Railroad Name PTC Implementation Plan (PTCIP) TEMPLATE ONLY

"Date"

Submitted in fulfillment of 49 CFR Part 236, Subpart I, § 236.1011

REVISION HISTORY

Date	Revision	Description	Author

Designating Track as Main Line or Non-Main Line [§ 236.1011(a)(8)]......16

PART NUMBERS BASED ON NPRM FINAL PART NUMBERS MAY CHANGE IN FINAL RULE

Table of Contents

 Introduction
 1

 1.1
 OVERVIEW
 1

 Deployment Sequence and Schedule [§ 236.1011(a)(5)]
 13

 7.1
 SEGMENT TRAFFIC CHARACTERISTICS [§ 236.1011(A)(5)(I)]
 13

 7.2
 SEGMENT OPERATIONAL CHARACTERISTICS [§ 236.1011(A)(5)(II)]
 13

 7.3
 ROUTE ATTRIBUTES [§ 236.1011(A)(5)(III)]
 13

 Rolling Stock [§ 236.1011(a)(6)]
 14

 8.1
 ROLLING STOCK TO BE EQUIPPED [§ 236.1011(A)(6)(I)]
 14

 8.2
 SCHEDULE [§ 236.1011(A)(6)(II)]
 14

 8.3
 TENANT RAILROADS [§ 236.1011(A)(6)(III)(A) AND (B)]
 14

 Wayside Devices [§ 236.1011(a)(7)]

Exceptions to Risk-Based Prioritization [§ 236.1011(a)(9)].....17

Strategy For Full PTC System Deployment [§ 236.1011(b)]18

Main Line Track Exclusion Addendum [§ 236.1019]19

Organizational Relationships1

Request for Amendment of a PTCIP [§ 236.1009(a)(2)(ii)]......1

1

1.1.1

1.1.2

1.3

1.4

1.5

1.6

2 3

4

5

6 7

8

9

10

11

12

13

1 Introduction

1.1 Overview

This section shall provide an overview of the submitting railroad's plan for implementation of PTC in accordance with the mandate of the RSIA 08, and the requirements of the anticipated final rule primarily consisting of 49 CFR Part 236, Subpart I. The plan shall identify, as a minimum: (a) how, where, and in what sequential order the PTC system(s) will be deployed; (b) how the system(s) will provide the statutory functionality; (c) whether the PTC system(s) are defined for safety as non-vital, vital, stand-alone, or mixed per the Part 236 Subpart I criteria; and, (d) all main line track segments, the method of operation and the maximum authorized speed(s) for each, any MTEA, any RFA, the installation risk prioritization methodology used, and any other federally required information.

1.1.1 Organizational Relationships

This subsection is to outline the management organizational structure of the project. It shall briefly describe the responsibilities of all entities involved in the implementation as well as the administrative and managerial boundaries of: the railroad's organization, the subcontracted organizations, the quality assurance organization, or any other organizational entity interfacing with the project. Graphical devices such as hierarchical organization charts or matrix diagrams may be used to depict the lines of authority, responsibility, and lines of communications within the project. This subsection is intended to define the railroad's project management approach and will summarize the railroad's strategy for deployment of PTC.

1.1.2 Request for Amendment of a PTCIP [§ 236.1009(a)(2)(ii)]

This subsection shall describe how the railroad will make and file a Request For Amendment (RFA) of its PTCIP in accordance with § 236.1021. It shall include a description of the railroad's review and approval process for generating amendments to the PTCIP, how amendments to the PTCIP will be submitted to the FRA for approval, and how distribution, version control, and configuration management requirements will be met by the railroad for PTC safety documentation. It shall also include when and how the railroad will identify and provide to FRA any routing changes affecting the annual MGT or PIH traffic levels which would result in a revision to where PTC shall be implemented.

1.2 Goals and Objectives

This section shall describe the overall goals and objectives of the railroad for PTC deployment. Some examples of goals would be to comply with regulatory requirements, achieve deployment milestones and timelines, and maintain PTC system reliability and availability.

