

Testimony of Deanne Criswell, Commissioner, New York City Department of Emergency Management Before the New York City Council Committees on Consumer Affairs and Business Licensing; Waterfronts and Resiliency; Environmental Protection; and Health May 26, 2020

Good morning Chairpersons Cohen, Brannan, Constantinides, and Levine and members of the Committees on Consumer Affairs and Business Licensing; Waterfronts and Resiliency; Environmental Protection; and Health. I am Deanne Criswell, and I am happy to be here today in my role as Commissioner of New York City Emergency Management. I am joined by members of the administration, including Jainey Bavishi Director of the Mayor's Office of Resiliency, and Carolyn Olson, Assistant Commissioner in the Bureau of Environmental Surveillance and Policy at the Department for Health and Mental Hygiene.

It has been an unprecedented time in New York City, indeed around the world. City government has worked tirelessly with our partners at all levels. While we have made significant progress against COVID-19, much work remains and we keep working to ensure the safety and security of New Yorkers. We realized early on in our response to COVID-19 that this was going to be a marathon and not a sprint, and we established a cascading impacts team. This team has spent months looking over the horizon at response challenges in a COVID-19 world and adapting existing plans to account for new needs such as social distancing, facility closures, and an economic downturn.

To that end, we have adapted the interagency Heat Emergency Plan to prioritize the health and safety of all New Yorkers. This adapted plan builds on assumptions that social distancing guidelines, in some form, will still be in place during the summer. The populations most at risk for heat related illness – those with chronic conditions such as renal or heart disease, obesity or diabetes, severe mental illness, or substance use – has not changed. Unfortunately, these are largely the same populations at greatest risk for complications from COVID-19.

The three pillars to our adapted Heat Emergency Plan are:

- 1. More strategies to keep the most vulnerable cool and healthy without leaving their homes to visit a cooling center.
- 2. New strategies to help cool a population without air conditioning who are at lower risk of COVID-19 but can safely travel outside their homes.
- 3. Adapted strategies to mitigate potential power outages or load issues.

Existing federal programs that help low-income vulnerable New Yorkers get cooling assistance reach less than 1,000 city residents every year. This summer, the City created a \$55 million program to provide 74,000 air conditioners to New Yorkers who are 60 years of age or older, have an income below 60% of the state median income, and do not have air-conditioning at home. To reach this goal, multiple New York City agencies are conducting direct outreach to New Yorkers who meet the criteria, particularly to those who are already receiving City benefits.



Due to air conditioning usage, energy bills are generally higher in the summer, and many people with air conditioners choose not to use them because of cost concerns. The City petitioned the Public Service Commission for summer utility bill assistance for 450,000 low-income New Yorkers so they can afford to run their air-conditioners and keep cool indoors this summer. If the Public Service Commission will not cover this, the City will look to utilize federal funding or City funding to help bridge the gap.

Additionally, the City is looking to expand the Home Energy Assistance Program, or HEAP. This program, typically allocated to assist with winter heating costs, is a federal program that helps low income households pay for heating or cooling their homes. Through the CARES Act, the Federal Government allocated an additional \$900 million in HEAP funding nationwide. The City, through the Department of Social Services, is advocating that the State expand the use of its HEAP funds to start providing summer utility assistance, in addition to providing more air conditioners to New York City residents.

We have also adapted our Heat Emergency Plan for traditional cooling options for those who can leave their homes. Assuming that Senior Centers, traditionally used as cooling centers, have not re-opened, we have identified existing facilities that allow for social distancing and can be used as cooling centers in communities that are highly vulnerable for heat illness, communities of color, and immigrant communities. For example, we are working with the Department of Education to explore targeting schools with air-conditioned classrooms that would allow for vulnerable New Yorkers to stay cool and isolated. We are also looking at transportation options to assist people in getting to cooling facilities.

During a heat event, people who normally rely on pools or beaches will flock to other water-based amenities like hydrant spray caps and spray showers in parks. The Parks Department and the Department of Environmental Protection (DEP) will provide spray caps and spray showers in the parks and schedule hydrant openings to ensure access to outdoor cooling across the city while minimizing strain on the water system and also while maintaining necessary social distancing according to current COVID-19 prevention guidance. DEP will also create a reusable water bottle distribution program and social media campaign beginning in June to promote reusable bottles and remind New Yorkers to stay hydrated.

Similar to the issues presented with congregate cooling in a COVID-19 world, the City is modifying how it will respond to power disruptions this summer. Even before COVID-19, following last summer's blackouts, the City increased its coordination with our utility providers. This included monthly workshops, updates to our communication procedures, and a deeper understanding of the power grid. With COVID-19, we have doubled-down on our engagement with utility providers. Our teams are on multiple weekly calls on various planning efforts, including communications procedures and response protocols and we are in the process of holding pre-season trainings and briefings for all City agencies. New York City Emergency Management and Con Edison lowered the threshold for notifications to agencies to prepare for outages. In addition to these actions in conjunction with utility providers, the City plans on pre-staging and rapidly mobilizing emergency generators as needed.



