CITY COUNCIL
CITY OF NEW YORK

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TRANSCRIPT OF THE MINUTES

of the

COMMITTEES ON LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND TECHNOLOGY

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January 18, 2013 Start: 1:11 p.m. Recess: 5:30 p.m.

HELD AT:

Council Chambers

City Hall

B E F O R E:

DANIEL R. GARODNICK FERNANDO CABRERA MARGARET CHIN Chairperson

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Andy King Rosie Mendez

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Charles Barron Michael C. Nelson Julissa Ferreras Stephen Levin

A P P E A R A N C E S (CONTINUED)

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A P P E A R A N C E S (CONTINUED)

Robert Stahl Senior Business Agent Local 1-2

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CHAIRPERSON GARODNICK: Good

afternoon and welcome to this joint hearing of the Consumer Affairs, Technology, and Lower Manhattan Redevelopment Committees of the New York City Council. Today is Friday, January 18th, my name is Dan Garodnick and I have the privilege of joining—of chairing the Consumer Affairs Committee, and I'm joined by Chairs Cabrera of the Technology Committee and Chair Chin of the Lower Manhattan Redevelopment Committee, as well as Council Member Koppell, Council Member Brewer, Council Member Comrie, Council Member King, our newest colleague, Council Member Mendez, Council Member Crowley, and Council Member James, Council Member Crowley, and Council Member James, Council Member Weprin. Did I miss anybody?

Okay. Today's hearing is the third in a series of hearings that the Council will hold on emergency planning and management during and after Hurricane Sandy. We will focus today on public utilities, like Con Edison and the Long Island Power Authority, or LIPA, National Grid, and telecommunications companies to explore how Hurricane Sandy impacted services and what steps these companies have taken in Sandy's aftermath to

Weather forecasts for Hurricane Sandy promised a massive storm with high winds, 10-foot high storm surge, extensive flooding, torrential rains, and widespread power outages. Sandy lived up to those expectations and then some.

In advance of the storm, Con Ed began preemptive power cuts to some of Zone A communities, reportedly to minimize flood damage to its equipment and to allow power to be restored more quickly after the storm. While Con Ed preemptively cut power to two Lower Manhattan networks in Zone A and another in Brighton Beach in Brooklyn, it continued to supply power to networks serving other Zone A communities. We will be asking Con Ed today to explain the basis for its preemptive cuts as well as their success and their thinking regarding the preemptive cuts in some, but not all, of the Zone A communities.

In addition to Con Ed's preemptive power cuts, the failure at the 13th Street Con Edison substation in Manhattan--the one that

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south of 39th Street to the tip of Manhattan. will say that I saw the flash myself and, while I did not know precisely what it was at the time, I knew it was not a good sign. The light in the buildings all around me started going out one at a

exploded--knocked out power to 250,000 customers

time shortly thereafter. By the morning after the storm, there were reports of more than 750,000 New

Yorkers without power.

Of course, not all power outages were due to flooding and Con Ed's preemptive cuts. Throughout the city, high winds and downed trees toppled above-ground power lines causing widespread power outages. By the middle of November, the City had received more than 15,000 reports of down trees.

During Wednesday's Public Safety hearing on Hurricane Sandy, the administration clarified that tree removal from power lines and streets is given priority over private property, however, the City was vague about which entity, the Department of Parks or Con Edison, is actually responsible for removing downed trees from streets, homes, and power lines in order to begin

power line repairs. Today, the committees will

want clarification on that question as well.

Affairs Committee.

We will also hear a bill related to underground power lines. Intro 985 would require the Mayor's Office of Long-Term Planning and Sustainability to conduct a study to assess the utilization of underground power lines in the city and to determine locations where it would be advantageous to move above-ground lines below ground. The mayor's office has submitted written testimony which is generally supportive of this study with a request that it be narrowed and we will enter that into the record. It is dated January 18th, 2013, and it is signed by the director of Long-Term Planning and Sustainability, addressed to me as the chair of the Consumer

Yorkers were not just frustrated with having to live in homes that lacked heat, hot water, and electricity for many days, and in some cases, weeks, but also because Con Ed provided little substantive information regarding when service

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would be restored to a particular area.

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example, although Con Ed has an outage map that indicates an approximate location rather than the specific address of an outage, many outages did not actually make it onto this map during and after Sandy, including, by way of just example, the 110 residential buildings of Peter Cooper Village in Stuyvesant Town on the east side of Manhattan in which more than 25,000 of my

constituents live. That many power outages all across New York City were not indicated on the outage map suggested to already-frustrated New Yorkers, accurately or not, that Con Ed was

unaware that their homes did not have power.

The committees will explore changes

Con Ed and LIPA have made to their emergency

management plans to better communicate with their

customers, including small businesses and even

with telecommunications and cable companies during

and after a storm. We expect the Utility Workers

union to testify that Con Edison's inventories for

spare parts was insufficiently stocked in advance

of the storm and that its failure to properly

prepare for Sandy led to power restoration delays.

We will certainly have questions for Con Ed

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regarding its inventory of supplies, such as cables and poles, as well as the qualifications of the visiting workers from around the United States and Canada that reported to our area to help with repairs. We will have similar questions for LIPA and National Grid regarding an update on repairs

to power lines in the Rockaways.

We will also have procedural questions regarding how the power companies communicate with electricians regarding the necessary electrical inspections that must be conducted before power can be restored to a home. Sandy had devastating and lasting impacts on many homes and businesses in New York City, and in particular on Staten Island, Lower Manhattan, Coney Island, other parts of Brooklyn and the Rockaways. The New York City Department of Buildings red or yellow tagged many properties in these communities, indicating repairs were necessary before it was safe for a home's occupant to return. The committees want a better understanding of how private electricians communicate to power companies that it is safe to restore power to a property.

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Lastly, we would like an accounting of the circumstances under which Con Ed would reimburse customers for losses and damages. Con Ed posted on its website that, due to the severity of impacts of Hurricane Sandy, it was not responsible for "property damage or other losses" that consumers suffered due to power losses, even when Con Ed made the cuts preemptively.

Now as to the telecommunications companies, New Yorkers also endured cell phone and landline service interruptions during and after Hurricane Sandy. Flooding caused extensive damage to many underground cables and, just as with the electrical systems, workers could not enter some buildings immediately to assess damage and begin necessary repairs until water was pumped out of the basements and equipment dried. Complicating earlier service restoration for landline customers was the extensive damage to copper lines. Verizon, for example, has opted to replace damaged copper lines with fiber optic cable. It is not clear if installing fiber optic cable is more time consuming than making the necessary repairs to existing copper cable, we will explore that with

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them, and reportedly some owners have denied telephone companies access to their buildings--further delaying repairs.

Many cell phone users also experience service interruptions because cell towers require a power source and not all cell towers have backup power supplies. This was one of the biggest surprises to many New Yorkers who realized that their cell phones were no longer working in the aftermath of Sandy and many asked, it's 2012, 2013, how is it possible cell phone service is fundamental here and we should always have some backup source for the cell towers. For many New Yorkers, no power and no cell phone service meant that there was no way to implement their family's own emergency plans.

So we are going to explore all of these issues today at this hearing. I am going to turn in a moment to the chairs of both the Lower Manhattan Committee and also the Technology Committee, but before I do, I want to give a shout out to the lowly pay phone, whose days may be numbered in New York City. Long queues could actually be seen at public pay phones in the

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immediate aftermath of Sandy, extremely useful in an emergency and we need to keep that in mind as we plan for their future.

So I want to thank everyone who will be testifying today and for your presence at today's hearing. And before we go to our witnesses, and we're going to start with Con Ed today, let me first turn the microphone over to Council Member Margaret Chin, the chair of the Lower Manhattan Redevelopment Committee, and then we will hear from Council Member Cabrera, who is the chair of the Technology Committee. Council Member Chin.

CHAIRPERSON CHIN: Thank you,
Chair. Good afternoon, I am Margaret Chin, Chair
of the Committee on Lower Manhattan Redevelopment
and the City Council representative for District

1, Lower Manhattan. I'd like to thank my
colleagues, Council Member Garodnick, Chair of the
Consumer Affairs Committee, and Council Member
Cabrera, Chair of the Technology Committee, for
jointly hosting this hearing on emergency planning
and management during and after the storm. I
would also like to welcome the newest member of

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the City Council and a new addition to the Lower
Manhattan Redevelopment Committee, Council Member
King.

Hurricane Sandy affected my entire district of Lower Manhattan, from residents who had to climb up and down 30 flights of stairs to get to their apartments and for a whole week in the village, to residents in Knickerbocker Village in the Lower East Side, who made due without heat or electricity for even longer, to those of my constituents who are still without essential services in the financial district and the seaport. We are still struggling to return to normal life down here in Lower Manhattan.

A large part of recovery work that remains is dependent on the restoration of essential utilities. We need electricity to pump out water, remove damaged floorings and walls, remediate mold, and to move mechanical instrument to higher, less vulnerable parts of the building. Many are using temporary generators to power repairs in buildings that are still unable to receive power from electrical grid. Buildings also need working electrical and

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telecommunications system before FDNY will approve building for re-occupancy.

Residents, businesses, and nonprofits are still struggling to function without Internets or landline. Those that were lucky enough to get temporary service have complained to us that the temporary Internet boxes provided are not enough for multiple people to use the Internet and that they spend an enormous amount of time now just trying to get online.

Because of the high cost of initial installation of utility infrastructure, utility company often get to operate with a quasi-monopoly in their service areas. Because of this, I believe they have a higher level of responsibility to the public they serve to address service problem and be as perfect as possible in their response to emergencies. We as government must also hold the companies to a higher standards in these situations.

I am eager today to begin delving into what we as a city and what utility companies can do at the policy and infrastructure level to prevent such protracted utility outage in the

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 15 TECHNOLOGY 2 future, including developing smart grid that isn't vulnerable to damage at weak points and looking at 3 burying utility lines where they are not already 4 5 buried. I also would like to look at how б 7 temporary services can be better provided in the 8 future, perhaps including temporary charging 9 station and the provision of a higher quality of wireless service. 10 11 I also hope that we can examine 12 some of the impacts that have come along with some 13 of the infrastructural change planned, for 14 example, switching from copper to fiber optics, 15 burying utility wire, and moving mechanicals to 16 higher floors. 17 And I would like to examine what 18 utility companies are doing now to help their 19 customers, including providing temporary services, 20 keeping customers informed with regular status 21 updates, offering rebates for service outage to 22 contract holders, and allowing customers to leave 23 contracts without penalty if services are no

longer being provided or are changing.

Thank you to all of you who have

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1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 16 TECHNOLOGY 2 come to testify today and I look forward to having a productive conversation on all these issues. 3 4 Thank you. 5 CHAIRPERSON GARODNICK: Thank you very much, Council Member Chin. Now before we 6 7 turn to Chair Cabrera, I just want to recognize that we have been joined by Council Members 9 Domenic Recchia and Charles Barron. Chair 10 Cabrera. 11 CHAIRPERSON CABRERA: Thank you so 12 much to both the co-chairs. Good afternoon and 13 welcome to this joint oversight hearing that 14 concerns assessing and improving public utility 15 risk mitigation measures in light of Hurricane 16 Sandy. 17 The day after Hurricane Sandy devastated New York City, nearly 2 million 18 19 residents had lost power. In the days after the 20 storm, many New Yorkers who were without power had 21 trouble getting basic information from utility 22 companies, such as when service crews will be 23 dispatched to their area. Service was not

restored to many areas for several days and in

other areas it took weeks. Some residents are

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In addition to electricity, the storm resulted in widespread landlines and wireless communication disruptions throughout New York City. The Tuesday following the storm, as much as 25% of cell phone towers in the stormaffected areas remained out of service. Six days after the storm, many customers in the hardest hit areas were still without cell service. And I personally know, be in the Rockaways helping my fellow Council Member James trying to make phone calls to people to help us out, it seemed almost impossible to just get even a minute of a phone call out, it was very frustrating to say the least.

With respect to landline, service disruption had continued for many customers, especially those in Lower Manhattan, for months afterwards.

reports that Con Edison, LIPA, and Cablevision continued to bill customers who suffered outages as a result of the storm for services that they were no longer receiving. Although some companies

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2	have waived charges and fee for customers who
3	suffered outages, other companies have require
4	customers to notify them before receiving such a
5	waiver.
6	The committees look forward to
7	hearing from utility companies and others about
8	what steps they took before the storm and how
9	effectively they have managed the restoration of
LO	these services. Thank you so much.
11	CHAIRPERSON GARODNICK: Thank you,
L2	Chair Cabrera. And now we're going to get right
L3	into it, and we'd like to welcome John Miksad from
L4	Con Edison and anybody else who is here to testify
15	on their behalf. Mr. Miksad, welcome. As soon as
L6	you are settled, just go ahead and introduce
L7	yourself and you can begin. And the Sergeant may
18	give you a hand here turning on the microphone.
L9	Let me note that we have been
20	joined by Council Member Mike Nelson.
21	[Pause]
22	CHAIRPERSON GARODNICK: Welcome.
23	JOHN MIKSAD: Okay. Thank you,
24	Chairperson Garodnick, Chairperson Cabrera, as
25	well as Chairperson Chin, for having this

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important session today. This is something that
we've been saying ever since Sandy hit, that we
need to have a public conversation about the
lessons learned in the wake of Sandy. It
certainly has changed, I think, all of our
thinking and planning around the weather and the
events that can occur in this area as a result of
the unprecedented nature of that storm.

I would just also like to take a moment to acknowledge and recognize the 13,000 men and women of Con Edison who did a really heroic job in the restoration of 1.1 million customers in the wake of Hurricane Sandy, despite the fact that, as residents of New York City and the area, they themselves were—lost property, lost homes, and in many cases left homes in the dark themselves in order to restore our customers.

We took the liberty of putting together a presentation and I think the presentation will answer some of the questions you talked about in your opening remarks, not all of them, but I did jot them down, so I'll look to answer those questions that you highlighted in your opening, and, obviously, any others that you

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2 have for me today.

So I'll just run through this quickly and sort of bring you up to speed on where we've been and where we're heading in the aftermath of the storm.

Just to, sort of, I've said that already. So I just wanted to take you back for a second. This was not the first severe weather we've had, obviously, 1992 was the highest tides that I've experienced in my 32-year career at Con Edison. And we did take action, raised equipment, changed specifications, changed the designs of the system, both for our own equipment, as well as customer's equipment that we connect to. We also learned, not only from events in our service territory, but we were down helping our friends in Entergy in New Orleans when Katrina hit them and we learned a number of lessons from them as well.

With regard to the overhead system, since 2006, we've changed our standards, we have a very aggressive tree trimming program right now, one of the most aggressive in the country, to increase the clearances around the overhead system. That is fine, it helps, it has helped for

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limbs coming down or limb contact, but when trees are uprooted completely or broken in half, like was the--what happened in Sandy, there's no line clearance program that can prevent those kind of events when tons of trees are coming down on your lines. We also do inspections of our lines monthly and semi-annually.

We've modernized the system, someone alluded to smart grid, we've got probably one of the smartest grids in the country with more telemetered points than anyone else, any other utility around.

We'll bring up to the few days
before Hurricane Sandy hit. We were tracking the
storm very early, as early as October 22nd, and if
you remember, the forecast pretty much called for
the typical of run out to sea until the 24th,
where some forecast, including the National
Weather Service and the National Hurricane Center,
forecasted that left turn into New Jersey, which
left us in the northeast quadrant of a storm,
which are the most severe winds. So we reviewed
our plans and mobilized our staff, looked at
inventories to make sure we had enough material

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and equipment, we moved equipment to higher ground in a number of locations. We looked and sandbagged a number of locations, as well as using water dams in both in the field and in substations, and started the mutual assistance process, which is critical for our industry

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restoration effort that's required in the wake of a Hurricane Sandy. And that has served us well in

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the past, but certainly Sandy has shown some

because no utility can staff for the kind of

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vulnerabilities there, which I'll talk about.

We deployed the thousands of Con Ed

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workers, as well as communicated to our customers

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of the impending storm. We did that through blast

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e-mails, press releases, and Web updates. Called

17 18 all of our life-sustaining equipment customers, as

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well as critical care customers and told them of a

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potential outages, as well as offered guidance on

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We established our Corporate

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Emergency Response Center, which is the

what to do about it.

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organization that really brings all the resources

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of Con Edison to bear on any major event that we

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experience, and we've used that successfully ever

2 since 9/11 and it has served us well.

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We are dealing in our situation with high voltage, high temperatures, high pressures in our systems and we wanted to make sure first and foremost that we kept the public safe. I think we did a good job with that. preemptively shut down steam service to about 30 miles of steam pipe, realizing that East River water and hot steam under pressure is a bad combination so we preemptively shut down parts of that system. And as you mentioned, we preemptively shut down three networks, two in Lower Manhattan and one in Brooklyn when the water started entering the equipment in customer basements, and as well as our structures that were not submersible, and then we secured the gas system to make sure it was also safe.

Mutual assistance, as I mentioned, is a critical component. We needed ultimately 5,700 employees from around the country as far out as California--first time ever we've gone to California for help. And the reason for that was the wingspan of this storm was so wide, it affected 21 states, 8.5 million customers

throughout the country. And I'll just give you a

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sense of what the storm--this says that 800-mile wingspan, peak wind gusts of 90 miles an hour, and

5 the thing that really took, I think, everyone by

6 surprise, and you mentioned the 10 foot 7 foot

7 | forecasts for the storm tide, and we hit a record

8 by far, 14 feet at the Battery, and that

9 overwhelmed the flood protection that we had at

10 the 13th Street substation, as well as some other

11 locations. This is a picture of the FDR Drive,

which looks more like a river than a highway and

this is, you know, I think just an example, as you

know, of many of the scenes we saw throughout our

15 city.

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As far as the impact to Con Edison in addition to, obviously, the loss of life that Sandy incurred as well as property damage in homes that were destroyed, I did want to touch on the 13th Street, what actually happened there. You mentioned the flash, that certainly was one event that occurred there, but it was not the event that took that substation down. What took the substation down was actually the water that entered into the control panels and saturated with

saltwater, the controls systems and the wiring and

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those controls then short-circuited and took the

4 substation out. And there was some question as to

5 whether a preemptive shutdown of the station would

6 have reduced the restoration time of the

7 customers, the 250,000 customers that you alluded

8 to, Chairperson, on the--if we preemptively shut

9 down, would that have shortened the restoration

10 and the answer to that is no. The process was

11 pumping out, cleaning, drying, repairing the

12 existing equipment, there was no collateral damage

that resulted, we would have had to do those

efforts regardless of whether we shut down the

15 station or not.

This is a picture of the area that you described in Manhattan that was out. The pink is the area associated with the 13th Street substation failure, the yellow is the two networks that we preemptively shut down because they're in the lowest lying areas that were most affected by the floodwaters as they pushed over the bulkhead in Lower Manhattan. And as you also mentioned, Brighton Beach serving Coney Island, was also preemptively shut down for the same reasons.

The overhead system was the other part of the story, not affected by floods, but affected by wind, and those 90 mile an hour gusts took out what--when it all was said and done, 70% of our customers were in the dark as a result of damage to that system. And the failure mechanism was exactly what you see up here, trees taking down wires taking down poles, and we had thousands of trees down that resulted in damage and required an immense amount of work, five times more than we've ever experienced before. And it was just a year prior, during Hurricane Irene, where we had experienced a record storm, and this one exceeded Irene by five times in every category.

And you also mentioned clearing roads and certainly coordinating that work with the City is a challenge. We thought we did a better job, but I assume from your remarks that we need to do even better there.

From a restoration effort, you can see that the restoration effort was--it's difficult in any aftermath of any storm with wires down, trees down, but this added floodwater, standing water in a number of places which,

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obviously, we want to make sure that the safety of our crews were also protected and we did a very good job of that.

And I just wanted to give you a sense of the restoration effort. You can see the almost 800,000 customers that were interrupted in the city and this shows the progress--the march toward that restoration to full restoration and you can see that on the 30th we had some just under 100,000 customers restored, and by the 2nd, we had 50% of customers restored, and then stepped up to 80%, and that last leg of the restoration is always the hardest and longest 'cause the big restorations have been done and now we're hand-tohand combat, door-to-door, customer-by customer to get them restored. I will say this shows full restoration on the 11th, and what we mean by that is that this does exclude those hard-hit areas of Staten Island, Brooklyn, and Queens that where the homes and businesses just could not be restored until after they were certified safe by an electrician. So there were 30,000 of those customers that we excluded from this count.

We coordinated with all the

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agencies, OEM was terrific, very helpful to us in every way, the federal government helped in this storm, the state and local agencies. As I mentioned, we focused on public safety and we made sure that the public did not get hurt.

We prioritized the restoration, I do want to talk a little bit about that. As I said, public safety first with downed wires and road closures, we target critical customers-hospitals, nursing homes, and the like--and then we go from, as I alluded to, largest outages first so that we get the most customers restored as quickly as possible and then work our way down to the end, where we're working one customer at a time to get those last customers back. distributed wet and dry ice, some 280 tons of that, which helped, not a great help, but it is somewhat of a help to some of our customers. we set up command buses in those hardest hit areas in Staten Island, Queens, and Brooklyn so that we had folks on the ground that where customers could come to talk to to make sure we help them through that, I'm sure, very confusing and emotional process of trying to rebuild their lives.

This, again, is a typical scene that we saw with multiple trees down pulling down our facilities, as well as the other facilities on the pole.

also alluded to in your opening remarks, obviously, homes destroyed, some will never be reconnected to the grid and it will have to be rebuilt, but for those that are repaired, there's a certification process, as you alluded to. We have people still on the ground out there, which is basically waiting for a certification from an electrician and we will turn that around quickly within 24 hours, in many cases within one shift, eight hours, to re-energize that customer, either whether business or residential property. And that process has been in place ever since the storm and it continues as we speak.

I mentioned the 30,000 customers that were originally in the hardest-hit areas and we have--we're now down to about 900 customers that are still remaining and, as I mentioned, some of those will never be reconnected until they rebuild their homes.

Unprecedented is the word that keeps getting used in this storm, and in mutual assistance, it was no exception. We built five base camps, basically tent cities, around the city and Westchester County to house these crews from around the country. We fed them there, they slept there, we gave them their work there, their safety discussions were there. Equipped them, fueled their vehicles, we did everything there. Woke them up at around 4:30, 5 o'clock, fed them, and then got them out so we maximized daylight for maximum restoration efficiency.

This shows a bucket truck from California being off-loaded a U.S. Air Force transport. First, another one of these first unprecedented things that we experienced, there was so many of them during this storm.

You probably remember, November

7th, we had a setback with a nor'easter that came
through in the midst of our restoration effort.

We were down to about 55,000 customers out at this
point, and I should say I think we were at 70,000
customers out at this point and then another

55,000 were interrupted with the nor'easter came

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through and so it did slow us down and we had to then come back and do additional restoration.

These were the breakdown by borough of the outages in New York City, just to give you a sense of where they occurred.

And as you mentioned, as important as restoration is communication and, although we did a lot of communication, I mentioned the prestorm communication, there was also a lot of communication during the storm: 1.2 million inbound calls from customers, 1.4 million outbound calls to customers. We did the press releases and the press briefings and the daily calls with elected officials and municipalities. Obviously, there's more to be done and we'll certainly talk more about that. We increased the use of social media, again, it's meeting customers where they are and this is how they want to communicate so this is where we're meeting them, and that was used quite extensively during the storm.

I want to talk about just sort of what we're doing now, at least some of the things,

I won't go into all the things because there are

many more than we have time for right now, but we

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are working on 13th Street and the other

3 substations that are in the floodplains and making

4 sure that all of them are protected to at least

5 | the Sandy level, that 14-foot level, if not

6 higher, and we will have all of our steam-

7 generating stations as well as the substations

8 that are in the floodplains protected, albeit some

9 of them with just makeshift barriers, but they

10 | will all be protected to the 14-foot level at

least by this summer. So if Sandy were to happen

in this hurricane season, 13th Street and the

13 customers associated with 13th Street would not be

impacted as a result of a shutdown of the station.

We are benchmarking with other utilities and

16 manufacturers around the country about what

17 | they're doing to make sure we're up-to-date, I

18 think we are, but we want to make sure.

With regard to the preemptive shutdown networks with Brighton Beach in Coney Island, we are installing switches that will allow us to isolate basically a handful of customers, like the aquarium and Kingsborough Community College, those that we know will go under water with a Sandy-like event, that we can isolate just

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 33
TECHNOLOGY

those handful of customers and spare the 28,000 other customers from preemptive shutdown, and that will be in place by this summer. Obviously, if those other customers have water in their basements and affecting their electrical equipment, that, obviously, will take them out also, but I'm just saying that we can isolate to a handful of customers the preemptive shutdown requirement in Brooklyn.

