

Responses to the Questions Asked at the City Council Committee Hearing

The following summarizes the request for information and commitments that were made during the City Council hearing.

1. Commitment to provide results of tests done on the 21 feeders that went out of service

2. Commitment to provide daily updates on future tests

We have retained an independent expert on cable failure analysis, CTL (Cable Technology Laboratories). They are currently in the process of performing an analysis on the samples of cable and cable connections that failed in the Long Island City network. Some Long Island City network feeders de-energized when a transformer supplied from a feeder failed. Thus, in parallel with the cable analysis, we have initiated the disassembly, inspection and analysis of the transformers that failed. These results are not available on a daily basis. However these findings will be detailed in a complete report and provided to the Public Service Commission by September 25, 2006. The City Council will be provided a copy of this report.

3. Commitment to provide the exact number of customers still getting power through generators supplied by Con Edison

As of July 31, 1,927 customers were receiving service from Con Edison-installed generators.

As of August 9, 1,302 customers were receiving service from Con Edison-installed generators.

4. Commitment to provide the exact number of customers receiving power through private generators

As of July 31, nine customers were using privately-installed generators.

As of August 9, four customers are using privately-installed generators.

5. Commitment to provide age of cables that came out of service and to determine whether a 67-year old cable was one of the first to fail

No 67-year old cable failed during the recent LIC network event. The “67-year old cable” referred to in the City Council hearing was a section of cable installed on feeder 1Q19 in the Long Island City network. (Feeders are composed of many individual sections of cable that are spliced together in manholes.) This particular cable section was a 3-conductor PILC (paper insulated lead covered) cable that was installed in 1938. Feeder 1Q19 went out of service after it was damaged by a contractor on February 15, 2005. The cable was damaged when the contractor struck the duct and cable while excavating the street to work on communications lines.

Feeder 1Q17 was the first feeder that failed during the Long Island City network event. It failed on July 17 at 15:50 hours. The cause of the feeder outage was a failure of a 12-year-old cable section. A sample of the failed cable section is at the Con Edison Cable Center being analyzed.

In the Long Island City network event the oldest cable section, a 59-year-old cable section on feeder 1Q01, failed due to damage from a defective cable conduit (underground duct which surrounds the cable), not from a problem internal to the cable section. The average age of the cable sections that failed was 16 years for the seven samples available, as evidenced below.

Feeder	Age
1Q17	12
1Q16	6
1Q21	
1Q01	6
1Q02	1
1Q12	22
1Q16	4
1Q01	59

6. Request for ranking of networks based on feeder failure rate

The following is the list of networks in alphabetical order with the associated failure rate ranking. The #1 ranking is associated with the highest feeder failure rate and the #57 ranking is associated with the lowest feeder failure rate. The enclosed table provides feeder failure rate data by network. This is based on feeder experience in 2005. This ranking varies year to year so that a particular network in the top quartile could fall to another quartile based simply upon that particular year's experience. Even the network which, in any particular year, finishes last, is still far more reliable and produces far fewer customer interruptions than the service received by other utility customers throughout the country.

Network	Ranking
Battery Park City	51
Bay Ridge	18
Beekman	44
Borough Hall	42
Bowling Green	55
Brighton Beach	38
Canal	30
Central Bronx	43
Central Park	33
Chelsea	39
City Hall	50
Columbus Circle	47
Cooper Square	17
Cortlandt	54
Crown Heights	3
Fashion	56
Flatbush	12
Flushing	5
Fordham	28
Fulton	37
Grand Central	21
Greeley Square	22
Greenwich	26
Harlem	9
Herald Square	36
<i>Hudson</i>	57
Hunter	35
Jackson Heights	7
Jamaica	13
Kips Bay	31
Lenox Hill	41
Lincoln Square	46
Long Island City	4
Madison Square	40

Maspeth	2
Northeast Bronx	49
Ocean Parkway	11
Park Place	32
Park Slope	14
Pennsylvania	53
Plaza	29
Rego Park	8
Richmond Hill	16
Ridgewood	6
Riverdale	19
Rockefeller Center	10
Roosevelt	48
Sheepshead Bay	34
Sheridan Square	27
Southeast Bronx	20
Sutton	24
Times Square	25
Turtle Bay	45
Washington Hts	52
West Bronx	15
Williamsburg	1
Yorkville	23

7. The 2006 Power Quality Report to PSC

A copy of the Annual Report on Electric Service and Power Quality is enclosed.

8. Other outages in Queens.

In Jamaica, 23 multiple dwellings, representing approximately 231 separate customer accounts, experienced service outages on July 18. The outages resulted from secondary cable failures and two transformer failures in the area. Service was restored to these customers via temporary shunts on July 23. After service was restored, some customers continued to experience low voltage until July 31, when one of the transformers was replaced.

In Elmhurst, approximately 350 customers in a two-block area experienced a low voltage condition beginning on July 13. Several defective secondary cables on 98th Street between 34th and 37th Avenues caused this condition. Temporary repairs were made on July 13, and permanent repairs were completed on July 17 when full voltage was restored.

