

**Prepared Testimony for
Joint NYS Senate & Assembly Public Hearing: To address the emergency storm response and
customer communication by utilities located in New York City, Long Island, Westchester
County, and the greater Hudson Valley post Tropical Storm Isaias**

June 20, 2020

Good afternoon, and thank you for the invitation to be here, so I can share Central Hudson's perspectives as it relates to this most recent storm. My name is Charles Freni and I am the President and CEO at Central Hudson Gas & Electric Corporation, a Fortis Company.

Central Hudson delivers electricity to approximately 309,000 customer accounts and natural gas to approximately 84,000 customer accounts in the Hudson Valley, representing a population of nearly 700,000 people across a 2,600 square mile service territory, which includes a portion of 8 counties, including Albany, Columbia, Dutchess, Greene, Orange, Putnam, Sullivan, and Ulster, and over 80 municipalities.

Every day we strive to fulfill our mission to deliver to our customers' energy and services in a safe and cost-effective manner. Obviously severe storms have the potential to disrupt our normal operations and we need to be prepared to restore service as quickly and safely as possible for our customers. This storm caused electrical outages for 117,000 of our customers. There were many challenges, including the increased complexities and pressures resulting from the COVID-19 pandemic and the economic shutdown, but we are proud that we restored service to 98% of impacted customers within 72 hours.

The Storm Preparations

Central Hudson, much like the other NYS Utilities, has a comprehensive Electric Emergency Response Plan, which serves as our guide for every storm restoration. Our Emergency Response Plan remains current, incorporating the improvements we identify from each of our prior major storm restorations, and the Plan is reviewed and approved annually by the Public Service Commission. We pride ourselves on continuously improving. We believe every effort can be improved upon and we will implement improvements based upon our experience of this storm restoration.

Central Hudson began monitoring Tropical Storm Isaias when it was in the Caribbean and approaching one of our affiliate Fortis companies in Turks and Caicos. From that point forward we continued tracking the storm, monitoring National Weather Service briefings as

well as receiving specific updated forecast information for our service territory from our private weather service vendor. As the likelihood of the storm impacting the Hudson Valley increased, with the track showing a direct path over our service territory, we took steps to prepare for the impact of the storm.

We have an extensive list of preparations we undertake for an approaching storm; however, nothing is more important than securing the field resources necessary for an efficient, safe restoration of service. Our internal line resources consist of approximately 150 line employees, a complement that has grown in number over the last few years in conjunction with our increased focus on infrastructure improvements, and is sized to meet our normal operating requirements. In addition we had 81 line contractors that were on our property prior to the storm working on construction projects and we redirected those contractors to be available for storm response. We also had approximately 125 contractor line clearance personnel on our property, working for us on our normal tree trimming work; they were also redirected to be available to respond to the potential storm damage. Additionally, through the North Atlantic Mutual Aid Group, (NAMAG), we requested mutual aid support on Monday, August 3rd in advance of the storm. Between both our NAMAG allocation and our unaffiliated storm contractors, we secured approximately 100 additional line resources; approximately 80 of which had arrived by the end of the day August 4th, with the remainder on site and available by mid-morning August 5th.

The COVID-19 Pandemic presented challenges to this restoration effort that we have not faced in the past, such as face mask requirements, maintaining social distancing, securing individual hotel rooms, available meal locations, single individuals in emergency response vehicles and not intermingling field crews. Since the onset of the pandemic, we have continued to operate serving our customers as an essential service provider, following the guidance of the CDC and New York State. To do so, about 40% of our workforce are working remotely utilizing VPN (Virtual Private Network); for the remaining 60% who were required to come to work to perform their duties, work practices were implemented and PPE was provided to protect their health and mitigate the spread of the virus. So, for a major storm restoration, careful consideration was taken to protect the health of our employees, mutual assistance crews and the public, as we managed an efficient storm restoration.

