OMB Control No. 2130-0553

Annual PTC Progress Report

2015

Canadian Pacific Railway

2010-0058

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): Canadian Pacific Railway

Railroad Code: CP

Annual PTC Implementation Progress Report for: 2015

PTCIP Version Number of File with FRA (basis for goals stated): 3.0

Submission Date: 3/31/2016

Contents

1. Summary

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

During CY2015, CP has made significant progress toward Revenue Service Demonstration in the Ottumwa subdivision, as well as wayside build out in other subdivisions and equipping Locomotives for PTC use.

At the end of CY2015, CP has:

- [redacted]

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	[redacted]			
Installation/Track Segments Completed				
Radio Towers Fully Installed and Equipped				
Employees Trained				

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
Route Miles In Testing or Revenue Service Demonstration				
Route Miles in PTC Operation				

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: Please see below	Please see below	Please see below	Please see below	Please see below

Please provide any additional narrative for Spectrum Acquisition below:

CP is a member of PTC-220, owned equally by each of the seven Class 1 railroads including CP. PTC-220 holds nationwide and regionally licensed FCC spectrum for PTC implementation in the 220-222 MHz spectrum band. Access to this spectrum for CP and each of the PTC-220 owner-members, and for non-members, is provided by a spectrum lease. CP will utilize spectrum planning tools provided by PTC-220 that will enable CP to coordinate its spectrum usage with other railroads to ensure adequate availability and interference mitigation in areas of overlapping operation.

PTC-220 and its member-owners, including CP, believe that the licenses that PTC-220 now currently holds provide spectrum sufficient for nationwide PTC implementation. Should it prove necessary, PTC-220 would seek to acquire additional spectrum licenses.

The RF design for the Chicago and Kansas City dense urban area, funded by the FRA, are in the initial stages of base station frequency plan analysis, including resolution of incumbent interference. Minneapolis-St. Paul, Kansas City areas are in the initial stages of data gathering. Once TTCI completes the dense urban areas of Chicago, Kansas City and Minneapolis-St. Paul RF planning work, we will be in a better position to answer the spectrum need question.

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)	[redacted]			
Software For Train Management and other applications				
PTC Displays				
Event Recorders				
Onboard Antennas and/or Transponder Readers				
GPS Receivers				
Locomotive Radios – Primary Communications (e.g., 220 MHz radios)				

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

[redacted]

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

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)				
Physical Back Office System Equipment (installations complete)				

Are the Back Office Location(s) fully operable?	Yes
Are the Dispatching Location(s) fully operable?	Yes

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

Core dispatching functionality is in place; however there is still work to be completed to automate MIS and Train Feeds to enable these desks to scale. Deployment completed for dispatch desks responsible for DM&E properties; work still remains for SOO and NEUS. Generally speaking, this covers 2 of 9 desks in the Minneapolis Operations Centre as complete, with 7 remaining. These desks will be enabled to align with, and support, the Subdivision Implementation Schedule. The CP US rail network is dispatched from our Minneapolis Operations Centre (MOC) which has the required equipment in order to meet our PTC implementation requirements. In addition to the MOC, CP maintains a back-up contingency facility which is prepared to perform the dispatching functions in the event the MOC becomes non-functional.

CP has installed both BOS required for PTC implementation across required portions of our US system, a primary as well as failover BOS.

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 Subdivision				
Subdivision: Ottumwa				
Wayside Interface Units	[redacted]			
Communication Towers or Poles				
Switch Position Monitors				
Wayside Radios				
Base Station Radios				
Are all necessary communication backbone utilities for this track segment (including fiber, copper, ground wiring etc.) installed and ready for operation? Yes				
Subdivision: Davenport				
Wayside Interface Units	[redacted]			
Communication Towers or Poles				
Switch Position Monitors				
Wayside Radios				
Base Station Radios				
Are all necessary communication backbone utilities for this track segment (including fiber, copper, ground wiring etc.) installed and ready for operation? No				