As noted earlier, the same populations most at risk for heat-illness are the most at-risk for COVID-19 complications. As such, we have identified facilities that house these vulnerable populations, including isolation hotel sites, adult care facilities, nursing homes, and NYCHA buildings. The City has done initial power surveys at the hotels currently being used for COVID-19, and is prepared to deploy and install emergency generators in the event of a prolonged power outage to reenergize these buildings and reduce the need for evacuation of vulnerable residents.

Recognizing that a significant number of air conditioners will be installed in NYCHA buildings, the City and NYCHA worked closely with Con Edison to identify buildings that may require additional electrical capacity, and required electrical work is happening now. The hotel sites are currently being assessed, and we will stage generators nearby if needed. Nursing homes are state-regulated and required to have back-up power capabilities; we will communicate to all nursing homes information regarding preventative maintenance, fueling, and testing of their back-up generators to ensure they are prepared for summer. Adult care facilities are also regulated by the State but are not required to have back-up generation, and the majority do not. The City's centrally-placed generators will be ready for quick roll-out if emergency situations arise. We have advocated that the State mandate these facilities be required to have either back-up generation or a "quick connect" that will make emergency generator installation easier, and will continue to advocate for this.

We are reviewing Preconsidered Introduction T2020-6198, which would enact legislation requiring New York City Emergency Management and the Health Department to provide the City's cooling plan to the City Council each year. Each year looks slightly different, obviously never more so than this year. We do a significant amount of public outreach and communication each year along the lines of the legislation and look forward to working with the Council on this proposal.

The Administration is also reviewing Preconsidered Introduction T2020-6197, which would require the Health Department to report on heat vulnerability and heat reported deaths. The Health Department is a national leader in conducting heat-health research and providing data through its Environment and Health Data Portal and looks forward working with the Council on this proposal.

As Mayor de Blasio has stated, this is going to be a different summer than any summer we have seen before. We have to be ready, we have been getting ready, and we will be ready. We are engaging with our partners at all levels of government to adapt our Heat Emergency Plan to meet the moment. While much remains uncertain about the moment we are in, and what future moments will look like as the summer goes on, our mission remains steady and focused – we are planning for and ready to respond to the challenges the summer months will present and will continue to support our city's residents. Thank you for this opportunity to testify and I look forward to your questions.



TESTIMONY OF THE MAYOR'S OFFICE OF RESILIENCY BEFORE THE NEW YORK CITY COUNCIL COMMITTEES ON CONSUMER AFFAIRS BUSINESS LICENSING, HEALTH, ENVIRONMENTAL PROTECTION, AND RESILIENCY AND WATERFRONTS

Tuesday, May 26, 2020

I. INTRODUCTION

Good morning. I am Jainey Bavishi, Director of the Mayor's Office of Resiliency. I would like to thank Chair Brannan of the Committee on Resiliency and Waterfronts, Chair Cohen of the Committee on Consumer Affairs and Business Licensing, Chair Levine of the Committee on Health, and Chair Constantinides of the Committee on Environmental Protection for the opportunity to testify here today.

I would also like to acknowledge my colleague, Commissioner Criswell, from New York City Emergency Management, and Assistant Commissioner Carolyn Olson from the Department of Health and Mental Hygiene.

II. CLIMATE CHANGE AND THE CITY'S STRATEGIC APPROACH TO HEAT

Climate change is a severe and growing threat. Rising temperatures driven by global warming threaten the health and safety of New Yorkers – and particularly older adults, those without access to air conditioning, and those with a variety of health conditions. As you know, New York City is vulnerable to a phenomenon known at the Urban Heat Island Effect, which can make urban areas up to 22 degrees hotter than surrounding areas. In an average year, extreme heat kills approximately 130 New Yorkers, making it our most deadly climate hazard.

To address the threat of extreme heat, in 2017, Mayor de Blasio launched Cool Neighborhoods NYC – an innovative, strategic, citywide effort to tackle extreme heat and its cascading impacts with many agency and nonprofit partners over the long term. These efforts reflect our commitment to managing future risks and provide the foundation for our current adaptive response to extreme heat this summer.

The \$106 million dollar investment and comprehensive approach outlined in Cool Neighborhoods NYC expanded the Administration's aggressive climate resiliency agenda to make neighborhoods cooler through significant tree planting in city streets and parks and painting reflective coatings on millions of square feet of rooftops in our most heat-vulnerable neighborhoods. Together with the Health Department, we have also worked to protect the most vulnerable New Yorkers inside their homes by providing heat risk education and increasing social support networks through our Be a Buddy pilot program, and enlisting home care agencies and community health organizations as partners in building community resiliency.