We are sensitive to the impacts that COVID-19 is having on our customers and, more

than ever, we are conscious of the potential consequences of the lack of electric service for extended periods, including elevated stress of and safety risks to our customers and the communities we serve. We understand that the services we provide have become even more critically important as many of our customers are forced to work from home due to the steps that have been implemented to control the spread of COVID-19. Many of our small business customers were just beginning to return to normal operations as this storm approached, so any extended time without electric service would be an additional hardship.

On the day prior to the storm's arrival, on the morning of Monday, August 3, 2020 we held an internal planning meeting and initiated our Incident Command structure in accordance with our Emergency Response Plan. We issued a press release to alert our customers of the impending storm, and we provided safety precautions and advice to customers to instruct them on how to prepare for the storm and potential electric service interruptions and to stay informed of storm and restoration conditions. We also notified LSE (Life Support Equipment) customers, EBD (Elderly Blind Disabled) customers, all critical facility customers, and municipal official contacts to take the necessary preparations and precautions in the event of a storm that results in outages of extended duration. We contacted local elected officials to inform them of our preparations and concerns about system damage, and we contacted several of the County Emergency Operations Centers (EOCs) to offer to assign a dedicated Central Hudson employee inside each EOC. In Putnam and Orange Counties a Central Hudson employee was present while the EOC was operational. Due to COVID-19 related concerns Dutchess and Ulster Counties elected not to have a Central Hudson employee in-person and instead communications were managed virtually through a dedicated point person from Central Hudson. Following our storm check list of preparations, we also verified material, equipment, vehicle, and fuel supplies, as well as special Storm Box locations and inventories.

The Storm

Tropical Storm Isaias arrived early in the afternoon of Tuesday, August 4th, bringing sustained winds of 35 mph and gusts to 61 mph and it remained in our service territory for a few hours. Due to the storm, a total of 5 transmission lines were impacted and 22 distribution breakers locked out, resulting in peak outages of nearly 110,000 customers at 8:00 pm, and more than 1,100 predicted cases of repairs. Through our service territory, the storm moved swiftly with initial impact beginning at 2 pm, heavy rains ending by late afternoon, and winds

subsiding throughout the region by 10 pm. Several crews worked through the night responding to emergency conditions and restoring large cases of trouble. Tropical Storm Isaias disrupted electric service to customers in all the counties we serve, with Dutchess and Orange County townships incurring the most damage and customer outages. This storm brought high winds to Central Hudson's service territory and Southern and Eastern NY and beyond, interrupting service to more than 3.7 million customers across the Northeast and Mid-Atlantic region due to the storm.

Approximately 117,000 Central Hudson customers were impacted, with more than 2,500 wires down reported, more than 140 broken poles that required replacement, and miles of conductor that required repair making this storm the 4th most impactful in the Company's history.

Restoration

The official start of restoration commenced at 10:00 pm on Tuesday, August 4th, at which point we launched an intensive, all-hands-on-deck, multi-day restoration effort. In accordance with our Emergency Response Plan, operations were decentralized with each of our impacted district operating offices staffed for local dispatch and restoration and empowered with local operating authority for all aspects of the restoration. Additionally, wires down teams, which were comprised of employees from across the organization and supplemented with contracted personnel, were dispatched to assess and guard downed wires. Damage Assessment teams were organized and began assessing and reporting damage locations first thing Wednesday morning.

With such an impactful storm, we continually sought out additional mutual assistance crews following the storm Tuesday evening and throughout the day Wednesday, August 5th. Crews continued to arrive on site through Thursday, August 6th. As additional mutual assistance crews arrived, they were provided safety briefings and an overview of our operating practices and standards; these crews were provided access to the pre-made Storm Boxes in order to obtain supplies of commonly used restoration materials, including fuses, insulators, and various line hardware. These mutual aid crews were efficiently and effectively deployed to the field, often within 2 hours of their arrival, and they were paired up with knowledgeable Central Hudson employees, who led them to repair sites, provided crew supervision, restoration direction and assisted with the restoration.

