

**Pennsylvania Public Utility Commission  
Special Electric Reliability Forum**

**Hurricane Irene  
Response Before, During and After the Storm**

---

**John D. Rea**

Director of Operations Support, Penelec

October 12, 2011



## Implemented by Penelec

# FirstEnergy Service Restoration Process

## Planning and Preparation in Advance of Storm

- **Preparations begin several days before a storm strikes**
  - Instrumental to restoring service quickly and safely
- **Company meteorologists monitor storm movement**
  - Assess potential impact on electric infrastructure
- **Conference calls held with company leadership, operations personnel and others to plan service restoration efforts**



# FirstEnergy Service Restoration Process

## Planning and Preparation in Advance of Storm (Continued)

- Evaluate need for internal and external mutual assistance crews
- Prepare staging areas needed for crews, equipment and supplies
- Communicate with emergency management agencies, government officials and regulators
- Implement proactive, comprehensive communications strategy for reaching customers and media outlets



# FirstEnergy Service Restoration Process

## Damage Assessment During and After Storm

- **Damage assessors respond to reports of damage to electric infrastructure; if hazard is found, they stand by to secure area**
- **Operating company leadership determines requirements for crews, equipment and supplies**

## Service Restoration Priorities

- **Emergency restoration efforts performed in staged process**
- **High priority to emergency response facilities such as hospitals, police and fire departments as well as 911 facilities**
- **Next, repairs made to high-voltage transmission equipment, lines and substations that restore service to greatest number of customers**

# FirstEnergy Service Restoration Process

## Safety is Our Top Priority

- **Safety representatives work alongside crews to reinforce safety procedures and practices**
- **Hazard assessors identify electrical hazards – downed and potentially energized wires and other equipment – and make them safe**
- **Train employees to fill roles of hazard-service dispatchers and responders, storm analysts, public safety protectors and service installers**
  - Ongoing training enables full use of our resources during service restoration efforts



# FirstEnergy Service Restoration Process

## Safety is Our Top Priority

(Continued)

- **Forestry crews clear fallen trees, branches and other debris so line workers can safely repair and re-energize lines**
- **Safety messages communicated to customers through news releases, paid media and FirstEnergy website**



# FirstEnergy Service Restoration Process

## Communications Outreach

- **Communicate with local emergency management agencies and 911 coordinators**
- **FirstEnergy Contact Center**
  - Call center staffing increased to manage potentially large customer call volume
  - Provide information through interactive voice response (IVR), outage website and customer service representatives
- **External Affairs managers respond to emergency management agencies and local officials**



# **Penelec** Planning and Preparations in Advance of Hurricane Irene

<b>Aug. 25</b>	<b>Storm preparations initiated; pre-planned requirements for dispatch, line, hazard and forestry crews</b>
<b>Aug. 26</b>	<b>Planned for pre-staging of crews</b>
<b>Aug. 27 at 8:00 p.m.</b>	<b>All pre-staged crews in locations</b>
<b>Aug. 28 at 6:00 a.m.</b>	<b>All storm support crews prepared to start work</b>

## **Mutual Assistance**

<b>Aug. 28</b>	<b>Six internal mutual assistance crews sent from The Illuminating Company and four from Monongahela Power</b> <ul style="list-style-type: none"><li>■ <b>Penelec crews from non-affected areas assist in restoration efforts</b></li></ul>
<b>Aug. 29</b>	<b>Helicopter supplied by Haverfield Aviation inspects transmission and distribution lines</b>

# Hurricane Irene ... By the Numbers

- **Storm reached parts of Penelec service area early morning on Sunday, August 28**
  - High winds and heavy rainfall caused numerous momentary and sustained service interruptions
- **Storm disrupted service to 60,737 customers, or 10% of customer base**
- **For the duration of the storm event, power restored to 45,581 customers within 12 hours**
- **701 outage orders**
- **1,483 trouble locations**



# Hurricane Irene ... By the Numbers (Continued)

- **Damage to Penelec system required the replacement of:**

- **3** miles of wire (in addition to the miles of fallen wire that was reattached to poles)
- **30** poles
- **132** cross arms
- **10** transformers



- **And, mobilization of 540 utility workers:**

- Penelec and other FirstEnergy operating companies **489**
- Line and forestry contractors **51**



