

Distribution Design

Innovative Solutions to Meet Growing Utility Demands

Future-Ready Solutions for Evolving Distribution Networks

EPE develops solutions that not only meet current demand but also anticipate future growth and seamless renewable integration. By leveraging advanced technology, strategic planning, and deep industry expertise, we enhance resilience and adaptability, ensuring your infrastructure evolves with energy demands and remains future-ready.



Why EPE



Industry-Leading Expertise

EPE brings industry-leading expertise to help utilities with distribution system expansion and grid hardening. To deliver quality and value, our experts focus on building strong client relationships and serving as an extension of a utility's internal team.

Our services are supported by our expertise in ArcFM, ArcGIS, AUD, AutoCAD, EFD, Maximo, NISC Software, O-Calc, PLS-CADD, PoleForeman, SAP, SPIDAcad, and WMIS.



Customized Solutions to Accommodate Future Growth

From concept to implementation, our team provides a customized approach that meets regulatory standards and enhances grid performance, equipping your infrastructure to meet evolving energy demands with confidence.

Our Focus Areas

Underground Engineering

- Overhead to underground conversions
- Underground utility coordination
- Duct bank and manhole layout design
- Cable pulling tension and sidewall pressure
- Transformer and switchgear selection and placement

Reliability & Resiliency Initiatives

- Implementation and analysis for covered conductor
- Implementation of specialty utility poles
- Implementation of grid modernization devices
- Feeder tie design for redundancy
- Loop scheme design for reliability
- Wildfire mitigation and grid hardening advisory services

Maintenance Programs

- Pole/cable replacement programs
- Inspection program
- Business case analysis
- Project coordination/communication, permit coordination
- Risk assessment
- Streetlight replacement

Field Services

- Field inventory
- Staking services
- Drawing development
- Pole staking sheet development
- As-built drawing updates from field redlines
- Work location and CU list preparation
- Field data collection using IKE device
- Field data collection using hot stick method

General System Requirements

- Voltage conversion
- Reconductoring
- Line extensions
- Service reroutes for roadway reconstruction
- Streetlight and traffic signal power design

Joint Use/Pole Attachments Services

- Wireline attachments
- Antenna attachments
- Streetlights
- Node poles
- Clearance analysis, overlash analysis, and make-ready design

Owner's Engineering

- Standards development
- 30%, 60%, and 90% design review
- Material bid specifications, procurement, and contracts
- Asset management
- Field assessment of exiting infrastructure
- Construction Unit ID (CID) consolidation
- Infrastructure upgrade recommendations

Your Trusted Energy Partner

EPE supports clients across the energy ecosystem with end-to-end solutions. Our work spans utility engineering, grid integration, regulatory compliance, and advanced analytics—delivered with the expertise needed to navigate the energy landscape. As consultants, engineers, and technologists, we act as an extension of your team, bringing decades of experience and a shared commitment to building a resilient, reliable, flexible, and affordable energy future.

Let's Engineer Success Together

Visit epeconsulting.com/solutions/distribution-planning-engineering to learn how EPE can accelerate your next project with confidence.

