

# HURRICANE SANDY

## Historic Storm ... Unprecedented Response



Special Electric Reliability Forum on  
Hurricane Sandy

Pennsylvania Public Utility Commission  
January 10, 2013

# Overview

- Preparations and Lessons Learned from 2011
- Storm Impact
- Restoration efforts
- Communications & Social Media
- Our Commitment

# Preparations For a Super Storm

- Expect & prepare for the worst storm in company history
- Mobilized employees, contractors in advance of storm
  - Expanded 24/7 staffing for all areas
  - Cancelled vacations & informed employees to pack for a week
  - Support from 56 companies from 16 states
  - Arranged for staging areas, housing, feeding & supplies
- Activated/staffed ECC 4 days prior to storm
- Public advisories
  - News release, media outreach
  - Automated phone call to 1M+ customers
  - Blast e-mail to customers, public officials
  - Social media

# Lessons Learned From 2011

## What We Did Differently

- **Improved Customer Service performance**
  - More CSRs
  - Increased phone lines into Customer Contact Center
  - Improved technology to handle exceptionally high call volume
  - Enhanced Outage Center on web with mobile reporting capability
  - Expanded use of social media
  - Visited QVC, Vanguard



# Lessons Learned From 2011

## What We Did Differently

- Upgraded Outage Management System
- Increased emphasis on damage assessment
- Increased storm response support
- Improved coordination with county EMAs
- Best Practices research
  - FPL, Entergy, PEPCO, Detroit Edison



# Storm Impact

- 2-5" of soaking rains
- Wind gusts up to 70-81 mph measured in Lehigh Valley
- Devastating tree and line damage
- Both transmission and distribution facilities affected



