

## **Two-Tiered Quarterly Progress Review Meeting No. 15 January 26, 2021**

Peninsula Corridor Electrification Project (PCEP)  
Peninsula Corridor Joint Powers Board (JPB)/Caltrain  
San Mateo, CA

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OPs Referenced: #01 Administrative Conditions and Requirements  
#25 Recurring Oversight and Related Reports

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Length of Time Firm Assigned to Project: 5 Years, 7 Months  
Length of Time Person Assigned to Project: 5 Years, 7 Months

# **1 EXECUTIVE SUMMARY**

## **1.1 Introduction**

This report summarizes Quarterly Progress Review Meeting (QPRM) No. 15 between the Federal Transit Administration (FTA); the FTA's Project Management Oversight Contractor (PMOC), Kal Krishnan Consulting Services, Inc. (KKCS); and the Peninsula Corridor Joint Powers Board (JPB)/Caltrain. JPB/Caltrain is the Project Sponsor for the Peninsula Corridor Electrification Project (PCEP).

The meeting was held virtually on January 26, 2021, due to public health restrictions imposed to combat the continued spread of the COVID-19 coronavirus pandemic. The meeting used Microsoft Teams video collaboration software to communicate via the Internet; a call-in number was also provided.

## **1.2 Project Description**

The Peninsula Corridor Electrification Project (PCEP) is a Core Capacity Improvement Project (CC) located on the peninsula between San Francisco and San Jose, California.

The PCEP consists of the electrification of 51 miles of Caltrain's double-tracked commuter rail line between the 4<sup>th</sup> and King Station in San Francisco and the Tamien Station in San Jose, and the purchase of 96 Electric Multiple Unit (EMU) vehicles that will be configured as sixteen (16) six-car trainsets. These EMUs will replace approximately 75 percent of Caltrain's current average weekday diesel powered service. The initial EMU order was supplemented in December 2018 when the JPB exercised an option to purchase an additional 37 EMUs; the resulting fleet will consist of nineteen (19) seven-car trainsets; the additional EMUs are not funded through the JPB's Core Capacity grant. The project also includes modifications to the wayside signal system and grade crossing warning systems to accommodate the new electrified rail system, and installation of Supervisory Control and Data Acquisition (SCADA) equipment to monitor and control the electrification equipment. The infrastructure scope also includes modification by "notching" of four (4) existing rail tunnels to accommodate the expanded clearance envelope of the electrified vehicles. Caltrain's Central Equipment Maintenance and Operation Facility (CEMOF) will also be modified to service the electrified vehicles.

The PCEP is part of a larger JPB initiative known as the Caltrain Modernization Program (CalMod). The CalMod program has separately installed a Positive Train Control (PTC) system, which is an advanced signal system that includes federally mandated safety improvements. The JPB is in the extended Revenue Service Demonstration phase of the PTC project, is interoperable with all tenant railroads, and submitted its Positive Train Control Safety Plan (PTCSP) on June 25, 2020.

## **1.3 Project Status**

The PCEP has a Full Funding Grant Agreement (FFGA) under the FTA's Capital Investment Grant (CIG) program for Core Capacity Improvement Projects; the project is in construction.

The FFGA for the PCEP was executed on May 23, 2017. The JPB issued a full notice to proceed (NTP) to the EMU supplier on June 1, 2017 and to the Electrification design-build contractor on June 19, 2017.

*The PMOC, at the FTA's request, conducted a virtual Risk Refresh workshop consisting of four (4) half-day sessions that were held on December 8, 10, 15 and 17, 2020. The workshop data is currently being analyzed and the Risk Refresh report is being prepared.*

## 1.4 Project Cost and Funding

The JPB received a grant for \$647 million in Section 5309 Core Capacity funding from the FTA. The balance of the project is being financed by a combination of regional, state, and local funds plus additional FTA funding under the Section 5307 Urbanized Area Formula program. The estimated capital cost of the PCEP is \$1,930,670,934 in the year of expenditure (YOE). *The JPB reported expenditures of \$1,069,343,754 through December 31, 2020.*

## 1.5 Project Schedule

The JPB had a very aggressive schedule for completing the PCEP. During the Project Development (PD) Phase, the JPB solicited and received proposals for a Design-Build (D-B) contract for the electrification system and for supply of its EMU rail vehicles. The JPB executed a design-build (D-B) contract for the electrification work with Balfour-Beatty Infrastructure, Inc. (BBII) on August 15, 2016. The JPB executed a contract for the EMU vehicles with Stadler US on August 15, 2016. The JPB issued Limited Notices to Proceed (LNTPs) for both the Electrification and EMU contracts on September 6, 2016. The LNTPs were extended from March 1, 2017 to June 30, 2017 when award of the FFGA was delayed. A full NTP was issued to the EMU supplier on June 1, 2017, and to the Electrification design-build contractor on June 19, 2017. The JPB issued a full Notice to Proceed (NTP) on its Tunnel Modifications contract on October 6, 2018. The tunnel contractor completed the majority of the work during a series of weekend outages in 2019 and completed installation of the overhead contact system (OCS) hardware in the tunnel during six (6) additional weekend outages in February and March 2020. The tunnel contractor has completed unpowered testing of the OCS system, and will return to complete final powered testing after the OCS system is energized. The JPB issued a Full NTP to the CEMOF modifications contractor on September 16, 2019. Construction work at CEMOF has been delayed by various factors including the need to avoid or relocate some of the many underground utilities at the site. *Completion of the CEMOF modifications is now expected in June 2021.* The CEMOF modifications contract is the last of the major contracts planned for the PCEP.

*The JPB recently revised its Master Project Schedule (MPS) to reflect delays in completing the Electrification contract. The schedule now shows initiating Phased Revenue Service (PRS) on July 14, 2023; this date is later than the Final Completion Date (FCD) of August 22, 2022 that was established in the FFGA. The project's critical path is now controlled by the completion of installation of the signal equipment. Assembly of the EMU trainsets has also been delayed by impacts associated with the COVID-19 pandemic. Delivery of the 14<sup>th</sup> trainset is now scheduled for October 10, 2022. Fourteen (14) trainsets are required to satisfy the Core Capacity requirements of the FFGA. The commencement of Phased Revenue Service is dependent on the completion of the Electrification contract elements and the availability of permanent power from the Pacific Gas and Electric Company (PG&E) to complete testing and initiate full operations with the EMU fleet.*

## 1.6 Significant Unresolved Issues

- The JPB's leadership continues in a technically facilitated mediation process with Balfour-Beatty (BBII), the Electrification contractor. *The objective is to reach agreement on an acceptable schedule for completing the signals work, which is on the contract's critical path, and any associated compensation. Recent meetings have included the signals contractors. The mediator submitted a settlement proposal to the JPB, and the JPB responded with a counter proposal on January 25, 2021. The parties are meeting on a*

*very frequent basis in an effort to reach an agreeable settlement; the next meeting is scheduled for January 28, 2021.*

- Progress on manufacture and assembly of the EMU vehicles has been severely impacted by the COVID-19 pandemic. Completion of Trainset 1, (TS-1), which will be sent to the Transportation Technology Center, Inc (TTCI) test track in Pueblo, CO, for its performance tests, was delayed because the European based software engineers were unable to travel to the U.S. because of the International Travel Ban until recently. Testing has resumed, however, a spike in COVID cases at Stadler's facility in late 2020 further slowed progress. *TS-1 is now expected to be shipped to the TTCI in late February 2021, with testing scheduled to commence in March 2021. The first EMU trainset (TS-3) is scheduled to arrive at Caltrain in July 2021.*
- Progress on design and installation of the OCS foundations continues to lag far behind projections. *The PCEP team reports that as of January 25, 2021, 2,024 of the required 3,026 foundations have been placed. The JPB now expects the OCS foundations to be completed later than the Electrification contractor's projected date in June 2021. The Electrification contractor recently learned that its high-voltage switchgear manufacturer will be unable to meet its contractual delivery dates, and the replacement supplier's delivery dates will delay completion of the traction power system, although this work is not currently on the critical path.*
- The design and installation of the signal system is on the critical path for completion of the Electrification contract. The signal system includes grade crossing warning devices and is under the jurisdiction of the Federal Railroad Administration (FRA). *The JPB and BBII, following a series of meetings with the FRA and the California Public Utilities Commission (CPUC), are proceeding to install a Two Speed Check (2SC) system to activate the grade crossing warning devices. The 2SC solution is expected to satisfy the FRA's regulations. The FRA has approved the JPB's 2SC test plan and is reviewing the JPB's Request for Amendment (RFA) to Caltrain's Positive Train Control Safety Plan (PTCSP) that will incorporate the 2SC solution. The JPB is scheduled to cutover the first 2SC controlled crossings during the weekend on January 30-February 2, 2021. The test data from these crossings will be sent to the FRA and is expected to complete the testing requirements.*

## **1.7 PMOC Observations**

- The PMOC congratulates Mr. Hartnett on his recently announced retirement, and thanks him for his active participation and support for our oversight work on the PCEP.
- The PMOC is pleased to see that the PCEP continues to make progress on all fronts as demonstrated by the completion of foundations in Segments 3 and 4, completion of the second and more complex signals cutover in Segment 4, and the completion of the construction of the intertie between PG&E's FMC substation and traction power substation (TPSS) 2. Unfortunately, the overall progress is far behind the original project schedule.
- The PMOC is also pleased that the mediation of the constant warning time (CWT) issue with BBII is making progress toward a possible settlement; however, the PMOC remains concerned that the resulting arrangement might leave the PCEP exposed to significant risk.
- The PCEP's leadership's recent acknowledgement of slippage in the overall schedule is helpful in the development of more realistic objectives for project completion. The PMOC

encourages the PCEP to complete full integration of the various independent schedules to produce a more effective management tool.

