# Annual PTC Progress Report

2015

### Nashville and Eastern Railroad

[Do# FRA-2015-0063

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 https://sir.fra.dot.gov.

Name of Railroad or Entity Subject to 49 U.S.C. § 20157(a): Nashville and Eastern Railroad

Railroad Code: NRTX (and NERR)

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

PTCIP Version Number of File with FRA (basis for goals stated): Revision 8

**Submission Date:** Click here to enter a date.

#### Contents

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

#### 1. Summary

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

The Railroad submitted PTCDP version 2.3 to the FRA for review on November 23, 2015.

| Category   | Quantity Installed<br>During Calendar<br>Year | PTCIP Year End<br>Goal (If Applicable) | Cumulative<br>Quantity Installed<br>at End of Calendar<br>Year | Total Quantity<br>Required for PTC<br>Implementation |
|--|---|--|--|--|
| Locomotives Fully Equipped                                 | 0   | 0                                      | 0  | 14   |
| Installation/Track Segments Completed                      | 0   | 0                                      | 0  | 1  |
| Radio Towers Fully Installed and Equipped                  | 0   | 0                                      | 0  | 1  |
| Employees Trained  | 0   | 0                                      | 0  | 15   |
| Route Miles In Testing or Revenue Service<br>Demonstration | 0   | 0                                      | 0  | 33   |
| Route Miles in PTC Operation                               | 0   | 0                                      | 0  | 33   |

#### 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<br>Location (E.g., county)                            | Spectrum Acquired and<br>Available for Use<br>(Owned/Leased) During<br>Calendar Year | Cumulative Amount of Spectrum Acquired and Available for Use (Owned/Leased) at End of Calendar Year | PTCIP Year End Goal for<br>Spectrum Acquired and<br>Available for Use | Total Spectrum Required for PTC Implementation, as Reported in PTCIP |
|--|--|---|---|--|
| Spectrum Coverage Area or Location†: Wilson and Davidson Counties (TN) | All, In place  | All, In place   | All, in place   | Music City Star route – 217-<br>220 MHz                              |

†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:

| Click here to enter text. |  |  |
|---------------------------|--|--|
|                           |  |  |
|                           |  |  |

#### 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<br>During Calendar Year | PTCIP Year End Goal | Cumulative Quantity<br>Installed at End of<br>Calendar Year | Total Required for PTC<br>Implementation, as<br>Reported in PTCIP |
|---|--|---------------------|---|---|
| Locomotive (Apparatus) <sup>1</sup>                                     |  |                     |   |   |
| On-board Computers (e.g., Train Management Computer)                    | 0  | 0                   | 0   | 14  |
| Software For Train Management and other applications                    | 0  | 0                   | 0   | 1   |
| PTC Displays  | 0  | 0                   | 0   | 14  |
| Event Recorders   | 0  | 0                   | 0   | 14  |
| Onboard Antennas and/or<br>Transponder Readers                          | 0  | 0                   | 0   | 28 x 220 Mhz antennas,<br>14 transponders                         |
| GPS Receivers   | 0  | 0                   | 0   | 14  |
| Locomotive Radios – Primary<br>Communications (e.g., 220 MHz<br>radios) | 0  | 0                   | 0   | 28  |

<sup>&</sup>lt;sup>1</sup> Railroads may elect to add categories or subcategories if more detail is desired.

| Secondary Communications (e.g., |   |   |   |    |
|---------------------------------|---|---|---|----|
| cell or Wi-Fi communications)   | 0 | 0 | 0 | 14 |
| Equipment                       |   |   |   |    |

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. |
|--|
| Click here to enter text.  |
|  |

#### 3.2. Infrastructure/Back Office Status

| Category / Installation Feature                                | Completed During<br>Calendar Year | PTCIP Year End Goal | Cumulative Quantity<br>Complete at End of<br>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:

|               | ,           | , |  |  |
|---------------|-------------|---|--|--|
| Click here to | enter text. |   |  |  |
|               |             |   |  |  |
|               |             |   |  |  |