# More damage than any other storm

Lehigh County:  
75% of all customers

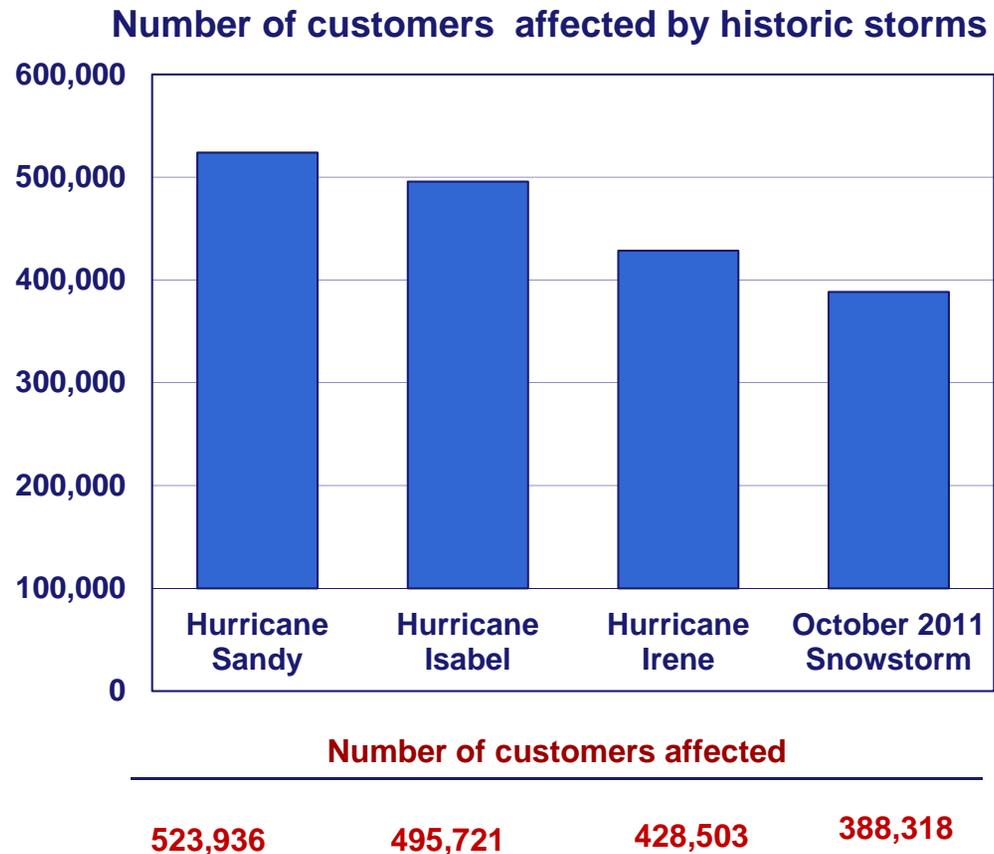
Northampton County:  
89%

Bucks County:  
84%

Monroe County:  
72%

Pike & Wayne counties:  
77%

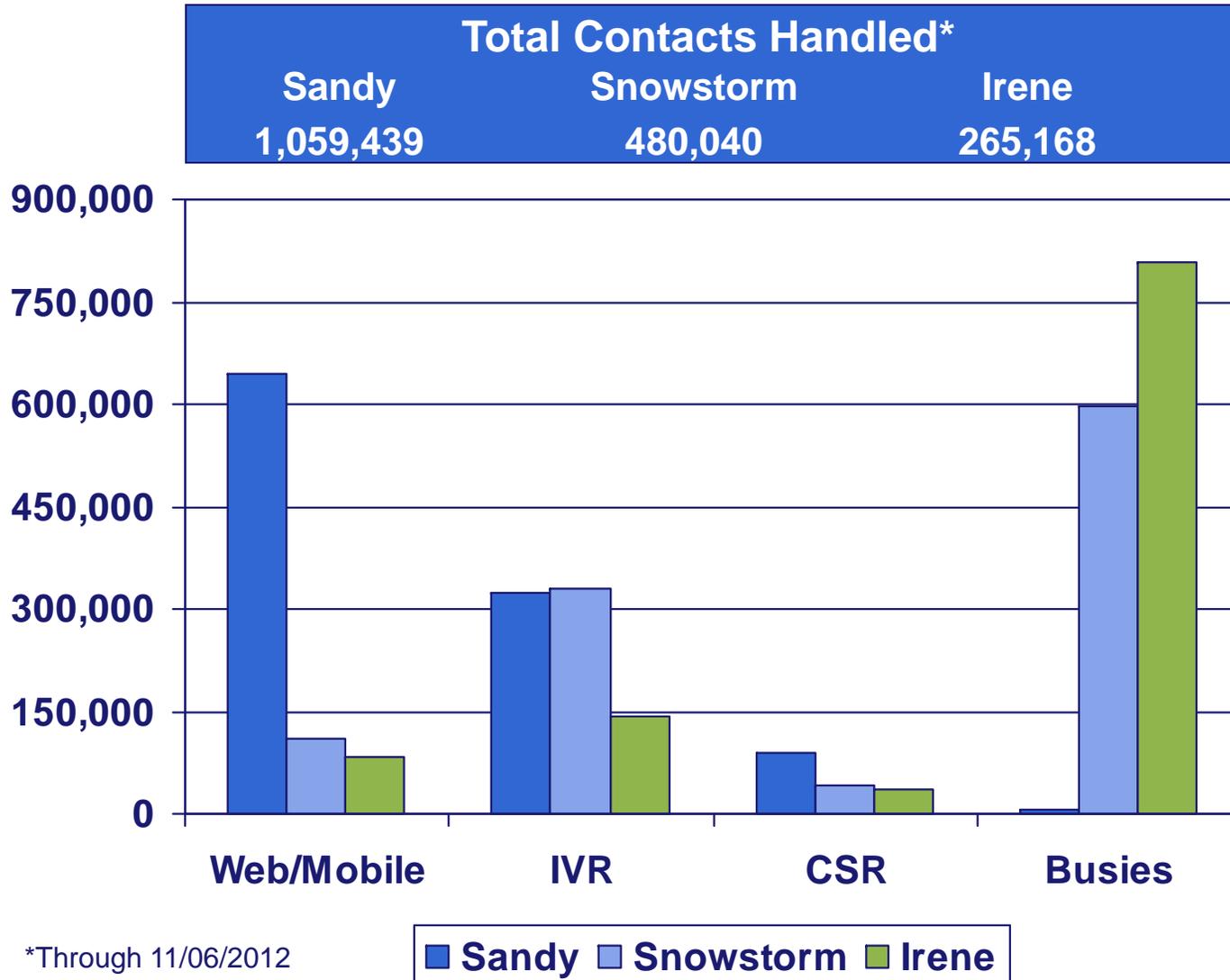
Dauphin, Lancaster &  
Schuylkill counties:  
1/3 of all customers



