EXHIBIT 3-Y

Docket No. DCA-08-MR009

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

Federal Railroad Administration Response of May 16, 2006 to NTSB Safety Recommendation R-05-10 to Require Train Crews to Call Signal Indications Over the Radio; and NTSB Reply November 15, 2006

U.S. Department
of Transportation

**Federal Railroad
Administration**

Administrator

1120 Vermont Ave., NW.
Washington, DC 20590

MAY 19 2006

The Honorable Mark V. Rosenker
Acting Chairman
National Transportation Safety Board
490 L'Enfant Plaza East, S.W.
Washington, DC 20594

Dear Mr. Rosenker:

Thank you for your letter to the Federal Railroad Administration (FRA) concerning the issuance of National Transportation Safety Board's (NTSB) Safety Recommendations R-05-09 and R-05-10, and the reiteration of Safety Recommendation R-01-06. These two new recommendations, and the reiteration of Safety Recommendation R-01-06 arose from the NTSB's investigation of the derailment of westbound Northeast Illinois Regional Commuter Railroad (Metra) train No. 519 near 48th Street, in Chicago, Illinois, on October 12, 2003.

The FRA has reviewed these recommendations, and offers the following responses to each of these recommendations:

Safety Recommendation R-05-09:

> *Develop guidelines for locomotive engineer simulator training programs that go beyond developing basic skills and teach strategies for effectively managing multiple concurrent tasks and atypical situations.*

Locomotive engineer training programs of the larger passenger and freight railroads generally incorporate both simulator and on-the-job training as a student engineer to supplement classroom instruction and contribute to skill development. The longer period of on-the-job training typically exposes the student to additional real-world demands, including divided attention tasks. However, FRA agrees that developing guidelines for locomotive engineer skill development that contribute to good situational awareness is worthy of consideration, both as a further contribution to the quality of existing training programs and as a means of benchmarking the various programs. FRA does not currently have funding available to initiate this action. However, FRA will endeavor to identify appropriate resources to undertake this work. We will also be in touch with Board staff as we develop a program plan.

Until FRA can identify the necessary resources and initiate this action, FRA respectfully requests that the NTSB classify Safety Recommendation R-05-09 as "Open—Acceptable Action."
Safety Recommendation R-05-10:

Require train crews to call out all signal indications over the radio, including clear signals, at all locations that are not equipped with automatic cab signals with enforcement or a positive train control system.

The requirement for the locomotive engineer to call out certain information over the radio, and requiring an acknowledgment from a member of the train crew, has been a practice in the railroad industry since the 1960s. The origin of this practice was primarily rooted in attempting to maintain the alertness of the train crews who were either riding in the caboose at the rear of the train, or in the body of a passenger train, by notifying them that the train was approaching a siding or station. While far from universal, in the ensuing years, additional railroads slowly embraced the concept, some even expanding it to include fixed signal aspects/indications, but again strictly for the alertness value. Eventually, however, railroads recognized that an ancillary benefit could be derived from this practice by obligating the train crew to become more vigilant in the operation of the train.

By the 1980s, with the gradual elimination of cabooses on freight trains, the conductor and brakeman were now required to ride in the operating cab of the controlling locomotive, along with the engineer. Under these circumstances, signal calling was sometimes restricted to the locomotive cab, but over time railroads also continued to experiment with calling of signals on the radio.

When FRA issued Emergency Order No. 20 (EO 20) in February 1996, and modified in Notice No. 2 in March 1996, FRA recognized the immediate need to ensure that signal indications were followed by train and engine crews. Since certain operating rules requiring the communication of signal indications and other information were already in place on many railroads, FRA adopted in EO 20 a rule that required a crew member located in the operating cab of a controlling locomotive, cab car, or MU car to orally communicate each wayside signal indication that required that the train be prepared to stop at the next wayside signal or that the train be prepared to pass the next wayside signal at restricted speed. A designated crew member, whether in the operating compartment or elsewhere in the train, must then immediately acknowledge and confirm the transmission. That requirement remains in place.

