Stray Voltage Progress

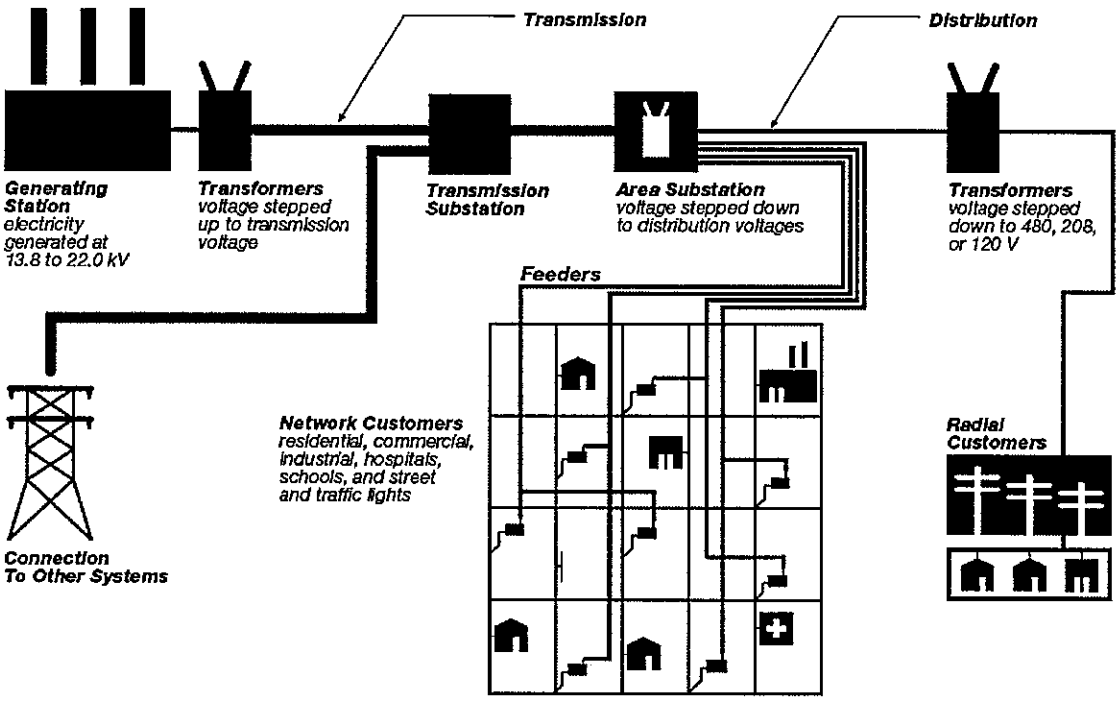
New York City Council
Transportation Committee
January 24, 2008

conEdison

Topics

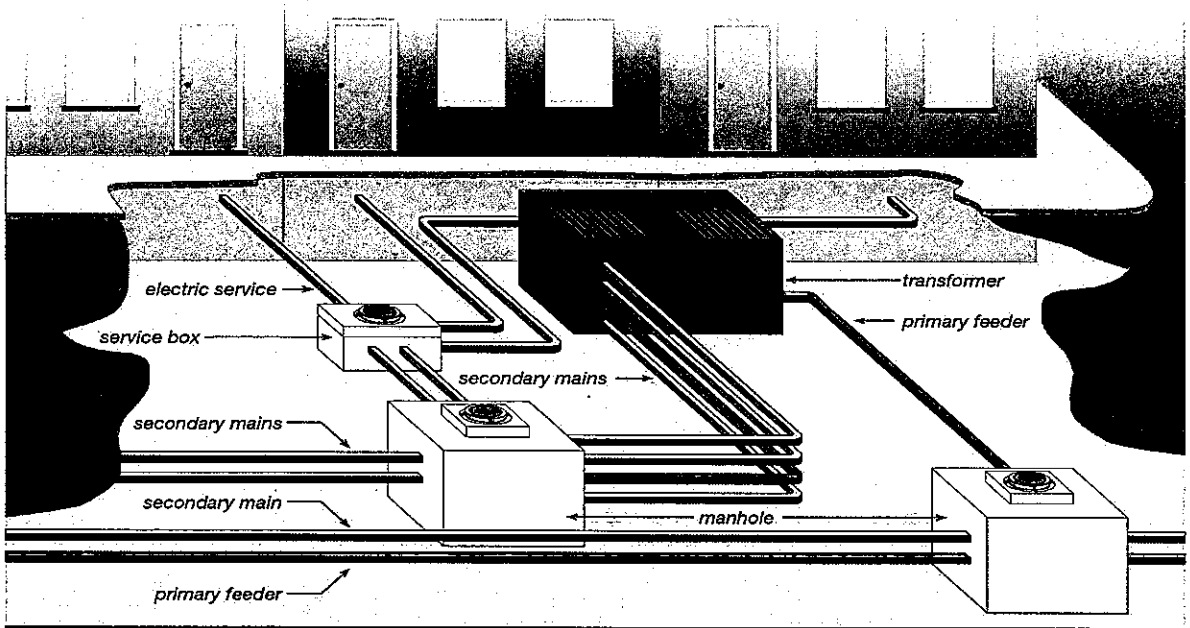
- Overview
- Results
- Actions
- Going Forward