- The PG&E Interconnection Agreement has not been completed, and it is the PMOC's understanding that PG&E will not energize the PCEP's facilities until this agreement is executed. This issue apparently involves the Single-Phase Study, which was reported to be on hold and elevated for management attention. This issue is further complicated by PG&E's need for an easement across VTA property, which still has unresolved elements.
- Acquisition of the real estate from Universal Paragon Corp in Segments 1 and 2 remains incomplete. This property is critical for completing the OCS, and eminent domain is not an option for the property in Segment 1.
- The Rail Activation Committee continues to make solid progress, and each iteration of the rail activation schedule shows improvement.

#### **1.8 Action Items**

No new Action Items were identified during the meeting; the completion date for Action Item 13.01 was changed, Action Item 13.02 was updated and will remain open until completed. Action Items 14.01 and 14.02 were closed. A list of Action Items is attached as Appendix D.

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## **TIER 1 – HIGH-LEVEL**

### **1 Opening Remarks**

#### **1.1 FTA**

Bernardo Bustamante opened the virtual meeting by wishing everyone a Happy New Year and welcomed the participants, including the JPB's funding partners. This will be a two-tiered meeting like the last one, with Tier 1 being an Executive session. There were no introductions because the collaboration site keeps a record of those attending. Mr. Bustamante introduced Ray Tellis, the Region IX Administrator, for some brief opening remarks.

Mr. Tellis wished everyone a Happy New Year and said that he is missing the face-to-face meetings. He also welcomed the JPB's stakeholders, as well as FRA and others. The FTA held a very productive Working Session with the JPB's and the PCEP's leadership. Mr. Tellis congratulated Jim Hartnett on his retirement from the JPB and commented that it was an uphill battle to secure stable funding for the JPB's operations. Mr. Tellis remarked that Nuria Fernandez, CEO of VTA, has announced her departure from VTA and has re-joined the FTA. Mr. Tellis invited Mr. Hartnett to make opening remarks, after which there will be a short FTA slide presentation. Mr. Hartnett welcomed the participants and said he too would welcome a return to in-person meetings. Mr. Hartnett thanked FTA for the Working Session and said that he will have additional remarks after the FTA slides.

Mr. Tellis presented a short series of PowerPoint slides highlighting recent federal accomplishments.

- The incoming Biden Administration has appointed Nuria Fernandez as Deputy FTA Administrator and Acting Administrator. Subash Iyer has been appointed FTA Chief Counsel. Matt Welbes continues as FTA Executive Director, a career position.
- Two (2) FTA Director level positions remain to be filled: Director of Congressional Affairs and Director of Communications.
- Public Law 116-68 was passed on December 27, 2020 and provides FTA funding for the remainder of FY 21 of \$26.96 billion, which includes \$14 billion in COVID Transit Infrastructure grants. The President also signed a Continuing Resolution that provides a one-year extension of the FAST Act.
- The 2021 Appropriations Act includes \$1.9 billion for CIG, slightly less than 2020, \$10.2 billion in Transit Formula Grants, and \$516.2 million in Transit Infrastructure Grants from the General Fund. The Biden Administration is also expected to propose a very large infrastructure bill.
- The \$14 billion Coronavirus Response and Relief Supplemental Appropriations Act of 2021 (CRRSA) has some particular limitations:
  - Several mid-size and smaller Urbanized Areas (UZA) will not receive funding allocations.
  - Funding is limited to 75% of FY 2018 operating expenses when combined with Coronavirus Aid, Relief, and Economic Security (CARES) Act funding.
  - FTA will publish an allocation notice on its webpage.
- Funding under CRRSA includes the following, which is intended for operating assistance with 100% federal share. There is no expiration date.
  - §5307 - \$13.3 billion
  - §5311 - \$648.2 million
  - §5311 (c)(1) Native American Reservations - \$30 million
  - §5310 (New for elderly and disabled) - \$50 million



- If an agency proposes to use these funds for capital, the agency must certify that there have been no layoffs.
  - Frequently asked questions (FAQs) are available on the FTA website, and the FTA docket page remains open for technical or legal issues.
- FTA has awarded 783 CARES Act grants, or 96% of the \$25 billion allocated to transit. Caltrain is to be congratulated for disbursing 100% of its \$64.7 million in CARES Act grants. FTA has also provided face coverings to 2,200 transit agencies for both transit workers and patrons.
- Region IX staff remain on maximum telework status, week 46. The highest priority will be to process CRSSA Act applications once allocations are finalized. FTA will rely on its CARES Act experience and use its already developed tools to streamline grant processing.
  - California's Governor has lifted the Stay-at-Home order.
- Transit ridership is coming back slowly. Pre-COVID ridership of 32 million average weekday boarding had dropped by 81% in April 2020, and is now down 61% (January 2021).
- Forty-four (44) agencies suspended service and 289 agencies reduced the frequency of service.
- Mr. Tellis reminded the JPB and others that he sent out a letter on August 11, 2020, related to the financial impacts of COVID and expects a formal response from agencies needing assistance.
- The change in Administrations means that the Annual New Starts report will be delayed, and awarding of CIG funding will also be delayed.
- FTA's Oversight Reviews (Triennial and State Management Reviews) were postponed due to COVID, and those originally scheduled for 2020 will now take place in 2021, and those scheduled for 2021 and 2022 will push out one-year. 2020 Catch-up Reviews will be done virtually starting in January – March 2021.

Mr. Tellis invited Mr. Hartnett to complete his remarks.

## 1.2 JPB

Jim Hartnett thanked Mr. Tellis for the presentation and for the nimbleness of his Region IX team in dealing with the CARES Act funding. He continued his remarks as follows:

- The JPB leadership transition is underway; Mr. Hartnett's last day will be April 9, 2021. Michelle Bouchard will be the Acting Executive Director of Caltrain. Carter Mau will be the CEO/General Manager of the San Mateo County Transit District.
- The leadership team will continue to work together and will have a program in-place before his April departure. He will meet with both the Caltrain and SamTrans boards next week.
- Mr. Hartnett said that he is not retiring but will remain active both locally and nationally. He said that he might have delayed his departure if Measure RR had not passed.
- Sales tax collections under Measure RR begin in July 2021, however, receipts will begin to flow to the agency in September 2021. There are cash flow measures in place to address this issue.
- There is still some discussion on the regional "Faster Bay Area" campaign, but the campaign is not mature yet. It's very unlikely that a measure would be on the ballot in 2022.
- The COVID pandemic has impacted the PCEP, but it has also prevented people from working together, which has had more of an impact at the bus bases where disease transmission results primarily from off-duty activities, not at-work behavior.

- The transit chief executive officers (CEOs) talk every week, their most recent call was yesterday, January 25, 2021. The hygiene measures are working in the at-work environment. Exposures are from non-work activities. The Governor's lifting of the Stay-at-Home order will not impact JPB/Caltrain immediately. This concluded Mr. Hartnett's remarks.

Mr. Tellis asked the FRA representatives if they had any opening remarks, and they declined.

John Funghi, CalMod Chief Officer began his presentation on JPB and PCEP matters.

## **2 Safety**

Mr. Funghi commented that COVID precautions now seem normal.

- The PCEP safety team conducted an independent survey beginning on January 2, 2021 of COVID-19 compliance measures among the contractors' employees. The safety team observed over 500 personnel at multiple jobsites. The team found 98% compliance with face covering requirements and 97% compliance with social distancing requirements and also sharing of tools.
- Workers who test positive for COVID symptoms are not allowed to return to work without a documented negative test result.
- BBII's Recordable Incident Rate (RIR) for the year 2020 was below the national average of 2.5 per 200,000 labor hours.