However, FRA did not require that this information be transmitted over the radio. If another crew member is present in the operating compartment, or if an intercom is used, then these methods would satisfy this requirement. FRA's expectations are that in the absence of an appropriate response by the engineer to a restrictive indication that has been communicated, the designated crew member shall take action to ensure the appropriate response. In the 10 years that this specific requirement of EO 20 has been in effect, FRA is unaware of any issues of noncompliance, or any instance of a train crew member having to take any action to ensure that the train is being operated safely.

However, by contrast, FRA sees limited value in indiscriminately broadcasting all signal aspects/indications over the radio. On a passenger train, for example, train crews may be occupied with other important duties such as collecting tickets, making change, answering passenger inquiries, adjudicating fare disputes, controlling unruly passengers, and making heat/light adjustments. With tinted windows obscuring their external view and inhibiting their ability to judge speed and the train's location, particularly at night, a crew member's ability to react quickly and appropriately to signal information is dubious at best. In the case of freight trains, all crew members will typically be seated in the locomotive cab or will be distracted by other duties or personal needs away from their normal positions in the cab.

Second, arbitrary radio transmissions that have no practical value can actually be a detriment to safety by unnecessarily congesting the airwaves, particularly in terminal areas (as the Board notes in its accident investigation report, EO 20 has an exception for "yard and terminal limits"). Further, calling signal indications such as clear or advance approach, which require no immediate action on the part of the engineer, would be meaningless to another crew member located elsewhere in the train, since they would not be required to take any action either.

Third, radio transmissions can also be interrupted ("stepped on"), thereby rendering the information incomplete or useless. Requiring separate acknowledgement of each transmission—including clear signals—would further clog the airways and would like introduce a new source of disruption to the engineer's situational awareness, particularly in the case of commuter operations where train speeds and frequent signals could result in an unacceptable communications workload. Also, with the multiplicity of channels in use today, one crew may not necessarily hear all transmissions that could affect their train.

Fourth, repetitive radio transmissions lose their effectiveness over time and may become merely white noise. FRA believes that it is essential that the power of Federal regulation be reserved for truly necessary and practical requirements, lest their influence be seriously diluted.

Fifth, too much information broadcast over the radio regarding train locations, speed, signal aspects/indications, etc., may create an anticipatory environment that can influence crews to act capriciously on that information. FRA's accident files contain cases that were caused by crews acting on information regarding a preceding train's location, even though railroad operating rules and Federal regulations prohibit this practice. The Board itself has noted that "communications between trains can be inconsistent," and that "radio communication between trains, because it is *ad hoc*, can itself lead to misunderstandings that could compromise safety." (NTSB/RAR-01/01 at 35-36.)

FRA does appreciate that, in the context of passenger operations subject to EO 20, it is appropriate to review the requirements for calling of signals, the present limitation to aspects more restrictive than those at issue in the Metra derailment, and the practices of the railroads in designation areas where even these minimum requirements do not apply. In response to the

Board's expressed concerns, FRA will request the Passenger Safety Working Group of the Railroad Safety Advisory Committee to include these issues in its forthcoming review of EO 20.

However, FRA strongly believes that an indiscriminant implementation of the subject recommendation to all railroad operations is not supported by the Board's analysis, the circumstances of the Metra derailment, or other information available to FRA. Accordingly, FRA respectfully requests that the NTSB reconsider this safety recommendation, classifying Safety Recommendation R-05-10 as "Closed--Reconsidered."

Safety Recommendation R-01-06:

> *Facilitate actions necessary for development and implementation of positive train control systems that include collision avoidance, and require implementation of positive train control systems on main line tracks, establishing priority requirements for high-risk corridors such as those where commuter and intercity passenger railroads operate.*

Since our last written update, Positive Train Control (PTC) design and implementation efforts have continued at an accelerated pace. In August of 2004, FRA filed with the Congress a report on the costs and benefits of PTC that identified possible benefits, in addition to the obvious railroad safety benefits, that might accrue to railroads, shippers, and members of the American public through implementation of PTC.

