

**RAILROAD-SHIPPER TRANSPORTATION ADVISORY COUNCIL
WASHINGTON, D.C.**

UPDATED POSITION PAPER ON POSITIVE TRAIN CONTROL

August 20, 2013

Background

Congress enacted the Rail Safety Improvement Act of 2008 (the "RSIA") on October 16, 2008, partly in response to a tragic collision between a Metrolink commuter train and a Union Pacific Railroad freight train in Chatsworth, California.¹ The RSIA mandated that Class I railroads install PTC by December 31, 2015, on tracks with a minimum of five million gross tons and where toxic inhalation hazardous ("TIH") or poison inhalation hazardous ("PIH") materials are transported as well as on lines with passenger service. The stated goal of this mandate is to reduce train accidents and to enhance public safety. PTC is a communication/processor-based train control technology that is designed to reliably prevent train-to-train collisions, over speed derailments, incursions into established work zone limits, and the movement of a train through a main line switch.

At the time of implementation, it was estimated that the law would affect Class I over 100,000 miles of the national rail network, 20,000 locomotives, and thousands of turnouts on the affected mainlines. In addition, the FRA mandated that the law would apply to any Class II or III railroads that operate over 20 miles or more of Class I tracks or that are connected with commuter rail systems. To comply, those short line and regional railroads would need to install PTC equipment on their locomotives. Some Class I carriers also contemplated requiring their short line partners to install the equipment, depending on the contractual or working relationships between the Class I and the Class II or III railroads.²

As required by law, the Class I railroads submitted implementation plans showing a path to towards completion by 2015. Technical and design issues and other challenges have, however, made nationwide implementation by the present deadline problematic. To date, railroads have spent more than \$1.5 billion of their own capital and the federal government has contributed \$50 million to try to resolve these issues. The FRA reported to Congress that solutions to some of these issues have either not been identified or cannot be implemented by the current December 31, 2015, deadline.

FRA Rules

The initial rule issued by the FRA required that PTC installation be based on the traffic patterns and volumes experienced in 2008. After litigation regarding the scope of the implementation of PTC, the FRA issued a final rule that reduced the number of route miles requiring PTC systems

¹ Public Law 110-432, 49 U.S.C. § 20101. The RSIA is 315 pages long and provides for substantial changes and enhancements to the law governing safety on the national rail networks, including limiting the number of hours that freight rail crews can work each month and for the Department of Transportation to determine work hour limits for passenger train crews.

² As discussed further below, the FRA's Notice of Proposed Rule Making may not allow a Class I to require this.

by thousands of miles. This rule provided for PTC implementation based on the network of route miles where covered traffic is expected to move as of 2015.

The FRA stated this adjustment was supported by ongoing changes in the routing of TIH traffic across the nation's rail network, driven by both market conditions and the routing regulations of the Pipeline and Hazardous Materials Safety Administration. The rule also included various exceptions from mandatory PTC system implementation, including a *de minimis* exception to allow railroads to avoid PTC system implementation where the burdens of regulation would yield a gain of little or no value.

FRA now estimates that approximately 73,000 miles of track on the U.S. freight system and 4,400 miles of passenger/transit system will require PTC installation. These miles do not include the route miles that short line and regional railroads will need to equip nor does it include any tracks that connect Class I yards or intermodal facilities.³ If the latter track miles are included, the number of miles will increase and, more importantly, the Class I railroads will have to equip a larger number of switch locomotives than anyone previously contemplated the need to equip.

On April 22, 2011, the Association of American Railroads ("AAR") requested that FRA begin a rulemaking to address a number of issues, including the applicability and scope of the *de minimis* provision; the application of a limited operations exception to freight traffic; the application of PTC in movements in and around yard environments; a clarification on how en route failures will affect rail operations; and a clarification of how PTC will affect the discontinuance of current signal systems.

In response, the FRA issued a notice of proposed rulemaking in December, 2012, to address the proposals made by the AAR. In that proceeding, the FRA invited interested parties to file comments on both its proposed rule changes and on those proposed by the AAR. The FRA also proposed to modify the specific *de minimis* exception; raise the number of freight cars containing PIH materials to which the exception applied from 100 to 200 carloads; revise the grade limitation; remove the traffic limitation of 15 million gross tons from the general *de minimis* exception; and add a yard movement *de minimis* exception that would authorize movements by unequipped locomotives over PTC-equipped main line track segments for the purpose of switching service or transfer train movements. It did not propose to adopt the remainder of the AAR proposed changes.