Overview – The Electrical System



conEdison

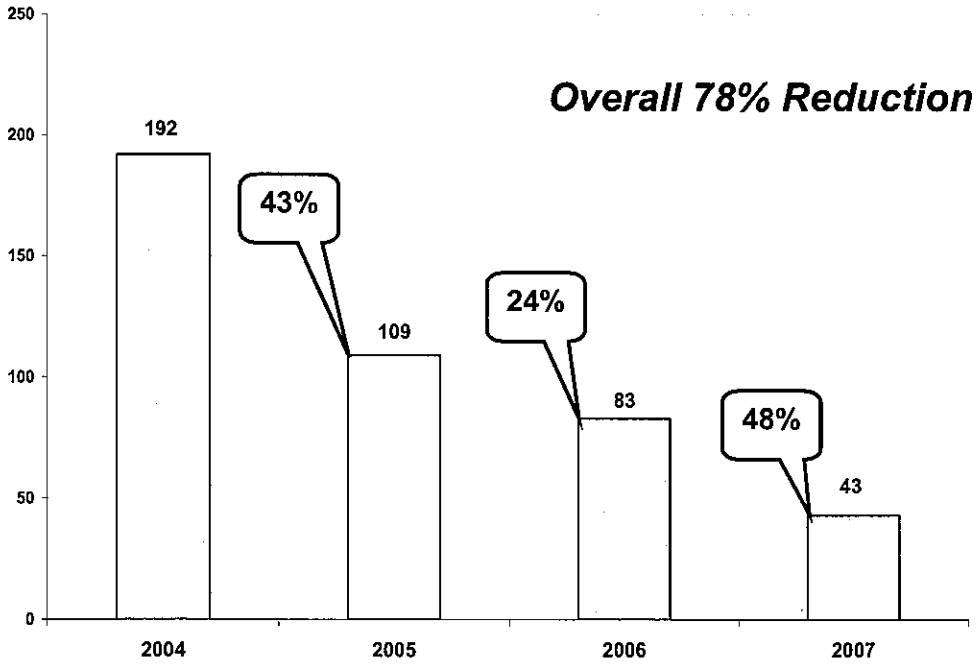
Street Cut-away



conEdison

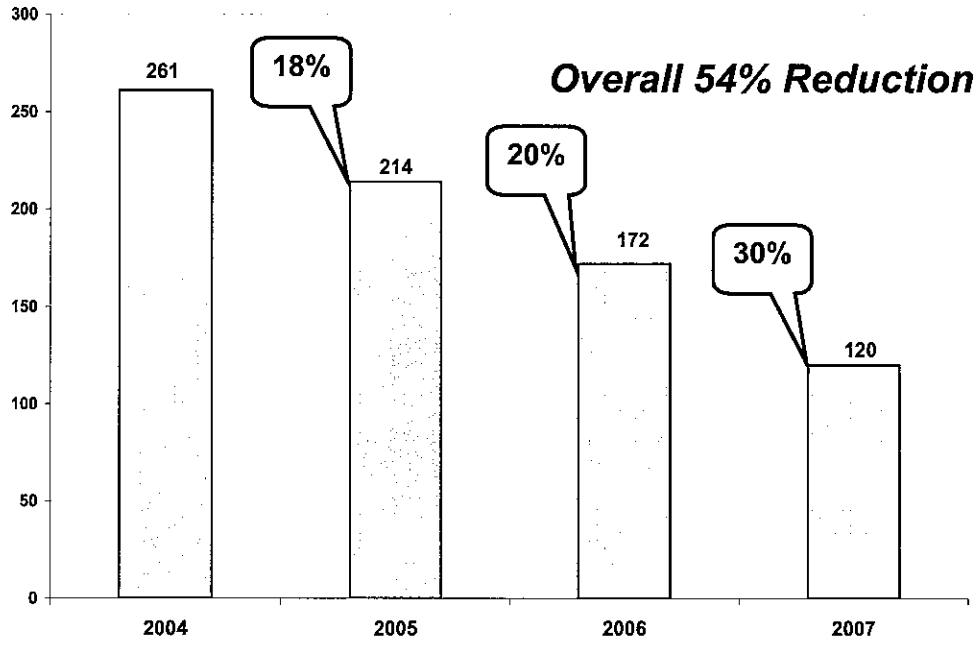
Street View

NYC Shocks from Con Ed Facilities



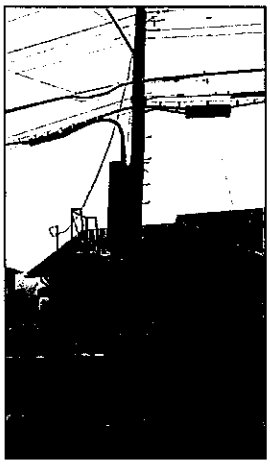
Overall 78% Reduction

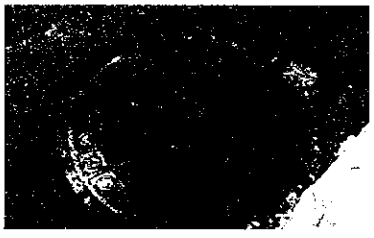
All NYC Shocks



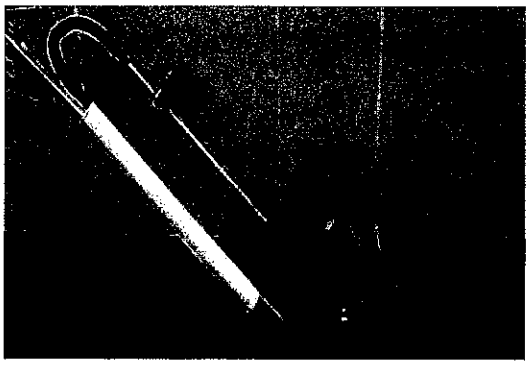
Manual Stray Voltage Testing

- 730,000 structures, poles and streetlights tested annually
- Over 4 Million stray voltage tests to date





