



RENEWABLE ENERGY

Since 1960, Booth & Associates has been known industry-wide as a top firm in traditional electric utility engineering. However, as renewable energy sources have become a more viable option, Booth has become increasingly competitive in this growing field. We have integrated alternative resource specialists in Solar, Biomass, Wind Energy, and Geothermal into an area of Booth's expertise. As the role of renewable energy increases over time, innovations that focus on renewable energy technologies have significant future potential in contrast to the conventional sources such as gas, coal, and oil.

SOLAR ENERGY

Solar (PV) farms are an innovative technology that have become widespread in parts of the United States, and in particular, nearby to us, in North Carolina. We can provide the full spectrum of engineering services to assist with solar farm development from the initial planning stages through the complete installation and commissioning. At Booth, we can assist with any size solar projects from <1 MW tied directly into the local distribution network or large scale (>100 MW) solar farms connected to transmission system power grid via utility substation. To date, Booth has assisted with hundreds of solar projects, whether it be the initial planning and development, substation design or solar field design.

PRIMARY CONTACTS



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RENEWABLE AREAS OF SPECIALTY

- *Economic Studies & Licensing (PPAS/ Wheeling Agreements*
- *Distributed Impact Studies*
- *Interconnect with Commercial/ Industrial Facilities or Power Grid*
- *Renewable Interconnection*
- *Solar and Wind Collector Design (AC/ DC)*
- *Fuel Spill Prevention and Control Systems*
- *Protective Relay Settings and Calibration*
- *SCADA and Plant Control*

SOLAR AREAS OF SPECIALTY

- *Civil Design/ Permitting on AHJ Requirements*
- *Software Analysis SAM, PV Case*
- *PV Array Layout / Optimization*
- *Array Elevations / Detailing*
- *Technical Support for Pull Testing*
- *Combiner Box Placement*
- *Central and String Inverter Systems*
- *Short Circuit / Harmonics Study*
- *Transient Over-Voltage / Recovery-Voltage Study*
- *Load Flow Study*