With regard to the two Manhattan networks, we're working on a plan to split those networks and divide them into sort of the coastal region and then the inward—the areas inward from the sea and we'll split that basically in half. So instead of 6,500 customers that will be interrupted, it'll be more like 3,500 customers and significant, important customers will be spared from a preemptive shutdown, including the Downtown—Beekman Hospital, the Federal Reserve, and the New York Stock Exchange, so we think that's an important move. And it's a step, not the be—all, end—all, but it's a step in the right direction. We'll have that done by the end of 2014. And then we are, as I mentioned, there's a

number of other things that we're doing in the

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flood-prone areas to allow it to be submersible.

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On the overhead system, we are

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that we're going to talk about is about perhaps

looking at selective hardening. I know the bill

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burying all overhead lines, and we've looked at

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that in the past, it is very pricey, but we think

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perhaps targeted undergrounding may be something

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that is appropriate. But we're also looking at

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other system designs, with different polls,

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different connectors, different wire that would be

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more storm resilient. There will be outages when

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there is a storm when the wind blows, but we could

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minimize those outages and that will allow faster

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restoration for those customers that are affected.

And then finally, we're reviewing

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all options, nothing is off the table, and we

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really think dialogues like this are critically

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important because there are--these are complex

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issues, many are costly issues, and if, for

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example, the city or state decides to put a

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seawall out in the New York Harbor, that would

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eliminate the need for some hardening. So we need

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to make sure that we're coordinating all the

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efforts to make sure we're getting the most bang

for the buck and not wasting taxpayer and 3

ratepayer dollars. So we will continue with our 4

5 hardening, as I said, we're taking some steps

6 already which would help us in a Sandy-type

7 scenario, but, obviously, there are other

scenarios where we need to look at also. 8

> We are continuing to look at the restoration process to streamline it to improve it. Mutual assistance is certainly an area that we're looking at. I'll just mention the traditional way mutual assistance was invoked was when the damage hit, that's typically when the trigger was pulled, and what we're realizing is we've got to pull the trigger days in advance. Now that could mean we have false alarms where we're pulling the trigger, bringing crews in, and then the storm goes out to sea and we've expended those dollars and used those resources but haven't really needed them because they haven't had any wire to put up or anything to restore. That's a possibility, and that's the risk you take when you do take an action like that.

> > And then the other critical thing

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for us is improve damage assessment, we have got to shrink the amount of time. And Sandy really showed us this because there was just so much damage, but we need a good damage assessment basically in a day so that we have our hands around what damage and what work we have to do. And if we can do that, if we can know the amount of work we have in basically a day after the storm and know the resources we have at our disposal, we can then put together a plan that can lay out what I think everyone wants is a solid, accurate estimated time for restoration. And I think with those two components, we can provide that. that is, really, I think, the holy grail and I don't think any utility in the country, that I know of, has mastered that but we know we have to.

And then we are also looking at all technology solutions, and that includes smart meters. We have looked at those before, another pricey solution, but we think that the time is come where we're not going to be able--we shouldn't have to rely on our customers to call us to tell us they're out of service, and that kind of technology is available. There are some

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 37
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issues, it's not just about putting meters in, changing out meters in our customers' homes and businesses, we also need to make sure that we can manage all that data, 'cause you can imagine the amount of data that's coming in during an event like this. So we've got to make sure that it actually is going to result in the outcomes that we're looking for.

And that really is what I had prepared, and certainly we can talk about anything that you would like to talk about.

CHAIRPERSON GARODNICK: Well thank you very much for your testimony, and I know that there are a number of questions for you. Let me kick it off very briefly and then I will come back after all my colleagues have had a chance to pose a few questions to you.

One of the points of frustration that a lot of people had with Con Edison was related to the communications after the storm.

Pre-storm communication is one thing, it sounds like you made a lot of outbound calls and e-mails, but the post-storm communications--and this may go to your point about damage assessments--but the

2 issue for many was that the outage map when people

3 would go to look or have somebody go to look for

4 them, they would know that their property was out

5 and they would look at the Con Ed map and it would

6 say nothing about their neighborhood or their

7 | building being out. And when they would inquire

8 to Con Ed, the response would be, we don't do

9 specific addresses, which people would understand

10 except for the fact when they looked at the map,

11 the entire area that they lived in appeared to be

12 with power when they knew, in fact, that it was

without. Can you address that particular

14 challenge?

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JOHN MIKSAD: Yes, indeed. Yeah,

we employ that outage map, the Internet-based

17 | outage map, I think we did that in 2007 or 2008.

18 I think it was a really good step, but it's

19 certainly just a step, we need to go further with

20 it. You alluded to, you know, sort of the general

21 area information but without customer-specific

22 information. What we're working on now is

23 actually, you know, through basically where a

24 customer can confirm by password where they can

25 actually go and get their specific, their own

information directly from that outage map, which I
think will be a huge step forward as opposed to
just whether the area is in or out.

And with regard to the misinformation that was on there or absence of information, that is certainly something that we need to work on also. And I do think that goes somewhat to the point—two points that I made, one is the damage assessment, which actually took us probably five days to complete in this storm, the longest ever, and we had 700 people doing damage assessment out there, but certainly Sandy showed that we needed either more or to come up with a different method.

I know there are some utilities that are looking at drones that can do aerial patrols of the system to do a quick damage assessment, we're certainly considering that. But we also do think that the smart meter type approach will give us certainly, you know, will be locked in in terms of who's in and who's out if we can crack the nut of data management that I alluded to in my remarks. But we acknowledge that we have more to do.

The other thing I would say is that will happen in terms of communication in April of this year, we will employ a system that the City has really been using for a while now and the MTA where it's an opt-in program our customers can sign up for texting where we will text our customers an estimated restoration time and other information that they are looking to receive. So there are communication breakthroughs in the short-term.

CHAIRPERSON GARODNICK: That's good and encouraging, provided, of course, that people actually have the cell phone service to be able to receive--

JOHN MIKSAD: [Interposing] Yes, indeed.

CHAIRPERSON GARODNICK: --those updates, and we're certainly that's part of our discussion today.

One other question from me relates
to your communication with property owners, either
at a large-scale, like in a Peter Cooper Village,
Stuyvesant Town context, which I experienced
firsthand, or with the individual homeowners in

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the Rockaways to know the moment at which power can be restored safely to those individual or communities of buildings. I will tell you that we saw an example in Peter Cooper Village where the property owner was not ready to receive Con Edison power at the moment that Con Ed power was restored. There was still water in the basements, they hadn't done the cleaning, and the results of the restoration too fast was a miniature explosion in the basement of one of the buildings, a fire, carbon monoxide, you know, 20 fire trucks and a possible evacuation, and people were appropriately concerned about that. And also to try to get Con Edison to reverse course was a very difficult thing to do in the midst of everything else that you all had going on. So this is a broader question, which is, how do you know the moment when it is safe and how would you rate your performance on that in the course of this storm? JOHN MIKSAD: Yeah, on the

individual building-by-building restoration, I
think I would rate us high. When Peter Cooper and
Stuyvesant were part of the, obviously, part of
the outage of 13th Street and when that substation

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was restored and those networks were restored on the Friday and Saturday following the storm, the second and third, we did not do a house-to-house inspection of every building prior to restoring those networks. Someone can call that -- could certainly call that a vulnerability and I would agree. We had to make a tradeoff there, we sort of weighed whether we can take the time, we had the luxury of time to do that sort of detailed inspection, we felt we didn't, and we basically made the restoration attempt at that time. Fortunately, the incident that you described at Peter Cooper was one of the few that we did experience, but, certainly, I'm aware that we had to then pull back and we had troops on the ground, as well as the fire department, to make sure that we de-energized and then worked with the building owner to restore.

But that certainly for, when we talk of this massive 230,000 customers, that certainly could be considered a vulnerability here when we are looking to make a rapid restoration.

CHAIRPERSON GARODNICK: Well we'd like to--I certainly would like to talk to you

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 43 TECHNOLOGY
2	further about that. I mean, the challenges are
3	enormous to you and everybody is pushing you to
4	restore power as quickly as possible
5	JOHN MIKSAD: Yeah.
6	CHAIRPERSON GARODNICK:and yet
7	at the same moment, if there had been people in
8	those basements working to clean them
9	JOHN MIKSAD: Yes.
10	CHAIRPERSON GARODNICK:we could
11	have had a real tragedy on our hands.
12	JOHN MIKSAD: Yes.
13	CHAIRPERSON GARODNICK: So, you
14	know, weighing that in the balance is a very
15	significant weight in, you know, in the balance of
16	public safety, but that's a conversation we should
17	continue to have
18	JOHN MIKSAD: Absolutely.
19	CHAIRPERSON GARODNICK:as to
20	that neighborhood and others like that. I'm going
21	to turn now to Chair Cabrera and then to the rest
22	of our colleague.
23	CHAIRPERSON CABRERA: Thank you so
24	much. I noticed that you had in your PowerPoint
25	presentation a little phrase, exceeded

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 44
TECHNOLOGY

expectations. Explain me, do you have experts
that you call upon:? You know, we don't see a lot
of hurricanes coming through New York City, did
you call upon experts in light of the fact that I
know, you know, just looking at what was happening
through the television, that we were going to have
a monster, and it had all kinds of names that were
attached to it, to Sandy, did you call upon
experts? And if so, were they the ones who
recommended to have only 700 standby workers that
were coming from out of state? Should we'd had
more waiting on the sidelines? Help me understand
what was happening behind the scenes.

JOHN MIKSAD: Okay. So with regard to our forecast, we actually have two meteorologists on staff that were tracking this storm. As I mentioned, I think we started tracking it on either the 19th or--either the 20th or 22nd of October. And you know, the typical path for a hurricane for the vast majority of these sorts of tropical storms is to, you know, sort of kind of curve, hug the coast, and then to break out to sea--

CHAIRPERSON CABRERA: Right.

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JOHN MIKSAD: --and that's why we don't see a lot of hurricanes up in our area in New York City.

So we were paying attention to this storm from its formation, as we do, I mean, obviously, we're very weather-sensitive so we are always looking at the weather, we're like farmers in that respect, and heat, cold, rain, snow, sleet, we're always looking at the weather, and in hurricane season we are particularly attuned to the weather. So we were watching this storm from either the 20th or the 22nd. As it was forming, it was somewhat unusual in the formation, and you could certainly talk to our meteorologists more about that. And then I believe it was either the 24th or the 25th where--is when the forecast that I think you're referring to, Chairperson, where the forecast showed this left hook, that the storm's path was going to move right into the Jersey shore, and leaving us in a very vulnerable position. As this storm pushes up and pushes all that water as result of its forward movement, as well as the winds, up into the New York Harbor. That's when the forecast--and I think in your

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 46
TECHNOLOGY
opening remarks you alluded to 10.7 foot tides and

that's sort of the range that we were hearing at

that time, and we were prepared for a 10 foot, 7

foot tides. We experienced, you know, a 9 1/2

6 during Irene and a 9 1/2 during the '92

7 nor'easter, so we were certainly prepared for

8 that. And I don't think anyone, especially since

9 it never occurred in the city, I don't think

anyone predicted or forecasted 14-foot tides--

CHAIRPERSON CABRERA: [Interposing]

I was hearing 13 a couple of days before, and
Irene, to be honest with you, was technically a
Category 1, but it was basically at the lower end,
it was dying when it came in. I mean, but just
looking at the massive and also the combinations
that you just mentioned, you know, that it was—
couple of days before we had a pretty good picture
that—and the fact that you call in 700, I'm sure
you guys were somewhat concerned that something
was about to happen that was out of the range of
what we're used to [off mic]. So, you know,
something to look at. My, you know, and just
hearing the mayor's response on the 29th that we

could handle all this by ourselves, I just hope

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 48 TECHNOLOGY 2 eye hits and where we are in relation to the eye. Obviously, this was the worst case scenario at 3 4 full moon, so there were all the stars, sort of, 5 aligned on this one that -б CHAIRPERSON CABRERA: Right. 7 JOHN MIKSAD: --resulted in these 8 high tides. But the numbers I have seen for a 9 Category 3, going to your example there, I have seen tides as high as 24-foot for a hurricane--10 11 Category 3 hurricane, which is--although I can't 12 imagine it, that would make Sandy look like a dry 13 run. 14 CHAIRPERSON CABRERA: Indeed. So 15 we will be--16 JOHN MIKSAD: [Interposing] Yeah, 17 so to your point, to your point, yeah, that would 18 require, obviously, much more. And there's only 19 three things you can do with these sorts of 20 systems: You can make them submersible, you can raise walls to keep the water out, or you can 21 22 raise up, as you indicated, raise up equipment 23 above where the water will reach. Those are 24 really the only three options that we have, and

that's not just true with the electrical grid, but

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1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 49 TECHNOLOGY 2 with all of the systems. Some systems you're not going to be able to do that, but at least with 3 4 ours, those are the three options that are at our 5 disposal. б CHAIRPERSON CABRERA: I have more 7 questions, but I'll just leave it at this: Would 8 it make more sense, because we never know how high 9 it's going to go up, you know, now 14, maybe 20, 10 you know, would it make more sense that we should 11 just focus on making the equipment submersible 12 because that way we would never have to worry 13 about the fact, how high, you know, it will go? 14 [crosstalk] Well--15 JOHN MIKSAD: 16 CHAIRPERSON CABRERA: Does it make 17 a difference? JOHN MIKSAD: --yeah, and that's 18 19 why I think that hearings like this and other 20 conversations that are, you know, involve a wide 21 range of stakeholders is just so important 22 because, you know, we could evaluate any and all options, as I said, they're all on the table. 23 24 could look at raising everything above the 24-foot 25 elevation level. My feeling is that would result

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 50 TECHNOLOGY in probably tens, I'm not sure if it's hundreds, 2 but I'm sure we're talking probably tens of 3 billions of dollars in order to do that. And when 4 5 you add onto that the communication 6 infrastructure, the gas, the steam, the cable, 7 subway, water, all of the other infrastructure, when you add that all together, you know, we're 9 talking about a high price tag. That's when, you 10 know, a 5 billion or \$6 billion solution, one 11 solution that keeps the water out into the harbor, 12 that's when it starts looking to be a reasonable 13 alternative. 14 So I just think what we need 15 probably the best solution would be for all of us 16 to work up our options, to look at the costs 17 associated with those options, and then come back to the table and have that conversation 18 19 collectively about, okay, how do we want to 20 proceed and what's the best way and most efficient

CHAIRPERSON CABRERA: Right, and let me just say, I know it's very easy sitting from this side playing Monday morning quarterback, very easy to do that, but let me just commend your

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way to proceed.

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 51 TECHNOLOGY 2 workers that did, in my estimation, you know, I saw them out there working long hours, had an 3 4 opportunity to speak to some of them, did, you know, as best they could, they did a great job. 5 6 Thank you so much. JOHN MIKSAD: I really appreciate 8 that. 9 CHAIRPERSON GARODNICK: Thank you 10 very much, Chair Cabrera. Chair Chin has 11 graciously offered to go after the rest of our 12 colleagues and ask her questions. Thank you, Chair Chin. We'll now go to Council Member 13 14 Koppell. 15 COUNCIL MEMBER KOPPELL: Thank you, Mr. Chairman. My constituency is fortunate that 16 17 most of my district lies above the water, however, 18 that did not spare us from considerable outages 19 and damage because much of my district has 20 overhead power lines, and I want to focus on the 21 undergrounding issue. First of all, Mr. Chairman, 22 I see that there is Intro 985, which calls upon the City to study undergrounding of power lines, 23 24 and I would like, if my name is not already on

that, I would like to add my name because I. And

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1	TECHNOLOGY
2	I'd like to discuss this with you for a moment.
3	First of all, I notice in your
4	presentation you said there will be some looking
5	at strategic locations where you could
6	underground. How are you going to decide what's a
7	strategic location?
8	JOHN MIKSAD: That's a great
9	question. We haven't decided how we're going to
10	decide which is a strategic location. We do think
11	that the decision is made in concert with City,
12	County of Westchester officials on what is the
13	right method, whether it's population density,
14	whether it's the critical customers that are
15	supplied from those particular lines. It could be
16	any of those strategies or others, but we'd
17	certainly be open to input as to how we go about
18	that.
19	COUNCIL MEMBER KOPPELL: Well
20	certainly, I mean, if you look at, as I say,
21	especially the Riverdale section of my district
22	that's
23	JOHN MIKSAD: Yes.
24	COUNCIL MEMBER KOPPELL:heavily
25	treed

JOHN MIKSAD: Yes.

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had repeated instances of lengthy outages, Sandy

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outages were up to 12 days, we had outages with

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Irene, we had outages with the tornado, we had a

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tornado a couple of years ago--

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JOHN MIKSAD: Yes.

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COUNCIL MEMBER KOPPELL: --and that

COUNCIL MEMBER KOPPELL: --we've

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caused outages in part, so I think we have a

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I've talked about undergrounding power lines for a

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strategic area. But the other question is, and

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undergrounding power lines, we get back the

decade, but each time we raise the issue of

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response from Con Ed, oh, that's going to be very

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expensive. And we've had a meeting only in the

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last few weeks, as you may or may not be aware,

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and we got estimates of millions of dollars to

19 20 underground the power lines. Now, what confuses me, if you will, is, has it always been adjacent

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property owners that have paid for undergrounding

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power lines or has that been a general charge to

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all the customers as you've undergrounded lines?

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'Cause most of Manhattan, and I don't think all of

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it, but most of Manhattan is underground now and

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 54
TECHNOLOGY

other areas are underground, some parts of my district are underground. Has that always resulted in specific charges to adjacent customers?

after--we've never done an undergrounding program in our territory. Manhattan has--well, actually since 1910 or 1920, Manhattan has been underground exclusively. The densely populated areas of Brooklyn and Queens, as well as the Bronx, have been underground from the beginning. The lower density population, typically the residential areas, are where we generally use overhead distribution methods. So we've never actually said consciously, okay, we're going to take these lines and now move them underground, so the question really hasn't come up until now.

And what, really, I'll just talk a little bit about what's involved. So it would certainly involve—the one obvious thing was we'd be taking the wires down off the pole and excavating the street along that lane in order to then put conduit and cables in the ground, and then to interconnect to all the customers on that

street from the underground system as opposed to the overhead system. What we've talked about—and, again, this is certainly something that we can talk further about—but that we would—to do this, we would bear the cost of moving the lines underground on the street and that would be—those costs would be borne by all customers, not the customers on the street. The work to convert the individual customer's home, the meter pan and the weather head that meets our cables, which is customer property, that is what we've talked about traditionally has been borne by the individual customer, and that would need to be changed and reconfigured by an electrician in order to accept an underground service.

So the way we've looked at it in the evaluations that we've done to date has been sort of a two-pronged, you know, there's a Con Edison component of cost and a customer component of cost. But certainly if the regulator and the elected officials decide that this would all be done, you know, through the company and spread through all customers, that's something that we can certainly, you know, talk about.

appreciate that. In my conversations with Con Ed, at least it's my impression that they're still talking—your representatives are still talking about charging the adjacent customer, not only for the connection between the street line and the home, but for the whole ball of wax, putting the lines under and the connection. Let me say, I'm not saying that I endorse the option you're talking about, but that certainly would be better than charging the customers for both putting the line in the street and then the line between the street and the home.

But what I would ask, Mr. Chairman, I think that this--Mr. Chairman, if I may address to you, I think that we should formally ask the Public Service Commission to study this issue because charging the individual homeowners becomes exorbitant, the charges are enormous. I think they talked about--I don't remember anymore the numbers, but it was millions of dollars per mile, so it's very substantial, and out of the budget range of most customers. At the same time, if it's put into the tariff, yes, everybody's going

2 to have to pay, but everybody pays for a lot of 3 the Con Ed infrastructure. So--

JOHN MIKSAD: Yes.

COUNCIL MEMBER KOPPELL: --I think we should--this committee should ask the Public Service Commission to study this issue and how the charges should be spread to the customers. And I think that, you know, obviously, there are a lot of different views of it, and if you have--get your power now from an underground source, you're probably not happy about my suggestion. But at the same time, looking at it from the point of view of my constituents and many others in places like Queens and Brooklyn, where you have overhead lines, the only way you can do it in an affordable way is if you spread it through all the customers.

So I think we really have to pursue that, and I would ask, you know, Con Ed to come up with various scenarios and proposals, as you yourself indicated. As I say, I'm delighted to hear you're at least thinking of bearing the cost of the mainline and then charging customers, I believe that that would be, certainly, a positive middle ground as far as I'm concerned.

Τ.	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 58 TECHNOLOGY
2	And I don't want to take more time
3	of the panel, but let me just say that I'm glad to
4	hear you say about improving the speed with which
5	you do damage assessment 'cause in my view, the
6	biggest problemthe greatest frustration I had in
7	my district was that it took you days to do damage
8	assessment
9	JOHN MIKSAD: Yes.
10	COUNCIL MEMBER KOPPELL:when my
11	own sense was I could drive around in a couple of
12	hours
13	JOHN MIKSAD: Yes.
14	COUNCIL MEMBER KOPPELL:and have
15	you told you what the damage was. So I think that
16	is a key priority
17	JOHN MIKSAD: Yes.
18	COUNCIL MEMBER KOPPELL:to get
19	the damage assessment done in the first 24 hours
20	and then start to address it. 'Cause we had
21	situations where, for four days, nothing was being
22	done
23	JOHN MIKSAD: Yes.
24	COUNCIL MEMBER KOPPELL:because
25	they said you were still examining the damage.

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 59 TECHNOLOGY 2 So--3 JOHN MIKSAD: Yes. 4 COUNCIL MEMBER KOPPELL: --that is 5 a real priority. 6 JOHN MIKSAD: Yes. 7 COUNCIL MEMBER KOPPELL: Thank you. 8 Thank you, Mr. Chair. 9 CHAIRPERSON GARODNICK: Thank you, Council Member Koppell. And I just want to note 10 11 on the subject of Public Service Commission, the 12 Governor's 2100 commission report did make some of 13 those requests already to the Public Service 14 Commission, but I certainly agree with you that 15 that's an issue that they should be looking at, as well as we should have it studied at all levels of 16 17 government and also certainly by Con Ed. I have some Council Members who 18 19 have lots of questions here, a couple who have 20 very few questions and reps from districts which 21 were very severely affected. So let me just start 22 with the folks who have a couple of questions, 23 which is Council Members Crowley and Weprin, and 24 then we're going to go on to Council Members 25 Recchia and Comrie.

	TECHNOLOGY
2	COUNCIL MEMBER CROWLEY: Thank you
3	to our chairs. I have a quick, few questions.
4	One, back in 1912 when the borough of Manhattan
5	was entirely put underground, were homeowners
6	charged? Those that lived in individual houses
7	versus bigger buildings, and were customers
8	charged to be hooked up to the grid from an
9	underground source when they were, prior to that,
10	getting billed from an overhead wire?
11	JOHN MIKSAD: I wasn't here at the
12	time
13	COUNCIL MEMBER WEPRIN:
14	[Interposing] Let's ask Oliver Koppell.
15	[Laughter]
16	COUNCIL MEMBER CROWLEY: I raised
17	that question because I believe we all pay the
18	same amount for the service, whether it be from an
19	underground power line or above ground, yet the
20	delivery of service is not the same. And, you
21	know, with the absence of this storm, definitely
22	within the district I represent. And I introduced

a bill about two years ago after the tornado

whipped through my district and many were left,

you know, for days without power, which wasn't so

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LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 61
TECHNOLOGY

bad compared to the severity of those that were affected during Sandy. However, in my district, it happens at least once a year for some customers, some customers a number of times a year.

And, you know, it's not just the service interruptions, earlier we spoke about the number of trees that have come down and affect the power lines, but I think the integrity of a tree is affected when we're cutting around it just to have the space for the lines and continuously altering that tree. So I think that there is a monetary value to those trees and, of course, aesthetically, overhead power lines are unattractive. So for those reasons, but most importantly, for the service, I believe they need to go down, especially in districts that have been so severely disserviced by this.

