



Burlington *hydro* inc.

Electricity 101

Anatomy of a Utility Pole

- 1** Primary wires are the high voltage lines that carry up to 37,600 volts
- 2** Insulators prevent energized wires from coming in contact with each other or the utility pole
- 3-4** Transformer steps down voltage from the primary line to the secondary line
- 5** Secondary wires carry up to 240 volts and are connected by a service wire to the house
- 6** Electric service wire to house from the secondary line
- 7** Phone and cable TV service wire to house
- 8** Ground wire runs the entire length of the pole. This directs any electricity on the pole safely onto the earth if there is a fault
- 9** Guy wires help stabilize poles

