

**Ulteig**

We listen. We solve.®



## STATEMENT OF QUALIFICATIONS

POWER



## ULTEIG POWER QUALIFICATIONS

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# ULTEIG OVERVIEW

Ulteig is a leader in the engineering industry. We are a team of forward-thinking, innovative experts who make critical connections, putting together the complex, multi-disciplinary strategies needed in today's rapidly changing power industry.

## THE VALUES AT OUR CORE

<b>CLIENT SUCCESS</b>	We create exceptional value through our expertise and collaborative approach.
<b>INTEGRITY</b>	We are authentic and always do what's right.
<b>ENTHUSIASM</b>	We are passionate about the work we do and have fun doing it.
<b>INCLUSION</b>	We seek diverse backgrounds, empower all voices, and value all perspectives.
<b>AGILITY</b>	We act with speed, flexibility and balance.
<b>INNOVATION</b>	We leverage ingenuity and foster creative outcomes.

**EMPLOYEE OWNED**



**1,600+**  
EMPLOYEES

**300+** LICENSED  
PROFESSIONAL ENGINEERS



**230+**  
SUBSTATION  
EMPLOYEES



**170+** AUTOMATION,  
INTEGRATION AND SYSTEM  
PROTECTION EMPLOYEES



**110+**  
T&D  
EMPLOYEES



**120+**  
CIVIL  
EMPLOYEES



**300+**  
ENERGY SOLUTIONS  
EMPLOYEES



**90+**  
FIELD SERVICE EMPLOYEES



## TOP AWARDS AND RECOGNITIONS



ENR TOP 500  
DESIGN FIRMS  
#100



DENVER TOP  
WORKPLACE



STAR TRIBUNE: MINNESOTA'S  
TOP WORKPLACES



ENGAGE  
INNOVATION



USA TODAY TOP  
WORKPLACE





# POWER MARKET OVERVIEW

America's power grid and infrastructure have come under increasing challenges in three key areas: **asset management, grid modernization and operational excellence**. Ulteig is the partner of choice for future-focused power companies that are looking at overcoming these challenges with integrated, expert solutions that produce exceptional results.

## WHO WE SERVE:

- CONSTRUCTION CONTRACTORS
- ELECTRIC UTILITIES
  - INVESTOR-OWNED UTILITIES (IOUs)
  - ELECTRIC COOPERATIVES
  - MUNICIPALLY-OWNED ELECTRIC UTILITIES

## OUR SOLUTIONS:

- RELIABILITY AND RESILIENCY
- AGING INFRASTRUCTURE UPGRADES
- SMART GRID TECHNOLOGY
- RENEWABLE INTEGRATION

## OUR POWER EXPERTISE:

- SUBSTATION
- TRANSMISSION
- DISTRIBUTION
- SYSTEM INTEGRATION
- GRID MODERNIZATION
- ENERGY STORAGE

# TECHNOLOGY INNOVATION

The technological landscape at Ulteig has undergone a profound transformation, ushering in an era of innovation and capability enhancement for our clients. Integrating AI, advanced data analytics, building information modeling (BIM) and automation has enabled us to deliver more sophisticated and efficient services. As a result, we are positioned at the forefront of technological innovation, ready to tackle the evolving challenges of tomorrow with agility and insight.



## WHAT'S NEXT:

Ulteig's Technology and Innovations team is actively leveraging:

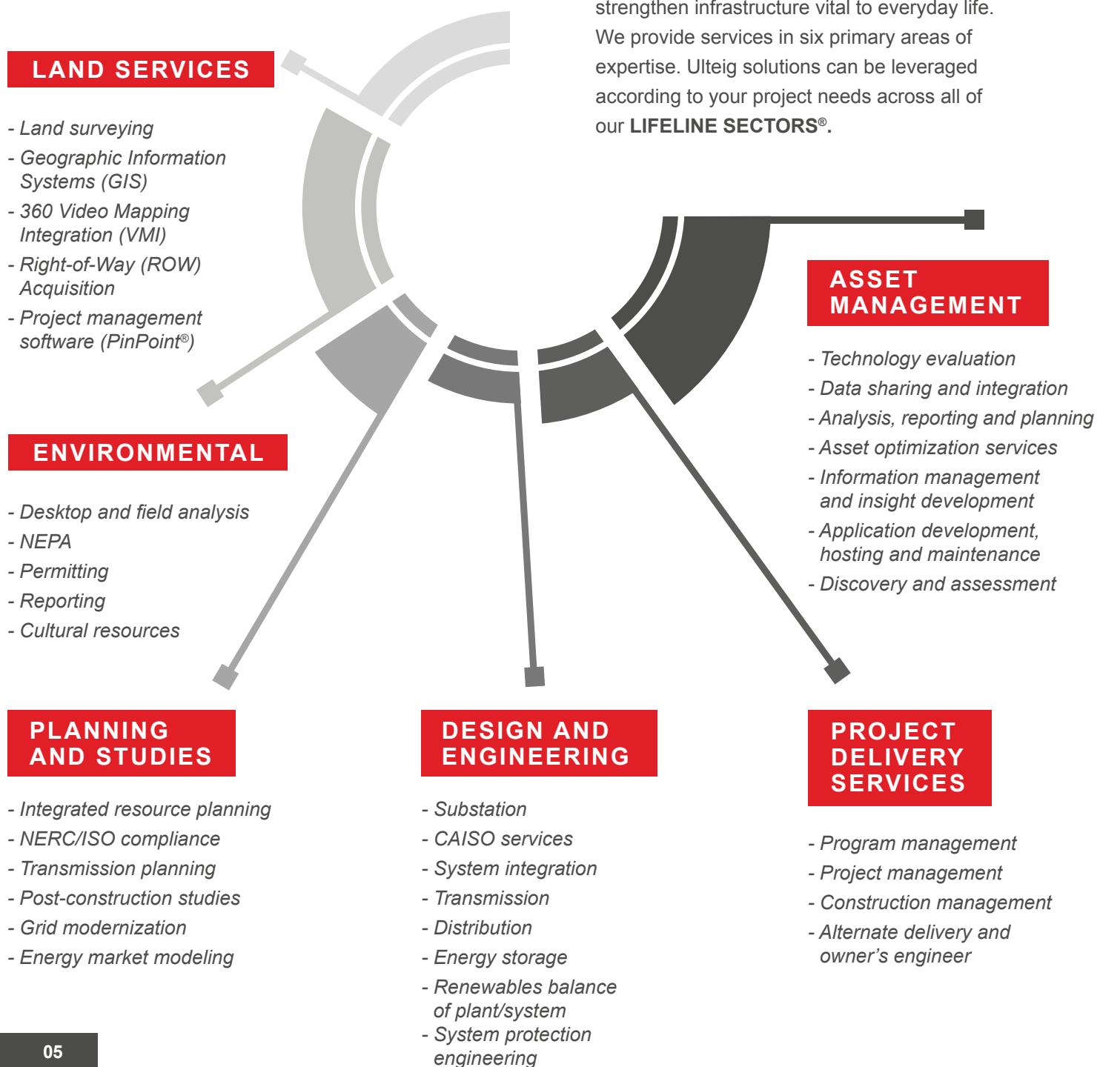
- 1 NEW, MIXED AND AUGMENTED REALITY TECHNOLOGIES**
- 2 AUTOMATED CONSTRUCTION EQUIPMENT**
- 3 DESIGN AUTOMATION AND GENERATIVE DESIGN**
- 4 VARIOUS AI TECHNOLOGIES**
- 5 3D MODELING / BIM (BUILDING INFORMATION MODELING)**



**MELISSA WASTELL** | ASSOCIATE DIRECTOR, DIGITAL DESIGN

We have entered an era in which the pace of innovation has accelerated dramatically. AI, design automation, and generative design are at the forefront of this transformation, evolving into essential functions that drive our services. These technologies empower us to push the boundaries of creativity and efficiency, opening up new possibilities in engineering solutions. As we build upon this technological foundation, we are set out to redefine problem-solving in our industry, delivering unparalleled value and innovation to our clients.

# INTEGRATED SOLUTIONS



# PROJECT PROFILE

## NEWPORT SUBSTATION INTERCONNECT | WAPELLO, IA

Central Iowa Power Cooperative (CIPCO) embarked on a project to reconfigure its Newport Substation and add a line in response to a request for a solar interconnection. The substation, located slightly to the south of Wapello, Iowa, serves as an access point for generation onto CIPCO's eastern Iowa power grid.