9. Request to provide reliability analysis on a grid by grid basis

We have analyzed reliability of each network based upon its interruption rate in terms of System Average Interruption Frequency Index – SAIFI. SAIFI is an industry index that measures the interruption reliability of utilities and is basically a measure of the number of interruptions per thousand customers.

Con Edison’s overall network system reliability is 5.8 customers interrupted per 1000 customers served. This means that for every 1000 customers we serve on the network system, approximately six may experience an interruption in a single year. This performance is considered the best in the country.

In response to your question, we further analyzed each network’s reliability individually. During 2005, in most networks less than 1% of the customers experienced an interruption, and in no network did more than 2% of customers experience an interruption. The enclosed table provides reliability data by network. As noted in an earlier response, this is based on outages experienced in 2005 and this ranking varies year to year so that a particular network in the top quartile could fall to another quartile based simply upon that particular year’s experience. Even the network which, in any particular year, finishes last, is still far more reliable and produces far fewer customer interruptions than the service received by other utility customers throughout the country.

Boro	Network	Customers Interrupted per 1000
Brooklyn	Borough Hall	6.72
Brooklyn	Brighton Beach	7.71
Brooklyn	Crown Heights	6.18
Brooklyn	Flatbush	5.96
Brooklyn	Ocean Parkway	2.28
Brooklyn	Park Slope	1.02
Brooklyn	Ridgewood	5.28
Brooklyn	Sheepshead	0.05
Brooklyn	Williamsburg	2.58
Manhattan	Beekman	8.31
Manhattan	Bowling Green	10.94
Manhattan	Canal	12.00
Manhattan	Chelsea	8.71
Manhattan	Columbus Circle	7.43
Manhattan	Cooper Square	17.35
Manhattan	Cortlandt	4.50
Manhattan	Central Park	4.12
Manhattan	City Hall	9.52
Manhattan	Fashion	4.83

Manhattan	Fulton	4.66
Manhattan	Grand Central	1.20
Manhattan	Greeley	3.21
Manhattan	Greenwich	3.34
Manhattan	Harlem	17.30
Manhattan	Herald Square	4.84
Manhattan	Hudson	4.91
Manhattan	Hunter	5.76
Manhattan	Kips Bay	2.58
Manhattan	Lenox	7.77
Manhattan	Lincoln Square	6.13
Manhattan	Madison Square	7.40
Manhattan	Pennsylvania	6.90
Manhattan	Palza	1.98
Manhattan	Park Place	7.35
Manhattan	Roosevelt	19.11
Manhattan	Sheridan Square	7.73
Manhattan	Sutton	3.89
Manhattan	Time Square	3.94
Manhattan	Turtle Bay	1.16
Manhattan	Washington	8.92
Manhattan	Yorkville	6.16
Queens	Flushing	3.09
Queens	Jamaica	4.55
Queens	Jackson Heights	1.74
Queens	Long Island City	2.45
Queens	Maspeth	3.02
Queens	Richmond Hill	1.21
Bronx	Central Bronx	2.24
Bronx	Fordham	17.10
Bronx	Northeast Bronx	1.63
Bronx	Riverdale	3.75
Bronx	Southeast Bronx	3.57
Bronx	West Bronx	7.09

10. Suggestion to improve policy on acquiring emergency generators

Con Edison conducts an annual engineering assessment of system reliability requirements as part of its summer preparedness program. In 2005, we purchased four, two megawatt units to bring the total number of mobile generator units owned by Con Edison to six. We also leased and staged eight units for summer 2006.

Given the nature and standards of the emergency generator industry in this nation, mobile generator units are designed to move around from place to place and run on a fairly continual basis (unlike stationary back-up generators).

Con Edison has a long-established process for acquiring additional mobile generators for emergency purposes on an as-needed basis. This process includes an updated list of mobile generator vendors, sourcing to identify immediate availability, and established purchase orders to lease equipment. An added strategic element to minimize response time for events provides for some vendor-owned generators to be stored on Con Edison property.

In the LIC network outage, Con Edison mobilized the Corporate Emergency Response Center (CERC). The CERC incident command structure included, but was not limited to, 1) an electric operations' distribution engineering group which provided real time and projected needs for emergency generation (and determined generator types and priorities), 2) a logistics unit which had a group of employees primarily dedicated to expedite generator acquisition and delivery, operation, and maintenance, and 3) an energy services group which provided customer communications and coordination regarding connection and/or disconnection of emergency generators.

Con Edison is committed to continuous improvement and is currently evaluating possible enhancements to the current processes including leasing strategies and internal communications.

11. Please provide a summary of customer reimbursement claims received to date and their status.

Here is a brief overview of the status of Queens outage claims received to date:

Claims Received (via Fax, US Mail, and e-mail) as of 8/10/06 - 3pm:

Residential	22,814
Commercial	722
Total	23,536

Claims Processed for Payment as of 8/10/06 - 3pm:

	Residential	Commercial
Processed	16,202	478

Reimbursements Mailed to Customers:

To date, we have mailed 14,795 reimbursement checks totaling \$4,500,232.93 (14,530 residential - \$3,374,245.77; 265 commercial - \$1,125,987.16).

12. How much has Con Edison spent, by borough, on replacing cables? How much cable has been replaced?

Please see attached chart.