These investments and strategies are targeted at the City's most heat-vulnerable communities. The Health Department and Columbia University developed a pioneering Heat Vulnerability Index that maps both physical and social vulnerability to precisely identify the neighborhoods at highest risk and this is the basis for the Mayor's Office of Resiliency's Cool Neighborhoods NYC strategy.

III. THIS SUMMER MAKES THESE THREATS MORE EXTREME

With the COVID-19 pandemic impacting every part of our lives, this summer is shaping up to be unlike any other in history. As the summertime heat season approaches, the COVID-19 crisis and the climate crisis are poised to interact in ways that could cause additional loss of life – and particularly in many low-income, black, and brown communities that have already been devastated by the virus.

With stay-at-home and social distancing orders in place, and more limited access to cool public spaces due to safety concerns, our Administration has taken extra steps to ensure that New Yorkers can stay cool this summer – it's simply a matter of life and death.

As Commissioner Criswell mentioned, two weeks ago, we were proud to announce the new \$55 million program to provide an additional 74,000 Energy-Star air conditioners to low-income seniors administered through our capable partners. We are particularly glad that this effort is designed with equity at its core by focusing on public housing residents and those who are most economically and physically vulnerable to heat-related illness and death.

Our efforts to protect at-risk New Yorkers from heat this summer are unprecedented, but there's even more should be done, particularly at the State level. Expanding cooling assistance through the New York State HEAP program and providing summer utility bill assistance through the Public Service Commission are two critical steps that should be undertaken without delay.

IV. CONCLUSION

Extreme heat is a significant threat to our most vulnerable communities, and COVID-19 is demonstrating how multiple risks can compound this threat unequally in this City. We're glad to support significant progress on long-standing priorities that address New York City's most deadly climate threat now and in the future.

In conclusion, I would like to thank the Committee on Resiliency and Waterfronts, Committee on Environmental Protection, Committee on Health, and the Committee on Consumer Affairs and Business Licensing for allowing me to testify here today. My colleagues and I are now happy to answer any questions you may have at this time.

Con Edison Summer Preparedness

VP Kyle Kimball's Opening Remarks

Good Morning, my name is Kyle Kimball, and I'm the Vice President for Government Relations at Con Edison, and I'm here with my colleagues, Patrick McHugh, Vice President for Distribution Engineering and Matt Sniffen, Vice President for Emergency Management.

Thank you for taking the time to across these four committees to hear about our summer 2020 preparations.

We plan to give you a very high level overview of our preparations for this summer and you have graciously granted us no more than 15 minutes to get through this, so we will move along quickly, and will happily provide more detail during the Q&A.

As we enter the summer of 2020, all of us are faced with a summer unlike anything we've ever experienced, personally and professionally. Keeping our customers safe has been, and remains our top priority. In addition to our normal safety concerns, we recognize that this summer, as it heats up, that the reliable delivery of energy is an important component to our collective public health efforts.

So, we will spend the next few minutes discussing with you how we have undertaken preparing for this summer, to give you a sense of the lessons we learned from last summer, how those learnings have been shaped by the current pandemic, and the investments we've made to ensure that we remain one of the most reliable energy providers in the world.

First, while our forecasters see overall lower demand for electricity this summer, the demand will most certainly shift away from the commercial centers to the residential areas.

Second, we have made significant investments into the energy grid, based on our learnings and analysis from last summer, to 1) minimize the chances of outages; 2) minimize the number of people affected by an outage and 3) minimize the amount of time people are without power in the case of an outage; and 4) re-tooling our communication plans to ensure that our appeals and information are more effective.

We have particularly focused on investments in the Flatbush network, and investments to improve the capacity to deliver electricity to over two dozen NYCHA developments that were at their capacity limits. This is particularly important to supporting the City's heat mitigation plan.

Third, we are in very close/weekly communication with the Mayor's Office and Emergency Management preparing for this summer, enhancing communication protocols, and giving them detailed analysis of our electric load forecasts and summer preparations.

Fourth, we will continue to work with our customers through the summer to address issues of financial hardship. Since March, we proactively suspended the termination of service for non-payment, we are waiving late fees, and re providing flexible payment agreements for those that need help

Before I turn it over to Patrick who will walk through summer preparations overview, its worth saying that climate change, and the more intense storms and heat events, coupled with a pandemic, it is imperative that our adaptation includes both investment in smart technologies, but also investments in efficiency, and alternatives to traditional approaches to enhance our resiliency.

Patrick McHugh's Slides

Good Morning.

Next slide please -

As we prepare for Summer 2020 we have been putting considerable effort into developing a very detailed forecast of the peak usage for the upcoming summer. Each year we work to design and upgrade the system to be ready for the forecasted peak energy usage. Pre -COVID the summer peak forecast was estimated to decrease by a few MW from last year's forecast, however the overall impact of COVID has had a significant impact on the overall energy usage in the city. Based on the current trends we see an overall weekday reduction of approx. 16% and weekend reduction of 8.5%. Our current system peak forecast for summer 2020 is now 12,000 MW, down from 13,270MW last year. A 10% reduction.

