



HOUSTON / GALVESTON NATIONAL WEATHER SERVICE

2009
Remembering IKE
HURRICANE WORKSHOP

Turning on the Lights

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Division Senior Vice President, Electric Operations

**Do you know how to prepare
your utilities for an approaching
hurricane?**

About CenterPoint Energy



- 5,000 square-mile electric service territory
- Serve 2+ million electric customers
- Own and maintain electric delivery system – poles and wires
- Serve 1+ million natural gas customers

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2008
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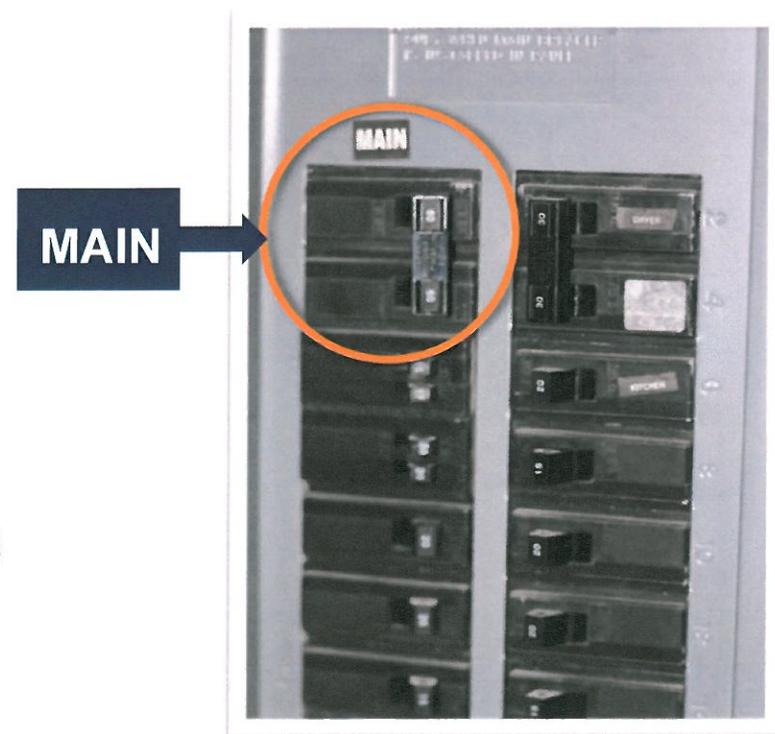
Turning on the lights

- CenterPoint Energy keeps the lights on no matter from which company you buy your electricity
- We're the only company that can restore your service during power outages; our trained crews will work day and night to get you up and running after a storm
- We prepare for outages before they happen by investing in technology to quickly and accurately pinpoint problems

However, there are a few things you can do before and after a hurricane for utility services to your home.

Pre-storm: Electric service tips

- If someone in your home depends on electricity for life-sustaining equipment, you need to make alternative arrangements for them in advance.
- Unplug sensitive electrical appliances, such as computers and TVs.
- If you expect flooding, turn off electricity at the circuit breaker.



Pre-storm: Natural gas service tips

- Natural gas lines are buried underground and not usually affected by severe weather.
- Do NOT turn off your natural gas at the meter. Proper pressure in home/business gas piping must be maintained to prevent water from entering the lines if flooding occurs.
- If you choose to discontinue your gas service - turn off gas at each appliance.



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**How long should you expect to
be without power after a
hurricane?**