Objectives shall address the following areas, as a minimum:

- Performance (for example a PTC deployment shall meet the PTC System Certification performance requirements in § 236.1015)
- Quality
- Technical

1.3 Success Criteria

This section shall describe how the railroad will measure success for both the long term goals of implementation, as well as intermediate goals. The metrics to be applied by the railroad to monitor progress against the plan stated in the PTCIP shall be identified and described. Methods for communicating the status of the goals and metrics internally and to the FRA should be described. Specific consideration should be given for the criteria that will be used to declare when a division/subdivision will be declared fully operational; (*For example, a subdivision will be considered cutover when all wayside equipment is installed and operational and 95% of the crews have completed required familiarization and PTC qualification*); the status of system implementation (*For example in 2012 40% of the xx subdivisions will be cutover for PTC operations, in 2013 80% of the xx subdivisions will be cutover*); and system use for subdivisions that have been cutover (*For example in 2011 40% of the traffic on subdivision X will operate equipped, in 2015 98% will operate equipped.*)

1.4 Applicability

This section shall provide the pertinent information for the railroad's rail network for the purpose of PTC implementation for which this PTCIP applies, and written explanation shall be accompanied by applicable mapping depicting the information (e.g., shape files). This section shall identify the following for all uniquely designated track segments: all main line tracks; annual traffic densities (freight in mgt and passenger in trains per day); annual PIH traffic (loads and residue); and, expected mandated PTC lines. The base line densities shall be for CY 2008, and shall be accompanied by any known or expected variances for CY 2009 and beyond, with explanation/justification for the variance. Any track segments where PTC systems are, or will be deployed, which are <u>not</u> required under Part 236 Subpart I, will also be clearly identified.

1.5 Document Overview

This section shall provide an overview of the organization of the PTCIP, which each railroad must develop and submit before implementing a PTC system as required by 49 U.S.C. § 20157 and § 236.1005.

- Section 1 shall describe the general objectives, applicability, and scope of the document.
- Section 2 shall list applicable documents that are referenced in this PTCIP.
- Section 3 shall describe the functional requirements that the proposed system must meet as required by § 236.1011(a)(1).
- Section 4 shall describe how the railroad intends to comply with § 236.1009(c) as required by § 236.1011(a)(2).
- Section 5 shall define how the railroad will provide for interoperability between the host and all tenant railroads as required by § 236.1011(a)(3).

- Section 6 shall describe how the PTC system will be implemented to address areas of greater risk to the public and railroad employees before areas of lesser risk, by evaluating multiple risk factors, as required by § 236.1011(a)(4).
- Section 7 shall define the sequence, schedule, and decision basis for the line segments to be equipped, including the risk factors by line segment, as required by § 236.1011(a)(5).
- Section 8 shall identify the rolling stock that will be equipped with the PTC technology, as required by § 236.1011(a)(6) and define a schedule for same.
- Section 9 shall identify the number of wayside devices required for each line segment and the schedule to complete the installations by December 31, 2015, as required by § 236.1011(a)(7).
- Section 10 shall identify which track segments the railroad designates as main line and non-main line track, as required by § 236.1011(a)(8).
- Section 11 shall identify and describe the railroad's basis for determining that the riskbased prioritization in Section 6 above is not practical as required by § 236.1011(a)(9).
- Section 12 shall contain the Main Line Track Exclusion Addendum (MTEA) as defined by § 236.1019.
- Section 13, required for Class I railroads and as an option for others, shall contain the strategy for full system-wide deployment of PTC systems beyond those line segments required to be equipped under 49 CFR Part 236, Subpart I, including the criteria that will be applied in identifying those additional lines.
- Section 14 shall include any Appendices, either directly or by reference, that provide supporting details that could aid in the understanding of the PTCIP.