## **3 Legal Issues**

- There is currently no litigation involving the JPB.
- Mediation with BBII, and more recently also with its two signals subcontractors, has been very active with meetings twice a week for four (4) months, and daily the last few days. The objective is to settle the dispute with BBII on its grade crossing related claims. Comments must be general to respect the legal privilege of the process.
  - The JPB has received a cost proposal from the two subcontractors, which is under review.
  - The JPB submitted its counter proposal yesterday, January 25, 2021.
  - The JPB is comfortable with the completion date offered for the signal system work, but is trying to encourage earlier completion.
  - The next cost discussions are set for Thursday, January 28, 2021.
- Communications Based Overlay Signal System (CBOSS) litigation – Michelle Bouchard presented the following update:
  - The litigation with Parsons Transportation Group (PTG) is continuing and the dispute remains in active mediation to achieve a settlement.
  - The case is set for trial in May 2021.

## **4 High-level Summary of Project Progress and Status**

Mr. Funghi continued his presentation.

### **4.1 JPB Organizational Changes**

- Casey Fromson is now Acting Chief Communications Officer.
- New Hires include Anthony Simmons – Director, Systemwide Planning, Caltrain; and Gustavo Gobbato – Sr. Engineer, Track Design.

## 4.2 Project Description

Mr. Funghi described the general parameters of the PCEP.

- The project is currently 55% complete.
- The Final Completion Date (FCD) in the FFGA is August 22, 2022.
- The JPB will be unable to meet the FCD because of the dispute related to the grade crossing warning system. The JPB is working to establish and refine a new date for final completion.
- The cutover process is being refined as the tasks are accomplished; this will drive the FCD.

## 4.3 Key Issues – Production and Schedule; PG&E, Stadler, FRA 2SC

John Funghi reported the following:

- COVID-19 Impacts to EMU Production
  - Stadler reported 27 new COVID cases in a single month in late 2020; that number has declined in recent weeks.
  - Pre-COVID, Stadler was relying heavily on employees traveling from Switzerland to augment its local workforce. That practice was halted by the International Travel Ban. Stadler has used emergency visas in some cases; however, recently two (2) software engineers were prevented from boarding their flight in Zurich. Mr. Funghi remarked that the trains are all software driven.
  - Two (2) of Stadler's suppliers went bankrupt due to COVID impacts. Stadler has replaced these suppliers and is able to move forward because it retains ownership of the suppliers' design drawings.
- The top issue is completing the grade crossing work. Discussions with the signals sub-contractors have been open and honest; the objective is how to improve cutovers without impacting rail service.
- Foundation production is a continuing struggle.
  - Foundations in Segments 3 and 4 are complete; approximately 1000 foundations remain.
  - The new schedule for completing foundations is in third-quarter 2021.
- BBII had to change suppliers for the High-Voltage Switchgear, and this delays the completion of the Traction Power system. Siemens is the new supplier, and the master schedule incorporates the new delivery dates.

## 4.4 Construction Update

Liria Larano provided an update on construction progress.

- Overhead Contact System (OCS) Construction
  - OCS foundations are complete in Segments 3 and 4.
  - Soil conditions are causing problems for foundation construction in Segment 1.
  - BBII will mobilize and move into Segment 2 in February 2021.
  - BBII presented a new foundation completion schedule yesterday, January 25, 2021; this schedule projects foundations will complete in July 2021. The JPB believes that this schedule is aggressive and requires two crews working simultaneously.

- Installation of poles and wire continues.
- Traction Power System (TPS) Construction
  - TPSS 2 and TPSS 1 are nearing completion, with the exception of the High-Voltage switchgear.
  - The First Article Test (FAT) was successfully completed on the switchgear for TPSS 2; this equipment will be delivered in May 2021.
  - The TPS is scheduled to be complete in April 2022.
- Signal System – The second phase of the final cutover in Segment 4 is scheduled for this weekend (January 29 – February 1, 2021). This cutover involves a complex control point and two grade crossings; these will be the first grade crossings cutover to the 2SC system.
- Pacific Gas & Electric (PG&E) - Construction of the interconnect between PG&E's FMC substation and TPSS 2 is complete, but has not been tested or energized.
- Central Equipment Maintenance and Operations Facility (CEMOF) – Substantial completion of the modification work is expected in March 2021.

#### 4.5 Vehicle Update

Greg Cameron provided an update on the EMU vehicles.

- The remaining design reviews, which are for software-based systems, are in second quarter of 2021.
- Official type testing has been started on TS-1 at Stadler's Salt Lake City facility. This trainset will be shipped to TTCI in February 2021 for dynamic testing, which is scheduled to begin in March 2021.
- Routine testing is in progress on TS-2 and TS-3. TS-3 will be shipped to the JPB in June 2021 after TS-1 completes certain required tests at the TTCI.
- The monthly FRA call took place on Monday, January 25, 2021. The FRA's sample car inspection of TS-3 will take place in Salt Lake City in May 2021. This inspection is primarily related to safety appliances and signage.
- The required Pre-Revenue Service Test Plan has been submitted to the FRA for its review.

#### 4.6 Real Estate Acquisition Status

Brian Fitzpatrick gave the following update on real estate activities:

- The JPB has all property rights needed for OCS poles in Segments 3 and 4; three (3) new parcels have been identified to accommodate the electrical wires.
- The JPB has presented an offer to the owner of the property needed in Segments 1 and 2; there has been no feedback on the offer.

*The PMOC asked for an update on the property transaction at TPSS #2 involving PG&E and VTA. The JPB has asked VTA to elevate the issue; however, VTA has asked to postpone elevation because VTA staff believes the right people are already involved. The CPUC representative asked what the main issues are in this transaction. Mr. Fitzpatrick explained that it involves VTA's desire to control access to PG&E's intertie facilities, including an 85' high power pole, and also insurance requirements. Insurance is a "legacy" issue and any changes would set a precedent.*

#### **4.7 Cost Update**

Liria Larano presented an update on project costs.

- The project has expended approximately \$1 billion thus far.
- The current contingency balance is approximately \$157 million, compared to the required contingency of slightly more than \$154 million.

#### **4.8 Construction Contract Status**

Ms. Larano continued her presentation.

- The completion date for Electrification is now July 14, 2023.
- The completion date for acceptance of EMU TS-14 from Stadler is now October 10, 2022. Fourteen (14) trainsets are required to satisfy the JPB's Core Capacity grant requirement.

#### **4.9 Rail Activation Update**

Michelle Bouchard provided the following update:

- The Rail Activation Committee (RAC) continues to meet on a bi-weekly basis.
- Coordination with first responders continues.
- Transit America Services, Inc. (TASI) has hired a Director of Electric Traction.
- JPB expects to advertise for Power Directors beginning in February 2021.
- Linking the Rail Activation schedule with the MPS and Testing and Commissioning schedule is very important to success.
- Rail Activation is part of a larger SamTrans organizational effort.
- Rail Operations is working with Human Resources on recruitments.
  - Systems positions.
  - High-level Director for Capital Projects.

#### **4.10 Concurrent Non-Project Activities (CNPA)**

Ms. Bouchard continued her presentation.

- Guadalupe Bridge Replacement Project
  - This is a Union Pacific Railroad (UPRR) structure; there is a meeting with the UPRR later today (January 26, 2021).
  - The project will take approximately two (2) years to complete; it will not be allowed to interfere with the PCEP.
- The JPB is also planning additional grade separation projects.

#### **4.11 Project Schedule**

Liria Larano presented the following information:

- Segment 4 is scheduled for completion in August 2021. The segment will be energized in June 2021.

*The PMOC asked what activities can be accomplished using PG&E's temporary power at TPSS #2. Ms. Larano said that the systems can be tested beyond Segment 4. The Paralleling Stations (PS) are not needed to accomplish testing. The PMOC asked how many EMU trainsets can be operated using only the temporary power. Ms. Larano said that she will need to research the answer.*

- PG&E's date for supplying permanent power to PCEP has slipped to April 2022 from September 9, 2021.
- The SCADA connection to TPSS#2 is complete and tested.

#### **4.12 Top Risks**

Liria Larano continued her presentation.

- Risk No. 314, failure to complete the signal related work on time and within budget.
- Risk No.303, cost and schedule impacts due to differing site conditions.
- Risk No. 313, sub-optimal contractor sequencing of potholing and foundation construction. JPB is encouraging the contractor to be more flexible in its sequencing of work.

*The PMOC asked if relieving the contractor from certain contractual restrictions would be beneficial. Ms. Larano responded that the restrictions have been relaxed, although not by Change Order. The contractor seems to be co-operating, and showing more flexibility in planning the potholing and foundation activities.*

#### **4.13 Disadvantaged Business Enterprise (DBE)**

Ms. Larano continued her presentation.

- JPB is reviewing the Electrification contractor's certifications to confirm that it has exceeded its goal. A wire supplier failed to provide the requested documentation, and the contractor dropped the supplier from its Disadvantaged Business Enterprise (DBE) plan and reduced its committed dollars accordingly.