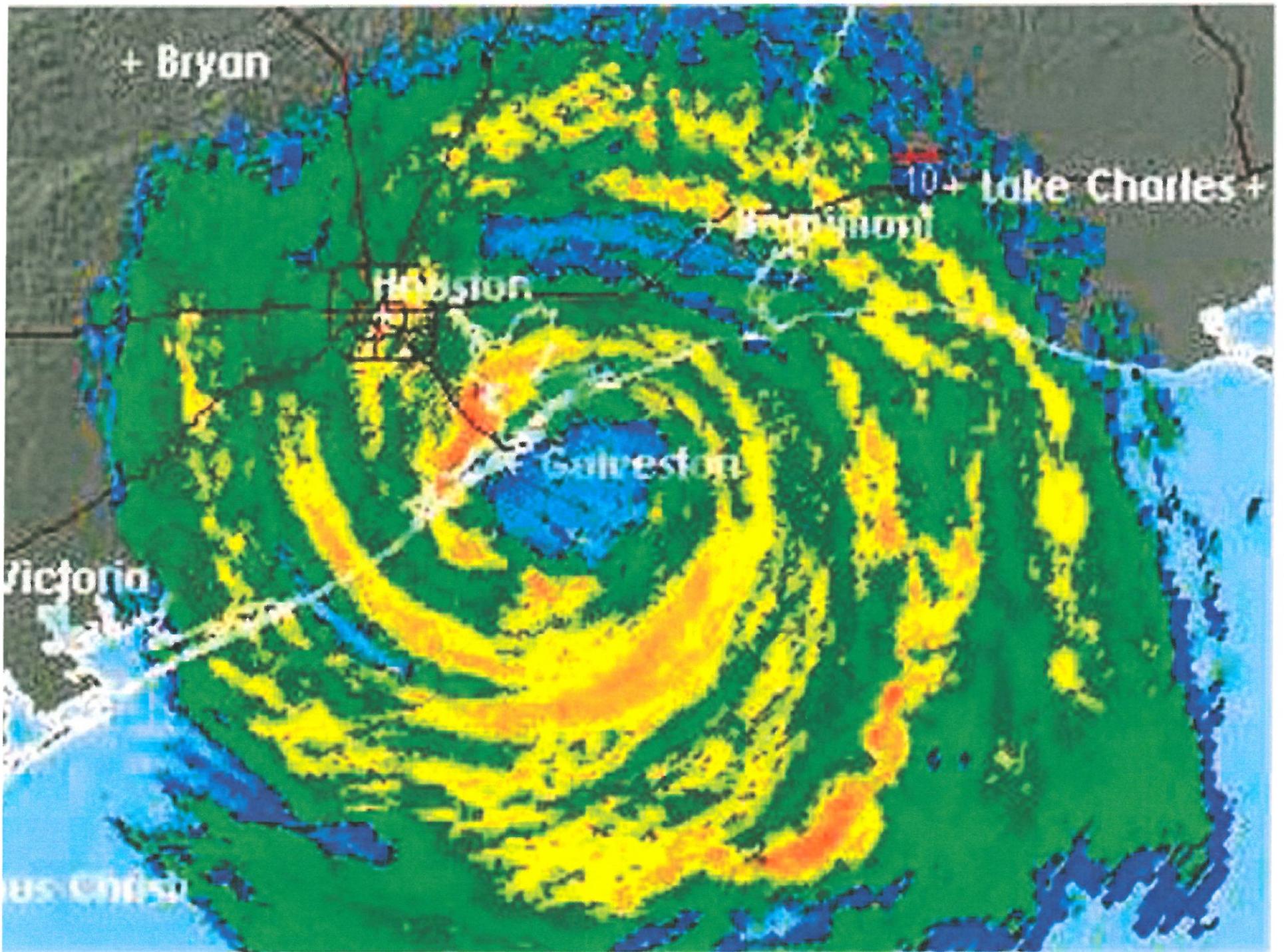
Power Restoration Guide

| | | |
|-------------------|----------------------|---------------------|
| Category 1 | winds 74-95 mph | 7 to 10 days |
| Category 2 | winds 96-110 mph | 2 to 3 weeks |
| Category 3 | winds 111-130 mph | 3 to 5 weeks |
| Category 4 | winds 131-155 mph | 4 to 6 weeks |
| Category 5 | winds 156 mph and up | 6 to 8 weeks |

Actual Power Restoration Times

- Hurricane Ike, September 2008
 - Made landfall as Category 2
 - 2.1 of 2.2 million customers lost power
 - 18 days to restore power
- Hurricane Rita, September 2005
 - Made landfall as Category 3
 - Houston experienced less than Category 1 winds
 - 719,000 of 1.9 million customers lost power
 - 6 days to restore power
- Hurricane Alicia, August 1983
 - Made landfall as Category 3
 - 750,000 of 1 million customers lost power
 - 16 days to restore power





Emergency Operations Plan

- The goal of our EOP is to safely restore service to our customers - quickly and efficiently
- With over 100 years experience, we prepare year-round
- In addition to linemen and local contractors, our EOP includes virtually every Houston employee that does not traditionally work in the field
- Through electric utility mutual assistance programs, we have access to thousands of linemen and tree trimmers from around the country
- The company also works to ensure that we have access to lodging, fuel, food, supplies and equipment

