

Utility Consulting Services:

Distributed Energy Resource Planning



With the widespread acceptance of Distributed Energy Resources, utilities have growing concerns about their impact on grid reliability and power quality.

Distributed Energy Resources (DER) are being adopted by a rapidly growing number of utility customers. These small-scale power systems are decentralized and incorporate generation, demand management and/or storage capabilities. However, to avoid potential adverse effects for existing customers and ratepayers, end-users looking to install and operate DER must meet criteria of the interconnected utility.



Our DER Plan provides a **comprehensive report** that enables future DER owners and installers to alleviate potential concerns the interconnected utility may have relative to power system reliability and quality.

Make the most of your energySM

Schneider
Electric™

Customer Centric

Schneider Electric's team examines the operational impacts of DER projects, helping customers navigate the transition to a smarter grid. Our Circuit Impact Study includes engineering and operational analysis of the following, in addition to other **utility interconnect requirements**:

- Personnel and equipment safety
- Circuit operation and control
- Circuit protection design and coordination
- Islanding effects
- Voltage and VAR regulation
- Equipment grounding
- *[If a battery is proposed]* Battery operation, control and system integration, including recommendations on modes of operation including demand response, arbitrage and emergency operation
- Communications to battery and project tie point
- Interconnection
- Circuit power quality (harmonics, flicker, etc.)
- Circuit reliability impacts
- Inverter operation

Schneider Electric will provide conceptual design and drawings of the proposed circuit interconnection configuration and can, at the Customer's request, lead negotiations with the Utility. Once the Utility and Customer approve the conceptual design, Schneider Electric will produce a final design and drawings and an interconnect agreement including power purchase agreements to allow the interconnection of the Customer's Facility.

Schneider Electric will conduct minor modeling work as part of the Circuit Impact Study and the Utility will be asked to provide electrical models of the interconnected circuit. If an electrical model of the circuit does not exist or needs significant updates, Schneider Electric can include those tasks as part of the scope of work.

Utility Centric

DERs require complex integration with the existing electricity grid. Schneider Electric's **DER Study** examines the business, regularity and operational impacts of widespread DERs on a utility's distribution system. Working closely with a utility, we assess each of these areas and provide a broad review of a utility's readiness for DER integration — including regulatory, business, operational and technical procedures and practices. This review includes:

- An examination of a utility's current interconnect standards and agreements
- A review of current rates and tariffs related to Distributed Energy Resources
- A review of current operational and business systems related to Distributed Energy Resources
- An examination of current safety, engineering, design, and operational standards, procedures, and guidelines related to Distributed Energy Resources

The Schneider Electric team assesses needs, identifies gaps, provides the insights necessary to prepare a utility's system for the integration of future distributed energy resources.

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Why Choose Schneider Electric Consulting Services?

Our Consulting Services are delivered by energy experts with real-world utility experience.

120+

They are supported by a national network of over 120 professional engineers who are collectively registered in every state of the U.S. Having a power system engineer close by assures familiarity with authorities having jurisdiction, local codes and standards, utility systems, and operations.

For more information:



call **888-778-2733** or



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