For a storm of this magnitude we had the field crews we needed to efficiently and safely complete the restoration. At the height of the restoration, Central Hudson had deployed more than 350 additional line and line clearance personnel to supplement our own employee and contractor resources; in total more than 720 line and line clearance personnel. In all Central Hudson received support from National Grid, several NY municipal crews, and other private line contractor crews from as far away as Indiana, Illinois, and Georgia. We also received support from Fortis affiliate companies, including ITC and FortisOntario. During the multi-day restoration, the Central Hudson and mutual aid crews worked primarily from 6:00 am to 10:00 pm each day, with a complement of crews in each district working throughout the night to respond to emergencies. Central Hudson worked safely and efficiently during the restoration, restoring service to more than 50 percent of impacted customers by 6:00 pm on Wednesday, August 5th, to 75 percent by 5:00 pm on Thursday, August 6th, to 98 percent by 10:00 pm on Friday, August 7th. Service to the last customer impacted by the storm was restored on the evening of Saturday, August 8th.

Every Central Hudson employee, more than 1,000 in total, participated in the restoration effort, either directly or indirectly, with a unified mission and a singular purpose - to restore service as safely and as quickly as possible.

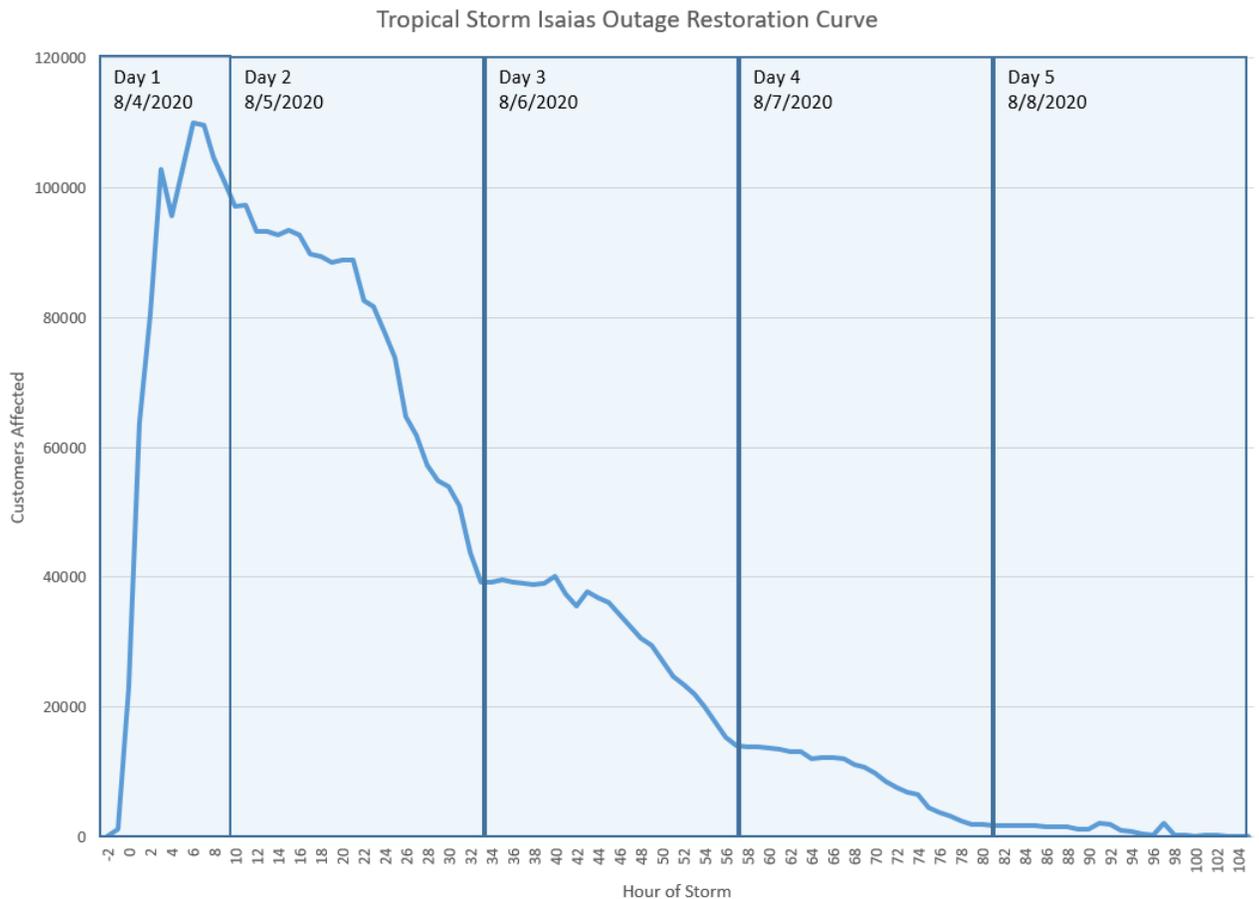
- As previously discussed, our planning team monitored the storm's path and began securing mutual aid crews in advance and it continued to secure additional aid during the restoration;
- Our logistics team worked to secure dry ice in the midst of a national shortage. They also helped keep restoration efforts going around the clock with meals, supplies and lodging for our mutual aid crews;
- The wires down team managed more than 2,500 cases and helped to keep the public safe;
- The public information team kept our customers, first responders and elected officials informed by making use of several communication channels;
- And, of course, our operations and safety teams restored service to our customers' homes and businesses without sacrificing the safety of the public or our workers.

