

**1 FEDERAL RAILROAD ADMINISTRATION  
POSITIVE TRAIN CONTROL AND OTHER SIGNAL SYSTEMS  
(Title 49 Code of Federal Regulations Parts 235 and 236)  
SUPPORTING JUSTIFICATION  
OMB Control No. 2130-0553**

Summary

- This submission is a revision to the last approved submission pertaining to Title 49 Code of Federal Regulations (CFR) Part 236, which was approved by OMB on June 5, 2020, and which expires June 30, 2023.
- The Federal Railroad Administration (FRA) is publishing a final rule revising part 236 titled Positive Train Control Systems in the Federal Register on July 27, 2021. See 86 FR 40154. FRA has received comments in response to the Notice of Proposed Rulemaking (NPRM) issued on December 18, 2020.
- The adjustments decreased the burden by 21,820 hours and decreased responses by 548 after a thorough review of the data.
- The total burden for this collection has increased by 4,416 hours and by 52 responses due to a program change.
- The answer to question number 12 itemizes information collection requirements.
- The answer to question number 15 itemizes adjustments.

**1. Circumstances that make collection of the information necessary.**

Section 20157 of title 49 of the United States Code (U.S.C.) mandates each Class I railroad, and each entity providing regularly scheduled intercity or commuter rail passenger transportation, to implement an FRA-certified positive train control (PTC) system on: (1) its main lines over which poison- or toxic-by-inhalation hazardous materials are transported, if the line carries five million or more gross tons of any annual traffic; (2) its main lines over which intercity or commuter rail passenger transportation is regularly provided; and (3) any other tracks the Secretary of Transportation (Secretary) prescribes by regulation or order.<sup>1</sup> By law, PTC systems must be designed to prevent certain accidents or incidents, including train-to-train collisions, over-speed derailments,

---

<sup>1</sup> Rail Safety Improvement Act of 2008, Pub. L. No. 110-432, 104(a), 122 Stat. 4848 (Oct. 16, 2008), as amended by the Positive Train Control Enforcement and Implementation Act of 2015 (PTCEI Act), Pub. L. No. 114-73, 129 Stat. 568, 576-82 (Oct. 29, 2015), and the Fixing America's Surface Transportation Act, Pub. L. No. 114-94, section 11315(d), 129 Stat. 1312, 1675 (Dec. 4, 2015), codified as amended at 49 U.S.C. 20157. *See also* Title 49 Code of Federal Regulations (CFR) part 236, subpart I.

incursions into established work zones, and movements of trains through switches left in the wrong position.<sup>2</sup> In this final rule, FRA is revising its regulations governing changes to PTC systems and reporting on PTC system performance. First, recognizing that the railroad industry intends to enhance FRA-certified PTC systems to continue improving rail safety and PTC technology's reliability and operability, FRA is modifying the process by which a host railroad must submit a request for amendment (RFA) to FRA before making certain changes to its PTC Safety Plan (PTCSP) and FRA-certified PTC system. Second, to enable more effective FRA oversight, this final rule: expands an existing reporting requirement by increasing the frequency from annual to biannual; broadens the reporting requirement to encompass positive performance-related information, including about the technology's positive impact on rail safety, not just failure-related information; and requires host railroads to utilize a new, standardized report form.

## **2. How, by whom, and for what purpose the information is to be used.**

FRA is issuing a final rule that permits host railroads to utilize the same type of PTC system to submit joint RFAs to their PTCSPs and PTC Development Plans (PTCDPs)—an option which, if exercised, would efficiently leverage industry's resources, help ensure coordination among railroads operating the same types of PTC systems, and reduce the number of similar or identical RFA filings host railroads submit to FRA for review and approval. FRA is also expanding an existing reporting requirement—49 CFR 236.1029(h), *Annual report of system failures*—by increasing the frequency of the reporting requirement from annual to biannual; broadening the reporting requirement to encompass positive performance-related information, not only failure-related information; and requiring host railroads to utilize a new, standardized Biannual Report of PTC System Performance (Form FRA F 6180.152)<sup>3</sup> to enable more effective FRA oversight. In addition, FRA is amending paragraph 236.1029(h) by updating the provision to use certain statutory terminology for consistency; clarifying the ambiguous filing obligation by specifying that only host railroads directly submit these reports to FRA; and explicitly requiring tenant railroads to provide the necessary data to their applicable host railroads by a specific date before the biannual filing deadlines.

### **Background on Current Information Collections**

- The information to be collected under section 235.6 is used to simplify and expedite the process of submitting application requests to FRA by railroads seeking to modify existing signal systems associated with PTC implementation.
- Section 235.6, copies of such modification application requests must be sent to railroad unions responsible for maintenance, inspection, and testing of signal systems under Part 236. This requirement allows union representatives the

---

<sup>2</sup> 49 U.S.C. 20157(g)(1), (i)(5); 49 CFR 236.1005 (setting forth the technical specifications).

<sup>3</sup> The Biannual Report of PTC System Performance (Form FRA F 6180.152) will be placed in the docket (Docket No. FRA-2019-0075) for review when this final rule is published.

opportunity to review all railroad signal system modification requests/applications and enable them to send comments from the railroad workers perspective.

- Railroads are required to furnish FRA with a variety of information regarding PTC technology. Under Subpart A of Part 236 (sections 236.1-236.23), railroads are required to adopt a software management control plan to assure that software used in processor-based signal and train control equipment placed in service is the version intended by the railroad to be in service at each location. FRA uses this information as an audit trail to determine if the correct software is installed at the correct locations for all processor-based signal and train control systems on a railroad.
- Under Subpart H (sections 236.901-236.929), railroads are required to develop a Railroad Safety Program Plan (RSPP) that serves as the railroad's principal safety document for all safety-critical products. FRA requires railroads to submit their initial RSPPs for FRA review and approval prior to implementation of safety-critical products.
- Also, under Subpart H, railroads must submit a Product Safety Plan (PSP). Each PSP must include a complete description of the product and must include system specifications that describe the overall product and identify each component and its physical relationship in the system. FRA examines each PSP and uses this information to determine the type of operation on which the product will be used, and the suitability of the product for that type of operation.
- Railroads are also required to retain records.
- Section 236.1005 provides flexibility to railroads by permitting requests for temporary rerouting. FRA will review temporary rerouting requests to determine whether the requested rerouting is necessary and in the interest of public safety.
- Section 236.1006 details the requirements for equipping locomotives operating in PTC territory. FRA reviews these reports by Class II/Class III railroads to monitor their progress in complying with mandatory statutory deadlines for equipping their locomotives with PTC.
- Section 236.1007 requires a PTC railroad that conducts freight or passenger operations at more than 125 miles per hour to have an approved PTCSPs accompanied by an "HSR-125" document. FRA reviews "HSR-125" documents to ensure the additional safety analysis contained in this document provides suitable evidence to the agency that the PTC system can support a level of safety equivalent to, or better than, the best level of safety of comparable rail service.
- Section 236.1009 spells out PTC Implementation Plan (PTCIP) requirements and mandates each Class I carrier and each entity providing regularly scheduled intercity or commuter rail passenger transportation to develop and submit a plan for implementing a PTC system. FRA examines each PTCIP to confirm that it fully describes the technology that will be employed and how the requirements stipulated in sections 236.1009 and 236.1011 are met.
- Section 236.1013 establishes that, for a PTC system to obtain a Type Approval from FRA, a PTCDP must be filed in accordance with § 236.1009. The PTCDP is

the core document that provides the FRA Associate Administrator for Safety sufficient information to determine whether the PTC system proposed for installation by the railroad could meet the statutory requirements for PTC systems prescribed in the RSIA of 2008 and the regulatory requirements under subpart I which covers PTC Systems.

- Section 236.1015 sets forth PTCSP content requirements and what each railroad must do to receive a PTC System Certification. Each PTCSP must include a risk assessment. FRA uses this information as a basis to confirm compliance with the appropriate performance standard.
- Section 236.1017 requires that each PTCSP must be supported by an independent third-party assessment when FRA Associate Administrator for Safety concludes that it is necessary based upon criteria spelled out in § 236.913(g)(2)(vii). If an independent assessment is required, the assessment may apply to the entire system or a designated portion of the system. FRA reviews any third-party audits to verify that the minimum requirements are met.
- Section 236.1019 pertains exclusively to exceptions from the rule that trackage over which scheduled intercity and commuter passenger service is provided is considered main line track requiring installation of a PTC system.
- Section 236.1021 references discontinuances, material modifications, and amendments. FRA reviews these RFAs to ensure that all necessary information is provided to the agency to determine whether agency approval should be granted.
- Section 236.1023 requires PTC product vendors and railroads to notify FRA when any PTC system, subsystem, component, product, or process fails, malfunctions, or otherwise experiences a defect that decreases or eliminates any safety functionality. FRA reviews these notifications to make certain that the cause of such failures, malfunctions, or defects are identified and that corrective actions are taken without undue delay.
- Section 236.1029 requires communication of a report to a designated railroad officer when a PTC on-board device on a lead locomotive that is operating in or is to be operated within a PTC system fails or is otherwise cut-out. These reports are used by railroads to ensure necessary safety measures are taken, that the necessary alternative protection of absolute block is established. FRA monitors these reports to verify that appropriate records are kept relating to the occurrence of en route failures.
- Section 236.1035 stipulates required information that railroads must provide to FRA before any field testing of an uncertified PTC system, or a product of an uncertified PTC system, or any regression testing of a certified PTC system is conducted. FRA reviews these documents/plans to make informed decisions regarding the safety of testing operations.
- Section 236.1037 specifies records retention requirements. FRA reviews these records for compliance with a performance standard and with the requirements of this new Subpart.

- Section 236.1039 requires railroads to catalog and maintain all documents as specified in the PTCDP and PTCSP for the installation, maintenance, repair, modification, inspection, and testing of the PTC system and have them in one Operations and Maintenance Manual.
- Section 236.1041 requires railroads and contractors to establish and implement training and qualifications programs for PTC systems subject to this Subpart. These programs must meet the minimum requirements spelled out in the PTCDP and PCTSP in §§ 236.1039-236.1045, as appropriate, for the certain personnel.
- Section 236.1043 requires regular and periodic evaluations of railroad's/contractor's PTC training programs and retention of training records. Railroads/contractors use this information as an audit to determine if their PTC training program materials and curriculum are effective and are imparting the specific knowledge, skills, and abilities to accomplish the stated goals of the training program. FRA reviews training records to verify that required personnel are properly trained and that new designations of qualified personnel are recorded, as appropriate.

### **3. Extent of automated information collection.**

In keeping with past agency practice and the requirements of the Government Paperwork Elimination Act, FRA highly encourages and strongly supports the use of advanced information technology, wherever possible, to reduce burden. In Subpart H of this rule, FRA provides for electronic recordkeeping, or automated tracking systems. Furthermore, the hazard log or database of all safety-relevant hazards affecting PTC/processor-based signal and train control systems may be kept electronically. FRA believes that electronic records are not only convenient but also help to reduce the time and cost burdens experienced by railroads in gathering necessary information.

Also, FRA has decided to allow railroads to fax or e-mail the report required under §236.917(b).

Under § 236.1011, railroads are permitted to submit the PTCIP information electronically. FRA expects each PTCIP to include various highly specific and descriptive elements relating to each railroad's infrastructure and operations. FRA recognizes manual assembly of each piece of data into a PTCIP may be exceptionally onerous and time consuming and may make the PTCIP prone to errors. To facilitate collection of this data, FRA is accepting the submission of this data in electronic format.

In particular, FRA believes that the preferred, least costly, and least error-prone method to comply with § 236.1011 is for railroads to submit an electronic geographic digital system map containing the segment attribute information in shape file format, which is a data format structure compatible with most Geographic Information System (GIS) software packages. Using a GIS format provides an efficient means for organizing basic

transportation-related geographic data to facilitate the input, analysis, and display of transport networks. As previously noted, FRA believes that many railroads have already identified track segments, and their physical and operational characteristics, in shape file format.

Additionally, the notifications required under § 236.1023 may be made electronically and the records required to be retained under § 236.1037(a) and § 236.1037(c), which pertain to the results of inspections and tests specified in each railroad's PTCSP and PTCDP, may be kept electronically, subject to approval by FRA. Finally, the training records required under §§ 236.1043–236.1049 may be kept electronically.

