347 Madison Avenue
New York, NY 10017-3739
212-532-4900

Howard Permut
President

Metro-North Railroad

An Open Letter to Metro-North Railroad Customers

Metro-North Railroad has performed a review of its actions in response to a number of heat-related incidents that occurred on July 22, 2011 on the New Haven Line. The results of that review are contained within this report.

First and most importantly, I apologize to the MNR customers who were traveling on the New Haven Line during that afternoon. The delays and discomfort they experienced were significant and it is certainly not how Metro-North chooses to operate its service. Many of the improvements in procedure and protocol that we recommend address these failures and seek to prevent them from happening again.

It is important to note, however, that these actions cannot overcome years of disinvestment in infrastructure and equipment. While the 405 M8 cars currently on order will help significantly to improve the line's operation, it is not the only solution. Continued investment is essential to replace the century-old catenary system and other elements of the New Haven Line's over-age infrastructure. MNR will work with the Connecticut Department of Transportation, the owner of the infrastructure, to rebuild this line as expeditiously as possible.

On July 22, MNR customers and employees faced a wide range of difficulties. The extreme 100+ degree heat caused a number of infrastructure and equipment problems. At the end of the day, customers traveling on 121 trains were delayed – some for well over an hour. There were 13 major separate incidents that required different responses during the 12-hour period between Noon and Midnight. Nine ongoing infrastructure problems were compounded by four disabled trains – all of which required different types of rescue operations. This restricted MNR's ability to operate trains so significantly that for much of the afternoon there was only one open and usable route in the 22 miles between Stamford and Bridgeport – and that route required switching tracks multiple times. Throughout the day, however, MNR's primary focus was to rescue stranded customers and ensure that all customers were transported as safely as possible without causing further damage to an already seriously damaged system.

The operating difficulties we faced were numerous. However, much of the public discussion that ensued after July 22 centered around one disabled train -- train #1532 (the 1:34 PM train out of Grand Central Terminal, due New Haven Station at 3:18 PM).

This train became disabled between Westport and Green's Farms stations when one of its pantographs was damaged from sagging wire, causing the electricity needed to operate the train to turn off – including the power needed for lights and air conditioning. It is important to note that the air conditioning on that train had not been working well before the train became disabled; in some cars it had not been working at all. The conditions for customers on board this train became extremely difficult very quickly. Although the train crew was walking through the train, communication with these customers was not frequent enough, especially given the circumstances.

MNR's employees were battling to rescue this train. A team of employees, all of whom had just rescued a different disabled train in Bridgeport, responded to this train as quickly as they could. They requested and received an MTA police escort from Bridgeport to Westport. They cut through the heavily-wooded marshland that stood between them and the train, using a chainsaw to establish an access route.

Employees in the Operations Control Center in New York were determining how to rescue this train and its customers most quickly without doing further damage to the railroad's infrastructure. Plans changed continually to adapt to the changing conditions along the entire line.

When the train was moved to the nearest station, several customers were treated for the effects of heat. MNR was unable to quickly provide a train for these customers to continue their trip. Continuing problems forced MNR supervision to change plans, causing customers to move from one platform to the other.

Since this was not the only disabled train in a very short period of time, there was also some difficulty with communication among the MNR Operations Control Center, the MTA PD and with local first responders in the town of Westport as everyone endeavored to provide correct information so that customers who were seeking assistance could get it as quickly as possible.

Our review clearly identifies steps that can be taken to reduce the risk of future failures and improve response time in these situations. Metro-North has evaluated proactive measures to establish better protocols and procedures for these types of weather conditions -- up to and including reducing train speeds or service or both. We will improve our operating protocols to mitigate the impact of extreme weather on our infrastructure. We will also improve our protocols for communicating with customers during disruptions, on trains, at stations (both visually and audibly) and via email and the web site.

Lastly, MNR will ensure that its working relationships with local first responders are seamless. Toward that end, the railroad has begun to meet with the local first responder organizations in communities along the New Haven Line Protocols and procedures will be reviewed to ensure that there is clear communication and quick response to any incident requiring their assistance in the future. This outreach has already occurred with the first responders in the town of Westport and resulted in a very productive and cooperative discussion.

We remain open to suggestions that will be made during the public meeting that is being held on Thursday, August 18. Any recommendations made during that session will be reviewed for incorporation in our post-incident improvement plans.

Sincerely,

Howard Permut

A Review of the Actions Taken by Metro-North Railroad in Response to Multiple Heat-Related Incidents on the New Haven Line July 22, 2011

I. Current Condition of the New Haven Line

Background

New Haven Line is not only the busiest rail line operated by Metro-North Railroad, it is the busiest rail corridor in the United States. A total of 390 MNR & Amtrak trains operate on the line every day. MNR trains alone carry 37.3 million people annually, 47% of all Metro-North East-of-Hudson customers.

The line is operated under a comprehensive service agreement between the Metropolitan Transportation Authority in New York and the State of Connecticut through the Connecticut Department of Transportation. Infrastructure improvements within each state are the responsibility of that state. Day-to-day operation of the line is the responsibility of Metro-North Railroad.

Infrastructure/Physical Characteristics

The New Haven Line extends 73 miles from Grand Central Terminal in New York City to New Haven, Connecticut. In addition to a predominantly 4-track main line, there are three single-track branch lines: New Canaan, Danbury and Waterbury branches.

Trains operate under two different power sources -- overhead catenary (A/C) and third-rail (D/C) power, converting from one power source to the other while moving. No other railroad in the United States requires this type of operation, making the New Haven Line the most complex operation in the United States.

Portions of the overhead catenary system on the New Haven Line date to 1914. A key feature of this old catenary system is that it is prone to failure in either extreme heat ("sagging wire") or extreme cold ("brittle wire"). Specifically, when wires are sagging, they can become tangled in the "pantographs" -- the mechanical arms on the top of the cars that collect the power and provide it to the train – both disabling the train and potentially tearing down wires that require sections of track to be taken out of service for lengthy periods of time.

The New York State portion of the catenary system was successfully renewed in 1993 with a state-of-the-art design that features constant tension. As the name implies, this type of construction can better accommodate temperature extremes. It is noteworthy that there were no catenary failures in the portion of the line with the constant tension design.

CDOT commenced its catenary replacement in 1996. Completion is planned for 2015. Today, of the 172 miles of catenary on the New Haven Line in the State of Connecticut, 60% is the new constant tension system and 40% is either the original antiquated system or out of service for repair. MNR's operation is particularly vulnerable in the 7-mile stretch between Southport and Bridgeport. Of the four tracks in that area, 2 tracks are out of service for catenary replacement and bridge work; all trains, therefore, must operate on the other two tracks under old catenary. This system is decades past its useful life and the fragile condition of the system leads to regular failures, significantly impacting service reliability.

Current Status of New Haven Line Catenary System