

# **Positive Train Control**

## **Where Are We Now - Next Steps**

**Implementation of the Mandate of the  
Rail Safety Improvement Act of 2008**

**March 18, 2010**

# OVERVIEW

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- **BACKGROUND**
- **WHY PTC?**
- **THE FINAL RULE**
- **ADDITIONAL COMMENT PERIOD**
- **SIGNIFICANT MILESTONES**
- **HANDLING OF CURRENT SYSTEMS**
- **FRA EFFORTS**

# BACKGROUND

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- Over the years about 3-4% of route miles of railroad main lines equipped with cab signals and automatic train stop or automatic train control which provides some protection for single point human failure.
- Since about 1971, the National Transportation Safety Board has been demanding better technology.
- Since 1985, the railroad industry has been promising it.

# BACKGROUND

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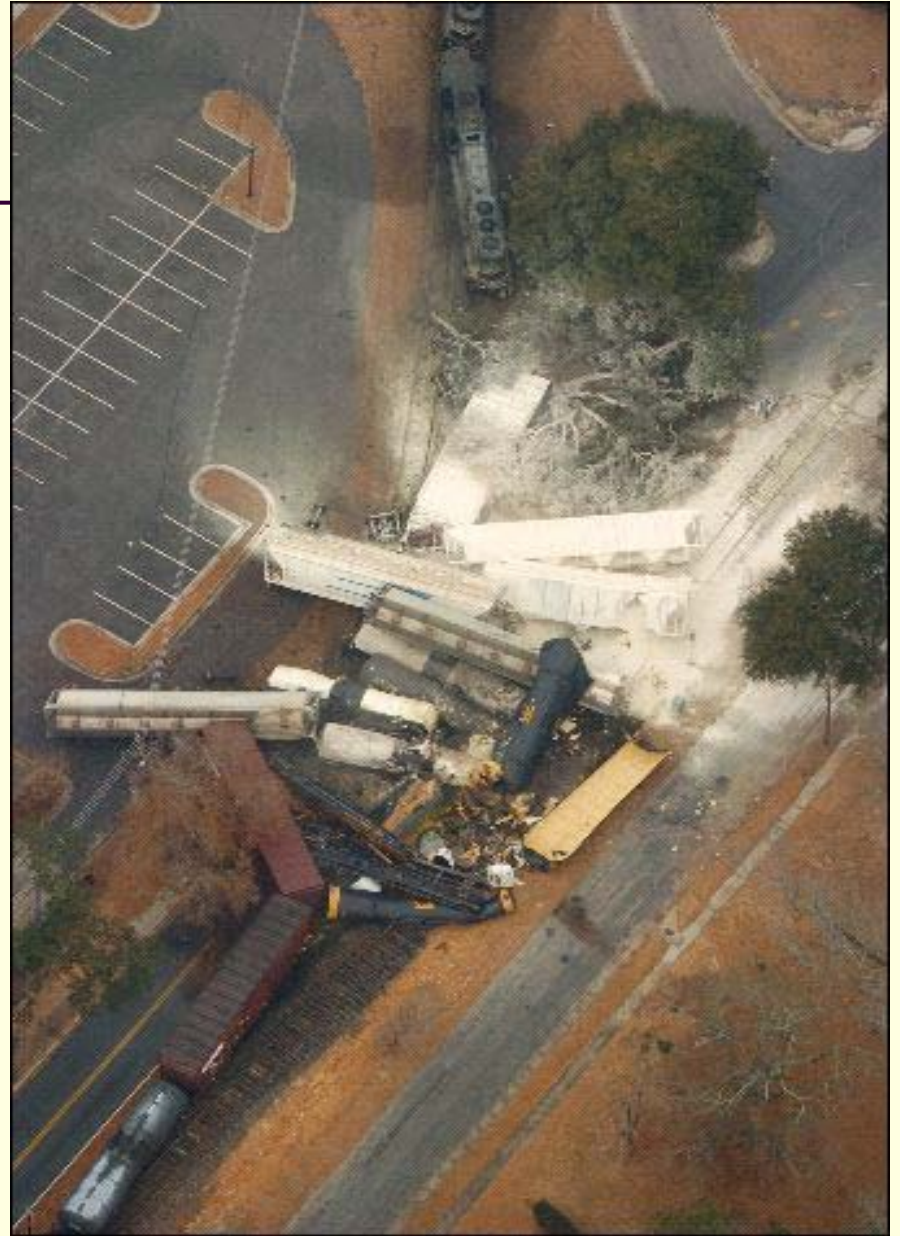
- Through great effort and assistance of the RSAC PTC working group, FRA published on March 7, 2005, the performance-based Subpart H of 49 CFR Part 236 addressing processor-based signal and train control systems.
- A proposed system must be shown to be at least as safe as the previous condition.
- Railroads have been implementing PTC under Subpart H, but slowly.
- Major train accidents preventable by PTC continued to occur.

