

PTC Collaboration Session

Fifth of Six in 2019 and 2020

June 10, 2020

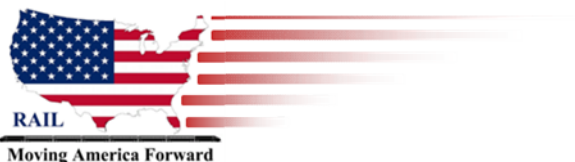
*To promote information-sharing,
best practices, and collaboration
between FRA and industry*



U.S. Department
of Transportation
**Federal Railroad
Administration**

Topics

- Industry's Progress Toward Full Implementation as of March 31, 2020
- Positive Train Control Safety Plan (PTCSP) Update
- Statutory and Regulatory Flexibility Following the December 31, 2020, Deadline
- Statutory and Regulatory Failure-related Reporting Requirements
- Future Amendments to FRA-certified PTC Systems



*High-level Overview of Industry's Progress
Toward Fully Implementing PTC Systems
as of March 31, 2020*



Progress Toward Full Implementation

As of March 31, 2020

- **Status of Host Railroads' PTC-governed Operations**

- As of March 31st, PTC systems were in operation or advanced testing (RSD) on over 56,500 (98%) of the almost 58,000 required route miles—a 2% increase from December 31, 2019
- Three (3) railroads commenced RSD during Q1 of 2020, and four (4) railroads placed all route miles into RSD during that quarter
- Two additional Class I railroads placed all subdivisions into PTC operations
- FRA received four (4) PTC Safety Plans during Q1 and as of March 31, 2020, has fourteen (14) PTCSPs under review



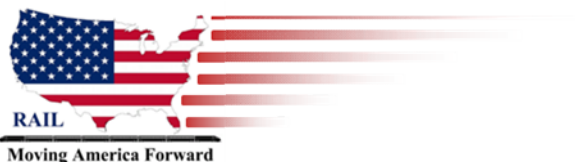
Interoperability Continues to Progress

As of March 31, 2020

• **Status of Interoperability**

- 48.5% of host-tenant relationships are interoperable (total 229)
 - Operational/Complete: 111 relationships
 - Testing: 73 relationships
 - Installing: 21 relationships
 - Not Started: 5 relationships
 - Not Reported: 19 relationships

- Interoperability achieved by host railroad type:
 - Class I Railroads: 59%
 - Amtrak: 25%
 - Commuter Railroads: 32%
 - Other Host Railroads: 52%

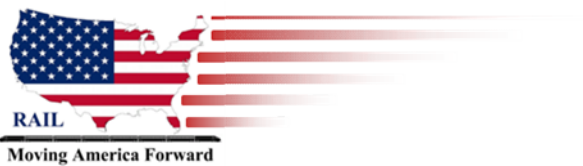


2020 'At-risk' Criteria

- **As of March 31, 2020:**
 - Four (4) railroads came off the at-risk list from December 31, 2019, reducing the list to four (4) railroads
- **Criteria:**
 - Expected date to submit PTC Safety Plan
 - Percentage of route miles governed by PTC (including RSD)
 - Severity of technical issues impacting testing and roll-out schedule
 - Percentage of interoperable tenant railroads
- **Measured:**
 - Quarterly (Q4 2019, Q1 2020, Q2 2020, and then monthly)
 - Letters to railroads and governing bodies (for any commuter railroads)
 - List published when data is released



PTC Safety Plan Update



PTC Safety Plans and FRA Certification Status (Host Railroads Only)

• Safety Plan & Certification Status

- 13 Certified PTC Systems (including Conditionally Certified Systems)
 - 7 I-ETMS non-vital overlay, and 1 I-ETMS mixed system
 - 2 ACSES II vital overlay
 - 1 E-ATC vital overlay
 - 1 CBTC mixed system
 - 1 ITCS vital overlay
- 15 PTC Safety Plans under review
 - 8 I-ETMS
 - 3 ACSES II
 - 4 E-ATC
- 9 PTC Safety Plans not yet submitted
- 7 RFAs expected



