



David Warner
Associate Counsel

June 18, 2018

Via Electronic Mail

Hon. Kathleen H. Burgess
Secretary to the Commission
New York State Public Service Commission
Three Empire State Plaza
Albany, New York 12223-1350

RE: Case No. 17-E-0428 – In the Matter of an Investigation into the April 21, 2017 Metropolitan Transportation Authority Subway Power Outage and Consolidated Edison Company of New York, Inc.’s Restoration Efforts.

Dear Secretary Burgess:

In accordance with Ordering Clause 29 of the Public Service Commission’s *Order Directing Steps to Safeguard and Maintain Adequate Utility Service to the Subway System* issued November 10, 2017 in the above referenced proceeding, Consolidated Edison Company of New York, Inc. (“Con Edison”) submits its May 2018 monthly report. As discussed with Department of Public Service Staff, Con Edison files its monthly report on (or about) the 16th day of the following month.

Thank you for your assistance.

Sincerely,

Att:

cc: Michael Worden, Director, Utility Rates and Services

Case 17-E-0428

May 2018 Monthly Report
Consolidated Edison Company of New York, Inc.

June 18, 2018

Consolidated Edison Company of New York, Inc. (“Con Edison”) has prepared this monthly report for May 2018 as required by Ordering Clause 29 of the Public Service Commission’s *Order Directing Steps to Safeguard and Maintain Adequate Utility Service to the Subway System* issued November 10, 2017 in Case 17-E-0428 (“Order”).¹

Table 1 provides the status on the field work in progress that is required under the Order and includes the Ordering Clause number, a description of the specific requirement, the end of month status, the total units of work required, the required completion date (if provided) in the November Order and any explanatory note, if needed. Table 1 also provides a status update on other Ordering Clause requirements that are not field work, but are single activities required by a date certain (e.g., reach agreement on scope, participate in an activity). The Company has noted where contractors that have related expertise to perform this work under MTA oversight are performing this work.

Table 2 tracks completed work, provided in prior monthly reports, including field work that has been completed and the resolution of other Ordering Clause requirements.

¹ In order to create a single comprehensive order and to eliminate any confusion as to the Commission’s requirements, the November 10 Order re-adopts deadlines that have already passed and actions that were already taken by Con Edison pursuant to the Commission’s *Order on Consent Directing Steps to Safeguard and Maintain Adequate Utility Service to the Subway System*, issued August 16, 2017 in Case 17-E-0428.

Table 1
May 2018 Update

| Field Work Status | | | | |
|---|--|---|---------------------------------|--------------------------------|
| Ordering Clause Number and Requirement | May 31 Status | Total Units to be Completed | Completion Date | Notes |
| 5. Inspections of MTA Property Line Boxes | Property Line Box inspections complete at 299 remaining stations | Total number of remaining stations - current estimate of 299. | 5/9/2018 for remaining stations | Complete as of May 7, 2018 |
| 5. Inspections of MTA Electric Distribution Rooms* | 293 | 293 remaining locations | 5/9/2018 for remaining stations | Complete as of May 6, 2018 |
| 7. Identify, inspect and test, currently installed Automatic Transfer Panels* | 211 | 211 remaining locations | August 9, 2018 | Complete as of May 6, 2018. |
| | 0 | 12 locations | August 9, 2018 | Retrofit and repair as needed. |
| 7. Install Sag Correctors as needed* | 4 at priority locations | 111 priority locations | August 9, 2018 | |
| | 3 installed at remaining locations | Current estimate is 274 remaining locations | December 31, 2018 | |

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| 7. Install Quick Connects for Back-Up Generators at Remaining Locations* | 2 at priority locations | 11 priority locations | August 9, 2018 | |
| | 0 at remaining locations | 40 remaining locations | December 31, 2018 | |
| 7. Trackside work except for Signal Cable Replacement* | 100 percent complete | 100 percent | May 9, 2018 | Complete. Contractors completed the inspections and work, including necessary repairs and replacements, except for a small number of locations where access could not be provided by the MTA because of the extensive coordination needed in these locations. The MTA advised Con Edison and DPS Staff that it will take responsibility for completion of this remaining work. |
| 7. Signal Cable Replacement* | 10 locations | 10 locations | May 9, 2018 | Complete as of May 6, 2018. |
| 13. Replacement of Aluminum conductors | 165 sections replaced at remaining stations | 165 sections | May 9, 2018 | Complete as of May 7, 2018. |
| 16. Implement work plans for improved redundancy at remaining locations | 50 complete | Current estimate is 50 locations | May 9, 2018 | Complete as of May 7, 2018. |

Other Ordering Clause Requirements

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| 17. Con Edison will work with the MTA, Electric Power Research Institute (EPRI) and DPS to agree on operational settings for the modernization of Automatic Transfer Panels or related equipment across 88 MTA Stations. | The MTA identified 73 locations where Automatic Transfer Panels required replacement. The 73 ATPs were installed, at the agreed upon operational settings, by April 17, 2018. |
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* This work is being performed by contractors that have related expertise to perform this work under MTA oversight.

