

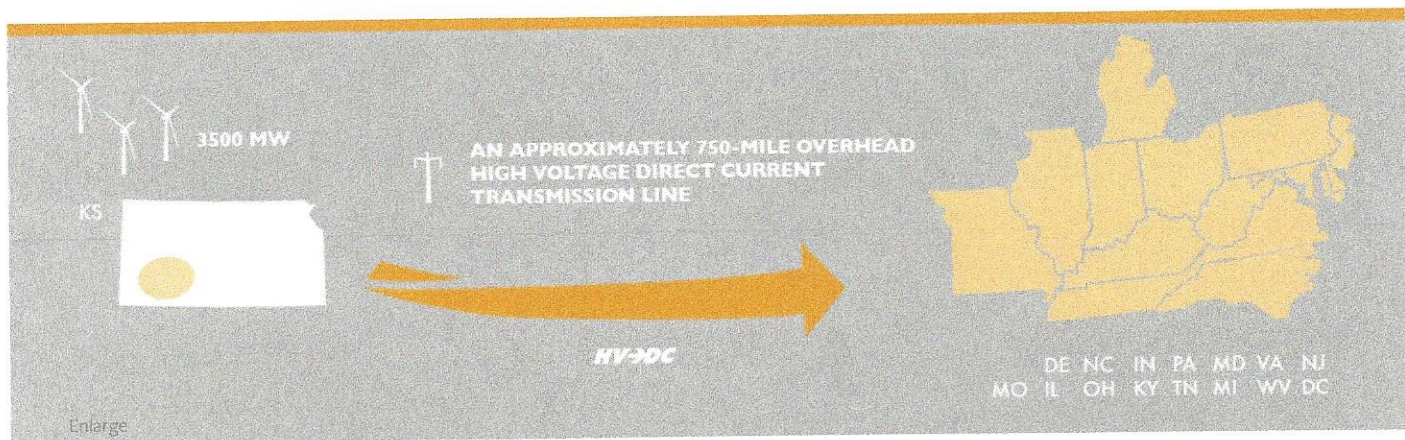
CLEAN LINE
ENERGY PARTNERS

GRAIN BELT EXPRESS CLEAN LINE

OVERVIEW

The Grain Belt Express Clean Line is an approximately 750-mile overhead, direct current transmission line that will deliver wind energy from western Kansas to utilities and customers in Missouri, Illinois, Indiana and states farther east.

Similar to the trains that carry grain harvested in the Midwest to market, the Grain Belt Express Clean Line will move wind energy from its source in the grain belt of the country to markets with a strong demand for low-cost, clean power.



GRAIN BELT EXPRESS CLEAN LINE QUICK FACTS

- The Grain Belt Express Clean Line will deliver up to 3,500 megawatts of low-cost, renewable power and enough clean energy for approximately 1.4 million homes per year.
- The Grain Belt Express Clean Line will create thousands of construction jobs and hundreds of permanent jobs to maintain and operate the wind farms and transmission line.
- The development and construction of the Grain Belt Express Clean Line is an estimated \$2 billion investment that will enable approximately \$7 billion of new, renewable energy projects to be built. The transmission line will also provide a long-term source of income for rural communities that host the line.
- The Grain Belt Express Clean Line is a participant-funded, merchant model project. Its construction will be paid for by the renewable energy generators and load serving entities that purchase transmission capacity on the line.

