Power Outage Restoration Protocols

BPU works year-round to maintain a dependable and reliable electric system, but when extreme weather hits power outages can occur. The illustration below shows how power is restored after a major outage, and the step-by-step process that BPU must follow first to identify the extent of the problems and then work to fix them.



Repair Substations

Substations distribute power to several thousand customers. When a problem can be solved at this level, power can be restored to large groups of customers at once if there aren't problems further down the line. Sometimes, power can be rerouted to customers from a different substation while a repair is being made.

Repair Transmission Lines **STEP**

Transmission lines deliver power to sub-stations, and when damaged, can disrupt power to tens of thousands of customers. These must be repaired before other parts of the system can operate.

BPU Electrical System Overview

Power Stations

27 **Substations**

60,866 **Electric T&D Poles**

3,000+ Miles Electric T&D Lines

> 13,666 Transformers

19,000 Streetlights

5,300 **Traffic Signal Heads**

Repair Main Distribution Lines **STEP**

435

Main distribution lines, which carry power away from substations to multiple neighborhoods or businesses are then checked. When power is restored at this level, all customers served by these lines see the lights come on, unless the problem is further down the line.

Prioritize Public Health & **Safety Facilities**

Ensuring hospitals, police facilities, fire stations, and other critical public functions have power and are capable of providing services.



Repair Neighborhood Tap Lines/Transformers

The final supply lines, called tap lines, carry power to utility poles or transformers outside houses, businesses, or other buildings - and can be impacted by falling trees or limbs. Line crews fix the remaining outages based on restoring service to the largest number of customers, and include removing and installation of new poles, transformers, etc.

BPU's electric generation, transmission, and distribution system spans a 135 sq. mile area, providing power to 67,000 residential, commercial, and industrial customers. If a major outage occurs, BPU follows specific industry Outage Restoration Processes and Protocols for restoring power quickly and safely to the entire community. This includes Assessing Storm Damage to identify required resources, establishing Repair Plans, Prioritizing Restoration Work, and Mobilizing Additional Crews if needed. Depending on the extent of damage and the size of the outage, this methodical step-by-step process can take time.

STEP

Sometimes damage will occur on the line between your house and the transformer on a nearby pole. This explains why you have no power when your neighbor does. BPU needs to know when you have an outage here, so crews can be dispatched to repair it. The line crews must tackle these repairs to every single connection one at a time – which is labor intensive and time consuming.

If necessary, BPU has Mutual Assistance Agreements in place with other utilities that can deploy crews and equipment to help during widespread outage emergencies.

Check Generation **Facilities**

Power Plants produce and generate the energy we use and are a critical component in the system.



Track Outages Online or via Mobile!

Stay informed of electric outages in your neighborhood either online or via mobile device with BPU's Outage Map tool. Using a birds-eye view of the entire service area, you can see outages "live" down to the street level at outage.bpu.com. To alert BPU about a power outage in your area, dial 913-573-9522.



View outage updates at outage.bpu.com

> POWER **OUTAGE MAP**

Repair Individual Service Lines

WINTER 2023 |