Note: A PTCIP must be preceded or accompanied by either a Notice of Product Intent (NPI), a PTC Development Plan (PTCDP), or an existing Type Approval, and may be accompanied by an RFA, either previously or simultaneously filed in accordance with § 236.1021, and an MTEA in accordance with § 236.1019.

1.6 Acronyms and Definitions

This section shall include definitions of all terms, abbreviations, and acronyms required to properly interpret the Implementation Plan.

The following is a list of some abbreviations and acronyms that may be used in the PTCIP:

Acronym	Meaning
CFR	Code of Federal Regulation
FRA	Federal Railroad Administration
MTEA	Main Line Track Exclusion Addendum
NPI	Notice of Product Intent
PIH	Poison by Inhalation Hazard
PTC	Positive Train Control

PTCDP	Positive Train Control Development Plan
PTCIP	Positive Train Control Implementation Plan
PTCSP	Positive Train Control Safety Plan
RFA	Request For Amendment
TIH	Toxic Inhalation Hazard
U.S.C.	United States Code

The following is a list of definitions of terms that may be used in the PTCIP:

Class I railroad	A railroad which in the last year for which revenues were reported
	exceeded the threshold established under regulations of the Surface
	Transportation Board (49 CFR part 1201.1-1 (2008)).
Host railroad	A railroad that has effective operating control over a segment of
	track.
Interoperability	The ability of a controlling locomotive to communicate with and
	respond to the PTC railroad's positive train control system,
	including uninterrupted movements over property boundaries.
Main line	Except as excepted pursuant to § 236.1019 or where all trains are
	limited to restricted speed, a segment or route of railroad tracks,
	including controlled sidings:
	(1) of a Class I railroad, as documented in current timetables
	filed by the Class I railroad with the FRA under § 217.7,
	over which 5,000,000 or more gross tons of railroad traffic is
	transported annually, as reported on the traffic density map
	required to be filed with the Surface Transportation Board
	pursuant to § XXX XX; or
	(2) used for regularly scheduled intercity or commuter passenger
	service, as defined in 49 U.S.C. § 24102, or both.
Main Line Track	The document further described in § 236.1019.
Exclusion	
Addendum	
NPI	Notice of Product Intent as further described in § 236.1013.
PTC	Positive Train Control as further described in § 236.1005.
PTCDP	PTC Development Plan as further described in § 236.1013.
PTCIP	P TC Implementation Plan as required under 49 U.S.C. § 20157 and
	further described in § 236.1011.
PTC railroad	Each Class I railroad and each entity providing regularly scheduled
	intercity or commuter rail passenger transportation required to
	implement and operate a PTC system.
PTCSP	PTC Safety Plan as further described in § 236.1015
PTC System	Certification as required under 49 U.S.C. § 20157 and further
Certification	described in §§ 236.1009 and 236.1015.
Request For	A request for an amendment of a plan or system made by a PTC
Amendment	railroad in accordance with § 236.1021.
Segment of track	Any part of the railroad where a train operates.
Tenant railroad	A railroad, other than a host railroad, operating on track upon which

	a PTC system is required.
Track segment	Segment of track

2 Applicable Documents

This section shall provide a complete list of all the documents and other sources referenced in the PTC Implementation Plan.

- A. Part 236 Subpart I Final Rule, TBD
- B. Part 236 Subpart H, March 5, 2005.
- C. The Railroad's Notice of Product Intent
- D. The Railroad's PTC Development Plan
- E. Type Approval granted by FRA for <vendor/system name> PTC system (if applicable)
- F. Main Line Track Exclusion Addendum
- G. Request For Amendment
- H. Other

Note: For dated references, only the edition cited applies. For undated references, the latest edition of the reference document applies, including amendments.

3 Technology [§ 236.1011(a)(1)]

This section shall provide a minimal description of the PTC system technology being deployed and shall reference a previous or concurrent submission of a Notice of Product Intent, PTC Development Plan (PTCDP), PTC Type Approval, or PTC Safety Plan (PTCSP) that contains a more detailed description (see § 236.1009).