I agree with a lot of what my colleague, Cabrera, has said about the storm. You know, I don't think New York City was prepared, the national weather channel said it was going to be a serious storm in New Jersey, the governor was yelling at mayors to get their people out of those

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 62 TECHNOLOGY 2 coastal towns. However, you know, our utilities and our public service, I don't believe was 3 prepared enough. Just quickly, could you--I don't 4 5 know if you said it before, but I don't remember hearing how many more men and women were brought 6 7 in to work on the system, how many more trucks in 8 preparation for the storm? 9 JOHN MIKSAD: Sure. First, I just 10 wanted to--I didn't say it before, but I just want 11 to say we support the bill to study--that is in 12 question here, to study undergrounding for the 13 city, and we will cooperate and provide any 14 information that we have to--15 COUNCIL MEMBER CROWLEY: 16 [Interposing] I just think we need to be brought 17 into the 21st century, us outer borough folks, the 18 people in Staten Island, the people in the Bronx 19 or Queens. If Manhattan has a service and has had 20 it for over a century, then we deserve the same service. So a study or not, it has to get done. 21 22 JOHN MIKSAD: To your question on 23 mutual assistance, we saw the forecast change, as 24 I mentioned, October 24th or 25th, and that's when

many of the models were converging on the eye of

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Τ	TECHNOLOGY
2	Sandy hitting the Jersey shore and, certainly,
3	that meant that we were going to get the impact by
4	both wind and water, and that's when we made our
5	initial requests out to the regional mutual
6	assistance group for support. I think I said in
7	the presentation about 28th or 29th we doubled
8	that request. So we were asking for
9	COUNCIL MEMBER CROWLEY:
10	[Interposing] Like, if on your average typical day
11	you have 100% workforce, did you double it to 200%
12	or 300%
13	JOHN MIKSAD: [Interposing] Okay,
14	okay, great. Yeah, normally, in my organization I
15	have, round numbers, 4,000 employees and we
16	brought in 5,700 employees, so we more than
17	doubled, we
18	[Crosstalk]
19	COUNCIL MEMBER CROWLEY:
20	[Interposing] So like 125%.
21	JOHN MIKSAD: Correct.
22	COUNCIL MEMBER CROWLEY: I want to
23	thank the workforce of Con Ed, you know, those men
24	and women who were working the overhead power
25	lines or working in the manholes, they went above

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 64 TECHNOLOGY 2 and beyond. I know they took a lot of abuse out there from some of my constituents, but I really 3 do appreciate their hard work, I know it was such 4 5 a difficult situation they were in. And--6 JOHN MIKSAD: Thank you. 7 COUNCIL MEMBER CROWLEY: --that's 8 it, I have no other questions. 9 JOHN MIKSAD: Okay. 10 CHAIRPERSON GARODNICK: Thank you 11 very much, Council Member Crowley. Now we're 12 going to go Council Member Weprin very briefly. I 13 have to apologize, I failed to recognize the bill 14 sponsor for an opening statement, we're going to 15 go to him immediately after Council Member Weprin, 16 that, of course, is Council Member Comrie. Council Member Weprin, please proceed. 17 18 COUNCIL MEMBER WEPRIN: Thank you, 19 Mr. Chairman; thank you to Council Member Comrie 20 and Council Member Recchia, I know you have things 21 to say. I just want to get a couple of points on 22 the record and ask about. First, I'll just 23 quickly say that we were very impressed, I know 24 other elected officials I spoke to, with Con Ed's effort to inform elected officials about the storm 25

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conference call, usually with John Banks or Kevin

and what was going to happen. There was a daily

4 Lanahan. Also, I want to mention Mike Clendenin,

5 who I spoke to offline very often, that was

6 terrific, we love that. However, one of the

7 biggest complaints I got during the storm was,

8 once the lights went out in people's areas, that

9 we were unable to give them any idea of when they

10 may get their power back. You would go on to the

11 Con Ed outage map that Council Member Garodnick

gone to, and it was really useless in a lot of

13 ways. It either had the wrong information or it

14 just said, we'll get back to you in about ten

days, was the, you know, the spirit of it. That

16 seemed very frustrating to me.

I listened to the radio and I'd hear Governor Christie and PSE&G and New York, New Jersey Power and Light talk about this map which tells you not only where you're out, but what day you're going to be coming back. And we had a lot of people out of their homes either in shelters, some staying in their mother-in-law's houses and other places who just wanted to know when, not exactly when, we understand it was the biggest

2 storm we've ever had, but give us an idea.

So one of the things I raised on the conference call actually to John Banks, and it was during the storm so it was harder to make this case, but it seems to me that there needs to be more of an effort by Con Ed to work on that system. And you say you are talking about it—

JOHN MIKSAD: Yes.

COUNCIL MEMBER WEPRIN: --but what can you do to improve the system for the future to try to get that tech aspect of it where you communicate directly with customers through either through e-mail, through voicemail, or through their elected officials just to give us an idea of where you are. We're understanding, but we want answers and just a timetable of when that power would come back.

JOHN MIKSAD: Yes, yep, I could not agree more. So I sat in on a customer focus group probably a year ago and I heard customers say what they want and how they want it. And what they want is exactly what you said, they want a good, early, accurate estimated time for restoration period. First of all, they don't want their

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 67
TECHNOLOGY

lights to out; but, secondly, if they do go out, they want a good, accurate ETR. The way they want it, it was what they told us was a text, a text message or a smart phone app, that's what they want. So that's what we're working on.

And as I mentioned, I do think
there are some big changes that need to be done to
get us there. If you may recall that, for the
network areas of, like, Manhattan, we said fairly
early after the storm that we would have them back
by the following weekend, in other words, by 11/4,
and we did live to that commitment, we restored
everyone either Friday the 2nd or Saturday the
3rd.

by the overhead, and that was definitely the bigger nut to crack, the more difficult challenge because there were thousands of damaged locations, what we had to do is do damage assessment in order to get our arms around the scope of the effort. That's the first piece, and I mentioned we are looking at any and all ways to shrink that damage assessment down to a day so that we can know very quickly what work we have that needs to be

2 addressed.

The second thing that we need to address was the mutual assistance process. It has served us well in the past, but it really did somewhat break down in Sandy. And it broke down because this storm was so big it affected 21 states that the folks who normally would be helping us, were busy restoring customers on their own. So we had to go further and further out in order to get that assistance. And as I mentioned, we went to Canada and California, including airlifting crews in to help us, but that took time. We ramped up, you know, a couple of days after the storm, but it took us several days to get that full strength to the 5,700 workers that I referred to earlier.

So we have got to do, to me, we've got to figure out a way to make sure that we got those resources that we can count on very early in the storm, and that may mean pulling the trigger earlier, you know, perhaps five or six days to allow travel time for folks to come from very far away to get to our service territory, that they could then be in a position to make restoration.

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 69 TECHNOLOGY
2	And those are changes that are on the table and
3	that we are looking at now.
4	COUNCIL MEMBER WEPRIN: Well we
5	needthat is absolutely, I mean, you don't think
6	[off mic] that they weren't here fast enough or in
7	time, but people just need to know, that was the
8	biggest
9	JOHN MIKSAD: Yes.
10	COUNCIL MEMBER WEPRIN:
11	frustration of all is the not knowing part.
12	JOHN MIKSAD: Right.
13	COUNCIL MEMBER WEPRIN: So that ETR
14	time should become a priority
15	JOHN MIKSAD: It is.
16	COUNCIL MEMBER WEPRIN:and not
17	to tell you, you know, your hiring decisions, but
18	you may want to fire one of the meteorologists and
19	put a new tech person in in order to try to
20	accomplish that, because the meteorologists didn't
21	do as well and we really do need some extra tech
22	work there.
23	And I apologize, and I compliment
24	Council Member Comrie for the legislation he's
25	putting forward 'cause those overhead power lines,

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 70 TECHNOLOGY especially in our area of Queens and in other 2 parts, are really a problem. 3 Thank you. 4 JOHN MIKSAD: Thank you. 5 CHAIRPERSON GARODNICK: Thank you, Council Member Weprin. Again, with apologies to 6 7 Council Member Comrie, the sponsor of the bill 8 that we're hearing today, the floor is yours. 9 We've been joined by Council Member 10 Julissa Ferreras as well. COUNCIL MEMBER COMRIE: Thank you, 11 Chair Garodnick and the other chairs, Cabrera and 12 13 Chin, for hosting this hearing today. I wanted to 14 ask a couple of questions regarding the cost of 15 what it took to do all of the repairs and bring in 16 the mutual aid in and everything. 17 And before I ask that question, I 18 do want to acknowledge that Con Ed, out of all of 19 the utilities, did make the strongest amount of 20 communications in the daily conference calls where, you know, after they got started were 21 22 helpful to us and to give us some sense of what 23 was going on. And I think that we were able to, 24 in fact, add to the issues and the problems and

were able to better highlight the concerns. But I

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1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 71 TECHNOLOGY 2 do want to agree with Council Member Koppell, the quicker that we can get full assessment of a 3 damage situation is critical. 4 5 But I wanted to find out what were your costs for, you know, restoration and mutual 6 7 aid repairs? Because, to me, you know, the bottom line in creating an underground system is to 9 offset those costs and to, you know, I think that 10 from my understanding of what I heard the costs 11 were, we could start putting in these lines and 12 start, especially with the repairing of lines, 13 installing them underground now. 14 JOHN MIKSAD: Yes. 15 COUNCIL MEMBER COMRIE: So could 16 you give us a break down on that? 17 JOHN MIKSAD: Yes, I don't have a 18 detailed breakdown, but I can tell you Sandy was, 19 by far, the most expensive storm we've ever 20 experienced in terms of the restoration effort. The highest cost storm prior to that, you know, 21 22 and it just took us a year to exceed it, was 23 Irene. Irene was basically a \$50 million storm, 24 that's the most we ever spent on a storm 25 restoration with Hurricane Irene. A year later,

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 72
TECHNOLOGY

with Sandy, we are talking about \$450 million for restoration. So, you know, almost ten times the magnitude and the restoration effort.

And that's as a result of that much more damage, that much more mutual assistance, that much more effort in order to make that restoration. There were 200,000 customers affected during Hurricane Irene and 1.1 million affected during Sandy.

COUNCIL MEMBER COMRIE: Right, and since we're spending, you know, large amounts of monies now, why can't we, you know, do those type of re-installations that put systems underground now? Isn't the technology available to make it happen?

undergrounding, the technology is there, we've done it in good portions of our system--all of Manhattan is underground and a good portions of the Bronx, Brooklyn, and Queens are underground. It really is a couple of issues, we've talked about the cost. We did an estimate and, you know, very early on estimate, rough, so don't quote me on this, but we're, you know, in the ballpark of

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 74
TECHNOLOGY

You know, what can we do to start undergrounding at least pieces of the system while you are having structural damage to the system in whole?

JOHN MIKSAD: Yeah, and the 900 customers are out, as you mentioned, are out because of damage internally, we're ready to accept them to the grid and they're still working on their internal equipment. And this goes to the point about safety, you know, with those 30,000 customers, we did have the certification process in place to ensure that we weren't re-energizing a home that was unsafe--where it was unsafe to do so.

But with regard to--I mean, I mentioned a number of things we're doing, you know, really it's two-pronged. I mean, we've got the floods to deal with and we've got the winds to deal with. On the flood side, I mentioned that 13th Street substation, as well as the other substations, will be protected for a Sandy-like storm if it should occur this summer. I mentioned that with Brighton Beach, we would not have to shut down the 28,000 customers in Brighton Beach, we could selectively shut down a handful, and I

mean a handful, like six or seven customers, of the large customers that were under water and the remainder of those 28,000 customers could be spared an outage. We are, I mentioned we're undertaking a split of the Fulton and Bowling Green networks in Lower Manhattan so that we would not have to preemptively shut down the New York Stock Exchange, the Federal Reserve, and Downtown Hospital, it would only be the coastal areas that were actually flooded—experienced flooding in the basements. And we are talking about selective undergrounding and we talked about what criteria to use, and that's something we need to discuss

Again, looking to prioritize the work given it's a big, big effort and that would take time and a lot of money, we're saying well let's prioritize and let's selectively choose which lines we put underground. But we're also looking at more storm-resistant designs that would remain overhead, which would reduce the impact of a Sandy-like event.

about where we do this.

There's smart grid technology that we're using currently and that's being expanded,

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that is happening, but the other thing we're

looking at is, I mentioned the smart readers, 3

which would tell us definitively customers are out 4

5 of service and when they are restored to service

6 so that we would not be relying on a customer call

7 in order to determine that.

> COUNCIL MEMBER COMRIE: Right, and, you know, a lot of those things you said in your opening statement, but I'm asking you a specific point of question, working to try to create underground opportunities from the worst case scenarios now if you started putting those 30,000 people that are still without power to an underground situation so that they would be able to not have as long wait times. Because my understanding from the National Weather Service is now we're going to get these types of storms more frequently, or at least once a year now where we're going to get a major tornado or a hurricane starting to affect us and especially in the areas where we have primarily over ground systems that are aboveground, we're going to have this situation where you're going to be spending at least 50 million to 450 million a year on, you

know, restoration. How much of that system can we start looking at putting underground now and can we look at that as part of the assessment. And I would hope that, you know, Con Ed and the other utilities would start looking at doing that now, which is, you know, the point of the bill.

I'm realistic to understand that we're not going to get everything underground, you know, in one year or ten years, but if we could start with every restoration to look at the feasibility of doing underground installations and repair, we could probably cut those costs down as well. So I would hope that we look at that as part of our overall strategy that we meet the governor's mandate and that we're asking the long-term sustainability office to look at that, and I would hope that you would work with that as well.

So, you know, I understand your answers and, you know, clearly, having all of those immediate options with breakaway lines and other things to, you know, to try to help mitigate long-term damages are good, but I think the more of the system that we can get underground to have long-term sustainability because in the outer

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boroughs, we don't have those heat inversion issues or the other issues that you have in Manhattan or the denser areas. You know, we need to try to make sure that we can do as much underground now as possible because, while Wall Street's important, I also have--we also especially have a lot of seniors that were stuck in their homes for 14 days or people that were on medical assistance that, you know, couldn't dial out, couldn't reach out. And, granted that you do have everyone that is on a medical breathing system or on emergency system tracked in your system and the response time was okay, but your overall assets could be better served with the things that we do to hardwire the system now in repair mode as to try to do it as a large project. And I think we need to move away from the large project thinking and look into the repair and restoration with hardwiring it underground, so that's what I'm asking to consider.

JOHN MIKSAD: Okay.

COUNCIL MEMBER COMRIE: Mr. Chair, in deference to all of the other questioners, I'm not going to ask a ton of questions, even though I

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 79 TECHNOLOGY
have some, I just really want to make the point
that I think we need to re-look at this to try to
create opportunities to make the system as safe
and as durable for our homeowners as possible,
especially in the better boroughs where we have
mostly over ground systems, that we look to try to
get this as a priority as well. Thank you.
CHAIRPERSON GARODNICK: Thank you,
Council Member Comrie, and the Manhattanites among
us take no offense. Let me go to Council Member
Recchia, who represents one of the districts that
was most severely hurt during this storm. Council
Member Recchia.
COUNCIL MEMBER RECCHIA: Thank you.
[Pause]
COUNCIL MEMBER RECCHIA: Hello?
Oh, there we go. Thank you, Dan Garodnick, for
today's hearing. Thank you for Leroy Comrie for
your bill.
And first I want to start out in
saying that Con Edison, you know, you did an
overall a good job
JOHN MIKSAD: Thank you.
COUNCIL MEMBER RECCHIA:but

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 80 TECHNOLOGY
2	there are rooms for improvement
3	JOHN MIKSAD: Of course.
4	COUNCIL MEMBER RECCHIA:there
5	are ways to make it better. My district was
6	devastated. And I just want to start off, you
7	talked about the Brighton Beach grid, okay? The
8	Brighton Beach grid, what areas does that cover
9	that went underwater?
10	JOHN MIKSAD: If you're looking for
11	the boundaries, I'm notI don't have them the top
12	of my head.
13	COUNCIL MEMBER RECCHIA: But it
14	covers Coney Island.
15	JOHN MIKSAD: It does, yes.
16	COUNCIL MEMBER RECCHIA: And what
17	was the actual problem there? You know, and why
18	did it take so long? 'Cause we were the last part
19	to go up.
20	JOHN MIKSAD: Yeah.
21	[Crosstalk]
22	JOHN MIKSAD: Right, so the issue
23	at Brighton Beach and Coney Island was really the
24	same as Manhattan, the two networks I described in
25	Fulton and Bowling Green. It was basically, I

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mean, we had people on the ground in that area on October 29th when that storm hit, when that storm surge came in who were really watching the flood level rise and they saw the salt seawater making its way into the high voltage equipment in the underground system out there in places like the aquarium and Kingsborough Community College and a number of other locations. And at that point we knew that saltwater and that the high voltage did not mix and we got--they talked to our control centers immediately and we then preemptively shut down those networks to avoid, essentially, fires and explosions, electrical fires and electrical explosions. We did that in the two networks in Manhattan as well as the area of Brighton Beach that I described. That was really the problem, that the saltwater inundated the underground network system in that area.

COUNCIL MEMBER RECCHIA:

[Interposing] So and what should be the solution for the future?

JOHN MIKSAD: So the immediate solution that we're working on is installing these flood switches that will isolate a number of these

Τ	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 8 TECHNOLOGY
2	locations that arewe know will go under water as
3	a result of Sandy. I mentioned Kingsborough
4	Community as well as the aquarium, and then as I
5	mentioned, there's about five others that are
6	there's one of the housing developments right
7	there along the shore that
8	COUNCIL MEMBER RECCHIA:
9	[Interposing] There's many.
10	JOHN MIKSAD: I know, I know, but
11	there's, I think there's two of them, two of the
12	housing developments that were particularly
13	affected, and so those handful, it's six or seven
14	customers, we'll open up those switches and
15	isolate those customers and prevent the outage,
16	the necessity for preventive outage for the 28,000
17	customers that are supplied.
18	But there is a caveat to that and
19	that is, for any of the other homes or businesses
20	that are underwater and their electrical equipment
21	becomes submerged, that then may become a public
22	safety issue where we need to de-energize either
23	those individual customers or the area.
24	So I do think it's a step, I don't
25	think it's thea silver bullet, the be-all, end-

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 83
TECHNOLOGY

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all, I think we have work to do to make that equipment in those basements, really, essentially, in the basements of all of our customers either higher, raise it up, or make it submersible.

COUNCIL MEMBER RECCHIA: I agree, and leading into one of the things that you just said is that those other buildings, if the electrical is not--was damaged also, then there is a lot of work that has to be done.

JOHN MIKSAD: Absolutely.

COUNCIL MEMBER RECCHIA: One of the biggest problems that we had during the storm and getting people's electricity back up and running was that we didn't know if it was a Con Ed problem or a electrical problem inside the people's house. Con Ed would show up, they would say it's the homeowner's responsibility to get electrician; a private electrician would come and say it's a Con Ed problem. Hundreds of homes this happened to. The communication was, wow, and I was trying to find somebody to, you know, 'cause it was just getting like the runaround. So how do we correct this so when this happens again we know exactly what has to happen?

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 84 TECHNOLOGY
2	JOHN MIKSAD: Yeah, I understand
3	completely what you're talking about. We've never
4	done what we did out there in those hard-hit areas
5	of Staten Island, Brooklyn
6	COUNCIL MEMBER RECCHIA: Yeah.
7	JOHN MIKSAD:and Queens.
8	COUNCIL MEMBER RECCHIA: This is
9	happening in Staten Island too.
10	JOHN MIKSAD: It is happening in
11	Staten Island, absolutely.
12	COUNCIL MEMBER RECCHIA: Staten
13	Island, people are getting the runaround.
14	JOHN MIKSAD: Yeah, I don't know if
15	they're still getting the runaround, I certainly
16	hope not, but I know early on we created this
17	process on, really, on the fly, it had not existed
18	previously. And we worked with the City, the
19	Building department and bringing in those
20	electricians and I know there were, you know, some
21	hiccoughs along the way, I know we had the
22	communication issues that you're referring to
23	early on. What I think the ultimate solution is I
24	think we have a process now that is pretty
25	efficient. Folks know their roles, they know how

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 85 TECHNOLOGY 2 to coordinate, and I think what you're, what I hope you're finding now is that the customer, 3 business, homeowner, knows they've got the 4 5 electrician, they're doing the repairs, they're bringing in that certificate to Con Edison and we 6 7 are out there, I'm telling you, very quickly, it's 8 within a day, if not within a shift, within eight 9 hours--10 COUNCIL MEMBER RECCHIA: 11 JOHN MIKSAD: --in order to make 12 that restoration. 13 COUNCIL MEMBER RECCHIA: 14 honest with you, the way I resolve these problems 15 now, I call Rapid Repairs, they send out their 16 electrician and they tell me if it's a Con Ed or 17 the people's house, that's the way I've been 18 handling this in the last few weeks. But moving right along, there's a 19 20 serious problem. That Monday, as the storm 21 started, at 4:30 in the afternoon, I was at Coney 22 Island Hospital, there was an explosion, smoke in 23 front of the hospital, and I'm talking to the 24 director of the hospital, I said what is going on 25 at Coney Island Hospital, do you need help, so I

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was right outside, he says, no, Con Edison, something happened with one of your grids at Coney Island Hospital, and the smoke started. I called an hour later, the smoke was still coming, they said Con Edison has it under control. The storm, 6 o'clock, 6:15, the storm started to hit. Seven o'clock, the tide starts coming in, the ocean starts coming down Ocean Parkway, Coney Island Hospital, Con Edison, I don't know what was the final result, and I need an explanation from Con Edison because the reason why Coney Island Hospital is still not open today is because of what happened with Con Edison. It got flooded too, but they had no power, nothing, because of this fire that started at 4:30 in the afternoon. 'Til today, no one from Con Edison has called me or any elected officials to explain what happened at Coney Island Hospital because of Con Edison. So do--

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JOHN MIKSAD: [Interposing] I will get you that answer.

COUNCIL MEMBER RECCHIA: This is very important. What is happening with Con Edison

and Coney Island Hospital, no one knows, no one

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 87 TECHNOLOGY 2 can give anyone a story. And the hospital is still not open. And they're working around the 3 4 clock. That is something that we really in this 5 next storm is that I'm going--you know, we have to 6 figure out who the go-to person is and we have to 7 figure out another system of communicating. Cable 8 was out, Internet service was out, cell phones 9 were out, everything was out. You know? 10 And getting back to what my 11 colleague said earlier, who was in charge of 12 communication on the radio? 'Cause everybody was listening to the radio, and could you explain to 13 14 us why wasn't more information being given on the 15 radio so people could listen? 16 JOHN MIKSAD: Yeah, I'm not sure, I 17 know I was holding a daily press call which 18 included the radio outlets and prints to bring 19 folks daily updates of the status of our 20 restoration effort, but we could certainly talk--21 if we need to do more, we're certainly open to 22 doing more. 23 COUNCIL MEMBER RECCHIA: Well part 24 of the problem is that in my district no one had

any service, any kind of service, and everybody

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      LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 88
                        TECHNOLOGY
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      was listening to the radio and no one could get
      any information. Unfortunately, we couldn't look
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      up on the Internet, we weren't that privileged.
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      Everybody was listening to the radio and there
      wasn't information on the radio. No one was
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      saying if you lived in Coney Island, if you lived
 8
      the Rockaways, if you lived here, you know, I
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      mean, we weren't getting information about
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      Seagate, about Coney Island, Brighton Beach,
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      Manhattan Beach, Gerritsen Beach, Red Hook. I
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      believe the way of communicating was through the
13
      radio and no one was taking advantage of it.
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                     JOHN MIKSAD: Understood.
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                     COUNCIL MEMBER RECCHIA: And I just
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      need to know why.
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                     JOHN MIKSAD: Yeah, that may be,
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      certainly, an area that we can improve on.
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                     COUNCIL MEMBER RECCHIA: Because,
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      you know, people were really looking into that,
21
      you know, and, you know, listen, I know it was a
22
      tough storm.
23
                     Getting back to the trees, okay,
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      and your tree pruning--I saw your PowerPoint
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      presentation--
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COUNCIL MEMBER RECCHIA: --branches

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was a big issue.

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JOHN MIKSAD: Yes.

4 came down and you prune your trees. I had an 5 experience once where I stopped my car and I tried 6 to ask the guys that were pruning the tree, they 7 said, oh, we're here for Con Edison, we're pruning 8 the trees, and I'll tell him why don't you take 9 this branch or that branch, right? They said no, it's not close enough, it's too far away from the 10 11 wire, but it's all these branches in the storm

that just comes down, you don't know which way the

wind will blow, so they have to do a better job at

tree pruning. 'Cause I believe, you know, that

JOHN MIKSAD: Trees were the major source of the outages on the overhead system, absolutely. We, currently, our specification guides those tree trimming crews to clear 10 feet on either side of the lines and 15 feet below. That's one of the most aggressive tree trimming programs in the country, but we could certainly take a look at it, and actually, we do have folks looking at what we could do differently.

