



Consolidated Edison Company  
of New York, Inc.  
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**Testimony of Con Edison  
Before the New York City Council  
Environmental Protection, Resiliency and Waterfronts,  
and Consumer Affairs and Business Licensing Committees  
September 4, 2019**

Good morning. Thank you, Chairs Constantinides, Brannan, Espinal and members of the City Council for the opportunity to discuss the customer outages associated with the July heat wave and the West 65th Street substation. My name is David DeSanti and I am Con Edison's vice president of Brooklyn & Queens Electric Operations. I am joined by Steven Parisi, vice president of Central Engineering, and Kyle Kimball, vice president of Government, Regional & Community Affairs.

Our comments will focus on what caused these two events, our response, and the actions we are taking to further enhance the reliability of our electric grid.

Before I begin my remarks on the events themselves, I'd like to say that we understand the frustration customers have expressed and fully realize that being without power causes distress. I assure you that all of our 14,000 women and men take pride in providing reliable service. I've worked for the company for 32 years and other than safety, nothing is a higher priority for me than reliable service.

Following the outages in southeast Brooklyn, we sent notes of apology to customers because we know they deserve better. We also have extended the deadline for customers to submit claims for losses they incurred due to the outages.

I want to make it clear that the outages from the heat wave and those on the West Side of Manhattan were not the result of neglected equipment or lack of investment and maintenance. We have an intensive capital planning process and invest heavily in our systems to maintain high levels of reliability.

We use a targeted investment strategy that considers the performance history of equipment, as well as the forecasted demand on each component. Con Edison's electric-delivery system is one of the most technologically advanced and complex in the world and contains redundancies to keep service reliable.

**The Heat Wave July 19 to 22 and its Impact on Southeast Brooklyn**

Let me provide some details on the outages that affected customers in southeast Brooklyn during the July 19-to-July 22 heat wave. I'll start with the evening of Sunday, July 21, when circumstances demanded that we pre-emptively interrupt service.

That decision was driven strictly by fast-changing system conditions, made with input from highly trained engineers and operators, and implemented to prevent broader, more prolonged outages.

To better understand our decision, it helps to first understand a little about our system. This area of southeast Brooklyn has 19 feeder cables that serve 132,000 customers. An underground network system provides power to about 99,000 of those customers. The remaining 33,000 or so customers are served by a separate, overhead 4-kilovolt grid.

We design our system with redundancy so that when one feeder fails, customers do not lose service. That's because the power that the failed feeder was carrying is re-distributed onto the feeders that remain in service. This shift places a greater burden on the in-service feeders, and when multiple feeder failures occur, this additional burden exponentially increases the likelihood of more failures. In our industry, this rapid sequence of feeder failures is referred to as "cascading." That is what we sought to prevent by pro-actively shutting down the 4-kV grid.

Our preparations for the heat began days in advance. On Friday morning, July 19, we activated our Corporate Emergency Response Center, or CERC. Our CERC serves as our command post and brings together people and resources from across the company with the single objective of providing safe, reliable service during severe weather and other emergencies. In addition, we mobilized 4,000 employees, procured mutual assistance, pre-positioned emergency generators, and ensured that we had dry ice to distribute.

Our system performed well on Friday and Saturday and into the early afternoon on Sunday. Sunday was the third straight day of temperatures above 90 degrees and the sustained heat resulted in high demand for power. In fact, demand in New York City and Westchester County, reached 12,063 megawatts, an all-time high for a weekend. Because the heat wave spanned the weekend, the demand was particularly heavy in residential areas, such as southeast Brooklyn.

After several of the 19 feeder cables serving southeast Brooklyn failed by early Sunday evening, we followed well-established protocols by making customer appeals and reducing voltage by 5 percent and then by 8 percent to reduce strain on the system.

Despite these measures, additional feeder cables serving the southeast Brooklyn grid began to fail in relatively rapid succession, and ultimately six of the 19 feeders failed. The network, normally served by 19 feeders, was now being served by 13, each of which was heavily loaded due to the high demand inherently associated with the heat wave and the demand that shifted from the failed feeders.

It was clear that allowing the grid to run with the six feeders out of service would result in cascading failures, extensive equipment damage, and broader, prolonged outages. As a result, at 7:32 p.m., we pre-emptively interrupted service to 30,000 customers in the

4-kV grid, affecting people in the neighborhoods of Canarsie, Flatlands, Mill Basin, Old Mill Basin, Bergen Beach, Georgetown, and Marine Park.

Because conditions were dynamic and events were moving so quickly, there was not time for us to alert customers before the shutdown of the equipment. The decision and the actual shutdown took place within minutes of each other. We made the decision in the presence of representatives from New York City Emergency Management who were embedded in our CERC, giving them a real-time flow of information as to what was taking place and how we were responding.

We understand the importance of communicating with customers and are working with agencies, including NYC Emergency Management, on ways to improve our communication during outages.

Our decision to pre-emptively interrupt customers was correct for several reasons. The analysis of our engineers and operators made clear that if we took no action, additional equipment was going to fail. It would have taken longer to repair the more extensive damage, meaning customers would have been without power for longer. Our action also prevented more widespread impact, as service interruptions would have reached an additional 99,000 customers in Crown Heights, Prospect Heights, Prospect Lefferts Garden, Prospect Park South, and Flatbush.

It is important to note that the customers whose service was affected were going to lose power regardless. Our decision to de-energize our equipment did not cause more customers to be without power.

I assure you that we fully appreciate the impact of shutting off power to customers. We did not take this decision lightly and we appreciate that the action had a real and significant impact on people, particularly those who are elderly or on life-sustaining equipment. We always regret having customers out of service.

When customers are out of service, our crews work around the clock to make restoration. As is often the case, the heat wave was broken by severe storms, which arrived late Monday afternoon, causing additional outages. But by midnight Sunday we had restored 55 percent of those affected by the pre-emptive interruption and within 24 hours we restored service to nearly 95 percent of those in southeast Brooklyn affected by the Sunday outage.

Customers had several ways to stay informed on the status of outages: text or phone calls, and by visiting our website and outage map. We also notified elected officials and kept them apprised throughout the event and were in regular touch with the media.

Our outreach included deployment of Customer Service vans and personnel at Jacob Joffe Fields in Flatlands and near Seaview Park in Canarsie. We distributed dry ice at both locations and had customer assistance personnel available to provide information on outage status, give claims forms to customers, and answer questions. In meetings with elected officials since this event, we have gotten feedback that these were not optimal locations. We will work with stakeholders to identify better sites.

The events in southeast Brooklyn occurred despite our investment of more than \$200 million in our grid in the area during the past decade. System-wide, we have invested more than \$1 billion a year in our system since 2005 and at least \$1.5 billion each year since 2015.

While no utility's electric-delivery system is fully immune from outages, Con Edison does strive to be as reliable as possible, and a number of metrics show we are the most reliable electric-delivery company in the United States. In terms of outage frequency, we are about eight times more reliable than the average electric utility, both in New York State and nationally. Additionally, over the last five years heat-related outages to customers served by overhead lines have declined.

We seek continuous improvement. We learn from every incident and every success. New York is the greatest city in the world and our customers deserve the most reliable electric service. We take that charge seriously.

We have completed repairs to the 4-kV grid. In addition, we are finalizing plans for significant upgrades in southeast Brooklyn. Those improvements will include:

- Replacing 70 sections of underground cable serving the network and 25 sections of overhead cable within the 4-kV grid.
- Installation of new switches on the overhead and underground systems to isolate faults, reduce outages and allow for faster restoration when outages do occur.
- Completing the deployment of smart meters by year end.

I'll now turn it over to my colleague Steve, who will talk about the outage on the West Side of Manhattan.

### **West Side Outage, July 13, 2019**

Thank you, Dave. And thank you to the Council for the opportunity to speak. The outage on the West Side on the evening of July 13 was due to the incorrect operation of protective relays on transformers at a substation on West 65th Street following a fault on a 13-kV cable. Relays are the brains of our system and make decisions in milliseconds to protect the grid when faults occur.

