What’s on an Electric Power Pole?

Primary wires are on top of the pole and usually carry 12,000 volts of electricity from a substation.

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Insulators prevent energized wires from coming in contact with each other or the utility pole.

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A crossarm holds the wires up on the pole.

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Lightning arrestors protect the pole and equipment from lightning strikes.

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Transformers convert higher voltage electricity carried by primary wires and lowers the voltage for use by customers.

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The neutral wire is below the transformer and acts as a line back to the substation and balances out the amount of electricity or load on the system.

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The secondary wire carries the lower voltage electricity after it passes through the transformer.

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Telephone and cable wires are typically the lowest wires.

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A ground wire runs the entire length of the pole. It directs any electricity on the pole safely into the earth.

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Guy wires help stabilize utility poles.

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