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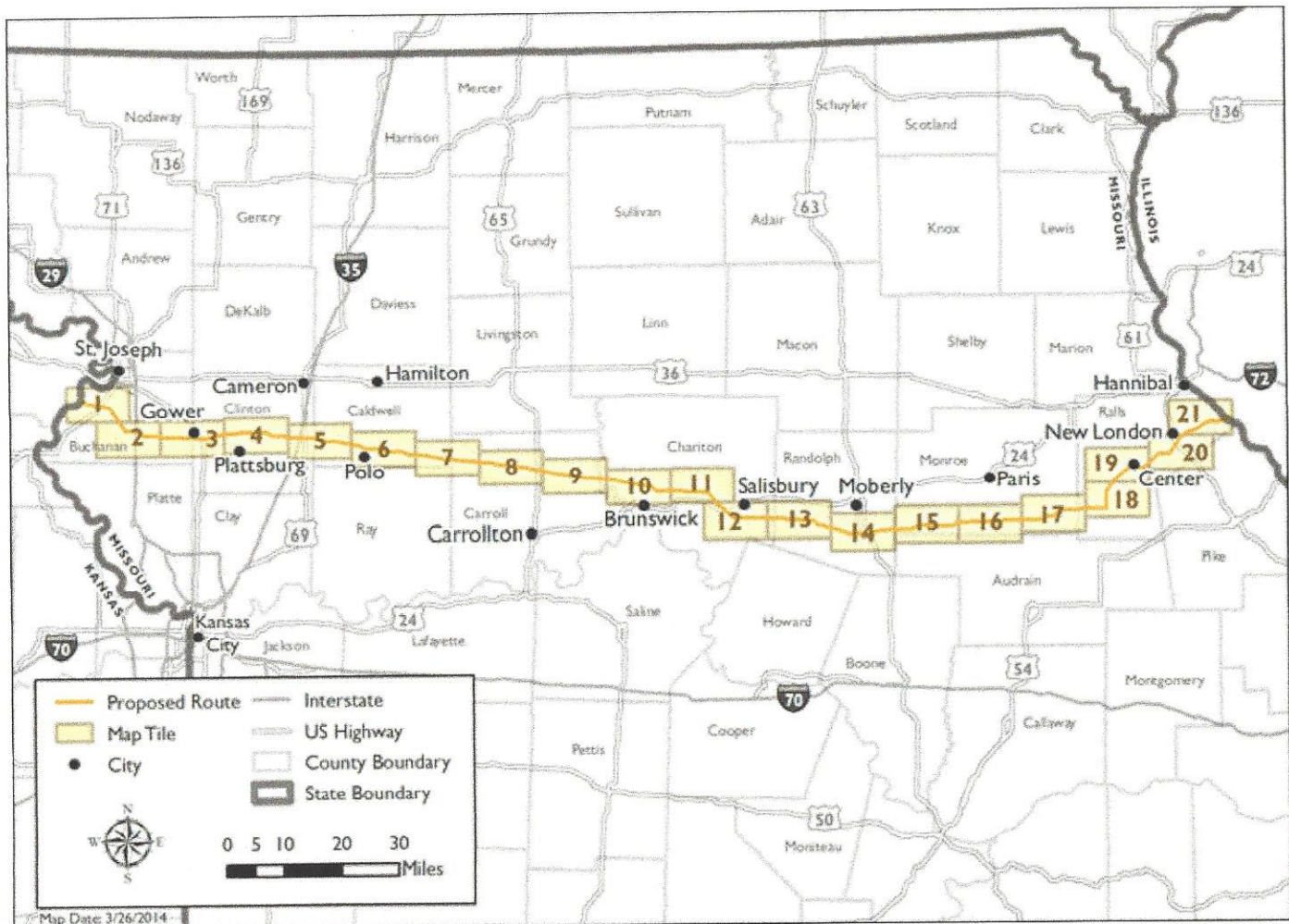
GRAIN BELT EXPRESS CLEAN LINE

MISSOURI PROPOSED ROUTE

An approximately 206-mile proposed route has been identified for the Grain Belt Express Clean Line in Missouri. The proposed route is the result of an extensive public involvement and routing process, during which Clean Line met with landowners, tenants, conservation and agricultural organizations, elected officials, community leaders, government agencies, and others, recognizing that these stakeholders have valuable insight that should be considered in the routing process. We continue to work closely with landowners to minimize impacts to their property and compensate them fairly.

Landowners and other interested community members can find [additional information here](#).

