Testimony of

## Craig Ivey, President

## **Consolidated Edison Company of New York**

Before the Senate Committee on Commerce, Science, and Transportation

& Subcommittee on Surface Transportation and Merchant Marine Infrastructure, Safety, and Security

Hearing entitled:

"Power Outage on Metro-North's New Haven Line: How to Prevent Future Failures Along Passenger Rail's Busiest Sector"

Monday, October 28, 2013

Good Morning Senator Blumenthal. My name is Craig Ivey and I am the President of Con Edison of New York, the utility which serves electric, gas and steam to the City of New York and parts of Westchester County. I want to thank you for the opportunity to participate this morning's hearing. I would also like to recognize Senator Murphy, Congressman Himes and Congresswoman Esty for their ongoing engagement in this issue.

Before I begin, I want to express on behalf of Con Edison that we clearly recognize the hardships endured by Metro-North's commuters during the train service interruption and regret the set of circumstances that led to the disruption. And I want to make clear to this panel, as well as to Metro-North riders, that we are committed to doing everything within our role to support the MTA to prevent anything like this from happening again, particularly as the agency's substation project moves forward.

I also want to commend our employees, and Metro-North employees, who reacted so quickly and professionally in this emergency to restore partial service, and then full service, to the New Haven line.

On September 13, 2013, one of the two Con Edison transmission lines, or feeders, serving the Metro North New Haven corridor was taken out of service at Metro North's request to accommodate work they were conducting at their Mount Vernon substation. To clarify, this is Metro-North's substation, not Con Edison's substation. The feeder was scheduled to be out of service from September 13, 2013 until October 13, at the request of Metro North, so that the line could be repositioned and reconnected to their new equipment in Mount Vernon.

On Wednesday, September 25, 2013 at 5:22AM the remaining in-service feeder cable failed and caused a total loss of power supply to Metro North's Mount Vernon Substation. A preliminary review indicates that feeder fault was related to our work on the scheduled feeder shutdown. I will go into greater detail shortly. Within a few days of the feeder failure, Con Edison successfully erected a temporary substation at the Harrison station to provide enough power to allow for the partial restoration of Metro North service on September 30. This was an innovative, unconventional and ultimately successful effort to transform low voltage, residential (13kV) power into higher voltage (27kV) power for the train line.

On October 3, we were able to reconnect and re-energize the 138kV feeder that had been removed from service at Metro North's request. This reconnection allowed Metro-North to return to its regular commuter schedule on Monday, October 7.

Our crews worked around-the-clock to expedite repairs to the failed feeder, which was re-energized on October 19, returning the Metro North supply to its normal configuration of two transmission feeders.

We are conducting a thorough review of the cause of the feeder failure to understand how this incident occurred and prevent it from happening again. The New York Public Service Commission is also conducting its own independent review. High-voltage transmission feeders are housed in oil-filled pipes. As a result, removing these feeders from service is a complex process. We have to freeze the insulating oil in the pipe within a "freeze pit" in order to contain the oil.

We located the fault on the failed feeder just outside of the "freeze pit" work area. We found that the ground surrounding the work area was frozen, which we believe contributed to the failure. Having completed these freeze operations for decades – approximately 20 times a year – we have no records of a condition of this nature developing at any other time. Our investigation will include a forensic analysis of the cable, the pipe and surrounding work area to help pinpoint the cause.

It is important to note that Con Edison continuously assesses the condition of its underground feeder cables with respect to possible degradation due to aging. Over the past several years, several sample sections of cable similar in construction to those supplying the Metro North Railroad have been subjected to in-depth engineering evaluations. These evaluations and our experience with these cable systems indicate that the condition and performance of the cable is primarily a function of the thermal and electrical stresses to which the cable is subjected as opposed to the age of the cable.

Con Edison recognizes how critical Metro North service is to the NY-CT area. Con Edison bears an equally monumental responsibility in powering our dynamic region. This is why we are having extensive discussions with the Metro-North regarding their future substation replacement work and the need to ensure that this type of event does not happen again.

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