Positive Train Control Implementation and Financing Act of 2018 (HR 4766, 115th Congress)

Prohibits further extension of the requirement to implement positive train control beyond December 31, 2018.

Updated last February 8, 2018
for the 01/11/18 version of HR 4766.

WHAT IT DOES

The Positive Train Control Implementation and Financing Act of 2018 (HR 4766) strikes language from the 49 U.S.C. 20157 (Implementation of Positive Train Control Systems) that allows railroad carriers to provide “an alternative schedule and sequence for implementing a positive train control (PTC) system.” Section 20157 currently requires Class I railroad carriers (i.e., railroads with operating revenues exceeding $433.2 million) to implement PTC systems to certain main lines by December 31, 2018. The existing code allows carriers to extend the 2018 deadline by up to 24 months. HR 4766, however, would remove allowances for these extensions, maintaining a firm December 31, 2018 implementation deadline for all carriers. Under the bill, carriers would not be allowed to begin service on any new routes unless PTC is fully implemented and operational.

The Act would authorize more than $2.5 billion to “entities providing regularly scheduled intercity or commuter rail passenger transportation” to support efforts to implement PTC. It also requires Amtrak to provide quarterly reports on progress made toward implementing a comprehensive PTC system.

RELEVANT SCIENCE

Positive train control systems are designed to support the locomotive engineer by enforcing speed limits, preventing unauthorized intrusion into work zones, reducing missed signals, and providing automated switch alignment. PTC systems include automation that apply brakes when the engineer fails to do so.

The goals of PTC systems are to prevent accidents resulting from:

- Train-to-train collisions;
- Derailments due to excessive speed;
- Incursions into work zones; and
- Movement through improperly positioned switches.

PTC systems include multiple components that monitor the location and speed of the train, speed restrictions and signals related to the section of track, the track grade, and the weight of the train. These parameters are used to calculate braking distance and determine if the brakes need to be applied. The main components include:

- Wayside: Signaling equipment on and around the track. Includes lamps, switches, gates and track circuits.
- Communications: Use of a radio system, wireless network, or GPS to transmit data. Facilitates communication between the office, onboard, and wayside devices.
- Onboard: An onboard computer system in the locomotive that monitors speed and braking. The onboard system receives information from the office and notifies the engineer of important changes.
- Office: The back-office system stores, processes, and acts on information it receives from the onboard locomotive computer, wayside messaging server, and maintenance personnel.

PTC is a backup system and is not intended to replace engineers. The engineer maintains responsibility for safe operation of the train.

BACKGROUND

The National Transportation Safety Board (NTSB) began recommending automatic train control in 1970. “Positive train separation” technology (later renamed PTC) was first placed on the NTSB’s Most Wanted List in 1990.

On the afternoon of September 12, 2008, a Metrolink train ran through a red signal in Los Angeles and collided head-on with a freight train. Twenty-five people were killed in the collision. Following an investigation, the NTSB determined that the accident was caused by the engineer failing to observe and respond to the red signal because he was texting. The accident led to the Rail Safety Improvement Act (RSIA) of 2008. The RSIA mandated PTC systems be installed on all passenger and Class 1 freight carriers by December 31, 2015. The Positive Train Control Enforcement and Implementation Act of 2015 (PTCEI Act; implemented as part of the Surface Transportation Act of 2015) subsequently amended the RSIA and extended the deadline to December 31, 2018, or 2020 for some qualifying railroads.

HR 4766 came in response to an Amtrak train crash near DuPont, Washington. On December 18, 2017, Amtrak Train 501 derailed from a highway overpass at 78 miles per hour on a track with a 30 mile per hour speed restriction, killing three people and injuring another 62. In their preliminary report, the NTSB determined that if PTC had been implemented:

1. PTC would have notified the engineer that the train was moving too fast for the track conditions; and
2. PTC would have applied the train brakes to maintain compliance with the speed restriction and to stop the train.

In total, 41 carriers are required to implement PTC systems by the deadline, according to a report posted by the Federal Railroad Administration in December 2017. As of September 30, 2017, twelve carriers had completed installation of all the necessary PTC hardware. Another twelve have completed 50% of the work. One year before the 2018 deadline, just 24% of track owned by passenger railroads have fully operational PTC systems installed.

The FRA estimates full PTC implementation will cover 60,000 miles of track and 20,000 locomotives and will cost nearly $3.5 billion. The American Association of Railroads estimates that freight railroads have spent more than $8 billion on PTC development and deployment.

ENDORSEMENTS & OPPOSITION

Endorsements:

Representative Peter DeFazio (D-OR-4), statement, January 11, 2018:

Since Congress first passed legislation to mandate PTC implementation in 2008, some railroads have been diligent in implementing PTC while others have clearly been dragging their feet. Two years ago, Congress granted them more time, pushing the PTC implementation deadline to December 31, 2018. As we approach that deadline, many of the railroads do not appear to be on track to meet the PTC mandate. Enough. No more delays, no more extensions, no more excuses from railroads who have had ten years to implement PTC technology. This legislation requires that PTC be installed by the end of the year, prevents future extensions of this life-saving technology, and provides critical grants for cash-strapped commuter and intercity passenger railroads to implement PTC.
The bill is also cosponsored by all the members of the Washington State Democratic delegation.

Opposition:

While there is no formal opposition to HR 4766, industry groups have raised concerns in the past for deploying PTC too rapidly. For example, in a March 2017 report, the Association of American Railroads released a paper stating:

> The end of 2015 was not a realistic deadline, considering the tremendous efforts needed to design, test, approve, produce, distribute, and install an incredibly complex technology nationwide and train 125,000 employees in its use. Rushing PTC development foregoing a logical plan for sequencing its installation does not make sense. It would sharply increase the likelihood that the system would not work as it should.

**STATUS**

The Positive Train Control Implementation and Financing Act of 2018 was introduced on January 11, 2018 and referred to the House Committee on Transportation and Infrastructure on the same date. It was then referred to the Subcommittee on Railroads, Pipelines, and Hazardous Materials on January 12, 2018.

**RELATED POLICIES**

The Positive Train Control Implementation and Financing Act of 2018 would amend Title 49 United States Code section 20157, which was established under the Rail Safety Improvement Act of 2008 and amended by the Positive Train Control Enforcement and Implementation Act of 2015.

**SPONSORS**

Sponsors: Representative Peter DeFazio (D-OR-4)

Cosponsors:

- Representative Michael Capuano (D-MA-7)
- Representative Rick Larsen (D-WA-2)
- Representative Sean Patrick Maloney (D-NY-18)
- Representative Denny Heck (D-WA-10)
- Representative Derek Kilmer (D-WA-6)
- Representative Adam Smith (D-WA-9)
- Representative Pramila Jayapal (D-WA-7)
- Representative Suzan DelBene (D-WA-1)

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