# Outreach to External Mutual Assistance Crews

- **Assistance from other FirstEnergy companies was sufficient**
  - Penelec did not request mutual assistance from other non-FirstEnergy utilities
- **Assistance provided by one line contractor, Haverfield Aviation, and 50 external forestry contractors**



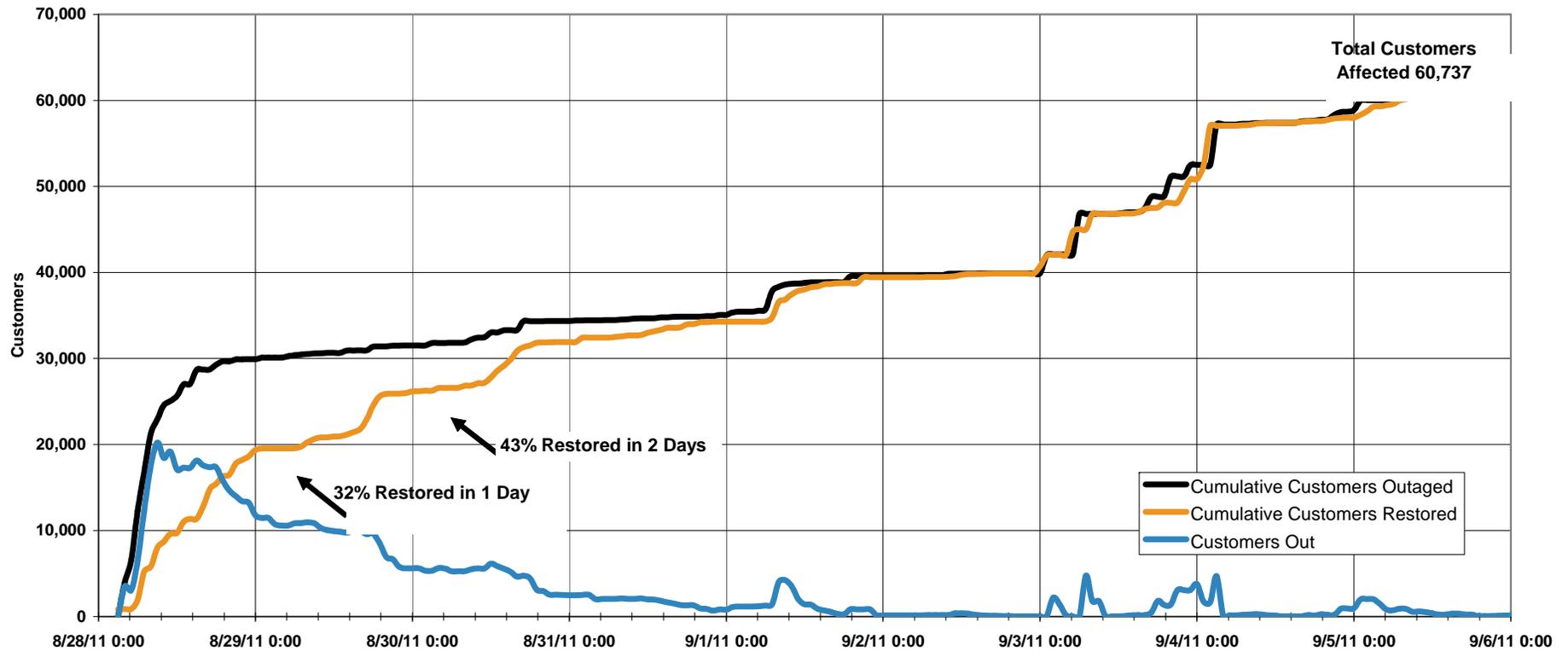
# Impediments to Service Restoration Efforts

- **Workers contended with downed trees, considerable debris, flooding and road closures**
  - Crews unfamiliar with area had difficulty routing around flooded areas
- **Difficult terrain and off-road damage also hampered service restoration efforts**
- **Intermittent telecommunications service and radio coverage in some areas presented challenges**
- **Shortage of local hotel accommodations increased crew travel times**



