

Statement Concerning July 6th Power Outages

July 14, 1999

Last week's events make it important to understand the size and scope of Con Edison's operations. The Con Edison distribution system covers 604 square miles and serves more than eight million people in New York City and Westchester County.

Of the 1,150 feeder cables in our system, approximately 50 were out of service during the Washington Heights network shutdown. The critical eight out of 14 feeders that failed in the Washington Heights network undergo the same tests and inspections as the rest of the feeder system.

Although the design of the network (which includes approximately 80,000 miles of underground cable in New York City) may make installation and repair work difficult, it nonetheless is the most reliable way to deliver electricity. Approximately 86 percent of our system is underground, which helps make us the most reliable electric utility in the world. Each network in our distribution system is designed to operate under the highest predicted load even with the loss of two primary feeder cables. Furthermore, each network area is operated as a unit and is entirely independent of the other network load areas.

On Friday, July 1, Con Edison personnel contacted the Mayor's Office of Emergency Management (OEM) concerning the potential heat wave emergency. Conference calls were coordinated by OEM (representing over 50 city agencies including the police and fire departments) on Sunday, Monday and Tuesday mornings. Con Edison participated in all calls. Starting Tuesday morning, we sent engineering personnel to OEM's Emergency Operations Center and an OEM staff member was assigned to our energy control center.

As the unprecedented heat wave continued from Monday into Tuesday, several neighborhood networks began straining. By Tuesday morning, five out of 14 feeders in the Washington Heights network were out. Feeders were also out in Williamsburg, Richmond Hill, Long Island City and parts of Westchester County. The New York State Power Pool instituted a statewide 5 percent voltage reduction early Tuesday afternoon as energy systems throughout the northeast experienced record energy demand.

Throughout the week, company officers and personnel had been in continuous contact with our customers, OEM, elected officials, community leaders and the media. We proactively reached out 24 hours a day throughout the week to ensure that people were aware of potential problems and our ongoing efforts to resolve them.

Nonetheless, the excessive current being drawn through the feeder cables at the substation that serves Washington Heights, caused by customers using air conditioners and other appliances, was too much for the cables to handle. The demand for energy was significantly higher than expected.

By 10:00 p.m. Tuesday evening, seven out of 14 feeders were out in the Washington Heights network. As we prepared to replace two feeders that would have stabilized the network, a feeder switch at the Sherman Creek Substation caught fire. With eight feeders out and the secondary system attempting to compensate for the losses, the network faced the alarming scenario of burning itself up. At that time, approximately 10:12 p.m., the system operator made the correct decision to take the Washington Heights network off line in order to prevent catastrophic electrical damage. If the network had not been shut down, the damage would have been so major and the repairs so extensive that the power could possibly still be out in northern Manhattan today.

Since our network system is designed to prevent problems from spreading from one network to another, the feeder outages in Washington Heights were isolated and could only be addressed in that neighborhood. There was no option of importing electricity from another community or shutting down power in a different neighborhood. The feeders in Washington Heights could only be repaired in Washington Heights. Had we experienced the same failures in Williamsburg and Long Island City, we would have had no choice but to shut off power in those neighborhoods as well.

Working continuously over the next 19 hours, we were able to start re-powering the Washington Heights network at 5:05 p.m. Wednesday evening. Earlier in the day, we were still concerned about the Cooper Square network, which had some feeders out that led to subsequent power outages. We instituted a voltage reduction for that network and asked OEM and certain major customers to assist in reducing electric system load by conserving energy use. Among those customers was the New York City Housing Authority (NYCHA). We requested that NYCHA attempt to reduce electrical usage in the Cooper Square network.

The damage done to overhead electric transmission systems by hurricanes and ice storms is familiar to everyone. The Fourth of July weekend heat wave was the equivalent of a hurricane to an underground distribution system. The record-breaking temperatures and suffocating humidity meant that the heat produced by underground cables that would normally be dissipated by the cooler surrounding soil had nowhere to go and built up in the cables causing burnouts.

We find it unacceptable for even one of our customers to be without power, and we deeply regret last week's events. Con Edison is proud of its international reputation for reliability and the fact that power outages are extremely rare occurrences in New York City. Last week, we appointed an independent board composed of distinguished engineering experts who will review all events leading up to the outages, the performance of equipment and the response of company personnel. We will learn from this incident and become even more reliable.