

Communication Based Overlay Signal System Project Status

Board of Directors February 4, 2016 Agenda Item 10



Background

- Issue Communications Based Overlay Signal System Design/Procure/Install Turn-key RFP: August 2010
- Awarded Prime Contact: October 2011
- Executed a Service Agreement with California High Speed Rail Authority (HSR11-04) for Federal Railroad Administration Funding: December 2011
- Issued Notice to Proceed to Parson Transportation Group: Jan. 27, 2012
- Executed Fiber Optic Option: April 26, 2012
- Exercised Option 1 (Phase 2): April 30, 2013
- Exercised Option 2 (Phase 3): Aug. 1, 2013
- Exercised Option 2 (Phase 4): Dec. 4, 2014



CBOSS Project Requirement

Positive Train Control (Rail Safety Act 2008)

- Prevent Train-to-Train Collisions
- Prevent Overspeed Derailments
- · Prevent Incursions into Established Work Zones
- · Prevent Movement through a Misaligned Switch

Additional Requirements

- Enhanced Crossing Safety / Performance
- Improved Headways and Operational Flexibility
- Enforcement of Scheduled Station Stops
- Schedule Management
- Employee in Charge

3



CBOSS PTC Project Status

- · On-Board Equipment Installation Complete
- Wayside Interface Unit Installation and FRA Official Validation Testing Complete
- · Fiber Optic Cable Installation Complete
- Base Station Installation Complete
- Dynamic Testing On Test Train Continues
- High Rail Testing for FRA Official Critical Assets Continues
- BCCF Build-out Complete; CBOSS PTC Testing being Conducted from BCCF Facility



Project Schedule and Budget

- · New Project Baseline Schedule Developed
- Revenue Service Demonstration delayed until Q4 2016.
 - I-ITCS Software Release Delays
 - Contractor Execution of Test Plans and Schedules
 - FRA process is in flux
- Schedule delay will require additional funding for the project.
 - Requires commercial negotiation with Contractor
 - Funding for extension of Owners Team
- Will Submit Budget Request in the FY 2017 Budget Process

5



Project Key Milestones

	Project Key Milestones	Planned Baseline Finish	Actual/ Forecast Finish
1	JPB Issued Notice to Proceed to PTG – Phase 1	Jan 2012	Jan 2012
2	Completion of Preliminary Design Review and Acceptance	Sept 2012	Nov 2012
3	Completion of Critical Design Review and Acceptance	Feb 2013	June 2013
4	Completion of Final Design Review and Acceptance	Jul 2013	Jun 2014
5	Completion factory Integrated Systems/Subsystem Demo	Sept 2014	Apr 2015
6	Completion of Data Communication Subsystem (DCS) Installation and Verification	Sept 2014	Apr 2015
	Completion of Field Subsystem Installation and Verification	Jan 2015	Mar 2015
	Completion of Onboard Subsystem Installation and Verification	Jun 2015	Aug 2015
	Complete build out of BCCF for CBOSS PTC	Feb 2014	Sept 2014
	Commence FRA Pilot Section Demonstration	Oct 2014	May 2015
	Submit Revenue Service Demonstration Application	Jul 2015	Q3 2016
	Revenue Service Demonstration	Oct 2015	Q4 2016
	Final System Acceptance	May 2016	Q2 2017



Next Steps

- Develop and Submit Revised Project Budget in FY17 Budget Process
- Complete Segment #3 Pilot Testing and FRA Witness Testing
- Submit RSD Application
- Complete Segment #2 and Segment #1 Testing
- Commence Revenue Service Q4

7



Questions?

CaltrainPTC@samtrans.com