"Based on our experience with substations and interconnects," said Patrick Deibel, P.E., a technical manager with Ulteig's substation team, "Ulteig was awarded the design to reconfigure the Newport Substation and connect it with a new solar project being built on 800 acres adjacent to the substation."

Working on the Newport Substation was familiar ground for Ulteig's engineers. Just two years earlier, Ulteig assisted CIPCO in the redesign of a 161 kV ring bus to expand the Newport Substation to provide more reliability to the overall system. During the start of design and construction in 2017 and 2018, a future line position was not needed, but the new design was added to provide for future positions to be integrated into the expansion.

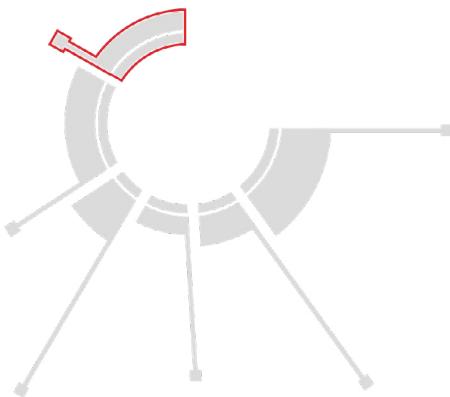
### SERVICES USED:

- Substation design
- Project management

### PROJECT AWARDS:

- National Recognition Award in the American Council of Engineering Companies (ACEC) 2021 Engineering Excellence Awards (EEA)
- Grand Prize Award in the Energy Production Category of ACEC Iowa's 2021 Engineering Excellence Awards





# LAND SERVICES

Ulteig has the distinct combination of capacity and experience to deliver a wide range of land, GIS and surveying services to meet your specific project needs. We provide a one-stop shop for our clients, which can fast-track a project and reduce coordination efforts and risk. Our in-house land service capabilities are comprehensive and adaptable to support your project goals.

## LAND SURVEYING

- Cadastral surveys
- Boundary surveys
- ALTA/NSPS land title surveys
- Micrositing
- Utility locating – Quality level B
- Due diligence and constraint analysis support
- Control surveys
- Land divisions and subdivision platting
- Easement surveys and land descriptions
- Mapping
- Topographic design surveys
- Construction staking surveys
- Pre and post construction haul route road scan
- UAS Data Acquisition and LiDAR
- Terrestrial Scanning

## RIGHT-OF-WAY ACQUISITION

- Roadway, large-scale electric transmission and pipeline corridors
- Utility scale renewable projects
- Relocation assistance and services
- Land acquisition
- Title research
- Crop damage assessments
- Lease program management

## GEOGRAPHIC INFORMATION SYSTEMS

- Geometric network modeling
- GIS needs assessments and implementation plans
- Mobile mapping solutions
- Site selection
- Suitability modeling
- Utility mapping and modeling

# CONSULTATIVE AND ADVISORY SERVICES

By leveraging Ulteig's expertise, our power clients can enhance their operational efficiency, streamline processes, and implement innovative solutions tailored to the energy sector. Ulteig's consulting services will provide strategic insights and actionable recommendations, helping clients navigate complex regulatory environments, optimize resource allocation, and improve overall performance.

Additionally, Ulteig's deep industry knowledge and technical proficiency will ensure that clients stay ahead of technological advancements and market trends, ultimately leading to increased competitiveness and sustainable growth. Our team of consultants is dedicated to assisting clients in achieving their objectives, including safety, reduced outages, enhanced system resiliency, cost efficiency, resource optimization, and risk mitigation.

## TECHNICAL CONSULTING

- Owner's Engineer Advisory Services \*
- Energy Market Modeling
- Interconnection Application Services
- Policy Advisory Services

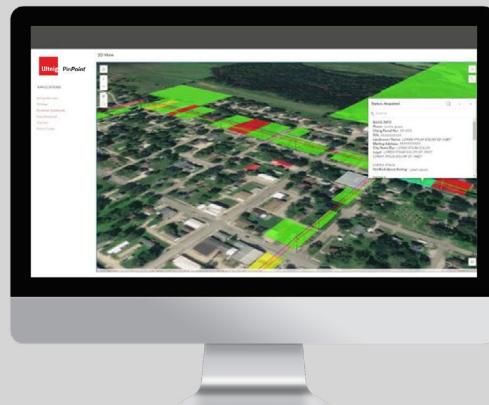
## MANAGEMENT CONSULTING

- Grants & Funding Services
- Business Process Design and Re-engineering
- Supply Chain Consulting \*
- Change Management
- Technology Advisory Services \*

