# STATE OF NEW YORK PUBLIC SERVICE COMMISSION

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At a session of the Public Service Commission held in the City of Albany on June 16, 2011

#### COMMISSIONERS PRESENT:

Garry A. Brown, Chairman Patricia L. Acampora Maureen F. Harris James L. Larocca



CASE 10-E-0271 - Proceeding on Motion of the Commission to Examine the Mobile Testing Requirements of the Safety Standards.

ORDER REQUIRING ADDITIONAL MOBILE STRAY VOLTAGE TESTING

(Issued and Effective June 23, 2011)

BY THE COMMISSION:

## INTRODUCTION

In December 2008, we ordered all electric utilities to complete an initial mobile stray voltage detection survey of their underground electric distribution systems, in appropriate areas of certain large cities, during calendar year 2009 to positively identify those areas that can be effectively surveyed using that technology. According to that order, the annual mobile testing requirement for those cities would continue thereafter until further Commission action. A subsequent assessment by the affected companies indicated that the following cities were to be surveyed under the requirements

<sup>&</sup>lt;sup>1</sup> These are comprised of incorporated cities with a population of at least 50,000 (based on the results of the 2000 census).

Case 04-E-0159, Proceeding on Motion of the Commission to Examine the Safety of Electric Transmission and Distribution Systems, Order Adopting Changes to Electric Safety Standards (issued December 15, 2008)

detailed in the order: Buffalo, Syracuse, Utica, Albany, Schenectady, Niagara Falls (National Grid, or "NG"); Yonkers, White Plains, New Rochelle, Mount Vernon (Consolidated Edison Company of New York, Inc., or "Con Edison"); and Rochester (Rochester Gas & Electric, or "RG&E").

The results of the mobile surveys conducted in 2009 were presented to the Commission at its June 2010 session and, after review and consideration of those results, we ordered that one mobile scan be completed in calendar year 2010 for Yonkers, White Plains, Albany, Niagara Falls, Rochester, and New Rochelle, and that two mobile scans be completed in Buffalo. No additional scans were required for Mount Vernon, Schenectady, Syracuse, and Utica. As in the prior year, reports were submitted to Staff compiling the results of the testing.

An examination of this 2010 data indicates that another round of testing in these areas is warranted, consistent with that conducted in 2010.

## BACKGROUND

## Results of Testing

In Buffalo, National Grid scanned a total of 1,382 miles in June 2010 and 1,235 miles in October 2010. The company found 931 energized objects (measured at 1 V or greater) in June and 837 in October, for a total of 1,768. Street light poles accounted for 1,700 of the total detections, and traffic signal poles and control boxes accounted for 45. In addition, 1,281 of

Case 10-E-0271, Proceeding on Motion of the Commission to Examine the Mobile Testing Requirements of the Electric Safety Standards, Order Requiring Additional Mobile Stray Voltage Testing (issued July 21, 2010).

Variances in mileage are attributable to the same crews performing both scans and optimizing routes during the second scan, resulting in less overlap.

the total findings were measured at less than 4.5 V.<sup>5</sup> All repairs to NG facilities were completed within the 45 day time frame, and all issues related to privately owned assets have been made safe. For comparison's sake, a mobile scan conducted in the fall of 2009 resulted in 2,677 energized objects, 2,527 on street light poles and 91 on traffic signal poles.

In Albany, 218 miles were scanned yielding 217 energized objects, 139 of which were below 4.5 V. Almost all of the findings, 213, were on street lights/ traffic signals.

Mobile testing conducted in 2009 resulted in 101 total findings. In Niagara Falls, 38 miles were scanned, resulting in 11 energized objects compared to 54 in 2009. The repairs to National Grid facilities were completed within the 45 day time frame, and all issues related to privately owned assets have been made safe.

RG&E scanned a total of 495 miles and found a total of 40 energized objects, 39 of which comprised street lights/ traffic signals. Of the 40 findings, 27 were measured at less than 4.5 V. All repairs to RG&E facilities were completed within the 45 day time frame. The testing conducted in 2009 yielded 161 findings.