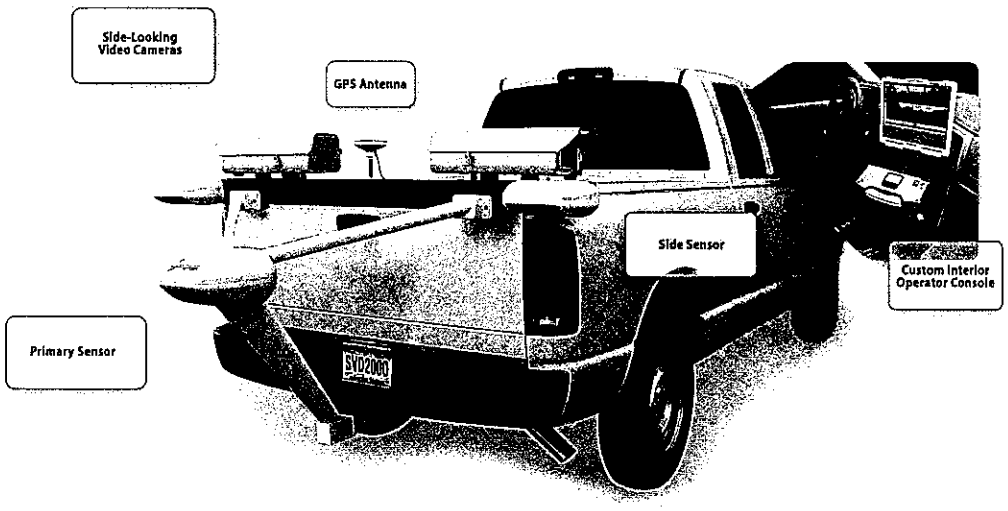
Stray Voltage Testing Evolution



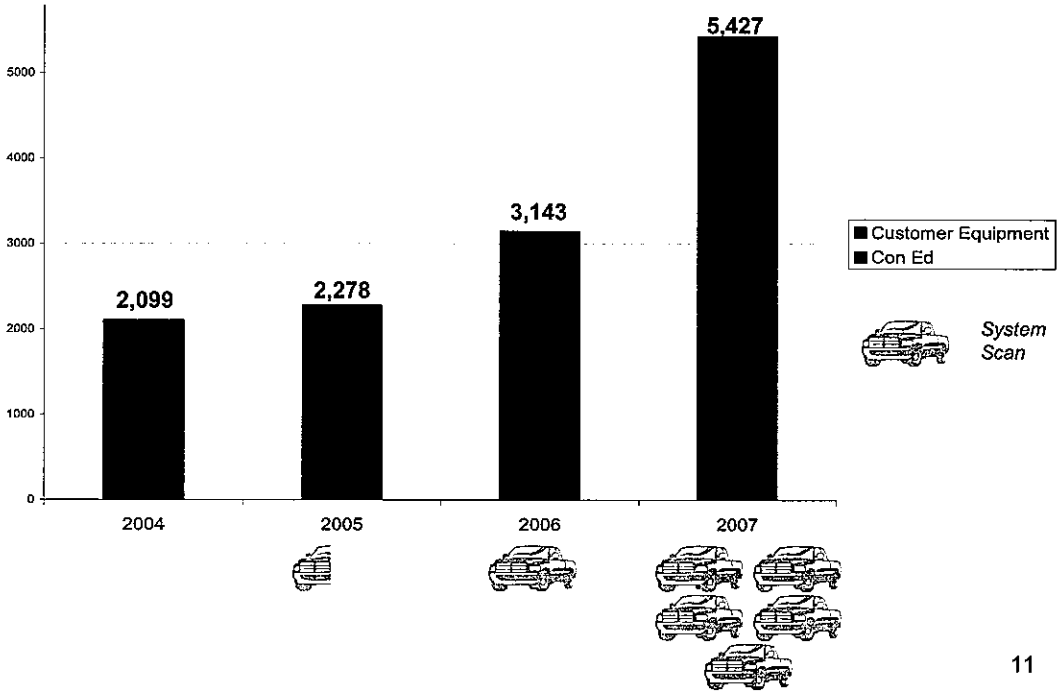
Push Cart Sensor

Trailer Mounted Sensor

Mobile Stray Voltage Testing

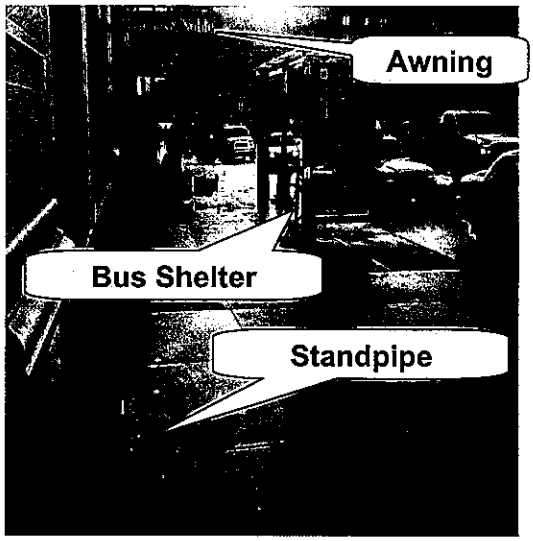


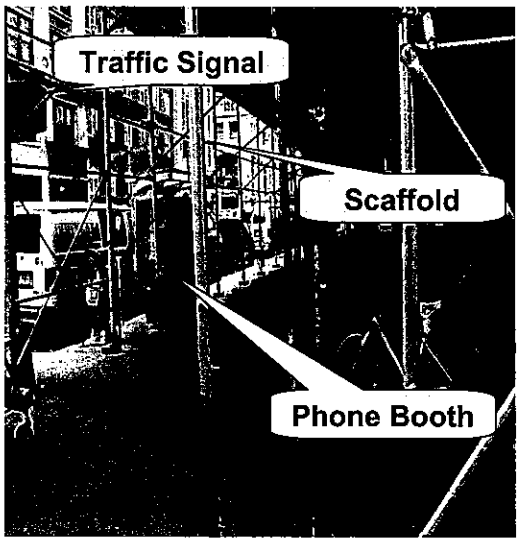
Stray Voltage Found/Repaired



conEdison

Public Safety Benefit





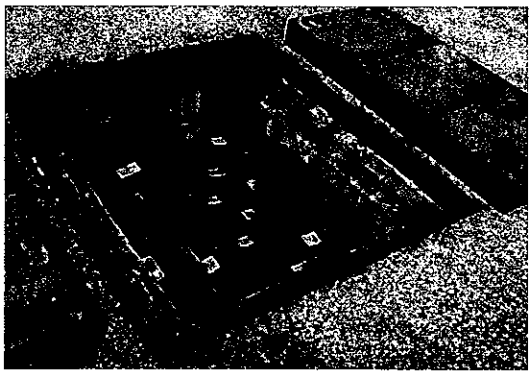
conEdison

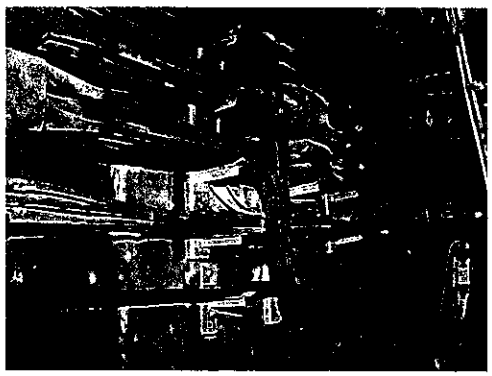
Collaboration with City Agencies

