PG&E’s electric system

PG&E’s electric system is designed and built to deliver safe, reliable power to customers in Northern and Central California. PG&E produces or buys its power from a mix of conventional and renewable generating sources, which travel through our electric transmission and distribution systems to reach our customers.

1. **PG&E-owned generators**
   - PG&E’s electricity is generated by many producers. The process starts with a diverse mix of generating sources. PG&E’s generating plants make electricity by hydropower, gas-fired steam and nuclear energy.

2. **Independent generators**
   - PG&E acquires electricity from over 400 plants owned by independent power producers or qualified facilities, and sold to PG&E for resale to our customers.

3. **Out-of-state generators**
   - We also buy electricity for our customers from sources outside of PG&E’s area, which is transmitted across several states.

4. **Transmission system**
   - Electricity is carried over the bulk electric grid, a “network” of high-voltage transmission lines that connect power plants to substations, and link our system to neighboring ones.

5. **Substations**
   - Substations are critical junctions and switching points in the electric system, connecting the transmission system to the distribution one. Substations use transformers to lower the voltage of electricity.

6. **Distribution system**
   - The distribution system links the transmission system and most customers. It includes: main or “primary” lines and lower voltage or “secondary” lines, which deliver electricity either overhead or underground; distribution transformers, which lower voltage to usage levels; and switching equipment to permit the lines to be connected together in various combinations and patterns.

7. **Individual services**
   - Individual services or “drops” connect the distribution system to the customer – industrial, commercial, agricultural or residential.