PTC Safety Plan Review – FRA Insights

- **PTC Specialists are focusing on early review of documentation (pre- and post-submission)**
 - Railroads have been very responsive and timely in updates
 - FRA has suspended reviews while waiting for updates to submissions
 - Except for ACSES II systems, FRA has prioritized review and approval of safety plans that will be used as a baseline (E-ATC, I-ETMS non-vital overlay), and this process is nearing completion
 - Contract support will be available to PTC Specialists from the end of June to provide safety engineering manpower

- **Reminder of key considerations for PTC Safety Plan preparation**
 - Document all variances to the associated Type Approval
 - Update hazard log and risk assessment reflecting Type Approval variances, operational differences, functional differences, and test data results
 - Update human factors analysis to reflect railroad operations
 - If using a baseline approval, ensure all comments to the baseline are addressed prior to submission



Overview of the Statutory and Regulatory PTC Flexibility Following the December 31, 2020 Deadline



Overview of Certain Post-deadline Flexibilities

I. Background

- The Positive Train Control Enforcement and Implementation Act of 2015 requires an FRA-certified and interoperable PTC system to govern operations on all main lines subject to the statutory mandate by December 31, 2020.
- However, the Early Adoption subsection of the statute recognizes that certain PTC system failures (e.g., initialization failures, cut outs, and malfunctions) may occur after December 31, 2020. See 49 U.S.C. § 20157(j).
 - **When Is the Early Adoption Period?** Oct. 29, 2015 → *One year after* the last Class I railroad obtains PTC System Certification and finishes fully implementing a PTC system on all its required main lines
- **Reminder:** A railroad must comply with the safety assurance and reporting requirements under 49 U.S.C. § 20157(j)(1)–(4). For example, if an FRA-certified PTC system fails to initialize, cuts out, or malfunctions, the affected railroad shall make reasonable efforts to determine the cause and adjust, repair, or replace any faulty component causing the failure in a timely manner.



Overview of Certain Post-deadline Flexibilities

II. Early Adoption Provisions

Beginning with 49 U.S.C. § 20157(j)(1)

- The statute **temporarily** prohibits FRA—until approximately December 31, 2021—from imposing or enforcing the operational restrictions under FRA’s S&TC regulations (49 CFR § 236.567) and PTC regulations (49 CFR § 236.1029) when a PTC system “fails to initialize, cuts out, or malfunctions, *provided that such carrier operates at an equivalent or greater level of safety than the level achieved immediately prior to the use or implementation of its [PTC] system.*”
- The statute provides the same temporary relief—from the operational restrictions under 49 CFR §§ 236.567 and 236.1029—to **any Class II or Class III railroad operating pursuant to an exception under 49 CFR § 236.1006(b)(4)** (≤ 4 non-PTC-governed movements per day), which otherwise would require “that movement [to] be made in accordance with § 236.1029.” See 49 CFR § 236.1006(c).



Overview of Certain Post-deadline Flexibilities

III. Timeline Applicable to Railroads with a 2020 Deadline*

For illustrative purposes, the table below summarizes the pertinent authorizations and prohibitions under the Early Adoption subsection (49 U.S.C. § 20157(j)) and/or FRA’s regulations, including 49 CFR §§ 236.1006(b)(3) and 236.1029(g).

<u>Calendar Year 2021</u> <i>(Last Year of Early Adoption Period)</i>	<u>Calendar Year 2022</u>	<u>January 1, 2023 and Thereafter</u>
<ul style="list-style-type: none"> • A train may operate on a PTC-mandated main line even if: <ul style="list-style-type: none"> ○ The PTC system failed to initialize; or ○ The PTC system failed en route (including malfunctions and cut outs). • The operational restrictions under 49 CFR §§ 236.567 and 236.1029 <i>do not</i> apply. 	<ul style="list-style-type: none"> • A train may operate on a PTC-mandated main line even if: <ul style="list-style-type: none"> ○ The PTC system failed to initialize; or ○ The PTC system failed en route (including malfunctions and cut outs). • The operational restrictions under 49 CFR §§ 236.567 and/or 236.1029 <i>do</i> apply. 	<ul style="list-style-type: none"> • A train may operate on a PTC-mandated main line even if: <ul style="list-style-type: none"> ○ The PTC system failed en route (including malfunctions and cut outs). • The operational restrictions under 49 CFR §§ 236.567 and/or 236.1029 <i>do</i> apply.