All boroughs have seen a reduction in usage when compared to similar times and temperatures last year. Some areas have seen much more significant reductions than others. We are seeing the possibility of a few areas that may increase in load and we are taking quick action to upgrade equipment in those areas to address this new forecast.

We will continue to monitor the energy consumption behavior around the city as we head into the summer and will adjust our plans, as necessary, based on any new observations.

Next slide please----

At the end of last summer, we develop our summer prep plan to get the system ready for summer 2020. I am happy to report that we are going to meet and exceed that plan, even with the impact that COVID had on our operations.

Throughout the entire impact of the pandemic, the brave women and men of Con Edison's operations and field forces have worked side by side with many other essential employees in the city to keep the essential services of the city going. This effort has enabled us to complete all our summer prep work that was planned last Fall to have the system in a strong position going into the summer.

We have invested \$1.3 billion dollars in the power system to

- improve the safety and reliability of the system,
- prepare the system for more disturbed resources,
- and connect new customers to the grid.

This investment included multiple upgrades in the Flatbush region of the grid where we had the unfortunate outage event in the overhead area of the system last summer. We have upgraded cables in both the 27 kV and 4 kV systems in this area, and installed 6 new sectional switches in the overhead and underground to provide better reliability to the feeders in this area. We have also completed relays upgrades on all feeders supplying the overhead grid, and developed a new control system to allow operators to surgically sectionalize the overhead grid if problems develop.

In other areas, we have worked with NYCHA to address 29 NYCHA locations around the system to allow for additional energy consumption for people sheltering in place at these locations.

We have also completed significant reliability upgrades across all 5 boroughs.

To be ready for summer 2020 we have upgrade distribution feeders and transformers that have been identified as reaching capacity for summer 2020. 31 locations were addressed.

I also want to highlight that we continue to deploy grid edge technology to continue to make the grid safer, smarter, more reliable and more easily accessible to support distributed resources. This technology includes;

- smart meters, which allows two communication to the meter and near real time data of energy usage
- two ways communication to underground switches to make the network system more adaptable to two-way power flows and quickly respond to system issues,
- and manholes sensors that detect abnormal conditions in the manhole and can communicate that information back to work center.

I want to note that we did temporarily suspend smart meter deployment during the COVID impact, but we have plans to begin redeployment in the weeks ahead on phased approach. The new meters greatly enhance social distancing by no longer require meter readers to enter customer locations to get meter reading and also allow "turn on and turn off" request to be done remotely.

Finally, to address some of the unknowns about the redistribution of customer energy usage patterns around the city from the COVID impact, we have secured an additional 12 large 2WM generators to add to our fleet. We plan to preemptively locate these units in residential areas to help address any new loading concerns that arise.

VP Matthew Sniffen's slides

<u>Slide 6</u>

Based on lessons learned from our experience last year we updated our Emergency Response Plans

To measure their effectiveness, we do numerous drills each year many in collaboration with NYCEM.

After last summer's incidents we met with NYCEM and MOR. The output was a request for a series of workshops aimed at each side getting a better understanding of our system and the city agency's needs.

This year we have jointly established a communication protocol during heatwaves that will keep the agencies informed as an event is potentially unfolding.

We will continue to communicate with as an activation happens including embedded team members in each other's Emerg Operations centers

As temperatures rise we activate our plans adjust our schedules for better coverage

<u>Slide 7</u>

As we get into contingencies in heat events, we have several options that we pre-emotively use in order to avoid a load shedding event like Flatbush last year.

When we are having a network problem, we typically would do a network focused appeal as the area in contingency doesn't influence other areas.

Con Edison Summer Preparedness

May 26, 2020



Key Points: What's Different This Year?

- Summer demand patterns will likely be lower, but shifted, due to pandemic and customer pattern changes;
- We have invested \$1.3 billion in our electric grid to provide even higher levels of reliability and resiliency – particular focus on NYCHA;
- Closer coordination with Mayor's Office, Emergency Management, and commitment to improved communication;
- Con Edison will continue to work with its customers through the summer to ease issues of financial hardship;
- Climate change adaptation requires a balance between investment and energy efficiency.



COVID-19 Customer Assistance

- Suspended termination of service for non-payment and waiving late fees.
- Providing flexible payment agreements for those that need help.
- Supporting the City of NY's heat mitigation plan.
- Providing energy saving tips while people are at home more; best way to save is to conserve.



Summer Energy Forecast

- Revised summer peak forecast: 12,000 MW, down from 13,270 MW last year.
- Currently overall load has decreased because of the pandemic.
 - Weekday overall load is down ~15.6%
 - Weekend overall load is down ~8.5%
- Vast majority of areas will experience similar or lower than that typical peak load.
- Few areas may experience higher than typical peak load.



