



PLANNING, ROUTING AND PERMITTING

Ulteig has the expertise and capabilities to perform all types of transmission, distribution, and generation system planning and related economic studies. We help our utility clients weigh the myriad of alternatives in the current energy market climate to make informed decisions. Our experience working with public agencies and knowledge of local, state and federal regulations allows us to carefully manage your project to balance the needs of all stakeholders, while delivering efficient, cost-effective solutions.

TRANSMISSION PLANNING STUDIES

We perform a future-looking assessment of requirements; taking into account existing system, projected/expected growth in load demand and generation resources, and future uncertainties. Our planning services are based on extensive knowledge in the following analytic skills:

- Power flow
- Short circuit including ANSI standard breaker duty analysis
- Transient & dynamic stability
- Voltage stability
- Reliability evaluation
 - Deterministic approach
 - Probabilistic approach
- Open access & pricing
 - Feasibility of transaction events
 - Impacts of transaction events
- Reactive power compensation
 - Series & shunt compensation
- AC & DC transmission
- Relay protection
- EMF assessment
- Transfer limits
- Loss evaluation
- Power quality studies
- Economic analysis

Our staff understands the challenges of the current market and knows how to deliver electricity, fossil fuel and renewable energy resources. Our full service practice offers comprehensive planning, routing and permitting, engineering, surveying and right-of-way acquisition services.

OUR EXPERIENCE

Ulteig provides solutions to power system problems with our combination of experience, analytical techniques, industry software tools, NERC's and other Regional Reliability Organization's Reliability Criteria and customer focused services.

- Transmission short & long range planning studies
- Transmission grid expansion
- Generation inter-connection feasibility and/or impact studies
 - Conventional
 - Renewable
- Wind farm modeling
- Transmission tariffs studies
- Load management studies
- Power factor studies
- Development of operating procedures & guidelines
- Siting studies
 - Generation & Substation
- Line mapping/routing studies
- Liaison services
 - NERC/FERC regulatory compliance
 - Organizational liaison
 - Government
 - Utility/pools/cooperatives
 - RTOs/ISOs
- Capital budget plans
- Design studies that optimize
 - Electrical factors
 - Mechanical factors
 - Environmental & economic factors
- Construction work plans
- Facility permitting/regulatory support
- Economical conductor studies
- Project closeout

