

# Getting your lights back on after a storm



### Contents

Are you ready?4
Understand our priorities6
How we get your lights back on
Damage to natural gas and electric equipment 14
Stay connected 18

No one likes power outages – including Orange & Rockland. Even with a sophisticated outage tracking system, comprehensive emergency response plans and large investments in state-of-the-art electric system enhancements, destructive storms can still cause lengthy and widespread power outages.

That's why it's a good idea to take the time to develop an emergency plan, know what to do, and understand what we do when a storm strikes.

### This booklet will give you information on:

- Getting ready for storms and outages
- Our outage priorities
- Our restoration process
- What to do if your electric or gas equipment gets damaged
- Staying connected for outage and restoration updates



### Are you ready? **Prepare for storms** and outages

Act before severe weather strikes. You'll have the best chance of safeguarding your home and family and minimizing the inconveniences of a power outage.

#### Stock up on necessities before a storm hits:

- Pack your flashlights with fresh batteries.
- Have drinking water, blankets, first aid kit, and non-perishable food on hand.
- If you have a well pump, fill your bathtub with water for washing and flushing toilets.
- unplanned power outages.

#### Protect your home and electronic equipment:

- battery backup systems to protect against sudden loss of computer data.
- when service is restored.
- Know how to replace blown fuses or reset circuit breakers.

#### Be safe:

- branches or fences.
- Never drive over wires lying on the road, and don't drive under low hanging wires.
- Only operate portable generators outdoors where there's sufficient ventilation.
- Only plug individual appliances into generators.
- switch to prevent damage and protect our workers from backfeed.

• Fully charge your mobile phone. Cordless and digital phones may not work during outages.

• Let us know ahead of time if someone in your family uses electrically-operated life support equipment. We'll provide you with a confidential telephone number for access to the latest information during

• Install surge protectors. They'll help to protect sensitive appliances and equipment. Consider using

• Turn off light switches and unplug appliances if the power goes out. This will prevent damage to them

• Learn to manually open and close any electrically operated garage door, security door or gate.

• If you have a sump pump, consider a backup power source such as a battery or generator.

• Stay away from downed power lines. If you spot one, call us immediately at 1-877-434-4100.

• Never approach or touch anything that may be touching a downed wire, including vehicles, tree

• If you're connecting a generator to house wiring, first have a qualified technician install a manual transfer



#### 1. Transmission towers and lines

Thousands of people are served by these lines, which are usually miles away from your neighborhood. If these lines are out, they must be restored first for electricity to flow to other parts of the system.

#### 2. Substations

Our substations reduce the voltage from the transmission lines to levels appropriate for distribution lines that run along local streets in your community. If there's damage to a substation, it must be repaired before work can begin on the distribution lines in your neighborhood.

#### 3. Circuit lockout

Damage anywhere along a distribution circuit can prevent the flow of electricity throughout the entire circuit feeding many communities. Repairing a lockout restores service to large numbers of customers, and allows us to then work on damages to distribution lines fed by the circuit.

#### 4. Overhead distribution lines

All homes in the neighborhood may not be fed by the same overhead line. That's why some houses in the same neighborhood may have power while others do not.

#### 5. Underground distribution lines

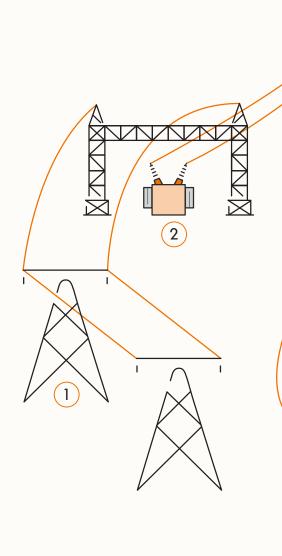
You might think that you're in the clear if you have underground distribution lines. But they're fed by overhead lines. A tree falling onto an overhead line can affect a neighborhood with underground service.

