

# **Caltrain Modernization Program** Peninsula Corridor Electrification Project (PCEP)



# **Executive Monthly Progress Report**

June 30, 2023

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# TABLE OF CONTENTS

1.0	Execu	utive 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	y	2-1
3.0	IMS P	Program 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	
	4.2	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	lssues	
5.0	Chang	ge Management	5-1
	5.1	Introduction	5-1
	5.2	Change Orders	5-1
	5.3	lssues	5-2

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#### 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 finished a schedule reforecast in March 2023 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 June 2023, the project is on budget:

- The current project total cost at completion (EAC) is the same as the Board adopted budget of \$2.44 billion.
- As of June 2023, a total of \$8.06M has been drawn down from the Shared Risk Pool of \$50 million. In June 2023, \$0.83M was drawn from the Shared Risk Pool.
- As of June 2023, a total of \$3.52M has been drawn from the project contingency of \$40 million. In June 2023, there was no draw from project contingency.
- As of June 2023, no new awards have been made from the Project incentive pool of \$18.5 million.
- As of June 2023, no incentive was issued from the milestone incentive pool of \$15 million.

#### **1.3 Program Progress and Schedule**

As of June 30, 2023, the overall project completion is 83.99%. The current program schedule is projecting a PCEP substantial completion date of April 2024 and Revenue Service by September 2024. Staff is implementing a 2023 path to completion with 31 weekend area focused bus bridges to maximize track access to allow system integration testing, signal cutovers, and proactive OCS construction productivity mitigations for the remaining PCEP work.

#### 1.4 Change Management Board (CMB)

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

• IRL 293 – Pedestrian Gate Separation

#### **1.5** This Month's Accomplishments

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

- Measured monthly project schedule against the reforecast that reflects the path to completion with 31 focused area weekend closures. The reforecast schedule does not change the Project completion date. Interim milestones have been developed and measured against the reforecast schedule.
- Continued to coordinate low voltage power drop applications with PG&E and utilizing generators to support project testing and cutovers.
- Continued bi-weekly project completion road map meeting with Design-Build Contractor Executives to address OCS productivities and TPS findings. Additional third-party crews were added for OCS regulation work.
- Continued operations planning, ambassador, and rail service planning effort for weekend area closures for Segments 1 and 2 OCS construction in June and July, and Segment 1 cutover scheduled in June and August 2023.
- Continued EMU maintenance training.
- Completed Drill Track (Test Track) live runs successfully.
- Completed joint walk verification for Segment 4 Live runs and full energization.
- Commenced operators refresher training at the Drill Track.
- Held Monthly CMB meeting for program status and change order approval.
- Continued to work with FRA on Submitted Programmatic Agreement (PA) amendment review and approval.
- Continued safety special task force working group, including TASI, Rail Operations and PCEP to address communications, process, and procedure improvements. Railroad implemented 10 feet foul instead of 4 feet in mid-May.
- Continued providing PCEP progress updates to funding partners, leadership, elected officials, citizens, and business community.
- Continued Rail Activation effort on path to energization for Segments 4 and 3, including CEMOF.
- Received Caltrans Segment 3 encroachment permit.
- Completed Segment 1 first phase cutover effort without any crossings.

#### 1.6 Upcoming work

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

- Continue bi-weekly project completion road map meeting with Design-Build Contractor Executives to address OCS productivities and TPS findings.
- Continue operations planning, ambassador, and rail service planning effort for remaining weekend area closures for Segments 1 and 2 OCS construction and the last Segment 1 cutover scheduled in August 2023.
- Drill Track Test Track will stay energized for EMU Testing.
- Receive FRA Test request approval and complete EMU PTC testing

# Peninsula Corridor Electrification Project

#### Monthly Progress Report – June 2023

mainline.

- Continue to coordinate with PG&E on low voltage power drop applications, and distribution line de-energization work.
- Complete EMU maintenance training.
- Energize TPS1 by August 20, 2023.
- Complete TPS documentation audit, field validation and test audit.
- Complete Segments 4 and 3 Live runs with the EMUs.
- Energize CEMOF for EMU commissioning.
- Complete Segments 4 and 3 joint punch list walks.
- Finalize close out process and workflows.
- Hold FTA Quarterly progress meeting.
- Hold Monthly CMB meeting for program status and change order approval.
- Develop EMU revenue service maintenance program and diesel fleet exit plan.
- Continue work with FTA and complete Programmatic Agreement (PA) amendment and finalize burial agreement and treatment plan.
- Complete newly defined Milestone 1 (Segments 3 and 4), which will provide 20 miles electrified line for EMU burn-in in fall of 2023.