Implementation Deadline Problems

In a report dated August, 2012, the FRA stated that although the initial PTC Implementation Plans ("PTCIP") submitted by the railroads to the FRA for its approval stated that the railroads would complete implementation by the 2015 deadline, all of the plans were based on the assumption that there would be no technical or programmatic issues in the design, development, integration, deployment, and testing of the PTC systems the railroads adopted. The report states, "However, since FRA approved the PTCIPs, both freight and passenger railroads have

³ While the ASLRRRA was able to obtain an exemption for up to 20 miles on which short line railroads need not install PTC, some Class I railroads are considering requiring any short line railroad that operate on Class I tracks of any length to equip their locomotives with PTC.

encountered significant technical and programmatic issues that make accomplishment of these plans questionable." It further stated, "Given the current state of development and the availability of the required hardware, along with deployment considerations, most railroads will likely not be able to complete full RSIA-required implementation of PTC by December 31, 2015."

According to the FRA, the technical obstacles include: communications spectrum availability; radio availability; design specification availability; back office server and dispatch availability; track database verification; and installation engineering, reliability, and availability. In addition, the FRA said there are budgeting, contracting, and stakeholder availability related to programming.

As a result of these obstacles, as of mid-November, 2012, the Class I railroads had equipped 2,663 locomotives with 18,117 locomotives left to be equipped and had expended approximately \$1.5 billion on PTC, with the total implementation cost estimated at approximately \$10 billion. The American Short Line and Regional Railroad Association ("ASLRRA") estimates that approximately 94 short line and regional railroad will have to equip locomotives with PTC. If the proposed rule regarding yard and transfer trains is adopted, this number may be reduced by as much as 50%.

According to the ASLRRA, one of the biggest problems facing many Class II and III carriers is the cost to install microprocessor based PTC equipment in older locomotives, many of which are 25 year old or older. The installation cost of ranges between approximately \$70,000 to \$175,000 to equip a locomotive, depending on the age and model of the locomotive.⁴

Moreover, it is not a foregone conclusion that the PTC equipment is compatible with the models and types of locomotives currently operated by the smaller railroads. Lack of compatibility could make it impossible for some small carriers to comply with the mandate.

Given that these carriers currently must expend large sums of capital to maintain their infrastructure in a safe operating condition it is difficult to see how they will be able to afford complying with this mandate. Neither financial institutions nor the federal Railroad Infrastructure and Improvement Financing ("RIFF") program⁵ are likely sources to fund the installation since at the end of the day, the PTC equipment (which can be removed from a

⁴ ASLRRA estimate contained in *Progressive Railroading*, December, 2012, p. 50.

⁵ Congress established the RRIF program in the Transportation Equity Act for the 21st Century (TEA-21). Under this program the FRA Administrator is authorized to provide direct loans and loan guarantees up to \$35.0 billion to finance development of railroad infrastructure with \$7.0 billion reserved for projects for Class II and III freight railroads. Funding may be used to acquire, improve, or rehabilitate intermodal or rail equipment or facilities, including track, components of track, bridges, yards, buildings and shops; refinance outstanding debt incurred for such purposes; and develop or establish new intermodal or railroad facilities. Loans can fund up to 100% of a railroad project with up to 35 years to repay the loan. The interest rate is set at the cost of borrowing by the federal government. Railroads, state and local governments, government-sponsored authorities and corporations, joint ventures that include at least one railroad, and limited option freight shippers who intend to construct a new rail connection are eligible for RIFF loans.

locomotive) would be worth more than the locomotive leaving nothing of value for a bank or the federal government to look for a security interest.

A new challenge confronting the rail industry in its efforts to implement PTC is a recent heightened environmental and historic preservation review requirement imposed by the Federal Communication Commission ("FCC") for construction of wayside wireless PTC antenna structures. This has effectively halted such construction across the entire rail network as the FCC, the Department of Transportation ("DOT"), and affected railroads work to find feasible and streamlined processes to handle review of the more than 22,000 structures involved. The FCC has suggested it will be the first quarter of 2014 before a global solution is likely to be in place.

Current Status

On August 6, 2013, Senator John Thune (R SD), the ranking member of the Senate Commerce Committee introduced a bill to delay the positive train control deadline by five years. This bill is cosponsored by Sens. Roy blunt (R-Mo.), Claire McCaskill (D-Mo.) and Mark Pryor (D-Ark.). Senator Thune's bill would extend the deadline to 2020 and give the FRA the option of granting an additional two-year delay.

In addition, DOT Secretary Foxx told reporters he's open to an extension, saying, "I think the most important thing is getting it done and getting it done right. If we can't get it done within the time parameters that exist, if there's a reasonable time beyond that, we ought to be trying to make it work."

RSTAC Recommends the Following:

- That Congress adopt the legislation proposed by Senator Thune which would extend the deadline to 2020 and give the FRA the option of granting an additional two-year delay.
- That Congress allocate additional funds to offset the costs to be incurred by railroads and shippers in implementing PTC. That funding may include both grants and RIFF funds to be used by short line and regional railroads to equip their locomotives with PTC.
- That the FRA review its PTC regulations to ensure there are no adverse impacts concerning the velocity at which trains are moved so that rail shipments continue to be efficiently and economically moved.