To provide clarity and precision regarding the reporting requirement under 49 CFR § 236.1029(h), FRA developed an Excel-based Biannual Report of PTC System Performance (Form FRA F 6180.152) that railroads would utilize to satisfy the reporting requirements. This form would incorporate the information currently required under 49 CFR § 236.1029(h) and the additional types of information specified in the final rule.

To date, FRA's PTC expert estimates that 100 percent of required Subpart I documents have been submitted electronically to the agency.

**4. Efforts to identify duplication.**

To FRA's knowledge, these information collection requirements are not duplicated anywhere else. Similar data are not available from any other source.

**5. Efforts to minimize the burden on small businesses.**

Respondents will be individual railroads mandated to provide this information under 49 U.S.C. § 20157. While some of those railroads are smaller, short-line railroads that may qualify as small businesses, most are larger freight or passenger railroads that do not qualify as small businesses. Therefore, the burden to small businesses should be negligible. Furthermore, the final rule allows railroads to consolidate RFA submissions, which may reduce the burden for smaller entities, which would otherwise need to create some mechanism to catalog this information on their own.

The "universe" of the entities under consideration includes only those small entities that can reasonably be expected to be directly affected by the provisions of this rule. In this case, the "universe" will be Class III freight railroads that operate on rail lines that are currently required to have PTC systems installed. Such lines are owned by railroads not considered to be small.

The U.S. Small Business Administration (SBA) has authority to regulate issues related to small businesses, and stipulates in its size standards that a "small entity" in the railroad

industry is a for-profit “line-haul railroad” that has fewer than 1,500 employees, a “short line railroad” with fewer than 500 employees, or a “commuter rail system” with annual receipts of less than seven million dollars. See “Size Eligibility Provisions and Standards,” 13 CFR part 121, subpart A.

The final rule will directly apply to all host railroads subject to 49 U.S.C. 20157, including, in relevant part, 5 Class II or III, short line, or terminal railroads, and 23 intercity passenger railroads or commuter railroads. FRA has determined that one of these railroads is considered a small entity based on revenue and employee size. Therefore, FRA has determined that this final rule will have an impact on a substantial number of small entities (one affected small entity out of one applicable small entity).

However, FRA has determined that the impact on the small entity affected by the final rule will not be significant as the costs are minimal, and the business benefits of this rule outweigh the costs. Therefore, the impact on the small entity will be positive, taking the form of business benefits that are greater than any new costs imposed on the entity.

The new RFA process will allow railroads to make enhancements and necessary changes to their PTC systems more efficiently.

FRA is also amending the reporting requirement under paragraph 236.1029(h) by increasing the frequency from annual to biannual, clarifying the types of statistics and information the reports must include, and expanding the reporting requirement to encompass positive performance-related information.<sup>4</sup> While this expanded reporting requirement would double the number of submissions and increase the hourly burden, the changes are necessary to enable FRA to oversee the performance and reliability of railroads’ PTC systems effectively. FRA estimates that the additional costs associated with the increased reporting requirement would be more than offset by the changes to section 236.1021.

Consistent with the findings in FRA’s initial regulatory flexibility analysis, and the lack of any comments received on it, the Administrator of FRA certified that this final rule would not have a significant economic impact on a substantial number of small entities.

## **6. Impact of less frequent collection of information.**

This information collection activity is essential to effectuate FRA oversight of railroads’ implementation of PTC under 49 U.S.C. § 20157. Under the PTC Enforcement and Implementation Act of 2015 (PTCEI Act), railroads will have the burden of collecting,

---

<sup>4</sup> In addition, with respect to tenant railroads, FRA’s changes to § 236.1029(h) would be generally consistent with the existing regulatory requirement specifying that a tenant railroad must report a PTC system failure or cut out to “a designated railroad officer of the *host railroad* as soon as safe and practicable.” See § 236.1029(b)(4) (emphasis added).

cataloging, and presenting this information in some form, including the required annual report and information required by FRA to perform compliance reviews, regardless of whether or not a form is provided.<sup>5</sup>

It is essential that FRA obtain extensive documentation of the safety of “PTC” systems, as well as subsystems and components thereof, before any “PTC” system is placed in revenue service in order to confirm that rail carriers meet this high-level performance standard. The required information, particularly the risk assessment data, can be used by FRA as a basis to measure and identify the likelihood of a hazardous event and the potential for the system to function as intended, as well as to confirm compliance with the performance standard.

Without the required information, FRA could not be assured that railroads establish and implement a PTC training program. Without the ability to oversee the adoption and implementation of each railroad’s required PTC training program and the proper training of its personnel, there would most likely be increased numbers of accidents/incidents, such as those mentioned above, with even greater numbers of injuries and fatalities to train crews, roadway and other rail (signal) workers, and members of the traveling public.

In sum, the collection of information serves to meet the congressional mandate enunciated in 49 U.S.C. § 20157 and advances the goal of enhancing rail safety nationwide.

## **7. Special circumstances.**

Under § 236.917(b), railroads may have to report information to FRA more often than quarterly if the frequency of the safety-relevant hazards exceeds the threshold set forth in the Product Safety Plan (PSP). Once the product is placed in service, railroads must report the inconsistency to the FRA Director, Office of Safety Assurance and Compliance, at agency headquarters within 15 days of discovery. Railroads are also required to provide a final report to the FRA Director, Office of Safety Assurance and Compliance, on the results of the analysis and countermeasures taken to reduce the frequency of the safety-relevant hazard(s) below the threshold set forth in the PSP when the problem is resolved.

Additionally, under § 236.917(a), railroads must retain at a designated office: (i) for the life cycle of the product adequate documentation to demonstrate that the PSP meets the safety requirements of the Railroad’s Safety Program Plan (RSPP) and applicable standards in this subpart, including the risk assessment; and (ii) An Operations and Maintenance Manual, pursuant to § 236.919; and (iii) training records pursuant to § 236.923(b).

Furthermore, under § 236.1005(g)(1)(ii), written or telephonic notification to FRA of temporary emergency rerouting of trains equipped with a PTC system onto a track not

---

<sup>5</sup> See 49 U.S.C. §§ 20107, 20157(c)(1)–(2); 49 CFR §§ 236.1006(b)(2), 236.1009(h), 236.1011(f).



equipped with a PTC system and of trains not equipped with a PTC system onto a track equipped with a PTC system must be made within one business day of the beginning of the rerouting. Also, under § 236.1005(g)(2)(ii), temporary rerouting requests due to planned maintenance must be filed no less than 10 days prior to the planned rerouting. Both requirements and any additional requirements under the temporary rerouting provisions are to ensure rail safety and prevent avoidable collisions and derailments, and any required requests and/or notifications may be submitted electronically.

Moreover, under § 236.1037(d), if the frequency of safety-relevant hazards exceeds the threshold set forth in either the PTCDP or PTCSP, reports of the inconsistency must be made in writing by mail, facsimile, e-mail, or hand delivery to FRA within 15 days of discovery. Again, this is to ensure rail safety, and electronic reports are permitted.

Finally, under § 236.1043(b), employers must retain training records of those persons who are qualified under this section until new designations are recorded, or for at least one year after such persons leave applicable service. These records are necessary so that FRA inspectors can verify that employees are properly trained and qualified to perform their duties related to the installation, repair, modification, inspection, and testing of PTC systems and safety-critical elements of the railroad's PTC system. These records are also essential for FRA/NTSB investigators in the event of a rail accident/incident. All other reporting and recordkeeping requirements are in compliance with this section.

## **8. Compliance with 5 CFR 1320.8.**

As noted in the summary section, FRA is publishing a Notice of final rule in the Federal Register on July 27, 2021, titled Positive Train Control Systems.<sup>6</sup>

On December 18, 2020, FRA issued a Notice of Proposed Rulemaking (NPRM) to amend its PTC regulations to modify regulatory provisions that, if not revised, would impede the industry's ability to advance PTC technology efficiently and FRA's ability to oversee the performance and reliability of PTC systems effectively.<sup>7</sup>

During the comment period that closed on February 16, 2021, FRA received seven sets of generally supportive comments from the following entities and individuals: the American Public Transportation Association (APTA); the Association of American Railroads (AAR)

---

<sup>6</sup> 86 FR 40154.

<sup>7</sup> 85 FR 82400.

and the American Short Line and Regional Railroad Association (ASLRRA) (jointly filed); the National Railroad Passenger Corporation (Amtrak); New Jersey Transit (NJT); and two individuals (David Schanoes and Patrick Coyle), who often report on rail matters.

Part I of Rule (49 CFR § 236.1021) – Modifications to the Process for Requests for Amendments (RFA) to FRA-approved PTC Safety Plans (PTCSP) and FRA-certified PTC Systems		
Commenter	Summary of Comment	FRA’s Response in Final Rule
AAR, ASLRRA, APTA, Amtrak, NJT, and Both Individuals	All commenters expressed general support for this proposal.	(No action needed except advancing the final rule.)
APTA	Even with the streamlining in this rule, § 236.1021 will present an undue burden if FRA broadly interprets the types of changes (often referred to as “material modifications”) that require a host railroad to file an RFA under § 236.1021(h).	FRA provides an explanation. – This rule does not expand or revise the types of changes that trigger the filing of an RFA under existing paragraphs (h)(1) through (4) or the exceptions under § 236.1021(i)–(k). FRA will handle inquiries about whether a specific change might trigger the filing of an RFA on a case-by-case basis. FRA previously advised railroads about the scope of these terms, during FRA’s PTC Collaboration Sessions and in FRA’s individual letters to railroads approving their PTCSPs and certifying their PTC systems.
Patrick Coyle	FRA should add the following provision to the list of changes that trigger the filing of an RFA: “(5) Any change in PTC component software or firmware.”	FRA declines, and provides an explanation. – This rule does not revise the list of triggering changes under § 236.1021(h)(1)–(4). However, such an addition would be unnecessary as relevant changes to software or firmware are already covered within existing paragraphs (h)(3) and (4).
APTA	Although APTA generally supports FRA allowing RFAs to be jointly filed under new paragraph 236.1021(l), APTA notes that railroads operating ACSES II / ASES II, E-ATC, or non-vital, overlay I-ETMS systems may not benefit from this flexibility to the same extent as the 19 railroads operating mixed I-ETMS systems.	FRA provides an explanation. – New paragraph (l) provides the same flexibility for <i>all</i> host railroads operating <i>all</i> types of PTC systems. FRA welcomes joint RFAs from any group of host railroads utilizing the same type of PTC system with the same certification classification, as new paragraph (l) states. FRA remains available to provide technical assistance to any railroads that have questions about this provision and how to utilize the flexibility therein.
AAR and ASLRRA	Paragraph (m)(2)(v)—requiring a host railroad to submit any other information that FRA requests on a case-by-case basis—should be removed because an existing provision, § 236.1021(d), already states that.	FRA declines, and provides an explanation. – FRA explains existing paragraph (d) is no longer applicable to a host railroad’s RFA to its PTCSP. Under this final rule, new paragraphs (l) and (m) will govern in this context, as they establish the process, including content requirements, for RFAs associated with FRA-approved PTCSPs and FRA-certified PTC systems.  Also, the existing section 236.1021(d) applies only to RFAs to PTCIPs and

		PTCDPs, not RFAs to PTCSPs or PTC systems. FRA’s burden estimates are based on the full set of information that paragraph (m) requires RFAs to PTCSPs to contain, including responses to FRA’s possible requests for additional information on a case-by-case basis, as appropriate or necessary.
--	--	---

