

PENINSULA CORRIDOR JOINT POWERS BOARD  
STAFF REPORT

TO: Joint Powers Board

THROUGH: Jim Hartnett  
Executive Director

FROM: Michelle Bouchard  
Chief Operating Officer, Rail

SUBJECT: **CALTRAIN POSITIVE TRAIN CONTROL PROJECT UPDATE – APRIL 2018**

**ACTION**

Staff Coordinating Council recommends that the Board receive the Positive Train Control (PTC) report April, 2018

**SIGNIFICANCE**

Staff will provide monthly updates covering PTC related activities during the previous month.

**BUDGET IMPACT**

There is no budget impact.

**MONTHLY UPDATE**

The Caltrain PTC project respectfully submits the following update for your review and comment:

**1. Status on Major Milestones to Successfully Enter RSD December 2018**

<u>Key Project Activity</u>	<u>Expected Completion</u>	<u>Progress As Of 4/5/18</u>	<u>Progress On Track?</u>	<u>Mitigation Required / Comments</u>
Approval of Designated RSD Test Request	May 30	In Process	Yes	Test Request submitted in April to FRA for review, approval
Pilot Installations (4) Completed	June 20	Starts May 4	Yes	Scheduled to do (4) pilots in 2018, (3) pilots 2019
Submit Designated RSD Application	Oct 15	Not Started	Not Started	No issues at this time
Complete Critical Feature V&V	Oct 30	In Process	Yes	V&V has begun, no issues at this time
Designated RSD Training Complete	Nov 14	Not Started	Not Started	Material development starts July 3
Designated RSD – Required Vehicle Install Completion	Nov 27	Not Started	Not Started	(44) Total installs required – (4) pilot plus (40) other vehicles
Complete All Designated RSD Testing (Lab, Functional and FQT)	Dec 18	Not Started	Not Started	Lab testing begins Aug 16, field testing Sept 28, PTC functional testing Nov 27
Start of Designated RSD	Dec 18	Not Started	Not Started	Must complete (44) installs and receive FRA approval to run in PTC mode in Designated RSD area

**Major Wabtec activities completed in April:**

- Wabtec mobilization completed, including locating in BCCF and start of vehicle installation material deliveries to CEMOF
- Key Wabtec personnel approved (Project manager and Test Manager)
- Approval of Wabtec baseline project schedule
- Completion of requirements to secure \$21M FTA/FRA PTC grant (March 30<sup>th</sup>)

**2. Change Order Log** – There have been no change orders requested from Wabtec during this reporting period, and there are none in process or review by JPB. This section will track all change activity on the contract.

**3. Risk Management** - JPB and Wabtec have agreed to share the management of an identified list of risk items which were identified during the contract negotiations. Risk review meetings between the JPB and Wabtec will be held on a quarterly basis, the first review tentatively to occur in May, with the resulting update and actions to be noted in this report. There are also risks to be monitored outside the Wabtec – specific contract that the project team monitors and mitigates as necessary.

The following table captures the top risks both external (outside the Wabtec contract) and internal (specific to the Wabtec contract):

Risk Item	Type	Mitigation Action
Potential EMU delay due to move from I-ITCS to I-ETMS	External	Support EMU team effort to bring Wabtec under contract to provide PTC solution required for EMU cars with minimal delay
FRA process changes	External	Maintain close and open relationship with key FRA contacts to insure all submittals are done correctly and within required time frame to achieve 2018 RSD
Interoperability delays	External	Work with UPRR and tenants to insure agreed to interoperability schedule dates are maintained
Onboard installation delays	Internal	Uphold review schedule for pilot design approval and insure production installation schedule is maintained by Wabtec to achieve required 2018 installs to achieve RSD
Track access delays	Internal	Insure field test schedule is maintained by coordinating all field work in combination with other capital projects needs