- Department of Transportation
  - Insulation Paint
  - Improved Electrical Connectors
  - Low voltage sensors
- Department of Buildings
  - Code Compliance

Inspection Program

- Inspect each facility every 5 years
- 235,000 inspections completed

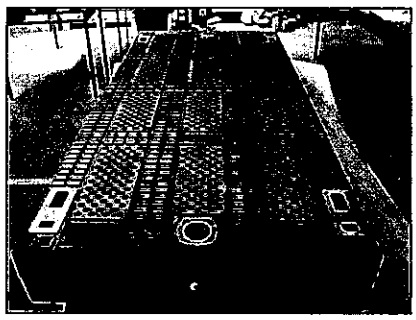




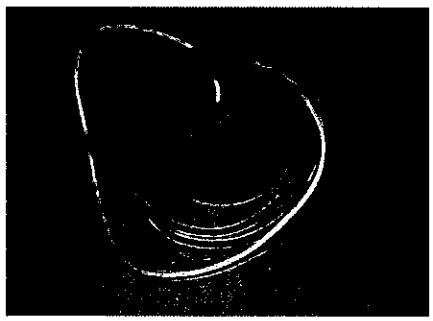
Going Forward

- Implement advances in design and technology
- Significant infrastructure investment
- Continue to improve public safety