The overview map on this page depicts the route of the Grain Belt Express Clean Line in Missouri. Please click one of the light-yellow shaded boxes below to zoom in.



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GRAIN BELT EXPRESS CLEAN LINE

TRANSMISSION LINE STRUCTURES

There are many different types of transmission structures used to deliver power. Clean Line Energy is evaluating the use of steel lattice and steel monopole DC transmission structures to move large amounts of renewable power over long distances to market.

A typical steel monopole transmission structure requires around 35,000 – 40,000 pounds of steel per structure and a typical steel lattice transmission structure requires an average of 32,000 pounds of steel per structure.

The images below show average specifications for a typical steel monopole, typical steel lattice mast, and a typical steel lattice transmission structure.

Key Terms

Shield Wire:

Protects the line from lightning strike to prevent power outages.

Insulator:

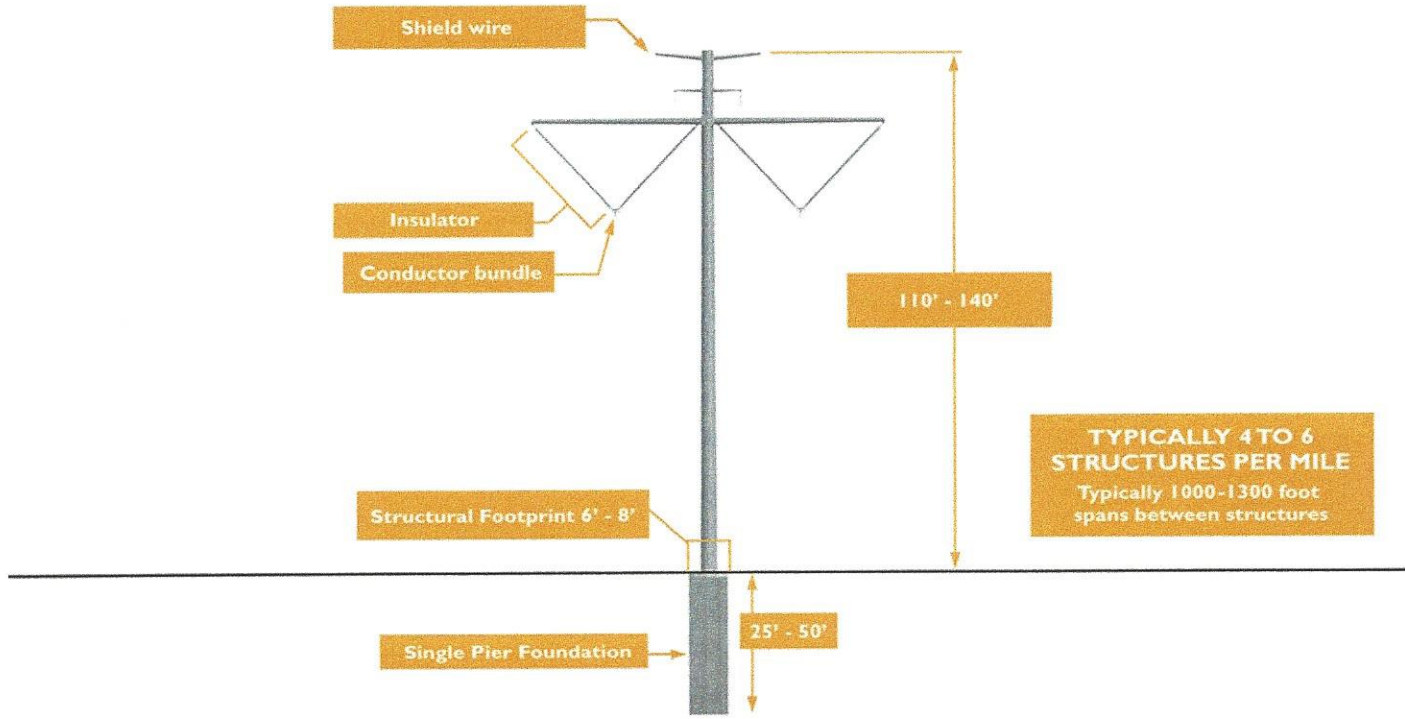
Prevents the electricity from short-circuiting from wire to structure.