Con Edison scanned a total of 236 miles in White Plains, Yonkers, New Rochelle and Mount Vernon and found a total of 94 energized objects, 45 of which comprised street lights/traffic signals. All repairs were completed within the 45 day time frame. Of the 94 findings, 46 were measured at less than 4.5 V. The testing conducted in 2009 yielded 75 findings in these four cities.

<sup>&</sup>lt;sup>5</sup> 4.5 V is the lower detection limit of the manual testing device currently utilized by the utilities. Readings below this level would not be detected during the manual testing program.

The total cost for performing the mobile testing, including repairs, was provided in the company reports, and the expenditures amounted to \$4.8 million for NG, \$93,000 for RG&E, and \$91,000 for Con Edison.

## CPB MOTION AND FILED COMMENTS

On February 23, 2011, the NYS Consumer Protection Board (CPB) <sup>7</sup> filed a motion requesting that the Commission direct NG to increase the number of mobile scans in the City of Buffalo from two to six. As a result of CPB motion, a SAPA notice was posted in the *State Register* on April 13 and comments were received as detailed below.

CPB justifies the increased testing by noting that the number of energized objects per street mile is significantly greater in Buffalo than in New York City, and that energized objects are left unaddressed for a longer period of time in Buffalo as a result of the disparity in testing frequency.

On March 16, 2011, NG responded to CPB's motion stating that the reported shock data does not indicate a greater hazard in Buffalo compared to New York City. National Grid's data reveals 16 shocks in 2010, as compared to 45 in 2009. Of the 16, five were attributable to NG facilities, and only one was in the pedestrian pathway. National Grid also states that CPB's entire argument is predicated on comparing Buffalo to New York City. It states that in the Mobile Testing Order, the Commission recognized that New York City has been scanned once per month since April 2008, and a comparison of the results of mobile scans in Buffalo to the mature survey results in New York

<sup>&</sup>lt;sup>6</sup> The relatively low cost for Con Edison is attributable to the fact that the company owns the testing vehicles and was only required to provide for contracted labor.

<sup>&</sup>lt;sup>7</sup> The CPB role has been assumed by the NYS Department of State, Division of Consumer Protection, Utility Intervention Unit.

City is inappropriate. National Grid states it is premature at this point to increase beyond two mobile scans in Buffalo, and that two scans strikes the appropriate balance between public safety and cost to ratepayers.

On March 23, 2011, Power Survey Company, the provider of mobile stray voltage testing services used by all operators in 2009 and all except RG&E in 2010, filed comments requesting that the Commission block the use of the equipment utilized by RG&E. Power Survey Company states that the scan of Rochester was being performed with a different contractor using new equipment, the NARDA 8950/10 Mobile Stray Voltage Detection System. According to Power Survey Company, it performed a survey concurrent with the survey using the NARDA equipment which yielded 251 energized objects compared to only 40 found using the NARDA equipment. Power Survey Company claims that this demonstrates that the NARDA device is unable to adequately perform its intended purpose. In addition, Power Survey Company asserts that given its sensitivity levels the NARDA device is unable to detect "[e]ven extremely dangerous structures energized with over 100 V because they will often produce electric fields far below 2V/m."

On April 13, 2011, NARDA filed a response to Power Survey Company's claims. NARDA points out that Power Survey Company provided no details regarding its 251 findings in its comments, nor any scientific proof or facts to support its claims that electric fields at low levels can produce extremely dangerous conditions on accessible structures.

On April 24, the Jodie S. Lane Public Safety
Foundation (JSLPSF) submitted a petition similar in nature to
the Power Survey Company petition, requesting that the NARDA
device be banned until new detection technologies can be
benchmarked and their effectiveness clearly demonstrated.