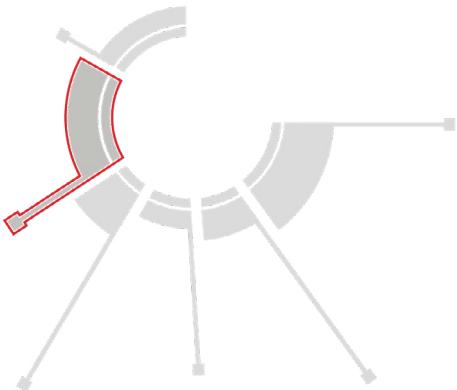
*\* Pathfinder™ support consulting*

## LEVERAGING TECHNOLOGY TO DELIVER SUSTAINABLE VALUE TO CLIENTS AND THEIR CUSTOMERS

Ulteig's proprietary decision-support tool, Pathfinder™, is cutting-edge software designed to assist our teams manage the complexities of modern energy infrastructure consulting. Powered by Ulteig's extensive engineering expertise, Pathfinder™ optimizes technology investments for substation and transmission assets, delivering significant savings in time, money, and resources. For organizations with complex or dynamic needs, Pathfinder™ offers customizable frameworks, adaptable content, and seamless integration with Ulteig's consulting expertise.



# ENVIRONMENTAL



Ulteig's environmental team delivers comprehensive and innovative solutions to achieve environmental clearance for all your project needs. Our diverse team of environmental professionals are recognized as leaders in the industry to aid projects from upfront field resources surveys through local, state and federal permitting, to environmental construction inspection. Our environmental staff works hand in hand with the design team as a collaborative effort to ensure your projects move forward in an expeditious manner to meet project schedule, cost and quality expectations.

## ENVIRONMENTAL

### NEPA

- CATEX, EA, EIS
- Agency Coordination, Public and Stakeholder involvement
- Administrative Record

### NATURAL RESOURCE FIELD SERVICES

- Aquatic Resource Surveys
- Migratory Bird, Bat and Raptor Surveys
- Threatened, Endangered, State Listed Species and Habitat Surveys
- Storm Water Pollution Prevention Plan Inspection
- Biological and Botanical Surveys

### ADDITIONAL SERVICES

- Viewshed Analysis
- Noise Analysis, Abatement and Reporting
- Construction Monitoring
- Habitat Conservation Plans
- Phase I/II Environmental Site Assessment
- Asbestos Inspection
- Critical Issues Analysis
- Project Routing

### PERMITTING

- Federal, State, Local
- Clean Water Act (Section 401, 402, 404, 408)
- Incidental Take Permit
- Stormwater Pollution Prevention Plan Inspection
- Public Utilities/Service Commission

### CULTURAL RESOURCES

- Manuscript and Records Search
- Cultural, Historical and Architectural Survey
- Native American Consultation
- Report of Investigation
- Survey, Evaluative Testing and Mitigation
- Unanticipated Discovery Plan

# PROJECT PROFILE

## BAYOU TO ELIZABETH 115kV REBUILD | COLORADO

CORE, a large Colorado cooperative, embarked on a project to develop a 115 kV transmission line and engaged Ulteig to manage engineering design, environmental assessments, permitting, land acquisition and transmission engineering to support the project.

Ulteig's work began with a desktop evaluation to identify environmental resources within the project area, followed by a field visit to verify conditions, assess habitat suitability for federally and state-listed species, and identify wetlands. Before construction began, an avian nest survey was conducted to locate raptor and eagle nests, ensuring compliance with Colorado Parks and Wildlife guidelines.

From there, Ulteig provided land acquisition services by researching public records, identifying property owners along the transmission corridor, and preparing notification letters for the pre-design and pre-construction phases. A permit matrix was also created to streamline the identification of required state and county permits.