Our first priority was to safely and quickly restore customers, so we immediately mobilized our CERC and communicated that we would restore all customers by midnight. We met that target and restored customers in an average of three hours and 10 minutes. We worked with NYC Emergency Management on-site to keep the public up to date on our response.

Following restoration, our planners and operators began analyzing data and equipment performance. We also conducted diagnostic testing to identify the specific cause of this event. Within 48 hours, we announced our preliminary findings, and on July 29 we announced the root cause was an improper connection between some of the sensors and protective relays at the West 65th Street Substation. This connection caused the protective relays to improperly shut down transmission feeders from the West 49th Street Substation to the West 65th Street Substation and several other substations that serve the area.

Since this event, we have taken preventative measures by isolating similar relay equipment at other substations and we are analyzing and testing it before it is placed back into service.

Although we are confident that we have identified the cause of the West Side outage and taken the actions to prevent a recurrence, we continue to conduct an in-depth review of the event.

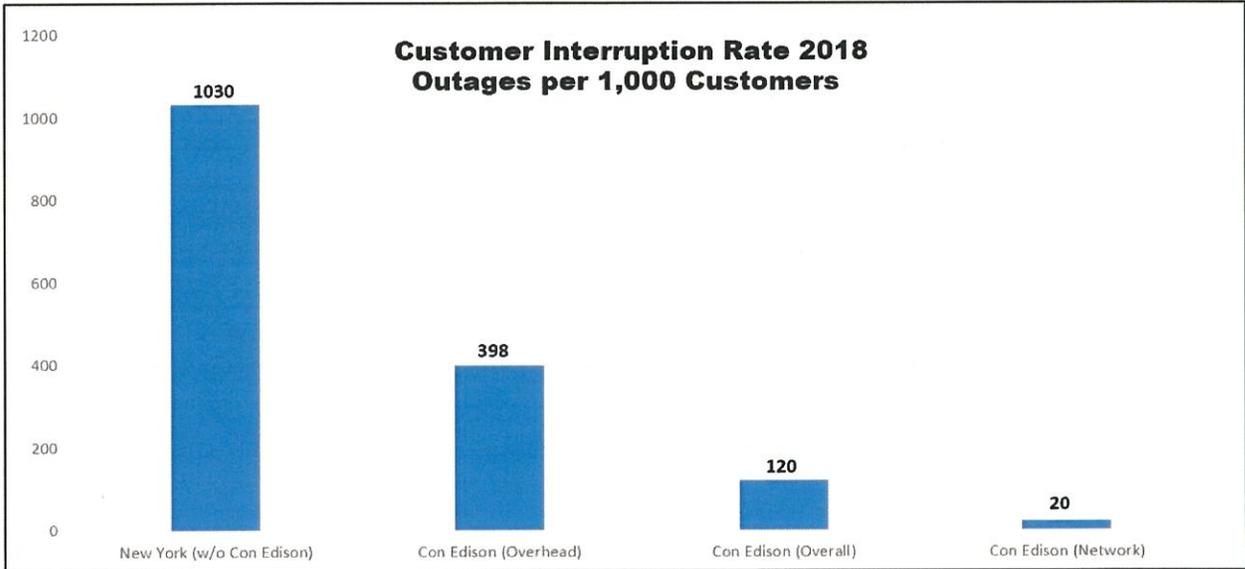
In addition to this ongoing review, there is an Event Analysis Process underway with the New York Independent System Operator, Northeast Power Coordinating Council, and the North American Electric Reliability Corporation. Also, we are providing information to the New York State Public Service Commission in its investigation of this outage.

### **Conclusion**

In closing, I'd like to again emphasize our commitment to safety and reliability. We back that commitment with strategic capital planning and robust investment in our energy systems. The events in southeast Brooklyn and on the West Side of Manhattan happened because - despite our strategic, targeted investments - our system is not perfect. They did not occur because of neglected infrastructure or a lack of maintenance or investment.

Our decision to take customers out of service in southeast Brooklyn the evening of July 21 – while understandably frustrating for customers and maybe even puzzling to some – was due to system conditions, not any other factor. We remain convinced that it helped avoid a large-scale outage that would have stretched on for days.

That concludes our prepared remarks and we will be happy to answer any questions you may have.



Data Source: New York State Public Service Commission

**Testimony of the New York City Emergency Management Department  
before the New York City Council Committees on Resiliency and the Waterfronts,  
Environmental Protection, and Consumer Affairs and Business Licensing  
On Oversight – Consolidated Edison Summer 2019 Service Outages**

**September 4, 2019**

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***Background***

Thank you to Mr. Speaker, Chairmen Brannan, Constantinides, and Espinal and members of the Committees on Resiliency and the Waterfronts, Environmental Protection, and Consumer Affairs and Business Licensing for the opportunity to submit testimony regarding Consolidated Edison's Summer 2019 Service Outages.

New York City Emergency Management (NYCEM) works closely throughout the year with the city's utility providers including Consolidated Edison ("Con Edison"), Public Service Enterprise Group – Long Island ("PSEG-LI"), and National Grid on preparing for and responding to utility outages and incidents. Our 24x7 operations center, Watch Command, maintains direct communication with all three utility providers, and we have procedures in place to receive and process information in order to inform interagency partners, elected representatives, and the general public of outages, planned maintenance, and utility emergencies when they occur.

During large-scale utility emergencies, like those experienced on the West Side of Manhattan on July 13<sup>th</sup> and in the Flatbush and Mill Basin neighborhoods of Brooklyn and the Jamaica neighborhood in Queens on July 19<sup>th</sup> through the 21<sup>st</sup>, utility personnel are embedded in the City's Emergency Operations Center (EOC) and NYCEM personnel are embedded in Con Edison's Corporate Emergency Response Center (CERC). Understanding the stress that heat waves place on the electric grid, the *New York City Heat Emergency Plan* has several operational strategies dedicated to protecting the integrity of the power grid. These include, but are not limited to, messaging the public to curtail use of certain appliances and to keep thermostats set to 78 degrees or higher, issuing Excavation Safety Alerts, coordinating with the New York City Department of Transportation (DOT) for the issuance of Special Construction Embargoes, and supporting utility-managed demand/load relief programs as they are implemented.

During the recent heat wave, Con Edison did not provide timely information to NYCEM and other City officials which put public safety at risk. For example, on July 21, 2019 ConEd shed power in Brooklyn, affecting over 30,000 customers. ConEd informed the City of the outage as it was being implemented. The lack of advanced notification from Con Ed that they were experiencing significant issues in the Flatbush area inhibited the City's ability to warn the public of the impending outage and stage first responders and

emergency equipment (e.g., generators, light towers, etc.) in the area to ensure a rapid response

The power outages of July 2019 were the largest the City has experienced since Hurricane Sandy in 2012, and NYCEM was deeply involved in the response to both events. While both events had major impacts and public safety implications to the affected communities, it is important to note that the Manhattan outage was a no-notice event while the Flatbush and Jamaica outages occurred during a forecasted excessive heat event, allowing the City to stage personnel and resources for immediate response.

### ***July 13, 2019 – Manhattan No-Notice Power Outage***

NYCEM began seeing reports via social media and 911 calls of a major power outage in Manhattan at approximately 6:47PM. While there were consistent reports of a major power outage on the West Side of Manhattan, the exact boundaries of the outage area were not known. Within minutes of those initial reports, NYCEM dispatched Citywide Interagency Coordinators, senior agency leadership, including Commissioner Criswell, and our mobile Interagency Command Center to West End Avenue and West 64<sup>th</sup> Street to establish a field interagency command post. Our on-call team was also immediately activated and recalled to the EOC. Additionally, once Con Edison informed us that it was activating its CERC, a NYCEM representative was immediately dispatched to serve as a liaison.