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

#### 1.7 Critical Items

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

Table 1-1. Critical Issues and Actions							
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	<ul> <li>Additional BBII OCS crew training for regulation and variance in the OCS design / installation due to redesign &amp; accommodations to resolve foundation Differing Site Conditions (DSC) issues – Completed.</li> <li>Hiring additional BBII OCS staff members to prevent schedule slippage and help in future installation planning – Completed.</li> <li>Hold OCS construction scheduling recovery workshop for remaining OCS installation and testing – Completed.</li> <li>Increase OCS crews and OCS wiring equipment to increase productivity – Completed.</li> <li>More track access including weekend area closures for remaining Segments 1 and 2 OCS construction and testing. Weekend bus bridge construction started on February 11, 2023.</li> <li>OCS storm repair work for Segment 2 is planned for August/September 2023 due to rainstorm and long lead time for materials.</li> <li>Bring on more regulating crews in May 2023. Mass will start regulating work in the first week of June 2023 – Completed.</li> <li>Procure more equipment parts and ensure all equipment is performing well for construction – Completed.</li> </ul>						

# Peninsula Corridor Electrification Project Monthly Progress Report – June 2023

Critical Issues	Actions
	<ul> <li>Bring on equipment fitters and warehouse material manager on site – Completed.</li> </ul>
<ul> <li>Complete TPS Short Circuit Tests</li> <li>TPS 2 short circuit test delays drill track and Segment 4 mainline energization. TPS 2 Short circuit test was performed in May 2023 with some follow up actions.</li> <li>TPS 1 Short Circuit Test is scheduled for October 21st.</li> </ul>	<ul> <li>Perform comprehensive root cause analysis and develop corrective action plan – Completed.</li> <li>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 – On-going.</li> <li>Perform technical working groups including all vendors and EOR – On-going.</li> <li>Weekly management team briefing on corrective action status – On-going.</li> <li>Perform independent assessment of the TPS – Completed.</li> <li>Develop SSWP for all work performed at TPS for Caltrain review and approval – On-going.</li> <li>Perform field verification and pre-testing before short circuit re-test – Completed.</li> <li>Developed remaining short circuit tests required for system completion.</li> </ul>

# 2.0 SAFETY

There were no reportable injuries in June 2023. The Reportable Injury Rate (RIR) for 2023 YTD is currently 1.55. Overall, since the project's inception, the RIR is at 1.65, which remains below the national average. Please note that the chart below was updated for the current year. Contractor has advised the Project Team that they had not been reporting all the hours they and their subs had worked.



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. Caltrain initiated the 10'/10' rule: 10' from track and 10' from overhead wires.

#### 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 and EMU First Responder training is currently scheduled for South San Francisco, Redwood City, San Carlos, Belmont and San Mateo in August, September and October.

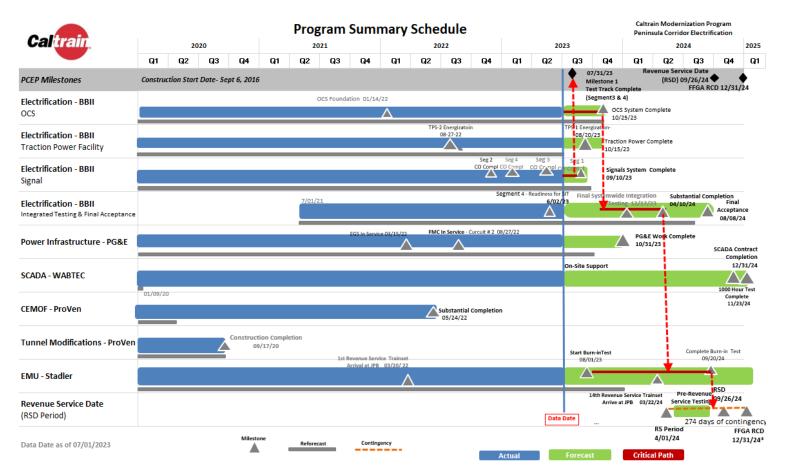
Police Departments along the corridor are currently being scheduled by the Transit Police to receive this training also.