#### **4.14 Quality Assurance and Quality Control**

Greg Cameron provided an update on EMU quality activities.

- The primary focus at this time is improving Stadler's quality performance at the Salt Lake City assembly plant.
  - Stadler is now producing some work instructions, but only for simple tasks.
  - Sub-supplier quality audits are still on-hold due to COVID restrictions.

#### **4.15 Environmental Actions and Mitigation**

Stacy Cocke presented the following update.

- The JPB's contractor is monitoring tree pruning and dust control activities.
- Additional archeological monitoring at the TPSS#2 site in connection with the interconnection to PG&E's FMC substation.

#### **4.16 Public Outreach**

Brent Tietgen provided an update on recent activities.

- The project conducted twenty (20) community meetings during 2020.

- The EMU Virtual Reality Experience has been very popular.
- A live virtual event was held which included a tour of Stadler's Salk Lake City plant,

#### **4.17 Future Projects**

Peter Skinner described some of the other projects being advanced by the JPB, and commented that little had changed since the last quarterly meeting.

- JPB is working with a developer on a ground lease at the agency's Hayward Park station. This follows the FTA's approval of a joint development of residential units at that site.
- SamTrans is advancing the conceptual design of the alignment and stations for the Dumbarton Transportation Project and will consider next steps when the conceptual design phase is completed.

#### **4.18 Action Items**

- Action Item 13.01 - Liria Larano is awaiting additional documentation from the Electrification contractor.
- Action Item 13.02 - Stacy Cocke reported that the FRA has reviewed and approved the test request for the 2SC solution. Test results from the first cutover have been provided to the FRA and the final pieces of information needed to approve the JPB's Request for Amendment should be produced as part of the next scheduled cutover 2B.
- Action Item 14.01 – Liria Larano stated that the 65% design of the Guadalupe River Bridge is in progress and will be completed in late 2021. Procurement should take six (6) to eight (8) months, followed by fabrication of the structure. The bridge is scheduled to be placed during the limited in-water work window beginning in summer 2023. The PCEP end-to-end testing is expected to be complete before construction starts.

#### **4.19 PMOC Comments**

- The PMOC congratulated Mr. Hartnett on his recently announced retirement, and thanked him for his active participation and support for its oversight work on the PCEP.
- The PMOC is pleased to see that the PCEP continues to make progress on all fronts as demonstrated by the completion of foundations in Segments 3 and 4, completion of the second and more complex signals cutover in Segment 4, and the completion of the construction of the intertie between PG&E's FMC substation and TPSS 2. Unfortunately, the overall progress is far behind the original project schedule.
- The PMOC is also pleased that the mediation of the CWT issue with BBII is making progress toward a possible settlement; however, the PMOC remains concerned that the resulting arrangement might leave the PCEP exposed to significant risk.
- The PCEP's leadership's recent acknowledgement of slippage in the overall schedule is helpful in the development of more realistic objectives for project completion. The PMOC encourages the PCEP to complete full integration of the various independent schedules to produce a more effective management tool.
- The PG&E Interconnection Agreement has not been completed, and it is the PMOC's understanding that PG&E will not energize the PCEP's facilities until this agreement is executed. This issue apparently involves the Single-Phase Study, which was reported to be on hold and elevated for management attention. This issue is further complicated by PG&E's need for an easement across VTA property which still has unresolved elements.

- Acquisition of the real estate from Universal Paragon Corp in Segments 1 and 2 remains incomplete. This property is critical for completing the OCS, and eminent domain is not an option for the property in Segment 1.
- The Rail Activation Committee continues to make solid progress, and each iteration of the rail activation schedule shows improvement.

#### 4.20 Tier 1 Wrap-up

*Ray Tellis said that the tone is different for this QPRM, following the working session between the FTA, JPB and the PMOC. He said that he had asked the PMOC to be candid in its comments. Mr. Hartnett thanked Mr. Tellis and said he will stay in touch with him.*

### **TIER 2 – IN-DEPTH DISCUSSION**

## **5 Project Status**

### **5.1 PCEP Organization Charts / Organizational Changes**

John Funghi began by presenting new organization charts representing the main elements of the PCEP.

*The PMOC requested a chart showing the transition organization that will take the PCEP from construction through start-up and into operations. Mr. Funghi responded that he will provide that.*

*The PMOC inquired about Steve Mahler's status. Mr. Funghi said that he has left the project and is now working for Balfour Beatty's quality subconsultant on one of the Bay Area Rapid Transit District (BART) projects. The JPB has interviewed a candidate offered by AECOM, and he will be starting soon. The PMOC requested a copy of the new person's resume.*

Mr. Funghi mentioned the following

- Darren Goodbar is now OCS Assistant Resident Engineer
- Additional Resources
  - Khaled Elkadash, Lead Scheduler
  - Gary Kelly, Inspector

### **5.2 Design / Construction Update / Significant Change Orders**

#### **5.2.1 Electrification Update – Lin Guan**

- Final design of PS-3 is nearing completion; the 95% drawings were received in November 2020.
- Foundation work south of Tunnel 4 has encountered soil stability problems that has slowed production. These conditions are not expected north of Tunnel 4.
- On-track foundation work will resume the week of February 1, 2021.
- BBII's productivity projections shown on Slide 42 rely on multiple crews performing on-track and off-track work simultaneously. The JPB has developed independent projections that show a mid-September 2021 completion date for the remaining foundation work.
- Completion of OCS wire installation in Segment 3 is expected in April 2021, followed by Segment 4 in May 2021 and CEMOF in July 2021.

*The PMOC asked if the switchgear will present any Buy America issues. Mr. Guan replied that there had been earlier concern about gas-insulated switchgear; however, use of that type of switchgear proved to be unnecessary.*



### 5.2.2 Signals Update - Stacy Cocke

- FRA approved a corridor-wide test request on January 6, 2021.
  - Cutover 2A was completed January 15, 2021. The team is preparing Lessons Learned to improve future cutovers.
  - Cutover 2B is scheduled to begin January 29, 2021. This cutover includes the first two gated crossings.
- Design is progressing, although Segments 1 and 3 are behind due to earlier restrictions on Segment and Work Order priorities.

*The PMOC asked about the assumptions used to develop the signals schedules and requested a copy of the cutover schedule. Ms. Cocke replied that she will provide the requested information.*

*The PMOC inquired whether BBII is following the contract on the signals work. Ms. Cocke responded that the 2SC work is performance based, not prescriptive, therefore the JPB doesn't foresee any issues.*

### 5.2.3 Change Orders Exceeding \$100,000 – Stacy Cocke

- There have been no Change Orders exceeding \$100,000 for BBII during the last quarter.

### 5.2.4 PG&E Interconnect – Lin Guan

- The construction of the interconnection between PG&E's FMC substation and TPSS #2 is complete, but it has not been tested or energized.

*The PMOC asked about PG&E's schedule for completing its work on the FMC substation, and why that work is being delayed. M. Guan replied that the FMC site is very constrained. Ms. Larano said that she will provide PG&E's updated schedule when she receives it.*

### 5.2.5 Third-party Utilities – Lin Guan

- All third-party power line work has been completed.
- AT&T and Comcast still have communication lines that require relocation. The JPP is prioritizing this work to keep ahead of the Electrification work.

### 5.2.6 EMU Vehicles – Greg Cameron

Greg Cameron reported on the status of EMU activities.

- Type testing of TS-1 is nearing completion.
- TS-1 will ship to the TTCI in late-February 2021 and dynamic type testing will begin in March 2021.
- FRA has scheduled a Sample Car Inspection for TS-3 in spring 2021. This inspection is focused on safety appliances and signage.
- The Pre-revenue Service Test Plan has been submitted to the FRA.
- TS-2 is supplying one of its cars to allow the dynamic testing of TS-1 as an 8-car train during the testing at the TTCI. Another car from TS-2 will undergo climate testing off-site. Three (3) final design reviews, all software related, remain to be completed.
- There were no Change Orders exceeding \$100,000 during the last quarter.
- Mr. Cameron provided the following observations related to Stadler's Salt Lake City operations:

- More production employees are needed on the shop floor.
- The lack of detailed work instructions is a problem for the workforce.
- Stadler has had no Manager of Construction for several months; that position is now filled.
- Stadler is experiencing high turnover in its workforce; this is not unusual in new operations.

#### 5.2.7 CEMOF Update - Liria Larano

- All Change Order work has been completed.
- Substantial completion is expected in March 2021.

### 6 Real Estate Acquisition Status / Issues

Brian Fitzpatrick provided a brief update.