An initial interagency conference call was conducted by NYCEM with Con Edison and key public safety, health, and human services partners at 7:40PM to ascertain the scope of the outage, identify any immediate life-safety impacts, and determine if there were any resource requests or needs from other agencies. Initial reports during the call stated that the Columbus Circle and Hudson networks were impacted but within a few minutes the power outage expanded to the Lincoln Square, Plaza, Rockefeller Center, and Pennsylvania networks. The police and fire departments were reporting an increase in call volume and, in particular, hundreds of calls for stuck elevators. Based on the expanding number of affected networks and no estimated time for restoration, more than twenty (20) City, state, and partner agencies were directed to send representatives to the EOC and the City's Generator Task Force was mobilized.

At the field command post NYCEM, FDNY, NYPD, and the New York City Department of Buildings (DOB) established an Elevator Task Force to facilitate rapid response and reduce resource duplication to "stuck elevator" calls. NYPD declared a Level Three Mobilization which surged dozens of police officers and traffic enforcement agents into Manhattan to ensure public safety and restore the safe flow of traffic affected by approximately 200 traffic signals being offline. Vehicular traffic was restricted from West 42<sup>nd</sup> Street to West 71<sup>st</sup> Street between 8<sup>th</sup> Avenue and the West Side Highway to facilitate the response and staging of emergency assets and protect pedestrian and bicycle traffic. FDNY deployed its Queens and Bronx Tactical Response Groups to the area to handle the increased call volume. In the EOC, NYCEM personnel conducted

outreach to healthcare facilities in the affected area; provided information to elected officials and the general public via Notify NYC, social media and direct emails; coordinated the deployment of over one hundred (100) City and State owned light towers; notified our 1,500 Community Emergency Response Team volunteers; and worked with our emergency contractors, New York State Department of Homeland Security and Emergency Services (NYS DHSES), and other City agencies to identify nearly two hundred (200) generators in the tristate area potentially available for deployment in the event the outage was prolonged.

NYCEM and partner agency personnel worked in the EOC until approximately 4:15AM when Con Edison confirmed that all power was restored, the power grid had stabilized, and no further issues were expected.

### ***July 17<sup>th</sup>-23<sup>rd</sup> Heat Wave and Associated Power Outages***

The National Weather Service forecasted an extreme heat event beginning on Wednesday, July 17<sup>th</sup> and continuing through Sunday, July 21<sup>st</sup> where heat indices were anticipated to be in excess of 105 degrees and overnight temperatures were not expected to drop below 80 degrees. These were the highest forecasted temperatures and heat indices experienced in seven (7) years.

NYCEM activated the City's Heat Emergency Plan on July 17<sup>th</sup>, coordinated the opening of nearly five hundred (500) cooling centers, and activated the EOC to facilitate a rapid and coordinated response to any incidents that developed during the heat wave. Due to the unprecedented heat indices and in an effort to reduce strain on the power grid, Mayor de Blasio declared a State of Emergency and ordered office buildings that were one hundred (100) feet tall or higher to set their thermostats to 78 degrees and directed City agencies to take all necessary and appropriate steps to protect the security, well-being, and health of city residents. In preparation for power outages, NYCEM activated one of its emergency contractors and staged six (6) large generators at our Emergency Support Center in Brooklyn. Ten (10) electricians from City agencies and our emergency contractor were also on stand-by to support generator installation. This was in addition to eight (8) large NYCEM-owned generators, and the more than forty (40) generators owned across eight City agencies that are earmarked for emergencies. NYCEM also rented eighty (80) portable air conditioning units that could be installed at cooling centers, senior centers, and other facilities if their existing air conditioning systems failed. Of the eighty (80) portable air conditioners, forty six (46) were deployed during the heat wave.

For the first two days of the heat wave, the power grid remained stable, and there were no widespread power outages. However, beginning in the late afternoon on July 21<sup>st</sup>, power outages began to increase, and NYCEM was notified by Con Edison that it had implemented a pre-emptive voltage reduction in its Flatbush and Brighton Beach networks due to several electric distribution feeders going out of service. Just before 7:30PM, Con Edison advised NYCEM that it would be pre-emptively de-energizing

customers in the Flatbush and Mill Basin areas in order to protect the balance of its Flatbush network. Within minutes of that notification, NYCEM learned that approximately 30,000 customers were removed from service.

NYCEM and agency partners in the EOC immediately assessed impacts of the outage. Two private adult care facilities – with a combined census of more than 200 elderly and vulnerable individuals who are at extreme risk for heat-related medical complications – lost power. These facilities, by NYS code, are not required to and did not have back-up generation. The outage prompted the deployment of MTA buses to serve as mobile cooling centers, generators and electricians. With advanced notice from Con Edison that part of their power grid was in trouble, NYCEM would have been able to deploy generators and electricians to the facilities prior to the outage.

Several New York City Housing Authority (NYCHA) developments were also identified in close proximity to the outage area, and NYCHA assigned personnel to check on the status of these facilities. Personnel were dispatched from the New York City Department of Education (DOE) and American Red Cross (ARC) to open an overnight shelter in a school in close proximity to the outage area. NYCEM deployed Citywide Interagency Coordinators, our mobile Interagency Command Center, and portable light towers. The local CERT team also deployed several members that worked alongside City workers long into the night.

NYCEM also observed a large and increasing number of customer outages in the Jamaica section of Queens and worked with DOE and the American Red Cross to open an additional overnight shelter in that area. Additionally, NYCEM issued public messaging via Notify NYC and social media, provided updates to elected officials, and checked on the status of critical facilities within that network.

The EOC remained activated until 5:00PM on July 23<sup>rd</sup>, once the overwhelming majority of customers were restored.

### ***Communication and Coordination with Con Edison***

As noted at the beginning of this testimony, NYCEM considers the utility providers to be key emergency planning partners and we highly value our relationship. These two most recent events did highlight some communication, coordination, and information gaps that we are working to resolve, including:

- Understanding which portions of the electric grid are more vulnerable to power outages in various circumstances;
- Gaining more advanced warning when pre-emptive power outages are being considered so the City can communicate to the public, mobilize and stage resources, and identify available shelter locations close to areas of potential impact;

- Understanding the boundaries of a power outage (or potential power outage) in real time to better target resource deployment; and
- Additional steps the City can take, in support of Con Edison, to protect the integrity of the power grid.

### ***Conclusion***

NYCEM recognizes that global warming and aging infrastructure are likely to exacerbate the threat of power outages in the future.

As we do following all major emergencies, NYCEM is in the process of conducting internal and interagency after action reviews to identify and prioritize gaps, highlight best practices, and develop improvement plans. NYCEM is fully committed to working with the utility providers, other City agencies, New York State, and our private and non-profit partners so that together we can improve our preparedness for and response to power outages.

In addition to planning and preparing for outages and grid emergencies, the City is actively working with key energy stakeholders to understand and prepare for the impacts of climate change. The City has been a strong proponent throughout multiple rate cases and other energy regulatory forums in pushing Con Edison to study, plan and take action for how increased temperatures, more intense and longer duration heatwaves, sea level rise and increased precipitation will change its planning processes, investment priorities, assets and operations. In 2016, Con Edison agreed to conduct a study on these issues and is expected to release the results of this study by the end of this year.

The recent events in July underscore the fundamental fact that the climate is changing now - historical conditions are no longer an accurate predictor of what will happen today and in the future. Accordingly, urgent actions are needed to mitigate the impact that these risks will have on our power grid.

Thank you.



## New York City Environmental Justice Alliance

166A 22nd Street, Brooklyn, NY 11232 | [www.NYC-EJA.org](http://www.NYC-EJA.org)

On the ground - and at the table

### **New York City Environmental Justice Alliance testimony to the New York City Council Committee on Environmental Protection and Committee on Resiliency and Waterfronts regarding the Consolidated Edison Summer 2019 Service Outages**

September 4th, 2019

Good afternoon Chairperson Constantinides, Brannan, and Espinal, and Members of the City Council. The New York City Environmental Justice Alliance (NYC-EJA) is a citywide membership network linking grassroots organizations from low-income neighborhoods and communities of color in their struggle for environmental justice. Through our efforts, member organizations coalesce around specific common issues that threaten the ability of low-income communities of color to thrive, and coordinate campaigns designed to affect City and State policies, including energy policies directly impacting our communities.