#### Monthly Progress Report – June 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 current schedule dates for this program schedule were based on BBII's June 2023 Progress Schedule as well as the Stadler May 2023 EMU Progress Schedule. The Revenue Service Date (RSD) remains as September 26, 2024 and Full Funding Grant Agreement (FFGA) Revenue Completion Date (RCD) remains December 31, 2024.



# Figure 3-1. Master Program Summary Schedule

#### Monthly Progress Report – June 2023

#### 3.2 Critical Path Analysis

The current critical path remains basically the same as the last few months (February through May 2023) starting with waiting to receive the PG&E (Low Voltage) Power Design at 4<sup>th</sup> and King St. for Wayside Power Cubicle (WPC) 1 and 0.11, completing the installation of the Pedestal Housing for the Meter, providing the Low Voltage Power Drop connection at 4<sup>th</sup> and King St. for WPC-1 and 0.11, Punchlist Verification that Low Voltage Services are ready for energization at Segment 1 and Low Voltage Permanent Power provided for all segments followed by a 50-day Project Schedule Contingency, Substantial Completion, Final Punchlist, Final Acceptance Inspection and Final Acceptance.

#	Activity D	Activity Name	Duration	Total		Reforecast	Current	Current	Refor Finish	2	0 23						2024			2025
	-			Float	Start .	Finish	Start .	Finish	Varian ce	May Jun	Jul Au	g Sep	Oct Nov D	ec Jan Fe	b Mar /	Apr May Ju	un Jul A	ug Sep	Oct Nov Dec	Jan Feb Mar
1	Segment 1 (8 Mi)																			
2	PD-01-1820	Receive PG&E Power Design - 0.09 4th & King St for 0.11	264	-9	22-Jan-23	28-Sep-23	22-Jan-23 A	12-Oct-23	-14											
3	PD-01-1800	Receive PG&E Power Design - 0.09 4th & King St for WPC 1	264	-9	22-Jan-23	19-Aug-23	22-Jan-23 A	12-Oct-23	-54											
4	PD-01-1690	Complete Pedestal / Meter Install / Precon - 0.09 4th & King St for WPC 1	42	-9	20-Aug-23	30-Sep-23	13-Oct-23	23-Nov-23	-54											
5	PD-01-1020	Complete Pedestal / Meter Install / Precon - 0.09 4th & King St for 0.11	42	-9	29-Sep-23	09-Nov-23	13-Oct-23	23-Nov-23	-14	]										
6	PD-01-1700	Request Meter from JPB - 0.09 4th & King St for WPC 1	14	-9	01-Oct-23	14-Oct-23	24-Nov -23	07-Dec-23	-54				<b>—</b>	1						1
7	PD-01-1080	Request Meter from JPB - 0.09 4th & King St for 0.11	14	-9	10-Nov-23	23-Nov-23	24-Nov -23	07-Dec-23	-14				-							
8	SG-01-19200	Provide Power Drop - 0.09 4th & King St for 0.11 CP 4th 48R	70	-9	24-Nov-23	01-Feb-24	08-Dec-23	15-Feb-24	-14				-							
9	WP-01-1270	Provide Power Drop WPC 1	70	-9	15-Oct-23	23-Dec-23	08-Dec-23	15-Feb-24	-54				-	-						
10	All Segments																			
11	DS-00-7420	Low Voltage Services Ready for Energization - Segment 1 / Punchlist Verification	5	-8	08-Feb-24	11-Feb-24	15-Feb-24	20-Feb-24	-9					•						
12	TS-00-0500	Low Voltage Permanent Power Provided for All Segments	0	-8		11-Feb-24		20-Feb-24	-9						•					
13	FTC-0001	Project Schedule Contingency	50	-9	12-Feb-24	01-Apr-24	21-Feb-24	10-Apr-24	-9	1					_					
14	GC-00-9990	Scheduled Substantial Completion	0	-9		01-Apr-24		10-Apr-24*	-9						, i	<b>+</b>				
15	PC-00-0990	Overall Schedule / Substantial Completion Completion Milestone	0	-8		01-Apr-24		10-Apr-24	-9						į.	•				
16	GC-00-9920	Final Acceptance	0	-9		30-Jul-24		08-Aug-24*	-9											1
17	Submittals																			
18	SM-00-20020	Final Punchlist	60	-9	02-Apr-24	31-May-24	11-Apr-24	09-Jun-24	-9											
19	GC-00-9930	Final Acceptance Inspection	60	-9	01-Jun-24	30-Jul-24	10-Jun-24	08-Aug-24	-9	1							-			
20	No PCEP-Segment																			
21	RA S2400	Visual Message Signs (VMS)	704	0	01-Mar-23	01-Mar-23	01-Mar-23 A	01-Feb-25	-703											
22	RA \$09.90	RAS Independent Work Sequence Finish	0	0	02-Feb-25		02-Feb-25		0	1										8

