



September 15, 2015

The Honorable John R. Thune, Chairman  
Committee on Commerce, Science and Transportation  
United States Senate  
512 Dirksen Senate Office Building  
Washington, DC 20510

Dear Chairman Thune:

Thank you for contacting the Southeastern Pennsylvania Transportation Authority (SEPTA) as you and the Committee on Commerce, Science and Transportation continue your ongoing assessment of the technical and programmatic challenges related to Positive Train Control (PTC) implementation in advance of the December 31, 2015 deadline. I share your concerns about the industry's readiness and the possible need for an extension of the PTC deadline. As you consider the impact of the deadline on passenger rail transportation, I appreciate the opportunity to update you on SEPTA's efforts to implement PTC on its Regional Rail system by the deadline.

With three and-a-half months before the December 31, 2015 deadline, SEPTA is one of the few railroads in the nation positioned to comply with the PTC mandate. Following the passage of the Rail Safety Improvement Act (RSIA) of 2008, the Authority committed to meeting the deadline and began designing its PTC system ahead of the Federal Railroad Administration issuing its Final Rule. Additionally, in its efforts to comply with the law, the Authority diverted manpower and already-limited capital resources away from critical infrastructure projects.

Positive Train Control represents a quantum leap forward for rail safety, and SEPTA is eager to deploy this life saving technology on its Regional Rail network. In early July, the Authority hosted Members of the southeastern Pennsylvania Congressional delegation to demonstrate PTC's safety advances and brief them on the remaining implementation challenges.

As the deadline approaches, SEPTA has submitted its PTC Safety Plan for FRA approval and critical signal and communications equipment verification and validation testing, which are already underway on some segments of the system, will intensify. SEPTA is well on track to complete installation of all vehicle and wayside PTC equipment and components by mid-December.

Congress' aggressive timeline, however, allows little margin for unexpected technical or operational challenges, and SEPTA is working to address potential functionality and performance issues that may result from the hastened implementation of PTC. Because a significant portion of SEPTA's Regional Rail system operates over Amtrak-owned track, the Authority has adopted the Advanced Civil Speed Enforcement System (ACES) PTC technology. Amtrak developed ACSES for intercity operations, and it is unproven in congested,

shorter trip environments, such as the greater Philadelphia region where SEPTA operates. SEPTA will not fully-know how the ACSES system will perform or impact service until it expands testing or cuts over to PTC on all Regional Rail lines at the deadline.

Rushing the implementation of a new signal system before it is fully vetted could create false confidence in an untested system and result in service impacts due to PTC functionality problems. In the months leading up to the deadline, SEPTA is losing passenger capacity as approximately 10 railcars are taken out of service on any given day to accommodate the accelerated installation of onboard communications and cab signaling equipment. For the residents of southeastern Pennsylvania who rely on SEPTA Regional Rail for more than 37.4 million annual passenger trips, additional time to phase implementation on a line-by-line basis would minimize PTC-related service interruptions and customer inconvenience.

SEPTA's timeline for achieving full-PTC compliance by December 31, 2015 is further complicated by the interconnectedness of the national rail network and the simultaneous, industry-wide implementation effort. As your analysis has identified, interoperability and radio frequency spectrum issues have emerged as pressing challenges, which could impact SEPTA's full-compliance both before and after it implements PTC.

Several Class I railroads have trackage rights on SEPTA-owned track, and three of SEPTA's Regional Rail lines operate entirely on Amtrak's Northeast and Keystone Corridors. SEPTA was able to address a major interoperability hurdle on a segment of its West Trenton Regional Rail Line by expending \$28 million to physically separate its operations where CSX will be installing conflicting PTC technology (IETMS). Elsewhere on its Regional Rail network, however, SEPTA has serious concerns that delays in freight or Amtrak implementation could present interoperability issues that expose SEPTA to fines or liability even if the Authority is operating its equipment under PTC.

Another recently identified concern that may not be resolved before the current deadline is radio frequency interference from freight railroads using the 220 MHz spectrum. SEPTA acquired the necessary 220 MHz spectrum early in its implementation efforts (July 2010) and is now transmitting at 220 MHz while testing various segments of the Regional Rail system. Because the freight rail operating environment requires transmission of PTC data at a higher power than passenger rail, such as SEPTA, the freight rail operators with whom SEPTA shares trackage rights are now indicating that their use of the 220 MHz spectrum will likely interfere with SEPTA's PTC communications. This is especially true in sections where SEPTA and freight rail operate in close proximity. The Authority is currently working with freight entities to address potential spectrum problems and ensure its PTC data can be transmitted without interference; however, the solution may prove costly and difficult to achieve following SEPTA's initial implementation of PTC.

SEPTA continues to follow its plan to implement a safe, viable and reliable PTC system by the deadline; however, even if SEPTA completes implementation by the deadline, the Authority is concerned that its PTC system could be rendered non-compliant if its tenant and host railroads do not have interoperable PTC systems in place. Under the current deadline and regulations, SEPTA could then be subject to federal fines and penalties notwithstanding seven years of

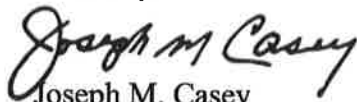
determined effort and the investment of approximately \$328 million in capital funds. Our investment includes \$150 million for the installation of ACSES, \$150 million to complete the installation of Automatic Train Control (ATC) and \$28 million to separate from CSX on the West Trenton Line.

An extension of the PTC implementation deadline would afford SEPTA the time to responsibly complete the remaining equipment installation and remedy technical issues that may arise during testing. Similarly, extending the deadline now would help mitigate the anticipated interoperability and spectrum issues described above.

I am grateful for your leadership and efforts to include bipartisan language in the DRIVE Act that provides passenger rail operators the time, resources and reasonable oversight necessary to successfully implement this important safety technology. As this legislation moves forward and you and your colleagues engage in discussions with the House of Representatives, I hope you will consider changes to the proposed PTC grant program to ensure systems like SEPTA, which have substantially completed PTC implementation or obligated all of their PTC costs, can compete for any grant funds that are made available to commuter railroads to advance deployment of PTC systems.

Thank you again for the opportunity to update you on SEPTA's PTC implementation progress and submit information in support of the Senate Committee on Commerce, Science and Transportation's PTC proposal. I look forward to working with the members of the southeastern Pennsylvania delegation to support your efforts. In the meantime, please contact SEPTA's Deputy General Manager, Jeffrey D. Knueppel, P.E., at 215-580-7389 or [jknueppel@septa.org](mailto:jknueppel@septa.org), if you have any questions or need additional information.

Sincerely,

  
Joseph M. Casey  
General Manager

cc: The Honorable Robert P. Casey, Jr., United States Senate  
The Honorable Patrick J. Toomey, United States Senate  
The Honorable Bill Shuster, Chairman, House Transportation and Infrastructure Committee  
The Honorable Chaka Fattah, United States Representative  
The Honorable Robert A. Brady, United States Representative  
The Honorable Michael G. Fitzpatrick, United States Representative  
The Honorable Patrick Meehan, United States Representative  
The Honorable Ryan Costello, United States Representative  
The Honorable Brendan Boyle, United States Representative