**Table 2
Completed Work**

| Field Work | | | | |
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| Ordering Clause Number and Requirement | Monthly Report | Total Units to be Completed | Completion Date | Notes |
| 1. Inspections of Con Edison structures directly serving MTA stations | October 2017 Report | 462 MTA passenger/signaling facilities in the Con Edison service territory | 9/30/2017 | Complete. |
| 4. Mapping deficiencies identified | September 2017 Report | 462 MTA facilities in Ordering Clause 1 | 9/30/2017 | Complete - Con Edison has corrected 258 mapping deficiencies within 5 days. |
| 5. Inspections of MTA Property Line Boxes | January 2018 Report | 100 priority locations | 2/9/2018 | Complete. |
| 5. Inspections of MTA Electric Distribution Rooms | February 2018 Report | 119 Priority Stations | 2/9/2018 | Complete. |
| 7. Inspections of Signal Relay Rooms | February 2018 Report | 201 | 2/20/2018 | Complete. |
| 7. Review Remaining Locations for Determining Alternate Electric Service | March 2018 Report | 66 | 3/27/2018 | Complete. 51 of 66 require necessary construction work. |
| 7. Install Automatic Transfer Panels | April 2018 Report | 73 | 4/17/18 | Complete. |
| 7. Install Quick Connects for Back-Up Generators | April 2018 Report | 162 | 4/17/18 | Complete. |

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| 8. Inspections of MTA's high voltage substations | September 2017 Report | 5 | 9/30/2017 | Complete. |
| 9. Sensors at MTA stations | September 2017 Report | 462 stations | 9/30/2017 | Complete. |
| 10. AMI meters and communications equipment associated with MTA signaling services | January 2018 Report | 752 meters | Manhattan and Brooklyn: 1/31/2018 | Complete. |
| 10. AMI meters and communications equipment associated with MTA signaling services | March 2018 Report | 359 meters | Bronx and Queens: 3/20/2018 | Complete. |
| 13. Replacement of Aluminum conductors | December 2017 Report | 77 sections at High Priority locations | 12/31/2017 | Complete. |
| 15. Implement work plans for improved redundancy at 17 high priority locations | December 2017 Report | 17 | 12/31/2017 | Complete. |
| 21. Con Edison to provide "virtual presence" or key operating employee on site | December 2017 Report | Con Edison is installing 10 dedicated automatic ring down circuits between Con Edison Regional Electric Control Centers and the MTA power control center. | 12/31/2017 | Complete. Con Edison, DPS Staff and the MTA reached agreement on the "virtual presence" approach by August 31, 2017 (See August 2017 monthly report). The 10 dedicated automatic ring down circuits have been installed and are in service. |

Complete - Other Ordering Clause Requirements

| Ordering Clause Number and Requirement | Monthly Report | Company Response |
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| 5. Scope of inspections and roles of parties for MTA Property Line Boxes and Electric Distribution Rooms | August 2017 Report | Con Edison, DPS Staff and the MTA reached agreement in principle on August 31, 2017 on the scope and roles for these required inspections. The agreed-upon date to complete the inspections is February 9, 2018 for 119 priority stations that MTA identified and May 9, 2018 for the remaining stations. |
| 7. Scope of inspections and roles of the parties for the inspections of MTA interlocking station electric equipment | August 2017 Report | Con Edison, DPS Staff and the MTA reached agreement in principle on August 31, 2017 on the scope and roles for the required inspections. The agreed-upon date to complete these inspections is May 9, 2018. |
| 8. Scope of inspections and roles of the parties for the inspection of MTA's 221 high voltage substations | August 2017 Report | Con Edison, DPS Staff and the MTA reached agreement in principle on August 31, 2017 on the scope and roles for the required inspections. The agreed-upon date to complete these inspections is September 30, 2017. |
| 8. Con Edison and DPS will come to an agreement on what Con Edison's inspection history indicates about the need for additional inspections of Con Edison's area substation equipment serving MTA's high voltage substations. Con Edison will inspect its area substation equipment serving MTA's high voltage substations where indicated by the agreement by June 1, 2018. The inspected equipment shall include but not be limited to area station transformers, circuit breakers, and relays | October 2017 Report | Con Edison and DPS have reviewed Con Edison's inspection history, agreed on what it requires with respect to inspections, and Con Edison has completed those inspections. |