# WHY PTC?

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**Graniteville, SC**

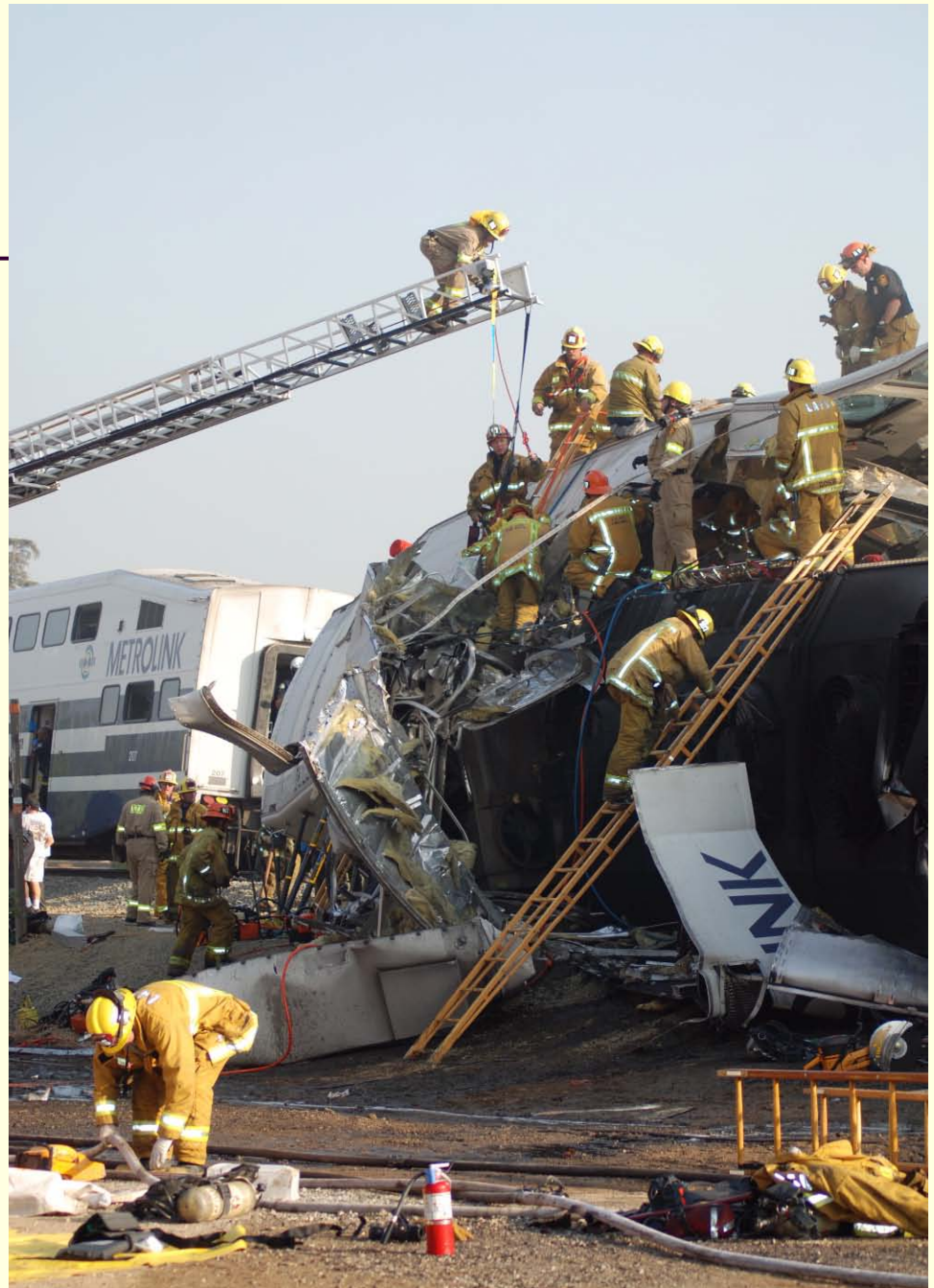
**January 5, 2006**





# WHY PTC?

**Chatsworth, CA**  
**September 12, 2008**



# THE FINAL RULE

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- Rail Safety Improvement Act of 2008 signed into law on October 16, 2008, mandating widespread PTC implementation.
- Again through great effort and assistance of the RSAC PTC working group, FRA published the NPRM on July 21, 2009, consisting primarily of new Subpart I addressing the mandate for PTC.
- The working group then addressed comments received and worked off most issues.
- The final rule was published on January 15, 2010, and is effective on March 16, 2010.

# THE FINAL RULE

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- Primary topics of the rule include:
  - Required PTC functionality;
  - Required levels of safety;
  - Line segments requiring PTC – including potential exceptions;
  - Procedural requirements – necessary submissions for approval, content and timelines;
  - System use and unequipped operations
  - Manuals and training criteria



# ADDITIONAL COMMENT PERIOD

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- The final rule included a narrow scope of comments accepted until February 16, 2010.

Regarding further clarity of appropriate criteria associated with potentially excluding lines from required PTC implementation;

Regarding considerations related to the extent of PIH *de minimis* exceptions;

Regarding further consideration of the 2008 baseline year and handling of adjustments due to traffic pattern changes following PTCIP submission and prior to the December 31, 2015, implementation dead line.

# COMMENTS RECEIVED

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## ■ Comments were received from:

The AAR regarding the three issues identified in the request for comments;

The MTA regarding issues beyond those for which comments were requested and which will be considered as a petition for reconsideration; and

The NTSB regarding the three issues identified in the request for comments.

Additional comments were received that were largely outside the scope of request.

The AAR also submitted a formal petition for reconsideration regarding the requirement of a display being visible and accessible to each crew member in a locomotive cab.

# SIGNIFICANT MILESTONES

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RSIA 08 signed into law on October 16, 2008.

