

**Testimony of Mike Innocenzo, Senior Vice President and Chief Operating Officer
PECO
Pennsylvania House of Representatives
Consumer Affairs Committee
March 27, 2014**

Thank you, Chairman Godshall, Chairman Daley, and members of the committee, for the opportunity to testify regarding PECO's response to the ice storm that struck our region on February 5, 2014. I am Mike Innocenzo, Sr. Vice President and Chief Operating Officer for PECO, southeastern Pennsylvania's electric and gas utility.

PECO provides electric service in the Philadelphia, Bucks, Chester, Delaware, Montgomery and a portion of York counties, and natural gas service in Bucks, Chester, Delaware and Montgomery counties.

Today, I will describe our response to the destructive February ice storm – it was comprehensive, it was aggressive, and it was successful, with all customers restored in two days less time than Hurricane Sandy.

At the same time, we also will talk about what we learned and how we are working to do even better moving forward. Continuous improvement is what PECO is all about, and what our customers have a right to expect.

The things we learned during Hurricane Irene helped us improve our response to Hurricane Sandy. What we learned in Sandy enabled us to reply more effectively to the February ice storm.

And, the Lessons Learned from this storm will drive us to better performance the next time that Mother Nature puts us to the test.

In these times, our job is to be prepared, respond effectively, and keep our crews and our customers safe.

Continuous Preparations:

The first part of preparing for any emergency event is what we do every day to keep our systems in good order, the investments we make to improve service and reliability, and the focus we place on training our people.

We have made enormous investment in the robustness and reliability of our system during the last 5 years.

We invested \$1.8 billion dollars in improvements in our transmission and distribution system since 2009: improving substations, installing state-of-the-art system control and

GIS mapping systems, adding reclosers, upgrading circuit breakers, transformers, switchgear, control houses, distribution line feeders and bus and tie breakers.

As a result of these investments, 2013 marked our best year of service reliability in company history. Specifically the amount of outages, – SAIFI – was 0.68, exceeding the 2012 best-in-class benchmark, and the length of outages that did occur – CAIDI – was about 94 minutes, top quartile for the industry.

SAIFI measures how often the average customer experiences a service interruption of 5 minutes or greater on an annual basis. CAIDI refers to the average duration in minutes of outages on the system in a given year. These are the standard measures of electric reliability performance.

A primary focus of our efforts is vegetation management – because we know that 1/3 of all outages are caused by interference with trees and other vegetation.

PECO has consistently invested approximately \$35M a year on its vegetation management program. Our integrated vegetation management program includes tree trimming, tree removals, and herbicides to control fast-growing or invasive tree species. The tree trimming is performed in alignment with American National Standard A300 (ANSI A300).

PECO maintains the vegetation around all of its aerial primary wires on a 5-year maintenance cycle. This cycle has been consistently performed since 1998, and is now in the second year of its fourth cycle. An independent quality assurance inspection is performed on 100% of the work to ensure it is performed in accordance with PECO guidelines.

In addition to the 5-year cycle, PECO also performs a mid-cycle program, reliability data driven tree work, and responds to customer requests. This work is targeted into the spots where vegetation reliability concerns are reported within the 5-year cycle.

While reliability is our primary concern, we also work with our local municipalities and customers to perform this work in a manner that is respectful of our communities and our customers' property. We are constantly working to develop an appropriate balance of these responsibilities.

In addition to driving continuous improvement on the overall system, we monitor reliability performance in each of our individual municipalities and identify where targeted investments are needed. We are keenly aware that all reliability is local and some of our individual customers may be having an experience that differs from what is happening across the entire system. We are constantly monitoring our performance in every area that we serve.

We're proud of our overall performance, but we know that when a storm of this scale hits, our customers will measure us on how we respond. And, we know that all of this work and all of these investments will not eliminate the impact of severe weather on our system.

Summary of Event:

Winter Storm Nika knocked out power to 1 million customers nationally. With this type of storm, the most severe impacts will always be concentrated where weather conditions allow the greatest amount of ice to develop. Unfortunately for all of us, Nika delivered a direct hit on our area.

By storm's end, more than a half inch of ice covered much of our region, adding 500 pounds to lines and equipment and creating 6,000 areas of individual damage.