Where reference is made to a previously submitted NPI, or an NPI is included, the NPI shall contain the information prescribed within § 236.1013(e). Where reference is made to a PTCDP, Type Approval, and/or PTCSP, or same is included, each respective document shall contain the information prescribed within its applicable rule section.

This section shall summarize the technology by containing the following:

- a) Identification of the architecture of the PTC system(s) being deployed.
- b) High level description of the functionality of the PTC system, subsystems, and interfaces, both internal to the PTC system and external to other systems such as signaling and CAD systems.
- c) A basic physical layout and location of PTC equipment onboard locomotives, at wayside locations, at network interfaces, and at a central office or offices.

Note: When the PTCIP is filed with an NPI, a complete PTCDP and updated PTCIP must be submitted not later than 9 months after the date of FRA'S provisional approval of the PTCIP. Failure to submit the required PTCDP within 9 months will result in automatic disapproval of the PTCIP and possible civil penalties.

4 Compliance [§ 236.1011(a)(2)]

This section shall describe how the railroad intends to comply with § 236.1009(c), which requires the railroad to apply for and receive PTC System Certification from the Federal Railroad Administration (FRA). A PTC System Certification must be received before deploying a PTC system(s) in revenue service on a railroad.

It will describe any identified or potential risks or other items that could create or suggest increased difficulty in the successful completion and delivery of the PTC system installation on or prior to the required date. It is also to identify any contingency plans that may have been formulated to deal with the risks. Risks are created when assumptions are not met. As you identify risks, you must also identify the consequences associated with those risks.

The railroad's description of the process planned for achieving FRA Certification will contain the following elements, as a minimum:

- a. How the railroad will utilize any existing Type Approvals and/or PTCDP that apply to the specific PTC system(s) being installed?
- b. Certify the validity of the Type Approval previously granted by FRA (see § 236.1013(c))
- c. How the railroad will handle its own PTCDP and/or Type Approval process for the unique aspects (the variances) of the specific PTC system(s) to be installed by the railroad, if any?
- d. What deliverables will be supplied by the railroad to the FRA to support a petition for Certification of the PTC system(s)?
- e. If The PTCIP is filed with an NPI, how the railroad will address completion of the PTCDP and refiling of the PTCIP and submission of the PTCDP?

5 Interoperability [§ 236.1011(a)(3)]

This section shall describe how the PTC system will provide for interoperability between the host and all tenant railroads on the lines required to be equipped with a PTC system per Part 236 Subpart I.

5.1 Railroad Agreement Provisions Relevant to Interoperability [§ 236.1011(a)(3)(i)] This section shall include identification and description of all relevant provisions to any agreements executed by all applicable railroads which are in place in order to achieve interoperability. The technical details of the agreements are of interest to the FRA, not the commercial relationships.

This section must clearly describe the degree of interoperability that will be obtained, the extent to which the railroad has coordinated its plan with the other railroads with whom they interoperate, the specific service requirements that the technology must meet, the proposed technology to be used to obtain interoperability, and its current state of development and availability. This section must also provide a list of the interoperable systems.

For the purposes of the interoperation analysis, the analysis must address notions of purpose (the goal for the interoperation) and context (the environment in which the entities exist). To interoperate one system must provide a service that is used by another. This cannot be achieved without, at a minimum, communication from the provider to the consumer of the service. Interoperability relationships necessarily involve communication. Any discussion of interoperability must therefore address the atomicity of interoperability relationships, the degree of coupling ("tightly coupled," or loosely coupled), as well as means the system's capabilities provide for such communications (e.g., an agreement to share a common protocol or request broker that relays messages between systems).