As a part of this structure, Central Hudson employees who are not typically involved in restoration work are trained for and assigned to perform a specific role during a major

emergency. These assignments include support in the Storm Operations Center to assist with storm reporting, management of mutual aid crewing and logistics, including hotel rooms and similar needs. Employees are also assigned to supplement and assist Customer Service Representatives in the Contact Center to receive and address the elevated number of calls and call backs, to perform and coordinate damage assessment crews and wire down guards, to visit LSE customers if necessary, to lead and manage mutual aid and contract crews as ‘bird dogs’, and/or to distribute ice and bottled water at numerous locations, among a number of other temporary but critical storm assignments. Lastly, our “Meals-on-Wheels” program was initiated and operated each day to assemble and deliver over 2,800 meals to crews in the field to avoid de- and re-mobilization at outage locations; this increases the efficiency and productivity of the restoration.

The safe and timely restoration of service following weather events of this magnitude and geographic impact are extraordinarily challenging in terms of the operational response, logistics, and communications, both within Central Hudson and with all stakeholders, most importantly our customers. Our overarching goal in response to a major emergency brought about by any extreme weather event is to protect the public and restore service as safely and quickly as possible, while communicating our efforts and progress to our customers, local, State and Federal officials, and our regulator.

A line graph summarizing Central Hudson’s hourly restoration progress for this storm is provided below.



Storm Specific Challenges

As with all storms there were new challenges; two unique situations Central Hudson faced with Isaias was the shortage of dry ice as a result of the COVID-19 pandemic and a failure of our communications vendor’s fiber communication infrastructure.

Dry Ice Supply Shortage

During the morning of Monday, August 3rd, prior to the arrival of Isaias we began making requests for dry ice from our 13 vendors to secure supplies. We would normally secure 40,000 pounds (one truckload) to start, and if restoration is projected to last beyond 2-3 days we would purchase a second truckload. During this storm, we were only able to procure and distribute 2,325 pounds of dry ice due to lack of supply.

After being unable to locate dry ice on Monday, we made the decision in consultation with Department of Public Service (DPS) Staff in the afternoon of Tuesday, August 4th to rent three refrigerated trucks in order to distribute regular ice to our customers. Ice, bottled water, and the limited supply of dry ice that we were able to procure were distributed on a daily basis beginning Wednesday, August 5th, and continuing through Saturday, August 8th.

We are actively looking to expand our network of dry ice suppliers so we can better accommodate our customers if the need arises again.

Phone Communications

Telecommunications services, like electric, are essential to our everyday lives and to our restoration effort.

