

RAILROAD-SHIPPER TRANSPORTATION ADVISORY COUNCIL (RSTAC)
Washington, D.C

White Paper on Railroad and Shipper Industry Impacts of Positive Train Control (PTC)

October 4, 2010

RSTAC:

The Railroad-Shipper Transportation Advisory Council was established pursuant to the ICC Termination Act of 1995. Its 15 appointed members consist of senior officials representing government, shippers and railroads. They share a common goal to strengthen the national rail industry to improve service levels and foster mutually beneficial relationships between large and small railroads and shippers, across all commodity groups.

BACKGROUND:

In October 2008, Congress enacted the Rail Safety Improvement Act of 2008 (H.R. 2095). This act included, among numerous other items, a safety requirement that railroads install a new technology called Positive Train Control (PTC) by December 31, 2015 to reduce the risk of train accidents and protect the public. PTC is required to be installed on mainline railroad where toxic inhalation hazard (TIH) chemicals are transported and on lines with passenger service. It is estimated to affect over 100,000 miles of our nation's rail network, 20,000 locomotives, and thousands of shipper turnouts (rail switches to their plants). The effect will be felt by all shipper turnouts on the affected mainlines. That is, a turnout for a shipper of wood products on an affected mainline will be required to be upgraded to comply with the law.

Deployment of PTC (and maintenance) is estimated to cost between \$9.5 billion and \$13.2 billion over 20 years. (See, 49 CFR, Parts 229, 234-36., December 8, 2009). This estimate does not take into account the costs that will be incurred by Class II and III railroads that operate 20 miles or more on Class I railroads or that operate passenger train routes, or as a result of changes in the operating agreements on Class I railroads that may require Class II and III trains to be PTC-equipped while running on Class I PTC routes. A Rail Safety Technology Grant program was provided by Congress for the Rail Safety Investment Act and provides \$250 million (\$50 million/year for five years) in funding for PTC. This is far short of the over \$10 billion needed because of the number of constituencies affected, the expense of the technology, and the uncertainty of the program's continuation or ultimate yearly funding level. In addition, this safety mandate will not provide sufficient returns to make this technology cost justifiable for shippers nor railroads (See, 49 CFR Parts 229, 234, 235 and 236, December 8, 2009).

RECOMMENDATION:

Railroads and shippers believe there should be a strong public policy to mitigate costs to all parties without compromising safety. One option, where possible, is through reduction of miles

where the technology must be implemented, and a second is through an investment tax credit to defray the PTC installation costs to all parties.

The members of RSTAC propose to Congress that Congress should appropriate sufficient funds to enable rail shippers and the railroads to implement this safety technology, and/or approve a tax credit, such as S. 3759/H.R. 1806 that would make those expenses deductible, to prevent a wholesale rail freight flight. In addition, a mechanism should be developed to apply for the funding requests. Assistance with funding would ensure upgrades are accomplished within the timeframe necessary to meet the legislation and would ease the economic burden for this safety requirement. It will also promote more use of rail which would in turn reduce highway congestion and CO2 emissions associated with use of over the road trucking.

ISSUES:

We are concerned about four unintended consequences:

- deterring existing customers from using their own in-plant infrastructure;
- discouraging new customers from locating on rail;
- the cost to existing or new shippers for installing switches or turnouts in order to be rail served on a PTC line;
- the inability of short lines to equip their locomotives to meet the requirement because of the inordinate cost.

ISSUE 1 - IMPACT ON EXISTING CUSTOMERS:

Both Congress and the FRA intended to prevent train-to-train collisions with the PTC mandate and rulemaking. However, the impact of the mandate will be felt far beyond the large Class 1 railroad community, and will likely ultimately impact its customers, both big and small that ship any type of product, small short line railroads, and the public. For example, one of the major cost components for this technology is equipping turnouts into shipper plant facilities that are located on mainline track, especially in unsignaled territory. It is estimated that this element of PTC will comprise approximately 45% of the cost of PTC. The lack of cost-benefit justification may discourage many shippers from shipping by rail and using their investment in their own in-plant infrastructure. An unintended consequence of the mandate then, might be the transfer of existing freight traffic from rail to truck of any product shipped (e.g., steel, aggregates, plastics, paper, etc) should the costs to install and maintain the turnouts become prohibitive for the traffic volumes shipped from those shippers.

ISSUE 2 - IMPACT ON FUTURE CUSTOMERS:

As new businesses locate on rail throughout the United States, their facilities will have to comply with the requirement to equip turnouts to their plants with PTC technology to bring them in compliance with the new law. This technology could cost tens of thousands or even hundreds of thousands of dollars per shipper location depending on whether power and communication capabilities exist in the area. Small businesses generate modest volumes of rail traffic. With modest traffic volumes, the installation cost of this technology may prove prohibitive, thus

discouraging use of rail at the new plant. A second unintended consequence of the mandate, then, might be deterring new small shippers from using freight rail and having an impact.

ISSUE 3-SUBSTANTIAL NEW COSTS:

A shipper locating in a very remote area where no signaling capabilities exist, and neither electrical power nor communication equipment exist could face costs in excess of \$200,000 to equip a turnout to their plant for PTC. A typical small rail shipper may receive as few as 20 carloads of rail freight per year. This type of an investment would drive rail freight costs up by as much as 100% for a typical small shipper.

- Estimated annual cost of freight over 5 years for a shipper in a remote area:
 - 100 carloads x \$2000 average freight per car = \$200,000
- Estimated increase in rail costs for PTC installation over 5 years (not including maintenance)
 - \$200,000 freight + \$200,000 cost of PTC switch requirements = \$400,000 or 100% higher costs for shipping freight over 5 years

These costs could drive small shippers away from the railroads, and add further to the railroads' already steep cost burden.

ISSUE 4 - IMPACT ON SHORT LINES:

PTC presents huge technological and production challenges that will have to be overcome before a nationwide system can be installed. The FRA anticipates this technology will comprise: *"digital data link communications networks, continuous and accurate positioning systems such as NDGPS [GPS], on-board [locomotive] computers with digitized maps on locomotives and maintenance-of-way equipment, in-cab [locomotive] displays, throttle-brake interfaces on locomotives, wayside interface units at switches and wayside detectors, and control center computers and displays."* Many of the locomotives operated by the short line industry (and by the Class I railroads for that matter) are older model locomotives that can only be PTC-equipped at a tremendous cost. In fact, in some cases, the cost of the technology would be more than the value of the locomotive. Most small short lines operate on a very thin margin to begin with and to add this cost to them could prove to be the cause of the demise of many of those smaller short lines that serve mainly rural areas of the US.

BENEFITS OF SHIPPING BY RAIL ARE COMPELLING:

- Every railcar trip removes approximately three truck trips from congested highways and one train can carry the load of more than 280 trucks, clearing space for over 1,100 cars. By creating additional freight transportation options, moving industrial freight via rail will reduce traffic congestion and lower highway maintenance costs.
- In addition, any effort to shift long haul freight to rail can greatly improve safety by reducing highway collisions and subsequent driver injuries and fatalities by reducing truck traffic on roadways in urban and rural areas.

- Moving freight via rail versus truck reduces CO2 emissions by 75% on average, leveraging the environmental advantages of rail transportation and helping shippers reduce their carbon footprint.
- On average, railroads are four times more fuel efficient than trucks, according to a recent independent study for the FRA. If just 10 percent of the long-distance freight that moves by truck moved by rail instead, fuel savings would exceed one billion gallons per year.

We stand ready to provide any additional insight or assistance to this recommendation.

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