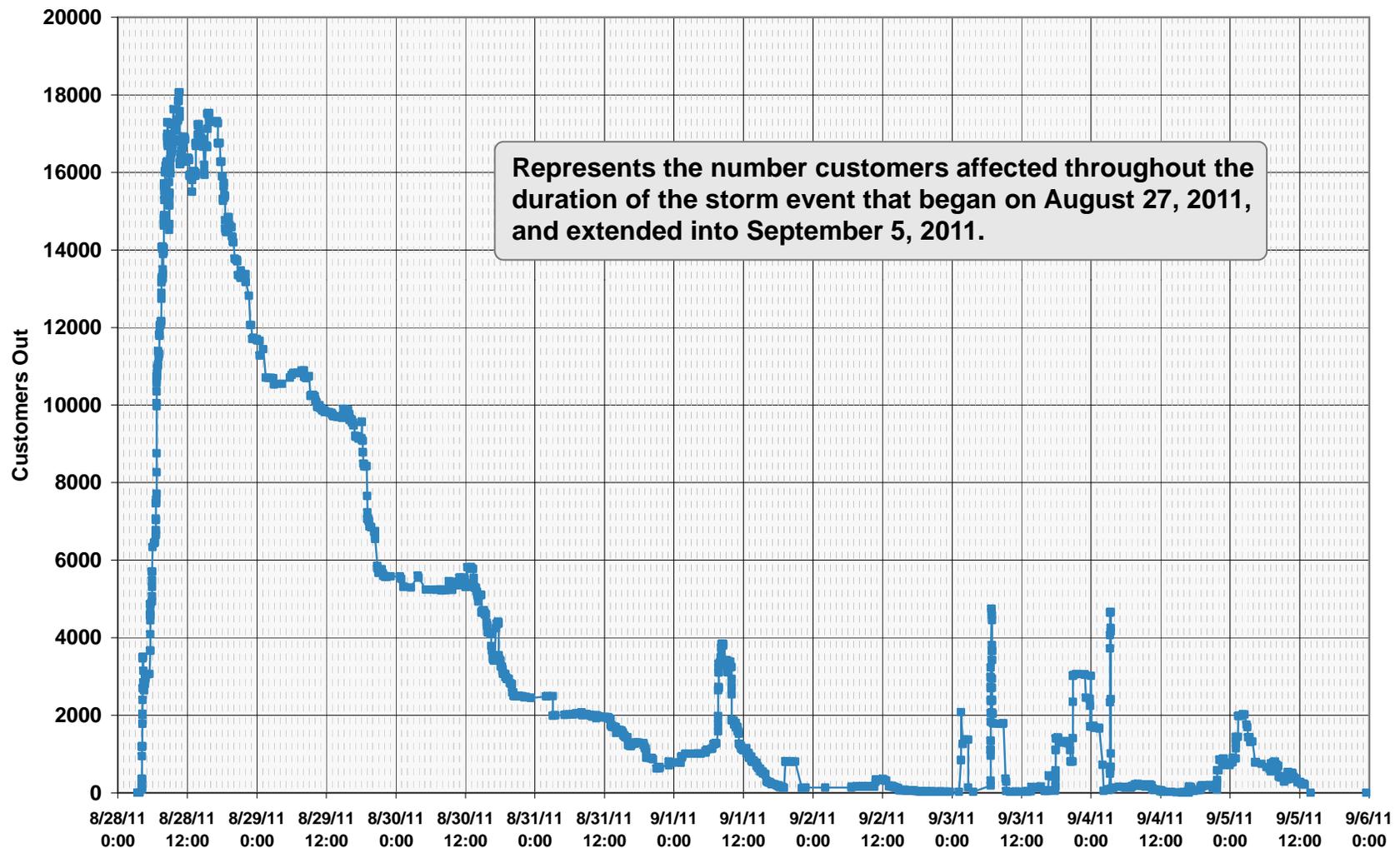
# Customer Service Restoration Times

## Penelec: August 28–September 5, 2011



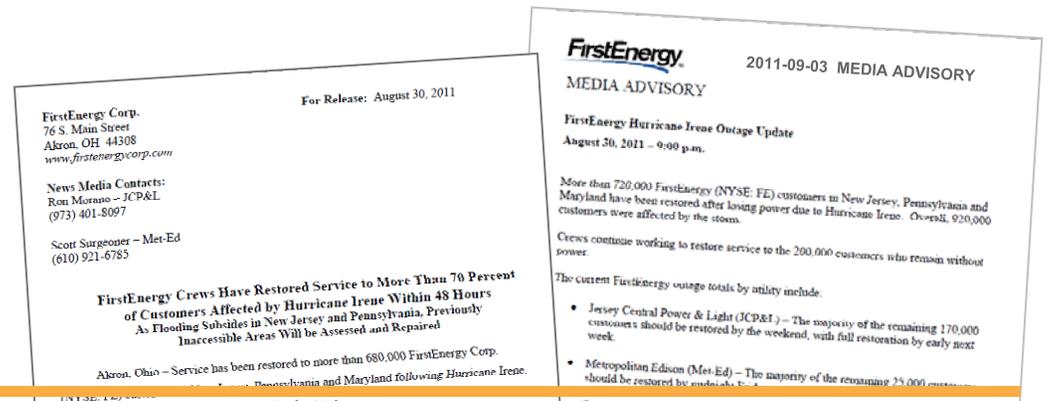
# Customer Service Restoration Times

## Penelec: August 28–September 5, 2011



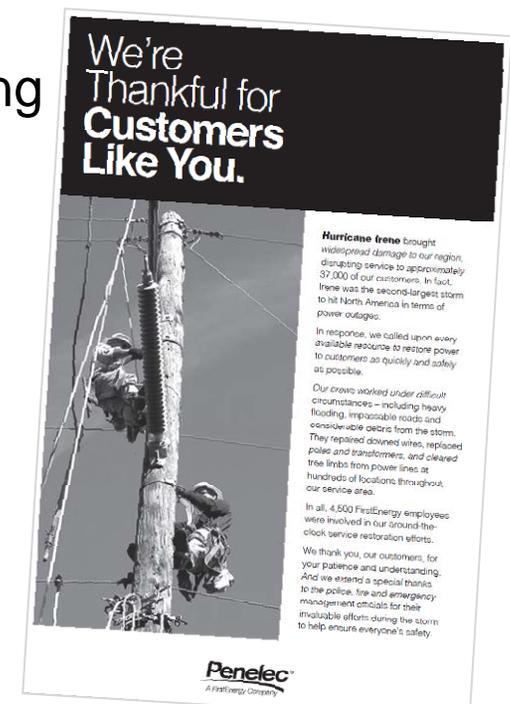
# Communications Outreach

- **Implemented proactive, comprehensive communications strategy**
  - Emphasized ability to quickly and safely mobilize crews, supplies and equipment into affected areas
  - Provided customer safety tips
  - Across FirstEnergy, we responded to more than 500 media calls, participated in live interviews, provided information to media on service restoration efforts
- **Across FirstEnergy, produced 14 news releases and 10 media advisories**
  - Distributed to some 2,600 media outlets



# Communications Outreach (Continued)

- **On FirstEnergy website, created Hurricane Irene site**
  - Updated daily with news releases, media advisories, outage maps, safety tips and photos as well as water and ice availability
- **Advertising outreach aligned with service restoration efforts**
  - Newspaper (print and online) and radio advertising
    - Reinforced importance of public safety, provided service restoration updates
- **Campaign concluded with customer “thank you” ads in major papers and on our website**



# Contact Center Calls

## Customer calls to FirstEnergy Pennsylvania contact centers

<b>Total PA calls handled from Aug. 27 to Sept. 5</b>	<b>171,526</b>
<b>Outage calls</b>	<b>168,634</b>
<b>Hazard calls (911)</b>	<b>2,892</b>



# What went well ...

- **Very good safety results under difficult conditions**
  - Tribute to the skill, focus and dedication of our workforce
- **Successful implementation of service restoration process**
  - “Isolate and make safe” process increased effectiveness of hazard and assessment crews
- **Provided updates to PUC staff working in the State EOC**
  - Outages by city/county, responded to inquiries regarding 911 centers/EMAs that were running on generators and provided ETR information when available
- **Helicopter inspection of lines accelerated damage assessment and subsequent repair work**
- **Partnered with the Susquehanna County EMA/American Red Cross and local fire departments to make ice available free of charge to customers**



## ... and lessons learned

- **Continue working to ensure more consistent and accurate communications with community leaders, especially regarding amount of damage and estimated restoration times**
  - Consider adding area managers from other FirstEnergy companies, if needed
- **Consider social media presence**
- **Create a more user-friendly, mobile version of our website for outage information**
- **Consider alternative lodging arrangements due to lack of available rooms in certain areas**