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
Subdivision: Mason City				
Wayside Interface Units				
Communication Towers or Poles				
Switch Position Monitors				
Wayside Radios				
Base Station Radios				
Are all necessary communication backbone utilities for this track segment (including fiber, copper, ground wiring etc.) installed and ready for operation? Yes				
Subdivision: Marquette				
Wayside Interface Units				
Communication Towers or Poles				
Switch Position Monitors				
Wayside Radios				
Base Station Radios				
Are all necessary communication backbone utilities for this track segment (including fiber, copper, ground wiring etc.) installed and ready for operation? No				
Subdivision: Chicago				
Wayside Interface Units				
Communication Towers or Poles				
Switch Position Monitors				
Wayside Radios				
Base Station Radios				
Are all necessary communication backbone utilities for this track segment (including fiber, copper, ground wiring etc.) installed and ready for operation? Yes				

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
Subdivision: Laredo				
Wayside Interface Units	[redacted]			
Communication Towers or Poles				
Switch Position Monitors				
Wayside Radios				
Base Station Radios				
Are all necessary communication backbone utilities for this track segment (including fiber, copper, ground wiring etc.) installed and ready for operation? Yes				
Subdivision: Kansas City				
Wayside Interface Units	[redacted]			
Communication Towers or Poles				
Switch Position Monitors				
Wayside Radios				
Base Station Radios				
Are all necessary communication backbone utilities for this track segment (including fiber, copper, ground wiring etc.) installed and ready for operation? Yes				
Subdivision: Canadian and Connector				
Wayside Interface Units	[redacted]			
Communication Towers or Poles				
Switch Position Monitors				
Wayside Radios				
Base Station Radios				
Are all necessary communication backbone utilities for this track segment (including fiber, copper, ground wiring etc.) installed and ready for operation? Yes				

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
Subdivision: Freight				
Wayside Interface Units	[redacted]			
Communication Towers or Poles				
Switch Position Monitors				
Wayside Radios				
Base Station Radios				
Are all necessary communication backbone utilities for this track segment (including fiber, copper, ground wiring etc.) installed and ready for operation? Yes				
Subdivision: C&M				
Wayside Interface Units	[redacted]			
Communication Towers or Poles				
Switch Position Monitors				
Wayside Radios				
Base Station Radios				
Are all necessary communication backbone utilities for this track segment (including fiber, copper, ground wiring etc.) installed and ready for operation? No				
Subdivision: Watertown				
Wayside Interface Units	[redacted]			
Communication Towers or Poles				
Switch Position Monitors				
Wayside Radios				
Base Station Radios				
Are all necessary communication backbone utilities for this track segment (including fiber, copper, ground wiring etc.) installed and ready for operation? Yes				

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
Subdivision: Tomah				
Wayside Interface Units				
Communication Towers or Poles				
Switch Position Monitors				
Wayside Radios				
Base Station Radios				
Are all necessary communication backbone utilities for this track segment (including fiber, copper, ground wiring etc.) installed and ready for operation? No				
Subdivision: River				
Wayside Interface Units				
Communication Towers or Poles				
Switch Position Monitors				
Wayside Radios				
Base Station Radios				
Are all necessary communication backbone utilities for this track segment (including fiber, copper, ground wiring etc.) installed and ready for operation? Yes				
Subdivision: Merriam Park				
Wayside Interface Units				
Communication Towers or Poles				
Switch Position Monitors				
Wayside Radios				
Base Station Radios				
Are all necessary communication backbone utilities for this track segment (including fiber, copper, ground wiring etc.) installed and ready for operation? Yes				

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
Subdivision: Withrow				
Wayside Interface Units	[redacted]			
Communication Towers or Poles				
Switch Position Monitors				
Wayside Radios				
Base Station Radios				
Are all necessary communication backbone utilities for this track segment (including fiber, copper, ground wiring etc.) installed and ready for operation? Yes				
Subdivision: Paynesville				
Wayside Interface Units	[redacted]			
Communication Towers or Poles				
Switch Position Monitors				
Wayside Radios				
Base Station Radios				
Are all necessary communication backbone utilities for this track segment (including fiber, copper, ground wiring etc.) installed and ready for operation? Yes				
Subdivision: Elbow Lake				
Wayside Interface Units	[redacted]			
Communication Towers or Poles				
Switch Position Monitors				
Wayside Radios				
Base Station Radios				
Are all necessary communication backbone utilities for this track segment (including fiber, copper, ground wiring etc.) installed and ready for operation? Yes				