5.2 Technology Applicable to Interoperability [§ 236.1011(a)(3)(ii)]

This section shall describe all the technologies used to achieve interoperability. Each railroad must address how they obtain technical, semantic, and organizational interoperability to enable PTC systems to enhance, rather than obstruct, the ability of multiple railroads to work together safely. Technical interoperability includes interfaces, standards, and data to be commonly used. Semantic interoperability describes how the meaning of exchanged information is understood by applications and services. Organizational interoperability is about the collaboration of organizations (companies and administrations) that wish to exchange information and to cooperate despite having different internal structures and processes.

5.3 Obstacles to Interoperability [§ 236.1011(a)(3)(iii)]

This section shall identify all obstacles to interoperability and the further steps that will be taken to overcome them. If full interoperability has not been met with one or more tenant railroads, a description of the degree interoperability that has been obtained and how adverse consequences associated with the lack of interoperability have been mitigated. This requires identification of:

- a) The safety functions which are not implemented when interoperating on the host railroad.
- b) The risks associated with not implementing the safety function (frequency and consequence).
- c) The alternate means of performing the safety function not performed by PTC.
- d) The reason that the alternate means is an adequate substitute for the function.

Note: A full discussion of interoperability issues may not be possible by the railroad if an NPI is filed in lieu of a PTCDP. This PTCIP section must be updated accordingly and refiled with FRA for approval when the full PTCDP is filed.

6 Installation Risk Analysis [§ 236.1011(a)(4)]

This section shall describe how the PTC systems will be implemented to address areas of greater risk to the public and railroad employees before areas of lesser risk. This section must provide appropriate justification if areas of lesser risk are addressed first. This section is intended to:

- a) Describe the rail network, and its subdivisions (or other pertinent territories).
- b) Identify the significant risk factors on each subdivision (or other pertinent segment).
- c) Prioritize the installation of PTC for each subdivision (or other pertinent segment) based on the levels of risk and consequences.

The risk analysis shall consider a number of factors, many of which will be specific to each subdivision (or other pertinent segment) when analyzing the consequences. Not all the criteria will be present on each route, and each route will have its own combination of factors to be considered. Each railroad is to tailor their analysis to the particular risks and factors of their operations. The risks and factors that must be considered include:

- 1. Annual MGT levels;
- 2. Presence and volume of passenger traffic;
- 3. Presence and volume of PIH/TIH material (loads and residue) transported;
- 4. Presence and volume of other bulk hazardous materials, with emphasis on flammable compressed gas, explosives, and environmentally sensitive chemicals;
- 5. Method of Operation;
- 6. Presence or absence of underlying block signal, cab signal, train stop, or train control systems;
- 7. Maximum authorized speeds of train operations;
- 8. Number of tracks;
- 9. Track grades and curvatures;
- 10. Presence of non-PTC equipped traffic along the route (shared track);
- 11. Frequency and location of track turnouts (i.e., spurs and sidings); and
- 12. Past accident/incident statistics.

Characterizations of the risks and of changes in the nature or magnitude of risks shall be quantitative to the extent possible consistent with available data. The railroads shall identify which factors were deemed the most significant to their implementation. Statements of assumptions, their rationale, and their impact on the risk analysis should be explicit. The analysis should adopt consistent approaches to evaluating the risk. Other route attributes bearing on risk that may be considered:

- 1. Presence or absence, and types, of wayside hazard detectors;
- 2. Number and types of at-grade crossings (both highway-rail and rail-to-rail);
- 3. Public venues along the route (high population density, stations, events, places of congregation, etc.);
- 4. Hazards to human health and the environment.

Characterizations of these types of risks and of changes in the nature or magnitude of risks shall be qualitative or quantitative to the extent possible consistent with available data. These risks shall not override the risk rankings determined by the required route attributes.