****This overview focuses on the framework applicable to railroads that obtained FRA’s approval of an “alternative schedule and sequence” with a December 31, 2020, deadline, under 49 U.S.C. § 20157(a)(3).***



Overview of Certain Post-deadline Flexibilities

IV. Timeline Applicable to Railroads with a 2018 Deadline*

For illustrative purposes, the table below summarizes the pertinent authorizations and prohibitions under the Early Adoption subsection (49 U.S.C. § 20157(j)) and/or FRA’s regulations, including 49 CFR §§ 236.1006(b)(3) and 236.1029(g).

<p style="text-align: center;"><u>Calendar Year 2021</u> <i>(Last Year of Early Adoption Period)</i></p>	<p style="text-align: center;"><u>January 1, 2022 and Thereafter</u></p>
<ul style="list-style-type: none"> • A train may operate on a PTC-mandated main line even if: <ul style="list-style-type: none"> ○ The PTC system failed to initialize; or ○ The PTC system failed en route (including malfunctions and cut outs). • The operational restrictions under 49 CFR §§ 236.567 and 236.1029 <i>do not</i> apply. 	<ul style="list-style-type: none"> • A train may operate on a PTC-mandated main line even if: <ul style="list-style-type: none"> ○ The PTC system failed en route (including malfunctions and cut outs). • The operational restrictions under 49 CFR §§ 236.567 and/or 236.1029 <i>do</i> apply.



****This overview focuses on the framework applicable to railroads that fully implemented an FRA-certified and interoperable PTC system by December 31, 2018.***



Statutory and Regulatory Failure-related Reporting Requirements



Reporting of Various PTC System Failures

I. Permanent Regulatory Reporting Requirements

To ensure PTC system failures are properly communicated to all affected parties, FRA's PTC regulations require coordination among, and reporting by, railroads, vendors, and suppliers, under **49 CFR §§ 236.1023**, *Errors and malfunctions*, and **236.1029**, *PTC system use and failures*.



Reporting of Various PTC System Failures

I. Permanent Regulatory Reporting Requirements (Cont'd)

Example #1 – Vendors and suppliers:

- **49 CFR § 236.1023(b)(2)–(3) & (h)** – PTC system and product suppliers and vendors shall:
 - Promptly report, to each railroad using the product, any safety-relevant or safety-critical failures, defective conditions, or previously unidentified hazards in their PTC system, subsystem, or component, in addition to the *recommended mitigations*, pending determination of the root cause and final corrective actions; and
 - Notify FRA of any safety-relevant failure, defective condition, or previously unidentified hazard discovered by the vendor or supplier and the identity of each affected and notified railroad.
- **49 CFR § 236.1023(f)** lists reporting instructions and content requirements for FRA purposes (e.g., due w/i 15 days of discovery).



Reporting of Various PTC System Failures

I. Permanent Regulatory Reporting Requirements (Cont'd)

Example #2 – Post-PTC System Certification:

- **49 CFR § 236.1023(e)** – A railroad must notify FRA and the applicable vendor/supplier if:
 - The frequency of a safety-relevant hazard exceeds the thresholds in the railroad's PTCSP, *or*
 - The safety-relevant hazard has not been previously identified in the appropriate risk analysis.
- See **49 CFR § 236.1023(f)** for reporting instructions (e.g., due w/i 15 days of discovery).
- For FRA purposes, please e-mail directly to: **FRAPart2361023Notification@dot.gov**



Reporting of Various PTC System Failures

I. Permanent Regulatory Reporting Requirements (Cont'd)

Example #3 – Post-PTC System Certification:

- **49 CFR § 236.1023(k)** – A railroad must comply with the standard reporting requirements under 49 CFR part 233 if it experiences a failure of its PTC system resulting in a more favorable aspect than intended or other condition hazardous to the movement of a train.
 - 49 CFR §§ 233.5, *Accidents resulting from signal failure*, & 233.7, *Signal failure reports*
 - Examples listed in FRA's conditional PTC System Certifications:
 - Failure to enforce required braking applications and speed restrictions;
 - Overrun of an authority boundary due to late braking or an inaccurate braking algorithm; and
 - Authority sent by the dispatcher to the train crew, where such authority is either not promptly transmitted, not recorded, or erroneously modified by the system.