Conductor:

Carries electricity

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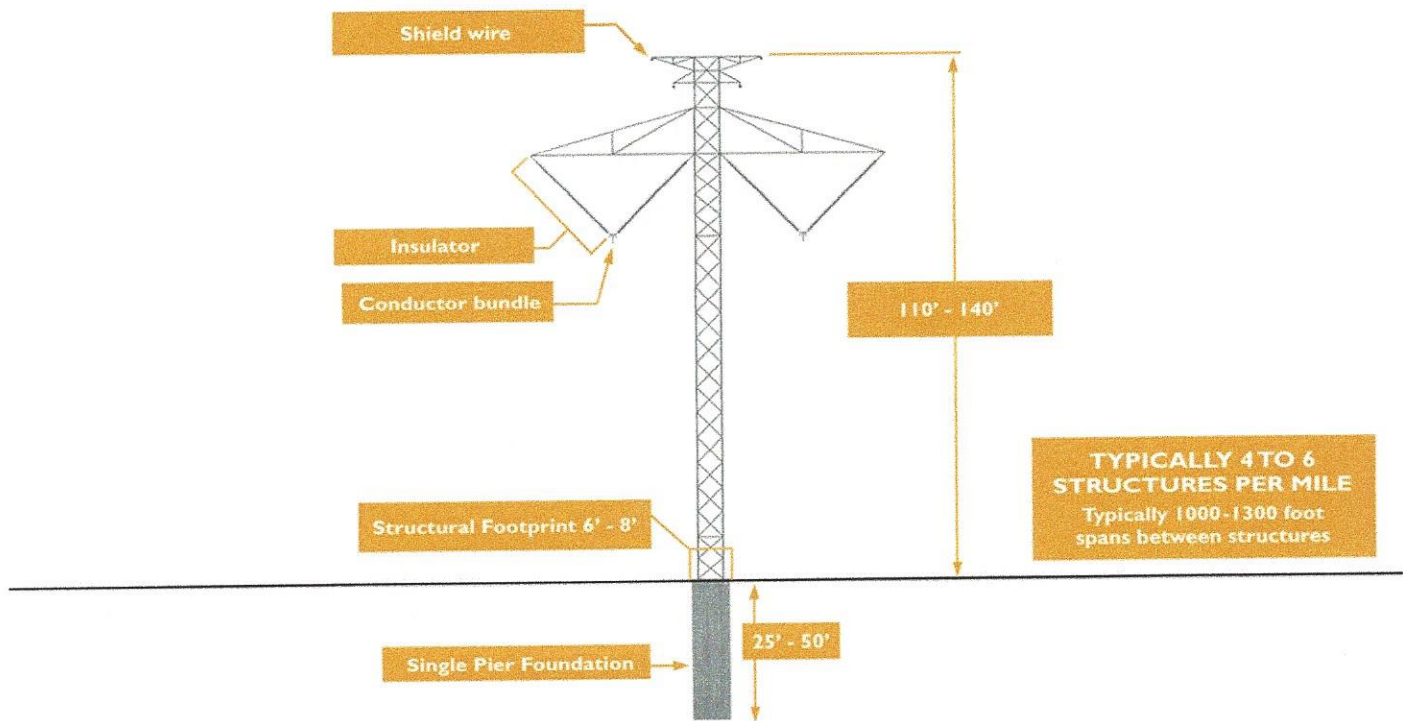
TYPICAL MONOPOLE STRUCTURE: 110 - 140 FEET