Part II of Rule (49 CFR §§ 236.1003 and 236.1029(h)) – Pertinent Definitions and Biannual Report of PTC System Performance (Form FRA F 6180.152)		
Commenter	Summary of Comment	FRA’s Response in Final Rule
AAR, ASLRRA, APTA, Amtrak, NJT, and Both Individuals	All commenters expressed general support for this proposal.	(No action needed except advancing the final rule.)
APTA	FRA should review its cost-benefit analysis associated with the changes to § 236.1029(h) FRA proposed in the NPRM.	FRA accepts, and revises its economic analysis. – FRA thoroughly reviewed and updated its estimate of the increased burden associated with expanding the reporting requirement under § 236.1029(h) (Form FRA F 6180.152). FRA revised the average time per submission from 12 hours, as estimated in the NPRM, to 48 hours.
Patrick Coyle	FRA should add the following clause to the end of the definition of “malfunction”: “or any indication of unauthorized system access or other indicators of compromise described by system suppliers or vendors.”	FRA declines, and provides an explanation. – FRA declines to add the requested clause to the end of the definition of “malfunction” for two reasons. First, host railroads have become accustomed to collecting data using the exact definition of “malfunction” FRA proposed in the NPRM, as FRA developed that definition with industry’s feedback during its establishment of the Statutory Notification of PTC System Failures (Form FRA F 6180.177). Second, FRA’s proposed definition of “malfunction” already captures certain instances that the commenter describes. If a person or entity interferes with a PTC system, subsystem, or component to the point the technology fails to perform the mandated functions, that would fall squarely within the definition of “malfunction.”
David Schanoes and APTA	FRA received two comments on FRA’s proposal to increase the frequency of the reporting requirement under § 236.1029(h) from annual to biannual. <ul style="list-style-type: none"> <li>• An individual commented that FRA should increase the frequency to quarterly, as that will help FRA more effectively determine if the reliability of PTC systems is trending upward or downward.</li> <li>• APTA recommends keeping § 236.1029(h) as an annual reporting requirement, noting that increasing the frequency to biannual may require each railroad to use</li> </ul>	FRA declines, and provides an explanation. – FRA adopts the biannual reporting frequency it proposed in the NPRM because that frequency balances FRA’s need to oversee the reliability and performance of PTC systems actively throughout the year, with commuter railroads’ stated preference for less frequent reporting. With respect to APTA’s comment that increasing the reporting frequency from annual to biannual will require railroads to compile performance-related data more regularly, FRA accounts for that burden in its economic analysis in Section V ( <i>Regulatory Impact and Notices</i> ) of the final rule.

	additional resources to review and compile data on a more regular basis.	
David Schanoes	One comment inquires what FRA will do with this new data and suggests FRA commit to producing high-level summaries of railroads' Biannual Reports of PTC System Performance, analyses of trends, and recommendations.	FRA provides an explanation. – FRA explains that it intends to use host railroads' Biannual Reports of PTC System Performance to evaluate the rate at which PTC systems are experiencing failures and trends in system reliability over time. In addition, these reports will help FRA prioritize its resources, including helping inform decisions about which railroads may benefit from additional technical assistance. As a part of FRA's ongoing PTC oversight, the agency will evaluate the best way to continue its transparent reporting on PTC progress and challenges.
Patrick Coyle	FRA should require railroads to submit the following additional data in their Biannual Reports of PTC System Performance: "Any reports from hardware or software suppliers or vendors under § 263.1023(b) about software failures or reported vulnerabilities."	FRA declines, and provides an explanation. – FRA declines to adopt this recommendation in the final rule because FRA already receives such reports on an ongoing basis, under 49 CFR § 236.1023.
AAR and ASLRRRA	Information regarding PTC system improvements is not related to biannual failure statistics, and any such summary should be optional.	FRA accepts in part and revises the regulatory text. – FRA revises the regulatory text to clarify the scope and purpose of this required summary and its relation to the biannual failure statistics. Specifically, new paragraph (h)(2) will require a host railroad's biannual report to include a summary of any actions the host railroad and its tenant railroads are taking to reduce the frequency and rate of initialization failures, cut outs, and malfunctions, such as any actions to correct or eliminate systemic issues and specific problems.
APTA	In the NPRM, FRA outlined the dates by which host railroads must submit their Biannual Reports of PTC System Performance (Form FRA F 6180.152)— <i>i.e.</i> , by July 31 (covering the period from January 1 to June 30), and by January 31 (covering the period from July 1 to December 31 of the prior calendar year). Though APTA agrees that requiring earlier submission of the data is reasonable, APTA asserts that filing the data about 30 days after the reporting period might be insufficient to compile the data. APTA recommends the deadline should be "within 45 days of the reporting period."	FRA declines, and provides an explanation. – FRA expects that providing railroads one full month (from the end of the half-year period) to complete Form FRA 6180.152 will be sufficient and reasonable, given railroads' current experience in reporting these failures monthly, within 15 days of the end of each month. (As a note, the temporary Statutory Notification of PTC System Failures (Form FRA F 6180.177) pursuant to 49 U.S.C. 20157(j)(4) expires December 31, 2021).
AAR and ASLRRRA	FRA should delete the deadlines it proposed in the NPRM for tenant railroads to provide the necessary data to host railroads, for purposes of host railroads' Biannual Reports of PTC System Performance (Form FRA F 6180.152). FRA	FRA accepts in part and revises the regulatory text. – The final rule establishes a general requirement for each applicable tenant railroad that operates on a host railroad's PTC-governed main lines to provide the pertinent information to each applicable host railroad on a continuous basis—without imposing a date-specific

	should leave it to the host and tenant railroads to determine the most effective way to coordinate.	deadline or unnecessarily interfering with host and tenant railroads' existing processes for coordination and data-sharing.
AAR, ASLRRA, APTA, Amtrak, and NJT	One reporting metric (the number of enforcements by the PTC system) could impose a significant burden on railroads operating ACSES II because almost all ACSES II railroads need to obtain that data manually, based on that system's current capabilities or configuration.	<p>FRA accepts in part and revises the regulatory text. – At least one ACSES II host railroad currently utilizes an automated tool that remotely collects and analyzes data from the PTC system, including enforcements by the PTC system. The other six ACSES II host railroads could likewise, over time, explore options or tools for obtaining their enforcement-related data remotely (<i>i.e.</i>, without manually performing a locomotive download while connected to each locomotive). FRA declines to eliminate paragraph (h)(1)(iv) from the final rule, as the number of enforcements by a PTC system is an integral metric about PTC technology's performance.</p> <p>However, to avoid imposing a significant burden on those railroads, the final rule, under new paragraph (h)(5), provides temporary relief from the content requirement under paragraph (h)(1)(iv) (the number of enforcements by the PTC system) to any railroad operating a PTC system classified under FRA Type Approval Nos. FRA-TA-2010-001 (ACSES II) or FRA-TA-2013-003 (ASES II). Specifically, those railroads must begin submitting the specific metric required under paragraph (h)(1)(iv) not later than January 31, 2023. FRA expects this will provide the six applicable ACSES II host railroads sufficient time either to refine and expedite their manual processes or to adopt a more automated process.</p>
AAR and ASLRRA	Once this final rule is effective, the new Biannual Report of PTC System Performance (Form FRA F 6180.152) should replace the temporary reporting requirement FRA adopted in 2020.	FRA declines, and provides an explanation. – AAR and ASLRRA are referring to the Statutory Notification of PTC System Failures (Form FRA F 6180.177, OMB Control No. 2130-0553), which implements the statutory reporting requirement under 49 U.S.C. 20157(j)(4). That separate reporting requirement remains in place, by statute, until December 31, 2021.
Patrick Coyle	All federal agencies must step up their activities related to cybersecurity, noting that PTC technology is one area where FRA must proactively address cybersecurity needs. The comment also acknowledges that a comprehensive attempt to addressing cybersecurity challenges would require a separate rulemaking.	FRA declines, and provides an explanation. – Although the comment is outside the scope of this rulemaking, FRA notes that its existing regulations establish security requirements for PTC systems under 49 CFR 236.1033, <i>Communications and security requirement</i> . In addition, FRA notes that certain cybersecurity issues resulting in PTC system failures, defective conditions, or previously unidentified hazards are currently reportable under 49 CFR 236.1023, <i>Errors and malfunctions</i> , and cybersecurity issues resulting in initialization failures, cut outs, or malfunctions, will be reportable in the new Biannual Report of PTC System Performance (Form FRA F 6180.152) under 49 CFR 236.1029(h).

## Public Participation Prior to the Issuance of the NPRM

FRA regularly engages with host railroads, tenant railroads, and PTC system vendors and suppliers, as part of FRA's oversight of railroads' implementation of PTC systems on the mandated main lines under 49 U.S.C. 20157 and the other lines where railroads are voluntarily implementing PTC technology.

During two of FRA's PTC Collaboration Sessions in 2019 and 2020<sup>8</sup>, FRA generally discussed its intention to propose to modify the RFA process under § 236.1021, specifically as it relates to FRA-approved PTCSPs and FRA-certified PTC systems. One of these two Collaboration Sessions was held on February 6, 2019 at DOT's Headquarters in Washington, DC, and the other was hosted via teleconference on June 10, 2020.<sup>9</sup>

### **9. Payments or gifts to respondents.**

There are no payments, gifts, or other types of remuneration to respondents.

### **10. Assurance of confidentiality.**

FRA fully complies with all laws pertaining to confidentiality, including the Privacy Act of 1974. With respect to the two forms:

The statutory mandate does not require that FRA publicly release the Statutory Notifications of PTC System Failures (Form FRA F 6180.177) that railroads submit under 49 U.S.C. § 20157(j)(4). Similarly, FRA is not required to release the Biannual Reports of PTC System Performance (Form FRA F 6180.152). However, if FRA decides in the future to voluntarily post any of this failure-related information on its website, FRA would be limited to a certain extent by any requests for confidentiality that railroads submit pursuant to 49 CFR § 209.11.

Under 49 CFR §§ 209.11 and 236.1009(e)(3), a railroad may request confidentiality of its PTC-related filings. However, if FRA does not believe the information is confidential, or if another party seeks such information under § 209.11 (invoking the Freedom of Information Act), FRA will perform a review to determine whether it should be disclosed. Until such time, to the extent required by law, FRA will honor each railroad's request for confidentiality, especially if the railroad complies with the requirements under § 209.11, including proper markings, labels, redactions, and a statement justifying nondisclosure. If the information, however, is somehow changed to reduce or eliminate its connection to a

---

<sup>8</sup> Beginning in 2018 and planned through 2020, FRA hosted a series of collaboration sessions intended to bring together railroads, railroad associations, and FRA's PTC experts. Topics have included statutory and regulatory requirements, testing best practices, and PTC System Certification. All past materials can be found at: <https://railroads.dot.gov/train-control/ptc/positive-train-control-ptc>.

<sup>9</sup> 85 FR 82400.

single source (e.g., aggregating numbers across all railroads to develop a national or regional total), it is likely no longer protected as confidential.

Furthermore, FRA requires an additional version of the document under 49 CFR § 236.1009(e)(3) to assist FRA in efficiently and correctly reviewing confidential information. Under § 209.11, a redacted and an un-redacted copy of the same document must be submitted. When FRA review is required to determine whether confidentiality should be afforded, FRA personnel must painstakingly compare side-by-side the two versions to determine what information has been redacted. This process may result in information for which exemption from disclosure is being requested to be misidentified. To reduce this burden and to ensure that the intellectual property of the railroad and their suppliers is appropriately guarded, FRA requires any material submitted for confidential treatment under 49 CFR § 236.1009 to include a third version that would indicate, without fully obscuring, the redacted portions for which protection is requested. For instance, to indicate without obscuring the plan's redacted portions, the railroad may use the highlighting, underlining, or strikethrough functions of its word processing program. This document will also be treated as confidential under § 209.11.

FRA is allowing the submission of an adequate GIS shapefile to fulfill some of the PTCIP content requirements under § 236.1011. However, with respect to requesting confidential treatment of specific information contained in a GIS shapefile, which includes primarily map data, FRA recognizes that visually blocking out the information would defeat the purpose. For instance, a black dot over a particular map location, or a black line over a route, would reveal the location. Thus, FRA expects that a railroad seeking confidential treatment for portions of a GIS shapefile will submit three versions of the shapefile to comply with 49 CFR § 236.1009(e). Alternatively, a single shapefile can include three separate layers each representing the three levels of confidentiality, with specific instructions indicating which elements are being displayed and how to handle the file for confidentiality purposes. FRA also expects that the version for public consumption would not include the information for which the railroad is seeking confidential treatment.

**11. Justification for any questions of a sensitive nature.**

The information sought relates only to PTC implementation statutory compliance and is authorized by statute and regulation. Thus, there are no questions of personal or sensitive nature.

**12. Estimate of burden hours for information collected.**

In the following table, estimates for the respondent universe, annual responses, and average time per responses are based on the experience and expertise of FRA's Signal and Train Control Division.

The total annual burden hours, under the fourth column, is calculated by multiplying total annual responses by average time per responses. For example, 10 expedited applications \* 5 hours = 50 hours.

The dollar equivalent cost is derived from the 2019 Surface Transportation Board's (STB) Full Year Wage A&B data series using the appropriate employee group hourly wage rate that includes a 75-percent overhead charge. For Executives, Officials, and Staff Assistants, this cost amounts to \$120 per hour. For Professional/Administrative staff, this cost amounts to \$77 per hour.