#### 6. Transformers

Transformers further reduce voltage to levels suitable for homes and buildings. If a transformer is damaged, the number of homes served by that transformer will be out of power. Once distribution repairs are made, we fix damaged transformers.

#### 7. Individual service wire

Damage can occur on the service line between your house and the pole on the street. If your service wire is damaged, you may not have power even though the rest of your neighborhood does.

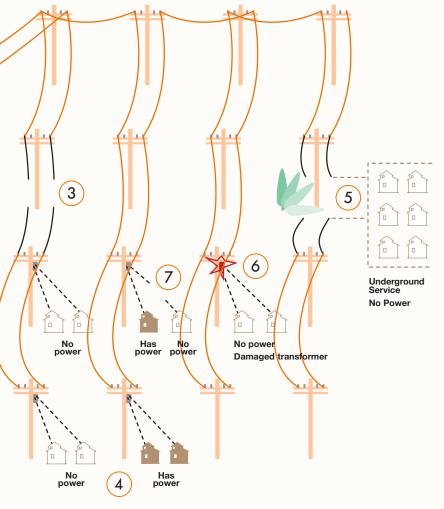


### Understand our priorities

When it comes to large-scale power restoration, we go through a step-by-step process.

Our top priority is ensuring public safety by securing downed wires and addressing critical infrastructure such as hospitals, emergency facilities and municipal services. We then work to restore power to the largest number of customers until all lights are back on.







#### How we get your lights back on

When severe weather or a heat wave is predicted, we plan ahead to make sure we can repair damage and restore service as safely and quickly as possible. Here's a behind-the-scenes look at what we do when you tell us your power is out.



#### Assessing the damage

Power restoration work starts with damage assessment.

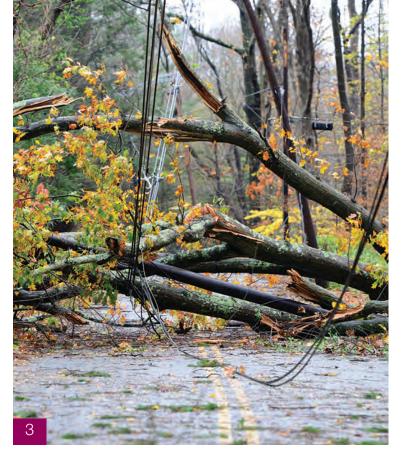
Before we assign a work crew, we need to determine the scope and extent of the damage first, so we can decide what kind of crew – a tree crew or a line crew – needs to be dispatched and what equipment such as poles, wires and transformers will be needed for repairs.





#### Scoping the site

Each job must be surveyed carefully for hazards before repair work can begin. For example, local traffic conditions determine the best access for our equipment.



#### Clearing the roads

When damage to the electric system is extensive and widespread, we dispatch crews to help municipalities with road clearing efforts. Making roads safe, clear and accessible is important to public welfare and safety.

When there's a dangerous situation, we work with local officials and make road clearance a priority over system repair and restoration.



#### Protecting our safety

Work site safety plays a key role in restoration work.

Before we move equipment to the job site, we place barrier tapes, signs and cones around the work zone to protect motorists and pedestrians.



#### Planning the work

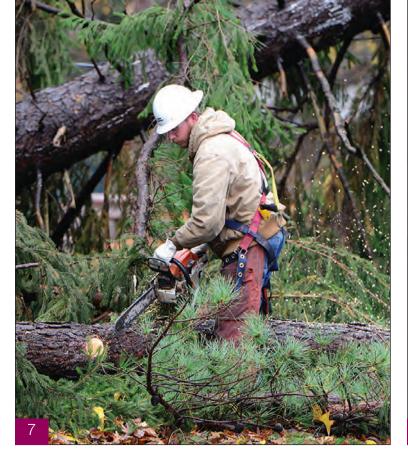
Before starting a repair job, crew members must first plan the work and discuss each person's role and responsibilities. Planning the work before working the plan is important to ensure the work is done safely and efficiently.