Enlarge

6

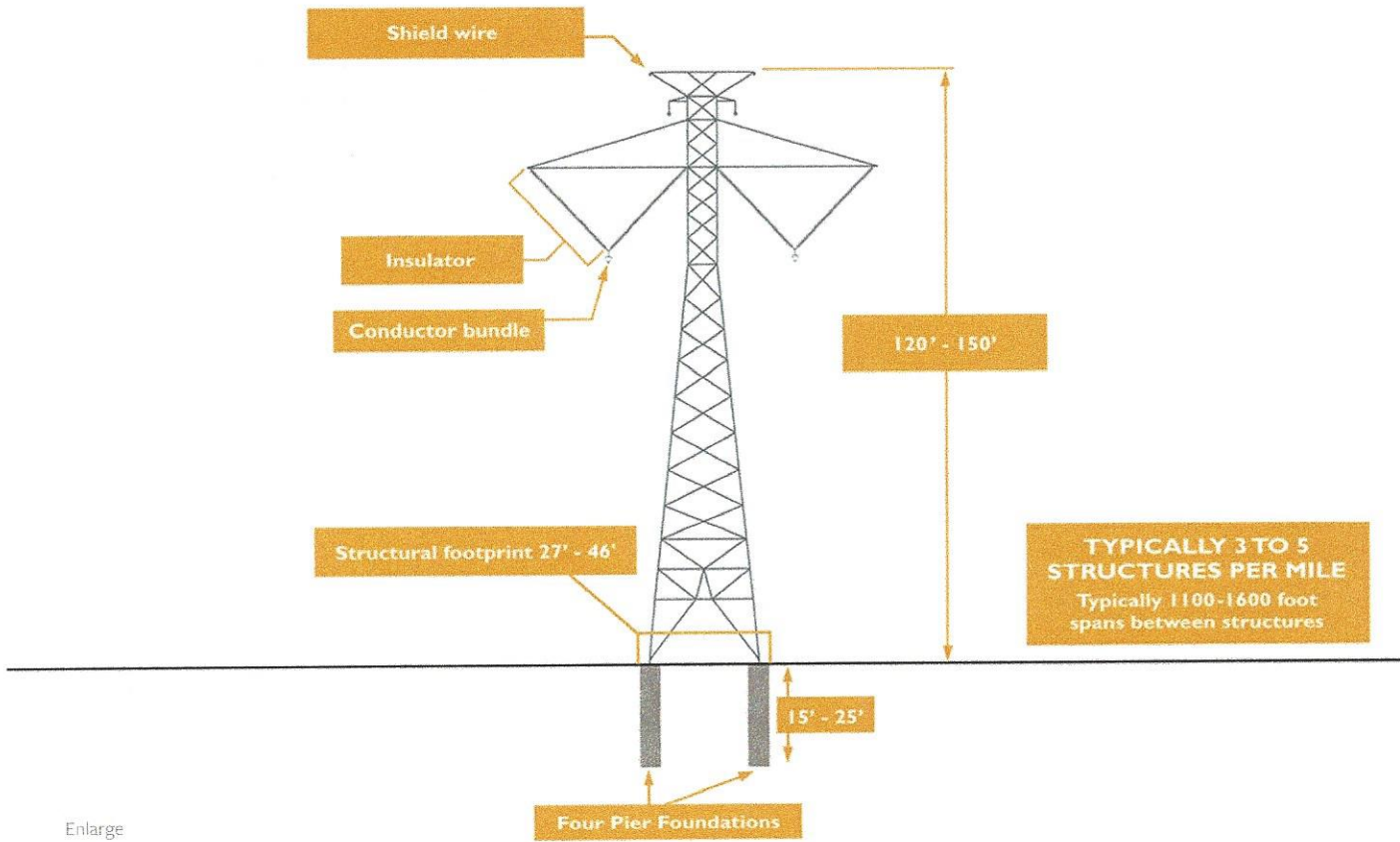
TYPICAL LATTICE MAST STRUCTURE: 110' - 140' FEET



Enlarge

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TYPICAL LATTICE STRUCTURE: 120 - 150 FEET



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