Climate justice is based on the principle that frontline communities are most vulnerable to climate change and, therefore, must play an integral role in planning for the renewable and regenerative energy economy. These are communities where climate vulnerabilities intersect with historic patterns of environmental burdens, many of which could be ameliorated through equitable energy policies and strategic investments. As utility ratepayers, members of these communities have financially contributed to existing energy efficiency and renewable energy programs in New York, only to encounter barriers to their own participation or programs that ultimately fail at systematically addressing the root causes of energy insecurity and energy poverty. The massive systems change required to stave off dangerous climate change impacts requires a consideration of the unique vulnerabilities facing environmental justice communities.

Extreme Heat will exacerbate energy inequities. Low-income communities and communities of color also face disproportionate climate risks, many of which could be ameliorated through equitable energy policy and strategic investment. For example, New York City's 12 most heat-vulnerable neighborhoods are predominantly high-poverty areas where residents are majority people of color. This assessment is based on the NYC Heat Vulnerability Index (HVI), which summarizes factors associated with adverse health effects and identifies neighborhoods with a higher risk for heat-related deaths and consists of environmental metrics, poverty rates, and race demographics proven to be strong indicators of heat risk. Furthermore, heat-vulnerable and high-poverty areas also face additional overlapping vulnerabilities. For example, in Central Brooklyn—one of New York City's most heat-vulnerable areas—Con Edison has projected an energy shortfall necessitating demand reductions through its Brooklyn Queens Demand Management (BQDM) program. For years, we have warned of the vulnerabilities in the BQDM that may result in brownouts and blackouts. While Con Edison is expected to reach and exceed its energy demand reduction targets with a renewed commitment of \$200 million ratepayer funds for demand reduction measures, the BQDM program only provided limited energy efficiency opportunities to residents. Despite residents making up 60% of customers in the BQDM area, residential programming so far has been limited mainly to light bulb replacements.

Furthermore, New York City is home to 16 peaker plants, many with multiple generating units, both publicly and privately owned. These highly polluting, fossil fuel power plants known as “peakers” fire up in the South Bronx, Sunset Park, and other communities of color on the hottest days of the year, when air quality is at its worst, and sensitive populations are warned to stay indoors. Peakers then spew even more harmful emissions into neighborhoods already overburdened by pollution and exacerbating widespread health problems.

This outdated, inequitable and inefficient system for meeting peak demand is ripe for transformation. All of NYC’s privately owned peaker plants have been in operation for over 45 years and utilize old technology without upgraded pollution controls. Over the past ten years, by public estimates these NYC peaker plants have taken in about 4 billion dollars of what are called “capacity payments” just to sit there and run infrequently – with some units operating no more than a few hours in a year -- to keep the grid operating. Local New York City ratepayers pay out of their electric bills for these capacity payments.

Many of these plants, particularly the largest, oldest, most polluting plants, are owned by out-of-state private developers, taking these billions of dollars in wealth out of these communities. These billions of dollars could be used in local investments – like community solar and storage - that could meet peak demand needs, reduce electric bills and provide resilient power, avoiding the impacts of blackouts like the one that just hit Manhattan and Brooklyn this Summer. Renewable and resilient energy systems will advance energy democracy, reduce energy cost burdens, strengthen the resiliency of their communities, and capture the benefits that community-based solar and storage installations can deliver

The Climate Leadership and Community Protection Act, which legislated commitments to eliminate fossil fuel emissions in NYS by 2050 – make it imperative to transition to renewable and resilient energy future. New York City’s electricity generation and distribution infrastructure is highly vulnerable to storm surge, flooding, and extreme heat – and we can no longer wait to invest in a Just Transition.



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**Testimony from Dr. Yury Dvorkin, Assistant Professor of Electrical and Computer  
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before

**The New York City Council Committees on Consumer Affairs, Environmental Protection  
& Resiliency and Waterfronts Joint Oversight Hearing on the Consolidated Edison Summer  
2019 Service Outages**

*September 4, 2019*

Chairman Brannan, Constantinades and Espinal and fellow Council Members, thank you for the opportunity to submit my testimony today on this important oversight hearing regarding large-scale power outages in Consolidated Edison's service territory that happened in summer 2019. I am pleased to share my experience as a power engineering and smart grid researcher and professor with you and your constituents, so we can move towards a more efficient, reliable, sustainable and equitable electricity supply in New York City.

The electric power sector entered into a period of dramatic transformation a decade ago. Since then, constantly improving computation, communication, and control technologies in combination with next-generation distributed energy resources – renewables, energy storage, demand-side management, electric vehicles, microgrids, etc – have been shown to advance efficiency, sustainability, reliability and resiliency of electric power supply. **On the other hand, the practical implementation of these new smart grid technologies and resources, with a few notable exceptions such as Consolidated Edison's Brooklyn–Queens Demand Management program, lags far behind due to a variety of factors, most of which are non-technological and can be addressed via innovative policy and regulatory solutions.** Nothing illustrates this point better than wide-spread outages in Manhattan and Brooklyn this summer. Today, **my objective is to provide an overview of these much-needed policy and regulatory solutions that, in my opinion, can improve current electricity supply practices, help ensure reliable and affordable electricity supply, and harness the full potential of emerging smart grid technologies and distributed energy resources, which is currently being underused.**

Reliability and affordability of electricity supply always come together. That is, one can ensure a high level of reliability at an unbearable cost, which unavoidably would be passed down to consumers (in our case, to ordinary New Yorkers, some of whom already struggle with a fairly high cost of living in one of the most expensive places in the world), or one can cheaply operate an unreliable power system. The art of being an electric power utility is in constantly managing risks (e.g. imposed by outages) and costs of mitigating these risks. **The challenge of trading off between risks and costs is that it is impossible, even with the best intentions in mind, to guarantee 100% reliability of complex engineering systems, e.g. urban power grid infrastructure.** Regardless of financial allowances, maintenance and retrofit efforts, investments programs and budgets, power outages are unavoidable and, in the light of aging infrastructure and growing adversarial effects of climate change (e.g. storms, heat waves, etc), it is likely that such outages will occur in the not so distant future with a greater frequency and at a larger scale. **Hence, the conclusion of foremost importance is that an electric power utility should not be judged solely based on its ability to prevent such outages, but also on its ability to swiftly restore electricity supply following a large outage.**

Despite their presence in Consolidated Edison's service territory, smart grid technologies and distributed energy resources have contributed little to none to supply restoration during this summer's outages in Manhattan and Brooklyn. In my opinion, the underlying reasons that must be dealt with sooner rather than later are:

1. Resiliency is not incentivized: **Resiliency, i.e. the ability of a power grid to withstand and, if need be, recover from an infrequent, large-scale outage, is not explicitly accounted for in current rate design practices.** In other words, there is no economic incentive to enhance resiliency of the system and it is not sufficient to provide means for post-outage recovery. The current practice, named Electric Service Reliability Performance Mechanism, penalizes Consolidated Edison for large outages. But the enforced penalty does not adequately reflect the actual value of lost (electric) load and varying resiliency preferences of electricity consumers. For example, under the current practice, Consolidated Edison accrued only a \$5 million charge for the outage in Manhattan on July 13, 2019, that affected ~72,000 customers<sup>1</sup> (the number of affected people on

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<sup>1</sup> <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={B2D45013-ADA7-4CCF-8896-B854834BD2DB}>

customer premises is estimated at ~200,000, i.e. the penalty is ~\$25 per affected person on customer premises, which is relatively low to this area with a large number of residential, commercial and retail customers<sup>2</sup>). Notably, although customers affected by this outage were located in six distribution networks, the current practice imposed the \$5 million penalty charge for supply interruptions only in three out of six affected distribution networks. Under such circumstances, forcibly curtailing electricity supply to selective groups of customers may appear more cost-effective, rather than investing in resiliency solutions, which are often capital intensive. Adequately internalizing resiliency of the power grid and resiliency preferences of electricity customers in the current rate design practice will provide **economic incentives for the utility and ratepayers to leverage emerging smart grid technologies and distributed energy resources** to prevent negative societal impacts of large power outages, should they occur.