- The Bayshore parcel in Segment 1 is the top priority; the parcel was been split into two units to possibly achieve more timely results.
  - Eleven (11) foundations are located in the City and County of San Francisco.
  - Condemnation is not an option in San Francisco.
  - Forty (40) foundations are located in San Mateo County.
- The Britannia Gateway parcel adjacent to TPSS #1 would have required condemnation if an agreement had not been reached.

### 7 Schedule

Liria Larano described the interface schedule on Slide 68.

*Sharath Murthy, representing the California High Speed Rail Authority (CHSRA), asked about the completion of Segment 3. Ms. Larano replied that it depends on the results of the mediation.*

*The PMOC asked when all of the project schedules will be fully integrated. Ms. Larano said that they are all integrated except for the Rail Activation Schedule.*

### 8 Safety

Sal Gilardi provided an update on safety trends and incidents.

- BBII's Recordable Incident Rate for calendar year 2020 was 1.5, which below industry average. This incident rate compares to 2.43 in 2019 and is a good sign.
- The most recent incident was a Rules Violation by Modern Railway Systems (MRS) employees doing signal work on CP Bird.
  - An employee accidentally shunted a switch, which caused a track indication, resulting in a penalty brake application on a northbound deadhead train.
  - The employee said that he had miss-read the schematic and did not realize that it would affect the signal.
  - All employees were drug tested with negative results.

### 9 Tier 2 Wrap-Up

*Mark Gallegos from the FRA's Salt Lake City office commented that they recently visited Stadler's operation and it appeared to be very short-staffed.*

Next Meeting: TBD

Adjournment: The meeting adjourned at 11:55 am PDT

## Appendix A: List of Acronyms

AAR	Association of American Railroads
AIM	Accelerating Innovative Mobility
APTA	American Public Transportation Association
APC	Automated Passenger Counter
ASME	American Society of Mechanical Engineers
AVT	Alternative Vehicle Technology
BA	Buy America
BAFO	Best and Final Offer
BART	Bay Area Rapid Transit District
BBII	Balfour-Beatty Infrastructure, Inc.
BUILD	Better Utilizing Investments to Leverage Development
CAR	Corrective Action Request
CARB	California Air Resources Board
CARES	Coronavirus Aid, Relief, and Economic Security Act
CBOSS	Communications Based Overlay Signal System
CC	FTA's Core Capacity Improvement Program
CCIP	Contractor Controlled Insurance Program
CCSF	City and County of San Francisco
CEMOF	Central Equipment Operations and Maintenance Facility
CEO	Chief Executive Officer
CEQA	California Environmental Quality Act
CGA	Construction Grant Agreement
CHSRA	California High Speed Rail Authority
CIG	Capital Investment Grant
CMB	Change Management Board
CNPA	Concurrent Non-Project Activity
CO	Change Order
CP	Control Point
CPM	Critical Path Method
CPUC	California Public Utilities Commission
CRISI	Consolidated Rail Infrastructure and Safety Improvements
CRSSA	Coronavirus Response and Relief Supplemental Appropriations Act of 2021
CSCG	City/County Staff Coordinating Group
CWT	Constant Warning Time
DART	Days Away, Restricted or Transferred
D-B	Design-Build
DBE	Disadvantaged Business Enterprise
DCN	Design Change Notice
DEIR	Draft Environmental Impact Report
DMU	Diesel Multiple Units
DOT	Department of Transportation
DRB	Dispute Resolution Board
DSC	Differing Site Conditions
EA	Environmental Assessment

EAC	Estimate at Completion
ECHO	Electronic Clearing House Operation
EE	Entry into Engineering
EEO	Equal Employment Opportunity
EIC	Employee in Charge
EIR	Environmental Impact Report
EMU	Electric Multiple Unit Rail Vehicle
ESA	Environmental Site Assessment
ESZ	Electrical Safety Zone
FAI	First Article Inspection
FAQ	Frequently Asked Questions
FAST	Fixing America's Surface Transportation Act
FASTER	Faster Bay Area Initiative
FAT	First Article Test
FCA	Financial Capacity Assessment
FCD	Final Completion Date
FEIR	Final Environmental Impact Report
FERC	Federal Energy Regulatory Commission
FFGA	Full Funding Grant Agreement
FHWA	Federal Highway Administration
FMOC	Financial Management Oversight Consultant
FMP	Fleet Management Plan
FONSI	Finding of No Significant Impact
FQT	Field Qualification Test
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
FTE	Full-time Equivalent
FY	Fiscal Year
GO	California Public Utilities Commission General Order
HEALS	Health, Economic Assistance, Liability Protection and Schools Act
HEROES	Health and Economic Recovery Omnibus Emergency Solutions Act
HISEP	High-Intensity Strategic Enforcement Program
H.R.2	116th Congress (2019-2020)
HSR	High Speed Rail
HVAC	Heating, Ventilation, and Air Conditioning
IFB	Invitation for Bids
I-ETMS	Wabtec's Interoperable - Electronic Train Management System
IFC	Issue for Construction
INVEST	Investing in a New Vision for Environment and Surface Transportation in America Act
JPB	Peninsula Corridor Joint Powers Board
KKCS	Kal Krishnan Consulting Services, Inc.
LNTP	Limited Notice to Proceed
LPMG	Local Policy Makers Group
MCC	Management Capacity and Capability
MCP	Major Capital Project

MMRP	Mitigation Monitoring and Reporting Program (Environmental)
MOU	Memorandum of Understanding
MPS	Master Project Schedule
MRS	Modern Railway Systems
MTC	Metropolitan Transportation Commission
NCR	Non-Conformance Report
NCTD	North County Transit District
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOFO	Notice of Funding Opportunity
NPRM	Notice of Proposed Rulemaking
NTI	National Transit Institute
NTP	Notice to Proceed
OCS	Overhead Contact System
O&M	Operations and Maintenance
OSHA	Occupational Safety and Health Administration
P3	Public-Private Partnership
PCEP	Peninsula Corridor Electrification Program
PCWG	Peninsula Corridor Working Group
PD	Project Development Phase
PG&E	Pacific Gas and Electric
PHA	Preliminary Hazard Analysis
PMOC	Project Management Oversight Contractor
PMP	Project Management Plan
PRO	Pre-Revenue Operation
PRS	Phased Revenue Service
PS	Paralleling Station
PSP	Product Safety Plan (FRA)
PTASP	Public Transportation Agency Safety Plan
PTC	Positive Train Control
PTCSP	Positive Train Control Safety Plan
PTG	Parsons Transportation Group
QA	Quality Assurance
QC	Quality Control
QMP	Quality Management Plan
RAB	Rail Alignment and Benefits Study
RAC	Rail Activation Committee
RAMP	Real Estate Acquisition Management Plan
RAP	Rail Activation Plan
RCD	Required Completion Date (FFGA)
RFA	Request for Amendment (FRA)
RFMP	Rail Fleet Management Plan
RFP	Request for Proposal
RIMP	Risk Identification and Management Plan
RIR	Recordable Injury Rate
ROW	Right of Way

RSD	Revenue Service Demonstration (FRA)
RWIC	Roadway Worker in Charge
RWP	Roadway Worker Protection
SamTrans	San Mateo County Transit District
S&P	Standard & Poor's
SCADA	Supervisory Control and Data Acquisition
SCC	Standard Cost Category
SCVTA/VTA	Santa Clara Valley Transportation Authority
SCVWD	Santa Clara Valley Water District
SF	City of San Francisco
SFCTA	San Francisco County Transportation Authority
SHPO	State Historic Preservation Office
SIT	System Integration Testing
SJ	City of San Jose
SMART	Sonoma Marin Area Rail Transit
SMCTA	San Mateo County Transportation Authority
SMCTD	San Mateo County Transportation District
SME	Subject Matter Expert
SMS	Safety Management System
SOGR	State of Good Repair
SPUR	San Francisco Planning and Urban Research
SSCC	Safety and Security Certification Committee
SSCP	System Safety Certification Plan
SSDCC	Safety and Security Design Certification Committee
SSF	South San Francisco
SSMP	Safety and Security Management Plan
SSOA	State Safety Oversight Agency
SSF	South San Francisco
SSPP	System Safety Program Plan
SSWP	Site Specific Work Plans
SVP	Silicon Valley Power
TAD	Track Access Delay
TAM	Transit Asset Management
TASI	Transit America Services, Inc.
TES	Traction Electrification System
TIA	Time Impact Analysis
TIGER	Transportation Investment Generating Economic Recovery
TIP	Transportation Improvement Program
TIRCP	Transit and Intercity Rail Capital Program
TJPA	Transbay Joint Powers Authority
TOD	Transit Oriented Development
TPD	Trains per Day
TPSS	Traction Power Substation
TrAMS	Transportation Award Management System
TTCI	Transportation Technology Center, Inc.
TVA	Threat and Vulnerability Analysis