Grid Investments: Overview

- 2020 summer prep work will be completed as planned.
- We have invested \$1.3B in our electric grid;
 - Multiple significant projects across all five boroughs.
 - Southeast Brooklyn (Flatbush grid) improvements & equipment upgrades
 - Providing service capacity upgrades at numerous NYCHA sites.
- Continue to deploy smart technologies across the grid:
 - Smart meter installations resuming;
 - Two-way communication underground switches;
 - Manhole sensors to better anticipate manhole fires;
- Proactive generator positioning.



Heat or Storm Event: Operational Readiness

- Emergency response plans
- Training and exercises
- Coordination and embedding with NYC EM
- Preemptive measures before incident





Operational Readiness: Heat Event

- Load Reduction Measures:
 - General Customer Appeal
 - Focused Network Appeal
 - Distribution Load Relief Program

- Voluntary Load Reductions
- Voltage Reduction
- Load Shedding (last option)





Customer Communications

Proactive

- Targeted outbound energy conservation messages
- Press releases, email blasts, web postings, social media
- New: Regular update calls with electeds before storms and potential outage events

Outage-related

- Customer reports outage (land line, smart phone, text, or internet)
 - Once established, Estimated Time of Restoration provided to customer
 - Service restoration confirmation outbound calls made to customer



Customer Communications: Online Outage Map





Key Points

- Summer demand patterns will likely be lower, but shifted, due to pandemic and customer pattern changes;
- We have invested \$1.3 billion in our electric grid to provide even higher levels of reliability and resiliency – particular focus on NYCHA;
- Closer coordination with Mayor's Office, Emergency Management, and commitment to improved communication;
- Con Edison will continue to work with its customers through the summer to ease issues of financial hardship;
- Climate change adaptation requires a balance between investment and energy efficiency.



APPENDIX



COVID-19 Operational Changes

- Crews have been part of the essential workforce and have continued to work throughout the pandemic.
- To increase social distancing, start times staggered, satellite work out locations created, additional vehicles were provided, and PPE was issued.
- Crews practice social distancing, use face coverings when not possible, and follow CDC guidelines.
- Non-operational employees have been working remotely to the greatest extent possible to minimize spread of COVID-19.
- Reduced workstreams to limit exposure to public. This included new service work, smart meter deployment and meter reading.



Operational Readiness: Heat Event





COVID-19 Community Assistance

- Contributed more than \$300,000 to nonprofit organizations dedicated to feeding New Yorkers.
- Contributed \$50,000 to the NYC Heathcare Heroes Fund to provide food, household cleaning and personal care products to health-care professionals.
- Contributed \$40,000 to assist local police and fire departments and USO foundations.
- Employees have contributed more than \$100,000 to various groups since March 1, and those donations are matched dollar for dollar by Con Edison.
- Employees at a Con Edison machine shop in the Van Nest section of the Bronx manufactured more than 40,000 plastic face shields and donated it to health-care workers.
- Donated nearly 100,000 N95 masks for health-care workers.
- Our crews ran electricity lines to emergency hospitals in Central Park, at the Westchester County Center, and a drive-through testing center in Coney Island, Brooklyn. Continue to work on COVID-19 testing sites.

ConEdison

Grid Investments: Battery Storage





Electric Grid Overview



Powering Customers





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Testimony from Yury Dvorkin, Assistant Professor of Electrical and Computer Engineering at the New York University Tandon School of Engineering

before

The New York City Council Committees on Consumer Affairs, Environmental Protection, Health, and Resiliency and Waterfronts Joint Oversight Hearing on Consolidated Edison's Summer Preparations and the City's Cooling Needs

May 26, 2020

Good Morning Chairpersons Brannan, Cohen, Constantinades, Levine and all Council Members present. Thank you for the opportunity to testify today at this important oversight hearing regarding **Consolidated Edison's summer preparations and the City's cooling needs.** I am pleased to share with you and your constituents my experience as a professor and power engineering and smart grid researcher. I hope my insights prove valuable as we move towards a more efficient, reliable, sustainable and equitable electricity supply in New York City, especially during and beyond COVID-19 and the strain it has put on our public and private resources. I would also like to acknowledge the National Science Foundation (NSF) for supporting my ongoing research at New York University's Tandon School of Engineering, aimed at better understanding the effects of the COVID-19 outbreak on New York City's infrastructure systems and its ability to provide critical services¹.

