Annual PTC Progress Report

2016

Central Florida Rail Corridor   FRA-2010-0104

The Annual Positive Train Control (PTC) Progress Report is due by March 31st of each year until full PTC system implementation is complete. The Annual PTC Progress Report must cover the railroad's implementation efforts and progress from the directly previous calendar year, and must be submitted electronically to the Federal Railroad Administration (FRA) via the FRA Secure Information Repository at https://sir.fra.dot.gov.

FRA F 6180.166 (2-16)

Name of Railroad or Entity Subject to 49 U.S.C. § 20157(a): Central Florida Rail Corridor

Railroad Code: CFRC

Annual PTC Implementation Progress Report for: 2015

PTCIP Version Number of File with FRA (basis for goals stated): Version 4

Submission Date: 3/30/2016

Contents

1. Summary

Please provide a narrative summary of overall PTC implementation progress during the preceding calendar year (January 1 to December 31):

In early to mid-2015, CFRC was exploring implementing E-ATC for PTC since E-ATC was being implemented by other commuter rail systems. An open design-build procurement for both E-ATC and I-ETMS was issued in September 2015 but was cancelled because E-ATC was no longer a viable option. Discussions subsequently commenced in earnest with a contractor in the fourth quarter of 2015 to determine an optimal method for implementing I-ETMS.

Discussions also took place in 2015 with various hosted services to evaluate the best method for moving forward with PTC for CFRC.

Category	Quantity Installed During Calendar Year	PTCIP Year End Goal (If Applicable)	Cumulative Quantity Installed at End of Calendar Year	Total Quantity Required for PTC Implementation
Locomotives/Cab Cars Fully Equipped	0	0	0	24
Installation/Track Segments Completed (miles)	0	0	0	110
Radio Towers Fully Installed and Equipped	0	0	0	5
Employees Trained	0	0	0	94
Route Miles In Testing or Revenue Service Demonstration	0	0	0	61.35
Route Miles in PTC Operation	0	0	0	61.35

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2. Update on Spectrum Acquisition

Required content:

- The amount of spectrum acquired and available for use during the applicable calendar year and the cumulative amount acquired and available for use at the end of the applicable calendar year, as compared to the amount the railroad stated would be acquired and available for use by the end of that calendar year and in total for PTC implementation, in the applicable revised PTCIP, as amended
- The basis for how the railroad is determining that the acquired spectrum is available for use by PTC radios (e.g., ensuring non-interference with other radios)

Spectrum Area or Location (E.g., county)	Spectrum Acquired and Available for Use (Owned/Leased) During Calendar Year	Cumulative Amount of Spectrum Acquired and Available for Use (Owned/Leased) at End of Calendar Year	PTCIP Year End Goal for Spectrum Acquired and Available for Use	Total Spectrum Required for PTC Implementation, as Reported in PTCIP
Spectrum Coverage Area or Location✝: None acquired yet	0	0	0	2017

✝Note: To add rows for additional spectrum areas or locations, click on the blue "✛" symbol at the bottom right-hand corner. Please be sure to first click anywhere inside the table to activate this function.

If this function is unavailable for your document, please manually add additional rows.

Please provide any additional narrative for Spectrum Acquisition below:

Spectrum will be acquired for the Central Florida Rail Corridor.

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3. Quantity Update on Hardware Installation

Required content:

- Separated by each major hardware category and subcategory identified below, the amount of PTC hardware installed during the applicable calendar year and the cumulative quantity installed at the end of the applicable calendar year, as compared to the amount the railroad stated would be installed by the end of that calendar year and in total for PTC implementation, in the applicable revised PTCIP, as amended

3.1. Locomotive Status

Category / Installation Feature	Quantity Installed During Calendar Year	PTCIP Year End Goal	Cumulative Quantity Installed at End of Calendar Year	Total Required for PTC Implementation, as Reported in PTCIP
Locomotive (Apparatus)[1]				
On-board Computers (e.g., Train Management Computer)	0	0	0	24
Software For Train Management and other applications	0	0	0	24
PTC Displays	0	0	0	24
Event Recorders	24	0	0	24
Onboard Antennas and/or Transponder Readers	0	0	0	192
GPS Receivers	0	0	0	48
Locomotive Radios – Primary Communications (e.g., 220 MHz radios)	0	0	0	24

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[1] Railroads may elect to add categories or subcategories if more detail is desired.

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Secondary Communications (e.g., cell or Wi-Fi communications) Equipment	0	0	0	48

Please provide any additional narrative for Locomotive Status below. If any of the information called for in Section 3.1 is unavailable to the railroad at the time it is completing and submitting this form, please insert "TBD" in the appropriate field and/or use this comment box to explain when such information will be available and when the railroad expects to submit it to FRA.