But I will say, as you know, Sandy

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 90 TECHNOLOGY
2	didn't take down branches, it took down trees.
3	COUNCIL MEMBER RECCHIA: Well tell
4	me about it, I know.
5	JOHN MIKSAD: Yes.
6	COUNCIL MEMBER RECCHIA: Listen
7	JOHN MIKSAD: Yes.
8	COUNCIL MEMBER RECCHIA:you
9	know, my district, you know, we're still
10	recovering and, like I said, I just want to, you
11	know, overall, you were overwhelmed and it was
12	tough, but we have toreally, I would like to set
13	up a meeting with somebody from Con Edison who
14	knows about what exactly what happened at Coney
15	Island Hospital 'cause I'd really like to hear
16	from your end what exactly transpired with
17	JOHN MIKSAD: Absolutely.
18	COUNCIL MEMBER RECCHIA:the
19	hospital not up and running.
20	[Crosstalk]
21	JOHN MIKSAD: Absolutely.
22	COUNCIL MEMBER RECCHIA:much.
23	CHAIRPERSON GARODNICK: Thank you,
24	Council Member Recchia, and we certainly hope that
25	you will follow up with the

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 91 TECHNOLOGY 2 JOHN MIKSAD: We will. CHAIRPERSON GARODNICK: 3 4 Councilman on the Coney Island Hospital issue. 5 JOHN MIKSAD: Absolute. 6 CHAIRPERSON GARODNICK: And on the 7 subject of the tree removal, before I go to Council Member Levin, there was a lack of clarity 9 at one of our last hearings as to whose 10 responsibility it actually is when a tree ends up 11 on a power line. I call 311 and I say that 12 there's a tree down on a power line in my 13 neighborhood in the middle of a public street. Who gets the call, what happens? 14 15 JOHN MIKSAD: Yeah, so I'll hit on 16 the jurisdiction first and then I'll try to cover 17 what happens. Jurisdiction is, it's a city or a 18 private property owner's tree, Con Edison doesn't 19 own any trees, to my knowledge. We, as I 20 mentioned, I mean, our responsibility when we're 21 giving guidance out to our crews is to clear, you 22 know, in the area around to give us enough 23 clearance to prevent limb contact. So the tree is 24 the responsibility of the City, Parks department, 25 or a private property owner; lines, overhead power

2 lines are obviously Con Edison's.

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The question is what happens when they come together. So the tree comes down on the wires, bring them down onto the street, very often then blocking the road, and you call 311. I can't say I know for a fact that, you know, who all gets the call from 311, I imagine on the City side, that's going to Department of Sanitation or Parks. I know on our side when 311 calls our--contacts us, we are putting in, what we call a ticket, creating a job, and we get a report that we have wires down, trees on them. We will respond, typically, with either or both tree crews who only do tree work or line crews that can do some limited tree work, limited, they don't have the powerful chainsaws and the like, plus they're a resource that can be better spent in putting wires up, and it's a higher skill task. So typically, what will happen is we will respond with tree crews and line crews in order to just clear the trees off of our lines enough for us to get access. We will generally not--we're generally not clearing the road, we generally clear the lines so that Sanitation or Parks can then clear

2 the tree.

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That's the way it's supposed to work, but it very often can get bounced back and forth between the companies. The Sanitation can come out and say, well we can't move this tree because there's lines in it. We may have already cut the lines, de-energized the lines, making it safe for them to do so.

So one of the things we're actually looking to do is to come up with a universal process that all parties understand so that when we've de-energized the circuits--'cause that's really the concern--and we don't--and, by the way, this is a -- we don't want Sanitation department, Parks department, or our customers and the public touching any downed lines, we're the experts in that area and we're the ones who are trained to handle them, so we always advise everyone else, treat everything as a live. So what we are looking to develop is a process that when we cut lines or de-energize lines, that we can somehow tag those lines so that even after we've left the location, the Parks or Sanitation folks will know it is safe to work on those--clear the roads,

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 94 TECHNOLOGY
2	those trees, and they can do their thing without
3	scratching their head and saying I'm not sure if
4	these things are de-energized.
5	So that process improvement, I
6	think, will clear up a bunch of the
7	miscommunication that typically happens in an
8	event like this.
9	CHAIRPERSON GARODNICK: So it
10	sounds like there's a reason why there was
11	vagueness or lack of certainty at the last
12	hearing, which is simply that there is some lack
13	of certainty in these circumstances as to who
14	exactly is going to pick up that tree, is that
15	fair?
16	JOHN MIKSAD: Yes.
17	CHAIRPERSON GARODNICK: Now if the
18	report through 311 was there is a tree on a power
19	line, there is no way for a 311 operator at that
20	moment in time to know whether that is a de-
21	powered power line or whether it's an active power
22	line, correct?
23	JOHN MIKSAD: [Interposing] That is
24	correct
25	[Crosstalk]

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 95 TECHNOLOGY
2	CHAIRPERSON GARODNICK: So as far
3	as you know, they are routing that call to both
4	the Department of Sanitation and to Con Ed?
5	JOHN MIKSAD: Yes.
6	CHAIRPERSON GARODNICK: So whoever
7	gets there first says, oh, this is either my
8	responsibility or it's not, and in the scenario in
9	which Con Ed shows up first and you say, okay,
10	well look, we've got an active line here we need
11	to cut off the power to be able to remove the
12	tree, do you actually remove the tree if it's in
13	the middle of the street?
14	JOHN MIKSAD: No.
15	CHAIRPERSON GARODNICK: So Con Ed
16	says, okay, we're here to turn off the power and
17	you hope that the Department of Sanitation at that
18	point hasn't gone on to their next call, is that
19	right?
20	JOHN MIKSAD: Well I don't know if
21	it's hope, there is some
22	CHAIRPERSON GARODNICK:
23	[Interposing] Well I would hope, as the person on
24	the street
25	JOHN MIKSAD: Yes, yes.

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 96 TECHNOLOGY
2	CHAIRPERSON GARODNICK:I would
3	hope that they haven't gone
4	JOHN MIKSAD: Yes.
5	CHAIRPERSON GARODNICK:because
6	you guys have at least made it safe, but nobody
7	who actually can take the tree away.
8	JOHN MIKSAD: That's right.
9	CHAIRPERSON GARODNICK: Okay. So
10	that's obviously something that we need to get
11	straight between
12	JOHN MIKSAD: Yes.
13	CHAIRPERSON GARODNICK:Con Ed
14	and the City
15	JOHN MIKSAD: Yes.
16	CHAIRPERSON GARODNICK:and
17	that's a big frustration, at least as I understand
18	it.
19	Sorry
20	JOHN MIKSAD: Yes.
21	CHAIRPERSON GARODNICK:Council
22	Member Levin, but now it's
23	FEMALE VOICE: Council Member King.
24	CHAIRPERSON GARODNICK:it's
25	actually Council Member King. Council Member

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 97 TECHNOLOGY 2 King, it is you, the floor is yours. COUNCIL MEMBER KING: 3 4 afternoon, thank you--5 JOHN MIKSAD: Good afternoon. 6 COUNCIL MEMBER KING: --Mr. Chairman, and I thank you for coming out this 7 8 afternoon and, you know, fielding our questions. 9 I know you're in the hot seat, but you're doing a 10 great job in answering questions, so I really 11 appreciate that. 12 I'm not going to beat you up at all 13 because I am the new kid on the block, but I also 14 want to say my district was one that didn't really 15 get--it got hit, but it didn't get hit as my 16 colleagues out in the Rockaways, you know, still 17 going through the devastation. But one of the 18 main issues that we did have, and you talked about 19 it a little bit, was the communication between Con 20 Ed, Department of Sanitation, and 311, which was 21 very frustration for homeowners who have the 22 children, to the NYCHA developments that were out 23 of power, and when we ran into a truck on the 24 street, they could only say I don't know. 25 I want to ask you, how is it

coordinated far as in each borough when it comes down to a crisis like this, is each borough responsible for its borough; is there a central command in Manhattan somewhere then everyone filters out from that way? Because I'm trying to understand if we have Con Ed sites in the Bronx, would they be responsible to get out early to do an assessment as opposed to trying to get and report into Manhattan somewhere and then get back to the boroughs that they already are located in and try to figure this coordinated effort when you already have supervisors and workers already in the ground and in all the boroughs. How does the organizing start to be able to get the assessments done?

JOHN MIKSAD: Okay. There is a central command structure, we call it our Corporate Emergency Response Center, or CERC. I was the incident commander during the restoration of Sandy, so we are at our headquarters building in Manhattan. We have four-hour conference calls with all of the boroughs so I'm on the phone, videophone, with the incident commanders from each of the boroughs and they're reporting back to me

2 on a four-hour period.

I'm not hearing every single detail, obviously, in an event like this with all of the things that we're dealing with, but I am hearing about any issues, manpower issues, material issues, vehicle issues, any issues whatsoever, obviously, any safety issues. So we are looking at—maybe talking a little bit about the restoration philosophy will help you also. It generally is, first and foremost, the public safety issues where with wires down that we've just been talking about, closed roads, those are certainly a high priority, critical customers—hospitals, nursing homes, police departments, firehouses—those are certainly on our radar.

In this storm, if you remember, it was just prior to election day, getting the schools and polling places open was certainly a priority during this storm so folks can exercise their constitutional right to vote. So we work those critical customers. And then finally, the last sort of bucket is to restore customers in the largest amount possible. And if you saw the restoration curve that I showed, you see that we

because we're restoring large, wide areas in--for example, I mean, November 2nd and 3rd we were able to restore essentially all of the Manhattan outages that were interrupted. And that also happened in the outer boroughs, as well as Westchester County.

And after we've taken care, restored all of those big, large, widespread outages, we then work our way down to the hundreds of customer outages, and then tens of customer outages, and then individual single customer outages, and we work our way down that way.

That's the prioritization that we've used, I know it's the prioritization scheme that other utilities use, it's the one we've used for years. It seems to serve us well, it doesn't discriminate, it basically says let's get the most back as quickly as possible. And that is, sort of, the effort.

Now, if Staten Island has just a handful of customers left and we've got thousands of customers out or tens of thousand customers out in Queens because they were hit by a tornado, as

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 101
TECHNOLOGY

has happened in--as was mentioned earlier, we will shift resources to where they're needed most, again, in terms of that getting the most back as quickly as possible.

So that is just a sort of a general structure and general philosophy in terms of restoration about how it happens.

thank you, thank you for that answer, it does clear up, so when I go back, I can share what you just shared with me. 'Cause one of the most frustrating things that did occur on that day is that my district's adjacent to Koppell's district so I know what he was experiencing and it came to the point that we felt that we're being neglected because we're more on solid land than everybody that was on the coastal line. So even though we didn't have the waters all over, we did have a lot of trees down, a lot of power outages. And even the residents had to take to the streets to get something done because they just felt that it was so neglected.

But as we move forward, I just hope our communication is a little better and having a

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 102 TECHNOLOGY 2 system that maybe we don't have to call 311 'cause 311 doesn't know and somebody who is riding around 3 with a radio should be able to answer something 4 5 than the I don't know--6 JOHN MIKSAD: Yeah. 7 COUNCIL MEMBER KING: --especially 8 when everybody's emotions are flying and going all 9 of the... But I thank you, I really thank you for today. 10 11 JOHN MIKSAD: Pleasure, thank you. 12 CHAIRPERSON GARODNICK: Thank you, 13 Council Member King, our newest colleague, we're glad to have you. And, Council Member Levin, 14 15 you're up. 16 COUNCIL MEMBER LEVIN: Thank you 17 very much, Mr. Vice President. First, I do want 18 to just say for the record that my experience with 19 Con Edison in the month after the storm, really 20 about three or four weeks, was overwhelmingly 21 positive. I was in constant communication with 22 Con Ed staff, Paul Kerzner, Phil Halliburton, Toni 23 Yuille, Phyllis White-Thorne. They would take my 24 phone calls at 3 o'clock in the morning and 25 consistently and would help with specific

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 103 TECHNOLOGY

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customers. I had six NYCHA buildings that were out for 12 days, they were in constant communication and advising me on what the Housing Authority wasn't doing and what Con Ed needed to get the development back up and running. And then the actual workers, the Con Ed workers, that would come out in the middle of the night were professional, they were working under extremely difficult conditions. I had a guy come out in the middle of the nor'easter and work in a manhole on his own, I mean, he had a partner, but he was a guy that was he wasn't even supposed to be doing, he had a red truck and he was doing work that he wasn't even supposed to be doing necessarily, but he was doing it really well and he was doing a great service to the city. I really just have to commend all of Con Ed's staff that I worked with because they were extremely professional and worked through a lot of difficult problems on a very individual basis. And so I do want to really make sure that that is recognized for the record. JOHN MIKSAD: And thank you for that.

COUNCIL MEMBER LEVIN: I wanted to

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 104 TECHNOLOGY 2 ask about the cogeneration plant in the Brooklyn Navy Yard. I know that they were outed--I know 3 4 that Con Ed--there's an arrangement or--do you 5 know what is going on there now? It took a long 6 time for them to get back online and how is Con Ed 7 playing a role in that? JOHN MIKSAD: Yes, yeah, the 9 Brooklyn Navy Yard plant, obviously, is not Con 10 Ed's but we, as you pointed out, there's an 11 arrangement for us to buy steam from that plant. 12 It was preemptively shut down, along with one of 13 our plants at East River, because of the tides. I 14 know it did take a long time to restore, I really 15 don't have the latest status of it, but I can 16 certainly get that to you and, sort of, the 17 process for restoration, if that would be helpful. 18 COUNCIL MEMBER LEVIN: Thank you. 19 I know that this may have been asked before, but 20 in terms of infrastructure, so the wall 21 surrounding the east 13th East River plant, is 22 that--you're looking to build that to sustain a 23 higher surge or is it--is that in the works? 24 JOHN MIKSAD: That's correct, yeah. 25 So by this summer, we'll be able to sustain a 14-

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 105 TECHNOLOGY
2	foot surge at 13th Street.
3	COUNCIL MEMBER LEVIN: Okay. And
4	lastly, were there any injuries sustained in the
5	city due to downed power lines after the storm?
6	JOHN MIKSAD: Yeah, there were
7	members of the public we're talking about?
8	COUNCIL MEMBER LEVIN: Yeah.
9	JOHN MIKSAD: Yeah, there were two
10	injuries, one was a young woman in Queens who
11	actually went out the night of the storm, the way
12	I understood it and, obviously, I wasn't there, I
13	don't know all the details, but her boyfriend
14	strongly urged her not to go out, she went out,
15	she was looking to take pictures, as I understand
16	it, and she actually touched a downed wire and she
17	was killed.
18	And then I know of a dog whose
19	owner was out walking them that night, the next
20	evening in the Bronx and the dog was killed.
21	Those are the public injuries that I know about.
22	COUNCIL MEMBER LEVIN: Okay. They
23	were both just due to downed lines and
24	JOHN MIKSAD: [Interposing] Yes.
25	COUNCIL MEMBER LEVIN: And then I

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 106
TECHNOLOGY

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just want to also ask in terms of--I know that LIPA had a situation where they had run out of poles, did Con Ed suffer the--did you guys find that you were in the same situation, or if you did, how did you deal with it?

JOHN MIKSAD: Well that was actually one of the points that I did want to bring up, so thank you for bringing it up again, because it was mentioned in the opening remarks about material shortages. And I will say that Sandy certainly stretched us, I mean, we were pushing up against a number of material needs, not the least of which was fuel. You know, there were gasoline shortages and diesel fuel shortages in the city, and actually in the northeast that we were also dealing with. We ended up buying tankers, we ended up getting tankers from other utilities to help us out. And I will say that not one vehicle ran out of fuel, fuel did not stop any vehicle from doing its mission of restoring service.

And I would say the same about material. We pushed up against it in a number of places and I know in the morning after the trucks

Τ	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 10 TECHNOLOGY
2	were out of the yard, you know, there was not much
3	left, but no material shortages delayed any
4	restoration in Hurricane Sandy, although we were
5	certainly challenged and we were pushed right up
6	against it and we were lookingturning over every
7	rock to find material, which included our normal
8	suppliers, other suppliers who we didn't even have
9	contracts with, and other utilities, as well as
10	assistance from the federal government. So it
11	certainly challenged us, but it did no way delay
12	any restoration during this storm.
13	COUNCIL MEMBER LEVIN: Okay. And
14	just, again, I can't say enough how meaningful it
15	was to have an agency that was as responsive as
16	Con Ed was, I really, by the bottom of my heart, I
17	mean that, so
18	JOHN MIKSAD: Thank you.
19	COUNCIL MEMBER LEVIN:I want to
20	commend you and your entire staff for that.
21	[Crosstalk]
22	JOHN MIKSAD: Thank you, thank you
23	very much.
24	CHAIRPERSON GARODNICK: Thank you,
25	Council Member Levin. Now Chair Chin.

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CHAIRPERSON CHIN: Thank you. I mean, first of all, I also wanted to join my colleagues in commending the Con Ed workers who were, like, doing 24/7 in our district, and also your staff who were always there when we called. I mean, my office and my staff were, like, the people our constituents go to when they could not get any answer. When buildings weren't coming back online and the building managers weren't giving them information, they would just say it's Con Ed's fault, so we'd say, okay, let's call Con Ed and see if it's really Con Ed's fault or something else. And I really wanted to thank, you know, John Leo and David Comlauk [phonetic], they were our liaison and they were really helping us with a lot of these--answering these questions for our constituents.

So within Lower Manhattan, we still got a lot of commercial buildings running on generators, they're still—we started off with, like, a 105 generators and I think now we still have about over 50 large commercial buildings that are still running on generators, and we just want to make sure, it's like how is Con Ed—'cause when

we met with the Con Ed staff and they told us that

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they're ready for these building to receive power, 3

4 so are you helping some of these, especially these

5 large commercial building to really do as quickly

6 as possible to really help them so they could be

7 plug back into you guys and bring life back in,

you know, in Lower Manhattan? 'Cause right now

9 it's devastating when we don't have these building

online means workers are not there and our small 10

business are hurting. 11

> JOHN MIKSAD: Yeah, so, yeah, the number that I have in my mind is that we have got 31 buildings still left to connect to the grid in Manhattan, I think nine of them are small, very small buildings, but then the rest are the large buildings that I think you're referring to. we are working hand-in-hand with the customers, the building owners, their contractors to ensure that nothing gets in the way of restoration. I assure you, the grid is ready to accept all of those customers. As soon as they give us the indication that they are ready, we will interconnect them and there will not be delay on our side.

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 110 TECHNOLOGY
COUNCIL MEMBER CHIN: Well and I
just urge you to really work with them, give them
the help they need, whatever
JOHN MIKSAD: Yes.
COUNCIL MEMBER CHIN:to help get
them back on
JOHN MIKSAD: Yes.
COUNCIL MEMBER CHIN:the
generatingI mean, the generators are creating a
lot of noise pollution and
JOHN MIKSAD: Yes.
COUNCIL MEMBER CHIN:air
pollution in our district and we just really want
to get rid of them as quickly
JOHN MIKSAD: Yes.
COUNCIL MEMBER CHIN:as
possible.
JOHN MIKSAD: And I don't blame
you.
COUNCIL MEMBER CHIN: The other
issue that I wanted to perceive on that we really
didn't talk about much about was the steam heat.
You know, a lot of the buildings down here in
Lower Manhattan relied on steam heat, so, great

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 111 TECHNOLOGY the lights back on, I mean, by Saturday, most of 2 the building in the district had electricity--3 4 JOHN MIKSAD: Yes. 5 COUNCIL MEMBER CHIN: --but they 6 had no heat because the steam was not ready, and what we were told that was because the pipes has 7 8 water in it and the water is cold and so you could 9 not send the steam back up. 10 JOHN MIKSAD: Yes. 11 COUNCIL MEMBER CHIN: And it took 12 about another week. 13 JOHN MIKSAD: Yes. 14 COUNCIL MEMBER CHIN: And we had a 15 lot of seniors in the district, they're like in 16 Southbridge and in Chatham Green, who just, you 17 know, really were having a tough time, even though the lights were back on, they didn't have the 18 19 heat. So is there any kind of precautions that 20 you're looking at now that can provide emergency 21 backup power that can help restore the steam if this ever happen again, to come back as quickly as 22 23 possible? 24 JOHN MIKSAD: Yeah, not my area of 25 expertise, but I will say that it was a tremendous

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effort on the folks in the steam organization to go basically underground structure by underground structure pumping out the structure itself and then, as you indicated, getting that water out of the steam pipe so they can then put steam back into the pipe and avoid the safety concerns. I mean, you're familiar, if you're in any of the old apartment building, the water hammer that occurs in the old steam heat where it bangs the -- the pipes bang, well just imagine that, you know, times 1,000 with our high-pressured steam system. So once again, the laborious process that they went through was really to ensure the safety of the public and our customers to make sure that there was no chance of a water hammer that could result in a steam pipe rupture, and that was the time it took.

Now I'm sure--again, this was, you know, another first, so I'm sure there were lessons learned that we can do that in a quicker way. We still have not figured out a way to avoid the need to preemptively shut down a portion of the system because the installation of that system is it will cool down and cool that pipe down and

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 113 TECHNOLOGY
2	result in condensation of that steam so we need to
3	de-energize it. The thing we can really work on
4	is can we expedite the restoration, either by
5	putting more people on it or shrink the amount of
6	area through additional valving that needs to be
7	de-energized and that would a faster restoration.
8	COUNCIL MEMBER CHIN: I think
9	that's really, really important because even our
10	office building at 250 Broadway didn't have heat
11	'cause we rely on steam heat and
12	JOHN MIKSAD: Right.
13	COUNCIL MEMBER CHIN:staff had
14	to work with hats and gloves and coats, and it
15	wasall that was, you know, happening at the same
16	time.
17	What about this whole smart grid
18	technology? What's the feasibility of ensuring
19	that there's more reliable supply of electricity
20	for the city? Are you expanding on that and
21	JOHN MIKSAD: [Interposing] We are,
22	and we have been for a number of years now. I
23	think it's the most complex distribution grid in
24	the country and perhaps the world, but we are
25	expanding that effort. But I will say smart grid

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 114
TECHNOLOGY

is not the be-all, end-all either. I mean, if the communication equipment is on a pole and the pole comes down, there goes your smart grid also. So also, as we talked about earlier, if the communication system is out, for whatever reason, as a result of power outage or whatever, that limits the ability for that system to communicate back and there goes your smart grid also. So the smart grid is not a be-all, end-all solution, but it has helped us and it will continue to help us.

The one area that we've looked at before and that we're looking at again now that really is under the smart grid umbrella is smart meters. To change out the existing meters that require a meter reader that only communicate to us when a meter reader goes out and reads it and but rather have a meter than can do a number of other functions, including tell us the quality of the power, can remotely connect and disconnect, and can, most importantly for this conversation, to tell us when the customer is out of service or back in service. That will have a huge--if we can make that work in this sort of event, that will have huge benefits in a Sandy-like event in

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 115 TECHNOLOGY 2 expediting the restoration and help us greatly in communicating better accurate information to our 3 customers. And I think both of those fronts are 4 5 really worth the exploration, that's why we're 6 doing it. COUNCIL MEMBER CHIN: Another 8 question of in terms of when you talked earlier, I 9 think you said that the costs of the damage was around \$450 million? 10 11 JOHN MIKSAD: I did. 12 COUNCIL MEMBER CHIN: So how are you going to recover that costs, from the federal 13 government or whatever, and are you going to have 14 15 to raise the rates of your customers? 16 JOHN MIKSAD: Right, so we are 17 looking for federal reimbursement, we have 18 submitted the application to the governor's 19 office, so hopefully the governor and his folks 20 will consider Con Edison in part of the 21 reimbursement, and we certainly hope that the 22 senate passes the relief bills to make sure that 23 money starts coming to this area. So we hope to 24 be part of that reimbursement so that those costs

are covered. We also, obviously, have insurance

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1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 116 TECHNOLOGY 2 claims and the like. But that's really what we're hoping 3 for in terms of payment for the restoration. 4 5 COUNCIL MEMBER CHIN: Okay. And б then just one last question on when we were talk--7 when Council Member Comrie was talking about 8 really looking at maybe a piecemeal approach to 9 laying underground, you know, the wiring or 10 whatever, and so you were talking about \$25 11 billion, so do you have, like, a breakdown, like a 12 per mile cost for laying, you know, the utility 13 underground? JOHN MIKSAD: Yes, our estimate is 14 15 \$6 million a mile, and there are studies around 16 the country that are in that ballpark, I've seen 17 \$3 million a mile, \$4 million a mile. We're at 18 six, we're probably at the high end of that 19 spectrum, and, really, it's more of a challenging 20 environment in our service territory, a lot more 21 things are already underground that are in the way 22 that we need to consider. 23 We feel that it's going to be on 24 the higher end of the range in terms of 25 undergrounding.

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 117 TECHNOLOGY 2 COUNCIL MEMBER CHIN: Okay. Thank 3 you. 4 JOHN MIKSAD: You're welcome. 5 COUNCIL MEMBER CHIN: Thank you, Chair. 6 7 CHAIRPERSON GARODNICK: Thank you, 8 Chair Chin. I'm going to clean up here with a few 9 final questions for you before we go on to our 10 next witnesses. 11 Let's just go back to the 12 preemptive cuts for a moment. We know that Con Ed 13 cut power preemptively to 34,500 and we also know 14 that there were preemptive cuts in some, but not 15 all, of the areas that are Zone A areas. Help us 16 understand the factors that go into that decision, 17 as well as if you can rate yourself as to how you 18 did and whether or not there were other areas that 19 if such a storm were to be looming on the horizon 20 tomorrow, whether you would do preemptive cuts 21 there. 22 JOHN MIKSAD: Sure. Really, the 23 data that we used on this the idea of preemptive 24 de-energization was some studies that we did. We 25 actually took our equipment and put it in a lab

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and submerged it in saltwater and we saw the

effects and so we knew, based on those studies,

that the outcome would not be good, that there

would be fires, that equipment would fail and, in

some cases, fail violently. So that really was

the information that we had at our disposal to

make that call.