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
Subdivision: Carrington				
Wayside Interface Units	[redacted]			
Communication Towers or Poles				
Switch Position Monitors				
Wayside Radios				
Base Station Radios				
Are all necessary communication backbone utilities for this track segment (including fiber, copper, ground wiring etc.) installed and ready for operation? Yes				
Subdivision: Portal				
Wayside Interface Units	[redacted]			
Communication Towers or Poles				
Switch Position Monitors				
Wayside Radios				
Base Station Radios				
Are all necessary communication backbone utilities for this track segment (including fiber, copper, ground wiring etc.) installed and ready for operation? Yes				
Subdivision: Noyes				
Wayside Interface Units	[redacted]			
Communication Towers or Poles				
Switch Position Monitors				
Wayside Radios				
Base Station Radios				
Are all necessary communication backbone utilities for this track segment (including fiber, copper, ground wiring etc.) installed and ready for operation? Yes				

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
Subdivision: Detroit Lakes				
Wayside Interface Units				
Communication Towers or Poles				
Switch Position Monitors				
Wayside Radios				
Base Station Radios				
Are all necessary communication backbone utilities for this track segment (including fiber, copper, ground wiring etc.) installed and ready for operation? Yes				

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.

Wayside build out is progressing to support the revised PTCIP. Wayside build out is dependent on CP resource availability. WIUs, Switch Position Monitors, Wayside Radios, and Base Station Radios are not classified as completed until software kits have been installed; Communication Towers and Poles are not classified as completed until Antennas have been cabled to the radios.

FCC Environmental Assessment (EA) approvals have resulted in schedule delays for construction throughout the year. At year end, there are still outstanding EA approvals for Marquette subdivision, which is impacting the overall construction schedule. Further, there are outstanding approvals for the SOO properties, which will begin impacting the overall construction schedule during Q1 2016. Initial testing may need to occur with a reduced coverage design or site gaps causing retesting and potential rework later.

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[2]	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				
Employees who Dispatch Train Operations				
Train and Engine (Operations) Employees				
Roadway Worker Employees				
Direct Supervisors of the Above Employees				

Please provide any additional narrative for Employee Training below:

Per above table, subset of row 1 was reported in PTC IP (Mechanical Employees); row 2 was not reported in PTCIP; and Direct Supervisors contains elements of all 4 rows and therefore cannot be reported per the requested definition.

[2] *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

CP is complying with the implementation schedule provided in the PTCIP v3.0

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:

CP has made progress in reducing various implementation risks identified the original PTCIP by:

1. Gaining early experience with a predecessor ETMS type system to improve the learning curve of CP PTC Staff
2. Working closely with BNSF regarding initial interoperability activities, and
3. Taking programmatic actions to revert to a proven legacy CAD system to reduce the probability that a new dispatch system could adversely impact PTC deployment schedules.
4. Collaborating with other Class One Railroads to gain valuable experience as part of industry and CP's own lab and field verification and validation activities of I-ETMS, including wayside and communication components.

Although the CP initiatives mentioned above have helped to mitigate various implementation risks, the following key technical challenges remain:

- **Software Stability**: PTC Back Office and Locomotive operating software supplied to CP has consistently demonstrated a high degree of instability and numerous defects which have resulted in corresponding impacts to the implementation schedule. Similar software issues have also been experienced by the other railroads implementing I-ETMS. CP is collaborating with other I-ETMS user railroads and the software supplier to manage and close software defects and to refine I-ETMS functional requirements. CP has expanded the scope of lab testing scenarios in order to identify software anomalies earlier in the development cycle. As CP is now beginning Revenue Service Demonstration activities on its Pilot territory, it is important that defects that could result in Severity 1 or Severity 2 anomalies be eliminated. This remains a significant risk to CP as it proceeds to roll out PTC to subsequent subdivisions.

