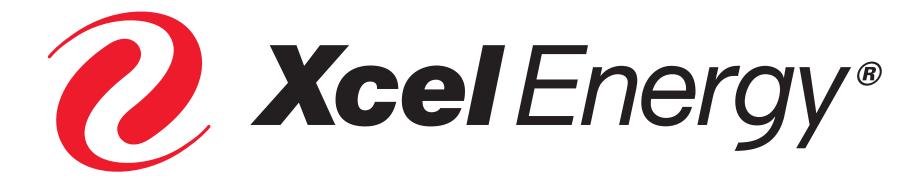
## Transmission Infrastructure



Single pole self-weathering steel



## **SHIELD WIRE**

INSULATOR

CONDUCTOR

**STRUCTURE** (weathering steel)

## **RIGHT-OF-WAY**

## Terms to know

**Conductor:** A wire made up of multiple aluminum strands around a steel core that together carry electricity. A bundled conductor is two or more conductors connected to increase the capacity of a transmission line.

**Circuit:** A continuous electrical path along which electricity can flow from a source, like a power plant, to where it is used, like a home. A transmission circuit consists of three phases with each phase on a separate set of conductors.

**Phase:** One element of a transmission circuit that has a distinct voltage and current. Each phase has maximum and minimum voltage peaks at different times than the other phases.

**Single circuit:** A circuit on the same structure with three conductors.

**Shield wire:** A wire connected directly to the top of a transmission structure to protect conductors from a direct lightning strike, minimizing the possibility of power outages.

**Structures:** Towers or poles that support transmission lines.

**Insulator:** An object made of a material, such as glass, porcelain or composite polymer that is a poor conductor of electricity. Insulators are used to attach conductors to the transmission structure and to prevent a short circuit from happening between the conductor and the structure.

**Right-of-way:** Land area legally acquired for a specific purpose, such as the placement of transmission facilities and for maintenance access.