715,000 PECO customers --- more than forty percent of our customers -- were left without power. If you exclude the City of Philadelphia where only about 40,000 out of 700,000 customers lost service, you get an even clearer picture of how devastating the storm was in the suburban counties -- almost seventy percent of customers in those areas were without power at some point.

Nika was the second most damaging storm in PECO's history, and in some ways, it was more impactful to our customers than Hurricane Sandy.

Many customers had to manage multiple days in frigid temperatures. We were keenly aware of this situation, and it drove our efforts every day. In fact, many of our employees worked through the storm restoration effort while they and their families were also without power.

PECO's emergency response organization, already active in response to the snow storm earlier that week, was elevated to its highest level -- OpCon Level 5.

Every PECO employee was focused on storm preparation and response -- from securing off-system crews to manning our customer care centers.

Our goal was simple -- get our customers back on-line as soon as possible without losing focus on safety.

In reviewing PECO's performance, I'd like to first focus on 3 key areas -- Customer and Community Safety, Operational Readiness and Performance, and Caring and Informing our Customers.

After that, I will summarize our post-event Situational Analysis and be pleased to take your questions.

Customer and Community Safety

At PECO, safety is paramount – keeping our customers and employees safe -- each and every day and in every situation. A moment's lapse in safety can be a matter of life and death.

The ice storm was a test of the strength of our safety culture under the most adverse circumstances – long hours, freezing temperatures, short daylight windows and, on top of everything else, snow. And I am proud to say that we managed the event with no serious safety incidents. We are extremely grateful that although there were four minor injuries to our visiting contractors, we were able to safely restore service in these difficult conditions without a single serious injury or fatality.

In terms of public safety, almost half of our critical customers lost power during the ice storm. Our first focus was on restoring service to these public safety facilities such as hospitals, 911 Centers, water treatment plants, prisons, and regional government, transportation and communications hubs.

It is important to note, however, that restoration of any outage, even that of a critical customer, is subject to the severity of the event. Critical customers should make prudent arrangements for back-up power and have contingency plans in place.

We also responded to more than 3,885 police, fire and wire down jobs.

Every media interview or outreach stressed to our customers the need to stay safe and stay away from downed lines and damaged electrical equipment.

Operational Readiness and Performance

Preparations for the Ice Storm began February 3 with our Emergency Response Organization elevated to OpCon Level 5 – “All Hands on Deck.”

We executed the readiness procedures that had been proven effective in Hurricanes Irene and Sandy.

We developed a pre-event strategy based on weather forecast and estimated damage.

We finalized employee staffing plans.

Contractors and assistance from other utilities was secured, including our sister utilities BGE and ComEd.

Our staffing levels grew from 2,700 on February 5th to 6,800 by Sunday, February 9th. Basically we successfully and safely added 4,000 additional individuals in 4 days – more than 2,000 alone in the first 24 hours. All available resources were secured and

the company amassed its largest field effort ever— about 1/3 larger than during Hurricane Sandy.

By the end of the event, crews from Illinois, Ohio, New York, New Jersey, Connecticut, Massachusetts, Maine, Alabama, Arkansas, and as far away as Canada assisted us.

Again, words can only begin to express our gratitude to these men and women.

Twenty Operations sub-centers were established throughout the service territory to host field crews and facilitate rapid response.

After responding to public safety incidents and restoring service to substations and critical customers, we prioritized our work to restore service to the greatest number of customers as fast as possible:

44% of customers had their service restored in 24 hours.

62% were back on in two days.

91% of our customers had their service restored by Saturday at midnight – approximately three days after the storm hit.

98.9% of customers were restored by Monday, and service was restored to all customers by 2:30 p.m. on Wednesday, February 12.

Hundreds of schools also were impacted, and we worked to restore service to all schools in time for class on Monday, February 10th.

Throughout all of this, Local Emergency Operations Centers were staffed until no longer needed – through February 13 in some areas, and daily briefings were conducted with state and local officials and regulators.

Caring and Informing our Customers

Our Customer Care associates managed a massive volume of more than 1.1 million customer calls – answering each within an average of 12.1 seconds.

More than 500 media interviews were conducted throughout the storm to keep our customers informed through traditional media outlets.

Our online Storm Center was activated on February 4 and updated throughout the storm, providing information about safety and the company's efforts to restore service.

More than 4.6 million web page views occurred during the event.

PECO's social media channels (Facebook and Twitter) were used in advance of and throughout the storm to keep our customers informed and to respond to our customers' needs.