The total cost equivalent, under the fifth column, is calculated by multiplying total annual burden hours by the appropriate employee group hourly wage rate that includes a 75-percent overhead charge. For example, 50 hours \* \$77 = \$3,850. FRA is including the dollar equivalent cost for each of the itemized hours below using the STB Full-Year Wage A&B data series as the basis for each cost calculation. For railroad executives, officials, and staff assistants, the hourly wage rate is \$120 per hour (\$68.81 \* 1.75 = \$120). For professional and administrative staff, the hourly wage rate is \$77 per hour (\$44.27 \* 1.75 = \$77).

Note: The hourly wage rate of \$77 was used to calculate total cost equivalent for all items except for §§ 236.913(a), 236.1001(b), 236.1007(c), 236.1007(d), 236.1009(a)(2), and 236.1009(a)(3) which is \$120.

CFR Section/Subject	Respondent universe	Total annual responses (A)	Average time per responses (B)	Total annual burden hours (C) = A * B <sup>10</sup>	Total cost equivalent (D) = C * wage rate <sup>8</sup>	Section Analyses and Estimates
229.135(b) – Event recorders	The burden for these provisions are included under that of § 236.907 relating to the Product Safety Plan (PSP) and under § 236.1015 relating to the PTC Safety Plan. Consequently, there is no additional burden associated with these requirements.					
234.207 – Adjustment, repair, or replacement of component.	The burden for this requirement is included under OMB No. 2130-0534. Consequently, there is no additional burden associated with this requirement.					

<sup>10</sup> Totals may not add due to rounding



234.275 - Processor-based systems	The burden for the first part of this requirement regarding the Product Safety Plan (PSP) is included under that of § 236.907. The burden for PTCDPs and PTCSPs are included under that of § 236.1013 and § 236.1015, respectively. Consequently, there is no additional burden associated with it.					
235.6(c) – Expedited application for approval of certain changes described in this section	42 railroads	10 expedited applications	5 hours	50 hours	\$3,850	Modification of a signal system consisting of the installation, relocation, or removal of one or more signals, interlocked switches, derails, movable-point frogs, or electric locks in an existing system directly associated with the implementation of PTC pursuant to Subpart I of Part 236, if the modification does not include the discontinuance or decrease of limits of a signal or train control system.  FRA estimates that it will take approximately 5 hours to complete each expedited application with the necessary information.
– Copy of expedited application to labor union	42 railroads	10 copies	30 minutes	5 hours	\$385	FRA estimates that one (1) copy of each of the 10 expedited application requests (with the necessary notice and profile plan) will be provided to the Headquarters of the Railroad Signalmen’s Union or BRS (Brotherhood of Railroad Signalmen).  FRA estimates that it will take approximately 30 minutes to complete each modification request copy.
– Railroad letter rescinding its request for expedited application of certain signal system changes	42 railroads	1 letter	6 hours	6 hours	\$462	FRA estimates that approximately 1 letter rescinding a request for expedited application of certain signal system changes will be made by railroads and sent to FRA. It is estimated that it will take approximately 6 hours to complete each rescindment letter.
– Revised application for certain signal system changes	42 railroads	1 application	5 hours	5 hours	\$385	FRA estimates that approximately 1 revised application for approval of certain signal system changes that include the required notice, profile plan, and statement will be sent to FRA under §§ 235.5 and 235.9–235.20.  FRA estimates that it will take approximately 5 hours to complete each revised application with the

						necessary information.
– Copy of railroad revised application to labor union	42 railroads	1 copy	30 minutes	0.5 hour	\$39	FRA estimates that 1 copy of the revised application request (with the necessary notice and profile plan) will be provided to the Headquarters of the Railroad Signalmen’s Union or Brotherhood of Railroad Signalmen.  FRA estimates that it will take approximately 30 minutes to complete a modification request copy.
236.0 - Applicability, minimum requirements, and penalties	The burden for this requirement is included under that of § 236.1009. Consequently, there is no additional burden associated with this requirement.					
236.1 – Railroad maintained signal plans at all interlockings, automatic signal locations, and controlled points, and updates to ensure accuracy	700 railroads	25 plan changes	15 minutes	6.3 hours	\$485	As required for maintenance, plans shall be kept at all interlockings, automatic signals and controlled points. Plans shall be legible and correct.  FRA estimates that it will take approximately 15 minutes to complete each plan update.
236.15 – Designation of automatic block, traffic control, train stop, train control, cab signal, and PTC territory in timetable instructions	700 railroads	10 timetable instructions	30 minutes	5 hours	\$385	Automatic block, traffic control, train stop, train control, cab signal, and PTC territory shall be designated in timetable instructions.  FRA estimates that that it will take approximately 30 minutes to complete each timetable instruction.
236.18 – Software management control plan – New railroads	2 railroads	2 plans	160 hours	320 hours	\$24,640	FRA estimates that the Class II railroads and Class III railroads have prepared and adopted a software management control plan. Therefore, only new or existing Class II and Class III railroads that become subject to this requirement would be affected. It is estimated that it will take each railroad approximately 160 hours to develop its software management control plan.
236.23(e) – The names, indications, and aspects	700 railroads	2 modifications	1 hour	2 hours	\$154	The names, indications, and aspects of roadway and cab signals shall be defined in the carrier's Operating

of roadway and cab signals shall be defined in the carrier's Operating Rule Book or Special Instructions. Modifications shall be filed with FRA within 30 days after such modifications become effective						<p>Rule Book or Special Instructions. Modifications shall be filed with the FRA within thirty days after such modifications become effective.</p> <p>FRA estimates that it will take about an hour for each modification.</p>
236.110 - Results of tests	The burden for this requirement is included under OMB No. 2130-0006. Consequently, there is no additional burden associated with this requirement.					
236.587(d) – Certification and departure test results	742 railroads	4,562,500 train departures	5 seconds	6,337 hours	\$487,949	<p>The certification and the test results shall be posted in the cab of the locomotive and a copy of the certification and test results left at the test location for filing in the office of the supervisory official having jurisdiction.</p> <p>FRA estimates that it will take about 5 seconds to record each departure.</p>
236.905(a) – Railroad Safety Program Plan (RSPP) – New railroads	2 railroads	2 RSPPs	40 hours	80 hours	\$6,160	<p>The RSPP must establish the minimum Product Safety Plan (PSP) requirements that will govern the development and implementation of all products subject to this subpart, consistent with the provisions contained in § 236.907.</p> <p>FRA estimates that it will take approximately 40 hours to write the petition.</p>
236.907 – Product Safety Plans (PSP)	The burden for this requirement is included under § 236.913(c1) - (c2). Consequently, there is no additional burden associated with this requirement.					
236.909 - Minimum performance standard	The burden for this requirement is included under § 236.913(d). Consequently, there is no additional burden associated with this requirement.					

236.913(a) – Filing and approval of a joint Product Safety Plan (PSP)	742 railroads	1 joint plan	2,000 hours	2,000 hours	\$240,000	<p>A PSP must be prepared for each product covered by this subpart. A joint PSP must be prepared when: (1) The territory on which a product covered by this subpart is normally subject to joint operations, or is operated upon by more than one railroad; and (2) The PSP involves a change in method of operation.</p> <p>FRA estimates that it will take approximately 2,000 hours to write each joint PSP and notification.</p>
(c)(1) – Informational filing/petition for special approval	742 railroads	0.5 filings/approval petitions	50 hours	25 hours	\$1,925	<p>Not less than 180 days prior to planned use of the product in revenue service as described in the PSP or PSP amendment, the railroad shall submit an informational filing to FRA.</p> <p>FRA estimates that it will take approximately 50 hours to write an informational filing.</p>
(c)(2) – Response to FRA’s request for further data after informational filing	742 railroads	0.25 data calls/documents	5 hours	1 hour	\$77	<p>FRA estimates that it will request further information in approximately 0.25 instances under the above requirement. It is estimated that it will take approximately 5 hours to gather the necessary information and complete the documentation.</p>
(d)(1)(ii) – Response to FRA’s request for further information within 15 days after receipt of the Notice of Product Development (NOPD)	742 railroads	0.25 data calls/documents	1 hour	0.25 hour	\$19	<p>Within 15 days of receipt of the Notice of Product Development, the Associate Administrator for Safety either acknowledges receipt, or acknowledges and requests more information.</p> <p>FRA estimates that it will receive approximately one data call every two years with the necessary information under the above requirement and it will take approximately one (1) hour to complete each document and sent them to FRA.</p>
(d)(1)(iii) – Technical consultation by FRA with the railroad on the design and planned development of the	742 railroads	0.25 technical consultations	5 hours	1.3 hours	\$96	<p>If FRA concludes the Notice of Product Development contains sufficient information, the Associate Administrator for Safety determines the extent and nature of the assessment and review necessary for final product approval. FRA may</p>

product						<p>convene a technical consultation as necessary to discuss issues related to the design and planned development of the product.</p> <p>FRA estimates that each consultation will take approximately 5 hours.</p>
(d)(1)(v) – Railroad petition to FRA for final approval of NOPD	742 railroads	0.25 petitions	1 hour	0.25 hour	\$19	<p>Within 30 days of receipt of the petition for final approval, the Associate Administrator for Safety either acknowledges receipt or acknowledges receipt and requests more information.</p> <p>FRA estimates it will take one (1) hour to complete this submission.</p>
(d)(2)(ii) – Response to FRA’s request for additional information associated with a petition for approval of PSP or PSP amendment	742 railroads	1 request	50 hours	50 hours	\$3,850	<p>Within 60 days of receipt of the petition for approval, FRA either acknowledges receipt, or acknowledges receipt and requests more information.</p> <p>FRA estimates it will take 50 hours to complete this request.</p>
(e) – Comments to FRA on railroad informational filing or special approval petition	742 railroads	0.5 comments/letters	10 hours	5 hours	\$385	<p>Interested parties may submit to FRA information and views pertinent to FRA’s consideration of an informational filing or petition for approval.</p> <p>FRA estimates that it will take approximately 5 hours to complete each comment and send it to FRA.</p>
(f) – Petition for approval prior to completion of field testing of the product	The burden for this requirement is included under § 236.91. Consequently, there is no additional burden associated with this requirement.					

(h)(3)(i) – Railroad amendment to PSP	742 railroads	2 amendments	20 hours	40 hours	\$3,080	<p>A railroad may submit an amendment to a PSP at any time in the same manner as the initial PSP.</p> <p>FRA estimates that that each amendment will take approximately 20 hours to complete and submit to FRA.</p>
(j) – Railroad field testing/information filing document	742 railroads	1 field test document	100 hours	100 hours	\$7,700	<p>Field testing of a product may be conducted prior to approval of a PSP by the submission of an informational filing by a railroad. The FRA will arrange to monitor the tests based on the information provided in the filing.</p> <p>FRA estimates that each field-testing document will take approximately 100 hours to complete and submit to FRA.</p>
236.917(a) – Railroad retention of records: results of tests and inspections specified in the PSP	13 railroads with PSP	13 PSP safety results	160 hours	2,080 hours	\$160,160	<p>A railroad must maintain at a designated office on the railroad: (i) For the life cycle of the product, adequate documentation to demonstrate that the PSP meets the safety requirements of the railroad’s RSPP and applicable standards in this subpart, including the risk assessment; (ii) An Operations and Maintenance Manual, pursuant to § 236.919; and (iii) Training records pursuant to § 236.923(b). Results of inspections and tests specified in the PSP must be recorded as prescribed in § 236.110. Contractors of the railroad must maintain at a designated office training records pursuant to §236.923(b).</p> <p>FRA estimates that each of these documents will take</p>

						approximately 160 hours annually to complete.
(b) – Railroad report that frequency of safety-relevant hazards exceeds threshold set forth in PSP	13 railroads	1 report	40 hours	40 hours	\$3,080	After the product is placed in service, the railroad must maintain a database of all safety-relevant hazards as set forth in the PSP and those that had not been previously identified in the PSP.  FRA estimates that it will take approximately 40 hours to prepare the initial and final reports.
(b)(3) – Railroad final report to FRA on the results of the analysis and countermeasures taken to reduce the frequency of safety-relevant hazards	13 railroads	1 report	10 hours	10 hours	\$770	A railroad must provide a final report to the FRA Director, Office of Safety Assurance and Compliance, on the results of the analysis and countermeasures taken to reduce the frequency of the safety-relevant hazard(s) below the threshold set forth in the PSP when the problem is resolved.  FRA estimates that it will take approximately 10 hours to prepare the report and submit it to FRA.
236.919(a) – Railroad Operations and Maintenance Manual (OMM)	13 railroads	1 OMM update	40 hours	40 hours	\$3,080	A railroad must catalog and maintain all documents as specified in the PSP for the installation, maintenance, repair, modification, inspection, and testing of the product and have them in one Operations and Maintenance Manual, readily available to persons required to perform such tasks and for inspection by FRA and FRA certified state inspectors.  FRA estimates that it will take approximately 40 hours to update OMM.
(b) – Plans for proper maintenance, repair, inspection, and testing of safety-critical products	13 railroads	1 plan update	40 hours	40 hours	\$3,080	Plans required for proper maintenance, repair, inspection, and testing of safety-critical products must be adequate in detail and must be made available for inspection by FRA and FRA certified state inspectors where such products are deployed or maintained. They must identify all software versions, revisions, and revision dates. Plans must be legible and correct.