Reporting of Various PTC System Failures

I. Permanent Regulatory Reporting Requirements (Cont'd)

Example #4 – Post-full implementation of a PTC system:

- **49 CFR § 236.1029(h)** – After a railroad fully implements an FRA-certified and interoperable PTC system on its PTC-mandated main lines, the railroad must submit an *annual* report by April 16th regarding the PTC system failures that occurred during the prior calendar year. At a minimum, the report shall “identify failures by category, including but not limited to locomotive, wayside, communications, and back office system failures.”
- Voluntary Aspect – For consistency, the annual report *could* also include the same categorizations as under 49 U.S.C. § 20157(j)(4)—i.e., “initialization failures, cut outs, and malfunctions.”
- For railroads whose deadline for full PTC system implementation is December 31, 2020, the first annual failure report will be due **April 16, 2021**, and each April 16th thereafter.



Reporting of Various PTC System Failures

II. Temporary Statutory Reporting Requirement

On **June 5, 2020**, the Office of Management and Budget (OMB) approved the mandatory **Statutory Notification of PTC System Failures** (Form FRA F 6180.177, OMB Control No. 2130-0553).

- **Electronic Web Form** – <https://safetydata.fra.dot.gov/PTCSysSystemFailuresFRAForm177/>
- **For Detailed Information and Background** –
 - Initial 60-day *Federal Register* notice – 84 Fed. Reg. 72121 (Dec. 30, 2019)
 - The final 30-day *Federal Register* notice summarizing and responding to industry’s comments – 85 Fed. Reg. 15022, 15025–27 (March 16, 2020)

As a reminder, the *temporary* failure-related reporting requirement under **49 U.S.C. § 20157(j)(4)**:

- Applies only to FRA-certified PTC systems that are in operation, and
- Is effective from only October 29, 2015, until approximately December 31, 2021.



Reporting of Various PTC System Failures

II. Temporary Statutory Reporting Requirement (Cont'd)

As a reminder, as the statute authorizes, FRA established via the OMB-approved Statutory Notification of PTC System Failures (Form FRA F 6180.177): (1) **an alternative reporting location** (instead of submitting the notifications to the appropriate FRA region), and (2) **an alternative reporting deadline** (instead of within 7 days of each occurrence).

Important Notes:

- FRA's website enables host railroads to upload bulk data. Specifically, the website contains an Excel template, which is available for downloading and uploading (labeled "Import").
- By early July, each SIR user will be e-mailed web-form log-in instructions, including a password. Access for additional users can be requested via the website as well.
- If you have any questions or issues while using the website or uploading the Excel template to the website, please send an e-mail to PTC.correspondence@dot.gov.



U.S. Department
of Transportation
Federal Railroad
Administration

Change Password

Statutory Notification of Positive Train Control (PTC) System Failures

Start Form

Pursuant to 49 U.S.C. § 20157(j)(4), each host railroad operating an FRA-certified PTC system must notify FRA—using this mandatory, web-based Form FRA F 6180.177—of any PTC system initialization failures, cut outs, and malfunctions that occur on its PTC-governed main lines, including those experienced by its tenant railroads. This statutory reporting requirement is temporary and expires on December 31, 2021.¹

Reporting Frequency and Due Dates:

- **Any Fully Implemented PTC Systems:** By the 15th of each month, a host railroad must submit a **monthly** notification of any PTC system initialization failures, cut outs, and malfunctions that occurred during the prior calendar month, if the host railroad has fully implemented an FRA-certified and interoperable PTC system on all its PTC-mandated main lines.²
- **Any Other FRA-certified PTC Systems:** If a host railroad is operating an FRA-certified PTC system but is still in the process of fully implementing the PTC system on its required main lines, it must submit a failure-related notification on a **quarterly** basis by the due dates in the following table, during the ongoing implementation process. A host railroad must begin submitting monthly notifications (see above) immediately after it finishes fully implementing an FRA-certified and interoperable PTC system on all its PTC-mandated main lines.