This year, in addition to the usual challenges associated with running a major urban electric power distribution system, Consolidated Edison faces additional barriers and uncertainty imposed by the ongoing COVID-19 pandemic. In Summer 2020, the most significant of these will be social distancing norms and restrictions that can slow down the emergency response and thus increase outage durations². **Consolidated Edison must** revisit its protocols and practices to make sure that social distancing norms practiced by employees do not postpone scheduled maintenance and repairs, nor delay emergency response plans. Meanwhile, the uncertainty arises from two factors: (i) Lack of accurate demand forecasting tools: Preliminary analyses carried out for the NYISO's system reveals that demand forecast errors have surged in the aftermath of stay-at-home orders. This data-driven analysis indicates that demand forecasting tools that

largely use historical electricity consumption data cannot produce accurate forecasts for

¹ We gratefully acknowledge the NSF Award No. ECCS-2029158 "RAPID: RETrofitting REsiliency AgainsT COVID-19! (RETREAT COVID-19!)" https://www.nsf.gov/awardsearch/showAward?AWD_ID=2029158&HistoricalAwards=false

² As of April 23, 2020, more than 350 Consolidated Edison's employees were tested positively for COVID-19, in part due to a lack of personal protective equipment at early stages of the outbreak. <u>https://www.utilitydive.com/news/coned-covid-19-cases-grow-past-350-as-utilities-forced-to-adjust-pre-pandem/576606/</u>

this summer because consumption patterns have changed (e.g., shifts from the commercial to residential sector.)

(ii) <u>Projected increases in residential demand</u>: Due to stay-at-home orders, residential demand has changed its typical cyclic daily profile and, in many cases, has increased. Furthermore, the Mayor's current heatwave plan includes the installation of 74,000 additional air condition units for low-income senior citizens. These units, while providing necessary relief to a vulnerable population group, may further raise the electricity demand and cause additional stress on Consolidated Edison's distribution system.

Given these two factors, it may be difficult to impossible for Consolidated Edison to accurately predict how electricity demand in their system will change in Summer 2020 and when, where and what the actual demand peak will be. Furthermore, one must be aware that demand reductions in one part of the system (e.g., in the commercial sector) does not necessarily enhance the ability to serve increased demand in another part of the system (e.g., in the residential sector) due to various network limits (e.g., voltage and power flow) on the ability to transfer power from one part of the system to another. **Consolidated Edison must**, therefore, must proactively analyze the impact of increased demand and reduced accuracy of demand forecasting tools on their system, including the available transmission capacity to exchange power between different parts of the system.

Electric power distribution infrastructure operated by Consolidated Edison is a complex engineering system and its reliability cannot be 100% guaranteed, despite the best efforts of engineers, managers, and planners. This is of particular importance in Summer 2020, when a large number of people with COVID-19 symptoms will likely not be hospitalized and therefore remain homebound. Hence, it is important to "what-if" every possible contingency and pre-emptively plan for mitigation and corrective actions. **Consolidated Edison must** make this planning transparent and open for public comment and evaluation. One possible approach to ensure transparency and increase Consolidated Edison's preparedness 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, etc.)

As the Mayor recently announced, Consolidated Edison has been involved in implementing the City's heatwave plan, which includes 60 portable generators for emergency deployment in case of outages. Although this backup capacity can be used as a corrective measure to compensate power losses in some local outages, it can hardly be enough to deal with large-scale power outages. For example, last year's outages in Manhattan, Staten Island, Brooklyn, and Queens affected over 100,000 customers in total, and revealed that full recovery of electricity supply under normal circumstances (i.e., without the social distancing that Consolidated Edison's repair crews will have to follow) takes from several hours to several days. While hardly acceptable in normal circumstances, should similar outages occur this year, they will imperil electricity-vulnerable (electricity-dependent) New Yorkers who do not have access to alternative electricity supply. (In general, electricity-vulnerable population groups include children and youth³, citizens with pre-

³See for details here:

https://journals.sagepub.com/doi/full/10.1177/0009922813482762?casa_token=ieDjR8ajLkQAA AAA%3AP5eQr0JT0LyqK1ahg-7NzNhVuUJ116Wb_6wXLfZ4smfRD0hLiS87qUWSerSulY7h6itBtoEqzI-

existing health conditions⁴, and senior citizens⁵, especially from underrepresented groups.) Without thoroughly accounting for the needs of electricity-vulnerable populations groups in planning for contingency, it is impossible to balance the customer equity across the Consolidated Edison's service territory, which is among core principles in the current rate making practice in the State of New York⁶.

In order to further promote equity and social justice in urban resiliency planning, **Consolidated Edison must** proactively prepare to address the needs of these vulnerable population groups, in part by engaging with local communities to better understand their needs. This can be done by surveying existing customers while respecting their privacy (e.g., using regular mail and online billing) a project that can be expedited via city-wide community outreach led by Consolidated Edison to explore a broad range of local sensitivities characterizing electricity supply patterns and the resiliency needs of various socio-demographic groups. Based on this survey, **Consolidated Edison must** be prepared to immediately assist its customers from vulnerable population groups as soon as any power outage is reported. The outcomes of this outreach must then be incorporated in their pre-emptive planning for mitigation and corrective actions.