						FRA estimates that that the plan will take approximately 40 hours to complete.
(c) – Documented hardware, software, and firmware revisions in OMM	13 railroads	1 revision	40 hours	40 hours	\$3,080	Hardware, software, and firmware revisions must be documented in the Operations and Maintenance Manual according to the railroad’s configuration management control plan and any additional configuration/revision control measures specified in the PSP.  FRA estimates that it will take approximately 40 hours to prepare and document each hardware, software, and firmware revision.
236.921 and 923(a) – Railroad Training and Qualification Program	13 railroads	1 program	40 hours	40 hours	\$3,080	Employers must establish and implement training and qualification programs for products subject to this subpart. These programs must meet the minimum requirements set forth in the PSP and in §§ 236.923 through 236.929 as appropriate, for the following personnel: (1) through (4) of this section.  FRA estimates that it will take approximately 40 hours to establish the training program under this provision.
236.923(b) – Training records retained in a designated location and available to FRA upon request	13 railroads	350 records	10 minutes	58 hours	\$4,466	The employer’s program must provide training for persons who perform the functions described in paragraph (a) of this section to ensure that they have the necessary knowledge and skills to effectively complete their duties related to processor-based signal and train control equipment.  FRA estimates that it will take approximately 10 minutes to retain each record.
Form FRA F 6180.165 – Quarterly PTC Progress Report (49 U.S.C. 20157(c)(2)) <sup>11</sup>	The burden associated with this requirement has been completed.					



Form FRA F 6180.166 – Annual PTC Progress Report (49 U.S.C. 20157(c)(1) and 49 CFR 236.1009(a)(5)) <sup>12</sup>	The burden associated with this requirement has been completed.					
Form FRA F 6180.177 – Statutory Notification of PTC System Failures (Under 49 U.S.C. 20157(j)(4)) <sup>13</sup>	38 railroads	144 reports/forms	1 hour	144 hours	\$11,088	FRA uses this form to identify the number of PTC system initialization failures, cut outs, and malfunctions by state and subdivision. It also enables FRA to closely monitor trends in PTC system reliability throughout the country and focus its resources, for example, on any areas where such failures are occurring at a high rate.  FRA estimates it will take approximately one (1) hour per railroad to complete each report/form.
236.1001(b) – A railroad’s additional or more stringent rules than prescribed under 49 CFR part 236, subpart I	38 railroads	1 rule or instruction	40 hours	40 hours	\$4,800	Each railroad may prescribe additional or more stringent rules, and other special instructions, that are not inconsistent with this subpart.  FRA estimates that it will take approximately 40 hours to develop the additional or more stringent rules document.
236.1005(b)(4)(i)–(ii) – A railroad’s submission of estimated traffic projections for the next 5 years, to support a request, in a PTCIP or an RFA, not to	The burden is accounted for under 49 CFR 236.1009(a) and 236.1021.					

<sup>11</sup> A railroad’s final Quarterly PTC Progress Report (Form FRA F 6180.165) will be due on January 31, 2021, assuming the railroad fully implements an FRA-certified and interoperable PTC system by the statutory deadline of December 31, 2020.

<sup>12</sup> A railroad’s final Annual PTC Progress Report (Form FRA F 6180.166) will be due on March 31, 2021, assuming it fully implements an FRA-certified and interoperable PTC system by the statutory deadline of December 31, 2020.

<sup>13</sup> The temporary Statutory Notification of PTC System Failures (Form FRA F 6180.177) expires by law on approximately December 31, 2021. See 49 U.S.C. 20157(j).

implement a PTC system based on reductions in rail traffic						
(b)(4)(iii) – A railroad’s request for a <i>de minimis</i> exception, in a PTCIP or an RFA, based on a minimal quantity of PIH materials traffic	7 Class I railroads	1 exception request	40 hours	40 hours	\$3,080	A railroad may request review of the requirement to install a PTC system on a track segment where a PTC system is otherwise required by this section, but has not yet been installed, based upon the presence of a minimal quantity of PIH materials traffic.  FRA estimates that it will take approximately 40 hours to complete the exception request.
(b)(5) – A railroad’s request to remove a line from its PTCIP based on the sale of the line to another railroad and any related request for FRA review from the acquiring railroad	The burden is accounted for under 49 CFR 236.1009(a) and 236.1021.					
(g)(1)(i) – A railroad’s request to temporarily reroute trains not equipped with a PTC system onto PTC-equipped tracks and vice versa during certain emergencies	38 railroads	45 rerouting extension requests	8 hours	360 hours	\$27,720	A temporary rerouting request in the event of an emergency.  FRA estimates that it will take approximately eight (8) hours to gather the necessary information and complete the extension request and send it to FRA.
(g)(1)(ii) – A railroad’s written or telephonic notice of the conditions necessitating emergency rerouting and other required information under 236.1005(i)	38 railroads	45 written or telephonic notices	2 hours	90 hours	\$6,930	The railroad provides written or telephonic notification to the applicable SMT of the information listed in paragraph (i) within one business day of the beginning of the rerouting made in accordance with this paragraph; and (iii) the conditions under paragraph (j) of this section are followed.  FRA estimates that it will take approximately two (2)

						hours to complete each written or telephonic notification.
(g)(2) – A railroad’s temporary rerouting request due to planned maintenance not exceeding 30 days	38 railroads	720 requests	8 hours	5,760 hours	\$443,520	In the event planned maintenance that would prevent usage of the regularly used track if: (i) the maintenance period does not to exceed 30 days; (ii) a request is filed with the applicable Regional Administrator in accordance with paragraph (i) of this section no less than 10 days prior to the planned rerouting; and (iii) the conditions contained in paragraph (j) of this section are followed.  FRA estimates that it will take approximately eight (8) hours to gather the necessary information and complete each rerouting request.
(h)(1) – A response to any request for additional information from FRA, prior to commencing rerouting due to planned maintenance	38 railroads	10 requests	2 hours	20 hours	\$1,540	For the purposes of paragraph (g)(2) of this section, the rerouting request shall be self-executing unless the applicable SMT responds with a notice disapproving of the rerouting or providing instructions to allow rerouting. Such instructions may include providing additional information to the SMT or Associate Administrator prior to the commencement of rerouting. Once the SMT responds with a notice under this paragraph, no rerouting may occur until the SMT or Associate Administrator provides his or her approval.  FRA estimates that it will take approximately 2 hours to complete each request.
(h)(2) – A railroad’s request to temporarily reroute trains due to planned maintenance exceeding 30 days	38 railroads	160 requests	8 hours	1,280 hours	\$98,560	In the event the temporary rerouting described in paragraph (g)(2) of this section is to exceed 30 consecutive calendar days: (i) The railroad shall provide a request in accordance with paragraphs (i) and (j) of this section with the Associate Administrator no less than 10 business days prior to the planned rerouting; and (ii) The rerouting shall not commence until receipt of approval from the

						Associate Administrator.  FRA estimates that it will take approximately eight (8) hours to gather the necessary information and complete each rerouting request.
236.1006(b)(4)(iii)(B) – A progress report due by December 31, 2020, and by December 31, 2022, from any Class II or III railroad utilizing a temporary exception under this section	262 railroads	5 reports	16 hours	80 hours	\$6,160	To the extent any movement exceeds 20 miles in length, such movement is not permitted without the controlling locomotive being equipped with an onboard PTC system after December 31, 2023, and each applicable Class II or III railroad shall report to FRA its progress in equipping each necessary locomotive with an onboard PTC apparatus to facilitate continuation of the movement. The progress reports shall be filed not later than December 31, 2020 and, if all necessary locomotives are not yet equipped, on December 31, 2022.  FRA estimates that it will take approximately 16 hours to gather the necessary information and to complete each report.
(b)(5)(vii) – A railroad’s request to utilize different yard movement procedures, as part of a freight yard movements exception	The burden is accounted for under 49 CFR 236.1015 and 236.1021.					
236.1007(b)(1) – For any high-speed service over 90 miles per hour (mph), a railroad’s PTC Safety Plan (PTCSP) must additionally establish that the PTC system was designed and will be operated to meet the fail-safe	The burden is accounted for under 49 CFR 236.1015 and 236.1021.					

operation criteria in Appendix C						
(c) – An HSR-125 document accompanying a host railroad’s PTCSP, for operations over 125 mph	38 railroads	1 HSR-125 document	3,200 hours	3,200 hours	\$384,000	In addition to the requirements of paragraphs (a) and (b) of this section, a host railroad that conducts a freight or passenger operation at more than 125 miles per hour shall have an approved PTCSP accompanied by a document (“HSR-125”) establishing that the system: (1) through (2) of this section.  FRA estimates that it will take approximately 3,200 hours to complete each “HSR-125” document.
(c)(1) – A railroad’s request for approval to use foreign service data, prior to submission of a PTCSP	38 railroads	0.3 requests	8,000 hours	2,667 hours	\$205,359	FRA estimates that approximately one request every three years to use foreign service data before submittal of the PTCSP will be made under the above requirement.  FRA estimates that it will take approximately 8,000 hours to gather the foreign service data and complete each request.
(d) – A railroad’s request in a PTCSP that FRA excuse compliance with one or more of this section’s requirements	38 railroads	1 request	1,000 hours	1,000 hours	\$120,000	In addition to the requirements of paragraphs (a) through (c) of this section, a host railroad that conducts a freight or passenger operation at more than 150 miles per hour, which is governed by a Rule of Particular Applicability, shall have an approved PTCSP accompanied by a HSR-125 developed as part of an overall system safety plan approved by the Associate Administrator.  FRA estimates that it will take approximately 1,000 hours to complete the PTCSP and accompanying “HSR-125 document.”
236.1009(a)(2) – A PTCIP if a railroad becomes a host railroad of a main line requiring	264 railroads	1 PTCIP	535 hours	535 hours	\$64,200	After April 16, 2010, a host railroad shall file: (i) a PTCIP if it becomes a host railroad of a main line track segment for which it required to implement and operate a PTC system in accordance with §

the implementation of a PTC system, including the information under 49 U.S.C. 20157(a)(2) and 49 CFR 236.1011						<p>236.1005(b); or (ii) a request for amendment (“RFA”) of its current and approved PTCIP in accordance with § 236.1021 if it intends to: (A) initiate a new category of service (i.e., passenger or freight); or (B) add, subtract, or otherwise materially modify one or more lines of railroad for which installation of a PTC system is required.</p> <p>FRA estimates that there will be approximately one (1) new rail start each year that will require a PTCIP under the above requirement. It is estimated that it will take 535 hours to complete each request.</p>
(a)(3) – Any new PTCIPs jointly filed by a host railroad and a tenant railroad	264 railroads	1 joint PTCIP	267 hours	267 hours	\$32,040	<p>The host and tenant railroad(s) shall jointly file PTCIP that addresses shared track: (i) if the host railroad is required to install and operate a PTC system on a segment of its track; and (ii) if the tenant railroad that shares the same track segment would have been required to install a PTC system if the host railroad had not otherwise been required to do so.</p> <p>FRA estimates that it will take approximately 267 hours to complete each PTCIP.</p>
(b)(1) – A host railroad’s submission, individually or jointly with a tenant railroad or PTC system supplier, of an unmodified Type Approval	264 railroads	1 document	8 hours	8 hours	\$616	<p>An unmodified Type Approval previously issued by the Associate Administrator in accordance with § 236.1013 or § 236.1031(b) with its associated docket number.</p> <p>FRA estimates that it will take approximately eight (8) hours to gather the necessary information and complete the document.</p>
(b)(2) – A host railroad’s submission of a PTCIP with the information required under 49 CFR 236.1013, requesting a	264 railroads	1 PTCIP	2,000 hours	2,000 hours	\$154,000	<p>A PTCIP requesting a Type Approval for: (i) a PTC system that does not have a Type Approval; or (ii) a PTC system with a previously issued Type Approval that requires one or more variances.</p> <p>FRA estimates that each cover letter will take</p>