2. There is no competitive, level-playing field for electricity delivery from alternative (third-party) electricity suppliers (e.g. Energy Service Companies): **The current regulatory framework limits the ability of alternative electricity suppliers** (e.g. aggregators of distributed energy resources or demand response) to compete in electricity delivery on a par with Con Edison. As a result, this cements the monopolistic role of Con Edison and limits competition in the area of electricity distribution. As a result, in the current regulatory framework customers are limited in their choices of electricity supplier (or multiple suppliers) and cannot choose a provider (or multiple providers) that best fit their resiliency preferences. There is no magic pill to instantly create a level-playing field for all potential (virtual or physical) electricity providers, but supply competition can be enhanced by (i) **introducing high-fidelity electricity pricing** (e.g. DLMPs that recognize locational, temporal, stochastic and behavioral attributes of electricity production, distribution and consumption) and (ii) **removing delivery-motivated entry barriers for third-party electricity suppliers and for increasing customer-end autonomy** (e.g. interconnection costs, regulation overburden, utility's information privilege).

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<sup>2</sup> <https://pubs.naruc.org/pub.cfm?id=539BA54E-2354-D714-5116-111FF504C6B8>

3. Consolidated Edison needs to engage with local communities: **Community needs and means, which vary significantly across New York City, must be accounted for while planning for a further deployment of smart grid technologies and distributed energy resources.** Currently, this deployment is extremely capital intensive and, therefore, current long-term grid expansion and modernization practices are grid-centric and mainly focus on cost recovery, while neglecting important social justice factors. These factors are of particular importance in such a socially diverse urban area as NYC and, therefore, current practices must be revisited to ensure equitable access to the resiliency benefits provided by smart grid technologies and distributed energy resources. **This can be achieved by means of city-wide community outreach led by Consolidated Edison to explore a broad range of local sensitivities characterizing electricity supply patterns and resiliency needs of various socio-demographic groups.** The outcomes of this outreach must then be incorporated in grid expansion and modernization practices to avoid socially unjust outcomes.
  
4. Consolidated Edison should become more accountable and transparent to experts and the public: Since large-scale outages in complex engineering systems are inevitable, **Consolidated Edison must be kept accountable for their actions during both normal operations, as well as before, during, and after small and large outages.** This requires transparency in reporting the process and results of investigating every outage, as well as being transparent for continuous, rather than ad-hoc, audits by stakeholders and domain professionals. One possible approach to ensure a high quality of such audits is to **create a panel of rotating experts from a broad range of professionals and researchers with relevant expertise** (e.g. from leading academic institutions, US DOE National Laboratories, professional organizations) and community activists to systematically review Consolidated Edison's performance with the best public interest in mind.

Taken together, these four recommendations will not guarantee that there will be no events comparable to the outages of this last summer, but they will help ensure that adversarial effects of such outages are reduced.

Thank you for the opportunity to share my experience and recommendations and I would be happy to answer any questions the Committee may have. Should you need any follow up, please feel free to contact me ([dvorkin@nyu.edu](mailto:dvorkin@nyu.edu)) or Associate Dean for Communications and Public Affairs Sayar Lonial ([sayar.lonial@nyu.edu](mailto:sayar.lonial@nyu.edu)).



**Gustavo Gordillo**  
**NYC Democratic Socialists of America Ecosocialist Working Group**  
**September 4, 2019**  
**Con Ed Hearing Testimony**

Con Edison's blackouts in July coincided with a heat wave and extreme weather during the hottest month in recorded human history. Look at the devastation wrought this week by Hurricane Dorian, the fifth category five hurricane in the Atlantic in the last four years, and it is not hard to see that climate change will be the defining social and economic issue of the next several decades.

More and more, voters are seeing it too. In April 2019, a CNN poll found climate change to be the top issue for registered Democrats. 82 percent of registered voters who identified as Democrats or Democratic-leaning independents listed climate change as a "very important" top priority they'd like to see get the focus of a presidential candidate. In August 2019, a poll conducted by YouGov Blue and commissioned by Data for Progress found that nearly 62% of voters said they'd support "a policy holding energy companies or utilities legally liable if it could be proven that they misled the public about the consequences of climate change."

This is not good news for Con Edison. In 2017, the Energy and Policy Institute published a report titled Utilities Knew: Documenting Electric Utilities' Early Knowledge and Ongoing Deception on Climate Change From 1968-2017. The report details how Con Edison contributed funding to produce a 1971 report on the industry's long-term research and development goals that already included research into the "effects of CO2."

Con Edison is a member of the major trade association, the Edison Electric Institute which has spent recent years lobbying against solar throughout the country. At the Edison Electric Institute's Annual Convention in 1971, an MIT professor, Dr. Carroll L. Wilson, warned that "If a consensus arose that we had to limit or curtail the use of hydrocarbons because of their impact on climate, the implications would be enormous." The Edison Electric Institute sponsored a cutting-edge study between 1985 and 1988 which found that "climate changes possible over the next 30 years may significantly affect the electric utility industry."

But over 30 years later, investor owned utilities like Con Edison continue to hold us hostage to ecocidal policy like expanding fracked gas infrastructure, which Con Edison has supported both with the Williams pipeline and in its current, ongoing rate case.

Furthermore, in the last months Con Edison has shown itself to be unable to cope with the extreme weather conditions that they themselves have played a major role in creating and inflicting upon us.

I and others in the DSA have spent the last few months talking to New Yorkers about our broken energy system. We canvassed residents in Southeast Brooklyn who spent up to three days lingering in the heat without power during a record-breaking heatwave. That's because Con Edison decided to intentionally cut off power to more than 33,000 homes, allegedly to prevent a larger blackout. These New Yorkers were sacrificed without warning, and wanted to know why. Con Ed had 20 minutes between the decision to cut power to Southeast Brooklyn and the actual depowering (not "several minutes" as stated), but they have no system in place to notify people when they cut off their power.

One Canarsie resident had her power shut off and was forced to sleep outside on the porch with her baby because it was so hot inside her apartment — during the hottest month in recorded history. The baby contracted viral conjunctivitis, which cannot be treated with antibiotics, and soon after gave it to the mother, which led to her missing a week of work. It was a chain of misfortune set in motion by Con Ed's greed and well-documented history of placing profits over public safety, grid resilience, and climate justice.

We also spoke to people in Astoria, Queens, where a lion's share of the city's power is generated and where a recent transformer fire turned the night sky a vivid blue, leaving community members asking themselves if they were actually safe in their own neighborhood. More than 100 people made it out to a town hall Council Member Constantinides hosted with us in Astoria to speak out against Con Ed, despite the pouring rain.

Through that town hall and through canvassing, we have found that people are fed up with Con Ed and want real change. The climate crisis is upon us, and it's time we prioritize a just transition to renewable energy over investor's profits. Last year Con Ed paid almost \$850 million in shareholder dividends and made over \$1 billion in profits. Those profits should be democratically controlled by New Yorkers, the very people who provided them.

We face two massive intersecting crises of climate change and debilitating economic inequality. There's no rationalizing why we let a corporate entity like Con Ed, who has shown no meaningful sign of being willing to confront the climate crisis, profit by mismanaging a critical public resource like our city's energy. There is mass support for an energy system that is publicly owned and accountable to the people, not shareholders. This is nothing new. Public takeovers of utilities can and have been done many times before. The entire state of Nebraska runs fully off of public power after the state expelled its for-profit utility for charging exploitative rates. Additionally, more than 2,000 cities in the United States operate publicly owned utilities, and actually see the money from these utilities go straight back into their communities rather than disappear into the pockets of shareholders and CEOs.