On May 27, 2011, the WNY Citizens Against Puppy Mills submitted comments in support of CPB's motion to increase the number of mobile scans in Buffalo. It states that it is concerned with the safety and welfare of ours and other companion animals, and that the deterioration of the general infrastructure in the United States has posed an increasing danger of shock and electrocution to the family pet as well as young children on our city streets.

Also on May 27, 2011, Mr. and Mrs. Anthony W. Green and David A. Rivera filed comments supporting CPB's motion. The Greens are parents who lost a daughter to electrocution from a contact voltage incident in Baltimore, Maryland and Mr. Rivera is a member of the Common Council of the City of Buffalo.

On May 31, 2011, comments were received in support of the CPB motion from People United for Sustainable Housing (PUSH), a community-based organization principally committed to the development of affordable housing for the people of Buffalo, New York. CPB also filed comments on May 31 reiterating the points of their previous motion.

And, by letter filed on June 8, 2011, Assemblywoman Crystal Peoples-Stokes expressed her support for CPB's request to increase testing in Buffalo.

## DISCUSSION

In examining the results of the mobile testing, the City of Albany experienced a significant increase, from 101 findings in 2009 to 217 in 2010. Yonkers and New Rochelle also experienced increases, although not at the level seen in Albany. All other areas tested experienced a decline in the total number of findings from 2009 to 2010. In Buffalo, the area of greatest concern from last year, this decline was especially significant. Whether this decline is attributable to NG's ongoing underground

cable replacement program or due to eliminating conditions that had been present for some time, but had not been discovered until the first round of testing, remains to be determined. We are reluctant to draw conclusions from the limited testing performed thus far and given some of the apparent volatility in the number of findings in the testing completed to date. We will require an extension of the existing requirements for at least an additional year. This will provide further data, potentially allowing trends to emerge, which would allow us to make a more informed determination on the efficacy of mobile testing going forward.

CPB acknowledges that the testing results indicate a substantial decline in findings in the City of Buffalo from 2009 to 2010, from 2,677 to a total of 1,768 from the two scans conducted in 2010, a 34% decrease. Its contention that the number of energized objects per street mile is significantly higher in Buffalo versus New York City raises some concerns. However, it should be noted that 70 to 75 percent of the energized objects found measured 4.5 volts or less. Further, the shock report data as reported by NG in its response to CPB's motion does not support a contention that the public is exposed to greater hazards. The lack of shock incidents in Buffalo, in conjunction with the decrease in findings, indicates that an increase in the mobile scanning frequency is not warranted at this time.

With respect to the claims of Power Survey Company and JSLPSF, that RG&E missed a substantial number of energized objects by employing the NARDA device and the Commission should not allow its use, that issue appears to be moot. 8 It is our understanding that both RG&E and National Grid will be employing

<sup>&</sup>lt;sup>8</sup> Moreover, we note that the Commission does not approve the specific equipment that may be used to conduct testing pursuant to the Electric Safety Standards.

Power Survey Company to conduct the mobile scans in 2011. Therefore, no utility in New York State will be using the NARDA device for compliance with mobile testing requirements in 2011. However, we do anticipate the development of new testing devices and the refinement of mobile testing alternatives.

### The Commission orders:

- 1. For 2011 affected utilities shall complete two mobile stray voltage scans in Buffalo and one each in Yonkers, White Plains, Albany, Niagara Falls, Rochester, and New Rochelle.
- 2. Reports compiling the results of these tests shall be filed with the Secretary of the New York State Public Service Commission (Commission's Secretary), within 45 days after completion of the mobile scans or February 15, 2012, whichever is earliest, and in each subsequent year. The filings shall include the historic results and costs associated with the manual testing program in each area.
- 3. The Consumer Protection Board's motion to increase the number the number of mobile scans in the City of Buffalo from two to six is denied.
- 4. The Secretary at her sole discretion may extend the deadlines set forth in this order.
  - 5. This proceeding is continued.

By the Commission,

(SIGNED)

JACLYN A. BRILLING Secretary