

*To evaluate transmission systems, our experts rely on proven industry tools and the expertise Sargent & Lundy has gained over more than 120 years of service to the Power Industry.*

Sargent & Lundy's Power Delivery Services Group is uniquely positioned to provide a broad range of transmission system studies and evaluations for transmission system owners, ISO/RTOs, independent power producers, government entities, financial institutions, and regulatory groups. Our capabilities range from providing high-level planning support to more detailed analysis, such as short-circuit and transient stability studies. Our staff has unparalleled experience providing the following services:

#### **Generator Interconnection Studies**

Starting from first-cut feasibility studies based solely on power flow modeling, to more in-depth studies that may include:

- Short Circuit Analysis
- Transient Stability Study

These studies are performed for power plant developers, ISOs or transmission system owners evaluating new generation interconnections. Cost estimates for the system upgrades that may be required can also be provided.

#### **Power Transfer Capability Studies**

Evaluating the feasibility of transferring power to various target markets, a dual approach is taken; investigating physical limitations by conducting transfer studies, as well as researching Available Transfer Capability (ATC) on the OASIS.

#### **Transmission Screening**

High level evaluation geared towards utilities or power plant developers looking for potential sites for new generation over a large area, for instance several states or an entire ISO region.

#### **System Planning**

We work with you to analyze load growth, new generation additions/retirements, import/export capability, environmental impacts, and financial data to determine required generation and transmission infrastructure needed to accommodate system expansion, while maintaining reliability standards.

#### **Congestion Analysis**

Our services include performing analysis to determine the location of transmission constraints and estimating the costs to mitigate those constraints. Congestion analysis studies can be used for siting new generation and transmission facilities, as well as to establish the valuation of existing assets. Modeling techniques for congestion analysis can include load flow or locational marginal pricing (LMP) cases.

#### **Review of Local, State, Regional, and Federal Legislation**

Changes in legislation are identified and interpreted to determine the effect on proposed projects, including tariffs, ISO/RTO developments, and inter-NERC region arrangements.



#### **Asset Valuation**

Determining the value of transmission assets for legal proceedings, condemnation cases or potential acquisitions. Sargent & Lundy can perform asset valuations based on a number of methods, including replacement cost new less depreciation (RCNLD), market comparable, and income approach.

#### **Due Diligence Review**

Our services include performing a condition assessment of transmission and distribution assets, including reviews of operating and maintenance procedures, performance data, financial information, and organizational structure.