A number of years ago we transitioned from traditional copper trunk communication line services to Voice over Internet Protocol (VOIP). Verizon is the carrier that supplies Central Hudson with several T1 lines and 20mb ethernet links, procured through Windstream. This transition improved our capacity to handle inbound and outbound customer communications with multipath, multi-vendor solutions. We also have a 3rd party partner who takes our overflow collections and outage calls when all our internal Customer Service Representatives are assisting other customers. In addition, our IVR has automated outage reporting capabilities which worked seamlessly throughout the storm. The system also has auto-call back features for those customers who do not want to wait in queue for a live agent. During this storm there were no phone system outages that impacted our customers reaching us.

Internet Connectivity Interruption

At 2:59 PM on August 4th Crown Castle, our primary fiber communications carrier for Central Hudson Internet and Wide Area Network (WAN) connectivity experienced heavy damage to its infrastructure at a site in the City of Poughkeepsie. The damage was caused by multiple fallen trees bringing down power and communications wires. This outage severed our primary connection to the Internet and to the link to our district offices, most notably to our Newburgh office which houses our alternate standby Internet access link. As a result of the outage, our primary website, www.cenhud.com, became unavailable and we were not able to update the data on our outage website at stormcentral.cenhud.com. While this caused a level of customer frustration, especially for customers who prefer to communicate through texting and through our website, customers could continue to report their outage if they called, through our remote IVR service that has the capacity to handle 40,000 calls an hour. We also communicated with customers through our social media pages. This allowed us to maintain visibility to the number of customers impacted by the storm and share information with our customers.

When the fiber communication failure was discovered, we immediately developed plans to make an alternate website available for our customers to advise them why our webpage was

not accessible and how they could use alternative communications to speak with us. The alternative website became active at 7:06 pm on Tuesday evening. At the same time we were deploying the alternative site we also began working with Crown Castle on other solutions in parallel in order to get the primary Central Hudson website back online and stormcentral.cenhhud.com fully functional. By 10:28pm we created an alternate path that restored full functionality to the stormcentral.cenhhud.com site. This site provides updated storm and outage information. By 7:00 am on Wednesday morning, Crown Castle restored the damaged fiber and services to Central Hudson. All temporary changes were reversed and customer access to our primary website was restored. We are continuing to examine ways to improve our redundancy plans in regards to our connectivity and multi-channel solutions.

Due to measures taken to mitigate the spread of COVID-19 40% of our employees were working remotely utilizing VPN. The failure of our fiber communications provider's infrastructure required all of our employees working remotely to return to the office, especially our Customer Service Representatives who handle live customer calls. Employees returned to the office immediately and efficiently, and they continued to work from the office for the duration of the storm.

Storm Communication Efforts

Central Hudson communicated continuously with our customers concerning our restoration status and progress. In accordance with established state Estimated Time of Restoration (ETR) protocols and our Emergency Response Plan, on the late afternoon of Wednesday, August 5th, we provided a Global ETR of 11:30 pm on Friday, August 7th. County-level ETRs were issued the next day, followed by more granular municipality level ETRs, and where and when possible, case specific ETRs, which were provided during the morning of Friday August 7th. We communicated our restoration status and progress, as well as ETRs through a variety of means and channels including multiple press releases each day, updates to our phone voice message system and website, mobile app and text messages, daily emails to customers, updates to the Storm Central outage map, and through nearly real-time interaction on social media. Included in many of these channels are video messages and images which provide context and allow us to better communicate and share information with our customers. We also provided emergency outage status reports 4 times each day to the DPS, and we participated in morning and evening status conference calls with DPS Staff, PSC

Chair Rhodes, and various state officials.

Additionally, we held a municipal call in advance of the storm and each day during the restoration to report on our status and crew locations, and, when invited, we participated in County-led conference calls to inform them of our progress and provide updated crew location and restoration information. Our District Directors were in contact with local municipal officials, highway departments, telecommunications companies, and impacted critical facility customers, while our government relations personnel contacted State and Federal elected officials and County Executive offices in Dutchess, Greene, Orange, Putnam, and Ulster.