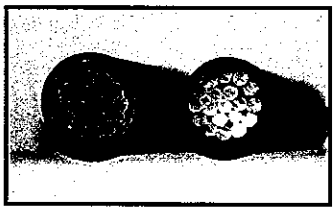
Going Forward



Composite Cover



Isolation Transformer



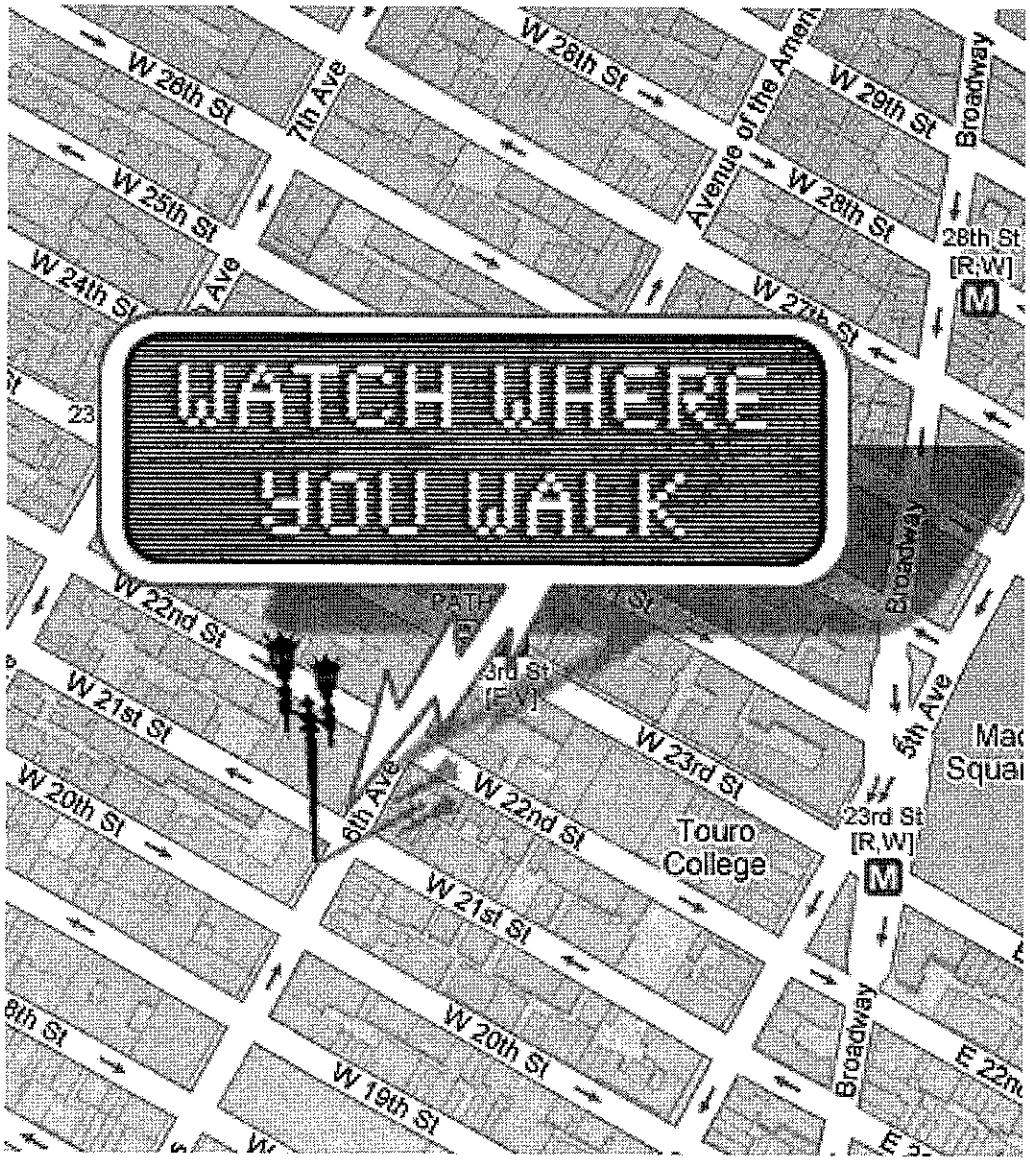
Dual jacketed cable

Stray Voltage Progress

New York City Council
Transportation Committee
January 24, 2008

conEdison

infraShock.com



Find the city's hot spots *before they find you!*

Are you aware of stray electrical voltage?