It has been made clear that Con Ed's infrastructure is not ready for the coming century of climate crisis. And their business model isn't, either. Thankfully, there is an alternative. We don't have to rely on a corporate monopoly to provide clean energy. We don't have to wait to save our planet until it becomes

profitable for investors. We can take matters into our own hands by creating a publicly owned and democratically controlled utility instead. We could decommodify clean energy and guarantee it to all New Yorkers as a human right, much in the same way we guarantee clean water through our public water utility.

We already have the largest state-owned public utility in the US--the New York Power Authority, which was founded during the New Deal. We could expand NYPA or municipalize private utilities like Con Ed and National Grid to democratize, decommodify, and decarbonize our energy system.

On average, publicly owned utilities are 15% more affordable, more reliable with outage durations less than half the national average, more sustainable, and safer than privately owned utilities. Public utilities' contributions to state and local governments are, on average, 33% higher than those of investor-owned utilities. And success stories like Austin Energy, the Kit Carson Electric Cooperative in New Mexico, which have set some of the most ambitious renewable targets in the country, will give us a solid road map to work from.

Publicly owned utilities are not a radical idea. Public or municipal utilities already serve 30% of all electricity customers in the U.S. What's radical is continuing to let Con Ed profit from killing us and our planet.

Con Ed has passed the costs of their outdated and dangerous business model onto ratepayers, taxpayers, workers, and the environment for too long. It is long past time for the rest of us to wake up and propose a different way forward. It's time that we bring their billions in profits under democratic control to invest in the renewable energy future we need to survive.

**Testimony of the New York City Emergency Management Department  
before the New York City Council Committees on Resiliency and the Waterfronts,  
Environmental Protection, and Consumer Affairs and Business Licensing  
On Oversight – Consolidated Edison Summer 2019 Service Outages**

**September 4, 2019**

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***Background***

Thank you to Mr. Speaker, Chairmen Brannan, Constantinides, and Espinal and members of the Committees on Resiliency and the Waterfronts, Environmental Protection, and Consumer Affairs and Business Licensing for the opportunity to submit testimony regarding Consolidated Edison’s Summer 2019 Service Outages.

New York City Emergency Management (NYCEM) works closely throughout the year with the city’s utility providers including Consolidated Edison (“Con Edison”), Public Service Enterprise Group – Long Island (“PSEG-LI”), and National Grid on preparing for and responding to utility outages and incidents. Our 24x7 operations center, Watch Command, maintains direct communication with all three utility providers, and we have procedures in place to receive and process information in order to inform interagency partners, elected representatives, and the general public of outages, planned maintenance, and utility emergencies when they occur.

During large-scale utility emergencies, like those experienced on the West Side of Manhattan on July 13<sup>th</sup> and in the Flatbush and Mill Basin neighborhoods of Brooklyn and the Jamaica neighborhood in Queens on July 19<sup>th</sup> through the 21<sup>st</sup>, utility personnel are embedded in the City’s Emergency Operations Center (EOC) and NYCEM personnel are embedded in Con Edison’s Corporate Emergency Response Center (CERC). Understanding the stress that heat waves place on the electric grid, the *New York City Heat Emergency Plan* has several operational strategies dedicated to protecting the integrity of the power grid. These include, but are not limited to, messaging the public to curtail use of certain appliances and to keep thermostats set to 78 degrees or higher, issuing Excavation Safety Alerts, coordinating with the New York City Department of Transportation (DOT) for the issuance of Special Construction Embargoes, and supporting utility-managed demand/load relief programs as they are implemented.

During the recent heat wave, Con Edison did not provide timely information to NYCEM and other City officials which put public safety at risk. For example, on July 21, 2019 ConEd shed power in Brooklyn, affecting over 30,000 customers. ConEd informed the City of the outage as it was being implemented. The lack of advanced notification from Con Ed that they were experiencing significant issues in the Flatbush area inhibited the City’s ability to warn the public of the impending outage and stage first responders and

emergency equipment (e.g., generators, light towers, etc.) in the area to ensure a rapid response

The power outages of July 2019 were the largest the City has experienced since Hurricane Sandy in 2012, and NYCEM was deeply involved in the response to both events. While both events had major impacts and public safety implications to the affected communities, it is important to note that the Manhattan outage was a no-notice event while the Flatbush and Jamaica outages occurred during a forecasted excessive heat event, allowing the City to stage personnel and resources for immediate response.

### ***July 13, 2019 – Manhattan No-Notice Power Outage***

NYCEM began seeing reports via social media and 911 calls of a major power outage in Manhattan at approximately 6:47PM. While there were consistent reports of a major power outage on the West Side of Manhattan, the exact boundaries of the outage area were not known. Within minutes of those initial reports, NYCEM dispatched Citywide Interagency Coordinators, senior agency leadership, including Commissioner Criswell, and our mobile Interagency Command Center to West End Avenue and West 64<sup>th</sup> Street to establish a field interagency command post. Our on-call team was also immediately activated and recalled to the EOC. Additionally, once Con Edison informed us that it was activating its CERC, a NYCEM representative was immediately dispatched to serve as a liaison.

An initial interagency conference call was conducted by NYCEM with Con Edison and key public safety, health, and human services partners at 7:40PM to ascertain the scope of the outage, identify any immediate life-safety impacts, and determine if there were any resource requests or needs from other agencies. Initial reports during the call stated that the Columbus Circle and Hudson networks were impacted but within a few minutes the power outage expanded to the Lincoln Square, Plaza, Rockefeller Center, and Pennsylvania networks. The police and fire departments were reporting an increase in call volume and, in particular, hundreds of calls for stuck elevators. Based on the expanding number of affected networks and no estimated time for restoration, more than twenty (20) City, state, and partner agencies were directed to send representatives to the EOC and the City's Generator Task Force was mobilized.

At the field command post NYCEM, FDNY, NYPD, and the New York City Department of Buildings (DOB) established an Elevator Task Force to facilitate rapid response and reduce resource duplication to "stuck elevator" calls. NYPD declared a Level Three Mobilization which surged dozens of police officers and traffic enforcement agents into Manhattan to ensure public safety and restore the safe flow of traffic affected by approximately 200 traffic signals being offline. Vehicular traffic was restricted from West 42<sup>nd</sup> Street to West 71<sup>st</sup> Street between 8<sup>th</sup> Avenue and the West Side Highway to facilitate the response and staging of emergency assets and protect pedestrian and bicycle traffic. FDNY deployed its Queens and Bronx Tactical Response Groups to the area to handle the increased call volume. In the EOC, NYCEM personnel conducted

outreach to healthcare facilities in the affected area; provided information to elected officials and the general public via Notify NYC, social media and direct emails; coordinated the deployment of over one hundred (100) City and State owned light towers; notified our 1,500 Community Emergency Response Team volunteers; and worked with our emergency contractors, New York State Department of Homeland Security and Emergency Services (NYS DHSES), and other City agencies to identify nearly two hundred (200) generators in the tristate area potentially available for deployment in the event the outage was prolonged.

NYCEM and partner agency personnel worked in the EOC until approximately 4:15AM when Con Edison confirmed that all power was restored, the power grid had stabilized, and no further issues were expected.

### ***July 17<sup>th</sup>-23<sup>rd</sup> Heat Wave and Associated Power Outages***

The National Weather Service forecasted an extreme heat event beginning on Wednesday, July 17<sup>th</sup> and continuing through Sunday, July 21<sup>st</sup> where heat indices were anticipated to be in excess of 105 degrees and overnight temperatures were not expected to drop below 80 degrees. These were the highest forecasted temperatures and heat indices experienced in seven (7) years.