Period	Coverage Period	Due Date
Q1	January 1 - March 31	April 30
Q2	April 1 - June 30	July 31
Q3	July 1 - September 30	October 31
Q4	October 1 - December 31	January 31

Period	Coverage Period	Due Date
Q1	January 1 - March 31	April 30
Q2	April 1 - June 30	July 31
Q3	July 1 - September 30	October 31
Q4	October 1 - December 31	January 31

Request for Confidentiality, If Any:

Consistent with 49 CFR § 209.11, if a railroad requests partial or full confidentiality of this data, do all of the following steps:

1. Indicate so by checking this box
2. Provide a statement justifying nondisclosures and referring to the specific legal authority claimed:

3. In addition to submitting this web form, submit the data upload template with redactions and labels, meeting the requirements under 49 CFR § 209.11(d), to the [FRA Secure Information Repository \(SIR\)](#).

¹Specifically, 49 U.S.C. § 20157(j)(4) states that this temporary reporting requirement ends one year after the last Class I railroad obtains PTC System Certification from FRA and finishes fully implementing a PTC system on all its required main lines.

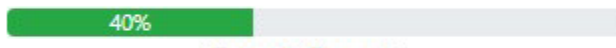
²For example, the notification regarding PTC system initialization failures, cut outs, and malfunctions during April 2020 would be due by May 15, 2020, for the subset of host railroads that have fully implemented an FRA-certified and interoperable PTC system as of that reporting period.

Public reporting burden for this information collection is estimated to average 1 hour 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.

Railroad: [Dropdown menu]

Submission Period: [Dropdown menu]

Submit Import



Tenant Count: 1

N/A

+ Tenant

Total Number of PTC-required Train Miles

Total Number of Scheduled Attempts at Initialization During Reporting Period:

Instructions and Definitions

Failure Types

- *Failure to Initialize:* Any instance when a PTC system fails to activate on a locomotive or train, unless the PTC system successfully activates during a subsequent attempt in the same location or before entering PTC territory. For the types of PTC systems that do not "initialize" by design, a failed departure test is considered a "failure to initialize" for purposes of this reporting requirement, unless the PTC system successfully passes the departure test during a subsequent attempt in the same location or before entering PTC territory.
- *Cut Out:* Any disabling of a PTC system, subsystem, or component en route, including when the PTC system cuts out on its own or a person cuts out the system, unless the cut out was necessary to exit PTC-governed territory and enter non-PTC territory.
- *Malfunction:* Any instance when a PTC system, subsystem, or component fails to perform the functions mandated under 49 U.S.C. 20157(i) (5), 49 CFR part 236, subpart I, or the applicable host railroad's PTC Safety Plan.

Safety Measures in Place: 49 U.S.C. § 20157(j)(4) requires a railroad to provide in this notification "a description of the safety measures the affected railroad . . . has in place."

Failure Type	Subdivision	Number of Failures
Under 49 U.S.C. § 20157(j)(4)	As Reported in the Host Railroad's PTC Implementation Plan (PTCIP)	During Reporting Period

You have not added any failures. An entry is required.

+ Failure

Statutory Notification of Positive Train Control (PTC) System Failures

Form FRA F 6180.177 OMB Control No. 2130-0553

Railroad:
[Redacted] Railroad Company

Total Number of PTC-required Train Miles
5132423

Safety Measures in Place:
Our safety measures are all spelled out here. They're quite good however we're always improving.