Pedestrians, distance yourself from street and traffic lamps and make it a routine to avoid metal grates and manholes when possible. All of them have the potential to be energized year-round. Wintry moisture and accumulated rock salt will heighten the risk, as will precipitation and flooding conditions. Reduce the chance of injury by being focused and alert on your stroll.

Dog walkers, utilizing a non-metal leash is a safer option. If your dog is resistant to an area it may be energized, so choose an alternative route and notify conEd* if you are suspicious (*800-75-CON ED). You can help reduce this year-round electrical hazard.

Putting the city's hot spots on the map!

Visit infrashock.com and learn about stray voltage and reports of electrical shock in New York and elsewhere. See it on the map – where you live, where you walk.

---

infraShock.com

or just remember *watchwhereyouwalk.com*

FOR THE RECORD

Testimony Before Committee on Transportation
Oversight - Con Edison and City's to Reign in Stray Voltage

Chairman Liu and City Counsel Members, I would like to start by saying thank you for your continuous effort and support to make the City of New York a safer place. As you know by now I blew the whistle on Con Edison years ago, when I worked for the company, on safety and discrimination issues. I am on record in City Hall and have testified several times on the issues related to stray voltage, the steam explosion and discrimination in Con Edison. I have made it clear that Con Edison is a corrupt and racist company that only worries about stock holders, profits and disregards safety above all other things. We as citizens in New York City, are basically collateral damage to Con Edison. But thanks through the hard efforts of City Counsel Members, Con Edison is now having to respond constantly for their gross negligence. I am not here to say anything you have not heard before. I am not a psychic and cannot predict the future, but 4 years ago in this very room, I testified there would be more electrocutions, major outages and problems with the whole electrical infrastructure including the steam system. People started listening to me but it was a little too late. I worked in Con Edison from the year 2000 to December 2003, where I encountered constant discrimination, retaliation and harassment, for bringing up safety and discrimination charges. I witnessed exposed frayed, corroded and sparking wires in many manholes and service boxes. I also witnessed problems with the steam system such as in late 2001, I was assigned to a cryogenic cable freeze performed at 41st Street and Lexington Avenue. The project lasted for approximately 3 weeks and I was on the job sight from the beginning till the end.

During the project I observed profusing venting steam from the steam pipe that was located at that intersection. After I reported the condition to my Supervisor, the Con Edison Steam Department came to the job sight but did nothing more than to perform a visual inspection and place a venting chimney on top of the leak. I also called Ombudsman Pat Boland and Mike Bagwell about the situation, as they had the authority to have the problem investigated more thoroughly. Pat Boland, however told me to stop being a trouble maker. A month after the job was finished, I was in the area and observed that the venting chimney was still there, therefore nothing had really been done to fix the problem I originally reported. The list goes on

and on. I could only hope that nothing but good comes out of these meetings. I have over and over for years stated that Con Edison's infrastructure was falling apart and we would have major problems and that there would be loss of life. I am not happy that these things have happened, but it goes to show I was telling the truth all along and chose to be a man of conviction.

Thank you for your time.

Ariel Antonmarchi

Ariel Antonmarchi 01-24-2008

DAVID WOLOCH
DEPUTY COMMISSIONER
NEW YORK CITY DEPARTMENT OF TRANSPORTATION

HEARING BEFORE THE CITY COUNCIL
COMMITTEE ON TRANSPORTATION
JANUARY 24, 2008

Good morning, Chairman Liu and Members of the Transportation Committee, I am David Woloch, Deputy Commissioner for External Affairs at the New York City Department of Transportation (DOT) and with me here today is Steven Galgano, DOT's Executive Director of Engineering. Thank you for inviting us here today to testify at this oversight hearing on stray voltage. I commend Chairman Liu and this Committee for continuing to focus on the safety of the City's electrical infrastructure --- and we welcome the opportunity to be here once again to discuss this issue.