#### 3.3. Installation/Territory Status

| Category / Installation Feature                     | Quantity Installed<br>During Calendar Year | PTCIP Year End Goal        | Cumulative Quantity<br>Installed at End of<br>Calendar Year | Total Required for PTC Implementation, as Reported in PTCIP |
|---|--|----------------------------|---|---|
| Infrastructure – Wayside Installations by Territo   | ory (i.e., Subdivision, Dist               | rict, Track Segment, Etc   | .)²   |   |
| Identification of the Territory (i.e., Subdivision, | District, Track Segment,                   | Etc.)†: Click here to ente | r text.   |   |
| Wayside Interface Units†                            | 0  | 0                          | 0   | 58  |
| Communication Towers or Poles†                      | 0  | 0                          | 0   | 1   |
| Switch Position Monitors†                           | 0  | 0                          | 0   | Click here to enter sub quantity.                           |
| Wayside Radios†                                     | 0  | 0                          | 0   | 58  |
| Base Station Radios†                                | 0  | 0                          | 0   | 1   |

Are all necessary communication backbone utilities for this track segment (including fiber, copper, ground wiring etc.) installed and ready for operation?† Choose Yes or 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.

<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.

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

| от от технология и |
|--|
| explain when such information will be available and when the railroad expects to submit it to FRA.   |
| Click here to enter text.  |

#### 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 <sup>3</sup>   | Number of Employees<br>Trained During<br>Calendar Year | PTCIP Year End Goal | Cumulative Number of<br>Employees Trained at<br>End of Calendar Year | Total Reported in PTCIP                  |
|--|--|---------------------|--|--|
| Employees who Install, Maintain, Repair,<br>Modify, Inspect, and Test the PTC System | 0  | 0                   | 0  | 3  |
| Employees who Dispatch Train<br>Operations   | 0  | 0                   | 0  | 2  |
| Train and Engine (Operations) Employees  | 0  | 0                   | 0  | 10                                       |
| Roadway Worker Employees   | 0  | 0                   | 0  | Click here to enter number of employees. |
| Direct Supervisors of the Above<br>Employees   | 0  | 0                   | 0  | 2  |

| Please provide any additional narrative | for Employee Training below: |
|---|------------------------------|
|---|------------------------------|

| Click | here | to | enter | text. |
|-------|------|----|-------|-------|
|-------|------|----|-------|-------|

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

| 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   |
| Click here to enter text.   |
|   |
| C. Summany Undata of Challenges / Disks   |
| 6. Summary Update of Challenges/Risks   |
| Required content:   |
| <ul> <li>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,</li> </ul> |
| permitting, and testing, demonstration, and certification   |
| Schedule Risk Updates (e.g., funding, technology, agreements)   |
|   |
| Please provide Summary Update of Challenges/Risks below:  |
| Need to obtain PTCDP type approval in order to move forward.  |
|   |
|   |
|   |
|   |
|   |
|   |

#### 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<br>Segment | Status at End of Calendar Year Current status of installation/track segment. Choose one: | Estimated Start Date for Revenue<br>Service Demonstration (if not<br>already completed) |
|-------------------------------------|-------------------------------------|--|---|
| Segment (add additional             |                                     |  |   |
| rows for segments as                | 33                                  | O Installing   | 2017  |
| necessary): Click here to           | 33                                  | O Testing  | 2017  |
| enter segment identification.       |                                     | O Operational/Complete   |   |

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.

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

| Ī | Click here to enter text. |
|---|---------------------------|
|   |                           |
|   |                           |
| 1 |                           |

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

#### 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:

Nashville RTA provides commuter rail service between Nashville and Lebanon, TN. They (the RTA) has authorized \$13 million in funding for PTC implementation.

#### 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.

Click here to enter text.

No new agreements affecting tenant railroads (RTA Music City Star & Tennessee Central Museum). No new agreements impacting host railroad (NERR).

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> :                  |
| Music City Star Commuter Line          | 7  | Not Started                          |
|  | /  | O Installing                         |

|                          |   | O Testing O Operational/Complete |
|--------------------------|---|----------------------------------|
| Tennessee Central Museum | 2 | Exempt                           |

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.

#### 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 |  |
|-----------------------|--|
| 2017                  |  |

Please provide any additional narrative for PTCSP Submission below:

Awaiting final PTCDP approval before developing PTCSP

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

Please provide Update on Testing and Integration efforts below:

Click here to enter text.

## 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.