Submission Period:
February 2020

Total Number of Scheduled Attempts at Initialization During Reporting Period:
21513453

Submit Import

+ Instructions and Definitions

Report Complete
Tenant Count: 1

[Redacted] Railroad Com... ✓

+ Tenant

Failure Type	Subdivision	Number of Failures	
Under 49 U.S.C. 5 20157(j)(4)	As Reported in the Host Railroad's PTC Implementation Plan (PTCIP)	During Reporting Period	
Cut Outs	ABC	1	
Failures to Initialize	ABC	2	
Malfunctions	XYZ	3	

+ Failure

Statutory Notification of Positive Train Control (PTC) System Failures

Form FRA F 6180.177 OMB Control No. 2130-0553

Railroad: [Redacted] Railroad Company

Submission Period: February 2020

Submit Import

98% Tenant Count: 2

[Redacted] Railroad Com... ✓

N/A [Trash] [Close]

+ Tenant

Total Number of PTC-required Train Miles: 5132423

Total Number of Scheduled Attempts at Initialization During Reporting Period: 21513453

+ Instructions and Definitions

Tenant Name: [Redacted] Tenant Name

Is the PTC System Governing This Tenant's Operations?

Total Number of Trains Operated on Host Railroad's PTC-governed Main Lines During Reporting Period: [Redacted]

Safety Measures in Place: Our safety measures are all spelled out here. They're quite good however we're always improving.

Failure Type	Subdivision	Number of Failures
Under 49 U.S.C. 5 20157(j)(4)	As Reported in the Host Railroad's PTC Implementation Plan (PTCIP)	During Reporting Period

You have not added any failures. An entry is required.

+ Failure

Railroad: [Redacted] Railroad Company

Submission Period: February 2020

Submit Import

Report Complete Tenant Count: 2

[Redacted] Railroad Com... ✓

Tenantantant [Delete] ✓

+ Tenant

Total Number of PTC-required Train Miles: 5132423

Total Number of Scheduled Attempts at Initialization During Reporting Period: 21513453

+ Instructions and Definitions

Tenant Name: Tenantantant Is the PTC System Governing This Tenant's Operations?

Total Number of Trains Operated on Host Railroad's PTC-governed Main Lines During Reporting Period: 24

Safety Measures in Place: Our safety measures are all spelled out here. They're quite good however we're always improving.

Failure Type	Subdivision	Number of Failures	
Under 49 U.S.C. § 20157(j)(4)	As Reported in the Host Railroad's PTC Implementation Plan (PTCIP)	During Reporting Period	
Cut Outs	FSA	1	[Delete]
Failures to Initialize	GFS	2	[Delete]
Malfunctions	MMW	3	[Delete]

+ Failure

Railroad: [Redacted] Railroad Company

Submission Period: February 2020

Submit Import

Report Complete
Tenant Count: 2

[Star] [Redacted] Railroad Com... [Checkmark]

Tenantantant [Trash] [Checkmark]

+ Tenant

Total Number of [Redacted] 5132423

Total Number of Reporting Period 21513453

+ Instructions

Tenant Name: Tenantantant

Is the PTC System Governing This Tenant's Operations?

Total Number of Trains Operated on Host Railroad's PTC-governed Main Lines During Reporting Period 24

Failure Type	Subdivision	Number of Failures	
Under 49 U.S.C. § 20157(j)(4)	As Reported in the Host Railroad's PTC Implementation Plan (PTCIP)	During Reporting Period	
Cut Outs	FSA	1	[Trash]
Failures to Initialize	GFS	2	[Trash]
Malfunctions	MMW	3	[Trash]

Confirm Submission

By clicking "Submit Form", you are confirming that all ptc system failures that occur on PTC-governed main lines, including those experienced by tenant railroads, for the selected reporting period have been reported in this form.

[Return to Form](#) [Submit](#)

+ Failure

Railroad: [Redacted] Railroad Company

Submission Period: February 2020

Submit Import

Report Complete
Tenant Count: 2

[Redacted] Railroad Com... ✓

Tenantantant [Delete] ✓

+ Tenant

Total Number of [Redacted]

Total Number of Reporting Period: 21513453

+ Instructions and Definitions

Tenant Name: Tenantantant

Is the PTC System Governing This Tenant's Operations?