To the extent Rail Routing Rule model justifications are relied upon:

- 1. Assume overlay PTC implementation on the base year route, the present route, and the route selected (if different from the present route).
- 2. Explain the weight afforded to the method of operation if less than 40% of the total weighting with respect to safety factors.
- 3. Provide full details for the analysis.
- 4. Justifications must include information regarding *residual traffic and risk* (including other hazardous materials, passenger traffic of any kind, and train counts per day) expected on a line from which it is reported, or assumed, that PIH traffic has been eliminated.
- 5. To the extent local PIH traffic is assumed to disappear prospectively, explain and justify on what basis this assumption is made.

This section may also describe other factors the railroad considered when grouping subdivisions (or other pertinent territories) with similar risk levels to support the continuity of the PTC system implementation. Examples of other factors that may be considered are:

- 1. Commitments to federal, state, or local agencies;
- 2. Tenant implementation plans;
- 3. Capital and Program Maintenance plans;
- 4. Availability of labor resources to support wayside installations.

The risk analysis shall be maintained and updated as needed with results being forwarded to FRA until completion of deployment of the PTC system and until retirement of the PTC system.

Note: A full discussion of risk prioritization issues may not be possible by the railroad if an NPI is filed in lieu of a PTCDP. This PTCIP section must be updated accordingly and refiled with FRA for approval when the full PTCDP is filed.

7 Deployment Sequence and Schedule [§ 236.1011(a)(5)]

This section shall define the sequence, planned schedule, and decision basis for line segments to be equipped, including the identified risk by line segment.

A proposed schedule for commencing revenue-service PTC operations by December 31, 2015, on all identified line segments shall be included. The schedule shall identify groups of line segments, the timeframe in which PTC operations for that group of line segments will commence, and other measurable supporting task completion dates that are relevant. The schedule may be supported by and/or integrated with the schedules for equipping rolling stock and wayside locations.

The risk for each line segment shall at a minimum address traffic characteristics (Section 7.1), operational characteristics (Section 7.2), and route attributes bearing on risk (Section 7.3).

7.1 Segment Traffic Characteristics [§ 236.1011(a)(5)(i)]

This section shall identify the segment traffic characteristics, such as typical annual passenger and freight train volume and volume of TIH shipments (loads and residue).

7.2 Segment Operational Characteristics [§ 236.1011(a)(5)(ii)]

This section shall describe the segment operational characteristics, such as current method of operation (including presence or absence of a block signal, cab signal, or train control system), number of tracks, and maximum allowable train speeds, including planned modifications. Planned modifications involve changes to the operating conditions on the railroad within the expected life-cycle of the PTC system.

7.3 Route Attributes [§ 236.1011(a)(5)(iii)]

This section shall identify the route attributes bearing on risk, such as extreme grades and curvature. Other factors to consider are:

- Number of switches;
- Number of rail-to-rail crossing-at-grade;
- Number of highway-rail grade crossings
- Number of movable bridges;
- Passenger stations;
- Presence of other equipped and non-equipped traffic along the route (shared track).

Note: A full discussion of scheduling issues may not be possible by the railroad if an NPI is filed in lieu of a PTCDP. This PTCIP section must be updated accordingly and refiled with FRA for approval when the full PTCDP is filed.

8 Rolling Stock [§ 236.1011(a)(6)]

This section shall contain information related to the rolling stock that will be equipped with the PTC technology.

8.1 Rolling Stock to be Equipped [§ 236.1011(a)(6)(i)]

This section shall identify what rolling stock will be equipped with PTC technology.

8.2 Schedule [§ 236.1011(a)(6)(ii)]

A proposed schedule for installation of PTC equipment on all identified rolling stock by December 31, 2015, shall be included. The schedule shall identify groups of equipment, the timeframe in which the installation is planned for that group, and other measurable supporting task completion dates that are relevant.

8.3 Tenant Railroads [§ 236.1011(a)(6)(iii)(A) and (B)]

The host railroad shall identify the actions taken to ensure tenant railroads will equip rolling stock with compatible PTC for operation on the host railroad's PTC territories. This requirement shall contain information for all tenant railroads not filing their own PTCIP.