Figure 3-2. Critical Path Schedule

#### 3.3 Schedule Contract Milestone Analysis

The current forecast for Substantial Completion of the project has moved out nine (9) days to April 10, 2024. The revised Milestone No. 1 is now forecasted to be completed on July 31, 2023. The Revenue Service Date and Revenue Completion Date remain the same as September 26, 2024 and December 31, 2024, respectively. Contractor still claims that they are being delayed by PG&E in obtaining the required designs for installing the permanent low voltage power. However, this path can be easily mitigated through the continued use of generators to provide low voltage power. The main challenge for the Contractor is to complete the requirements for Milestone No. 1 and facilitate the live run testing of the EMU trainsets.

Contractor	Milestones	Reforecast (Dec 2022) Dates	Current (June 2023) Forecast	Milestone Finish Date Variance	Remarks
BBII	Segment 4 Completion	05-Feb-23	03-Jul-23	-148	Delayed by the failed short circuit testing which has delayed the EMU live runs within Segment 4. Note: This finish date does not include the Guadalupe Bridge scope of work.
BBII	System Integration Testing Start (Segment 4)	21-May-23	15-Jul-23	-55	Delayed by energization delay of the Overhead Contact System (OCS)
BBII	Completion of Milestone 1 (Segments 3 and 4)	28-May-23	31-Jul-23	-64	Delayed by the delivery and installation of the replacement batteries at Parallel Stations (PS) 6 and 7
BBII	Traction Power Substation #1 Energization	12-Sep-23	20-Aug-23	23	Duration improvement from solving battery and other issues at Traction Power Substation #2.
BBII	Signal Cutovers and Systems Completion	20-Aug-23	10-Sep-23	-21	Delayed by the procurement and delivery of the new 6 Head Cantilever
BBII	OCS Construction Completion	25-Oct-23	25-Oct-23	0	
BBII	System Integration Testing Completion	16-Dec-23	17-Dec-23	-1	Delayed by delays to the Guadalupe Bridge Replacement Project. This testing completion activity includes the End To End Pull Away and Power Scenerio Tests with Contingency.
Stadler	14th Trainset Arrival at JPB Site	12-0ct-23	22-Mar-24	-162	Delayed by Stadler experiencing multiple problems obtaining parts and subassemblies from their Suppliers. They are still committed to deliver the first 14 Trainsets by 22-Mar-24.
BBII	Scheduled Substantial Completion	01-Apr-24	10-Apr-24	-9	Delayed awaiting the receipt of the PG&E (Low Voltage) Power Design at 4th & King St.
BBII	Scheduled Final Acceptance	30-Jul-24	08-Aug-24	-9	Delayed by the Final Acceptance Inspection
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 June 30, 2023.

#### 4.2 Program Budget and Cost

Description of Work	Current Budget (A) <sup>1</sup>	Budget Cost This Month		Estimate To Complete	Estimate At Completion	Variance at Completion	
		(B <sup>2</sup>	(C) <sup>3</sup>	(D)	(E) = (C) + (D)	(F) = (A) – (E)	
Electrification	\$1,749,139,439	\$15,548,856	\$1,572,896,648	\$176,242,790	\$1,749,139,439	\$0	
EMU	\$693,551,258	\$902,515	\$516,346,535	\$177,204,724	\$693,551,258	\$0	
PCEP TOTAL	\$2,442,690,697	\$16,451,371	\$2,089,243,183	\$353,447,514	\$2,442,690,697	\$0	

Table 4-1. Budget Summary by Project

<sup>1.</sup> Column A "Current Budget" includes re-baseline and executed change orders and awarded contracts.