**4. Cost – Spend vs budget**

	(A)	(B)	(C)	(D)	(E)	(F) = (C - E)	(G) = ( D / E)
Project Cost Analysis	Original Budget (US\$MM)	Approved Changes (Contractor) (US\$MM)	Project Current Budget (US\$MM)	Expended and Accrual To-Date (US\$MM)	Estimated at Completion (EAC) (US\$MM)	Variance at Completion (US\$MM)	% Expended of EAC
<b>CBOSS PTC Project (Jan 2008 - Feb 2018)</b>	\$ 231.00		\$ 239.88	\$ 202.10	\$ 202.10		
Caltrain PTC Project:							
Intergrator WABTEC Contract	\$ 43.01		\$ 43.01	\$ 0.19	\$ 43.01	\$ -	0.45%
Other Contractors	\$ 6.00		\$ 6.00		\$ 6.00	\$ -	
Potential Changes	\$ 2.00		\$ 2.00		\$ 2.00	\$ -	
Caltrain Owner's Costs	\$ 30.34		\$ 30.34	\$ 0.86	\$ 30.34	\$ -	2.83%
Project Contingency	\$ 6.06		\$ 6.06		\$ 6.06	\$ -	
<b>Total PTC Project</b>	\$ 87.41		\$ 87.41	\$ 1.05	\$ 87.41	\$ -	1.20%

**5. Items of note in April** – This section reports on PTC general progress and issues being tracked outside the Wabtec contract during the current reporting month.

- 1) The Back Up Central Control Facility (BCCF) was re-activated to serve as the project base of operations for Wabtec personnel, including project management, field testing, fiber audit, training and integration lab activities. A separate group of Wabtec personnel will be located at the CEMOF facility to support vehicle installation activities.
- 2) Submitted revised PTC Implementation Plan (IP) detailing the move from I-ITCS to I-ETMS to the FRA for review / approval, this is a key project submittal linking to the successful approval other documents required to achieve RSD.
- 3) Caltrain received and is reviewing the ARINC proposal for ROCS integration service support required for the PTC project. Scope of work in final review with expectation to sign contract in next 1-2 weeks.
- 4) Began updates to Caltrain tenant railroads and the UPRR, discussing the Caltrain project re-start and plans to achieve PTC interoperability for the Caltrain and UPRR properties.
- 5) Ongoing informal updates to the FRA to insure the Caltrain PTC project provides all information required in timely and correct manner expected to achieve RSD this year. Building strong relationships with the FRA regional personnel key to insuring minimal if any delays in the review process.
- 6) Project team in final stages of completing complete review / replan of overall program budget required to complete the PTC project. Once replan is complete, the JPB executive staff will submit the revised budget to the committee and Board for review.
- 7) The PTC project continues its coordination efforts with the Electrification and EMU programs via regularly scheduled status meetings such as the Biweekly CalMod Systems Integration, the PCEP Delivery Coordination and the PTC-PCEP coordination meetings. Ad hoc meetings to discuss topics requiring indepth or immediate decisions are held as needed.

**6. Upcoming Key Activities in May -**

- 1) Start of pilot onboard installations on Caltrain fleet – Wabtec will begin the installation of their onboard PTC product on (4) types of vehicles that have been chosen for the (44) total vehicles to be installed and tested to complete the RSD requirements for fleet installations.
- 2) Anticipated FRA approval for the designated RSD track segment (15 miles) required for achieving RSD in 2018.
- 3) Bringing ARINC under JPB contract for the CAD support required by Wabtec for the PTC contract.
- 4) Kickoff of the system-wide fiber audit to be conducted by Wabtec to determine the scope of repair required from the installation performed under the previous integrator. This audit will also result in updated As-Built drawings that correctly display the PTC fiber network.
- 5) Receipt and review of the Wabtec V&V test plan and master training plan
- 6) Complete securing of \$2.8M FTA/FRA testing grant and begin effort to secure additional grant funding
- 7) Reimplementation of the Funding Partners Oversight Protocol. A current list of standing mtgs will be distributed to the Partners.

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