Type Approval for a PTC system that either does not have a Type Approval or has a Type Approval that requires one or more variances						approximately 2,000 hours to complete each document.
(d) – A host railroad’s submission of a PTCSP	The burdens are accounted for under 49 CFR 236.1015.					
(e)(3) – Any request for full or partial confidentiality of a PTCIP, Notice of Product Intent (NPI), PTCDP, or PTCSP	38 railroads	10 confidentiality requests	8 hours	80 hours	\$6,160	Each filing referenced in this section may include a request for full or partial confidentiality in accordance with § 209.11 of this chapter. If confidentiality is requested as to a portion of any applicable document, then in addition to the filing requirements under § 209.11 of this chapter, the person filing the document shall also file a copy of the original un-redacted document, marked to indicate which portions are redacted in the document’s confidential version without obscuring the original document’s contents.  FRA estimates that it will take eight (8) hours to complete the confidentiality request.
(h) – Any responses or documents submitted in connection with FRA’s use of its authority to monitor, test, and inspect processes, procedures, facilities, documents, records, design and testing materials, artifacts, training materials and programs, and any other information used in the design, development,	38 railroads	36 interviews and documents	4 hours	144 hours	\$11,088	The Associate Administrator, or that person’s designated representatives, shall be afforded reasonable access to monitor, test, and inspect processes, procedures, facilities, documents, records, design and testing materials, artifacts, training materials and programs, and any other information used in the design, development, manufacture, test, implementation, and operation of the system, as well as interview any personnel: (1) through (2) of this section.  FRA estimates that each interview/document will take approximately 4 hours to complete.

manufacture, test, implementation, and operation of the PTC system, including interviews with railroad personnel						
(j)(2)(iii) – Any additional information provided in response to FRA’s consultations or inquiries about a PTCDP or PTCSP	38 railroads	1 set of additional information	400 hours	400 hours	\$30,800	If FRA has not approved, approved with conditions, or denied the PTCDP or PTCSP within the 60-day or 180-day window, as applicable, FRA will provide the submitting party with a statement of reasons as to why the submission has not yet been acted upon and a projected deadline by which an approval or denial will be issued and any further consultations or inquiries will be resolved.  FRA estimates that it will take approximately 400 hours to complete the set of additional information.
236.1011(a)–(b) – PTCIP content requirements	The burdens are accounted for under 49 CFR 236.1009(a) and (e) and 236.1021.					
(e) – Any public comment on PTCIPs, NPIs, PTCDPs, and PTCSPs	38 railroads	2 public comments	8 hours	16 hours	\$1,232	Upon receipt of a PTCIP, NPI, PTCDP, or PTCSP, FRA posts on its public website notice of receipt and reference to the public docket in which a copy of the filing has been placed. FRA may consider any public comment on each document to the extent practicable within the time allowed by the law and without delaying implementation of PTC systems.  FRA estimates that each comment will take approximately eight (8) hours to complete.
236.1013, PTCDP and NPI content requirements	The burdens are accounted for under 49 CFR 236.1009(b), (c), and (e) and 236.1021.					
236.1015 – Any new host railroad’s PTCSP meeting all content	264 railroads	1 PTCSP	8,000 hours	8,000 hours	\$616,000	This section sets forth PTC Safety Plan (PTCSP) content requirements and what each railroad must do to receive a PTC System Certification. Each PTCSP



requirements under 49 CFR 236.1015						<p>must address railroad-specific implementation issues associated with the PTC system identified by the submitted Type Approval. Each PTCSP must include a risk assessment. FRA uses this information as a basis to confirm compliance with the appropriate performance standard.</p> <p>FRA estimates that it will take approximately 8,000 hours to complete each PTCSP.</p>
(g) – A PTCSP for a PTC system replacing an existing certified PTC system	38 railroads	0.3 PTCSPs	3,200 hours	1,067 hours	\$82,159	<p>If a PTCSP applies to a system designed to replace an existing certified PTC system, the PTCSP will be approved provided that the PTCSP establishes with a high degree of confidence that the new system will provide a level of safety not less than the level of safety provided by the system to be replaced.</p> <p>FRA estimates that it will take approximately 3,200 hours to complete each PTCSP.</p>
(h) – A quantitative risk assessment if FRA requires one to be submitted	38 railroads	0.3 assessments	800 hours	267 hours	\$20,559	<p>When reviewing the issue of the potential data errors, the PTCSP must include a careful identification of each of the risks and a discussion of each applicable mitigation.</p> <p>FRA estimates that it will take approximately 800 hours to complete each non-quantitative risk assessment. The annual burden is divided amongst the one submission every three years.</p>
236.1017(a) – An independent third-party assessment, if FRA requires one to be conducted and submitted	38 railroads	0.3 assessments	1,600 hours	533 hours	\$63,960	<p>The PTCSP must be supported by an independent third-party assessment when the Associate Administrator concludes that it is necessary based upon the criteria set forth in § 236.913, with the exception that consideration of the methodology used in the risk assessment (§ 236.913(g)(2)(vii)) shall apply only to the extent that a comparative risk assessment was required.</p>

						FRA estimates that it will take approximately 1,600 hours to complete each third-party assessment. The annual burden is divided amongst the one submission every three years.
(b) – A railroad’s written request to confirm whether a specific entity qualifies as an independent third party	38 railroads	0.3 written requests	8 hours	3 hours	\$231	<p>If a PTC system is to undergo an independent assessment in accordance with this section, the host railroad may submit to the Associate Administrator a written request that FRA confirm whether a particular entity would be considered an independent third party pursuant to this section.</p> <p>FRA estimates that it will take approximately eight (8) hours to complete each written request. The annual burden is divided amongst the one submission every three years.</p>
(c) – Further information provided to FRA upon request	38 railroads	0.3 sets of additional information	20 hours	7 hours	\$539	FRA estimates that it will request further information to make a determination or provide its determination in writing under the above requirement. It is estimated that it will take the industry approximately 20 hours to complete each additional information document. The annual burden is divided amongst the one submission every three years.
(d) – A request not to provide certain documents otherwise required under Appendix F for an independent, third-party assessment	38 railroads	0.3 requests	20 hours	7 hours	\$539	<p>The independent third-party assessment must, at a minimum, consist of the activities and result in the production of documentation meeting the requirements of Appendix F to this part, unless excepted by this part or by FRA order or waiver.</p> <p>FRA estimates that it will take approximately 20 hours to complete each waiver request. The annual burden is divided amongst the one submission every three years.</p>
(e) – A request for FRA to accept information certified by a foreign regulatory entity for	38 railroads	0.3 requests	32 hours	11 hours	\$847	Information provided that has been certified under the auspices of a foreign railroad regulatory entity recognized by the Associate Administrator may, at the Associate Administrator’s discretion, be accepted

purposes of 49 CFR 236.1017 and/or 236.1009(i)						as having been independently verified.  FRA estimates that it will take approximately 32 hours to complete each request. The annual burden is divided amongst the one submission every three years.
236.1019(b) – A request for a passenger terminal main line track exception (MTEA)	38 railroads	1 MTEA	160 hours	160 hours	\$12,320	FRA will consider an exception in the case of trackage used exclusively as yard or terminal tracks by or in support of regularly scheduled intercity or commuter passenger service where the MTEA describes in detail the physical boundaries of the trackage in question and its use and characteristics (including track and signal charts) as described by this section.  FRA estimates that it will take approximately 160 hours to complete each MTEA.
(c)(1) – A request for a limited operations exception (based on restricted speed, temporal separation, or a risk mitigation plan)	38 railroads	1 request and/or plan	160 hours	160 hours	\$12,320	FRA will consider an exception in the case of a track segment used for limited operations (at speeds not exceeding those permitted under 236.0 of this part) and described by this section.  FRA estimates that it will take approximately 160 hours to complete each request.
(c)(2) – A request for a limited operations exception for a non-Class I, freight railroad’s track	10 railroads	1 request	160 hours	160 hours	\$12,320	Passenger service is operated on a segment of track of a freight railroad that is not a Class I railroad on which less than 15 million gross tons of freight traffic is transported annually (and follows the conditions described in this section).  FRA estimates that it will take approximately 160 hours to complete each request.
(c)(3) – A request for a limited operations exception for a Class I railroad’s track	7 railroads	1 request	160 hours	160 hours	\$12,320	Not more than four passenger trains per day are operated on a segment of track of a Class I freight railroad on which less than 15 million gross tons of freight traffic is transported annually.

						FRA estimates that it will take approximately 160 hours to complete each request.
(d) – A railroad’s collision hazard analysis in support of an MTEA, if FRA requires one to be conducted and submitted	38 railroads	0.3 collision hazard analysis	50 hours	17 hours	\$1,309	<p>A limited operations exception under paragraph (c) is subject to FRA review and approval. FRA may require a collision hazard analysis to identify hazards and may require that specific mitigations be undertaken. Operations under any such exception shall be conducted subject to the terms and conditions of the approval. Any main line track exclusion is subject to periodic review.</p> <p>FRA estimates that each analysis will take approximately 50 hours to complete. The annual burden is divided amongst the one submission every three years.</p>
(e) – Any temporal separation procedures utilized under the 49 CFR 236.1019(c)(1)(ii) exception	The burdens are accounted for under 49 CFR 236.1019(c)(1).					
236.1021(a)–(d) – Any RFA to a railroad’s PTCIP or PTCDP	38 railroads	10 RFAs	160 hours	1,600 hours	\$123,200	<p>(a) No changes, as defined by this section, to a PTC system, PTCIP, PTCDP, or PTCSP, shall be made unless: (1) The railroad files a request for amendment (“RFA”) to the applicable PTCIP, PTCDP, or PTCSP with the Associate Administrator; and (2) The Associate Administrator approves the RFA: (b) through (d) of this section.</p> <p>FRA estimates that it will take approximately 160 hours to complete each RFA and send it to FRA.</p>
(e) – Any public comments, if an RFA includes a request for approval of a discontinuance or	5 interested parties	10 RFA public comments	16 hours	160 hours	\$12,320	If the RFA includes a request for approval of a discontinuance or material modification of a signal or train control system, FRA will publish a notice in the Federal Register of the application and will invite public comment in accordance with part 211 of this

material modification of a signal or train control system and a <i>Federal Register</i> notice is published						chapter.  FRA estimates that each RFA comment will take approximately 16 hours to complete and send it to FRA.
(l) – Any jointly filed RFA to a PTCDP or PTCSP (*Note: This is a new paragraph to authorize host railroads to file joint RFAs in certain cases, but such RFAs are already required under FRA’s existing regulations*)	The burdens are accounted for under 49 CFR 236.1021(a)–(d) and (m).					
(m) – Any RFA to a railroad’s PTCSP (*Note: Revised requirement. This is a new paragraph with a simplified process governing RFAs to PTCSPs*)	38 railroads	15 RFAs	80 hours	1,200 hours	\$92,400	No changes, as specified under paragraphs (h)(3) or (4) of this section, may be made to an FRA-certified PTC system or an FRA-approved PTCSP unless the host railroad first complies with the following process: (1) through (2) of this section.  FRA estimates that each list will be approximately 80 hours to gather the necessary information and complete each RFA.
236.1023(a) – A railroad’s PTC Product Vendor List, which must be continually updated	38 railroads	2 updated lists	8 hours	16 hours	\$1,232	Each railroad implementing a PTC system on its property shall establish and continually update a PTC Product Vendor List (PTCPVL) that includes all vendors and suppliers of each PTC system, subsystem, component, and associated product, and process in use system wide. The PTCPVL shall be made readily available to FRA upon request.  FRA estimates that each list will be approximately eight (8) hours to gather the necessary information and complete each page of the list.

