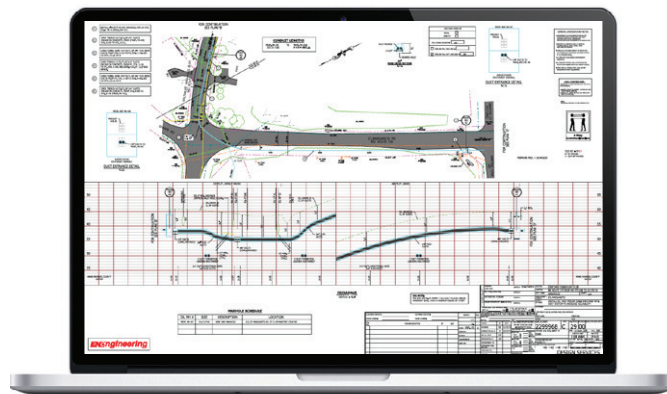


# ELECTRIC DISTRIBUTION DESIGN

## OUR SOLUTIONS

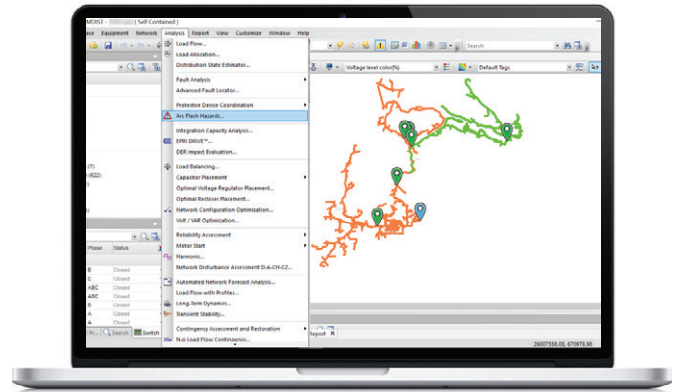
EN Consulting has extensive design experience working with major electric utilities. Our experience encompasses the full power delivery system, transmission and distribution, with an emphasis on system expansion, reinforcement, repair, and modernization. We work seamlessly alongside our utility clients' in-house teams, extending and enhancing their capabilities and working with their standards, work management systems, and design software. We also can develop project-specific standards packages and prepare designs using our own in-house software. Ancillary services are also available, including land surveying, property acquisition assistance, geotechnical engineering, environmental/jurisdictional permitting, facility inspection, construction inspection, and construction management.



Our staff includes expert engineers and design technicians with decades of electric utility experience, who are trained in-house to work with each of our clients. We take great care to match the proper resources to the assignment, ensuring high quality, high volume production, while providing service value.

## SERVICES

- Capacity expansions/system reinforcements/voltage conversions
- Circuit segmentation/self-optimizing grid (SOG) designs
- Downtown network (primary, secondary, nodal) inspections and design
- Underground vault inspections and structural/civil design
- New business inspections and design (industrial, commercial, residential)
- Facility relocation/public improvements
- Coordination with other utilities
- Permit application services
- Joint use/third party attachment inspections and design
- Make ready inspections and design
- NESC/utility design standards review and analyses
- Bore/drill plan and profile designs
- Fiber, telecommunication, and RF antenna design
- Geospatial analyses, design, and input
- NESC line clearance inspections and design support
- Steel monopole and foundation design
- Pole testing, inspection, and equipment inspection services
- Sediment erosion control and stormwater retention plans
- Static wire replacement/upgrade design
- Traffic control plans
- Outdoor lighting design
- Damage assessment and repair planning



## TOOLS UTILIZED FOR T&D PROJECTS

- **Structural Analysis Tools**
  - » PoleForeman/PoleForeman Lite
  - » PLS-CADD/PLS-Pole/TOWER (Transmission)
  - » SPIDAcad
  - » O-Calc/O-Calc PRO
  - » SAG10 (Transmission)
- **GIS/Design Tools**
  - » Smallworld/ATLAS/MyWorld
  - » GTech
  - » Esri
  - » Design-Expert/BOUD
  - » GIS Web
  - » ARAMIS-DT
  - » ASPEN
- **Drafting Software**
  - » AutoCAD
  - » Revit
  - » MicroStation
- **Work Management Tools**
  - » Maximo
  - » WMS
  - » MLOG
  - » Asset Suite
  - » STORMs
  - » SAP