2SC	Two Speed Check
UPRR	Union Pacific Railroad
USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service
VTA	Santa Clara Valley Transportation Authority
YOE	Year of Expenditure



## Appendix B: QPRM No. 14 Meeting Agenda

### AGENDA

#### FTA TWO-TIERED QUARTERLY REVIEW MEETING

**Grantee:** Peninsula Corridor Joint Powers Board (JPB)  
**Projects:** Peninsula Corridor Electrification Project (PCEP)  
**Location:** [Click here to join the meeting](#)  
Call-in Number: 929-352-1591 Phone Conference ID: 972 729 503#  
**Date:** Tuesday, January 26, 2021  
**Time:** 9:00 AM to 12:00 PM (PST)

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**Participants:** Federal Transit Administration (FTA)  
Peninsula Corridor Joint Powers Board (JPB)  
Federal Railroad Administration (FRA)  
California Public Utilities Commission (CPUC)  
JPB Funding Partners: CHSRA, VTA, CCSF, MTC, SMCTA  
Project Management Oversight Contractor (PMOC), KKCS

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#### Tier 1 High-level: 9:00 AM to 10:00 AM

1. Welcome and Introduction of Participants Ray Tellis
2. Opening Remarks Ray Tellis
  - FTA Ray Tellis
    - General Updates
  - JPB Jim Hartnett
    - Executive Director Transition
    - Finances
      - Measure RR
    - COVID-19
  - FRA FRA
3. Safety **JOHN** JPB/ PCEP
  - System-wide trends/update
4. Legal Issues JPB
  - Lawsuits, NEPA, Civil Rights, Mediation **JOHN and MICHELLE**
5. High-level Summary Project Progress and Status PCEP
  - JPB Organizational Changes **JOHN/MICHELLE**
  - Project Description **JOHN**
  - Key Issues –Stadler Delays, Production and Schedule, PG&E Operating Agreement **JOHN**
  - Construction Update **LIRIA**
  - Vehicles Update **GREG**
  - Real Estate Acquisition Status **BRIAN** PCEP
  - Costs **LIRIA** PCEP
  - Rail Activation **MICHELLE**
  - Concurrent Non-Project Activities Table **MICHELLE** PCEP

- Schedule **LIRIA** PCEP
  - Top Risks and Mitigations **LIRIA** PCEP
  - FTA Risk Refresh Status **(FTA/PMOC)** PMOC
  - Disadvantaged Business Enterprises (DBE) **LIRIA** PCEP
  - Quality Assurance and Quality Control **LIN/GREG** PCEP
  - Environmental Actions and Mitigation **STACY** PCEP
  - Public Outreach **BRENT**
  - Future Projects **PETER/ JIM H**
6. PMOC Comments PMOC
7. Wrap-up/Action Items JPB/PMOC

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**Tier 2 In-depth Project Progress Status: 10:00 AM to 12:00 PM**

8. Project Status JPB/PCEP
- PCEP Organization Charts / Organizational Changes **JOHN**
  - Design / Construction Update / TPS / Significant Change Orders **LIN/STACY**
    - Electrification, **LIN** Signals **STACY**, Communications **STACY**
    - PG&E **LIN/STACY**
    - Utilities **LIN**
    - EMU Vehicles **GREG**
    - CEMOF **LIRIA**
9. Real Estate Acquisition Status / Issues **BRIAN** PCEP
10. Schedule **LIRIA** PCEP
- Summary Schedule
  - Schedule Contingency Drawdown
11. Costs **LIRIA** PCEP
- FFGA / Non-FFGA Cost
  - Budget / Cost Contingency Drawdown
  - Construction Contract Status
12. Concurrent Non-Project Activities Table **MICHELLE** PCEP
13. FTA Risk Refresh Status **PMOC** PMOC
14. Safety (Project Specific) **SAL** PCEP
15. Wrap Up Discussions **PMOC** ALL
- Action Items **PMOC** PMOC
  - Next Meeting (April TBD) FTA

## Appendix C: Attendees

### **PENINSULA JOINT POWERS BOARD (JPB)/CALTRAIN PENINSULA CORRIDOR ELECTRIFICATION PROJECT (PCEP) TWO-TIER QUARTERLY PROGRESS REVIEW MEETING NO. 15**

**Meeting Date/Time:** Tuesday, January 26, 2021

9:00 A.M. - 12:00 P.M.

**Meeting Location:** Virtual Meeting via Microsoft Teams

<b>Peninsula Joint Powers Board/Caltrain (JPB)</b>		
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Simon Whitehorn	<a href="mailto:Simon.whitehorn@hsr.ca.gov">Simon.whitehorn@hsr.ca.gov</a>	916-297-0900
<b>Santa Clara Valley Transportation Authority (VTA)</b>		
Edwin Castillo	<a href="mailto:Edwin.Castillo@VTA.org">Edwin.Castillo@VTA.org</a>	408 321 5912
Franklin Wong	<a href="mailto:Franklin.Wong@VTA.org">Franklin.Wong@VTA.org</a>	

## Appendix D: Action Items

The following action items were identified during the meeting; the list also includes the status of unresolved or recently resolved Action Items from past Quarterly Progress Review Meetings and from the PMOC's monitoring activities. New items are indicated by colored text, items whose status has changed from the prior listing are italicized and completed items have been shaded.

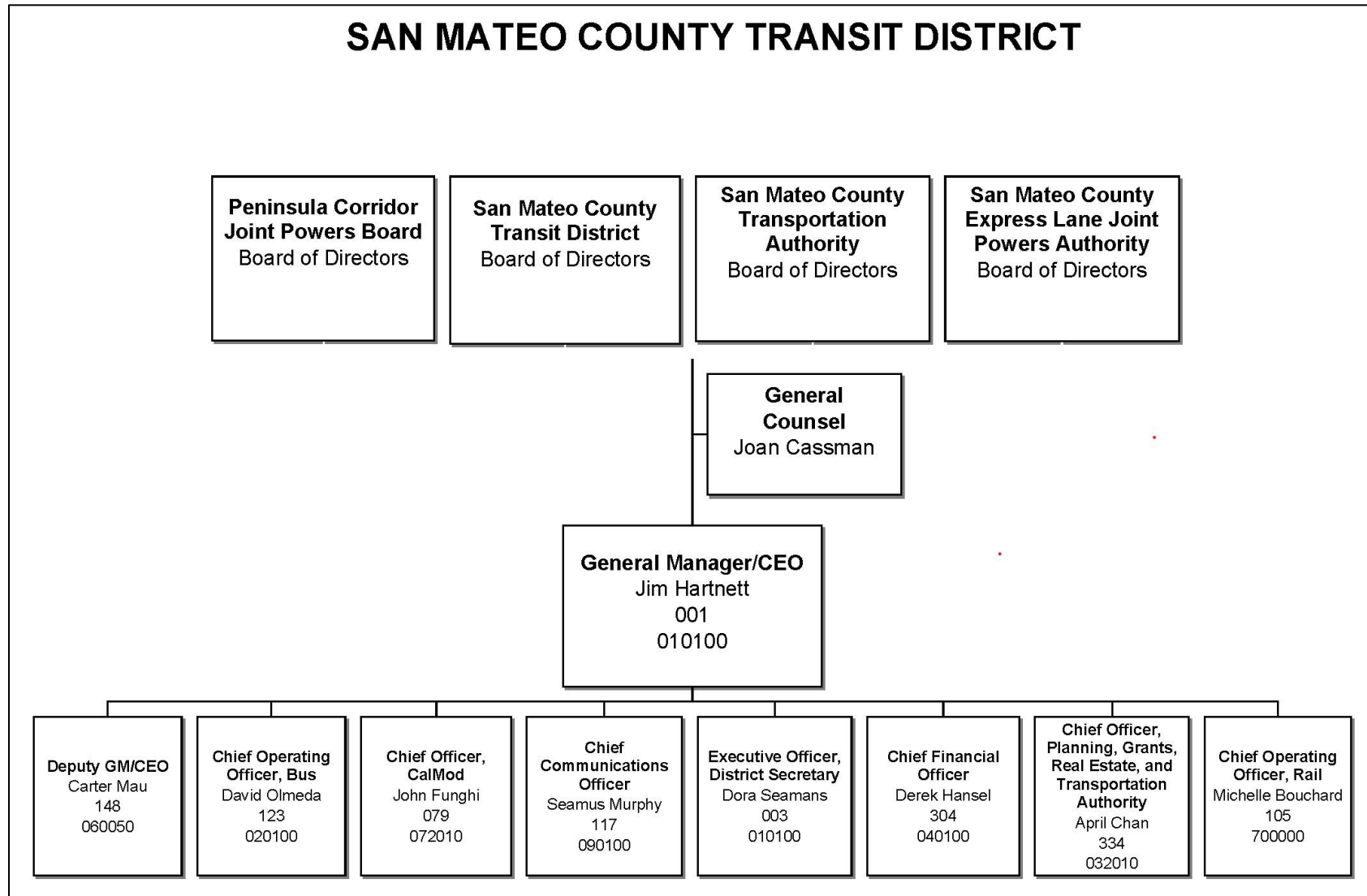
No.	Action Item	Discussion	Agreed Due Date	Responsibility Agency/Name	Status
13.01	JPB to review and assess BBII's Buy America compliance practices and results and report on its findings and any needed remedial actions.	Per FTA's direction, the JPB must determine whether BBII is satisfying the BA requirements in its grant.	<i>NLT QPRM #16</i>	Larano	The PCEP's provided a White Paper at QPRM #14 describing its process for verifying its contractor's compliance with BA. The PMOC requested additional documentation supporting the process described in the White Paper.

