

Southern Cross Project | Overview

Pattern Energy Group LP (Pattern Development) is developing the Southern Cross Project (Project), a ±500 kilovolt (kV) high-voltage direct current (HVDC) transmission line with a base load capacity of 2,000 MW (delivered in either direction after losses) that will link abundant and cost-effective wind energy in Texas to the transmission grid and customers in the Southeast. The benefits of the Project to both regions include the production and utilization of additional renewable energy, economic development, regional power market economic benefit and increased electrical reliability through providing access to the diverse generation resources in each region.

Louisiana will be home to the Southern Cross Project's western HVDC converter station and approximately 200 miles of HVDC transmission line. The converter station will be located in DeSoto Parish at the border with Texas. The exact location of the transmission line will be determined over the next several months as we work with local, state and federal agencies, permitting entities, landowners and other parties to develop the best route. We estimate that the Project's total investment in Louisiana will be in excess of \$600 million. These investments will provide tax benefits to the numerous parishes across the state on an annual basis throughout the life of the Project.

The Routing/Stakeholder Involvement Process

We believe in completing a route evaluation process to minimize impacts to the community and the environment. That process includes notifying potentially impacted landowners and other stakeholders about the Project and offering them the opportunity to provide input.





Source: Esri, USDA, and Burns & McDonnell Engineering Company, Inc

Project Information

- The proposed Project is currently under development and is targeted to start construction in 2018 and be in service in 2021.
- In 2014, the Southern Cross Project was granted both a 210 and a 211 order from the Federal Energy Regulatory Commission (FERC) which described the need for the project as being in the public interest and the benefits of the project as:
 - Encouraging the mobilization of energy and capital
 - Optimizing the use of facilities and resources
- The Southern Cross Project proposes to construct the following facilities in Louisiana and Mississippi:
 - A HVDC Converter Station to be located in northwest Louisiana;
 - Approximately 400 miles of HVDC transmission line to be constructed across Louisiana and Mississippi;
 - A HVDC Converter Station to be located in northeast Mississippi
- The Project is planned to interconnect with the Electric Reliability Council of Texas (ERCOT) portion of the electrical grid in Texas via the Rusk to Panola Transmission Line Project near the western HVDC converter station and with the Southeast electrical grid near the eastern HVDC converter station.
- The Project will provide bi-directional power flow capability, which allows each region to either import or export power based on need or relative power price in the regions served.

Louisiana Proposed Project Schedule

There are two utility regulatory authorities with jurisdiction over the Louisiana portion of the Project. FERC has previously found that the interconnection of the Southern Cross Project to the ERCOT transmission system is in the public interest and that the Project will create substantial benefits both for the ERCOT and the Southeast regions. After considering the information provided by the public and other stakeholders, a final set of route alternatives will be identified. In accordance with Louisiana law, Southern Cross will determine the final route considering such issues as costs, environmental impacts, long range area planning, safety, and reasonable convenience to the landowners. We will also submit an application to the Louisiana Public Service Commission (LPSC) for issuance of a Certificate of Public Convenience and Necessity regarding the public interest and economic benefits of the Project. Though LPSC process does not include a specific routing consideration and determination, the LPSC may consider the appropriateness of the generalized siting.



Structure Design and Easement Information

Structure type, structure height, spans between structures, and easement widths are dependent upon the terrain, final design, and permitting requirements. On average, the height of the structures will be approximately 120 feet with spans between structures of approximately 1,000 to 1,200 feet. The typical easement width will be 180 feet.

The Project is considering using tubular steel monopole structures on the straight line runs, and lattice steel structures on the corners and crossings (such as rivers, highways, and other long spans). Other structure types are also being considered. This approach is subject to final route and design.