(b)(1) – All contractual arrangements between a railroad and its hardware and software suppliers or vendors for certain immediate notifications	The burdens are accounted for under 49 CFR 236.1015 and 236.1021.					
(b)(2)–(3) – A vendor’s or supplier’s notification, upon receipt of a report of any safety-critical failure of its product, to any railroads using the product	10 vendors or suppliers	10 notifications	8 hours	80 hours	\$6,160	<p>The notification from a supplier to any railroad shall include explanation from the supplier of the reasons for such notification, the circumstances associated with the failure, and any recommended mitigation actions to be taken pending determination of the root cause and final corrective actions.</p> <p>FRA estimates that each request will take approximately 8 hours to complete.</p>
(c)(1)–(2) – A railroad’s process and procedures for taking action upon being notified of a safety-critical failure or a safety-critical upgrade, patch, revision, repair, replacement, or modification, and a railroad’s configuration/revision control measures, set forth in its PTCSP	The burdens are accounted for under 49 CFR 236.1015 and 236.1021.					
(d) – A railroad’s submission, to the applicable vendor or supplier, of the railroad’s procedures for action upon	38 railroads	2.5 notifications	16 hours	40 hours	\$3,080	The railroad shall provide to the applicable vendor or supplier the railroad’s procedures for action upon notification of a safety critical failure, upgrade, patch, or revision for the PTC system, subsystem, component, product, or process, and actions to be taken until the faulty system, subsystem, or

notification of a safety-critical failure, upgrade, patch, or revision to the PTC system and actions to be taken until it is adjusted, repaired, or replaced						component has been adjusted, repaired, or replaced.  FRA estimates that each procedure will take approximately 16 hours to gather the necessary information and complete each document.
(e) – A railroad’s database of all safety-relevant hazards, which must be maintained after the PTC system is placed in service	38 railroads	38 database updates	16 hours	608 hours	\$46,816	After the product is placed in service, the railroad shall maintain a database of all safety-relevant hazards as set forth in the PTCSP and those that had not previously been identified in the PTCSP.  FRA estimates that each update will take approximately 16 hours to complete.
(e)(1) – A railroad’s notification to the vendor or supplier and FRA if the frequency of a safety-relevant hazard exceeds the threshold set forth in the PTCDP and PTCSP, and about the failure, malfunction, or defective condition that decreased or eliminated the safety functionality	38 railroads	8 notifications	8 hours	64 hours	\$4,928	If the frequency of the safety-relevant hazard exceeds the thresholds set forth in the PTCSP, or has not been previously identified in the appropriate risk analysis, the railroad must: (1) Notify the applicable vendor or supplier and FRA of the failure, malfunction, or defect that decreased or eliminated the safety functionality; and (2) Keep the applicable vendor or supplier and FRA apprised on a continual basis of the status of any and all subsequent failures; and (3) Take prompt counter measures to reduce or eliminate the frequency of the safety-relevant hazards below the threshold identified in the PTCSP.  FRA estimates that each notification will take approximately 8 hours to submit.
(e)(2) – Continual updates about any and all subsequent failures	38 railroads	1 update	8 hours	8 hours	\$616	Additionally, FRA estimates that it will take approximately 8 hours to complete each notification update and send it to FRA and the affected railroad.
(f) – Any notifications that must be submitted to FRA under 49 CFR 236.1023	The burdens are accounted for under 49 CFR 236.1023(e), (g), and (h).					

<p>(g) – A railroad’s and vendor’s or supplier’s report, upon FRA request, about an investigation of an accident or service difficulty due to a manufacturing or design defect and their corrective actions</p>	<p>38 railroads</p>	<p>0.5 reports</p>	<p>40 hours</p>	<p>20 hours</p>	<p>\$1,540</p>	<p>Whenever any investigation of an accident or service difficulty report shows that a PTC system or product is unsafe because of a manufacturing or design defect, the railroad and its vendor shall, upon request of the Associate Administrator, report to the Associate Administrator the results of its investigation and any action taken or proposed to correct that defect.</p> <p>FRA estimates that each report will take approximately 40 hours to complete and send to FRA.</p>
<p>(h) – A PTC system vendor’s or supplier’s reports of any safety-relevant failures, defective conditions, previously unidentified hazards, recommended mitigation actions, and any affected railroads</p>	<p>10 vendors or suppliers</p>	<p>20 reports</p>	<p>8 hours</p>	<p>160 hours</p>	<p>\$12,320</p>	<p>PTC system and product suppliers and vendors shall promptly report any safety relevant failures or defective conditions, previously unidentified hazards, and recommended mitigation actions in their PTC system, subsystem, or component to each railroad using the product.</p> <p>FRA estimates that it will take approximately 8 hours to complete each report.</p>
<p>(k) – A report of a failure of a PTC system resulting in a more favorable aspect than intended or other condition hazardous to the movement of a train, including the reports required under part 233</p>	<p>The burdens are accounted for under 49 CFR 236.1023(e), (g), and (h) and 49 CFR part 233.</p>					



236.1029(b)(4) – A report of an en route failure, other failure, or cut out to a designated railroad officer of the host railroad	150 host and tenant railroads	1,000 reports	30 minutes	500 hours	\$38,500	<p>Except as provided in paragraphs (c) and (g) of this section, where a controlling locomotive that is operating in, or is to be operated within, a PTC-equipped track segment experiences PTC system failure or the PTC system is otherwise cut out while en route (i.e., after the train has departed its initial terminal), the train may only continue in accordance as described under paragraphs (1) through (6) of this section.</p> <p>FRA estimates that it will take approximately 30 minutes to submit each report under this requirement.</p>
(h) – Form FRA F 6180.152 – Biannual Report of PTC System Performance (*Revised requirement and new form*)	38 railroads	73 reports	48 hours	3,504 hours	\$269,808	<p>Each railroad shall provide FRA with a report of the number of PTC failures that occurred during the previous calendar year. The report shall identify failures by category, including but not limited to locomotive, wayside, communications, and back-office system failures.</p> <p>FRA estimates that each report will take approximately 12 hours to complete.</p>
236.1033 – Communications and security requirements	The burdens are accounted for under 49 CFR 236.1009 and 236.1015.					
236.1035(a)–(b) – A railroad’s request for authorization to field test an uncertified PTC system and any responses to FRA’s testing conditions	38 railroads	10 requests	40 hours	400 hours	\$30,800	<p>Before any field testing of an uncertified PTC system, or a product of an uncertified PTC system, or any regression testing of a certified PTC system is conducted on the general rail system, the railroad requesting the testing must provide a complete description of the PTC system as described under paragraphs (1) through (7) of this section. Furthermore, FRA may impose additional testing conditions for the safety of train operations.</p> <p>FRA estimates that each request will take approximately 40 hours to complete and send to</p>

						FRA.
236.1037(a)(1)–(2) – Records retention	The burdens are accounted for under 49 CFR 236.1009 and 236.1015.					
(a)(3)–(4) – Records retention	The burdens are accounted for under 49 CFR 236.1039 and 236.1043(b).					
(b) – Results of inspections and tests specified in a railroad’s PTCSP and PTCDP	38 railroads	800 records	1 hour	800 hours	\$61,600	Results of inspections and tests specified in the PTCSP and PTCDP must be recorded pursuant to § 236.110.  FRA estimates that it will take approximately one (1) hour to gather the necessary information and complete each record.
(c) – A contractor’s records related to the testing, maintenance, or operation of a PTC system maintained at a designated office	20 contractors	1,600 records	10 minutes	267 hours	\$20,559	Each contractor providing services relating to the testing, maintenance, or operation of a PTC system required to be installed under this subpart shall maintain at a designated office training records required under §236.1039(b).  FRA estimates that will take approximately 10 minutes to gather the necessary information and complete each record.
(d)(3) – A railroad’s final report of the results of the analysis and countermeasures taken to reduce the frequency of safety-related hazards below the threshold set forth in the PTCSP	38 railroads	8 final reports	160 hours	1,280 hours	\$98,560	The railroad shall provide a final report when the inconsistency is resolved to FRA, on the results of the analysis and countermeasures taken to reduce the frequency of the safety-relevant hazard(s) below the threshold set forth in the PTCSP and PTCDP.  FRA estimates that each final report will take approximately 160 hours to complete.
236.1039(a)–(c), (e) – A railroad’s PTC Operations and Maintenance Manual (OMM), which must be maintained and	38 railroads	2 OMM updates	10 hours	20 hours	\$1,540	The railroad shall catalog and maintain all documents as specified in the PTCDP and PTCSP for the installation, maintenance, repair, modification, inspection, and testing of the PTC system and have them in one Operations and Maintenance Manual, readily available to persons required to perform such

available to FRA upon request						tasks and for inspection by FRA and FRA-certified State inspectors as described under paragraphs (b), (c), and (e) of this section.  FRA estimates that it will take approximately 10 hours to complete each update.
(d) – A railroad’s identification of a PTC system’s safety-critical components, including spare equipment	38 railroads	1 identified new component	1 hour	1 hour	\$77	Safety-critical components, including spare equipment, must be positively identified, handled, replaced, and repaired in accordance with the procedures specified in the PTCDP and PTCSP.  FRA estimates that each submission will take approximately one (1) hour to complete.
236.1041(a)–(b) and 236.1043(a) – A railroad’s PTC Training and Qualification Program ( <i>i.e.</i> , a written plan)	38 railroads	2 programs	10 hours	20 hours	\$1,540	Employers shall establish and implement training and qualification programs for PTC systems subject to this subpart. These programs must meet the minimum requirements set forth in the PTCDP and PTCSP in §§ 236.1039 through 236.1045, as appropriate.  FRA estimates that it will take approximately 10 hours to develop each training program.
236.1043(b) – Training records retained in a designated location and available to FRA upon request	150 host and tenant railroads	150 PTC training record databases	1 hour	150 hours	\$11,550	Employers must retain records which designate persons who are qualified under this section until new designations are recorded or for at least one year after such persons leave applicable service. These records shall be kept in a designated location and be available for inspection and replication by FRA and FRA-certified State inspectors.  FRA estimates that it will take approximately one (1) hour to properly retain each record under this requirement.
<b>Total</b>	N/A	4,567,897 responses	N/A	50,969 hours	\$4,250,307	

**13. Estimate of total annual costs to respondents.**

There will be no additional cost burden to respondents beyond the burden listed in FRA’s answer to question number 12 and those customary and usual expenses associated with normal daily business operations. Each railroad should be tracking its implementation progress with sufficient detail to demonstrate statutory and regulatory compliance to FRA and, as such, does not require respondents to keep any new records specifically associated with this data collection.

**14. Estimate of Cost to Federal Government.**

To calculate the government administrative cost, the 2021 Office of Personnel Management wage rates were used. The average wage, step 5, was used as a midpoint. Wages were considered at the burdened wage rate by multiplying the actual wage rate by an overhead cost of 75 percent. The follow table shows the estimated average annual cost to the Federal government to review all the required documents and conduct the external audits associated with this rule.

Resources	Pay Grade	Annual-Average Wage Rate	Number of Employees	Percent Share of Time Use	Total Wages (Wages * 1.75 of Overhead Cost)
Division Staff Director	GS-15	\$163,345	1	50	142,927
Deputy Staff Director	GS-14	\$138,866	1	100	243,016
PTC Senior Test and Plan Monitors	GS-14	\$138,866	2	100	486,031
PTC Regional Specialists	GS-13	\$112,778	8	100	1,578,894
PTC Safety Specialist at Headquarter	GS-12	\$98,827	1	30	51,884
Electronic Engineer	GS-14	\$138,866	2	40	194,412
Estimated Average Annual Cost to Government					\$2,697,164

**Additional Cost**

The following is the annualized cost to the federal government pertaining to the creation and publication and the processing of all forms—152 and 177—and their associated data.

Resource	Report	Year	Development Hours	# Employees	\$/Hour	Review/Processing Hours	# Employees	\$/ Hour	Total \$
FRA Supervisor	Biannual Report (152) -- New	1	5	1	120	100	1	120	\$12,600
FRA Supervisor	Failure Notification (177)	1	5	1	120	100	1	120	\$12,600
FRA Supervisor	Biannual Report (152) -- New	2	0	0	120	50	1	120	\$6,000
FRA Supervisor	Failure Notification (177)	2	0	0	120	100	1	120	\$12,000
FRA Supervisor	Biannual Report (152) -- New	3-expiration year	0	0	120	40	1	120	\$4,800
FRA Supervisor	Failure Notification (177)	3	0	0	120	20	1	120	\$2,400
Annual Average Cost									\$16,800
Data Analyst (Contractor)	Biannual Report (152) -- New	1	40	1	100	80	2	100	\$20,000
Data Analyst (Contractor)	Failure Notification (177)	1	40	1	100	480	2	100	\$100,000
Data Analyst (Contractor)	Biannual Report (152) -- New	2	0	0	100	80	2	100	\$16,000
Data Analyst (Contractor)	Failure Notification (177)	2	0	0	100	480	2	100	\$96,000
Data Analyst (Contractor)	Biannual Report (152) -- New	3-expiration year	0	0	100	80	2	100	\$16,000
Data Analyst (Contractor)	Failure Notification (177)	3	0	0	100	100	2	100	\$20,000
Annual Average Cost									\$89,333
Total Annual Average Cost									\$106,133

Total government cost = \$2,803,297

**15. Explanation of program changes and adjustments.**

This is a revision to a current collection of information associated with FRA’s part 235 and 236 rules. Currently, the OMB inventory for this collection of information shows a total annual burden of 68,373 hours and 4,568,393 responses, while this updated submission reflects a total annual burden of 50,969 hours and 4,567,897 responses.