It really at that point it became a much easier decision, despite the fact that it was the first time we've ever done it, which is unprecedented, you know, another unprecedented thing in our 120-year history, but it was the first time we actually called for de-energization. Of course, the subway system, you know, in the last couple of years for the first time and--first and second time called for preemptive shutdown also so we were not alone. But we really knew, again, with this focus on public safety that that was the right call, no second-quessing, no doubts whatsoever in my mind that if we do have high voltage equipment that is not submersible and saltwater enters into it, we do need to go to preemptive.

That said, I mentioned we are

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looking at a number of different ways to avoid the need for a preemptive shutdown of a network and affecting that large an area, that many customers, I talked about Brighton Beach, how we're going to have switches that can isolate some of the larger customers that will go underwater and spare the portions that won't, I talked about splitting the Bowling Green and Fulton networks in Manhattan so that only the customers that go underwater would be de-energized preemptively, the rest of the customers, including the Stock Exchange and the Federal Reserve and downtown hospitals stay in, I think those are positive steps.

We've got a prototype out there for--and you may or may not know this, but a good portion of our underground system is submersible, the lower voltage equipment is submersible. We have never been able to create a submersible high voltage gear, we call it 460 volt equipment. It's open-air installation, it's generally in a vault right outside the customer on the sidewalk and then it goes into the basement of the customer and meets up with the customer's electrical gear.

We've got a prototype to actually encapsulate and

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allow our equipment, that 460 volt equipment, to be submerged. When we do that, we could, in theory, just isolate the building as opposed—the buildings that are affected as opposed to all of the network, so that's the other thing we're working. If that pilot is successful, then we certainly can—we'll have some promise on that front.

I would also say that, and I've been saying for several times that there are customers, most of our customer's equipment is in the basement also. I know some of our customers are evaluating whether to move their equipment up, that's a tough call for them, costly, it takes up--it moves from the basement up to rentable space up on the second floor, and they've all got to make that call. Whether building codes can or will change to require that is certainly something that we should be considering. I've already said that for all new buildings, all new installations, we require equipment to be either submersible or above the floodplain, but there's, obviously, a large population of buildings out there that do not have that that we need to consider.

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 121 TECHNOLOGY
2	CHAIRPERSON GARODNICK: That's all
3	extremely important and useful information. Let
4	me just thank you for the approach by Con Edison
5	for the future which would be a little more
6	precise in terms of the way to cut off power
7	JOHN MIKSAD: Yes.
8	CHAIRPERSON GARODNICK:because,
9	you know, you look at the vast area in Manhattan
10	south of 39th Street which was not anywhere near
11	Zone A or B
12	JOHN MIKSAD: Right.
13	CHAIRPERSON GARODNICK:but had
14	to have power, you know, shut down, or had power
15	shut down because of the flooding on 13th Street,
16	but to be able to isolate the most difficult areas
17	is something that we certainly will count on your
18	doing in the future.
19	But just to go back to my question
20	for a second, I heard you say that you would not
21	second-guess at all the areas in which you did do
22	preemptive shutdowns in unprecedented way, but do
23	you think that there were other areas in which you
24	should have done preemptive shutdowns?
25	JOHN MIKSAD: Well the one thing I

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will say that really didn't come to anyone's attention is we did shut down individual feeders supplying networks for the same reasons, because we knew that the equipment that those in the areas of those feeders would be submerged, but it didn't require the full shutdown of the network so the customers went unaffected. So we did do selective other preemptive shutdowns but they were really just equipment shutdowns and not customer shutdowns.

CHAIRPERSON GARODNICK: Okay. Α couple more questions from me, you talked about all of the outbound calls that you do before the storm and that included people who have critical life-saving machinery on which they rely, you said that you reach out to them. What is the process for reaching out to the folks who fall into that category? Presumably, they need to self-identify themselves to you, but how do you ensure that your message has actually been received by those folks? JOHN MIKSAD: Yes. Yeah, so they do self-identify. Every new customer who comes to

us, we inform of the program, and they have the option to sign up for it, and then we

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periodically, I know, send out in bill inserts the just informing--reminding folks of the program that if something has changed, they can sign up for it.

So the way we contact those customers is with a call from a representative to say, or a VRU, a recorded message, to say, hey, in this case, a storm is coming, we have potential for widespread power outages and should your power go out, just make sure you have an emergency plan and that could include going to the nearest hospital. And we will do that in advance of the storm.

Now during the storm, we're also reaching out to those customers that are actually now out, and if we don't get a hold of them, I think that was, sort of, one of the scenarios you were referring to, we do work through OEM and the police department and we will actually, if we try to get a hold of folks and we don't get a hold of them, we will actually get typically a PD to go out and knock on a door to make sure they're okay.

CHAIRPERSON GARODNICK: How big a

list is that?

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JOHN MIKSAD: There are 4,000

customers that are signed up on our lifesustaining equipment list and there are another
4,000 customers or so in the medical hardship,
which is a, sort of, a lower tier of that, but
still requires a--a doctor indicates that they
need some device to help them--their health.

We're going to be turning a little later on to cable or telecommunications companies, those are also entities that need to know where Con Edison is heading when it comes to power restoration so that they can actually anticipate where they need to deploy their resources and staff. Can you help us understand what your level is of communication with the telephone companies, the cable companies, et cetera, to keep them posted on what's going on?

JOHN MIKSAD: Yeah, I guess the

private--one of the points, the hubs, is at New York City OEM at their command post, we are staffed there, as are the cable and telecommunication companies so information is exchanged there at their periodic briefings, status reports back on both sides of that

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equation. So that's probably the primary, but I do know we, I mean, we are customers of the communication companies and the communication companies are customers of ours so we also have contact information that we will treat them like our other customers and we will give them estimated times of restoration, just like we do for any other customer. And then we generally have, sort of, an account executive for those corporate type customers that are also dealing with them and dealing with any issues that they may face.

CHAIRPERSON GARODNICK: Okay. And lastly, I expect that we're going to hear from the union because we have their testimony here, that they feel that Con Edison was not prepared to handle the supplies that were necessary, and by your own testimony a few minutes ago, you noted that Sandy stretched you, and that's not a surprise at all in light of what you were dealing with, but they have cited as an example that Con Ed ran out of poles, I don't know if that is accurate from your perspective, if you'd like to address that. And also while you're at it, let's

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outside, it was a significant number of people who

talk about the workers who came in from the

4 you brought in, it sounds like it almost even

5 doubled your--actually more than doubled your

6 workforce, and whether the people who came in had

7 the qualifications requisite to actually do what

8 we wanted them to do or whether they actually

9 ended up being a burden on your regular repair

10 people who might have needed to educate them on

11 how to handle an urban environment.

JOHN MIKSAD: Okay. First, on the poles, as I mentioned earlier, when that army went out to work, left those staging areas and those base camps, they took with them in many cases all of the material that we had, but no crew was delayed for an hour with regard to because we didn't have a pole. Did it push us, were we constantly replenishing once the crews left and replenishing? Absolutely. So could you have gone there at noon and found no poles? Absolutely, but all the crews were out of the yard, were doing the work that they needed to do with the poles that they needed and the other materials they needed.

So as I said, Sandy certainly stretched us and we

went to great lengths to make sure that material,

that supply chain kept that army fed with the 3

material and equipment and fuel that it needed. 4

5 With regard to mutual assistance,

you know, I cited the 4,000 employees that I have 6

7 in my organization and the 5,700 that came in, but

8 sort of, I think a better apples to apples

9 comparison is, you know, the major effort, the

10 real resources were required to reinstall poles

11 and put up wire and deal with the damage to the

12 overhead system, that was the bulk of the real--

the grunt work that was required. What we have on 13

14 a normal day, on a day like--a blue sky day like

15 today, we have some ballpark numbers, 150 overhead

16 crews on the Con Edison system, maybe it's 160,

17 170, but ballpark numbers, let's just--we'll call

18 it 150. The equivalent of the 5,700 people we

19 brought in, that's probably 1,200 crews, overhead

20 crews to do overhead line work. We don't need on

21 a blue sky day like today or the vast majority of

22 the time when Sandy has not affected us, we don't

need 1,200 overhead line crews doing on the work 23

24 on the system, I don't have the work for them, our

25 customers can't afford them, and there is no LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 128 TECHNOLOGY

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2 reason for us to have them. The mutual assistance, the beauty of the mutual assistance program, when it's working right, and, again, Sandy certainly pointed out some issues here, but when the mutual assistance program is working right, the beauty of it is that we can go along with the resources that we need for 360 days of the year and when the storm hits on those five days, we could get the resources we need basically for those five days and those five days alone. And that really is a system that has served, I think, the country, not only the city, very, very 14 well.

> And I think that in the cases where we did split crews up, Con Ed crews in order to guide, to be crew guides for those foreign crews, that is leveraging the talent that we have so that we can multiply it. So rather than one of our lineman being able to put up one wire at a time or one pole at a time, they are now responsible for five or seven or ten crews where they can leverage their talents to get more work done.

So that, in my mind, is a very positive thing, it's something that we--to me, it

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 129 TECHNOLOGY 2 allows us to use our talent in an optimal way given the immense amount of work that we have, it 3 allows -- it makes sure that we've got a highly 4 5 qualified person with every crew, foreign set of crews that come in to our service territory. 6 I would also say in addition to 8 that, prior to them doing work, we have -- and you 9 could have seen it at any one of those base camps, 10 we're talking to them in advance, we're talking 11 about the system design, we're talking about the 12 system rules, the work policies, and all of that 13 is communicated to the forces that come in to work 14 for us. 15 And I think it's an efficient and effective use of resources and it's something that 16 17 I don't think we want to give up. 18 CHAIRPERSON GARODNICK: Okay. And 19 I'm certain that we'll hear from the union 20 representatives themselves on their perspective. 21 So my very last question here is on 22 the 13th Street substation and whether or not the 23 wall that you are improving by the summer is 24 actually forward looking enough to actually be

able to deal with what might come. I feel like we

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are reacting, this is not a problem of Con Ed specifically, but we as a city are reacting to what we know and we're reacting to what we have seen or what we can reasonably anticipate. How confident do you feel about the size of the wall that's going up around 13th Street?

JOHN MIKSAD: Well the thing that gives me confidence is the uniqueness of Sandy, the way she hit, the fact that the stars aligned at high tide and we were in the northeast quadrant where the winds are the highest, the long push. I mean, it had 800 miles of push to push water into the harbor. So it was a fairly unique if you talk to meteorologists and, you know, can it repeat? I'm never going to say anymore that it can't repeat. But I do feel somewhat confident by the fact that the stars kind of had to align with Sandy.

Now that said, I don't think that we're done, I think this is a step, I think it's a good step, but we are also evaluating other plans, as was suggested by some of your colleagues today, about looking at do we just raise equipment up to a much higher level or figure out a way to make it

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 131 TECHNOLOGY 2 submersible. So I think we've got more work to do, I don't think that it's the end of the story 3 when we have 13th Street and the other stations 4 5 protected to 14 feet. 6 CHAIRPERSON GARODNICK: Well thank 7 you and we will look forward to being supportive 8 of having future conversations to deal with those 9 issues that you're struggling with. We've identified a number of the issues, I assume most 10 11 of them you are well aware of before the hearing, 12 and just we do very much appreciate your approach to the hearing, your presence, and certainly, the 13 14 candid way in which you acknowledged what went 15 right and what did not go right, and certainly this committee--all of these committees do 16 17 appreciate that, so thank you for that. And we're 18 going to call our next witnesses, so thank you. The next witness will be Michael 19 20 Deering and Jonell Doris, both of the Long Island 21 Power Authority. And as soon as you are up and 22 settled, you may go ahead and begin. 23 [Long pause] 24 CHAIRPERSON GARODNICK: Welcome. 25 MICHAEL DEERING: Thank you.

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[Pause]

MICHAEL DEERING: Okay. I got it.

Thank you for the opportunity or inviting us today to provide testimony in our response to Hurricane Sandy. I am Michael Deering, I'm vice president of Environmental Affairs for LIPA. Okay, thank you. And I'm joined by Bob Rowe, who's the director of Smart Grid for our service provider, National Grid; and Jonell Doris, who is the district manager for the Rockaways. We welcome the opportunity to address this Council and to discuss our storm preparedness, as well as what we can do to help you further your efforts as we go forward.

In particular, I would like to recount of the some activities and efforts that we undertook in the Rockaways to address the needs of our customers who suffered some of the worst damage delivered by this storm. It's my hope that as we proceed with this assessment of the event, the process will lead to lessons learned that will help us to improve our system and to help coordinate with our other agencies and utilities in future storms 'cause I think the question is

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not whether we're going to get another storm, but when we're going to get that storm and how we're going to address it differently as we go forward.

I also want to just take a moment to thank the workers from LIPA National Grid, IBEW 1049 and all the federal, state, and local agencies, the emergency response organizations that worked together to help us to safely restore power in just over two weeks' time. And I know two weeks is not satisfactory in terms of restoration and the expectations, but two weeks for a storm of this magnitude and given the not one storm we had, but two actually, was a wonderful accomplishment in that scheme.

Just for the purposes of setting
the stage, the Long Island Power Authority, as
you're aware, was a public power authority, we're
a not-for-profit, we were created by the state
legislature in 1998. It's our responsibility to
supply electric service to both Nassau and Suffolk
counties and our customers on the Rockaway
peninsula. We provide retail electric service to
about 1.1 million customers, and approximately
32,000 of those customers are located on the

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Rockaway peninsula. Now when I say customers, I'm talking meters, so the population is probably somewhere in the area of about 112,800 in the Rockaways. And that's a mix of both residential, predominantly residential customers and a mix of business and industrial customers.

Under a management services agreement with National Grid, they are responsible for our day-to-day management of our system. They also help maintain the electric transmission and distribution system, and they also supply delivery of energy that is produced by some of our generating plants. So LIPA basically owns the system and National Grid is our contractor, helps us to maintain and operate the system on a daily basis.

As was mentioned before, this was an unprecedented storm, exceeded the predictions of experts from the National Ocean--NOAA, from FEMA, the U.S. Coast Guard, and it was particularly exceeded those expectations as it dealt with the storm surge that greatly affected the south shore of Long Island and the Rockaway peninsula, and we'll talk a little bit about that

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Island, we do include the Rockaways--we did experience about 1.2 million outages, that's more than twice the number of outages that we experienced in Tropical Storm Irene. I mentioned the storm surge, and that is very significant. It was unprecedented, it brought water levels to between 9 and 11 feet above average high tide levels, with a surge that was reported in Long Beach of 16 to 18 feet. That was well in excess of what was anticipated by NOAA in the pre-storm activities.

As we planned for a storm, any storm, we are doing this many days in advance and we were actually monitoring this when it was down in Jamaica, and based on the weather reports, we predicted a tropical storm event and we commenced with storm meetings, we identified the availability of materials and acquired those materials that were going to be necessary.

Outreach began to our customers and key stakeholder groups urging them to be aware of the storm event that was coming and for them to help

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make appropriate preparations for a multiple day event.

One of the lessons learned from Hurricane Irene that we incorporated this time were daily municipal calls. We had begun those in anticipation of this storm and continued those throughout the storm. And in fact, once the devastation was in the Rockaways, we held separate calls for municipal leaders in the Rockaways to discuss this area in particular, as well as the broader municipal calls.

Based upon those National Weather
Service reports, LIPA and Grid anticipated
initially about 200,000 to 350,000 outages. We
looked at a 7-day restoration plan for a storm of
that type of a magnitude, and in an effort to
reduce the restoration period, LIPA authorized the
immediate request for almost 1,300 off-island
workers. The number of off-island workers
requested continued to rise as it became apparent
that Sandy would be a far greater magnitude than
initially forecast. And you heard from our
colleagues from Con Edison about the difficulty in
obtaining mutual aid crews because this was a

system that was very large, widespread, affected

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the south, the entire eastern seaboard, and we, just like them, were accepting and getting crews from across the country and were part of that

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6 airlift that was spoken about earlier with crews

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coming from as far away as California.

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9 restoring power to ensure the safety of those

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working on the lines as well as to restore the

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largest number and critical infrastructure

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customers in the initial stages, and then we work

We do have a set process for

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backwards. So the plan that we followed during

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Sandy was generally to repair the transmission

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lines to enable power to be supplied to our area

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substations, to repair those substation damaged to

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permit power to be supplied to the distribution system, restore the core infrastructure of the

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distribution system, which typically is larger and

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runs along our main roadways; restore distribution

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feeds into neighborhoods; and then restore

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individual pockets and individual homes. This

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also takes into consideration a prioritization of

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critical infrastructure, which includes the Long

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Island Rail Road, subways, hospitals, nursing

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homes, fire and police stations, schools, and as we saw in the last storm, gas supplies, which became a critical issue throughout the storm.

I mentioned the flooding along the south shore, that resulted in numerous—in damage to numerous substations and to address the significant impact in these communities, we had crews that were immediately dispatched to those substations to both assess the situation, formulate recovery plans that could address the restoration activities. And Bob Rowe was one of the directors of that program and had spent many, many weeks in Far Rockaway, in the Rockaways to address that.

Responding to the needs of the customers in these flooded areas was also treated as a priority. The flooding along the south shore damaged an estimated 100,000 homes and businesses. Saltwater intrusion into electric panels, electric outlets and wiring made it unsafe to re-energize affected premises without proper inspection and necessary repairs made by the customers. We worked with many of the agencies here to literally go house-to-house and business-to-business trying

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to ensure that those facilities were going to be safe to energize, and, in fact, to de-energize some areas in order to energize additional facilities. So it was a very deliberate process that was done in cooperation with many of the agencies here.

I also mentioned, despite the magnitude of Sandy, we anticipated that about 90% of our customers would be restored by the end of day ten, and we had about 85% of our customers restored by day seven. However, we did get hit with the nor'easter that brought with it additional winds and snow, that caused an additional 123,000 outages. Also, forced us to stand down in terms of our restoration because of the winds and the snow. And even with this setback, our crews moved forward and, again, within 16 days we did have all of our customers who could safely accept power to their homes and businesses--and that's an important feature 'cause we do still have people who are not yet ready to accept that power.

Our efforts in the Rockaways, LIPA and National Grid implemented a storm restoration

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plan specific for the Rockaways, which was executed in coordination with local, state, and federal agencies and included the focus on addressing the needs--the information needs, as well as the energy needs of the communities that we serve here. Damage assessment teams were deployed here. And the unprecedented flooding, as we mentioned, surpassed the height of the sandbags that had been proactively placed around substations to protect against the projected storm surge. This resulted in significant damage to these facilities and necessitated that the initial focus of restoration efforts here be targeted to repairing the substations. And as part of that was we also brought in generation, mobile generation to try to address the needs of the community while we were restoring some of those substations.

Conversely, and you heard--we've been talking about overhead and undergrounding lines, a detailed survey of the overhead lines here found that most had withstood the effects of the storm. That can't be said for the rest of the island. We took significant damage in terms of

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trees falling, wires down, poles coming down, but in this area, it was predominantly a flood surge event.

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Accordingly, we had an extremely large contingent of repair personnel supplemented by experts from National Grid and other service territories and they were assigned to the severely flooded substations here in the Rockaways, as well as the adjacent Woodmere substation to begin the repair and the rebuilding of these facilities.

Within days, progress was made in advancing repairs and, as I said, arrangements were made to site mobile generation at various sites, providing the ability to re-energize customers that could safely accept power.

center at the Rockaway Beach substation and placed a second mobile trailer to support the community. Given the complexity of the process and the need to closely coordinate with residents, building owners, and other key local stakeholders, working through the Office of Emergency Management, we engaged with the New York City Housing Authority, the police department, fire department, Department

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 142 TECHNOLOGY 2 of Transportation, FEMA, and the DEP to coordinate, develop, and execute a plan. 3 Cooperatively, the priorities were identified as 4 5 LIPA worked with the New York Police Department and DOT to install generation and energize traffic 6 7 and street lights to address public concerns. Power was also restored to FEMA's community 9 outpost, while generation was sited at key public health and safety facilities and housing complexes 10 11 across the Rockaways. 12 Efforts were also initiated through 13 a taskforce consisting of LIPA, Grid, and the OEM, 14 along with electricians and plumbers to 15 immediately begin the inspection process to 16 determine which homes and businesses were 17 structurally fit and safe to accept power. 18 As has been raised before, efforts 19 focused on isolating those premises unsafe to 20 accept power while the backbone of the electric 21 system was rebuilt. We did, at a deliberate pace

and under very safe conditions, restore power to

key facilities, including hospitals, nursing

homes, schools, housing complexes, and the MTA

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stations.

Additionally, as homes and

businesses were deemed safe, LIPA personnel were dispatched quickly to re-energize these premises, in many cases, immediately dispatched, and within 24 hours was the timeframe from notification that they were safe to energize for LIPA to go out and actually energize those facilities. And we still have, I believe, it's about 8,000 or so homes and businesses that have yet to be energized, some of which may never come back, we don't know what the loss may have been in the overall scheme of things.

Just in terms of communication, we did have personnel that went door-to-door to distribute informational flyers that detailed the re-energization process, we had walk-in centers established at numerous locations, including the Battalion Pentecostal Assembly, Waldbaum's Shopping Center, St. Francis de Sales Church, Belle Harbor, and Fort Tilden Park. Employees staffed these centers around the clock and remained on site during the holidays to provide assistance to customers. Additionally, a LIPA engineer was assigned to work with FEMA to assist

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in the execution of the Rapid Repairs program. We also had newspaper and radio ads that were going out. And, as the gentleman from Con Ed spoke earlier, we do have texting ability to notify customers of their restoration times, and used all of our methods mechanisms to get out and try to give the community as much information as we had.

To-date, we continue to maintain a presence at these command centers, and we have restored service to all customers' homes and businesses can safely accept power, and we're ready to connect the remaining customers that are out once those necessary repairs have taken.

Concurrently, we are also progressing with efforts to protect our substations and equipment against any future storms.

Because time is short, I'll conclude there and just thank you for your opportunity to be here today and we do look forward to providing additional information and working with the Council as you go forward on the bill and help in any way we can.

CHAIRPERSON GARODNICK: Well we thank you and certainly thank you for your

Ţ	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 14: TECHNOLOGY
2	presence here today and for your testimony. Let
3	me just follow up on a few points, the first one
4	relates to communications, both before and after
5	the storm.
6	Con Edison previously, or just
7	before you, had testified that they had made \$1.4
8	millionmillion dollar, 1.4 million robocalls
9	MICHAEL DEERING: Right.
10	CHAIRPERSON GARODNICK:before
11	the storm and that that they had a list of people
12	who are on life saving equipment, et cetera.
13	MICHAEL DEERING: Yep.
14	CHAIRPERSON GARODNICK: Can you
15	give us some of the stats on the level of outreach
16	that LIPA did before the storm, how you did it,
17	and how successful you were?
18	MICHAEL DEERING: I can provide you
19	specific stats, but generally speaking, all of our
20	critical care customers throughout Long Island
21	were contacted prior to the storm. We did
22	CHAIRPERSON GARODNICK:
23	[Interposing] By phone.
24	MICHAEL DEERING: By phone and
25	follow up during the storm. So if we did not get
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TECHNOLOGY
a response from a critical care customer, there

was a follow up and, ultimately, it was an onsite

4 follow up so that was--

[Crosstalk]

CHAIRPERSON GARODNICK:

[Interposing] By LIPA itself or--

MICHAEL DEERING: [Interposing] By
LIPA and National Grid to inquire about the status
of the customer. That was something that was a
lesson from Irene, so we have done that, and we
will continue to do that. Because critical care
customers on a blue sky day like today are given
priority in terms of a restoration effort, but in
a situation that we had in Sandy where we've got
the majority of our customers out, it's not
necessarily going to be a critical care customer
that we can get to immediately so we want to make
sure and clarify that, A, they know what that
means in that situation and, B, that they do have
alternative plans to try to address their
situation.

In addition, we did do, I believe, it was in excess of half a million robocalls prior to that, we have also done e-mail contacts. We do

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TECHNOLOGY

have the text-in, text-out information so we have contacted customers through their cell phones or e-mail addresses that they have given us, and I will get you all of the numbers. And that was prior to the storm as well as during the storm.