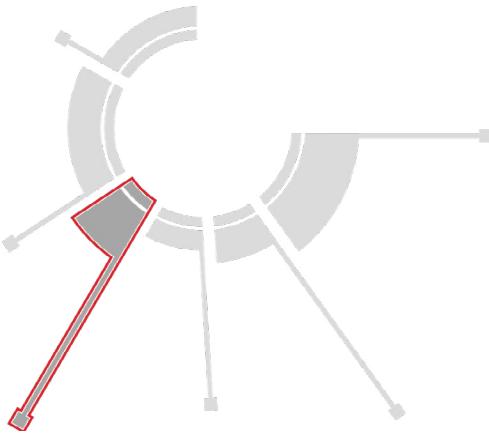
Through this comprehensive approach, Ulteig enabled CORE to successfully advance its transmission project while maintaining adherence to environmental and regulatory standards.

### SERVICES PROVIDED:

- Environmental planning and monitoring services
- Transmission planning



# PLANNING AND STUDIES



Our team provides insightful data and analysis to help guide clients to make decisions, communicating potential pitfalls and providing future project considerations to maximize long-term value. We manage all aspects of studies in-house, resulting in better efficiency and communication, and give you direct and reliable access to our team.

## POWER SYSTEM STUDIES

### TRANSMISSION PLANNING

- Energy market modeling and integrated resource planning
- Transient and dynamic stability studies
- Power flow and contingency analysis
- Economic conductor analysis
- Interconnection studies
- Wide area studies for multi-resources
- TPL-001 study
- Cascading failure analysis
- Transmission line path studies
- Mitigation solutions for multiple voltage and thermal violations
- Microgrid and virtual power plant analysis
- Energy market modeling

### POST-CONSTRUCTION STUDIES

- Capacitor bank switching studies
- Fuse/breaker coordination studies
- Transient Recovery Voltage (TRV) studies
- Post-construction harmonic metering and analysis

### NERC/ISO COMPLIANCE

- Transient and dynamic stability studies
- Power flow and contingency analysis
- Complete network dynamic stability studies for NERC 754 critical clearing and cluster studies



## GRID MODERNIZATION AND DISTRIBUTION PLANNING

- GIS mapping of the electric system
- Distribution planning and studies
- Fault current, power flow, voltage drop, coordination, load balancing
- Electric system model development
- Power quality
- Peak demand management
- Volt/VAR optimization
- System reliability
- Grid resiliency
- Automated fault location, isolation and service restoration
- Conservation voltage reduction
- Distributed Energy Resources (DERs) impact analysis
- Grid modernization and technology road map development
- Policy changes
- EV impact analysis

**GRID MODERNIZATION CYCLE** – We partner with electric utilities to develop future-ready modernization strategies designed to anticipate and meet the energy supply and demand challenges of the years ahead. We use a set of unique criteria, along with an electric system model, to customize a solution to meet your needs. Solutions typically include one or more of the following principles: **RELIABILITY, RESILIENCY, HARDDENING, VISIBILITY, ADAPTABILITY AND SYSTEM INTEGRATION.**

### 1 SYSTEM EVALUATION AND FRAMEWORK DESIGN

Since every utility is different, the first step is to evaluate your utility's individual systems to determine its unique needs, identify current issues and discover high-risk areas. From there, we can develop a solution to address your specific goals.



### 2 COMMUNICATION, NETWORK AND DATA MANAGEMENT

The overall effectiveness of Grid Modernization implementation is enhanced by including a secure communication network and a method for managing incoming data. This isn't a one-size-fits-all solution, so we can help find one to suit your needs.



**BLUEPRINT**

### 4 DATA ANALYTICS PROCESSING

Once a design is implemented, the final step is to think about how data is not only captured, but also processed, stored and interpreted. Our experts can help you lay out and enable a process that uses this information to your utility's maximum benefit.

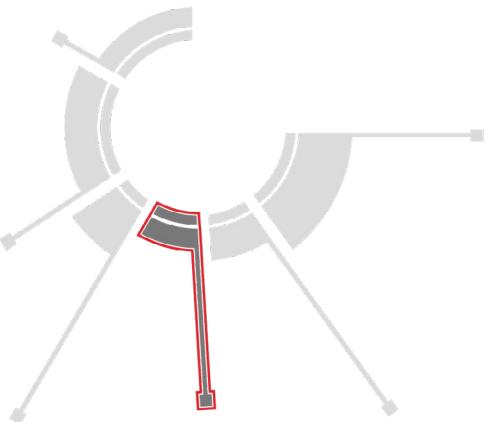


### 3 TECH SOLUTIONS AND FIELD IMPLEMENTATION

The next step is to complete the Grid Modernization project and implement it into your system. Critical decisions need to be made regarding overall design, implementation and vendor selection. Ulteig can help you navigate through these difficult hurdles.