WABTEC completed a study in 2014 which generated an installation plan. Provisions were made in each cab car and locomotive for allocation of PTC equipment. Part of the fleet survey included bill of materials and schematics.

3.2.   Infrastructure/Back Office Status

Category / Installation Feature	Completed During Calendar Year	PTCIP Year End Goal	Cumulative Quantity Complete at End of Calendar Year	Total Required for PTC Implementation, as Reported in PTCIP
Infrastructure (Back Office)				
Dispatching Locations (installations complete)	0	0	0	1
Physical Back Office System Equipment (installations complete)	0	0	0	1

Are the Back Office Location(s) fully operable?	No
Are the Dispatching Location(s) fully operable?	No

Please provide any additional narrative for Infrastructure/Back Office Status below:

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Discussion is taking place with a contractor to explore the possibility of the contractor providing their BOS for use on the CFRC. Discussion is still ongoing.

3.3.   Installation/Territory Status

Category / Installation Feature	Quantity Installed During Calendar Year	PTCIP Year End Goal	Cumulative Quantity Installed at End of Calendar Year	Total Required for PTC Implementation, as Reported in PTCIP
Infrastructure – Wayside Installations by Territory (i.e., Subdivision, District, Track Segment, Etc.)[2]				
Identification of the Territory (i.e., Subdivision, District, Track Segment, Etc.)†: CFRC				
Wayside Interface Units†	0	0	64	95
Communication Towers or Poles†	0	0	4	5
Switch Position Monitors†	0	0	0	n/a
Wayside Radios†	0	0	0	n/a
Base Station Radios†	0	0	0	5
Are all necessary communication backbone utilities for this track segment (including fiber, copper, ground wiring etc.) installed and ready for operation?† No				

†Note: To add rows for additional territories and associated sub-components, click on the blue "**+**" symbol at the bottom right-hand corner. Please be sure to first click anywhere inside the table to activate this function. If this function is unavailable for your document, please manually add additional rows.

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[2] Each railroad should report information in a manner
subdivision, it should report that way.

Please provide any additional narrative for Installation/Territory Status below. If any of the information called for in Section 3.3 is unavailable to the railroad at the time it is completing and submitting this form, please insert "TBD" in the appropriate field and/or use this comment box to explain when such information will be available and when the railroad expects to submit it to FRA.

4. Quantity Update on Employees Trained

Required content:

- Separated by each employee category identified below, the number of employees trained during the applicable calendar year and the cumulative number of employees trained at the end of the applicable calendar year, as compared to the number the railroad stated would be trained by the end of that calendar year and in total, in the applicable revised PTCIP, as amended

Employee Category[3]	Number of Employees Trained During Calendar Year	PTCIP Year End Goal	Cumulative Number of Employees Trained at End of Calendar Year	Total Reported in PTCIP
Employees who Install, Maintain, Repair, Modify, Inspect, and Test the PTC System	0	0	0	30
Employees who Dispatch Train Operations	0	0	0	10
Train and Engine (Operations) Employees	0	0	0	22
Roadway Worker Employees	0	0	0	9

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[3] *See* 49 C.F.R. § 236.1041(a).

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| Direct Supervisors of the Above Employees | 0 | 0 | 0 | 23 |

Please provide any additional narrative for Employee Training below:

An RFP will be issued that will encompass the requirements for comprehensive employee training. The technical specification will be issued for industry review at the end of April.

5. Progress on Implementation Schedule/Milestones

Required content:

- Describe the extent to which the railroad or other entity is not complying with the implementation schedule it provided in its revised PTCIP, as amended

It is anticipated that all hardware will be installed by December 31, 2018 with the pilot section in revenue service demonstration.

6. Summary Update of Challenges/Risks

Required content:

- Any update to the summary of remaining technical, programmatic, operational, or other challenges that the railroad or other entity provided in its revised PTCIP, as amended, including challenges with availability of public funding, interoperability, spectrum, software, permitting, and testing, demonstration, and certification
- Schedule Risk Updates (e.g., funding, technology, agreements)

Please provide Summary Update of Challenges/Risks below:

Risks:

- Delay in completing agreement with CSX could delay anticipated completion dates for RSD
- Delay in Ansaldo meeting CAD requirements could delay anticipated completion dates for RSD.
- Delay in issuing RFP for equipment could delay equipment installation.