FRA provided a thorough review of this package and FRA’s latest review has refined the estimates to be more accurate. For example, the estimated changes in the number of responses mainly contributed to the decrease in burden hours. The two tables below provide specific information on the review of any estimates that have changed.

**TABLE FOR PROGRAM CHANGES**

CFR Section/Subject	Total Annual Responses			Total Annual Burden Hours			Section Analyses and Estimates
	Current submission (average time per response)	Requesting submission (average time per response)	Difference	Current submission	Requesting submission	Difference	
236.1021(m) – Any RFA to a railroad’s PTCSP (*Note: Revised requirement. This is a new paragraph with a simplified process governing RFAs to PTCSPs*)	0	15 RFAs (80 hours)	15 RFAs	0	1,200 hours	1,200 hours	This is a new requirement.
236.1029(h) – Form FRA F 6180.152 – Biannual Report of PTC System Performance (Revised requirement and new form)	36 reports (8 hours)	73 reports (48 hours)	37 reports	288 hours	3,504 hours	3,216 hours	FRA estimates the annual response will increase from 36 reports to 73 reports due to a program change— i.e., increasing the reporting frequency from annual to biannual.  Additionally, the amount of time per report was increased from 8 hours to 48 hours due to changes to the program, including expanding the list of content requirements in the new standardized form.

**Program changes** above increased the burden by 4,416 hours and by 52 responses from the last approved submission.

**TABLE FOR ADJUSTMENTS**

CFR Section/Subject	Total Annual Responses			Total Annual Burden Hours			Section Analyses and Estimates
	Current submission (average time per response)	Requesting submission (average time per response)	Difference	Current submission	Requesting submission	Difference	
Form FRA F 6180.165 – Quarterly PTC Progress Report Form (49 U.S.C. 20157(c)(2))	140 reports/forms (23 hours)	0	-140 reports/forms	3,251 hours	0	-3,251 hours	The burden associated with this requirement has been completed. Railroads’ final Quarterly PTC Progress Reports (Form FRA F 6180.165) was received on January 31, 2021.
Form FRA F 6180.166 – Annual PTC Progress Report Form (49 U.S.C. 20157(c)(1) and 49 CFR 236.1009(a)(5))	35 reports/forms (40 hours)	0	-35 reports/forms	1,404 hours	0	-1,404 hours	The burden associated with this requirement has been completed. Railroads’ final Annual PTC Progress Reports (Form FRA F 6180.166) was received by March 31, 2021.
Form FRA F 6180.177 – Statutory Notification of PTC System Failures (Under 49 U.S.C. 20157(j) (4))	190 reports/forms (1 hour)	144 reports/forms (1 hour)	-46 reports/forms	190 hours	144 hours	-46 hours	The reduction in burden hours is due to changes in the number of responses—from 190 forms to 144 forms per year. The temporary Statutory Notification of PTC System Failures (Form FRA F 6180.177) is a temporary reporting requirement, which expires on approximately December 31, 2021 per 49 U.S.C. 20157(j).
236.1007(c)(1) – A railroad’s request for approval to use foreign service data, prior to	1 request (8,000 hours)	.3 requests (8,000 hours)	-.7 requests	8,000 hours	2,667 hours	-5,333 hours	The reduction in burden hours is due to changes in the number of responses—from one (1) request per year to one (1) per every three (3)

submission of a PTCSP							years. FRA's estimate is based on how infrequently these filings have been submitted to date.
236.1009(j)(2)(iii) – Any additional information provided in response to FRA's consultations or inquiries about a PTCDP or PTCSP	20 documents (400 hours)	1 set of additional information (400 hours)	-19 documents	8,000 hours	400 hours	-7,600 hours	The reduction in burden hours is due to changes in the number of responses—from 20 documents to one (1) set of additional information per year. FRA's estimate is based on how infrequently these filings have been submitted to date. In addition, this decrease corresponds to the reduced number of new PTC Safety Plans and PTC Development Plans FRA will receive from railroads going forward, specifically from any railroads that become subject to the mandate or choose to voluntarily implement a PTC system in the future.
236.1015(g) – A PTCSP for a PTC system replacing an existing certified PTC system	1 PTCSP (3,200 hours)	.3 PTCSP (3,200 hours)	-.7 PTCSP	3,200 hours	1,067 hours	-2,133 hours	The reduction in burden hours is due to changes in the number of responses—from one (1) PTCSP per year to one (1) per every three (3) years. FRA's estimate is based on how infrequently these filings have been submitted to date.
(h) – A quantitative risk assessment, if FRA requires one to be submitted	1 assessment (3,200 hours)	.3 assessment (800 hours)	-.7 assessment	3,200 hours	267 hours	-2,933 hours	The reduction in burden hours is due to changes in the number of responses—from one (1) assessment per year to one (1) per every three (3) years. FRA's estimate is based on how infrequently these filings have been submitted to date.  Additionally, the amount of time per assessment was reduced from 3,200



							hours to 800 hours because FRA had previously overestimated the burden, and this new estimate is more accurate in terms of the time necessary to prepare this type of document.
236.1017(a) – An independent third-party assessment, if FRA requires one to be conducted and submitted	1 assessment (1,600 hours)	.3 assessment (1,600 hours)	-.7 assessment	1,600 hours	533 hours	-1,067 hours	The reduction in burden hours is due to changes in the number of responses—from one (1) assessment per year to one (1) per every three (3) years. FRA’s estimate is based on how infrequently these filings have been submitted to date.
(b) – A railroad’s written request to confirm whether a specific entity qualifies as an independent third party	1 written request (8 hours)	.3 written request (8 hours)	-.7 written request	8 hours	3 hours	-5 hours	The reduction in burden hours is due to changes in the number of responses—from one (1) written request per year to one (1) per every three (3) years. FRA’s estimate is based on how infrequently these filings have been submitted to date.
– Further information provided to FRA upon request	1 set of additional information (20 hours)	.3 sets of additional information (20 hours)	-.7 set of additional information	20 hours	7 hours	-13 hours	The reduction in burden hours is due to changes in the number of responses—from one (1) set of additional information per year to one (1) per every three (3) years. FRA’s estimate is based on how infrequently these filings have been submitted to date.
(d) – A request not to provide certain documents otherwise required under Appendix F for an independent, third-party assessment	1 request (20 hours)	.3 request (20 hours)	-.7 request	20 hours	7 hours	-13 hours	The reduction in burden hours is due to changes in the number of responses—from one (1) request per year to one (1) per every three (3) years. FRA’s estimate is based on how infrequently these filings have been submitted to date.
(e) – A request for FRA to	1 request	.3 request	-.7 request	32 hours	11 hours	-21 hours	The reduction in burden hours is due

accept information certified by a foreign regulatory entity for purposes of 49 CFR 236.1017 and/or 236.1009(i)	(32 hours)	(32 hours)					to changes in the number of responses—from one (1) request per year to one (1) per every three (3) years. FRA's estimate is based on how infrequently these filings have been submitted to date.
236.1019(c)(2) – A request for a limited operations exception for a non-Class I, freight railroad's track	0	1 request (160 hours)	1 request	0	160 hours	160 hours	The increase in burden hours is due to changes in the number of responses—from 0 request to one (1) request per year. This addition is to account for this specific type of filing and FRA's expectation to receive one per year.
(c)(3) – A request for a limited operations exception for a Class I railroad's track	0	1 request (160 hours)	1 request	0	160 hours	160 hours	The increase in burden hours is due to changes in the number of responses—from 0 request to one (1) request per year. This addition is to account for this specific type of filing and FRA's expectation to receive one per year.
(d) – A railroad's collision hazard analysis in support of an MTEA, if FRA requires one to be conducted and submitted	0	.3 collision hazard analysis (50 hours)	.3 collision hazard analysis	0	17 hours	17 hours	The increase in burden hours is due to changes in the number of responses— from 0 analysis to one (1) per every three (3) years. This addition is to account for this specific type of filing and FRA's expectation to receive one every three years.
236.1023(b)(2)– (3) – A vendor's or supplier's notification, upon receipt of a report of any safety-critical failure of its product, to any railroads using the product	0.5 notification (8 hours)	10 notifications (8 hours)	9.5 notifications	4 hours	80 hours	76 hours	The increase in burden hours is due to changes in the number of responses—from 1 notification to 10 per year, based on FRA's understanding of the frequency of the type of failure that would trigger a notification.
(e) – A railroad's database of all safety-relevant	36 database updates	38 database updates	2 database updates	576 hours	608 hours	32 hours	The increase in burden hours is due to changes in the number of

hazards, which must be maintained after the PTC system is placed in service	(16 hours)	(16 hours)					responses—from 36 updates to 38 per year. In the new estimate, FRA is assuming that additional railroads will become subject to the mandate or choose to voluntarily implement a PTC system in the future.
(e)(1) – A railroad’s notification to the vendor or supplier and FRA if the frequency of a safety-relevant hazard exceeds the threshold set forth in the PTCDP and PTCSP, and about the failure, malfunction, or defective condition that decreased or eliminated the safety functionality	0.5 notification (8 hours)	8 notifications (8 hours)	7.5 notifications	4 hours	64 hours	60 hours	The increase in burden hours is due to changes in the number of responses—from 1 notification to 8 per year, based on FRA’s understanding of the frequency of the type of failures and other issues that would trigger a notification.
(e)(2) – Continual updates about any and all subsequent failures	.5 update (8 hours)	1 update (8 hours)	.5 update	4 hours	8 hours	4 hours	The increase in burden hours is due to changes in the number of responses—from .5 updates to one (1) per year, based on FRA’s understanding of the frequency of the type of failure that would trigger an update.
(h) – A PTC system vendor’s or supplier’s reports of any safety-relevant failures, defective conditions, previously unidentified hazards, recommended mitigation actions, and any affected railroads	.5 report (8 hours)	20 reports (8 hours)	19.5 reports	4 hours	160 hours	156 hours	The increase in burden hours is due to changes in the number of responses—from .5 reports to 20 per year, based on FRA’s understanding of the frequency of the type of failures and other issues that would trigger a report.
236.1031(a)–(d) – A railroad’s Request for	1 REC letter + supporting	0	-1 REC letter + supporting	8 hours	0	-8 hours	The reduction in burden hours is due to changes in the number of

Expedited Certification	documentation (8 hours)		documentation				responses—from one (1) letter to zero (0) per year. FRA’s estimate is based on how infrequently these filings have been submitted to date.
236.1037(d)(3) – A railroad’s final report of the results of the analysis and countermeasures taken to reduce the frequency of safety-related hazards below the threshold set forth in the PTCSP	0.5 final report (160 hours)	8 final reports (160 hours)	7.5 final reports	80 hours	1,280 hours	1,200 hours	The increase in burden hours is due to changes in the number of responses—from one (1) report to 8 per year, based on FRA’s understanding of the frequency of the type of failures and other issues that would trigger a report.
236.1043(b) – Training records retained in a designated location and available to FRA upon request	500 PTC training records (1 minute)	150 PTC training record databases (1 hour)	-350 PTC training record databases	8 hours	150 hours	142 hours	The reduction in burden hours is due to changes in the number of responses—from 500 training records to 150 training record databases per year. In the new estimate, FRA is assuming that each applicable host railroad and tenant railroad will maintain a recordkeeping database.  Additionally, the amount of time per recordkeeping was increased from 1 (one) minute to 1 (one) hour because of the change from individual training records to a database.

**Adjustments** above decreased the burden by 21,820 hours and decreased the number of responses by 548 from the last approved submission.

**16. Publication of results of data collection.**

The information provided by railroads will be published on the FRA’s public website and annual reports will continue to be

made available within each railroad's existing docket on [www.regulations.gov](http://www.regulations.gov). Confidential or proprietary information will be handled as described in question 10, above.

**17. Approval for not displaying the expiration date for OMB approval.**

Once OMB approval is received, FRA will publish the approval number for these information collection requirements in the **Federal Register**.

**18. Exception to certification statement.**

No exceptions are taken at this time.