Emergency Operating Plan: Ike Storm Timeline

- Communications with Mutual Assistance and contractors
- Initial logistics preparations
- Communications with local and national media

09/08/2008

- Daily conference calls with Impact Weather
- Internal mgmt .conference calls
- Leaders confirmed EOP assignments with employees
- Communications with local & state officials

09/09/2008

- Activated EOP
- Communicated with employees about evacuations
- Issued news release
- Notified logistics contractors
- Began calling critical care customers

09/10/2008

- Began radio advertising
- Notified 8 staging site owners
- Evacuated Galveston, Baytown and South Houston Service Centers
- Continued media relations
- Evaluated material needs

09/11/2008

- Opened Command Center
- Assured "storm riders" in place

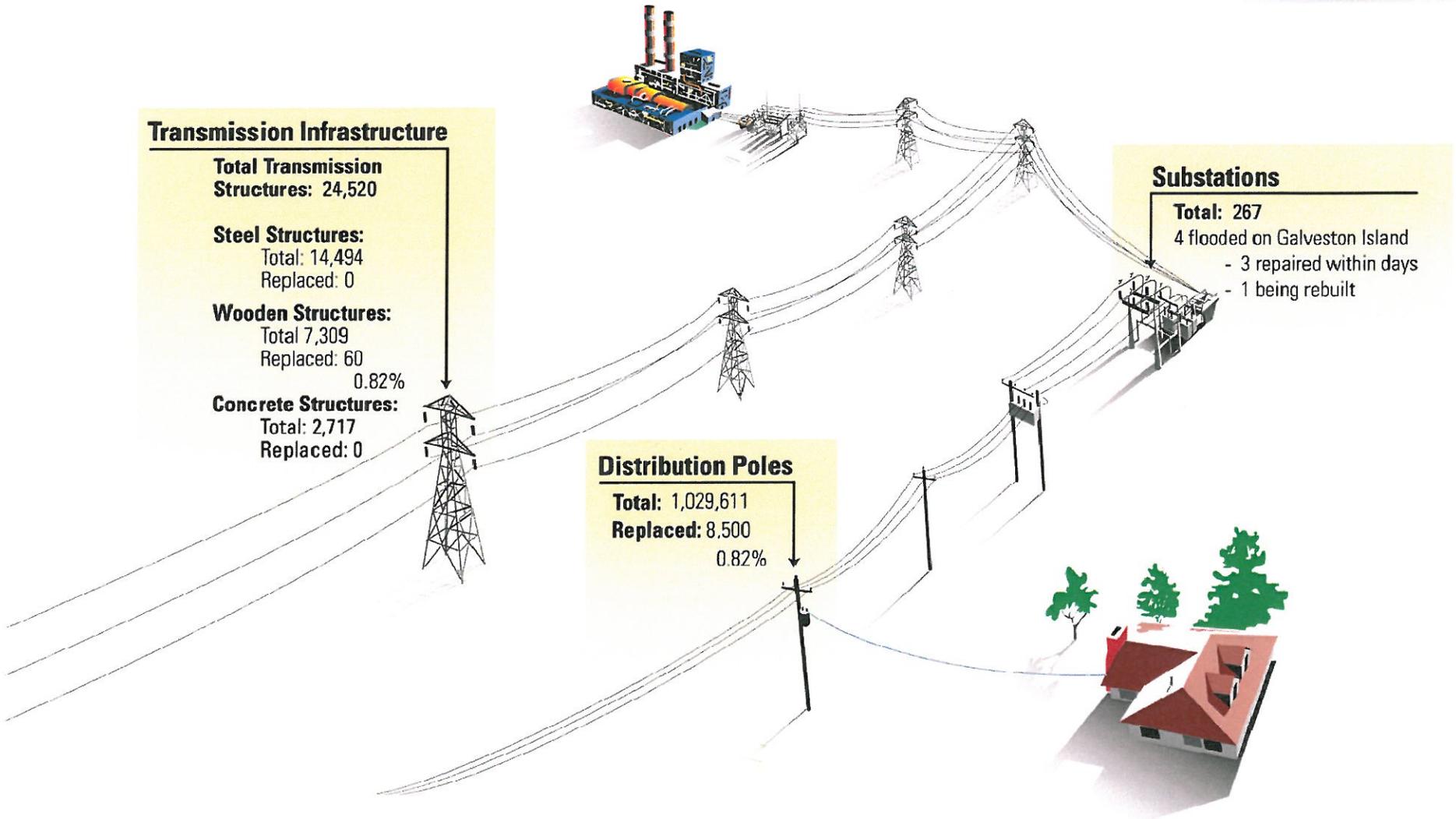
09/12/2008

- 2 am – Hurricane Ike made landfall near Galveston
- 11 am – when winds subsided below 40 mph, crews began assessing, clearing and restoring power