No.	Action Item	Discussion	Agreed Due Date	Responsibility Agency/Name	Status
13.02	JPB to submit a Request for Amendment (RFA) to Caltrain's Positive Train Control Safety Plan (PTCSP) under 49 CFR Sec. 236, Subpart I; the RFA will document the design and performance of its 2SC grade crossing warning system.	PCEP staff spoke with Carolyn Hayward Williams of FRA and her staff on August 4, 2020. A new strategy was recommended to satisfy FRA's requirements related to implementation of the 2SC solution.	Amendment to be submitted after Caltrain's PTCSP is approved and documented test results are available from one or more crossings. Schedule for submittal of the RFA is likely first quarter calendar 2021.	Funghi/Cocke	<i>FRA has approved the Test Request for 2SC and is reviewing the RFA. FRA's final approval is expected to follow review of the JPB's submission of the test results from Cutover 2B in Segment 4 scheduled for 1-30-2021. This action item will remain open until the FRA takes action to resolve it.</i>
14.01	The PMOC requested additional details on the JPB's Guadalupe Bridge Replacement Project.	Caltrain's Guadalupe Bridge Replacement Project has the potential to interfere with end-to-end testing of the PCEP, and coordination between the projects is not evident.	NLT QPRM #15	Larano	<i>Construction of the bridge is scheduled for summer 2023, which should be after the PCEP completes end-to-end testing. The JPB states that it will not allow the bridge project to interfere with the completion of the PCEP.</i>

No.	Action Item	Discussion	Agreed Due Date	Responsibility Agency/Name	Status
14.02	The FTA requested a Working Session with the JPB/PCEP leadership and PMOC to candidly discuss current circumstances.	The JPB has experienced COVID-19 related and other schedule impacts and has informally requested relief from its FFGA schedule requirement.	Prior to the Thanksgiving Day, November 26, 2020	Abaray/Eidlin	The virtual meeting was held on November 17, 2020.

