



Sargent & Lundy

New Grid Interconnection Analytical Services

Sargent & Lundy offers numerous analytical support capabilities for all stages of the interconnection process for new generation facilities. Our services include:

Economic Analysis

- Determine the most economically advantageous location in terms of risk of curtailment or future payoff, based on locational marginal prices
- Provide insight into market procedures specific to individual Independent System Operators (ISOs)
- Utilize PLEXOS, PROMOD, or other similar software for economic dispatch and unit commitment based on power market forecasting

Interconnection Studies

These studies are performed in the early stages of project planning to determine what grid facilities would need to be upgraded to support the prospective interconnection point. This information is used to estimate the costs for various interconnection points in order to determine which location is most economically viable. Examples of these studies include the following:

- Grid load-flow/contingency analysis
- Grid short-circuit analysis
- Grid stability analysis
- Subsynchronous resonance analysis (required for interconnection near series-compensated lines)

Detailed Design Studies

These studies are performed following selection of an interconnection point and are used for specifying equipment:

- Reactive power compensation analysis in compliance with FERC Order No. 827
- Cable ampacity analysis
- Insulation coordination and transient analysis
- Safety grounding analysis
- Protection and coordination analysis
- Arc flash analysis
- Single-line development and associated studies

AREAS OF EXPERTISE

Grid Load Flow/Contingency Analysis for Interconnection

Site Selection

Interconnection Cost Evaluations

Reactive Power Studies (FERC 827)

Contact: Michelle Hack
Vice President
+1-312-269-6950
michelle.hack@sargentlundy.com

Sargent & Lundy is a full-service engineering and consulting firm dedicated exclusively to electric power and energy-intensive clients, with experienced engineers, designers, and support professionals working on power projects worldwide. Sargent & Lundy's history and extensive design experience in the power industry provide an invaluable perspective to support its clients in the assessment, development, financing, and implementation of power generation and transmission projects.

Over 125 years of powerful ideas

Sargent & Lundy

www.sargentlundy.com