Taken together, these recommendations will not guarantee that there will be no events comparable to the outages of last summer, but they will help ensure that the adverse impacts of such outages are reduced, especially on vulnerable population groups.

Thank you for the opportunity to share my experience and recommendations. I would be happy to answer any questions the Committees may have. Should you have any additional questions, please feel free to contact me (<u>yvd204@nyu.edu</u>) or Associate Dean for Communications and Public Affairs Sayar Lonial, (<u>sayar.lonial@nyu.edu</u>).

⁴ See for details here:

https://journals.sagepub.com/doi/full/10.1177/0009922813482762?casa_token=ieDjR8ajLkQAA AAA%3AP5eQr0JT0LyqK1ahg-7NzNhVuUJ116Wb_6wXLfZ4smfRD0hLiS87qUWSerSulY7h6itBtoEqzI-

⁵ See for details here: <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5007208/</u>

⁶ See for details here: <u>file:///Users/yurydvorkin/Downloads/%7BA0BF2F42-82A1-4ED0-AE6D-D7E38F8D655D%7D%20(1).pdf</u>

<u>Committees</u>: on Consumer Affairs and Business Licensing and Resiliency and Waterfronts

Date: Tuesday, May 26 at 10:30am

<u>Topic</u>: Consolidated Edison's Summer Preparations and the City's Cooling Needs.

- Good morning/afternoon, my name is Richard Berkley, Executive Director of the Public Utility Law Project of New York (PULP)
- PULP is a 40-year old statewide nonprofit legal organization that educates, litigates and advocates on behalf of New York State's low & moderate income utility customers – seniors and disabled households
- Thank you for the opportunity to appear before the Committees today on these three extremely important issues – Con Edison's readiness to keep the lights on and Airconditioning working during what is forecast to be yet another record breaking hot summer; Councilmember Brannan's legislation requiring annual reporting on heat vulnerability and heat related deaths; and Councilmember Salamanca's legislation requiring a comprehensive cooling and communications plan
- We applaud those two pieces of vital legislation that will grow in importance each year global warming makes our summers worse
- Not to sound like a broken record, but PULP shares the Council's concerns about how New Yorkers will be able to weather the hot summer months during the COVID-19 pandemic
- I. Con Edison's Readiness for Summer in the City

- As you know, the Public Service Commission at its Session on May 13 heard from its staff about electric companies' preparations for summer, as it does every summer, and the PSC's staff suggested that electric companies were ready for the forecast of record breaking heat, and the COVID-19 changes of use patterns that do not match the systems design characteristics
- And you also know that while this summer is different than every summer since 1918's Flu pandemic, and 1930's first summer of the Great Depression, there is one thing that remains the same the economic health of the City and lives of countless thousands of heat-vulnerable and medically-vulnerable New Yorker households depend upon Con Edison's keeping power on and restoring it as quickly as possible when the inevitable brownouts and black outs occur.
- Over time, Con Edison has spent many billions of dollars on its electric system, but over time we have also seen it is not enough when faced with the unexpected, or sometimes even when faced by something as expected as a heatwave
- So yes, this summer is the same as most in that we can expect a number of small brownouts and blackouts and other symptoms of an electrical system under great stress from the heat
- And no, this summer is different because the great everyday areas of use Manhattan's office towers and New York's large commercial buildings are and will be largely empty and using only a fraction of their normal load, while the millions of New Yorkers working from home and staying safe through sheltering will be using significantly more electricity on airconditioning and at times of the day that the system and its engineers did not anticipate

- In a press release on May 20, Con Edison said it has invested in anticipation of keeping the lights on during this summer's heat waves, and it anticipates that if the City's large businesses remain largely closed, electric use will not hit a spike large enough to trigger the sort of mass blackouts NYC has seen in the past, but even when the system fails, the Company believes it can deploy its highly trained union workers in a manner that will maintain safety and social distancing for them and consumers
- Additionally, the Company noted that it has suspended shutoffs and late fees during the pandemic and state of emergency, and is working with customers on deferred payment agreements, while this is nowhere near everything PULP would hope for in these circumstances – particularly since it is likely that evictions and foreclosures will restart at the same time as collections, shutoffs and meter seizures by Con Edison – it is a good start
- PULP agrees with Con Edison it is important to remember that the grid is designed for peak summer months, and that while last July's blackouts and brownouts raise rightful concern about the resiliency of the grid and its reliability, since overall use is due to people are staying at home, we may get lucky this summer and not see major outages like in so many previous hot summers, especially with the drop in use by Large industrial and commercial customers, until NYC "reopens"
- But, we have seen system failures like last Summer's when the system was not at peak use, and when despite the investment of billions in resilience and reliability, the design that was supposed to stop blackouts from spreading did not function
- Finally, the Company showed it still has some room to improve its communications with customers and their elected representatives, as shown

by Con Edison's decision to blackout sections of Brooklyn for understandable engineering reasons, but with an unconscionable lack of prior warning and apparent consideration for its impact upon neighborhoods being suddenly thrust into darkness and heat without air conditioning

