

Distribution Resiliency

Practical Grid Strategies in a Changing Risk Landscape

From Risk Insights to Resilient Infrastructure.

EPE helps utilities build smarter, stronger, and more adaptive distribution systems. Extreme weather events, wildfire risk, and evolving regulatory requirements continue to challenge utilities. Our services span strategy through implementation. We combine risk assessment, climate data integration, and circuit-level vulnerability analysis.



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 Python Coding, AUD, ArcFM, ArcGIS, AustCAD, Maximo, NISC Software, O-Calc, PLS-CADD, PoleForeman, SAP, SPIDAcad, WMIS Cyme, Synergi, Windmill, ETAP, and other software.



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

Technology Evaluation & Awareness

- Industry benchmarking
- Technology landscape review
- Remote sensing and monitoring (weather, sensors, LiDAR, etc.)
- Advanced distribution automation
- Fault detection, isolation and restoration (FDIR)
- Predictive analytics and AI use cases
- Vendor evaluation/pilot identification

Resilience Strategy & Planning

- Resilience vision and strategic roadmap
- Hazard-agnostic planning (wildfire, storm, vegetation, asset risk)
- WMP/resilience plan development (as applicable)
- Cost-benefit analysis
- Investment planning and phasing

Risk Assessment & Prioritization

- Risk mapping and vulnerability analysis
- Climate data integration
- Circuit/asset risk scoring
- Resiliency metrics and prioritization
- Long-term investment planning

Mitigation Framework

- Grid hardening
- Covered conductor
- Undergrounding
- Pole hardening/replacement
- Long spans/reconfiguration
- Operational practices
- PSPS strategy
- Vegetation management
- Optimization models and decision support

Implementation

- Standards development
- Operational process development
- Project scoping and model development
- Design prioritization framework
- Integrated planning/program execution

Regulatory Support

- Expert witness testimony
- Rate case support
- WMP/resilience plan testimony
- CBR development and justification

Additional Resiliency-Focused Design Services

- Storm/grid hardening
- Distribution automation
- Targeted undergrounding
- Design program quality reviews
- Wildfire mitigation planning and implementation
- Project scoping
- Project/program management
- Field data collection and processing

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