The final rule entitled "Standards for Development and Use of Processor-Based Signal and Train Control Systems" was published March 7, 2005 and became effective June 6, 2005. This rule revised the existing Rules, Standards, and Instructions Governing Signal and Train Control Systems (49 CFR Part 236) and implemented the necessary technology-neutral, performance-based criterion for supporting the development and determining the safety of processor and communication-based signal and train control operating architectures.

Work continues on integrated PTC technology demonstrations. The FRA Signal and Train Control staff is closely monitoring the process and progress of these systems, and providing direct support where appropriate. FRA's Office of Railroad Development has provided further technical and financial support to many of these projects.

With Amtrak and the State of Michigan, FRA supported the Incremental Train Control System (ITCS) project which has included increased operating speeds to 95 mph on Amtrak's line in Michigan. Work continues on the ITCS software to support operating speeds of 110 mph. FRA funding continues in support of the Alaska Railroad's Collision Avoidance System (CAS). The installation of the first phase and detailed design of the second phase, of CAS is in progress. In the Northeast Corridor, Amtrak has continued with the successful expansion of the territory covered by its Advanced Civil Speed Enforcement System (ACSES) and has started preliminary

work on ACSES system enhancements. Although experiencing significant technical challenges, New Jersey Transit continues with testing of its Advanced Speed Enforcement System (ASES).

Very clearly, the most significant recent developments involve the major Class I freight railroads. The BSNF Railway's Electronic Train Management System (ETMS) is in the final stage of its first pilot in Illinois, and FRA has pending a request for a second pilot on the rail line from Fort Worth to Arkansas City, Kansas. Further, BNSF has submitted a Product Safety Plan for ETMS (presently under FRA review) and has informally indicated a strong commitment to proceeding with the system. CSX Transportation (CSXT) continues with development of its Communications Based Train Management System; and the Union Pacific Railroad (UP) has briefed FRA on its commitment to a Communications Based Train Control pilot project that will include significant installations in dark, wayside signal and cab signal territory. For the first time, BNSF, CSXT, and UP are apparently working to ensure that their systems now under development will be interoperable. Meanwhile, Norfolk Southern (NS) advised FRA that they have initiated work on an Optimized Train Control (OTC) system (with an initial application in South Carolina).

FRA shares the Board's concern that PTC is not yet a reality across the general rail system. However, very substantial technical progress has been achieved, and now momentum appears to be increasing toward wide-scale implementation. FRA will continue to provide financial and technical support and encouragement to these efforts.

In light of this substantial progress, the FRA respectfully requests that the NTSB retain Safety Recommendation R-01-06 in its present classification of "Open--Acceptable Response."

Sincerely,

Joseph H. Boardman
Administrator

National Transportation Safety Board

Washington, D.C. 20594

Office of the Chairman

NOV 15 2006

Honorable Joseph H. Boardman
Administrator
Federal Railroad Administration
1120 Vermont Avenue, N.W.
Washington, D.C. 20590

Dear Mr. Boardman:

Thank you for your May 16, 2006, response to the National Transportation Safety Board regarding Safety Recommendations R-05-9 and -10, and R-01-6, stated below. Safety Recommendations R-05-9 and -10 were issued as a result of the Safety Board's investigation of the derailment of Northeast Illinois Regional Commuter Railroad Corporation (Metra) commuter trains 519 and 504 in the vicinity of West 48th Street, railroad Control Point 48th (CP-48) Street, in Chicago, Illinois, on October 12, 2003, and September 17, 2005, respectively. Safety Recommendation R-01-6 was reiterated in the same report.