# The Restoration Effort

- 5,000+ employees and contractors working 24/7 to restore:
  - Nearly 100 miles of wire
  - 619 poles
  - Nearly 1,500 cross arms
  - 601 transformers
- Steady Progress
  - 50% of customers restored within 24 hours
  - 85% of customers restored within 4 days
  - 99% of customers restored by Sun, Nov. 4
- Free ice and water at 180+ retail vendors
  - Coffee and hot chocolate giveaways
- No outages on the bulk electric system (230 & 500 kV)

# Customer Contacts



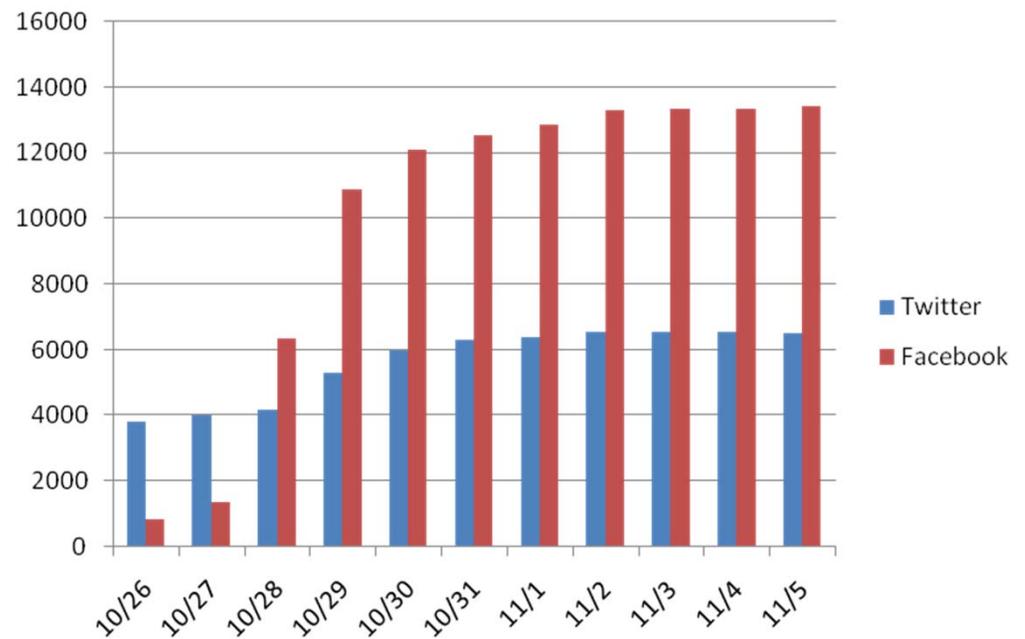
# Customer Communications

- E-mail blasts
- Automated telephone calls
- Alerts via text message and mobile phones
- [www.pplelectric.com](http://www.pplelectric.com)
- Daily news releases and frequent media updates
- Social media dialogue
- Daily conference calls with public officials
- Newspaper and radio advertisements

The screenshot shows a website page with a background image of a utility worker wearing a hard hat and safety glasses. The main heading is "A Historic Effort" with a sub-heading "One of the worst storms in PPL Electric Utilities history." Below this, there are several paragraphs of text detailing the effort: "Largest storm workforce with more than 5,000 people. The line crews received help from 56 different companies from 16 states." "Field personnel replaced 717,746 pieces of equipment including: \*More than 100 miles of cable, guy wire and fiber optic lines \*More than 460 poles, 1,800 crossarms, 16,850 insulators, 600 transformers, and 33,000 fuses/fuse links" "Customer Service handled more than 1,000,000 customer contacts – more than twice the number during the October snowstorm and nearly four times the contacts handled during Hurricane Irene." Below the text is a section titled "Hurricane Sandy 2012 One for the Record Books" with a sub-heading "A look back at history" and a button "CLICK HERE FOR STORM STATS". At the bottom, there is a section titled "Report your outage and receive regular status updates" with a sub-heading "As winter storm season approaches, visit the Outage Center for safety tips, preparation information and outage details".

# Social Media Outreach

- While online chatter surfaced many issues, overall public sentiment was positive – by > 3:1
- Our posts were shared 66,000+ times
- Twitter
  - Followers increased by 87%
  - Total Impressions: 531,095
- Facebook
  - Community grew by 13,000+ or 4,200%
  - Daily Impressions peaked at 83,141



# Our Commitment

- Self Critique
- Maintain coordination with utility industry
  - Mutual assistance vital during major storms
  - Common challenges: ERTs
- Foster ongoing coordination with PUC/PEMA, state and local agencies
- Municipal roundtables
- Customer Survey
- Investing in our Infrastructure