This marked our first use of these channels in response to a large-scale emergency.

Proactive calls were made to customers who experienced the most extensive damage and critical customers were continually informed of progress to restore their service.

More than 100 employees worked a combined 2,500 plus hours, operating six neighborhood customer care centers and speaking with more than 1,500 affected customers.

Incorporating Lessons Learned from Hurricane Sandy

During this ice storm, we incorporated many improvements that were identified following Hurricane Sandy, specifically working through a PUC led effort to share utility lessons learned and best practices across the state. We look forward to working with PEMA to do the same with this storm.

Some of the improvements that came from our Sandy discussions included:

- Use of social media
- Suspension of Estimated Times of Restoration (ETRs) during storm events
- Expansion of the outage map on our Website and mobile site to include municipal and township level information
- Regularly scheduled calls to provide real-time information and updates to townships and municipalities
- A new process for addressing road closures, developed jointly with the county emergency response organizations
- Neighborhood customer care centers to help affected customers

Post-Event Situational Analysis

First and Foremost – Safety

Like many others, many of our employees and contractors went home at night to homes that did not have electric service restored yet. But when they went home to their families, they went safely, as did the crews who came to help us.

Staffing and Mutual Assistance

Through our advance planning and mutual assistance resources, we successfully and safely on-boarded more than 4,000 individuals in about 4 days. These workers – side

by side with our employees – were able to get the lights on faster, outpacing our restoration efforts following Hurricane Sandy.

Customer Education

Social media provided a valuable tool to communicate directly and in a detailed manner with our customers in real-time.

Neighborhood customer care centers were vital to our effort to help those most impacted.

Estimated Time of Restoration (ETR)

Predicting the time that each customer's service will be restored, especially before crews have even arrived on the job site, can be challenging. But, we know our customers depend on this information and need it to be as accurate as possible.

One of the Best Practices identified through the PUC's Post-Hurricane Sandy industry collaborative was to stop providing estimated restoration times while severe storms are continuing and damage is still occurring.

With the storm cleared, we began providing ETRs at 5 a.m. on Thursday, February 6th. By following this practice, we provided our customers with more accurate ETRs than we were able to offer during Hurricane Sandy.

This is an area where we are continually working to improve. It is a challenge that is directly linked to managing embedded outages.

Embedded Outages

Embedded outages are the result of additional areas of damage on secondary lines. These outages are often not known to us until we complete repairs on primary lines and verify where service has and has not been restored.

These events continue to be a challenge for utilities. This was even more critical during the ice storm as customers were depending on estimated restoration times to make important decisions about overnight accommodations.

We are continuing to look at this issue closely to identify ways to provide timely and accurate information to even more customers during significant events, including fact finding efforts already underway with other major utilities to identify industry best practices.

Emergency Operations Center Communications

The speed of communication between the company and our local emergency operations centers is vitally important. Although we have made great progress in this area, we still need to share information more efficiently.

We are investigating a number of improvements in this area, including providing additional PECO personnel with a direct link to our operations center at each site.

Road Closures

Following Hurricane Sandy a cross-functional team worked with each of our county emergency operations departments to establish a comprehensive process to respond to road closures, including having each county provide us with priority response lists.

This system helped us safely manage nearly 900 events and complete more than 89 percent of Priority 1 jobs within one working day.

I'd like to thank our county Emergency Response Directors and PennDOT for their cooperation and assistance in this regard.

Several process improvements were made in real time, including sorting P1 closures immediately, so that we can enter them into our system first for quicker attention. We also are further exploring the process of connecting county emergency management systems directly with PECO for seamless, real-time sharing of information.

Conclusion

The February Ice Storm had a devastating impact on our region.

By applying Lessons Learned from Hurricane Sandy, PECO was able to complete power restorations in two days less than Sandy under far more challenging conditions.

We understand that customers in some of our most hard-hit areas want to have the opportunity to speak with us and discuss their experiences during the storm. And we want to hear from them. We've scheduled community open houses and will participate in PUC Input hearings throughout the region to hear from them.

After any event of this size there will be things that went exceptionally well and opportunities to improve. That is our goal, to do even better next time. And, although we would hope we don't experience another storm of this magnitude in the future, we will continue to prepare and stand ready to respond because that is our job. Thank you again for the opportunity to speak today, and I will be pleased to answer any questions.