Ensuring the safety of those traveling on the City's streets and sidewalks certainly continues to be a top priority for DOT. As you know, we worked collaboratively with this Committee four years ago to pass Local Law 44 of 2004. This law requires all local electric corporations to establish and implement written guidelines and procedures for the annual inspection and repair of each category of their electrical-related infrastructure. The law also went a step further by requiring DOT to conduct 250 annual random tests of local electric corporation's electrical-related infrastructure for the purposes of detecting stray voltage.

DOT recently submitted its third required annual report under Local Law 44 to the Public Service Commission (PSC) and Con Edison, and we shared this report with the Council as well. As noted in the report, in 2007, DOT's Electrical Inspections Unit surveyed 260 random Con Edison locations Citywide for stray voltage. These locations included all types of electrical related infrastructure, including manholes, metal conduit risers and cable guards. Sidewalk locations were also tested where Con Edison has service distribution boxes. Stray voltage was, in fact, detected at one location in the Bronx. This location was immediately reported to Con Edison and subsequent reinspection of the location indicated no stray voltage.

In addition to the random inspections we conducted, the PSC has required Con Edison to annually inspect our 172,000 metal street light poles and its own entire infrastructure. We have worked cooperatively with Con Ed on ensuring that these inspections are done and any problems identified and rectified. Additionally, as we testified to in 2006, DOT has also incorporated the testing for stray voltage into its own standard operating procedures. When DOT personnel or one of our contractors is out in the field responding to a streetlight and/or traffic signal issue – no matter what the reason – they are required to test for stray voltage. The end result is that we now conduct an additional 100,000 stray voltage tests each year.

I would also like to update the Council on our Citywide painting program. As you may recall, we initiated a Citywide painting program to paint all of DOT's metal streetlight poles to a height of 7 feet with a non-conductive paint. This paint is further serving to enhance the integrity of the City's infrastructure and it insulates the poles for up to 20 volts. At a cost of approximately $15 million, this program began in November 2006 and is substantially completed – approximately 5,000 poles (4%) are remaining and will be painted by this spring. As part of this effort, we have also installed approximately 27,000 hinged doors on signal and streetlight bases Citywide. These hinged doors remain attached to the base of the pole and since the hinge is on the top, they remain closed reducing the instances of exposed wiring.

As I mentioned in our 2006 testimony, DOT is also moving forward on utilizing technology in an innovative way to aid us in detecting the presence of stray voltage on our street light poles. Under a two phase Citywide energy efficiency program we have begun replacing 69,000 cobra head fixtures in Queens and Brooklyn. This program began in May 2007 and, to date, we have replaced approximately 13,000 cobra heads. Under phase II which will begin this summer, we will be replacing 80,000 cobra heads in the rest of the City with an estimated completion date of December 2009.

In addition to being more energy efficient, an added feature of these new fixtures is a device which can monitor the internal wiring of the pole and will alert us, via an LED light to the potential presence of stray voltage on the pole. In addition to the cobra head replacement contract, in order to expedite the replacement of cobra heads City-wide, we have also added a requirement in our maintenance contract that specifies that our contractors replace the cobra heads with the new fixtures as part of general maintenance. In addition, as part of this standard maintenance contract, our contractors are required to pass every street light every 10 days – which they do from their vehicles. The presence of the LED light alerts them to the potential presence of stray voltage – which they can then physically test the pole for.

Lastly, we continue to work with Con Edison in the development of other technologies to prevent and detect stray voltage. Earlier this month DOT staff and our maintenance contractors attended a Con Edison sponsored safety workshop to review the latest technology and procedures. For example, we are working collaboratively on isolation transformers that protect the public from stray voltage; and new connectors that allow work in the base of the poles without opening splices or cutting the insulation of wires which are some of the sources of stray voltage.

As you can see, DOT remains committed to ensuring the safety of the public as they navigate the City's streets and sidewalks. Thank you for this opportunity to testify before you today and at this time we would be happy to answer any questions that you may have.