

How Duke Energy Restores Power



Duke Energy focuses on restoring power in a sequence that enables power restoration to public health and safety facilities and to the greatest number of customers as safely and quickly as possible.

A typical sequence of activities, many of which occur simultaneously, is as follows:

1. **Public safety situations** – locate downed power lines and make sure electricity is no longer flowing through the wires.
2. **Transmission, substation equipment and main distribution lines** – these serve large numbers of customers and large geographic areas, and must be restored first to keep electricity flowing from power plants to neighborhoods.
3. **Essential facilities** – emergency service and critical infrastructure such as hospitals, law enforcement, fire departments and water treatment facilities.
4. **Distribution lines** – we work to get the largest number of customers back on as quickly as possible.

Restoration diagram

- ① **Generation sources** (power plants)
- ② **Transmission lines** (supply large number of customers and large geographic areas)
- ③ **Substation** (where voltage is lowered)
- ④ **Main distribution lines** (deliver electricity to large subdivisions and commercial areas)
- ⑤ **Power pole** (showing underground service to hospital)
- ⑥ **Local distribution or tap line** (the type of line that runs along neighborhood streets)
- ⑦ **Transformer** (reduces service voltage to individual households and businesses – may also be padmounted on the ground)
- ⑧ **Service lines** (to individual homes)