#### Getting the green light

When a crew arrives at the work site, they cannot begin work until they obtain clearance from the Control Center that the wires have been deenergized and they can proceed with repairs. This is why you sometimes see crews waiting at a job site



#### Removing trees

When a tree knocks down power lines, a tree crew must first clear the area before our line crew can begin system repairs. Depending on weather and traffic conditions, as well as the size and location of the tree, this can take hours of work.



#### Setting a pole

When the damage includes a broken pole, special equipment is brought to the site to dig the hole for a new pole. Before lifting and setting a pole into place, the crew must take extra precaution not to hit underground utility lines such as a gas main or water line.

The broken pole must be cut so the wires can be untangled and lifted to the top of the new pole.

Sometimes, a new crossarm has to be installed at the top of the pole, and insulators added to support the wires.



#### Moving wires into place

Once the pole is in place, the wires must be separated and installed on the new pole. Broken wires must be spliced together using special tools and techniques.







#### Finishing the job

The job is finished only after the crew removes all protective equipment, patrols the remainder of the line, reenergizes the line, performs voltage checks at a nearby transformer, and cleans up the worksite.

Then they move on to the next assignment.



#### Damage to natural gas and electric equipment

Not only do storms cause damages that result in widespread outages, they can also damage the equipment on your property that serves electric or natural gas directly to your home. When this happens, additional steps need to be taken to get your service restored.



#### Getting your natural gas service restored:

Flooding often damages both gas appliances and electric service. And safety regulations require us to isolate affected appliances. But if we can't enter your property, we must disconnect your natural gas service from the outside.

If this is the case, follow these steps to get your gas service restored:



Contact a qualified plumber to determine whether the building's natural gas appliances have been damaged.

- If the appliance control valve or other electrical control components on an appliance were submerged, they must be replaced. We'll isolate and place a red tag on the affected appliances until they're repaired.

If gas was shut off at the meter and necessary repairs have been made, please call us at 1-877-434-4100 to have us unlock your natural gas service at no charge.





#### Responsibilites







#### Getting your electric service restored:

Contact a licensed electrician to determine whether the building's electrical system has been damaged.



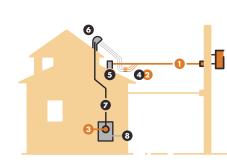
- If the building is damaged, arrange for it to be inspected by the local Building Inspector or Code Enforcement Official.
- If you own the damaged equipment, have a licensed electrician make the repairs (See Responsibilities).

4

5

After repairs are completed, contact an electrical inspector licensed by your municipality to inspect the building's electric service.

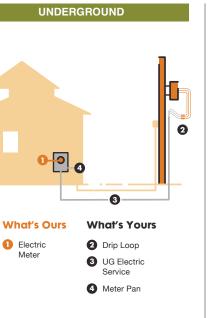
Once the electrical system passes inspection, the inspector or electrician will provide written notification, or cut-in card, to us. Upon receipt of the cut-in card, we'll restore your electric service as soon as possible.





## 

#### Responsibilites



#### UNDERGROUND PAD MOUNTED



#### **Stay connected**

Power outages can make you feel isolated from the rest of the world. That's why we offer several ways to stay connected with us so you can get updates on outages and restoration times.

#### Visit oru.com/storms

We take a lot of steps to prevent outages and recover from them quickly. Find out more about what we do, and what customers can expect if they're caught in an outage.

Download the O&R mobile app Available in the Google Play Store for Android devices and the Apple App Store for iOS devices.

Text outage reports send "OUT" to 69678 (myORU).

Sign up to receive text messages on outages in your area Sign up at oru.com/myaccount.

Call us to report an outage or downed power line 1-877-434-4100

Search @ORUConnect on social media Information, videos and more, 24/7 during storms



Whether your electric service is underground or overhead, power outages do occur. We ask for your understanding and cooperation, and assure you that we will work around the clock until everyone's lights are back on.



#### We'll get your lights back on



oru.com 877-434-4100