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| <p>8. Con Edison's role will be to inspect with the MTA, the MTA's maintenance and inspection records and to visually inspect with the MTA its equipment in the field without taking it out of service, and to provide recommendations to MTA by a date certain established in the agreement, subject to the MTA providing Con Edison access to MTA's records and facilities as required.</p> | <p>October 2017 Report</p> | <p>The agreed upon date for Con Edison to make recommendations for the MTA's 221 high voltage substations is November 30, 2017.</p> |
| <p>8. Con Edison's role will be to inspect with the MTA, the MTA's maintenance and inspection records and to visually inspect with the MTA its equipment in the field without taking it out of service, and to provide recommendations to MTA by a date certain established in the agreement, subject to the MTA providing Con Edison access to MTA's records and facilities as required.</p> | <p>November 2017 Report</p> | <p>Con Edison provided recommendations to the MTA on November 29, 2017.</p> |
| <p>11. Jointly develop Con Edison and MTA protocols regarding power and equipment issues, including, but not limited to AMI.</p> | <p>December 2017 Report</p> | <p>Written procedures and protocols were jointly developed by Con Edison, MTA, and DPS. They were agreed to during the weekly meeting on December 20, 2017.</p> |
| <p>11. Con Edison protocols for communications regarding power and equipment issues, including but not limited to AMI issues, will be developed and fully implemented by January 31, 2018 in Manhattan and Brooklyn.</p> | <p>January 2018 Report</p> | <p>Con Edison has fully implemented the procedures and protocols in Manhattan and Brooklyn. Protocols and procedures are also in place and in use for AMI equipment installed and operating at MTA locations in Queens and the Bronx to date.</p> |
| <p>13. (aluminum conductors) Con Edison shall complete the other locations (other than the high priority locations) by a date certain established in consultation with the MTA and DPS following the completion of the inspections required by Ordering Clause 1 above.</p> | <p>October 2017 Report</p> | <p>Con Edison has consulted with the MTA and DPS Staff on the removal of aluminum conductors at the "other locations" serving the MTA. The agreed upon date for the removal of the additional aluminum conductors is May 9, 2018.</p> |

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| 16. Jointly develop work plans to improve the redundancy of Con Edison's electric service and/or install additional redundant Con Edison electric supply options for the rest of MTA's signaling services. | December 2017 Report | Con Edison, MTA and DPS jointly developed work plans to improve redundancy of Con Edison's electric service at 42 MTA locations. The parties agreed that the date certain to complete this work is May 9, 2018. |
| 18. Establish inventory of generators and determine staging locations. | December 2017 Report | Con Edison, MTA and DPS worked together to develop a generator staging plan. This plan identifies the locations of MTA generators and Con Edison workout locations where generators will be dispatched from. At the weekly meeting on December 20, 2017, DPS, MTA and Con Edison agreed on the generator staging plan. |
| 19. Work with the MTA to perform an analysis of power supply and power quality events affecting MTA's signaling services from 2015 to date. | December 2017 Report | Con Edison worked with the MTA to perform an analysis of power supply and power quality events affecting signaling services. 198 events from January 1, 2015 to August 2, 2017 were reviewed using MTA reported times and locations to correlate with Con Edison system events. Root causes and solutions were identified to the extent applicable (cause could not be determined for 56 events, 3 were attributable to the MTA and 11 were not in the Con Edison service territory). |
| 20. Con Edison will demonstrate by August 31, 2017, that it has response personnel to provide priority response for power failure issues/impacts affecting the MTA system. | August 2017 Report | Con Edison provided this demonstration to DPS Staff and the MTA and it was agreed that Con Edison has sufficient response personnel. |
| 21. Con Edison, DPS Staff and the MTA to consider Con Edison providing a "virtual presence" on site or key operating employee on site. | August 2017 Report | Con Edison, DPS Staff and the MTA reached agreement by August 31, 2017 for the use of a virtual presence and dedicated communications equipment. |
| 22. Con Edison will work with the MTA and participate in a joint response drill on August 10, 2017. | August 2017 Report | Con Edison and MTA participated in a Joint Response drill on August 10, 2017. DPS Staff observed the drill. |

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| 23. Con Edison is directed to within five business days designate a specific team of individuals to assist DPS and EPRI in the power assessment. | August 2017 Report | Con Edison designated a team to assist DPS Staff and EPRI with the Power Quality review team within five days of the issuance of the Order. |
| 28. Con Edison will prepare by August 31, 2017, a Project Management Plan to coordinate all its activities related to the MTA system. | August 2017 Report | Con Edison provided a Project Management Plan to Staff on August 24, 2017. |