NYCEM activated the City's Heat Emergency Plan on July 17<sup>th</sup>, coordinated the opening of nearly five hundred (500) cooling centers, and activated the EOC to facilitate a rapid and coordinated response to any incidents that developed during the heat wave. Due to the unprecedented heat indices and in an effort to reduce strain on the power grid, Mayor de Blasio declared a State of Emergency and ordered office buildings that were one hundred (100) feet tall or higher to set their thermostats to 78 degrees and directed City agencies to take all necessary and appropriate steps to protect the security, well-being, and health of city residents. In preparation for power outages, NYCEM activated one of its emergency contractors and staged six (6) large generators at our Emergency Support Center in Brooklyn. Ten (10) electricians from City agencies and our emergency contractor were also on stand-by to support generator installation. This was in addition to eight (8) large NYCEM-owned generators, and the more than forty (40) generators owned across eight City agencies that are earmarked for emergencies. NYCEM also rented eighty (80) portable air conditioning units that could be installed at cooling centers, senior centers, and other facilities if their existing air conditioning systems failed. Of the eighty (80) portable air conditioners, forty six (46) were deployed during the heat wave.

For the first two days of the heat wave, the power grid remained stable, and there were no widespread power outages. However, beginning in the late afternoon on July 21<sup>st</sup>, power outages began to increase, and NYCEM was notified by Con Edison that it had implemented a pre-emptive voltage reduction in its Flatbush and Brighton Beach networks due to several electric distribution feeders going out of service. Just before 7:30PM, Con Edison advised NYCEM that it would be pre-emptively de-energizing

customers in the Flatbush and Mill Basin areas in order to protect the balance of its Flatbush network. Within minutes of that notification, NYCEM learned that approximately 30,000 customers were removed from service.

NYCEM and agency partners in the EOC immediately assessed impacts of the outage. Two private adult care facilities – with a combined census of more than 200 elderly and vulnerable individuals who are at extreme risk for heat-related medical complications – lost power. These facilities, by NYS code, are not required to and did not have back-up generation. The outage prompted the deployment of MTA buses to serve as mobile cooling centers, generators and electricians. With advanced notice from Con Edison that part of their power grid was in trouble, NYCEM would have been able to deploy generators and electricians to the facilities prior to the outage.

Several New York City Housing Authority (NYCHA) developments were also identified in close proximity to the outage area, and NYCHA assigned personnel to check on the status of these facilities. Personnel were dispatched from the New York City Department of Education (DOE) and American Red Cross (ARC) to open an overnight shelter in a school in close proximity to the outage area. NYCEM deployed Citywide Interagency Coordinators, our mobile Interagency Command Center, and portable light towers. The local CERT team also deployed several members that worked alongside City workers long into the night.

NYCEM also observed a large and increasing number of customer outages in the Jamaica section of Queens and worked with DOE and the American Red Cross to open an additional overnight shelter in that area. Additionally, NYCEM issued public messaging via Notify NYC and social media, provided updates to elected officials, and checked on the status of critical facilities within that network.

The EOC remained activated until 5:00PM on July 23<sup>rd</sup>, once the overwhelming majority of customers were restored.

### ***Communication and Coordination with Con Edison***

As noted at the beginning of this testimony, NYCEM considers the utility providers to be key emergency planning partners and we highly value our relationship. These two most recent events did highlight some communication, coordination, and information gaps that we are working to resolve, including:

- Understanding which portions of the electric grid are more vulnerable to power outages in various circumstances;
- Gaining more advanced warning when pre-emptive power outages are being considered so the City can communicate to the public, mobilize and stage resources, and identify available shelter locations close to areas of potential impact;

- Understanding the boundaries of a power outage (or potential power outage) in real time to better target resource deployment; and
- Additional steps the City can take, in support of Con Edison, to protect the integrity of the power grid.

### ***Conclusion***

NYCEM recognizes that global warming and aging infrastructure are likely to exacerbate the threat of power outages in the future.

As we do following all major emergencies, NYCEM is in the process of conducting internal and interagency after action reviews to identify and prioritize gaps, highlight best practices, and develop improvement plans. NYCEM is fully committed to working with the utility providers, other City agencies, New York State, and our private and non-profit partners so that together we can improve our preparedness for and response to power outages.

In addition to planning and preparing for outages and grid emergencies, the City is actively working with key energy stakeholders to understand and prepare for the impacts of climate change. The City has been a strong proponent throughout multiple rate cases and other energy regulatory forums in pushing Con Edison to study, plan and take action for how increased temperatures, more intense and longer duration heatwaves, sea level rise and increased precipitation will change its planning processes, investment priorities, assets and operations. In 2016, Con Edison agreed to conduct a study on these issues and is expected to release the results of this study by the end of this year.

The recent events in July underscore the fundamental fact that the climate is changing now - historical conditions are no longer an accurate predictor of what will happen today and in the future. Accordingly, urgent actions are needed to mitigate the impact that these risks will have on our power grid.

Thank you.

Wednesday, September 4<sup>th</sup>, 2019

## **Comments of the New York City Hospitality Alliance**

### **RE: Oversight - Consolidated Edison Summer 2019 Service Outages.**

The New York City Hospitality Alliance is a not-for-profit association representing restaurants and nightlife establishments that were impacted by Consolidated Edison's Summer 2019 Service Outages.

When restaurants and nightlife establishments lose power, it has a dramatic impact on their operations and finances. Restaurants must stop cooking, and customers are unable to finish their meals. Since many of these businesses process a significant amount of revenue via credit card transaction, which they are often unable to do without electricity, they cannot accept payment from customers. In many cases, it wouldn't be appropriate to charge anyway since people may not have finished their meals. This also results in some workers not earning tips and therefore losing out on income.

While the recent blackout did not last long enough to result in widespread food spoilage or situations that create foodborne illness concerns, if the outages lasted any longer, both could have been a serious concern from a financial and public health perspective.

A sudden loss of electricity can also cause a sudden panic among workers and customers because of heightened public safety and security concerns, which may be even more pronounced at nightlife establishments.

Because restaurant and nightlife venues are places where the public congregates, New Yorkers and visitors often ask them questions about why the power is down, when it's expected to return, and other related questions. These businesses can also become hangouts where people come to drink, consume food before it spoils and commiserate about the outage.

While the utilities and regulators discuss ways to avoid future outages, we suggest the following measures are taken to help mitigate the consequences future outages may have on the city's restaurant and nightlife industry:

#### **1. Communications:**

- Enhance existing communications and develop new systems where information about the service outages can be transmitted to businesses in real time.
- Because the public often asks the operators of restaurants and nightlife establishments about the outage, related Facebook, Instagram and Twitter images and posts can be created and given to these businesses for them to share on their social channels. These businesses often have large followings on these social media channels, so they can share important announcements with the public.
- Workers are often confused about whether to report to work, transportation options available, and how their lives will be affected by the outage. Information related to

these issues should be provided ASAP to employers, so they can better determine how to plan for the business interruption and inform employees as appropriate.

**2. Financial Impact:**

- There should be a larger conversation about the process and how much lost money impacted businesses can recoup from utilities due to such outages.
- Businesses should be educated about types of insurance coverage available to them should such an outage occur.

**3. Safety:**

- Businesses should be educated about how to best manage security and safety related issues that may occur.
- The NYC Department of Health and Mental Hygiene should provide information to businesses on how to address food safety matters related to power outages.

**4. Miscellaneous:**

- If the outage is expected to last for an extended period of time and a restaurant will likely have to dispose of its food, information about the city's new Food Donation portal and other food rescue services should be provided.

In addition to the aforementioned recommendations, the City and utilities should develop a reference guide to inform restaurant and nightlife establishments about best practices for preparation, in the moment, and post power outage. This guide should also include different resources available to them. The New York City Hospitality Alliance is happy to discuss these issues further and work with all parties to address them. Of course, the main goal must be to prevent these outages from occurring again, as they can have serious safety, operational, and economic consequences for our city's businesses and New York has a whole.