Again, I think the communication we're getting out to the public is giving them this kind of general window of be prepared for seven days, be prepared for ten days, be prepared for fourteen days and the end day. It's what customers are really looking for is a more granular stet of information: When is my power going to be turned on.

So that's the challenge for us is to get that granularity and that timeliness of information so that customers, after the immediate damage assessment is done, we can begin to give them, you know, better crew locations, better estimates of when their power is going to be on. So I think that's the challenge that I know we face. We have gone through a series of upgrades to our outage management system, we clearly need to do more to get more timely information to the crews, get the crews back to us so that we can

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TECHNOLOGY

then get it on our outage system maps and get it to our customers.

CHAIRPERSON GARODNICK: Speaking of the maps, LIPA had some of the same issues that we had identified with Con Edison previously, which is just information which was flat-out wrong and gave the perception to the customer that LIPA did not actually know what was happening. What steps have you all taken to deal with the inaccuracies on the maps so that you can give proper information to customers and also avoid that perception?

MICHAEL DEERING: Yeah, generally, we are looking--we're--and Bob could probably help answer this question--we are looking for technological advances, for example, having crews with touchpads to be able to communicate back to us where they are, what the damages are so we get a better handle on what is the repairs that are necessary and what the timeframe for those repairs could be. So part of it is getting crew information out, getting that damage assessment done more quickly, and then having it fed into the computer system in a quicker fashion to be able to

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 149 TECHNOLOGY
2	be put on the system.
3	Right now, what we have is a large
4	outage showing everybody on Long Island out. How
5	do you now synthesize that and break it down?
6	We're able to do that later on in the storm, I
7	think we were at that point around the eighth day,
8	ninth day, tenth day, but how can we do that in a
9	much sooner and quicker fashion, that's something
10	we're looking at. In fact, we've engaged aand
11	we've been engaged in conversations with the State
12	University of New York, at Stony Brook, the AERT,
L3	the AERTC, Advanced Energy Research Center, to
L4	begin to see how we might have some technology
L5	that can help us do that.
L6	Did you want to add?
L7	BOB ROWE: Sure.
18	CHAIRPERSON GARODNICK: What's your
L9	timeframe for being able to have some
20	recommendations on these issues? Because,
21	obviously, looking at them, we appreciate
22	MICHAEL DEERING: Yeah.
23	CHAIRPERSON GARODNICK:but we
24	also want to know that there is a concrete
25	timeframe for
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1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 150 TECHNOLOGY 2 MICHAEL DEERING: Yeah. CHAIRPERSON GARODNICK: --for this 3 4 advancement. 5 MICHAEL DEERING: Yeah, I wish I 6 could sit here and tell you I have a concrete 7 timeframe. We did have one meeting with them 8 already, we have a follow up meeting set up this 9 month, we're working with National Grid and our senior team to see what additional steps we can 10 11 take and how quickly we can do those [off mic]. 12 One of the meetings we have next week, in fact, is 13 to talk to a contractor that does have wireless 14 technology capabilities to go out and do damage 15 assessments through laptops to -- through iPads, I'm 16 sorry, to do touch points that can then be 17 transferred back, which would greatly enhance our 18 ability to give timeframes. 19 CHAIRPERSON GARODNICK: So are we 20 talking about a three-month or a six-month time 21 horizon here? Are we talking about a five-year 22 time horizon? What are we talking about? 23 MICHAEL DEERING: I don't think 24 we're talking about a three-month and we're not 25 talking about a five-year, I think we've got to

Τ	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 15 TECHNOLOGY
2	figure out how to do this in a reasonable
3	timeframe and I don't know what that technology
4	is, but I will come back to you with that
5	CHAIRPERSON GARODNICK:
6	[Interposing] Have you set any internal goals at
7	this point on ways to address that?
8	MICHAEL DEERING: In terms of
9	We're moving forward, I don't think we've set a
10	specific timeframe. We've also had, just so you
11	know, we've had conversations with New York State
12	on a number of other areas, communication is one
13	of them, infrastructure upgrades are second ones.
14	You know, so there are a number of things that
15	we're looking for and we're putting together
16	packages of potential improvements that could be
17	made and then we're going to work with our
18	partners to try to do that. DPS is very
19	interested in this and something we're going to
20	work with them on as well.
21	CHAIRPERSON GARODNICK: So,
22	obviously, our constituents want to know
23	MICHAEL DEERING: Yep.
24	CHAIRPERSON GARODNICK:that you
25	have a time table and that you have a plan and so

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 152 TECHNOLOGY
to the extent that you would be willing to share
that publicly
MICHAEL DEERING: Sure.
CHAIRPERSON GARODNICK:I think
it would go a long way to restoring confidence
and
[Crosstalk]
CHAIRPERSON GARODNICK:so that
people know what you are doing and what you're
shooting for.
MICHAEL DEERING: Totally.
CHAIRPERSON GARODNICK: As I've
said repeatedly through this storm and in the
aftermath, and even some of my colleagues cited it
here already today, it's not that people will
necessarily criticize you for precisely hitting
the mark
MICHAEL DEERING: Right.
CHAIRPERSON GARODNICK:of that
six-month or nine-month or three-month target, but
it is a fair criticism that there is no target
that you are seeking to achieve. That's an issue
with residential buildings around the city, it's
an issue with power companies, and so we want you

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 153 TECHNOLOGY
2	to put those numbers out there and we want you to
3	have something to strive for.
4	MICHAEL DEERING: Understood. I
5	would just add one other thing that we have done,
6	in fact, just this week. We have upgraded our My
7	Account pages on our website, which is that
8	texting in and texting out. So the more that we
9	can get customers engaged in alternative
LO	mechanisms to communicate with them, and that's
11	kind of a joint process is getting the customer to
12	actually register and then for us to continue to
L3	do that, that's one of the improvements that we
L4	have already made at this point in time.
15	CHAIRPERSON GARODNICK: You did
L6	note it in your testimony, did you do any
L7	preemptive cuts?
L8	MICHAEL DEERING: Preemptive cuts.
L9	CHAIRPERSON GARODNICK: Cuts to
20	power in the Rockaways?
21	BOB ROWE: Not in the Rockaway.
22	MICHAEL DEERING: No, we didwe
23	de-energized in Fire Island
24	CHAIRPERSON GARODNICK:
25	[Interposing] Sorry, de-energized is the proper

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 154 TECHNOLOGY
2	term so that's actually what I'm asking.
3	MICHAEL DEERING: But we did not do
4	that in the Rockaways and we
5	CHAIRPERSON GARODNICK:
6	[Interposing] Should you have, in looking back, do
7	you think that that would have helped the
8	restoration process?
9	BOB ROWE: I think similarly to
10	CHAIRPERSON GARODNICK:
11	[Interposing] Identify yourself.
12	BOB ROWE: Oh, sorry, I'm Bob Rowe
13	from National Grid. I think similar to the Con
14	Ed's testimony, the issues with the damage is a
15	lot around the control wiring, that is not
16	affected whether you de-energize or not, so I
17	think our restoration process would have been
18	about the same whether we had de-energized or not.
19	CHAIRPERSON GARODNICK: Let's talk
20	for a moment about the coordination with the City
21	on downed trees. We heard from Con Edison that
22	there is an amorphousand it sounds like a rather
23	poor process between the City and the power
24	companies that serve the city on how to deal with
25	trees that are on power lines. Would you describe

the situation the same way that we heard from Con Ed, which is you get routed a ticket from the 311 system saying there is a tree on a power line, you go there, the Department of Sanitation goes there, and if it's powered, you will de-energize it, and then the Department of Sanitation needs to remove it, is that consistent with your understanding of how things work?

BOB ROWE: I would say typically when trees are involved in a power line, as Con Ed said, LIPA does not own trees, so we will respond with a crew that's capable of clearing the lines, but we will just clear enough of the tree to be able to reestablish the lines, and in some cases, in storms of this magnitude, we also go out and cut the lines clear so that other crews can safely clear them. But it's typically left to, you know, the municipality to clear the road and remove the tree from the road. We don't have the equipment to pull a whole tree out of the road, we really just respond with trucks with saws to make it clear and get it out of the way.

CHAIRPERSON GARODNICK: And if the Department of Sanitation were to have arrived

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 156 TECHNOLOGY
2	there before you, there is nothing that they would
3	be able to do at that moment in time because they
4	have a live wire, is that correct?
5	BOB ROWE: That's correct.
6	CHAIRPERSON GARODNICK: Okay. How
7	many extra workers did you all bring in as part of
8	that worker sharing program to be able to help
9	deal with the challenges?
10	[background noise]
11	MICHAEL DEERING: Yeah, we have
12	6,100 crews?
13	BOB ROWE: Mm-hmm.
14	MICHAEL DEERING: We brought in
15	about 6,100 out-of-state crews.
16	CHAIRPERSON GARODNICK: Did you
17	have adequate supplies to be able to do
18	restoration or did you find yourself short?
19	MICHAEL DEERING: Yeah, there is
20	this perception that we ran out of poles at some
21	point in time, which is not true. We did not run
22	out of any materials during the storm. We
23	continued to replenish that, and that included gas
24	supplies and fueling our trucks and keeping our
25	keeping the workers who were out on the streets.
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LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 157
TECHNOLOGY

So, you know, these are challenges, but I give

National Grid kudos for this 'cause the logistics

of bringing 6,100 crews in, bedding them down,

providing them with all the equipment that they

need, the fuel, and to get them out and managed,

that was done throughout the process with adequate

materials.

CHAIRPERSON GARODNICK: Let's just do a little self-reflection on things that in hindsight you might have done if you had known what you were up against. Obviously, the testimony focuses on everything that you did, and we get that, but, obviously, there are also people who were without power for a very long time. What were the lessons here that if you had all of the perfect information that you would have done, but were not able to do?

MICHAEL DEERING: Well first we'd certainly be having the Long Island crews herethe off-island crews here, I'm sorry. So the mutual aid that, as Con Ed spoke about earlier, has worked very well in the past, in this situation, because of the size and scope of the storm, left many of us at a disadvantage for the

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 158
TECHNOLOGY

storm of this size. So having those crews here ready to go on day one.

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I think the other thing I mentioned before is to equip our surveyors with better tools to get faster damage assessments and more comprehensive damage assessments. That's part of the conversation that we're having with Stony Brook and the AERTC is how can we know a pole is down without necessarily having to send somebody out there, that's technology that may or may not be available at this point in time, but certainly to have an assessor go out, be walking the line, which is what we do, we have our assessors actually walking all of our lines and then taking damage notations. But to have that iPad availability so that they're punching in what that damage is, that's something that would be tremendously advantageous in the early stages, I think, and help move it forward. So that's something that we're looking at.

I think those two things are predominant. And I think the other thing is, you know, storms are very unpredictable, the predictability, if we can get better

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 159 TECHNOLOGY 2 predictability of storms, and I don't know if we can ever beat Mother Nature, but that's something. 3 I think the other thing is and 4 5 we're doing now is hardening some of the infrastructure that we have and dealing with the 6 7 substations in the potential flood zones. And I think the other thing that 9 we're going to be doing, clearly, I think 10 everybody's going to be doing, is working with 11 FEMA as flood maps get changed and potential areas 12 that heretofore weren't considered flood zones 13 perhaps are. 14 So I think we got to look at 15 hardening, I think we have to look at better 16 damage assessment, I think we have to look at the 17 mutual aid groups. And I turn it to Bob if there 18 was anything else. 19 CHAIRPERSON GARODNICK: So you 20 cited the number of 85% of your customers having 21 been restored by day seven, tell us about the 22 remaining 15%. 23 MICHAEL DEERING: Well, again, I 24 think it gets to that gradation, you know, you're 25 getting large customer blocks when you're

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 160
TECHNOLOGY

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improving--when we're restoring the transmission system, for example, and the distribution system, so you're, you know, in the beginning, you're getting large groups of folks. As you begin to get down to the individual wires or groups of wires or distribution feeders into the neighborhoods, you're getting fewer and fewer restored with each job that you're producing. you really do begin to see the drop off as the days go on as it becomes really a -- it gets to a point where it's one-on-one, one line for one home as you get to the end of it so you will see that slowdown in restoration. But conversely, with the workforce that we actually had at point in time and at that stage, that began to, you know, continue to move forward rather quickly.

CHAIRPERSON GARODNICK: Right, but do you have the numbers for us as to the timing of the restoration for that final 15?

MICHAEL DEERING: Oh, I didn't bring that with, the 15%. Well all of the--I don't have the breakdown, but all of our customers were restored within day 16. Sixteen. And, again, we were on track to restore our customers

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 161 TECHNOLOGY
2	within 10 to 12 days until that second nor'easter
3	came in
4	[Crosstalk]
5	CHAIRPERSON GARODNICK:
6	[Interposing] All right, and my last question
7	before we go to Chair Chin, you've, in your
8	testimony, you cited a number of 80,000 of, I
9	think it was either 80,000 or 8,000, you said it
10	quickly
11	MICHAEL DEERING: I'm sorry.
12	CHAIRPERSON GARODNICK:and I
13	missed it, as to the either customers or lines
14	that are yet to be energized
15	MICHAEL DEERING: I think
16	CHAIRPERSON GARODNICK:what was
17	that number? Because we missed it over here and
18	[Crosstalk]
19	MICHAEL DEERING: [Interposing] I
20	think it's about 8,000 customers.
21	CHAIRPERSON GARODNICK: Eight
22	thousand.
23	MICHAEL DEERING: Eight thousand.
24	CHAIRPERSON GARODNICK: And what
25	was the 8,000 number referring to?

1	TECHNOLOGY
2	MICHAEL DEERING: I think that's
3	the number of customers in the Rockaways that are
4	of yet to be re-energized because they are not
5	ready to accept power.
6	CHAIRPERSON GARODNICK: I see, so
7	by day 16, LIPA was prepared to give them power,
8	but there are 8,000 that are not
9	MICHAEL DEERING: It's exact
10	CHAIRPERSON GARODNICK:still not
11	ready to receive
12	[Crosstalk]
13	MICHAEL DEERING: [Interposing]
14	It's exactly right.
15	CHAIRPERSON GARODNICK: Okay.
16	MICHAEL DEERING: And there are
17	some also in Nassau and Suffolk counties that are
18	in a similar situation.
19	CHAIRPERSON GARODNICK: Chair Chin.
20	CHAIRPERSON CHIN: I think just on
21	the question of Intro 985, the whole idea of
22	putting power lines underground, have you guys
23	considered that, the feasibility of that, and also
24	the costs that you think would incur?
25	MICHAEL DEERING: We haveand if I

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 163 TECHNOLOGY 2 can just pull out my notes -- it is about 20% of our transmission system is underground, and 3 approximately 30% of our distribution lines are 4 5 underground. As it relates to the Rockaways, actually, the overhead distribution really was not 6 the issue, the predominant issue here was the flooding and the impact on the substations. 9 while we are looking at areas that might be, just 10 as Con Ed is, that might be appropriate for 11 undergrounding in the future, you know, I think 12 this area in particular is one where the system is 13 working and we have to be concerned with, I think, the substations and the infrastructure that we 14 15 have or generation that we have that are in 16 flooded areas that, for the first time in this 17 storm, saw inundation that we had never seen 18 before. Bob, if you have anything. 19 CHAIRPERSON CHIN: So do you agree 20 with what Con Ed laid out in terms of the costs? 21 MICHAEL DEERING: I think the cost 22 that we have estimated at is somewhere between 2 1/2 and \$3 million a mile. As a general 23

statement, you're going to have, you know, some

areas are going to be more complex than others.

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1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 164 TECHNOLOGY
2	I would point out undergrounding is
3	not always a solution, we did have an issue,
4	actually, out east with a transmission line out by
5	Shelter Island that was undergrounded and, because
6	of the storm, actually scoured away and actually
7	became damaged. So you can have the alternative
8	problem and thatand when you have an under line
9	damaged, it tends to take longer to find and tends
10	to take longer to fix.
11	CHAIRPERSON CHIN: Okay. Thank
12	you, Chair.
13	CHAIRPERSON GARODNICK: Thank you
14	very much. I think that's the last question we
15	have for you, and we're going to call our next
16	panel, and we appreciate it.
17	MICHAEL DEERING: [Interposing] And
18	I will provide you with some of those detailed
19	questions that you asked us.
20	CHAIRPERSON GARODNICK:
21	[Interposing] Please, we appreciate that.
22	MICHAEL DEERING: Thank you.
23	CHAIRPERSON GARODNICK: Thank you.
24	And our next panel is going to be Brian McMorrow
25	from National Grid and Ken Daly, National Grid.

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 165 TECHNOLOGY
2	[Long pause]
3	CHAIRPERSON GARODNICK: Gentlemen,
4	welcome, and whenever you are ready
5	KEN DALY: Sure.
6	CHAIRPERSON GARODNICK:we're
7	ready for you.
8	KEN DALY: Well good afternoon. We
9	have a formal statement, in the interest of time,
10	I was going to recommend we submit that.
11	CHAIRPERSON GARODNICK: That's
12	fine, and introduce yourself.
13	KEN DALY: Sure, I'm Ken Daly, the
14	president of National Grid's gas business.
15	National Grid has a gas business in New York City
16	in Brooklyn, Staten Island, and two-thirds of
17	Queens. We are not the gas business in Manhattan
18	or the Bronx. I am the president of the gas
19	business and I have responsibility for our New
20	York City business, as well as Long Island and our
21	upstate New York business.
22	Brian, would you like to introduce
23	yourself?
24	BRIAN MCMORROW: Brian McMorrow,
25	Director of Field Operations in New York City,

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 166 TECHNOLOGY
2	covering Brooklyn, Queens, and Staten Island
3	CHAIRPERSON GARODNICK:
4	[Interposing] Hold on one second, that microphone
5	is not on and we've got to help you out. Maybe on
6	the back.
7	BRIAN MCMORROW: Okay.
8	CHAIRPERSON GARODNICK: That all
9	right? Why don't you do that one more time? I'm
10	sorry.
11	BRIAN MCMORROW: Okay. Brian
12	McMorrow, Director of Field Operations in the New
13	York City area over the gas business coverage
14	Brooklyn, Queens, and Staten Island.
15	CHAIRPERSON GARODNICK: So I think
16	that's a fair recommendation, the idea of
17	submitting this, but we would like you to take us
18	through a little bit of it
19	KEN DALY: Sure.
20	CHAIRPERSON GARODNICK:that you
21	believe is the most salient. We don't need to go
22	through what exactly happened in the storm and how
23	significant, we've covered that with the others,
24	but anything that you believe is unique to your
25	situation, we would like to hear.

KEN DALY: Sure, well first let me, you know, thank you and all the Council Members for the opportunity to hear National Grid's perspective on the implications of Sandy to our gas business, and then likewise, thank all the emergency responders—fire department, police officers, Sanitation, who we worked very, very quickly with.

You know, as the gas company, we certainly understand that whenever our customers are unable to heat their homes or businesses, whether it's because of something National Grid did or something the customer did or, in the case of Sandy, because of the storm, it's a very serious issue and we take that responsibility with incredible commitment. And what I'd like to do is just outline our comments in terms of our preparation prior to Sandy, our efforts as part of the restoration, and then finally, and perhaps something you haven't heard much about so far today, our efforts right now in rebuilding these communities that were hard hit.

So let me start first with the preparation. Like the others you've heard from,

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we drill year-round for events like Sandy and for a specific storm, we actually started a full week prior with very, very intensive preparations. A checklist similar to what you've heard earlier-monitoring the weather; very, very frequent planning calls; working closely with the city, the state; monitoring our gas system to make sure we have adequate supplies at all time, which we did prior, during, and throughout the event; safety alerts for our customers; and then very, very specific work in the flood zones.

What we do is we go through isolation drills so that in the event there was a serious event like Sandy, we could limit the damage to those areas in the flood zones and by doing so, really protect the bulk of our gas system from that damage. So I think the preparations we took protected and prepared our system very well and, in fact, the bulk of the damage was limited to the flood zone.

What that meant for New York City, a system where we have 1.2 million gas customers, only about 7,000 outages were as a result of National Grid isolating the system. The remaining

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nearly 1.2 million customers were insulated and, in fact, did not have a gas outage.

Having said that, having said that, the damage we incurred from Sandy, if you can imagine, was greater than the damage to our system in the 100-year history of the company on a cumulative basis. What that means, in one night we saw more damage than we had in over a century of running the former Brooklyn Union, the former KeySpan, and now the National Grid gas business. So our restoration efforts, you know, very, very labor intensive, we went home-to-home in each of the communities that you've been hearing about-New Dorp, Staten Island, Manhattan Beach, Coney Island, Gerritsen Beach in Brooklyn, Howard Beach, and certainly, the Rockaways in Queens. I myself was at each of those sites many, many times.

Give you some of the numbers, we did over 72,000 safety inspections, we changed out 40,000 gas regulators—just to give you a metric there, that's about a decade's worth of change outs for one storm—and we're well underway to changing out over 100,000 gas meters. We did all this immediately following Sandy and our

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restoration efforts took about one week. So by day seven, any customer who was able to take gas, we were able to provide that gas service to.

But I don't want to understate the impact of this storm to National Grid and to our gas business. To give you another perspective, it was by far the largest ever natural gas mutual aid in the history of the country. So National Grid coordinated 46 different utilities coming here to New York City to support our restoration efforts, included among those 46 was our upstate New York affiliate, as well as our Rhode Island and Massachusetts peers from National Grid. So a lot of help came from within National Grid. I should also add that Con Edison sent over their gas crews and we worked very closely with Con Ed in terms of the restoration.

I should also point out for areas like Breezy Point and New Dorp, where the devastation was even more extreme, we essentially rebuilt the entire gas network, and that work has been completed, both Breezy Point and New Dorp, those systems are up and running. Again, any customer who could take the gas from us at this

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The challenge after the first week, similar to what you heard from Con Ed and LIPA, is, even though we were done on our end of the meter, the customers, in many cases, were many, many days away from being able to take the gas service because of massive damage to their equipment. So we went and organized a program of going out into the communities and we opened up eight what we call community centers. Many in the Rockaways, many in Brooklyn, and in Staten Island as well, where we staffed them with 100 National Grid employees essentially around the clock, and these employees helped meet the needs of those customers, giving them estimates as to what they needed to do to get their boilers fixed, to get their heating equipment fixed. But, again, we went far beyond our normal remit, just to give you a perspective, we actually donated over \$4 million worth of equipment to these communities, a total of over 300,000 flashlights, blankets, electric space heaters, batteries, water bottles, et cetera, et cetera, really to help these

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communities get back on their feet prior to the point where they were able to fix their gas equipment.

So normally we're only responsible to the work up to the meter, but, as you've heard, these were not normal times, so we went well beyond the meter and went into the premise, if you will. We organized a network of 250 plumbers, on our own, we helped those plumbers procure boilers, and we helped our customers get in touch with those plumbers to facilitate the reconnection process.

And then finally, and I think most importantly, we're now into what we call the rebuild phase. These communities, which have been our communities for over a century, were very, very hard hit and our commitment on day one was that we would be there to the very end until they're all back up and running so we launched a \$30 million economic development program. I would like to say it's the first of its kind, it's actually the second of its kind. Last year at about this time, we did the same thing in our upstate New York business. You'll remember right

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after Irene and Lee, although downstate New York was not impacted dramatically by the flooding, in upstate New York, in the Hudson Valley region, certainly very, very significant flooding, so we offered a similar program last year, we've now replicated that in downstate New York. If I could just take a moment and give you highlights of that program. Effectively, it has three tiers. Tier one is a program where we funded the cost of the plumbing inspection for the customer. So, again, normally that's not something that the utility is responsible for, we felt it was necessary.

Secondly, for any of our low income customers, for any customer who could not afford the new heating equipment, we paid up to \$6,000 for them to get a new boiler, new hot water heater, and have a plumber come and install that.

