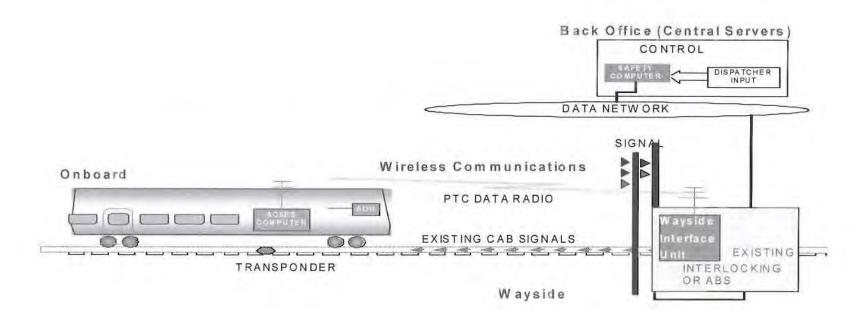
12-02-09 DRAFT

Positive Train Control Overview and Challenges



Overview

- First and foremost, MTA Long Island Rail Road & Metro-North, as well as other commuter RRs are committed to safe operation and endorse the PTC goals of the Rail Safety Improvement Act
- However, as we develop compliance plans, significant concerns arise relative to:
 - Timeframe
 - Decisions beyond our control
 - Capital Costs
 - Operating Costs
 - Customer Service Impacts

Timeframe

Lack of adequate time.....

- Conflicts with ability to consider cost effective alternatives
- No room for innovative approaches to be considered
- Does not allow needed customization for specific properties operations and infrastructure
- Necessitates almost immediate decisions on design and implementation with inadequate time for proper review
- Limited pool of Qualified Subsystem Suppliers and System Integrators may affect schedule, cost and system design
 - Inadequate timeframe creates a cost advantage for vendors
- Use of new vendors will trigger need for FRA approval and may trigger need for risk analyses

Decisions beyond our control

High risk critical path items....

- Interoperability for Joint Freight/Amtrak Territory
 - FRA Regs require Interoperability Agreements between all Tenant & Host Railroads -- Significant time may be needed to finalize
 - NO satisfactory dispute resolution mechanism in FRA Rule
- Communication/Data Radio
 - LIRR/Metro-North's current radio spectrum (frequency) may not have sufficient bandwidth to support a PTC system.
 - Operable radios at new frequency may not be feasible w/in FRA regulatory deadlines.
 - Interoperability will be an issue w/freights & Amtrak (potential exists for requiring installation of a dual radio system)
- Federal agencies (e.g. FCC) are key to critical path

Capital Costs

Extraordinary capital investments.....

- Est. prelim cost is more than \$750M for LIRR and MNR
- Unfunded needs nationwide are in the billions of dollars (\$2+ B)
- FRA added requirements that will increase project cost & risks such as requiring Grade Crossings to be enforced by PTC. [Est. Amt?]
- Lack of funding federal and non-federal
 - PTC \$50 M authorization inadequate and NOT funded in '09 or '10
 - NO multi-year SAFETEA-LU re-authorization on horizon
 - National economy DRAMATICALLY affecting state/local revenues
- Weighing safety investment trade-offs
 - Current MTA plan has over a billion dollars in SOGR/Normal Replacement. Critical projects would have to be deferred.

Operating Costs

Unknown Operating Budget Impacts.....

- PTC maintenance costs and operational restrictions, are TBD, but are sure to be significant
- To properly assess and mitigate the risk of operational impacts, railroads including LIRR and Metro-North would undertake extensive design reviews and pilot testing of the system before full implementation; but there is insufficient time

Customer Service Impacts

Unknown impact on millions of daily customers....

- Current signal systems provide a high degree of safety, particularly those areas under cab signal control
- Railroads including LIRR, Metro-North and SEPTA must determine impact to on-time performance, train capacity, and maintainability.
- PTC design may not be capable of avoiding adverse operational impacts related to earlier enforced braking
- Risk of significant delays related to a failure of vital components.
- Delays come with an economic cost

What are we asking?

- Look at proposed regs through lens of global cost implications
- Acknowledge lack of federal resources to implement and implications for schedule, etc.
- Request revisions to sections that go beyond mandate and increase costs
- ??????