

Project Description

The SolaireHolman project in Brewster County, Texas is ENGIE SOLAR's first project in ERCOT. The 50 MW single-axis-tracking PV array consists of twenty-six (26) KACO BluePlanet 2200 TL3 skid-mounted power stations. The project's Point of Interconnection (POI) is American Electric Power (AEP's) 69 kV Alpine to Fort Stockton transmission line. The initial POI is a temporary line tap and, six months after COD, the POI will shift to a new AEP switching station connecting both the Alpine to Fort Stockton and Alpine to Barilla Junction transmission lines.

Need

First, EPE performed a transmission export analysis for this project and kicked off the interconnection process with the Electric Reliability Council of Texas (ERCOT). EPE modeled two 50 MW phases each connecting to separate 69kV circuits as well as connecting to both circuits through a new switching station. On behalf of the client, EPE prepared the necessary applications, studies. Secondly, EPE developed specifications for the step-up transformer and for the substation EPC solicitation, evaluated bids and advised the client in negotiating and awarding contracts. EPE served as owner's engineer, working with the engineer-of-record, providing technical support and reviewing all calculations, drawings and studies. EPE was responsible to ensure that the project complies with interconnection standards for AEP, ERCOT and good utility practice. Currently, EPE is providing support for testing and commissioning and coordinating ERCOT approvals leading to commercial operation in 2017.



EPE Services

- Full Transmission Export Analysis
- ERCOT Interconnection Study Applications
- AEP Aspen Model & Interconnection Study Data
- Main Power Transformer (MPT) Specifications
- Substation Specifications
- Bid Evaluation & Contract Award Support
- Reactive Power Compensation Study
- Full Registration RARF and ERCOT Registration Support
- Desktop Review of Design Drawings & Design System Studies
- Supervision of MPT Testing
- Substation/Interconnection Facilities Electrical Inspection
- Solar Plant Collector System Walk Through
- ERCOT Commissioning Plan
- ERCOT New Generator Commissioning Checklist Assistance
- Lead the Lagging/Leading reactive power tests, Primary Frequency Response (PFR) and Automatic Voltage Regulator (AVR) tests
- Miscellaneous Technical Support as needed

Results

EPE led this project from the planning phase to the design / engineering / procurement phase, all the way to getting the project shovel ready and acted as owner's engineer throughout the construction phase. The project energized in March 2017 and began commercial operation in April 2017. The project will make a final permanent interconnection in October 2017.

Client Testimony:

"Technical support from the EPE team was invaluable. The interface with our project partners was seamless and the interconnection process was effortless."

Matt Held, VP Asset Development