<sup>2.</sup> Column B "Cost This Month" represents the cost of work performed this month.

<sup>3.</sup> 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	Major	Elements
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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	\$9,733,746	\$943,909,156	\$153,124,725	\$1,097,033,881
EMU Procurement	\$556,072,601	\$556,248,486	\$0	\$426,548,413	\$138,437,858	\$564,986,271
Minor Construction Contracts (Tunnel, CEMOF, SCADA, Non- BBI OCS)	\$67,055,072	\$68,091,194	\$0	\$64,775,911	\$3,315,283	\$68,091,194
Real Estate Acquisition & Support	\$34,914,177	\$34,914,177	\$83,288	\$24,396,344	\$10,517,833	\$34,914,177
PG&E, Utilities	\$132,088,994	\$132,088,994	\$400,672	\$205,181,437	-\$76,922,043	\$128,259,394
Management Oversight & Support	\$312,699,697	\$315,007,767	\$3,275,076	\$275,910,779	\$39,096,988	\$315,007,767
TASI Support	\$114,488,767	\$114,488,767	\$2,084,004	\$101,297,321	\$28,191,446	\$129,488,767
Finance Charges	\$9,898,638	\$9,898,638	\$92,603	\$9,454,384	\$444,254	\$9,898,638
Insurance	\$6,581,851	\$6,581,851	\$172,590	\$6,291,001	\$290,850	\$6,581,851
Other Required Projects & Services	\$9,084,176	\$10,484,176	\$215,529	\$5,060,734	\$5,623,442	\$10,684,176
Environmental Mitigation	\$14,438,866	\$13,038,866	\$0	\$1,249,084	\$11,589,782	\$12,838,866
Caltrain Capital Overhead (ICAP)	\$48,217,887	\$48,217,887	\$393,864	\$25,168,618	\$23,049,270	\$48,217,887
Contingency	\$40,000,089	\$36,480,012	\$0	\$0	\$16,687,827	\$16,687,827
Total	\$2,442,690,697	\$2,442,690,697	\$16,451,371	\$2,089,243,183	\$353,447,514	\$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	\$178,365	\$90,207
2	Different Site Condition for OCS Foundation	\$3,500,000	\$156,321	\$1,217,412	\$2,282,588
3	Different Site Condition for Duct bank	\$2,800,000	\$0	\$435,798	\$2,364,202
4	Condition of existing Fiber backbone infrastructure	\$3,150,000	\$97,794	\$354,244	\$2,795,756
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	\$134,751	\$403,821
8	EMI Nonconformance by EMU Vendor	\$750,000	\$13,184	\$13,184	\$736,817
9	Reed Street Cutover	\$90,000	\$0	\$0	\$90,000
10	Availability of low voltage power for cutover testing	\$1,120,000	\$0	\$1,744,137	-\$624,137
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	\$71,920	\$1,328,080
17	Third party Approval	\$150,000	\$325,903	\$339,044	-\$189,044
18	Impact from Caltrain other capital or third-party projects	\$2,166,683	\$0	\$697,117	\$1,469,565
19	Track access delay for BBII Construction	\$1,800,000	\$153,394	\$381,931	\$1,418,069
20	Additional light Maintenance and Protection Needs	\$280,000	\$0	\$164,531	\$115,469
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	\$85,713	\$2,088,739	\$9,911,261
NA	Unidentified	\$54,179	\$0	\$0	\$54,179
	BBII Risk Pool Total	\$50,000,000	\$832,308	\$8,059,978	\$41,940,023

#### Table 4-3. Shared Risk Pool Status as of June 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	\$36,480,012	\$32,010,612
STA-055-CCO-042	Stadler Project Time Extension – Adjustment of value		\$3,876
STA-056-CCO-043	Passenger Convenience Outlet Current Limit (PCEP Share) – Rev0 ( <i>Replaced</i> by Rev1)		\$390,000
STA-055-CCO-043	Passenger Convenience Outlet Current Limit (PCEP Share) – Rev1		(\$716,661)
BT-035C	TASI Support – Electrification (2023-2024)		(\$15,000,000)
	PROJECT CONTINGENCY REMAINING BALANCE	\$36,480,012	\$16,687,827

### Table 4-4. Program Contingency Drawdown Balance

Note: EAC Contingency reflects forecast contingency.