This section shall document the existence and status of all formal written requests made to each tenant railroad requesting identification of each rolling stock to be PTC system equipped and by what date each will be equipped. This section is to: (A) attest that the host railroad has made a formal written request to each tenant railroad requesting identification of each rolling stock to be PTC system equipped and the date each will be equipped; and (B) include each tenant railroad's response to the host railroad's written request made in accordance with paragraph (a)(6)(iii)(A).

Note: A full discussion of risk prioritization issues may not be possible by the railroad if an NPI is filed in lieu of a PTCDP. This PTCIP section must be updated accordingly and refiled with FRA for approval when the full PTCDP is filed.

9 Wayside Devices [§ 236.1011(a)(7)]

This section shall identify wayside devices or subsystems which must be installed for the PTC system. The listing of devices shall include, as a minimum:

- a. The types of wayside devices to be installed and types of locations at which they will be installed (e.g., at various switches).
- b. The number of wayside devices required for each line segment.

A proposed schedule for installation of all identified PTC wayside devices by December 31, 2015, shall be included. The schedule shall identify groups of equipment, the timeframe in which the installation is planned for that group, and other measurable supporting task completion dates that are relevant.

Note: A full discussion of scheduling issues may not be possible by the railroad if an NPI is filed in lieu of a PTCDP. This PTCIP section must be updated accordingly and refiled with FRA for approval when the full PTCDP is filed.

10 Designating Track as Main Line or Non-Main Line [§ 236.1011(a)(8)]

This section shall provide which track segments the railroad identifies as main line and non-main line track. If the PTCIP includes a Main Line Track Exclusion Addendum (MTEA), as defined by § 236.1019, the PTCIP shall identify the tracks included in the MTEA as main line track, with a reference to the MTEA.

11 Exceptions to Risk-Based Prioritization [§ 236.1011(a)(9)]

This section shall identify and describe the railroad's basis for determining that the risk-based prioritization in § 236.1011(a)(4) is not practical as it may be associated with any line segment on their system.

Note: A full discussion of risk prioritization issues may not be possible by the railroad if an NPI is filed in lieu of a PTCDP. This PTCIP section must be updated accordingly and refiled with FRA for approval when the full PTCDP is filed.

12 Strategy For Full PTC System Deployment [§ 236.1011(b)]

This section shall contain the railroad's strategy, required for Class I railroads and as an option for others, for full system-wide deployment of PTC systems beyond those line segments required to be equipped under 49 CFR part 236, subpart I, including the criteria that will be applied in identifying those additional lines. Such criteria is to include consideration of the policies established by 49 U.S.C. § 20156 (railroad safety risk reduction program), and regulations issued there under, as well as non-safety business benefits that may accrue. This strategy may be subsequently revised through an RFA filing in accordance with § 236.1021.

Note: At the time of completion of this PTCIP template, the Subpart I regulation had not yet been finalized. The issue of documenting a railroad's plans for full system-wide deployment was still an open item and depending on the final rule, may or may not be required as part of the PTCIP filing.

Note: A full discussion of full deployment strategies may not be possible by the railroad if an NPI is filed in lieu of a PTCDP. This PTCIP section must be updated accordingly and refiled with FRA for approval when the full PTCDP is filed.

13 Main Line Track Exclusion Addendum [§ 236.1019]

This section shall contain any Main Line Track Exclusion Addendum (MTEA), which the railroad shall use to designate track as not main line as defined by § 236.1019.

Note: Filings may be marked SSI or Proprietary to the extent warranted, however only such portions of filed documents as warrant such treatment.

14 Appendices

Appendices may be included, either directly or by reference, to provide supporting details that could aid in the understanding of the PTCIP.

Potential Appendices may include:

- 1. Model or software tool description for PTC deployment risk ranking.
- 2. Maps of territories to aid in understanding the railroad's Implementation Plan.
- 3. Extracts from interoperability agreements with other railroads, as discussed in the PTCIP text.
- 4. Project Schedule or Network Diagram.