



## ULTEIG SERVES AS ONE-STOP SHOP FOR WIDE RANGE OF UTILITY DISTRIBUTION SERVICES

### THE ULTEIG DIFFERENCE

At Ulteig, we know that utility distribution leaders need high-value projects delivered on time and on budget, meeting clients' standards and full requirements. As a quality, professional engineering firm, Ulteig does just that.

With the advent and growth of solar PV distributed resources, smart grids and smart meters, there is a significant need across the U.S. to ensure distribution systems are ready to handle more dynamic and variable conditions and loads. To help clients prepare for these changes, Ulteig focuses on its four primary service areas: field staking, grid modernization, distribution level studies analysis/planning and distribution hardening.

### SOLUTIONS

#### FIELD DESIGN & STAKING

- » *Basic Surveying*
- » *Construction Contract Administration*
- » *Easement Acquisition*
- » *Joint-Use Staking and Make-Ready Surveys*
- » *Line Inspection*
- » *NESC and Utility Specifications*
- » *Permitting*
- » *Overhead/Pole-Line Structure Design and Layout*
- » *Protection/Basic Sectionalizing Design*
- » *Sizing Transformers and Conductors*
- » *Underground Line Design and Subdivision Layout*
- » *Material Coordination*
- » *Construction Design Packages/Documents*

#### GRID MODERNIZATION

- » *Improved Distribution Grid Controls*
- » *Increased Use of Automation Systems*
  - *Advanced Distribution Management Systems (ADMS)*
  - *Integrated Volt/VAR Optimization (IVVO)*
  - *Fault Location Isolation and Service Restoration (FLISR)*
  - *Advanced Grid Intelligence & Security (AGIS)*
- » *Increased Visibility of Distribution System*
  - *Additional Data Points*
  - *Phasor Measurement Units*
  - *Advanced Metering Infrastructure (AMI)*

## DISTRIBUTION LEVEL STUDIES, ANALYSIS, AND PLANNING

» *Studies:*

- *GIS Mapping*
- *Power Quality*
- *Load Flow*
- *Volt/VAR Compensation*
- *Arc Flash*
- *Interconnection*
- *Coordination Studies*
- *Rate Studies*
- *Injection Studies*
- *Loss Reduction*

## DISTRIBUTION SYSTEM HARDENING

» *Design Criteria Development*

- » *Review of Existing System and Recommendations for System Hardening*
- » *Full Structure Analysis and Design*
- » *Review of Outage Data and Design Standards Recommendations*
- » *Underground Design*

Ulteig applies stringent quality processes to all projects to meet the specific needs of each client, leveraging its unmatched expertise in utility distribution system engineering and development with the personnel and tools to provide full-service solutions to our distribution clients from project inception through construction and commissioning.

Serving clients with timely, cost-effective services that leverage industry standards while focusing on client-intimate service and communication, Ulteig's team of distribution engineers and consultants are focused on ensuring our clients' success through a positive experience.

At Ulteig we know that your goal is to provide the most reliable, affordable power possible to your customers. Our distribution services help you balance these often competing objectives to deliver the maximum reliability returns on system capital improvements and expansions.

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## ABOUT ULTEIG

Ulteig Engineers, Inc. delivers comprehensive design engineering, program management, construction management and technical and field services that strengthen infrastructure vital to everyday life. Ulteig's footprint spans the nation and provides its expertise in multiple Lifeline Sectors®, including power (both electric utilities and renewables), transportation, water and oil and gas, to a wide range of public and private clients. To learn more about Ulteig and how we can help speed your next wind project to completion, visit [www.ulteig.com](http://www.ulteig.com).



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We listen. We solve.™