R-05-9

> Develop guidelines for locomotive engineer simulator training programs that go beyond developing basic skills and teach strategies for effectively managing multiple concurrent tasks and atypical situations.

The Safety Board appreciates the Federal Railroad Administration's (FRA's) general agreement with this recommendation. The Board notes, however, the FRA's statement that it does not currently have funding available to initiate this action, but will endeavor to identify appropriate resources to undertake this work. The Board would appreciate being informed of the anticipated timeframe for accomplishing these tasks.

The Safety Board believes that, through communication with the railroads, the FRA may be able to identify one or more railroads that would be interested in implementing a pilot program for locomotive engineer simulator training programs that teach strategies for multi-tasking and for dealing with atypical situations that would aid in the development of the recommended guidelines. The Board further believes that none of these actions—developing and providing a timeframe for obtaining necessary resources, implementing a pilot program, or developing the recommended guidelines—should require an excessive amount of time or funding. Therefore, we encourage the FRA to act expeditiously and to keep the Board informed as progress occurs. Pending completion of action to develop guidelines for locomotive engineer simulator training programs that go beyond developing basic skills and teach strategies for effectively managing multiple concurrent tasks and atypical situations, Safety Recommendation R-05-9 is classified "Open—Acceptable Response."

R-05-10

> Require train crews to call out all signal indications over the radio, including clear signals, at all locations that are not equipped with automatic cab signals with enforcement or a positive train control system.

The Safety Board is aware that on February 22, 1996, the FRA issued Emergency Order 20 (EO20) and modified it in Notice No. 2 in March 1996, as a result of the collision and derailment of a Maryland Transit Administration (MARC) train and an Amtrak train near Silver Spring, Maryland, on February 16, 1996. The Board notes that the FRA will request the Passenger Safety Working Group of the Railroad Safety Advisory Committee (RSAC) to include these issues in the forthcoming review of EO20. We would appreciate being informed of the timeframe for conducting this review. We further note concerns on the part of the FRA and some of the class I and commuter railroads regarding difficulties they anticipate such as airwave congestion and a loss of effectiveness of radio-transmitted messages due to the repetitious nature of this practice should the FRA require all railroads to call out all signals, including *clear* signal indications.

The Safety Board is aware that two class I railroads (CSX and Norfolk Southern [NS]) and two commuter railroads (Virginia Railway Express and MARC, when operating on CSX and NS track) currently call out all signals and apparently have not found this practice to be problematic. Several other railroads also require train crews to call out all signals under various circumstances and conditions. The Board suggests that, as part of its review of EO20, the FRA, through its RSAC, should study the effectiveness of these railroads' procedures related to calling out all signals to determine how these railroad procedures could be applied industry wide. The Board believes that all railroads should call all signal indications, including *clear*, at all locations except yard and terminal limits. Pending these actions being taken, Safety Recommendation R-05-10 is classified "Open—Unacceptable Response."

R-01-6

> Facilitate actions necessary for development and implementation of positive train control [PTC] systems that include collision avoidance, and require implementation of positive train control systems on main line tracks, establishing priority requirements for high-risk corridors such as those where commuter and intercity passenger railroads operate.

Thank you for your update on Safety Recommendation R-01-6 and for the details you provided regarding individual railroads' progress in implementing PTC systems. The Safety Board is pleased by the FRA's encouragement of the rapid deployment of PTC within the railroad industry; we also appreciate the FRA's close monitoring of the process and progress of these systems and provision of support where needed. Safety Recommendation R-01-6 remains

classified "Open—Acceptable Action" pending full implementation of PTC systems industry wide. Please update the Safety Board as progress continues on this effort.

Thank you for your cooperation and your actions to address these recommendations. We look forward to receiving further updates as progress continues on Safety Recommendations R-05-9 and –10, and R-01-6.

Sincerely,

Mark V. Rosenker
Chairman

cc: Ms. Linda Lawson, Director
Office of Safety, Energy, and Environment
Office of Transportation Policy