**Legend:** Colored italics indicate a new entry from the previous version. Shaded cells indicate a completed item.

## Appendix E: JPB Organization Chart





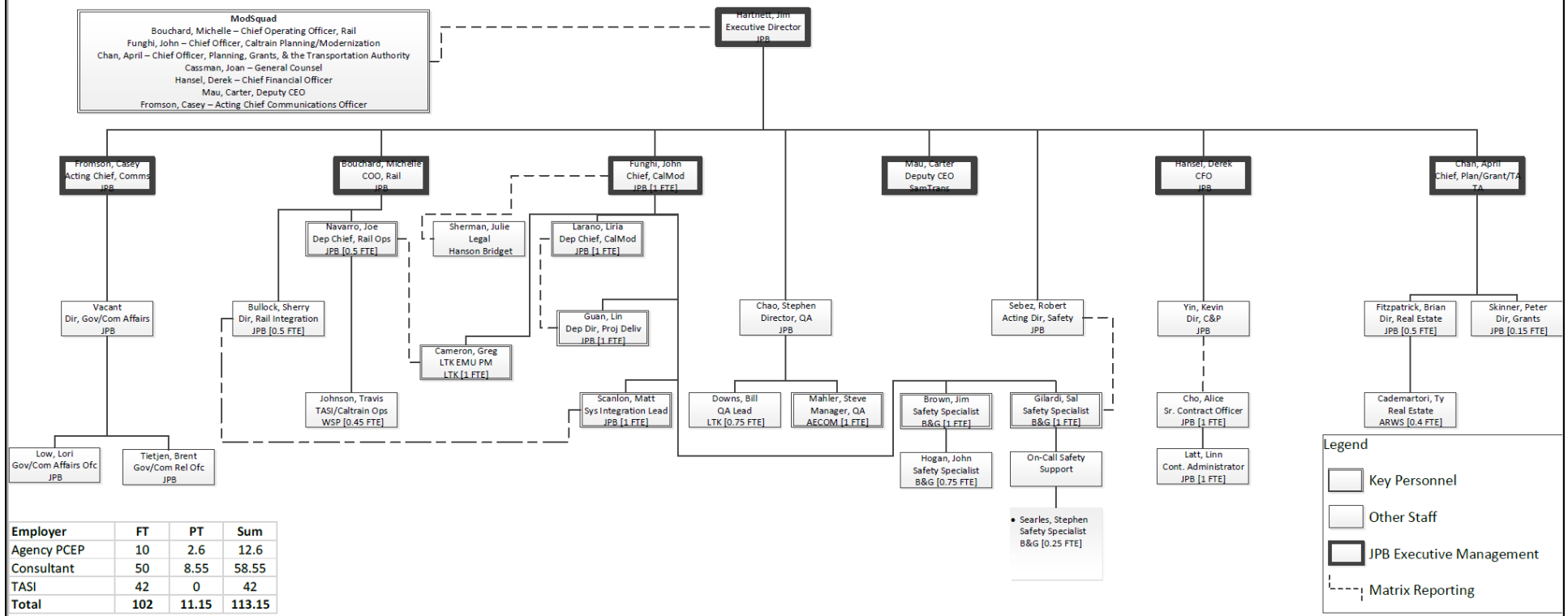
## Appendix F: PCEP Organization Chart

### Peninsula Corridor Electrification Project (PCEP) Organizational Chart

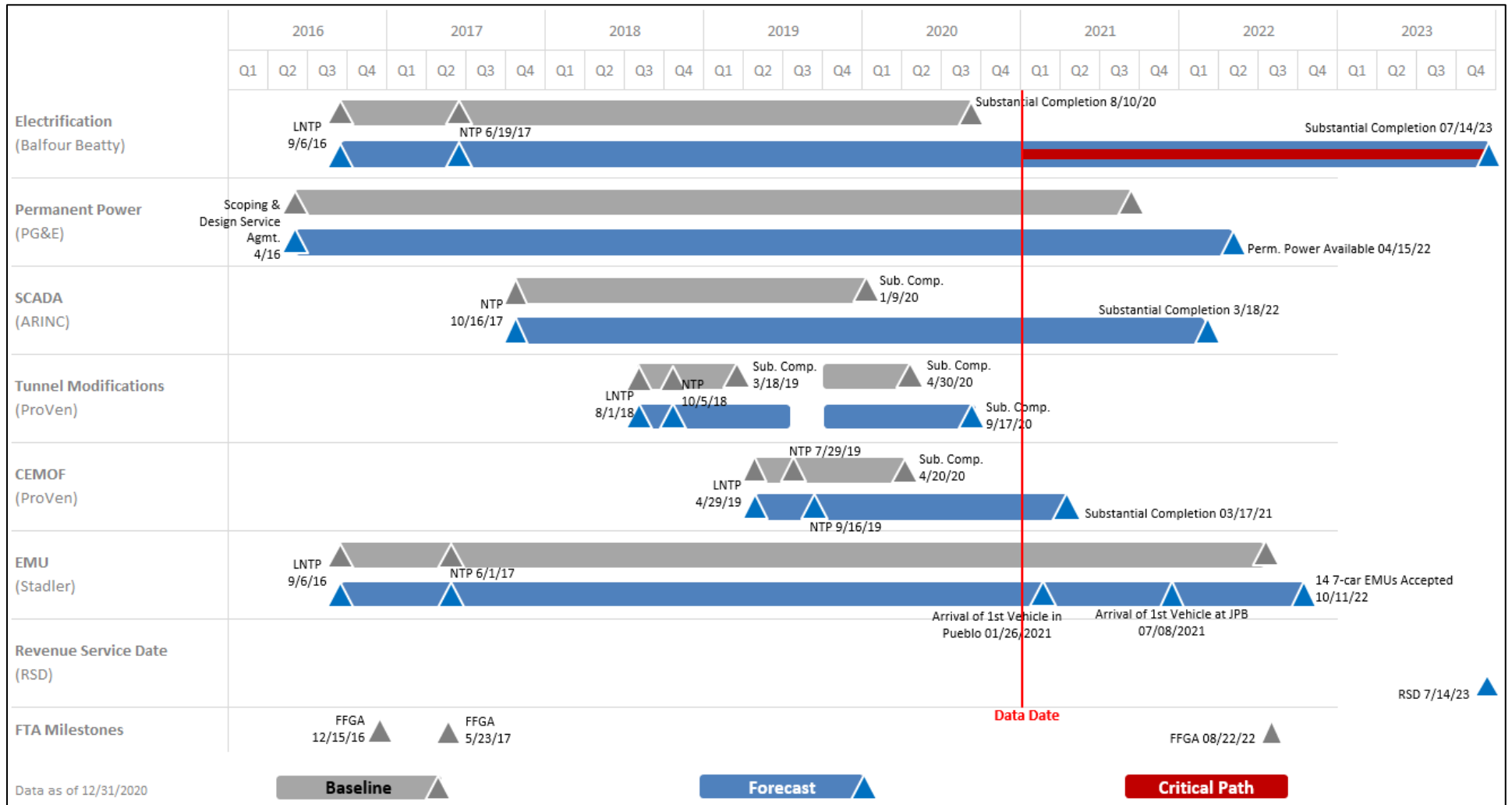
As of January 11, 2021



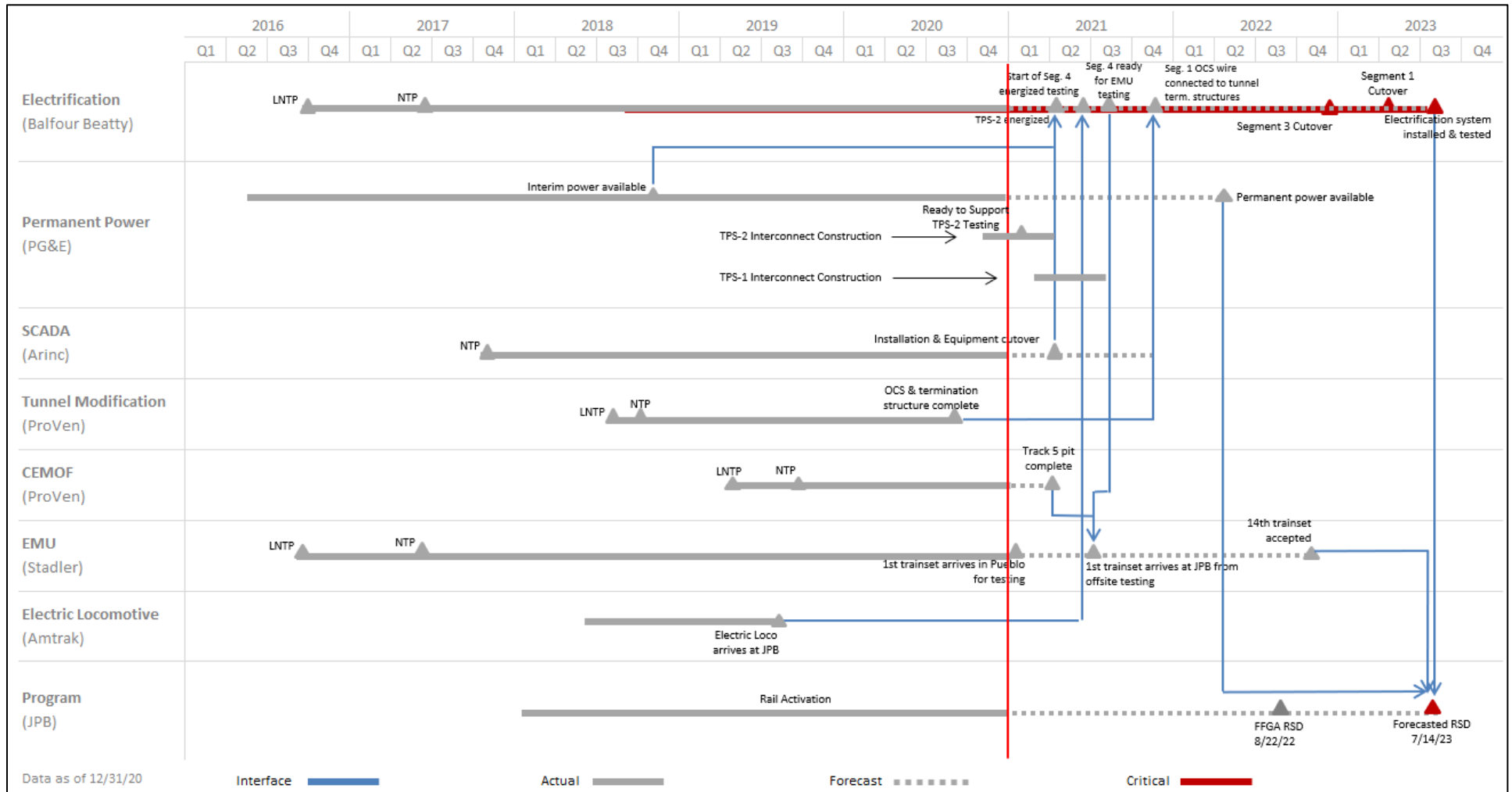
**Executive Team**  
& CalMod Chief Direct Reports




















## Appendix G: Program Schedule



## Appendix G: Summary Interface (Critical Path) Schedule



## Appendix H – Key Indicators (January 2021)

KEY INDICATORS DASHBOARD (JULY 2020)					
Project Sponsor:		Peninsula Corridor Joint Powers Board (PCJPB) / Caltrain			
Project Name:		Peninsula Corridor Electrification Project (PCEP)			
Date:		January September 30, 2020			
Project Detail					
Oversight Frequency:		Quarterly			
Element	Status			Prior Status (G/Y/R)	Issue or Concern
					
	G	Y	R		
PMP					
MCC					Continuing need for more Scheduling and Systems Integration support
Cost					Remaining unencumbered cost contingency below drawdown curve
Schedule					FCD delay projected; schedule contingency zero.
Quality					
Safety					The design-builder's safety performance has improved recently.
Risk					Delayed TPS switchgear, continued slow OCS progress, COVID-19 EMU delays, cost impact of schedule delays.
Legend					
Green	Satisfactory: No Corrective Action necessary.				
Yellow	Caution: Risk/Issues exist. Corrective Action may be necessary.				
Red	Elevated for immediate Corrective Action: Significant risk to the health of the project.				

## Appendix I: Core Accountability Items through December 2020

Project Status: In Construction		Original (FFGA)	Current Forecast <sup>[1]</sup>	PMOC Assessment of Current Forecast
Cost	Cost Estimate	\$1,930,670,934	\$1,930,670,934	Not an Estimate at Completion
Contingency	Unallocated Contingency	\$162,620,294	\$50,336,157	
	Allocated Contingency	\$152,913,317	\$14,357,276	
	Total Contingency	\$315,533,611	\$64,693,434	Likely Overstated
Schedule	Final Completion Date	August 22, 2022	July 14, 2023	Later than FCD
Project Progress			Amount (\$)	Percent of Total
Total Expenditures		Actual cost of all eligible expenditures completed to date <sup>[3]</sup>	\$1,069,343,754	55.39%
Planned Value to Date <sup>[2]</sup>		Estimated value of work planned to date <sup>[3]</sup>	\$1,185,166,596	61.39%
Actual Value to Date		Actual value of work completed to date <sup>[3]</sup>	\$773,488,854	40.06%
Contracts Status			Amount (\$)	Percent
Total Contracts Awarded		Value of all contracts (design, support, construction, equipment) awarded; % of total value to be awarded <sup>[4]</sup>	\$1,721,330,135	89.16%
Construction Contracts Awarded		Value of construction contracts awarded; % of total construction value to be awarded <sup>[5]</sup>	\$1,441,498,334	74.66%
Physical Construction Completed		Value of physical construction (infrastructure) completed; % of total construction value completed	\$700,442,400	48.59%
Rolling Stock Vehicle Status		Date Awarded	No. Ordered	No. Delivered
Electric Multiple Unit (EMU) commuter rail vehicles		08/2016 (A)	133	0
Next Monitoring Meeting Date:			TBD – March 2021	
Next Quarterly Review Meeting Date:			TBD April 2021	

### Core Accountability Table Footnotes:

1 Current estimate is the remaining balance which includes known change orders that will draw from Contingency funds, both Allocated and Unallocated.

2 Planned Value to Date is based upon the Program Schedule and Estimate (Rev. 4B) that were updated in October 2017 to reflect the FFGA delay.

3 Work is defined as construction or manufacturing by Balfour Beatty, Stadler, PG&E, CEMOF, Tunnel Modification, and other Required Projects.

4 Percentage is calculated based on a project value of \$1,930,670,934.

5 Total construction contracts awarded to date (construction & vehicle contracts only) includes design costs and executed change orders.