II. <u>PULP has numerous concerns and recommendations, some of which</u> <u>are unique to this first summer of COVID-19, and some echoing issues</u> <u>previous years:</u>

- To begin, there is a concern that individual New Yorkers will be bearing their entire energy burden this summer
 - After daily messaging, urging and encouraging New Yorkers to stay inside to prevent the spread of the COVID-19 health pandemic, and to protect their and their family's lives, thousands of residents are expected to remain inside during the hot temperature days, even if or when the City is able to get cooling centers up and running safely
 - Residents remaining inside means that New Yorkers will be bearing most, if not all of their energy use and billing during the upcoming months while running air conditioning units almost non-stop, and unanticipated cost during a time of the greatest loss of jobs in almost a century, and when people have already used their savings to live on
 - The City and NYSERDA have thought ahead to this problem of cooling centers and the need for a/c, and PULP applauds NYC and NYSERDA's joint efforts to provide air conditioning units to low-income seniors, assisting with access and instillation of essential cooling in preparation for summer 2020
 - As we have said before though, that is not enough, and the State Office of Temporary Disability Assistance (OTDA) must create

a cooling plan that will help with paying bills, and New York's Public Service Commission must immediately provide additional assistance for low-income household and vulnerable New Yorkers such as the elderly, blind and disabled customers of Con Edison

- PULP also wishes to continue to spread the word here that the Home Energy Assistance Program (HEAP) has a cooling program to which HEAP eligible housholds can apply, and that provides, if financially eligible, a subsidy when purchasing a window Air conditioning unit
 - But, while assistance purchasing an AC unit is helpful, PULP remains concerned that the program is flawed because it does not offer financial assistance for lowmoderate income utility customers to help pay the electricity bill
 - Due to the expected hot weather and likelihood many people, especially New York's most vulnerable, will be planning to remain at home this summer we must acknowledge that their electricity utility bills will likely skyrocket. This arises from lack of mobility, caused by COVID-19, limiting visitation to: local senior centers, libraries, cooling centers, buses, subway lines, or even visiting friends and family
 - Historically and "newly" low-income New Yorkers' energy burden and electricity bill will be all their own to pay. Even if they receive an AC unit through HEAP, they

will find themselves unable to afford to keep the unit running, exacerbating their risk.

- And as we all know, those neighborhoods with residents least likely to be able to pay their electric bills are also "heat islands" within the City and far warmer and for longer than wealthier neighborhoods
- PULP filed comments with the NYS Office of Temporary Disability Assistance regarding its HEAP plan and encouraged that changes be made to the cooling program to address these financial concerns and to help customers pay their electric bill due to the increase use from these AC units
- PULP also filed with the PSC, as did the City, to get immediate added assistance for the City's low-income residents this summer
- PULP also encourages the Council and the City's agencies to consider financial assistance programs to help customers cover the increase cost of electricity usage due to COVID-19, and to join in advocating increased low-income bill assistance and energy efficiency spending to bridge these needs

III. Moving now to the two pieces of legislation

- First, we applaud the move toward collecting data on heat vulnerability and heat deaths; PULP has advocated for 40 years to collect more granular data on consumers' needs from the electric, gas, telecommunications and water systems in New York because we believe evidence-based policy is best
- We also believe that in this first Summer where Con Edison has agreed not to shut off electric customers during extreme heat events, it is important to collect the data on how many lives were at risk, and how many might be saved (we also note that similar data must also be collected for water customers and heating customers)
- In a City that has adopted the use of objective and comprehensive data as thoroughly as NYC, it is appalling that we are only moving forward to collect this life saving data now, but we are glad and approving
- We also suggest the Council have its research arm examine the City's petition for additional discounts for low-income seniors' energy bills in case 20-M-0231, and additional low-income discounts in case 14-M-0565 at New York's PSC, and PULP's petition for immediate rate relief, utility spending reductions and greater consumer protections in case 20-M-0198
- Second, the need for the type of comprehensive cooling and communications plan that must be deployed this summer is obvious; what is not so obvious is that even with a deadline for the first comprehensive of June 20, whether the City can deploy these vital needs in a timely way
- Nonetheless we must try, and thus we suggest that the NYC Office for the Aging and the Administration for Children's Services be added to the list of agencies working on the report so that their vulnerable client populations' needs be advocated for by subject-matter experts

• We also suggest that the Council open a dialogue with OTDA to request at least a pilot program for discounts on cooling bills for low-income households; as summers continue to get warmer, such a program will no longer be able to be put off to the future

Once again, PULP appreciates the opportunity to testify here today, and to share our concerns and recommendations with the Committees on Consumer Affairs and Business Licensing and Resiliency and Waterfronts.

• PULP's hotline is available to assist utility customers with any problems they are experiencing: 877-669 - 2572