#### 4.4 Electrification Design Builder Contract Incentives

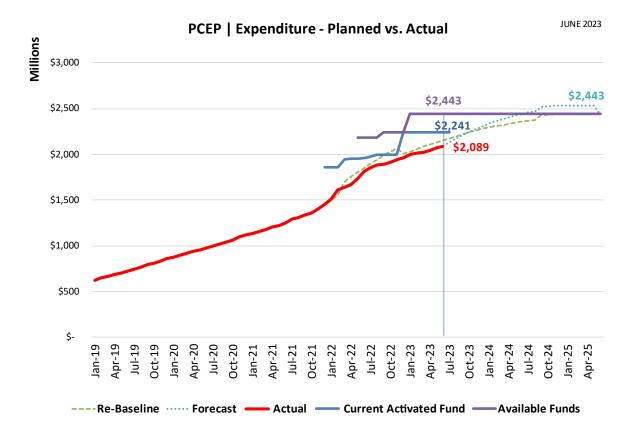
The Global Settlement with BBII also includes incentives based on Milestone completions and remaining contract incentives. Table 4-5 provides a status of Design-Build Contractor incentives Budgeted, Awarded, and remaining Balance.

Incentives	Budgeted	Awarded	Balance
Contract Incentive:			
Quality	\$1,250,000	\$1,000,000	\$250,000
Safety	\$2,500,000	\$1,000,000	\$1,500,000
Community Outreach	\$2,500,000	\$1,750,000	\$750,000
DBE	\$900,000	\$0	\$900,000
Total Contract Incentive	\$7,150,000	\$3,750,000	\$3,400,000
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	\$0	\$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 June 2023

Issues	Actions
Late receiving of PG&E \$99 million reimbursement	<ul> <li>Work with PG&amp;E to project reimbursement date.</li> <li>May need to hold \$100 million bond until PG&amp;E reimbursement is made to support project cash flow needs for FY25.</li> </ul>

#### 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 June 2023:

- Shared Risk Recoverable Costs for Ped Gate Separation / Articulated Gates was executed on June 20, 2023 for \$325,903.
- Storm Drain Repair at Foundation 0.1 01 was executed on June 27, 2023 for \$11,248.
- Track Access Delays August 2022 was executed on June 27, 2023 for \$39,184.
- 4<sup>th</sup> Street Tower Comms Equipment Relocation was executed on June 27, 2023 for \$97,794.
- Underground Boring Scope for JPB Utility Lines at MP 0.3 was executed on June 27, 2023 for \$85,713.
- DSC Unmarked Storm Drainpipe Damage @ CMV Siding was executed on June 27, 2023 for \$57,818.
- Fiber Slack Enclosure was executed on June 27, 2023 for no cost.
- CEMOF YT-5 Grounding and Bonding and Wire Removal (Design Only) was executed on June 27, 2023 for \$58,007.
- 5.2.2 CMB Approved Items
  - IRL 293 Pedestrian Gate Separation
- 5.2.3 Upcoming Change Orders/Shared Risk Items
  - Isolation and Protection for Railroad.
  - Stadler Time Extension and Added Work.
  - EMU Convenience Outlet Modification.
  - Debris Pile Removal at FDN 46.1-19.
  - September 2022 Track Access Delays.
  - Contaminated Fiber Splice Enclosure @ MP 0.37.
  - Contaminated Fiber Splice Enclosure @ MP 1.09 @ PS-1.
  - Contaminated Fiber Splice Enclosure @ MP 1.70.
  - TPS-2 Battery Enclosure and Materials.
  - TPS-1 Battery Enclosure and Materials.
  - Decoupling the Pre-Check Alarm.
  - Relocation of Aerial Utilities at Stanford Station MP 30.5 (Construction Only).

#### 5.3 Issues

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

Issues	Actions
Segment 4 Maintenance Option in the existing BBII Contract was never exercised. Maintenance of OCS/TPS for Milestone 1 limits (Diridon to San Antonio) will be needed once Milestone 1 is complete and once Caltrain is using it for EMU burn in under 25kV.	<ul> <li>Define EMU testing and burn in work schedule – Completed.</li> <li>BBII provides isolation and protection through September 2023.</li> </ul>
	Develop evaluation criteria for TASI Maintenance Service proposals.
	<ul> <li>Perform transition between BBII and TASI on isolation and protection service.</li> </ul>