Total Number of Trains Operated on Host Railroad's PTC-governed Main Lines During Reporting Period: 24

Failure Type	Subdivision	Number of Failures	
Under 49 U.S.C. § 20157(j)(4)	As Reported in the Host Railroad's PTC Implementation Plan (PTCIP)	During Reporting Period	
Cut Outs	FSA	1	[Delete]
Failures to Initialize	GFS	2	[Delete]
Malfunctions	MMW	3	[Delete]

Submission Status

Your submission has been successfully processed.

Ok

+ Failure

Sample Excel upload sheet

Note: data is not real data and is just serving as an example

IsTenant	OrganizationName	IsPTCGoverned	TotalTrainsOperatedOnHost	FailureTypeCode	Subdivision	TotalFailuresDuringPeriod
FALSE	ABCD	TRUE		M	AMBOY	19
FALSE	ABCD	TRUE		C	AMBOY	10
FALSE	ABCD	TRUE		I	AMBOY	10
TRUE	ACADIANA RAILWAY COMPANY	TRUE	4	C	CROWLEY LINE	8
TRUE	ACADIANA RAILWAY COMPANY	TRUE	4	I	CROWLEY LINE	1
TRUE	ACADIANA RAILWAY COMPANY	TRUE	4	M	CROWLEY LINE	17
TRUE	ACADIANA RAILWAY COMPANY	TRUE	4	C	OPELOUSAS LINE	17
TRUE	ACADIANA RAILWAY COMPANY	TRUE	4	I	OPELOUSAS LINE	12
TRUE	ACADIANA RAILWAY COMPANY	TRUE	4	M	OPELOUSAS LINE	17
TRUE	ADIRONDACK SCENIC RAILROAD	TRUE	43	C	ADIRONDACK	10
TRUE	ADIRONDACK SCENIC RAILROAD	TRUE	43	C	SYSTEM	7
TRUE	ADIRONDACK SCENIC RAILROAD	TRUE	43	I	ADIRONDACK	18
TRUE	ADIRONDACK SCENIC RAILROAD	TRUE	43	I	SYSTEM	3
TRUE	ADIRONDACK SCENIC RAILROAD	TRUE	43	M	ADIRONDACK	10
TRUE	ADIRONDACK SCENIC RAILROAD	TRUE	43	M	SYSTEM	17
TRUE	ALEXANDRIA TRAINS	FALSE				
TRUE	ABERDEEN RAILROAD	TRUE	12	C	PIEDMONT	15
TRUE	ABERDEEN RAILROAD	TRUE	12	I	PIEDMONT	1
TRUE	ABERDEEN RAILROAD	TRUE	12	M	PIEDMONT	5
TRUE	ABERDEEN RAILROAD	TRUE	12	C	SANDHILLS	12
TRUE	ABERDEEN RAILROAD	TRUE	12	I	SANDHILLS	0
TRUE	ABERDEEN RAILROAD	TRUE	12	M	SANDHILLS	6

Other Guidelines for the Statutory Notification of System Failures

Based on FRA's Analysis of Previously Submitted Data

In several cases, industry submissions provided more data than is required. These guidelines are reflected in the Excel template available for download on the website, in "Data Submission Instructions" & "Sample Submission."

- **For each tenant railroad, provide the total # of that tenant railroad's trains on the host railroad in general.** The "TotalTrainsOperatedOnHost" field should be the same for each row for each individual tenant railroad. For example, if Tenant X ran 100 times on Subdivision A and 50 times on Subdivision B, each "TotalTrainsOperatedOnHost" value for Tenant X on all subdivisions should be 150. Otherwise, the web form will only take the first value. ***Furthermore, this field "TotalTrainsOperatedOnHost" is not required for the host railroad and can be left blank.***
- **The "Total Number of PTC-required Train Miles" and "Total Number of Scheduled Attempts at Initialization" should be reported only for the host railroad's operations.** These numbers should not include any tenant railroad's operations.
- **A tenant railroad's name should be reported consistently throughout a report.** There should not be variations in the naming/spelling of one tenant railroad in the same report.
- **The subdivisions should correspond to the PTC-equipped subdivisions (or track segments, districts, territories, main line, branches, or corridors) in a railroad's PTC Implementation Plan.**



Future Amendments to FRA-certified PTC Systems