09/13/2008

Electric Infrastructure

Hurricane Ike: System held up well



Hurricane Ike: A “Category Tree” Hurricane



Systematic Power Restoration

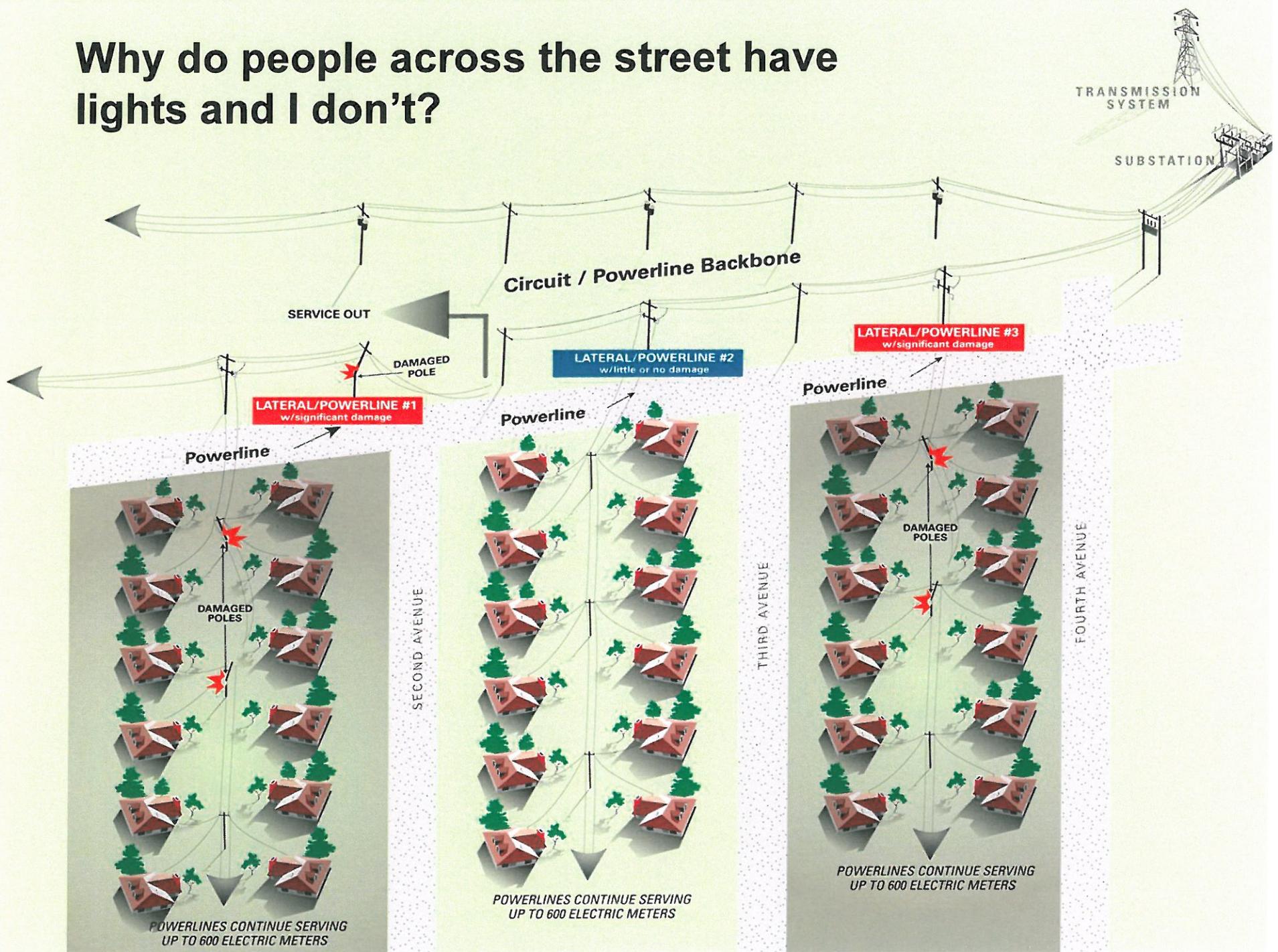
- First – restore service to key facilities vital to public safety, health and welfare, and secure downed power lines
- Second– repair major lines and fuses that restore power to greatest number of customers in least amount of time
- Third– repair transformers, which typically serve 10 customers
- Finally – repair individual electric drop to homes



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2004
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Why do people across the street have lights and I don't?