Respectfully submitted,

Andrew Rigie  
Executive Director  
arigie@thenycalliance.org



PUBLIC ADVOCATE FOR THE CITY OF NEW YORK

**Jumaane D. Williams**

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**TESTIMONY OF PUBLIC ADVOCATE JUMAANE D. WILLIAMS  
TO THE NEW YORK CITY COUNCIL COMMITTEES ON ENVIRONMENTAL PROTECTION,  
CONSUMER AFFAIRS AND BUSINESS LICENSING, AND RESILIENCY AND WATERFRONTS  
JOINT OVERSIGHT HEARING ON CONSOLIDATED EDISON SUMMER 2019 SERVICE OUTAGES**

**SEPTEMBER 4, 2019**

My name is Jumaane D. Williams and I am the Public Advocate for the City of New York. I would like to thank Speaker Corey Johnson, Council Members Costa G. Constantinides, Rafael L. Espinal Jr., and Justin Brannan, chairs of Council Committees on Environmental Protection, Consumer Affairs and Business Licensing, and Resiliency and Waterfronts respectively, for convening this hearing to investigate this summer's blackouts. Thank you for your hard work.

The electric transmission and distribution infrastructure in New York City is not overseen directly by a city agency. Rather, it is Consolidated Edison (Con Edison), a private company, with whom the public entrusts the maintenance and management of our city's vital power grid. In theory, the city guarantees Con Edison 8.5 million users and, in return for that captive customer base, Con Edison provides a resilient and reliable service to those users. In return, New Yorkers experienced multiple power outages this summer, including one in Manhattan on July 15 and Brooklyn on July 21 of this year.

At the same time, Con Edison is seeking to raise its already high rates by a record margin this year. Similar to previous years, Con Edison claims they need the extra \$695 million to invest in infrastructure, despite receiving approximately \$1.4 billion in profits in the last year. In the past, they have provided very little transparency as to where that money actually gets spent including the infrastructure upgrade of West 65th street area station that Con Edison had promised.

Con Edison's lack of transparency, infrastructure and communication were apparent in Con Edison's response to this summer's Brooklyn blackout. On July 21, 2019, the first press release put out by Con Edison announced that the company was "responding" to multiple outages. Two and a half hours later at 11 pm, the second press release put out by the company stated that the blackout was an intentional, preemptive move to protect vital equipment.

I would like to thank Con Edison's leadership for allowing my staff and I to tour its Brooklyn command center following these outages. During the visit, when asked about the conflicting nature of these statements, Con Edison seemed to be completely unaware of the conflict. My staff and I were also briefed on what led to the decision to cut power to the Flatbush network. The area that lost power is serviced by the Bensonhurst No. 2 substation. Like many substations in NYC, it is designed with multiple redundancies. In

this case, of the 19 feeder lines that service this area, as many as six can go offline at a time.

In the hours leading to the outage, my office found out that one of the feeders was offline for regular maintenance. As the temperature remained high and people returned to their homes and turned on appliances that evening, demand on the grid began to rise and voltage to the area was reduced to mitigate the impact of this increased demand. Soon, one of the feeder cables malfunctioned, shifting the burden to the remaining feeders, and subsequently leading to a chain of failures. After the fourth failure, the Corporate Emergency Response Center (CERC) - which includes Con Edison leadership, Public Service Commission representation, and the NYC Emergency Management office (NYCEM) - was put on direct notice of the potential for a blackout. Shortly after, a fifth and final feeder failed.

My office was informed that after this moment, Con Edison leadership had approximately five minutes to make the call to depower the grid to prevent a more catastrophic outage. After that call was made, there were approximately 20-90 minutes between when the call to de-energize the network was made and the blackout itself. These are in addition to the time Con Edison has between the fourth and fifth feeder failure. These vital minutes could have been used to warn the public about what was going to happen, especially vulnerable citizens such as those dependent on electronic medical equipment or people with low mobility who may need to seek a cooling center.

When my office asked Con Edison about outreach policy for blackouts, the company admitted it currently “has no policy” to communicate with customers. Con Edison has demonstrated that it does not provide customers with ample notification ahead of planned power outages. It has also been made clear that there is no official communication policy given multiple representatives--Con Edison leadership, the PSC, and NYCEM--in the room working to address the potential power outage. We are reaching out to NYCEM to better understand their role in the matter, but it is simply unacceptable that no outreach was made to even the most vulnerable members of the community, such as seniors and people with disabilities, and it is a miracle that nobody was harmed.

To date, my office sent two letters to Con Edison and made two visits to the Con Edison Brooklyn command center. While I appreciate Con Edison’s response explaining its process of restoring power outages, I have yet to get assurance that these catastrophic communication failures were a fluke. Specifically, the conflicting nature of public comments and the lack of clear communication with government entities and officials still remain to be answered. Moreover, I am still unclear of its future communication

plans if a similar incident were to happen again in New York City. I sincerely hope this hearing will help quell these concerns.

One of the Public Advocate's most important tasks is being the bully pulpit for the people of New York, especially when it comes to matters as vital as emergency management. In other jurisdictions, utility companies recently launched a new notification service. For example, in Los Angeles, customers can sign up to be texted or emailed whenever there is a blackout. The communication includes the areas impacted, as well as estimated time service will be restored. Customers can sign up for up to three neighborhoods. I see no reason why we cannot have a similar system in place.

In the coming days, I will be working on legislation to improve communication and transparency during blackouts and hold the company accountable.

Again, I thank the council committees for hosting this hearing today.

**THE COUNCIL  
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: \_\_\_\_\_

(PLEASE PRINT)

Name: Greg Waltman

Address: \_\_\_\_\_

I represent: G-One-Quantum

Address: \_\_\_\_\_

**THE COUNCIL  
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: 9/4/19

(PLEASE PRINT)

Name: Dr. Yury Dvorkin, Assistant Professor, NYU

Address: 6 MetroTech center

I represent: New York University

Address: 6 MetroTech center

**THE COUNCIL  
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: 9/4/19

(PLEASE PRINT)

Name: Lee Fiesche

Address: 219 Quincy St Apt 1 Brooklyn NY 11216

I represent: Sono Energy Project

Address: 252 E 11th Street, NY New York

Please complete this card and return to the Sergeant-at-Arms

**THE COUNCIL  
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: \_\_\_\_\_

(PLEASE PRINT)

Name: Richard Berkley

Address: 90 S-Swan St, Albany NY

I represent: Public Utility Law Project

Address: 25 Broadway, 9th Flr, NYC 10004

**THE COUNCIL  
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: \_\_\_\_\_

(PLEASE PRINT)

Name: LISA HARRISON

Address: 212 W 105 ST, 10025

I represent: \_\_\_\_\_

Address: \_\_\_\_\_

**THE COUNCIL  
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

OVERSIGHT CONED  in favor  in opposition

Date: 9/4/19

(PLEASE PRINT)

Name: KIM FRACZEK

Address: 250 MOORE ST. #410 BK NY 11206

I represent: SAFE ENERGY PROJECT

Address: 232 E. 11TH ST. NY NY 10003

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**THE COUNCIL  
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: 9/14/16

(PLEASE PRINT)

Name: DAVID DESANTI

Address: 230 E. 48th ST. NY

I represent: CON EDISON CO.

Address: 4 Irving Place

**THE COUNCIL  
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: 9/14/19

(PLEASE PRINT)

Name: Steven Parisi

Address: 4 IRVING PL NY, NY

I represent: Consolidated Edison Co of NY

Address: \_\_\_\_\_

**THE COUNCIL  
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: \_\_\_\_\_

(PLEASE PRINT)

Name: Kyle Kimball

Address: 4 Irving Place, NY, NY 10003

I represent: Con Edison

Address: 4 Irving Place, NY, NY 10003

158 2 1590

# THE COUNCIL THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: \_\_\_\_\_

(PLEASE PRINT)

Name: Gustavo Gordillo

Address: 245 Decatur St Brooklyn

I represent: NYC Democratic Socialists of <sup>America</sup>

Address: \_\_\_\_\_

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# THE COUNCIL THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: \_\_\_\_\_

(PLEASE PRINT)

Name: Annel Hernandez

Address: 166A 22nd Street

I represent: NYC Environmental Justice Alliance

Address: 166A 22nd street

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