7. Progress on Revenue Service Demonstration (RSD) or Implementation

Required content:

- The total number of route miles on which PTC has been initiated for revenue service demonstration or implemented, as compared to the total number of route miles required to have a PTC system (see Section 1 Summary Table)
- Estimated start date (month and year) for RSD

Segment Identification[4]	Number of Route Miles in Segment	Status at End of Calendar Year *Current status of installation/track segment. __Choose one__:*	Estimated Start Date for Revenue Service Demonstration (if not already completed)
Segment *(add additional rows for segments as necessary):* CFRC – pilot section	10	⊙ Not Started ○ Installing ○ Testing ○ Operational/Complete	October 2018
CFRC remaining corridor	51.35	Not Started	Late 2019

Note: To add additional rows, click on the blue "+" symbol at the bottom right-hand corner. Please be sure to first click anywhere inside the table to activate this function.

If this function is unavailable for your document, please manually add additional rows.

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[4] Segment identification should be consistent with segments listed in Section 3.3.

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Please provide any additional narrative for Revenue Service Demonstration or Implementation below:

The area that has been chosen for the pilot section is located in the Initial Operating Segment from MP 773 to MP 783 and is located in an area that should have minimal upgrades being performed over the next three years.

8. Update for Intercity or Commuter Rail Passenger Transportation (if applicable)

If this section is not applicable to your railroad, please mark N/A.

Required content (if applicable):

- For each entity providing regularly scheduled intercity or commuter rail passenger transportation, a description of the resources identified and allocated to implement PTC

Please provide Update for Intercity or Commuter Rail Passenger Transportation below, if applicable:

Discussion is taking place with a contractor to provide the following:

- Use of their BOS, redundant BOS and ongoing upgrades
- Troubleshooting the BOS
- Creation and ongoing maintenance and changes associated with ground survey, SubDiv files including critical asset validation and route validation
- PTC Help Desk
- Configuration Management templates
- PTCSP templates
- Rolling Stock software/firmware and updates
- Wayside equipment typical drawings, materials lists and seed programs, signals library and mapping
- Support lab and field integration, field qualification and revenue service demonstration support

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- Security Management
- 220 MHZ Coordination

Contracts will also be issued during the summer of 2016 for the remaining PTC work such as the Office, onboard, wayside and communications, the development of the PTCSP and integration activities.

9. Update on Interoperability Progress and Other Formal Agreements

Required content:
- For host railroads: provide updates to any agreements and key milestones for all tenant operations **FCEN, Amtrak, & CSX**
- For tenant railroads: provide updates to any agreements and key milestones for all operations over tracks hosted by another railroad

Host and Tenant Railroads: Please provide a general update on interoperability in the textbox below.

Florida Central Railroad – a tenant Class 3 short line freight operator has requested an exception to 49 CFR 236.1006 in order to operate non-PTC equipped locomotives on the corridor for interchange purposes.

Amtrak – Quarterly updates are ongoing.

CSX – Discussions are ongoing.

Host Railroads Only: For each tenant, please provide additional tenant information below.

Tenant Identification (Please add rows for additional tenants as necessary)	Estimated Tenant Locomotive Fleet (if the tenant does not have a separate PTCIP on file)	Current Tenant Implementation Status Choose one:
Florida Central Railroad – a tenant Class 3 short line freight operator has requested an exception to 49 CFR 236.1006 in order to operate non-PTC equipped locomotives on the corridor for interchange purposes. Amtrak – Quarterly updates.	FCEN – one round trip per day, five days per week for interchange purposes Amtrak – 6 passenger trains per day CSX – 8 local trains, 4 through trains	○ Not Started ⊙ Installing ○ Testing ○ Operational/Complete

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CSX – will be completed with installation of WIUs on either side of CFRC with the south side being completed in September in 2017 and the north side being completed in November 2017.		

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If this function is unavailable for your document, please manually add additional rows.

10. Estimated PTC Safety Plan (PTCSP) Submission Date (if not already submitted)

If this section is not applicable to your railroad, please mark N/A.

PTCSP Submission Date
December 2018

Please provide any additional narrative for PTCSP Submission below:

A contract will be issued for preparation of the PTCSP.

11. Testing and Integration Efforts (if applicable, laboratory, integration, and revenue service demonstration)

Please provide Update on Testing and Integration efforts below:

A contract will also be issued which will include testing and integration.

12. Updated Information That FRA Can Use to Maintain Its Geographic Information System (GIS) Database – Segments Complete and Operable

In its annual progress reports, a subject railroad or entity may submit a geographic information system (GIS) shapefile to indicate where various rail segments that must have PTC are located, as long as it includes the following fields: (1) a PTC attribute field (coded with "Y" if line segment is to have PTC installed, otherwise left blank); (2) a SUBDIV attribute field (populated with subdivision name); (3) a MONTH attribute field (populated with the month in which PTC is to be installed); and (4) a YEAR attribute field (populated with the year in which PTC is to be installed). A railroad may submit this information by means other than shapefile format.

Please provide any additional narrative for GIS Information below:

In ongoing negotiations with Contractors, they have offered to conduct the GIS survey and subdiv files.

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