

Distribution Services

K&A distribution services division provides full-service electrical, structural, and civil engineering services to support electric utilities distribution systems. Our capability to react quickly with advanced, budget-sensitive solutions is the key to providing the level of provision clients have come to expect. Our team of experts recognizes the challenges of modernizing and growing an aging infrastructure to support the new and ever-increasing demand for power capacity.

Services Offered:

- DER System Impact Studies (SIS)
- Overhead Distribution Design Services (DDS)
- Underground (URD) DDS
- Distribution System Load Forecasting
- Pole Loading Analysis
- Root Cause Investigation Analysis

DER System Impact Studies:

- Load flow
- Voltage Flicker
- Voltage Regulation Mode
- Short Circuit Current
- Protection Review
- Effective Grounding
- Harmonic Evaluation
- Anti-Islanding
- Upgrade Cost Estimation

End-to-End

overhead & underground distribution design

2.4 kV to 34.5 kV

distribution voltage range expertise

100%

utility standards-compliant designs

Complete Overhead DDS:

- OH distribution design per improvement diagrams
- Utility standards-based design
- Guying & slack span calculations
- Transformer loading calculations
- AutoCAD & MicroStation proficiency

Complete Underground DDS:

- Scaled underground residential design direct buried
- Scaled conduit and maintenance hole system design Cable tension calculations
- Staking of GME

Pole Loading Analysis:

- Damaged asset identification & remediation
- Accurate load calculations for design
- Pole loading support for 3rd-party applications
- Overloaded pole identification & replacement
- Improved public safety & system reliability
- Illegal attachment detection & resolution

Root Cause Investigation:

- System abnormality & damage investigations
- Event data collection & analysis
- Load flow, transient & protection coordination studies