Hurricane Ike Logistics Resources

- More than 1 million gallons of fuel for 7,000 vehicles
- 2 million lbs. of ice
- 94,000 hotel room nights
- 5,000 + cots system-wide
- More than 11,000 mutual assistance crews from 35 states and Canada
- 6,400 out of more than 1 million wood distribution poles
- 300,000 ft. of wire & cable out of approximately 140 million ft.
- 4,000 transformers out of 400,000
- 860,000 meals

Hurricane Ike Staging Sites

- Brazoria County Fairgrounds
- Butler Stadium/Reliant Park
- Reed Road
- Deer Park Football Stadium
- Gulf Greyhound Racetrack
- Humble Civic Center
- Moody Gardens
- Ritchie Brothers – Two locations
- Sam Houston Race Park
- Spring Branch staging site
- Plus 12 CenterPoint Energy Service Centers

Hurricane Ike: Lessons learned

- Overall, our system held-up well and due to extensive testing of our EOP since Hurricane Alicia 25 years ago, our overall process worked well
- Our key facility list (including; hospitals, public health & safety facilities, water pumping stations, etc.) has been revised and will be updated as necessary
- Communicating with customers about restoration timelines via zip codes was effective, but we are working to ensure that the data is more accurate and timely
- We were prepared with four staging sites, which grew to 11 – we are now prepared to open as many as 16 regional locations
- Planting the right tree in the right place is critical
- Ike data will enable us to improve our damage prediction models

Post storm: If your lights are out

- Please do NOT call us
- Unplug all major appliances and turn the air conditioner off
- Food in a freezer will stay frozen up to 36 hours if the door is kept closed
- Keep a small lamp plugged in and turned on so you'll know when power is restored
- Once your electric service is restored, plug in your appliances first then turn on your air conditioner

Post storm: If you evacuated, are your lights on?

- **DO NOT** call us during the first few days
- Instead:
 - Call your answering machine to see if it picks up
 - Call neighbors
 - Monitor the news
 - Check CenterPointEnergy.com for general outage information



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Post-storm: Electric safety tips

- **DO** call us to report a downed power line or other electric emergencies
 - Always stay away from power lines!
 - Stay away from standing water; Energized power lines could be submerged



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Post-storm: Electric safety tips

- If your power is out but your electrical system has not been harmed, make sure your circuit breaker is in the “on” position. Leave your air -conditioner and sensitive electrical appliances off until your power is restored.
- If water has risen above the electrical outlets, contact a licensed electrician before turning on the main circuit breaker.
- Any appliances or electronic equipment that have been submerged will need to dry thoroughly for at least one week and be checked by a qualified repair person prior to being turned on.
- If the outside unit of an air-conditioning system has been under water, mud and water may have accumulated in the controls. Have the unit checked by a qualified air-conditioning technician.

Post-storm: Portable generator tips

- Do NOT connect portable generators directly to a building's wiring without a licensed electrician first disconnecting the house wiring from CenterPoint Energy's service.
- NEVER run a portable generator indoors or in a garage - place it in a well ventilated area. Generators can produce carbon monoxide, and the odorless fumes can be deadly.