- **Hardware Reliability** – CP has experienced greater than anticipated levels of locomotive hardware infant mortality failures and random equipment failures that jeopardize the ability to proceed with formal functional V&V field testing. CP is working with equipment vendors in providing comprehensive failure data to assist in identifying potential design issues.
- **Interoperability** – CP has been an active member of the ITC technical teams and has made substantial strides with interoperable communication between railroads, but integration testing and actual interoperability is still in its infancy. There remains a high dependency on other railroads' systems to achieve full and seamless interoperability. Until all railroads' PTC systems are installed, there is a risk for CP to effectively complete installation.
- **Spectrum** - CP will utilize spectrum planning tools provided by PTC-220 that will enable CP to coordinate its spectrum usage with other railroads to ensure adequate availability and interference mitigation in areas of overlapping operation. It is not until each area, specifically urban hubs and major interchanges, is fully loaded with PTC trains from different railways, will the true stability/capability of an integrated PTC communications system be truly tested. There is still risk and CP remains committed to working within the PTC-220 to resolve any future issues.
- **Communication Stability** – CP is currently experiencing challenges regarding reliability of different modes of wireless communication paths - Cellular, 450mhz radios, and 220mhz radios - which are impacted by stability of cellular service, interference, weather, and other mitigating factors.

The principle challenge, which is more challenging than any listed above, is system engineering: including design, development, integration, and defect elimination for safe dependable behavior end-to-end between all segments of PTC: Back Office, Communications, Wayside and Locomotive. Eliminating defects will continue to be a substantial challenge even after initial implementation given unique or corner case operational scenarios are being tested across all railroad users of I-ETMS.

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

Subdivision	Number of Route Miles in Subdivision	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)
Ottumwa			
Davenport			
Mason City			
Marquette			
Chicago			
Laredo			

Subdivision	Number of Route Miles in Subdivision	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)
Kansas City			
Canadian & Connector			
Freight			
C&M			
Watertown			
Tomah			
River			

Subdivision	Number of Route Miles in Subdivision	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)
Merriam Park			
Withrow			
Paynesville			
Elbow Lake			
Carrington			
Portal			
Noyes			

Subdivision	Number of Route Miles in Subdivision	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)
Detroit Lakes			

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

Progress on RSD and Implementation aligns to, and supports, PTCIP 3.0.

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:

N/A

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.

Commitments have been made by CP's Class One tenants and Amtrak to implement technical solutions which meet the interoperability requirements as defined in 49 CFR § 236.1003(b). Further, these commitments include the expressed desire to participate in testing programs to verify functionality and interoperability, and to exchange technical information as needed to ensure implementation of PTC in accordance with the applicable FRA requirements.

CP has provided formal written notice to its Class Two and Class Three tenant railroads advising them of CP's plans for PTC and to solicit information as to each organization's intent with regards to PTC. Agreement has been reached with several Class Two and Three tenants to equip locomotives so that they may be interoperable with CP when operating as a tenant on CP trackage.

In the unexpected event that terms cannot be agreed upon with any of the tenant railroads, CP will examine alternative operations with the tenant that mitigate the risk and do not require any unequipped train access to PTC-controlled track unless such operation meets the requirements of 49 CFR § 236.1006(b)(5) and does not negatively impact operations.

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:***

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:***
[redacted]		

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
April 30, 2016

Please provide any additional narrative for PTCSP Submission below:

The safety plan will be submitted upon successful completion of RSDR, estimated to be approximately 2 months after RSDR start.

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

Please provide Update on Testing and Integration efforts below:

Dispatch

- [redacted]

Locomotive Onboard

- [redacted]

Wayside and Telecom

- Hi-rail and Locomotive testing has highlighted areas of poor cellular, 220mhz and 450mhz (dark Territory) coverage in Ottumwa subdivision; currently working to explore options regarding Cellular Antenna Boosters on locomotives, increasing antenna heights or antenna models, and increased power for the 450mhz radios.

End to End testing

- Locomotive Field Qualifications completed on the Ottumwa subdivision on 2015/07/17
- End to End testing in Ottumwa subdivision commenced on 2015/07/20 and ran through to year end

Revenue Service Demonstrations

- Approval to commence RSD received on 2015/12/15

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:

CP is not prepared to provide this information at this time.