Annual PTC Progress Report

2015

## [Virginia Railway Express]

Docket Number FRA-2010-0037

The Annual Positive Train Control (PTC) Progress Report is due by March 31<sup>st</sup> 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 <a href="https://sir.fra.dot.gov">https://sir.fra.dot.gov</a>.

Name of Railroad or Entity Subject to 49 U.S.C. § 20157(a): Virginia Railway Express

Railroad Code: VREX

**Annual PTC Implementation Progress Report for: 2015** 

PTCIP Version Number of File with FRA (basis for goals stated): 1.2

Submission Date: 3/31/2016

## Contents

1.	Summary
2.	Update on Spectrum Acquisition
3.	Quantity Update on Hardware Installation
_	
3	3.1. Locomotive Status
;	3.2. Infrastructure/Back Office Status4
:	3.3. Installation/Territory Status <sup>2</sup>
4.	Quantity Update on Employees Trained
5.	Progress on Implementation Schedule/Milestones
6.	Summary Update of Challenges/Risks
7.	Progress on Revenue Service Demonstration (RSD) or Implementation
8.	Update for Intercity or Commuter Rail Passenger Transportation (if applicable)
9.	Update on Interoperability Progress and Other Formal Agreements
10.	Estimated PTC Safety Plan (PTCSP) Submission Date (if not already submitted)
11.	Testing and Integration Efforts (if applicable, laboratory, integration, and revenue service demonstration)
	. Updated Information That FRA Can Use to Maintain Its Geographic Information System (GIS) Database – Segments Complete and erable

#### 1. Summary

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

VRE is a tenant Commuter Railroad hosted by CSX Transportation (CSXT), Norfolk Southern Railway (NSR) and Amtrak and will not be a Host Railroad for any PTC territory. For this reporting period, VRE started on-board equipment installation of Wabtec's I-ETMS® PTC System; developed training plans; evaluated solutions for implementing a hosted Back Office Server (BOS) system for communication with the Host Railroads; and evaluated the requirements to secure the necessary 220 MHz radio license.

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 Fully Equipped	8	8	8	41
Installation/Track Segments Completed	Not applicable	Not applicable	Not Applicable	Not Applicable
Radio Towers Fully Installed and Equipped	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Employees Trained	0	0	0	108
Route Miles In Testing or Revenue Service Demonstration	0	0	0	0
Route Miles in PTC Operation	0	0	0	0

#### 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†: Click here to enter text.	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Please provide any additional narrative for Spectrum Acquisition below:

As a Tenant railroad VRE will not be purchasing Spectrum.	

### 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) <sup>1</sup>								
On-board Computers (e.g., Train Management Computer)	8	8	8	41				
Software For Train Management and other applications	TBD	TBD	TBD	41				
PTC Displays	8	8	8	41				
Event Recorders	8	8	8	41				
Onboard Antennas and/or Transponder Readers	8	8	8	41				
GPS Receivers	8	8	8	41				
Locomotive Radios – Primary Communications (e.g., 220 MHz radios)	8	8	8	41				
Secondary Communications (e.g., cell or Wi-Fi communications) Equipment	8	8	8	41				

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 has not released to VRE the operational software for the TMC.

 $<sup>^{\</sup>rm 1}$  Railroads may elect to add categories or subcategories if more detail is desired.

#### 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)	Not Applicable	Not Applicable	Not Applicable	Not Applicable			
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?	Not Applicable

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

VRE is currently evaluating a 3<sup>rd</sup> party hosted Back Office System solution.

#### 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.) <sup>2</sup>							

<sup>&</sup>lt;sup>2</sup> Each railroad should report information in a manner consistent with its PTCIP. That is, if a railroad monitors implementation of track segments by territory or subdivision, it should report that way.

dentification of the Territory (i.e., Subdivision, District, Track Segment, Etc.)†: Not Applicable						
Wayside Interface Units†	Not Applicable	Not Applicable	Not Applicable	Not Applicable		
Communication Towers or Poles†	Not Applicable	Not Applicable	Not Applicable	Not Applicable		
Switch Position Monitors†	Not Applicable	Not Applicable	Not Applicable	Not Applicable		
Wayside Radios†	Not Applicable	Not Applicable	Not Applicable	Not Applicable		
Base Station Radios†	Not Applicable	Not Applicable	Not Applicable	Not Applicable		

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.

As a Tenant railroad, and by agreement with our Host Railroads, VRE does not have responsibility for wayside or other infrastructure installations.

## 4. Quantity Update on Employees Trained

etc.) installed and ready for operation?† N/A

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 <sup>3</sup>	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	31
Employees who Dispatch Train Operations	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Train and Engine (Operations) Employees	0	0	0	62
Roadway Worker Employees	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Direct Supervisors of the Above Employees	0	0	0	15

#### Please provide any additional narrative for Employee Training below:

VRE trains are operated and maintained through long-term 3<sup>rd</sup> party agreement with contractors. The totals include contractors as well as VRE staff. These counts are based on current staffing levels, based primarily on current service levels, which are subject to change. Any Operator or Mechanical staff changes will be required to be PTC trained.

#### 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

VRE believes we are on target with the implementation of PTC based on Host Railroads current projections for the segments VRE will operate over.

<sup>&</sup>lt;sup>3</sup> See 49 C.F.R. § 236.1041(a).

#### 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:

Although VRE feels we are currently on target to meet the goals described in the revised PTCIP for the tasks VRE must completed, the supply of PTC equipment material is a primary challenge that is of paramount importance to VRE. There are two unresolved issues VRE is actively pursuing which are the Onboard Slot-10 software development and the selection of the 3<sup>rd</sup> party for Back Office hosting. Regarding the Slot-10 software VRE is in discussion with their Host Railroads in order to replicate what they have implemented. The Back Office Host selection is planned to be completed in sufficient time to support Host Railroad testing by the end of calendar year 2016.

#### 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 <sup>4</sup>	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	Click here to enter number of route miles.	<ul><li>Not Started</li><li>Installing</li><li>Testing</li></ul>	To be determined by Host Railroads

<sup>&</sup>lt;sup>4</sup> Segment identification should be consistent with segments listed in Section 3.3.

necessary): Click here to	O Operational/Complete	
enter segment identification.		

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

This activity is dictated by the Host Railroad's internal plans.

#### 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:

Currently, VRE has a project manager and mechanical engineering consultants assigned to PTC implementation. For on-board PTC equipment installations, there are two full-time installation crews provided by the supplier of PTC equipment.

## 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
- 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.

VRE is currently in discussions with our Host Railroads on formal agreements to capture all requirements by the Host Railroads to operate under full PTC enforcement.

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

Tenant Identification (Please add rows	Estimated Tenant Locomotive Fleet (if the tenant	Current Tenant Implementation Status
for additional tenants as necessary)	does not have a separate PTCIP on file)	<u>Choose one</u> :
Click here to enter tenant's full name.	Click here to enter estimated tenant locomotive fleet.	<ul><li>O Not Started</li><li>O Installing</li><li>O Testing</li><li>O Operational/Complete</li></ul>

#### 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	
N/A	

Please provide any additional narrative for PTCSP Submission below:

A PTCSP is not required to be formally submitted by the Tenant Railroad.

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

Please provide Update on Testing and Integration efforts below:

Test plans will be determined by VRE and the Host Railroads.

# 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:		
	Click here to enter text.	

Public reporting burden for this information collection is estimated to average 38.41 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for this information collection is **2130-0553**. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection, including suggestions for reducing this burden to OMB's Office of Information and Regulatory Affairs, Attn: FRA OMB Desk Officer.