Generators



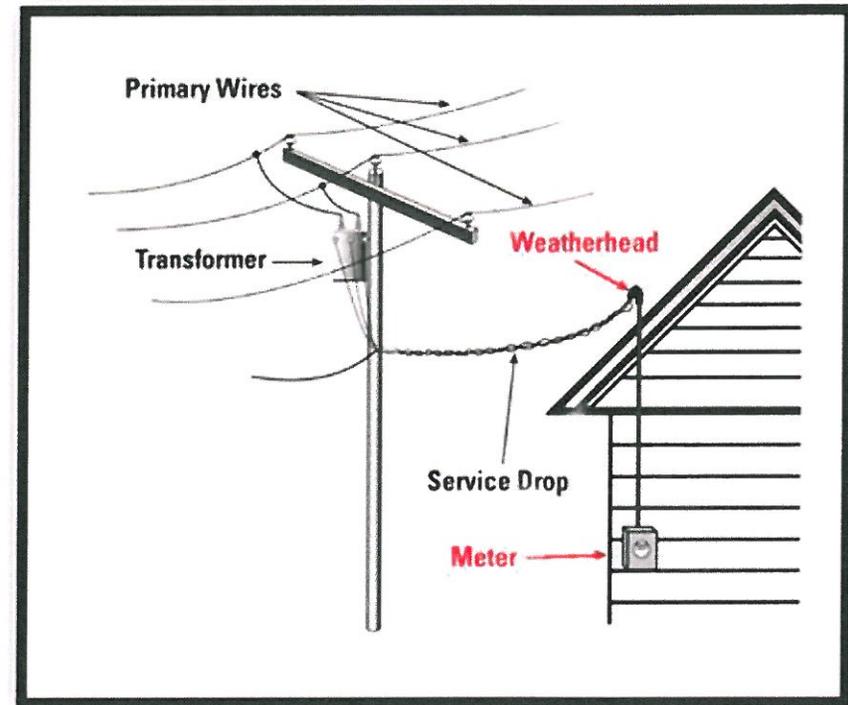
- CenterPoint Energy wants customers to be prepared, so until June 30, customers can receive up to a \$2,500 discount on the purchase and installation of a natural gas whole-house or partial-powered generators
- For more details, check the company's Web site at: *CenterPointEnergy.com/generators*



Do you know how to check if your home is ready to receive power from CenterPoint Energy?

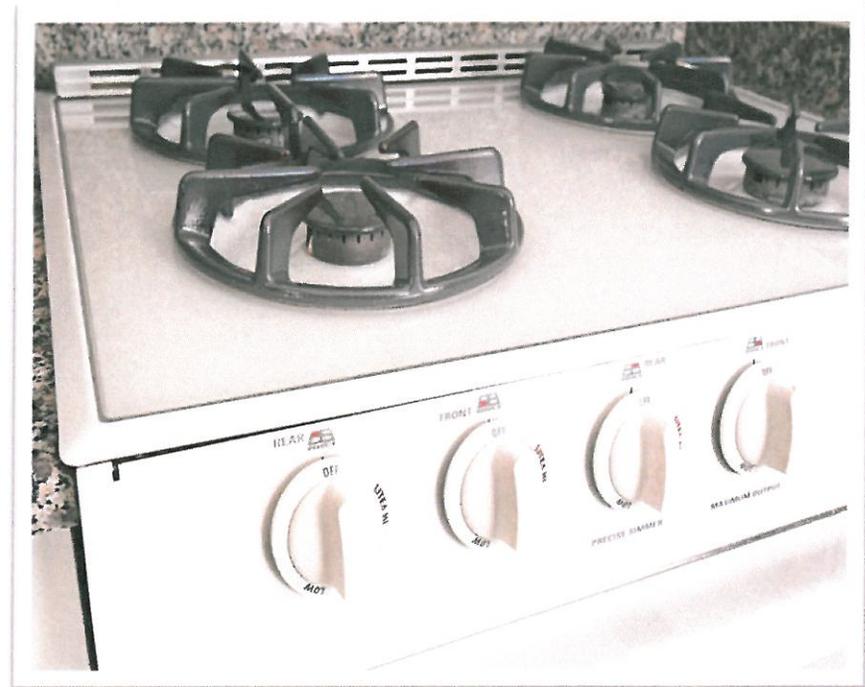
Post-storm: Electric weatherhead tips

- Check your home's weatherhead.
- Any weatherhead problems will need to be repaired by an electrician prior to service being restored.



Post-storm: Natural gas safety tips

- If you smell gas, leave the area immediately and then call us.
- Do not turn the lights on or off, smoke, strike a match, use a cell phone or operate anything that might cause a spark.
- Do not attempt to turn natural gas on or off.



Post-storm: Natural gas safety tips

- If your home was flooded, call a licensed plumber or a gas appliance technician to inspect your appliances and gas piping to make sure it is in good operating condition before calling CenterPoint Energy to reconnect service
- Don't forget to check outdoor appliances, such as pool heaters and gas grills
- Call 811 to locate utility lines prior to digging on your property while conducting clean-up



CenterPointEnergy.com/stormcenter