NPRM Published on July 21, 2009.

Final Rule published on January 15, 2010.

Additional comments on issue resolutions due by February 16, 2010.

Petition for Reconsideration due by March 16, 2010.

Final Rule effective date March 16, 2010.

PTCIP due by April 16, 2010, preceded or accompanied by a PTCDP, NPI, or type approval.

FRA to notify within 90 days of approval, provisional approval, or disapproval accompanied by explanation of plan deficiencies.

Railroad has 30 days to submit corrected plan.

# SIGNIFICANT MILESTONES

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If PTCIP submitted with an NPI, provisional approval may be granted, with an updated PTCIP accompanied by either a full PTCDP or type approval and submitted within 270 days.

Submission of PTCSP for system certification required prior to revenue use of mandated PTC. FRA to acknowledge receipt of a PTCDP or PTCSP within 30 days.

FRA target to approve or disapprove a PTCDP within 60 days, or provide a status response.

FRA target to approve or disapprove a PTCSP within 180 days, or provide a status response.

# SIGNIFICANT MILESTONES

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PTC system build-out (onboard and wayside) per approved PTCIP timetables.

Risk Reduction Plans to be filed (with further PTC lines identified) TBD in the 2012-2013 range.

Progress report due from FRA to the Congress on December 31, 2012.

Initial mandated PTC implementation to be complete by December 31, 2015.

Certain permitted Class II or Class III unequipped trains in PTC territory to be equipped by December 31, 2020.



# HANDLING OF PAST AND CURRENT SYSTEMS

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- FRA continuing to work with railroads related to “grandfathering” for systems in service through a “short form” certification process
  - **ACSES I, II**
  - **ITCS**
  - **BNSF’s ETMS I**
  - **Others approved under Subpart H**
- Credits for showings made under subpart H until effective date of the new rule.
- Option remains to proceed under subpart H where PTC is not mandated

# FRA EFFORTS

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- FRA staff has been steadily working with various entities on reviewing draft submissions, for appropriate content, and addressing associated questions; and to the best of our abilities will continue to do so.
- FRA is enhancing and expanding PTC–related staff.
- FRA has every intention of meeting expectations toward successful facilitation of accomplishing the mandate for PTC.