And then finally, the phase we're in now is we call tier three, it's working with the commercial customers. As you mentioned earlier, a number of the stores, laundromats, pizza shops, they're still not up and running, we are giving economic development grants of up to \$250,000 to these commercial customers, not loans,

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 174 TECHNOLOGY
2	grants. We have a chocolate factory in the
3	Rockaways, there's a bagel shop in Staten Island,
4	there's restaurants in Brooklyn that we're helping
5	them with these grants for their heating equipment
6	for their construction to really get them back up
7	and running. To-date, over 15,000 of our
8	customers have participated in one of those three
9	aspects of our economic development program.
10	So when we look at Sandy, you know,
11	we believe we were well-prepared, we believe we
12	performed as well as we could based on the
13	information we had at that time, but as you
14	mentioned earlier, you know, we've learned from
15	the experience from Sandy and we certainly have
16	recommendations as we go forward.
17	So with that, I will turn it to you
18	and be happy to take any questions you may have
19	regarding National Grid's gas business.
20	CHAIRPERSON GARODNICK: First of
21	all, thank you for your presence, and it is clear
22	that you all went above and beyond and we
23	certainly appreciate that and I'm sure your
24	customers appreciate that.
25	Let's talk for a second about the

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interplay between National Grid and Con Edison and what you lean on Con Edison for when you're trying to deliver gas service to the folks that you serve. How does it work and what challenges did you face here in the process of accessing power to

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be able to provide that service? KEN DALY: Yes, well Con Edison and

9 National Grid have a relationship that goes back, you know, well over a century in that we have 10

11 overlapping territory.. So in Brooklyn, Staten

12 Island, and two-thirds of the Queens, we're the

13 gas company there, the electric company, we work

every day together. You know, if you were to go

15 to our dispatch center or their dispatch center,

you'll see a red phone, that's Con Ed; and 16

17 likewise, if you went to their center, that's

National Grid. So our folks are in constant 18

19 dialogue. We have a very, very strict and formal

20 protocol that before we would relight any of our

21 gas infrastructure, we clear it through Con Ed;

22 likewise, before they re-energize their electric

infrastructure, they clear it through National 23

24 Grid. We work on a day-to-day basis like that,

25 certainly, never moreso than during Sandy.

We also provide one another mutual aid, in particular, when there are water outages.

Water outages are a very, very big challenge for a gas system. Not that long ago, Con Edison had a water outage, National Grid sent its crews, we sent our supervision, we sent our camera technology so they can go inside the pipes, inspect for water. And then likewise, Con Edison was kind enough to return the favor during Sandy, we relied on their crews, their cameras, their level of sophistication as well.

CHAIRPERSON GARODNICK: The notice that you gave to customers in advance sounds like you were reaching out, like LIPA and Con Ed. You were using robocalls and the e-mail both?

KEN DALY: Yeah, we have, you know, probably very, very similar outreach to other utilities whereby we contact utility customers, both in the way they prefer to be contacted, so if that's text in this day and age or, traditionally, through phone calls, depending on their preference.

CHAIRPERSON GARODNICK: So you use text, phone, and also e-mail too.

valve was, they knew what the protocol was, they

knew who the supervision was accountable for

making that decision, and then they would give

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constant updates from the field, as we saw, you know, the tidal surge is coming and what the conditions were right on the ground. And then on a case-by-case basis, you make a decision as to whether or not to isolate the system. By doing so, you then have an outage and it will take time to restore, but in the case of Sandy, you then wind up protecting the remainder of your infrastructure.

CHAIRPERSON GARODNICK: So you really need to get it right because it sounds like the restoration process is much tougher than the isolation process and when you have to go house to house, building to building, whatever the case is. So if you overreact and cut off gas and suddenly there is no storm that materializes, people are very angry at you for being as aggressive as you are; and similarly, if you don't protect the integrity of your system, people are very, very angry at you because you have not acted aggressively enough. It sounds like, in a way, the precision for the gas company is actually even a little tougher than for other entities the way you describe it.

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KEN DALY: Yeah, you accurately described that.

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CHAIRPERSON GARODNICK: Let's talk about refunds to customers. We know you've done a fair amount, the community centers, the grants, what have you done, if anything, for customer refunds?

KEN DALY: Yeah, so as soon as Sandy hit, we spoke to our regulators and we recommended that we would not charge any of our customers for any of the distribution charges for the period whereby we were unable to provide them with gas service, so we waived, you know, voluntarily any fees to the customer for that period. We then went a step further, and to this day, for any of our customers in the flood zone, and in fact, we took it a step further, for all of our downstate customers, we waived all of our normal customer collections and other billing processes. So we said between the time Sandy hit and February 1st, we would not proceed with our normal collections or other billing type activities.

For the flood-impacted customers,

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 180 TECHNOLOGY
2	to your point, we went, you know, much further, we
3	gave them plumbing inspections; if they were low
4	income, we paid for the entire boiler replacement;
5	and we have a number of other grant programs in
6	place.
7	CHAIRPERSON GARODNICK: All right,
8	gentlemen, thank you very much for your testimony,
9	and we appreciate the steps that you have taken
10	and continue to take to help bring a level of
11	normalcy to a very, very difficult situation, and
12	so thank you for that.
13	KEN DALY: Great, thank you again.
14	CHAIRPERSON GARODNICK: We
15	appreciate it. We're going to call our next
16	panel, which is Rich Windram and Chris Levendos of
17	Verizon. And then we're going to be followed by
18	the Local 1-2 of UWUA, it's UA.
19	Thank you. And to the Sergeant, if
20	you could grab testimony.
21	Welcome, as soon as you are ready
22	to go, please begin.
23	[Pause]
24	RICH WINDRAM: Good afternoon,
25	Chairs Garodnick and Chin, thank you very much for

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 181 TECHNOLOGY 2 having us here. My name is Rich Windram, I'm Director of Government Affairs for Verizon-New 3 York, and I'm joined by Chris Levendos, who is 4 5 executive director of our National Operations, and who is also leading the restoration here in 6 downtown Manhattan. We appreciate the opportunity to appear before you today to address Intro 985 9 and Verizon's preparation and response to 10 Superstorm Sandy. 11 Regarding Intro 985, Verizon 12 believes substantial challenges exist to the 13 undergrounding of power lines and the power-14 related infrastructure throughout the city. 15 However, we will participate in any study of this 16 issue, if one is conducted. 17 In regards to our storm 18 preparation, Verizon provides wireline and 19 wireless services throughout New York City. My 20 comments today will be focused mostly on wireline, 21 however, we will touch upon wireless also. 22 Verizon recognized early that Sandy had the 23 potential to be a highly destructive storm to many 24 parts of our territory. Internal preparations

began on October 25th, followed by communications

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to our customers on the 26th. We posted consumer tips on company websites, issued news releases, engaged customers through social media and emails. Our crisis management teams along the East Coast closely monitored the storm's path and completed required preparations, such as confirming fuel supplies for backup generators; adding critical inventory such as spare smartphone batteries and car chargers; moving vehicles and other portable equipment from low-lying areas; stocking critical supplies to centralized locations for rapid deployment, and we also staged many other equipment in and around the areas that may be affected by the storm. We also maintained a disaster recovery fleet of emergency vehicles, which include a 51-foot mobile command center and two 53-foot mobile emergency calling centers. These satellite trailers were moved close to the area along with our industry's--it's actually Verizon is the only one in the industry that has an environmental hazmat response team, we moved both close to the area to be prepared to move in if necessary.

The effects of Sandy were

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substantial, both to our infrastructure and to the

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many customers and employees who live in the In spite of the many challenges affected areas. presented by the storm's devastation, Verizon has made great progress in restoring customers to full service and rebuilding our damaged facilities. Crews comprising of over 700 managers and technicians were loaned from upstate New York, New England, and Florida to assist our local teams with repair and restoration efforts throughout the downstate area. While the bulk of our outages were related to the loss of commercial power, there also was significant damage to our infrastructure due to water and wind damage. teams repaired switches and other electronics damaged by flood waters, as well as began restoring the -- as well, we began restoring the damaged copper infrastructure with fiber wherever The emergency vehicles that I mentioned possible. before helped serve over 650 customers in different parts of the city once we deploy them. We continue to rebuild our network damaged by Hurricane Sandy to ensure that it is efficient and effective to all our customers.

Our partnership with the City's
Office of Emergency Management was critical in our
ability to commence our restoration efforts,
coordinate with Con Edison and power companies,
lessen many of the logistical hurdles we faced,
and communicate with necessary stakeholders. In
the immediate aftermath of Sandy, fuel
availability was a daily concern. Verizon's
command center worked with fuel suppliers at the
federal, state, and local levels to secure the
fuel essential to keep our generators and service
vehicles running.

Verizon's network was challenged by the effects of Sandy. In some areas, copper cabling was rendered inoperable as the result of the unprecedented flooding, the mixture of saltwater and diesel fuel in some buildings, and the loss of air pressurization systems. We have now taken on a effort to modernize the infrastructure so it's more resilient and able to adapt to these types of events. As part of the modernization, we have completed a major milestone here in Lower Manhattan by placing more than 500 miles of fiber strands, which will enable us to

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dramatically upgrade the communications

capabilities. Once the restoration is complete,

the area will have the nation's most advanced

communications infrastructure, providing the

highest level of service and reliability. While

the company has been installing the robust fiber

infrastructure, it also has been working with

landlords as they ready their properties for the

return of tenants.

As building owners and managers complete their work, Verizon is rapidly completing the work of connecting the newly-laid fiber to the new electronic systems and turning up service.

The steps these building owners are taking, in conjunction with the new fiber, will provide additional protection for the communications infrastructure in the event of future large-scale weather events.

During the restoration process,

Verizon has provided alternate communication

solutions to thousands of small businesses and

residential customers. The company has provided

call forwarding capabilities to consumers and

small businesses so calls are automatically

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forwarded to a working landline or cell phone number. In addition, the company has provided at no charge to customers more than 2,600 Verizon wireless home phone connect products and Verizon 4G LTE Jetpack Mobile Hotspot devices.

Verizon continues to operate two command centers in New York City where its operations and engineering teams can swiftly design and reconfigure new systems and routes and then work with building managers to identify space within their structure to locate the new equipment, electronics, and cabling.

Verizon has also had an open and continuous dialogue with the manufacturers and vendors that supply the industry with electronics necessary to terminate these sophisticated fiber solutions—fiber networks. The great need for equipment prompted by Hurricane Sandy restoration efforts continues to put pressure on supply chains of specialized equipment, which, in turn, affects restoration efforts.

During and after the storm, Verizon customers were able to call or go online to report service issues and receive updates on the status

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of their repairs. Call center hours and employee work shifts were extended to better meet customers' needs, and a company state of emergency was issued on November 3rd, enabling us to deploy essential employees on 12-hour shifts. Where possible, Verizon Wireless stores remained open during and immediately following the storm to provide device charging and free domestic phone calls to all local residents regardless of the carrier. We also increased device and accessory inventories at our stores to meet customer needs.

Verizon landline customers who have reported an out-of-service condition related to Hurricane Sandy will be receiving credit, and customers have been allowed to suspend their services free of charge if they currently are unable to live in their home or operate their business as a result of Sandy. Verizon technical support continues to help customers determine if their equipment, such as set-top boxes, home broadband routers, are inoperable or need replacement. Verizon is repairing or replacing any of this equipment damaged by Sandy without charge.

Verizon Wireless and the Verizon

Foundation partnered with the Red Cross to set up
a Text-to-Donate program for Sandy relief. Todate, that program has raised close to \$3 million
committed to the Red Cross's Sandy relief by our
customers and the company. Additionally, we
provided some local support to the likes of City
Harvest, Metropolitan Council for Jewish Poverty,
United Federation of Teachers, Catholic Charities,
and the Stephen Siller Tunnel to Towers
Foundation.

While these comments have focused mostly on Verizon's landline service, our wireless service also leveraged its years of investment and planning in providing wireless service support throughout and after Sandy. Our wireless network performed well in the immediate aftermath of Sandy due in large part to the billions of dollars of investment made in our network. Our network teams worked around the clock on restoration efforts, and by November 8th, the wireless network in the Northeast was once again operating at pre-Hurricane Sandy levels. Among other efforts,

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fueled permanent generators to replace power lost from traditional power grid. We also deployed Cells on Wheels to provide coverage and capacity, set up mobile stores on wheels, and stationed Wireless Emergency Communications Centers. After the storm, Verizon Wireless removed any domestic voice and text coverage charges that wireless customers in the affected areas may have incurred between October 29th and November 16th.

As our restoration efforts continue, we remain committed to providing the best service to our customers and most efficient manner—in the most efficient manner possible and coordinating with local officials to expedite the recovery. Thank you very much. If you have any...

CHAIRPERSON CHIN: Thank you. I do have some questions. I know that it's good that you are not charging, you know, customer who had overage on their text message and all that because, for a while there, texting was the only message that was getting across and people couldn't get calls and everything like that.

I represent Lower Manhattan and down here, we still have customers that don't

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 190 TECHNOLOGY 2 have--I mean, we still have constituent that don't have landline service. And so this whole issue of 3 fiber optic versus the copper wires, has Verizon, 4 5 in taking care of the damage, are you also replacing any of the functioning copper wire in 6 Lower Manhattan as part of your current plan? 7 CHRIS LEVENDOS: Yes, we have, from 9 the immediate aftereffect of the storm, any viable 10 opportunity that we had to fix copper 11 infrastructure, we have done so. I'll give you 12 one example, the water intrusion that we took into 13 the West Street Central Office or West Street Network Center, we took water intrusion to the 14 15 cable vault there, where all the cables aggregate 16 back to, we took about 70 faults to the 400 copper 17 cables that go out of there and we have fixed them 18 all. We saw other damages throughout the streets, 19 as well as other damages into our customers' 20 buildings. So the faults that impacted the copper 21 infrastructure were not only at Verizon's 22 location, they were throughout the streets and

manholes and conduit systems of Lower Manhattan,

as well as in the subbasements of our customers.

So where there was an opportunity to make a ready

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1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 191 TECHNOLOGY 2 fix to any piece of copper cable, we have done so. Where the damage is been complete, where it has 3 failed in many fault points, that's where we have 4 5 looked to build parallel fiber optic systems or, in many cases, actually to leverage off of 6 7 existing fiber optic systems that we already had 8 in place here in Lower Manhattan. 9 And, as Rich described, one thing 10 we're doing in the interim while we're working to 11 build out new fiber optic systems to impacted 12 small businesses and residential customers of 13 Verizon, is that's why we're looking to--that's 14 why we are providing alternative wireless service 15 for free while we are making those new fiber optic 16 connections. 17 CHAIRPERSON CHIN: So are you 18 saying that if the area where the copper wires 19 were not damaged, you sort of left it alone, you 20 didn't--21 CHRIS LEVENDOS: [Interposing] 22 Absolutely correct. 23 CHAIRPERSON CHIN: --upgrade them 24 to fiber optic. 25 Certainly not, CHRIS LEVENDOS:

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we're prioritizing them where we have service

outages. Verizon has plans in place with the

build out of FiOS throughout the city of New York

to build out fiber to every block and lot

according to those franchise agreements, but right

now, obviously, priority is around service

restoration.

CHAIRPERSON CHIN: So are customers aware that that's what's happening? Because, I mean, constituents has come in to us and they're wondering why all of a sudden they're getting upgraded to FiOS.

CHRIS LEVENDOS: Yeah, so we're certainly explaining those transitions during the service restoration. I will tell you that I've heard from Community Board 1, as well as Community Board 3, where we have appeared a number of times over the last so many weeks that we have certainly recognized that there have been gaps in communication and awareness, so we have taken that feedback squarely and have looked to supplement where we can with Community Boards helps as well. We have given additional flyer notices and worked with the Community Boards, as well as our own

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 193 TECHNOLOGY 2 outreach in trying to close any communication gaps about what our restoration process is about, what 3 4 the impact and process is customer by customer. 5 CHAIRPERSON CHIN: That is very 6 important--7 [Crosstalk] 8 CHAIRPERSON CHIN: --and I really 9 urge you to continue to do that because we have 10 constituents coming to us and say, you know, are 11 they just basically trying to upgrade everybody to 12 FiOS and making us pay for services that we might 13 not want. CHRIS LEVENDOS: Yeah, certainly 14 15 not, this is about restoring service. There is no 16 charge for this restoration process, there is no change in price in restoring voice service, 17 18 whether it's over copper or whether it's over 19 fiber. There's no change for that, there's no 20 different charges for that process. And during 21 that transaction, during that restoration, we look 22 to explain that to our customers. 23 CHAIRPERSON CHIN: Definitely, 24 that's really important. Also, does the FiOS 25 require electricity to function?

Optics eventually have to turn back to electrical signals. Phones, as well as computers, don't accept optical signals, so at the last point within a customer's location we use a device that's called an optical network terminal and what that simply does is it takes the fiber optic signals, turns it back to voice signals and data signals that can be accepted by the customer's equipment, and that device does need electrical support, it does need to be plugged in.

CHAIRPERSON CHIN: So what are you looking at in terms of in case of an emergency, like another blackout?

CHRIS LEVENDOS: There is--

CHAIRPERSON CHIN: How do you--

CHRIS LEVENDOS: --so there is

battery backup power, so if there's a loss of commercial power, there is a battery backup device that supplies eight hours of talk time for that device, and that's only when it's utilized. So if it's not being utilized, the power draw on the battery is not going down. So that's the support in a commercial power outage with a fiber optic

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 195 TECHNOLOGY
2	system.
3	RICH WINDRAM: If I can also add,
4	because the network is passive and there's no
5	electronics in it, it is more resilient in case we
6	are faced with any catastrophic events like Sandy
7	again. It would be able to be more resilient for
8	any type of water intrusion.
9	CHAIRPERSON CHIN: So is that
10	backup power also for landlines?
11	CHRIS LEVENDOS: Yes, voice service
12	will continue to work in the loss of commercial
13	power because the battery will support the power
14	necessary to provide voice.
15	CHAIRPERSON CHIN: Because right
16	now, what happened during the storm is that when
17	customers could not get the landline back it's
18	because of the damage to the copper wires.
19	CHRIS LEVENDOS: Correct, and as
20	Rich was just saying, the fiber optic cables have
21	certainly proved to be much more resilient to
22	flooding. We did not have any situation in Lower
23	Manhattan where any of our fiber optic cables were
24	impacted because of water intrusion. We had
25	incidences where we had infrastructure that was

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2	physically damaged from some forced pressure
3	impact, but nothing from water intrusion. Again,
4	as an example, our West Street central office,
5	which once we restored power to it within 27 hours
6	after the storm, all of our fiber optic systems
7	immediately turned back on and all of our
8	customers having fiber optic facilities and power
9	on our end and power on their end, those systems
10	were working.
11	The copper infrastructure that was
12	damaged, obviously, did not come back even with
13	the restoration of power.
14	CHAIRPERSON CHIN: There were
15	other, I mean, just curious as there were other
16	company that offer phones and Internets and they
17	were able to come right back on after the
18	electricity was restore.
19	CHRIS LEVENDOS: Yeah, they
20	obviously did not suffer the same cable damage
21	that we did.
22	CHAIRPERSON CHIN: Oh, okay. The
23	other issue was, I mean, I was very disappointed
24	to see that Verizon filed a petition with the
25	Public Service Commission saying that there were

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 197 TECHNOLOGY landlords or management office in Lower Manhattan 2 that were charging, demanding fees, and blocking 3 4 access to their buildings? 5 CHRIS LEVENDOS: Yeah, I would tell you today on a positive note that we are actively 6 7 engaged with almost all of those landlords and 8 moving things forward in a positive direction. 9 CHAIRPERSON CHIN: Because some of 10 those buildings that the New York Times article 11 mention, resident wasn't even allowed to move back 12 in, I mean, it's like 2 Gold Street and I think 13 201 Pearl Street. So I guess my question was why 14 are those building a priority for you to go in 15 there and do the FiOS when there are other 16 buildings that had people living in there or 17 working in there that really need the services? 18 CHRIS LEVENDOS: Yeah, I wouldn't 19 suggest they were a priority certainly if we 20 didn't have tenants back in the building, but we 21 have to have a plan for when they do return. 22 understanding is that the 2 Gold occupancy would occur sometime in February, perhaps later in the 23 24 first quarter. So we did have to have a plan at

some point in time that when those customers

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 198 TECHNOLOGY
2	return, that we'd be able to restore their
3	service. And so since we were having difficulty
4	executing on having a plan, we needed to move
5	forward. But, as I say, I sit here now and I will
6	tell you that we are in very positive
7	conversations about 2 Gold Street and other
8	addresses that were part of that filing.
9	CHAIRPERSON CHIN: So did you find
LO	it was necessary for you to file a petition with
11	the Public Service Commission?
L2	CHRIS LEVENDOS: [Interposing]
L3	Yeah, it wasn't my filing or my decision so I can
L4	only speculate to the point, as I said to you,
15	that it was our want to restore service and we
L6	felt that we were not moving along in a positive
L7	direction for the benefit of our customers and
L8	that had us concerned to seek some feedback from
L9	third parties.
20	CHAIRPERSON CHIN: So, I mean, all
21	along you have a plan to install FiOS throughout
22	Lower Manhattan.
23	CHRIS LEVENDOS: Throughout all of
24	New York City, yes.
25	CHAIRPERSON CHIN: Throughout all

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 199 TECHNOLOGY of New York City. 2 3 CHRIS LEVENDOS: Including Lower 4 Manhattan, yes. 5 CHAIRPERSON CHIN: Oh, now what is Verizon's plan to restore landlines to a lot of 6 7 the small businesses and customers who still to 8 this day don't have phone service? 9 CHRIS LEVENDOS: Right, so it is 10 our intentions to where our copper infrastructure 11 has been destroyed and we don't have immediate 12 fiber optics available to make use of. As I said, 13 in the interim, we're providing free wireless voice and data service and it is our intention to 14 15 rebuild those networks with fiber optics block by 16 block and lot by lot, and we are in the process of 17 doing that. 18 CHAIRPERSON CHIN: So how are you, 19 I mean, 'cause we were still getting complaints 20 from businesses who were not getting Internet 21 service or wireless service, so how are you doing 22 the outreach to them so that they know what's available? I mean, couple of weeks after the 23 24 storm, we were still getting complaints from, you 25 know, they're not small company, they're--

CHRIS LEVENDOS: Yeah, so--yeah.

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CHAIRPERSON CHIN: --companies that

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rely on a lot of phone service and they weren't

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getting it.

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CHRIS LEVENDOS: As I said before,

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was feelings, certainly from Community Board 1 and

we certainly took the candid feedback that there

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Community Board 3, that there was an information

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gap. We had teams that were out in the street

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communicating these issues, we had teams going

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door-to-door communicating these issues. We're

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3 communicating through e-mail and other cell

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numbers that we have, alternative reach numbers we have for customers, so we're continually looking

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to reinvigorate that message because we don't want

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to lose those customers, see, so it's in Verizon's

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best interests to provide alternative service

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measures while we have permanent ones, otherwise,

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they'll go elsewhere. So for us, it's a different

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story than when we talk about electrical service

restoration. If we don't do a good job in

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maintaining our customers and maintaining those

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relationships as well as services, they have other

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options and so we certainly don't want to see that

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 201
TECHNOLOGY

happen. We've taken the candid feedback that
we've gotten from our customers, as well as other
third parties, and that's why I said we're
aggressively looking to close any communication
gaps that we have.

CHAIRPERSON CHIN: One of the thing during the storm is that people had no facility to charge their phones, right? And we didn't see

Verizon out there, I mean, in Lower Manhattan in terms of having mobile stations or mobile charging station so that is something that, no, Verizon needs to think about in the future.

CHRIS LEVENDOS: Yeah, we did have mobile charging stations out there and, in fact, our Verizon Wireless stores, as well as our Verizon landline stores, were open and available and provided charging for many of our customers. So we can provide you the details of where we were and how we did that.

CHAIRPERSON CHIN: Yeah, I mean, I would love to see that because down where we were, my staff and I, when we were down in Lower

Manhattan in many community, we didn't see, we didn't see anything. There was no mobile station.

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 202 TECHNOLOGY
2	At least one of your competitor was out there,
3	they showed up one day, you know, with a
4	generators and a charging station.
5	CHRIS LEVENDOS: Yeah, I can assure
6	you
7	CHAIRPERSON CHIN: And we didn't
8	see Verizon.
9	CHRIS LEVENDOS:we were out
10	there, we were out there as well.
11	CHAIRPERSON CHIN: Okay. So, yeah,
12	please share the list that you were at with us.
13	That's all I have, Chair, thank
14	you.
15	CHAIRPERSON GARODNICK: Thank you
16	very much, Chair Chin. I just want to follow up,
17	I know that everybody is on a timeframe here and
18	it's getting late in the day, I only have a couple
19	quick questions and mine are specifically about
20	cell phone service. Because we had the challenges
21	with the landlines, we had the challenges with the
22	cell phones, and I think that was one of the
23	biggest surprises to New Yorkers, that they saw
24	such big gaps in cell phone servicethis is not
25	specific to Verizon, this is just across all of

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 203 TECHNOLOGY

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2 the cell phone service providers. And we appreciate your being here, so we're not going to, you know, have you bear the brunt of all challenges out there. But help us understand the absence of backup generators or the absence of the ability to power backup generators, what's the source of the problem here? So when we see a major coastal event like what we had, what can we do to help prevent the loss of cell phone service in the future?