Launch of the Municipal Portal

Central Hudson utilized our recently launched municipal portal. The portal is an example of an enhancement we have made based on the feedback and lessons learned from previous restoration efforts. The portal provides important information to each municipality and allows for interactive, two-way reporting between municipalities and counties and Central Hudson. This portal allows for easy reporting and customized alerts when addressing major storm events and other emergencies. The Municipal Portal features an exclusive electric outage map specific to each jurisdiction that offers outage and restoration information for critical facilities, such as hospitals, water treatment plants, nursing homes, etc., and the status and cause of emergencies, such as downed wires, trees and road closures. The portal will also display locations of ice and bottled water distribution sites. Usage of this portal throughout the storm made our daily municipal briefings with local officials much more productive.

Performance Assessment

The damage caused by the heavy rains and wind brought by Tropical Storm Isaias was wide-spread throughout Central Hudson's service area. Despite the historic nature of the storm, our crews were able to restore power to our customers safely, and more swiftly than we ever have with a weather event of this magnitude. We believe our efficient restoration times can be attributed in some part to the following unique Central Hudson initiatives:

- Providing Storm Boxes that contain all of the supplies and equipment our mutual aid crews need. This, coupled with an efficient on-boarding process, allows these workers to begin restoration efforts immediately, generally within two hours of arriving.

- Decentralization of operations and a teams-based approach allows for local decision making in the field that accommodates specific restoration needs while maintaining communication with local storm coordinators.
- Our Meals-on-Wheels program allows us to deliver food to crews while they are in the field. This avoids time lost by breaking down during meal times and maintains productivity.

Assessing our restoration performance also includes examining ways Central Hudson can reduce future service interruptions and minimize restoration times when outages do occur. These types of programs and initiatives could include:

- Expanding tree trimming efforts with enhanced line clearance to address the tallest trees, and including placing a greater emphasis on danger tree removal efforts from outside rights of way;
- Developing greater system redundancy through the use of our distribution management system through a combination of device sensing and communication and remote device operation;
- Selective undergrounding of electric distribution lines for resiliency;
- Pursuing natural gas powered micro grids in vulnerable and urban areas as initially envisioned under NY Prize;
- Expanding our training capability to develop a larger Central Hudson line workforce with broader skills in a shorter period of time than currently forecasted;
- Incorporating strategic shelter, phone charging stations and food services in conjunction with water and dry ice distribution centers; and
- Pursuing the use of drones to speed up damage assessment efforts.

Conclusion

Comparison between storms, and for that matter, restoration performance between utilities, is difficult and imprecise, because no two storms are the same in terms of weather precipitation and wind, intensity, geography, or impact to the electric system. And, there are also differences between utilities systems, operating practices, emergency planning and operating procedures, and mutual aid crew availability and resources. As a result, it is difficult to develop a 'one size fits all' solution for storm preparation and

restoration. Restoration efforts following storms similar to Isaias are truly a team effort. Utilities across the region provide assistance to one another. Just as National Grid provided assistance to Central Hudson and others when it was clear that their service territory was not impacted, Central Hudson sent crews to assist with the downstate restoration at the completion of our own work.

Tropical Storm Isaias brought severe winds and heavy rains to the region, bringing trees and limbs down onto power lines with the heaviest damage within Central Hudson's service area in southern Dutchess County and Orange County. We understand the impacts that the loss of electric service has on residents, businesses and the community, particularly during the COVID-19 pandemic, and we worked around the clock to restore power.

This storm posed difficult and dangerous conditions through which Central Hudson and its mutual aid personnel sought to restore electric service in as quick, efficient and safe manner as possible. I am extraordinarily proud of Central Hudson's restoration performance and the dedication and commitment demonstrated by each and every employee. That said, Central Hudson strives to continuously improve its storm planning, operational response, and communications.

Thank you, and I would be happy to answer any questions you may have.