



Communication Based Overlay Signal System Project Status

Board of Directors
July 7, 2016
Agenda Item # 18



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

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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
- Brake Testing is in Progress
- High Rail Testing for FRA Official Critical Assets Complete

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CBOSS PTC Project Status

- BCCF Build-out Complete; CBOSS PTC Testing being Conducted from BCCF Facility
- Successful Revenue Service Operations Test of the BCCF
- There appear to be interoperability challenges
 - Version issues
 - FRA requirements

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Project Schedule and Budget

- New Project Baseline Schedule Developed
- First phase of Revenue Service Demonstration scheduled for October 2016.
 - This timeframe is at risk
- CBOSS System Acceptance scheduled for April 2017.
 - This timeframe is at risk

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Project Related Activities

- JPB PTG Partnering Session held on May 25th and 26th.
- APTA Peer Review of CBOSS Project in Progress (June 1st – 3rd).
- Long Term Maintenance and Support:
 - Evaluating two alternatives for providing required CBOSS long term maintenance and support services
 - Both alternatives are contracted solutions

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
7	Completion of Field Subsystem Installation and Verification	Jan 2015	Mar 2015
8	Completion of Onboard Subsystem Installation and Verification	Jun 2015	Aug 2015
9	Complete build out of BCCF for CBOSS PTC	Feb 2014	Sept 2014
10	Commence FRA Pilot Section Demonstration	Oct 2014	May 2015
11	Submit Revenue Service Demonstration Application	Jul 2015	July 2016
12	Revenue Service Demonstration	Oct 2015	October 2016
13	Final System Acceptance	May 2016	April 2017

Next Steps

- Complete Segment #3 Pilot Testing and FRA Witness Testing
- Complete All Wayside and Communications Subsystem Testing
- Cut-over and Begin Using New Mileposts
- Submit RSD Application
- Complete Segment #2 and Segment #1 Testing and submit results to FRA.

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Transitions

- Changing PMO Staff
- PTG designing system to achieve revised functionality required by FRA for RSD
- Baseline schedule and schedule for RSD will be revised based on design solution and acceptance by FRA

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Questions?

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