CHRIS LEVENDOS: So we have battery backup power at many of our cell sites and as well we have generator power at many of our cell sites. Now not all of our cell sites have generator backup power and oftentimes, our cell sites sit on private property locations, they sit on tops of buildings. So oftentimes, it's a private property negotiation that we have to go through to have beyond just battery backup power, to be able to-the ability to have generator power. So we certainly see as a learning and a feedback to the process where we had challenges in bringing some cells back as quickly as we wanted to, the opportunity to, you know, revisit those

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 204 TECHNOLOGY
2	conversations with where they're deployed, how
3	they're deployed, and the opportunity to advance
4	the backup power so that it can be maintained
5	throughout a power failure or, at the very least,
6	recovered as quickly as possible. And, as Rich
7	described, we certainly bring in additional mobile
8	cellular infrastructure to be able to quickly plug
9	any gaps that get created, so that's certainly the
10	purpose of those that we do have things happen, we
11	need to be able to bring in temporary cellular
12	coverage to try to fill in those gaps and help
13	support service.
14	CHAIRPERSON GARODNICK: So of the
15	cell towers that have either a battery backup or a
16	generator or nothing, like, what's the breakdown
17	of Verizon's
18	RICH WINDRAM: [Interposing] They
19	all have battery backup
20	CHAIRPERSON GARODNICK:
21	[Interposing] Okay. For how long?
22	RICH WINDRAM: It depends, roughly,
23	average about eight hours battery backup, but,
24	again, it all depends on, you know, how the
25	battery is used and if there are power issues

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 205 TECHNOLOGY
2	where the battery has to get drawn from.
3	In New York City though, to add to
4	what Chris was saying, we have challenges to get
5	generators out there. It's our preference to have
6	generators at most of these locations, so anything
7	that we could doI don't want to speak for the
8	industry, but I think theVerizon and others
9	would love to work with New York City closer to
10	see how alternative and backup power can be at
11	these sites so we don't lose it. 'Cause to your
12	point, after the storm and how technology is
13	changing, everybody was looking for their cell
14	phone as opposed to their other means of
15	communications.
16	CHAIRPERSON GARODNICK: That's
17	right, it's become a bigger and bigger part
18	RICH WINDRAM: [Interposing] Yeah,
19	without a doubt
20	[Crosstalk]
21	CHAIRPERSON GARODNICK:of
22	emergency action because it's mobile and because
23	RICH WINDRAM: Right.
24	CHAIRPERSON GARODNICK:people
25	lean on it very heavily, you know

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 206 TECHNOLOGY
2	RICH WINDRAM: Right, the
3	CHAIRPERSON GARODNICK:nobody
4	makes plans anymore because they know that they
5	can wing it with their cell phone, and that's not
6	great in an emergency situation.
7	RICH WINDRAM: Yeah.
8	CHAIRPERSON GARODNICK: So that's
9	why, you know
10	RICH WINDRAM: Yeah.
11	CHAIRPERSON GARODNICK:it's
12	incumbent
13	[Crosstalk]
14	RICH WINDRAM: [Interposing] But
15	there's a
16	CHAIRPERSON GARODNICK:to figure
17	that out.
18	RICH WINDRAM:lot of space in
19	weight requirements and restrictions that are on
20	us, you know, for generators and if that can be
21	re-looked at, that would be
22	[Crosstalk]
23	CHAIRPERSON GARODNICK:
24	[Interposing] Are there so
25	RICH WINDRAM: [Interposing] I

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 207 TECHNOLOGY don't have the actual specifics but there are some 2 building code and some environmental and safety 3 issues that have always been the reason why we 4 5 can't get generators in some areas. CHAIRPERSON GARODNICK: 6 7 [Interposing] What about alternative power sources 8 like solar? Do you employ that in any of your 9 cell towers and is that something you've explored? 10 RICH WINDRAM: I would have to get 11 back to you on that, that I don't know. 12 CHAIRPERSON GARODNICK: [Interposing] 'Cause that seems to me at least 13 intuitively a good idea, it's obviously it has a 14 15 cost associated with it, but if you have a battery backup that diminishes potentially up to eight 16 17 hours but not more and you have the potential for 18 a source which actually could rejuvenate itself as 19 it goes, that seems like something that you might 20 want to take a look at. 21 One other question from me to 22 follow up on Chair Chin's questions about the 23 installation of fiber optics. Is there anything 24 about that plan--and Crane's reported that you 25 have put in 20 years of material purchases and

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 208
TECHNOLOGY

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installations into a matter of months, which is very impressive—but is there anything about that which is making it slower for customers to actually get their service restored?

CHRIS LEVENDOS: So what makes that challenging is not simply the scale, what makes it challenging is we now have fiber optic-fed electronic equipment working in buildings in Lower Manhattan, the equipment didn't exist before Sandy. The equipment has been manufactured, the equipment has been shipped, it has been installed and it has been enabled in the so many weeks post-Sandy. So we had some amount of that equipment available to us, but the sheer scale of the damage that occurred at our customer locations where we've had to--where all of the subbasements in the large commercial buildings in Lower Manhattan, where those had been flooded and damage occurred to that infrastructure, the sheer scale of that, putting tremendous pressure on our industry and the manufacturing industry, and that's been the process is getting the equipment.

But we have harnessed those resources, we have reached out to our competitors

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to be able to help in getting resources as well, and that pipeline is functioning. And I said, things are being made, things are being shipped and they're arriving here, and as soon as they come off the truck, they're going into buildings and work crews are turning those systems on.

Two positives for me for the area of Lower Manhattan, and Rich had commented how well positioned this area will be on a going forward basis from a service quality perspective, as well as the potential for service opportunities because of all being fiber optic-fed. While we have worked this upgrade and restoration to the Lower Manhattan area, a critical, you know, piece of the region to be completely fiber optic, thus providing better quality, as well as the bandwidth for future services, so thus future proofing the capability of the infrastructure we put underground. But we're also working hand-in-hand with these buildings as we're restoring service, we are putting these teleco rooms in many cases above grade. And I think it was described before in some similar aspects with the Con Edison testimony is that these interconnection points of

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 210 TECHNOLOGY 2 electrical gear, as well as telecommunication gear, has often taken place in subbasements, and 3 4 so many of the building owners are taking the 5 opportunity now as we work with them to restore 6 service, that we're making these interconnections 7 many floors up above grade level. So that's a positive should we have 9 any instance of even remote instance of a storm like this in the future, the fact that we'll be 10 11 completely fiber optic-fed, we'll be sustainable 12 to flooding, and that the electric infrastructure 13 that is at the end point of these fiber optics, 14 the fact that is many floors above grade, that will also help in any sustainability and 15 16 recovery efforts. So some silver linings out of 17 this process. There are other buildings that are 18 19 having us restore service immediately and then in 20 a post-process, we will work with them to move 21 those situations above grade. 22 CHAIRPERSON GARODNICK: Thank you. 23 I'm going to go back to Chair Chin before we call 24 our next panel.

CHAIRPERSON CHIN:

Yeah, just to

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 211 TECHNOLOGY 2 follow up just to make sure I understand that. So one of the problem that's causing the delay in 3 terms of getting services restore, you're talking 4 5 about not enough supplies in terms of--CHRIS LEVENDOS: [Interposing] Only 6 7 for the most sophisticated situations with the 8 large commercial buildings. We have plenty of 9 fiber optic cable, we have plenty of the materials that we need to build out FiOS for small 10 11 businesses and residential customers, so that 12 process is moving forward, that process does not 13 have any material shortages. It's the large 14 commercial buildings with very sophisticated 15 electronics that sits at the end of the fiber optics to provide the very intensive bandwidth 16 17 that these customers need for both voice and data, 18 that's where there certainly is a challenge on the 19 material side. 20 But as I said, that pipeline is 21 working and it is arriving, we are on track to 22 restore service through the month of January to 23 over 100 million square feet of commercial office 24 space in Lower Manhattan.

CHAIRPERSON CHIN:

Okay. So you're

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 212 TECHNOLOGY 2 talking about all the big building, commercial building that we have right now who is still out 3 of--and some of them are still running on 4 5 generators and--6 CHRIS LEVENDOS: [Interposing] Yes, 7 so well many of them are back and many come back 8 each and every day, and so we're working through 9 that. Some of them are on generator power, but we 10 can still install our equipment and be supported 11 by generator power, we don't necessarily need the 12 permanent power. As long as we have a power source, our equipment can work and function so we 13 14 will work through those processes with building owners. And we've done situations like that where 15 16 we've installed our equipment, it's functioning on 17 temporary power, they tell us when they're going 18 to cut over, we turn the equipment off during safe 19 time and late hours in the morning, they cut over 20 to the commercial power, we turn the equipment 21 back on. So we work through those things with 22 each passing day with the building owners. 23 CHAIRPERSON CHIN: Okay. Thank 24 you.

CHRIS LEVENDOS:

Thank you.

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 213 TECHNOLOGY
2	CHAIRPERSON GARODNICK: Thank you
3	very much, gentlemen, we appreciate your being
4	here today. And now I will call our next panel,
5	James Slevin, James Shillitto, Robert Stahl, Edwin
6	Lopez, and Pete Sikora. Thank you very much, and
7	come make yourselves comfortable, and we will get
8	started.
9	[Pause]
LO	[Off mic]
11	JAMES SLEVIN: Yeah, okay?
12	CHAIRPERSON GARODNICK: Yeah, sure,
L3	that's absolutely fine.
L4	JAMES SLEVIN: Good evening. Am I
L5	on? Okay. Good evening, my name is Jimmy Slevin,
L6	I'm the vice president of Local 1-2, the Utility
L7	Workers Union of America. To my left is Jimmy
L8	Shillitto, my senior business agent, and my other
L9	senior business agent, Robert Stahl.
20	Good evening, like I said, ladies
21	and gentlemen, I appreciate the opportunity to be
22	here on behalf of the 8,000 members that have work
23	around the clock since October 29th to restore the
24	essential utility service.
25	The importance of our efforts as

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 214
TECHNOLOGY

first responders cannot be over-cited. If our first-class city is to continue to foster economic development, it has to have a first-class electrical distribution system. Our members pursue this objective 24/7. And our members are not just utility workers, they are community residents, whose family's lives, if not home, were also upended by this storm. We welcome the opportunity to be involved both in assessing the efforts that were undertaken and developing ways to improve our ability to respond to future events.

In the weeks since the storm's waters receded, we have begun our own internal investigation of the state of Con Ed's system. In the days leading up to the storm, through the restoration, and near and long-term future, our investigation has focused on information that we have obtained from our members. They have a unique perspective to offer in that Con Ed men and women have been in the forefront's lines in both operating the system on a day-to-day basis and in restoring service house-by-house, to the millions affected by Sandy. Our investigation is ongoing

1 LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 215 TECHNOLOGY and we will be pleased to brief you on our 2 conclusion once our assessment is completed. 3 In the meantime, our major findings 4 5 thus far is the following: As the Council well knows, the issues surrounding Con Edison's 6 distribution systems are longstanding. There are no doubt several causes, but a central focus 9 should be the scope of the company's workforce. In the years since the advent of deregulation, Con 10 11 Ed has slashed its union workforce to the bone. 12 Since 2008 alone, the company's workforce has been 13 cut by nearly 1,500 members. The problem is 14 simple: There is too much work on the system for 15 too few utility workers. 16 Concerns with the system were 17 exacerbated since last summer's ill-advised lockout. When our members came back to work, we 18 19 found out that the company's makeshift workforce 20 has been dealing exclusively with emergency 21 situations while essential day-to-day maintenance was not being performed. Our members have been 22 23 playing catch up ever since. 24 Since the storm hit, our 25 restoration efforts were supplemented by several

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 216
TECHNOLOGY

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thousand utility workers from other part of the country. While mutual aid is an acceptable practice among utilities, we appreciate the help, the cost and inefficiencies of these efforts may well exceed any benefit to the Con Ed ratepayer. No two utility systems are identical, and the difference can be very significant. For example, the California utility had their trucks flown into New York, where the streets in Brooklyn and Queens were too narrow to navigate. Our firsthand and first line impressions is that the majority of the utility workers brought in to help had no training on performing service restoration in its unique urban environment in which we operate day-to-day. As a consequence, trained Con Ed workers had to take time away from their tasks to ensure that mutual aid workers with the ability to conduct their operations without injuring themselves or Inadequate material management impeded customers. our efforts.

While Con Ed had advance warning of the storm, it failed to secure necessary spare parts. Worse, some of those parts were secured were the wrong ones, and their inability to return

2 them.

Staffing deployments were mysterious. The few and grossly inadequate number of linemen responsible to address issues in the Bronx were diverted to Westchester, while Bronx residents sat in the dark. Neither the union nor the public has been provided an explanation for this staffing deployment decision.

Our efforts were also hampered by simple things. Our members function as first responders but do not have this official status. As a result, workers responding to emergencies were stuck on the same long gas lines as other city residents. Also, they were turned away when vehicle restrictions were imposed by the mayor. We suggest actions to ensure that when our members are engaged in storm restoration activities or any power emergency, they are treated as first responders, which will facilitate them entering into and movement throughout the five boroughs.

Even now, after the storm, Lower

Manhattan, just blocks from the Stock Exchange,

still has office buildings running off those

backup generators located on those city streets.

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 218
TECHNOLOGY

Part of the city are receiving services at lower voltages. Lower quality electricity service can damage consumer appliances, home computers, and cause erroneously increased record electrical use. To provide a service in an adequate voltage is an essential needs for meeting the needs of high-tech industries. These services are issues are used and to putting mildly consistent with efforts to promote an economic development. If we are to achieve this goal, we can neither, nor should, treat this situation as the new norm. It is unacceptable.

Union to the Moreland Commission summed up the summary well, stating that in an emergency the capability of utilities to respond and to provide good customer service comes down to the basic issue of having people and equipment to do the job. Based on our investigation to-date, Con Ed had neither trained sufficient trained personnel nor all the needed equipment.

Once that evaluation is complete, we will please to present our results, which we also plan to share with that Moreland Commission.

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 219 TECHNOLOGY
2	We look forward to working with you to ensure that
3	New York City is a place where electrical service
4	is provided a safe, reliable, and durable manner.
5	Thank you again, and if you have any questions,
6	I'll be feel free to answer.
7	CHAIRPERSON GARODNICK: Thank you.
8	Jimmy, anything
9	[Crosstalk]
10	CHAIRPERSON GARODNICK: Okay. And-
11	_
12	JAMES SLEVIN: I briefed it up.
13	CHAIRPERSON GARODNICK:did you
14	JAMES SLEVIN: [Interposing] No, I
15	briefed it up.
16	CHAIRPERSON GARODNICK: All set.
17	[Off mic]
18	CHAIRPERSON GARODNICK: All set.
19	[Crosstalk]
20	JAMES SHILLITTO:manpower and
21	deregulation issue
22	CHAIRPERSON GARODNICK: If you want
23	to add anything, great, otherwise, we'll just let
24	it stand. Okay. So let me just ask one question,
25	'cause we have heard from Con Ed, we've heard from

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 220 TECHNOLOGY

LIPA about how concerned they were about their ability to deliver quick and appropriate repairs with the workforce that they have. Goes to your point about do they have the appropriate sized workforce, and that's an open question. But as to what they did in this circumstance where they brought in so many people from the outside, putting aside the trucks which may not have been able to fit down city streets, what would you have recommended that they do as to the personnel instead of bringing, I think it was 5,700, at least in the Con Ed category, workers in to help provide extra support? What should they have done in that situation?

JAMES SLEVIN: Well they need to [off mic] that, right now, the utility workers that we represent is at a all-time low. Just alone over the year we've lost hundreds, and like I've stated here, 15,000--1,500 since '08, okay? During the lockout during the summer, we had a roughly a little under 8,000 members working just for Con Ed, and close to 5,000 management at that time. During this storm, they decided to separate the workforce so that they took care of the mutual

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 221
TECHNOLOGY

aid people, the 5,000 management didn't have the knowledge to go out and assess those mutual aid people so they took vital workers that could have went out to the system that they are familiar with day-in and day-out and performed what they do as a living, which is put the wires back for the consumers. So they were taken away from their task because of the lack of manpower that's out there in the workforce.

CHAIRPERSON GARODNICK: Thank you. Chair Chin.

CHAIRPERSON CHIN: Yeah, I think
we're definitely all very interested in looking at
your evaluation report. The thing is that one of
the point that you raise was that during the
lockout in terms of the maintenance. Do you feel
that because of lack of regular maintenance that
that also hamper the recovery efforts?

JAMES SLEVIN: Yes, there has been open mains on the system or wire upgrades that haven't been got to yet since the lockout. Since our members came back, you know, it's not just the workforce that's there, that workforce has been working extreme amount of hours and days since

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 222
TECHNOLOGY

that lockout and now a storm comes through and they're left their homes again for those lengths of periods of time. It's an exhausted workforce, it keeps getting stretched and stretched. And that's from our linemen that are out in the street to our call center people that are in the call centers in 30 Flatbush.

We have to figure out how we do sort of get some regular reporting in terms of status report so that we can, you know, hold Con Ed accountable and be able to ask them about their maintenance records and having sufficient personnel to do that. I think that's something that I think with all the utility and all the wireless network, how often do they really maintain their services. So that should be one part of the preparation or taking care of emergency, if they don't maintain their equipment, then it's going to be more difficult when emergency happen. So definitely when your report is available, please share it with us.

JAMES SLEVIN: We will.

CHAIRPERSON CHIN: Thank you.

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 223 TECHNOLOGY
2	JAMES SHILLITTO: I might say, a
3	big part
4	[Crosstalk]
5	CHAIRPERSON GARODNICK:
6	[Interposing] Let's make sure your microphone is
7	on and
8	JAMES SHILLITTO: [Interposing]
9	Press the button.
10	CHAIRPERSON GARODNICK:identify
11	yourself too.
12	JAMES SHILLITTO: James Shillitto,
13	senior business agent, Local 1-2. As each of the
14	utilities spoke glowingly about is how to utilize
15	mutual aid, that has become the norm in the
16	industry, they've decided to downsize their
17	workforce, rely on when they have more work on,
18	not only mutual aid when there's storms, but on a
19	daily workday on outside contractors increasingly.
20	You know, and, yes, of course, we want more
21	members, but to rely on a outside workforce that
22	is not as well trained or
23	JAMES SLEVIN: Familiar.
24	JAMES SHILLITTO:not familiar
25	with the system or not even just invested because

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they don't work for the company, okay? And they're from other regions, they're here to do a job and then they move on. It takes away the taxes, it takes away the spending 'cause they're not city residents, they have no vested interest in being here, they're here to do a quick job and leave. They're increasingly relying upon that type of workforce, rather than the workforce that has, for lack of better terms, skin in the game here in New York City. Okay? And as Mr. Slevin related to in our report, a classic example is they're short on linemen, they said they have 150 line crews, that's far more than they actually do have, okay? And, yeah, they needed a lot more because it was a hurricane, but, for instance, in the Bronx, they have a workout location in Van Ness, okay, and all of the overhead crews from there were sent to Westchester County. Drove through the neighborhood in which they are based, which was out of power in Morris Park, and went to Westchester and left the city out of lights.

So we feel that does need to be changed and relying on mutual aid, as you see in this, when we have bigger storms, everybody needs

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 225 TECHNOLOGY
2	mutual aid and the further out you go, the longer
3	it takes and the more costly it is.
4	CHAIRPERSON GARODNICK: Well thank
5	you for that and for the insight about mutual aid,
6	which was really my point of interest in your
7	testimony, and we appreciate your sharing those
8	insights. And please do pass on that report to all
9	three chairs: Chair Chin, myself, and Chair
LO	Cabrera, and we will certainly pass it along to
11	our colleagues.
12	So thank you very much.
L3	[Crosstalk]
L4	JAMES SHILLITTO: Thank you.
L5	CHAIRPERSON GARODNICK: And with
L6	that, Chair Chin, I will say I think this has been
L7	a very useful exercise in exploring some of the
L8	challenges thatI'm sorry?
L9	[Off mic]
20	CHAIRPERSON GARODNICK: Sorry, it
21	sounded like you didn't want to, but if you want
22	to, you're welcome to. It's
23	[Crosstalk]
24	[Off mic]
25	CHAIRPERSON GARODNICK: Would you

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 226 TECHNOLOGY
2	like to testify?
3	PETE SIKORA: Yeah.
4	[Crosstalk]
5	CHAIRPERSON GARODNICK: Please.
6	Please. No, no, absolutely, we called you, we're
7	ready for you.
8	PETE SIKORA: Yeah, it's sort of up
9	to you how long you want us to go, I mean, I can
10	be
11	[Crosstalk]
12	CHAIRPERSON GARODNICK:
13	[Interposing] I would, at this point
14	PETE SIKORA:I'm very mindful of
15	the time.
16	CHAIRPERSON GARODNICK:in light
17	of the time
18	PETE SIKORA: Yeah.
19	CHAIRPERSON GARODNICK:of day, I
20	would only add something that you believe has not
21	yet been added but
22	PETE SIKORA: [Interposing] Okay.
23	So, you know, one thing nobody's mentioned is that
24	we
25	CHAIRPERSON GARODNICK:
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LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 227
TECHNOLOGY

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[Interposing] Why don't you identify yourself and-

PETE SIKORA: [Interposing] It's

Pete Sikora with the CWA, District 1, we represent

telecommunications workers at Verizon, a few at

Verizon Wireless, AT&T, and Cablevision now.

I just want to echo what these guys have said, that deregulation is really setting the stage here for manpower shortages and equipment shortages. You can use--you don't have a lot of regulatory authority here is a big problem, what you can do though is potentially use the franchise process on the telecommunications side to actually hold the companies accountable for some of the standards. Now that's on--the franchise is obviously federally granted right for licensing video service, so it's not directly, arguably, not a utility service, but it's the same network that is providing telephone and Internet, which I don't think anyone would argue in this day and age are both utility services, right? So you may want to explore use of the franchise process to actually hold them accountable on some of this stuff.

But state and federal regulators

are really dropping the ball here, both on the electric side and on the telecommunication side, and that's because of the lobbying that these companies have done and a broader ideological shift in this country to the right. Right? So that's setting the stage for this kind of situation where you have shoddy day-to-day maintenance, lack of equipment, lack of people to do the work, and then you have a big disaster that

becomes much, much worse.

A few other quick points. The battery backup that Verizon talks about as eight hours, that's an ideal 8-hour time period, in reality, those batteries probably last less time than that. The copper network is conductive, fiber optic cable is not, so you can get electricity to it. So to your point earlier, the lonely pay phone, it works in a blackout because there's auxiliary backup power from a central office that's running on it. Now, in a Sandy-type emergency where everything gets flooded, that probably goes out as well, but in many cases it'll stay up. That's incredibly important for public safety, particularly as a backup for police, fire,

LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 229
TECHNOLOGY
any places where there might be shelters, health

care, et cetera, et cetera, right?

Another thing to keep in mind is that wireless is not a secure form of communication, there are security issues on it, it's over the air so it's not a perfect solution and we can see what happens here when the system actually just goes out largely. Right? So we really ought to prepare; really, really ought to think this through. The copper network is out there, it's being replaced in some places by fiber, fiber has unlimited information capacities, virtually speaking, so it's really, really fast Internet, but it isn't conductive and that's a really serious downside. So those are some of the things we wanted to add.

Just on a final note, somebody ought to talk about prevention of global warming also, it would be nice to see the big companies actually engage here.

Councilwoman Chin, we really feel your pain, we just got back into our building at 80 Pine Street, which is one of the commercial buildings that is just getting restored to

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 230 TECHNOLOGY
2	service.
3	So everything's in there, in the
4	stuff that you got. Thank you for this
5	opportunity to testify.
6	CHAIRPERSON GARODNICK: Terrific,
7	thank you, and we'll let you have the last word,
8	and we're glad the last word included global
9	warming so
10	PETE SIKORA: There you go.
11	CHAIRPERSON GARODNICK:because
12	we do need to address that and that's certainly
13	been a priority of this Council, and we appreciate
14	your patience with us too.
15	[Crosstalk]
16	PETE SIKORA: Of course.
17	CHAIRPERSON GARODNICK: So with
18	that, Chair Chin, I think that we've covered a lot
19	of territory, we have a lot of work to do,
20	clearly, and I know that your constituents and
21	small businesses are still very much struggling
22	and, certainly, if there's any way I can help to
23	support them or you, I am happy to.
24	[Pause]
25	CHAIRPERSON CHIN:Wanted to thank

1	LOWER MANHATTAN REDEVELOPMENT, CONSUMER AFFAIRS, AND 231 TECHNOLOGY
2	the unions for staying 'til the end and I just
3	really look forward to continue discussion and
4	making sure that you give us, you know, your side,
5	the information, so that we can have a
6	comprehensive picture. Thank you for being here
7	today.
8	CHAIRPERSON GARODNICK:
9	[Interposing] And we were very careful to make
10	sure that we used some of your testimony when we
11	had a chance with some of the companies that were
12	here.
13	So with that, we are adjourned,
14	with great thanks to all.
15	[Gavel]

I, Tammy Wittman, certify that the foregoing transcript is a true and accurate record of the proceedings. I further certify that I am not related to any of the parties to this action by blood or marriage, and that I am in no way interested in the outcome of this matter.

Signature Tammy Withman

Date _February 5, 2013_