# DESIGN AND ENGINEERING



## SYSTEM PROTECTION ENGINEERING

Ulteig's System Protection Engineering services encompass the full range of asset protection, from generation to distribution across greenfield and brownfield projects. Our tailored solutions are designed to meet the unique needs and standards of each client. From large utilities to owner-operators, we deliver reliability, security, dependability and compliance, ensuring your systems are robust and future-proof. Our services include the development of relay settings and coordination studies, third-party/OEM setting reviews, event analysis and troubleshooting, verification of NERC PRC compliance and relay testing and commissioning support.

Our team has extensive experience in performing relay and coordination studies, which include line, bus, breaker, shunt reactor, shunt capacitor, transformer, feeder, hydroelectric generation and motor protection. We strive to understand each client's protection philosophy and develop relay settings and reports consistent with their practices. If you don't have a standard, we have the expertise to develop comprehensive protection solutions to protect your assets by balancing security, dependability, cost and safety.

- Protective relay setting development and coordination
- Line protection
  - Pilot communication-assisted schemes (POTT, DCB, DCUB, line current differential)
  - Mutual coupling
  - Multi-terminal lines
  - Long or short-line applications
  - Weak terminals
- Power swing blocking/tripping
- Distribution feeder protection
- Feeder protection (wind or solar)
- Transformer protection
- Bus protection
- Breaker failure protection
- Reclosing
- Shunt reactor bank protection – dry type or oil-filled
- Shunt capacitor bank protection
- Generation protection
- Motor protection
- DER interconnection protection
- IEC 61850 GOOSE messaging
- Event report analysis and investigation
- NERC PRC compliance analysis/reports
- Protection design

# SUBSTATION

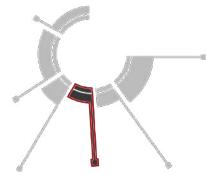
Ulteig has decades of experience in extra high, high and medium voltage substation design. In addition to substation design, Ulteig offers protective relay settings and metering services.

- Greenfield and station modifications from 5kV to 500kV
- Project scoping
- Preliminary arrangement
- Site selection
- Siting and permitting support, including photo renderings
- Facility studies
- Construction estimating and support
- Grading, erosion control and storm water design
- Stormwater Pollution Prevention Plan (SWPPP) and Inspection
- Control equipment enclosure
- specification, design, procurement and factory acceptance testing
- Auxiliary power system design
- Station battery system sizing
- Fault coordination studies
- Electrical control and design
- Physical design
- Structural steel design
- Structural foundation design
- Material ordering, tracking and expediting
- Equipment specifications
- Programmable Logic Controller (PLC) and Human-Machine Interface (HMI) programming
- Main Power Transformer specifications, procurement and factory acceptance testing
- Protective relay setting development
- System Control and Data Acquisition (SCADA) and network design
- Spill Prevention, Control and Countermeasure (SPCC) plan
- Event analysis and evaluation
- Lightning protection
- Resistivity testing and grounding design
- 3D design and rendering

# CAISO SERVICES

## CALIFORNIA INDEPENDENT SYSTEM OPERATOR RIG AND METER ENGINEERING CAISO NRI PROCESS MANAGEMENT | CAISO ANCILLARY SERVICES

- Revenue meter design and integration
- Complex metering schemes
  - Scheduling Coordinator Metered Entity (SCME) Metering
  - CAISO Metered Entity (ISOME) Metering
- Remote Intelligence Gateway (RIG) design and integration
- RIG certification renewals
- RIG reconfiguration
- New Resource Implementation (NRI) process management
- Energy Imbalance Market (EIM) process management
- Energy Communication Network (ECN) facilitation
- Qualifying Facility (QF) conversions
- Equipment specification and procurement
- Site surveys
- Remote and in-field support
- Design compliance review
- Milestone and deliverable tracking
- Annual meter maintenance
- Meter Re-Certifications
- Load profile data retrieval
- Troubleshooting and repair



# SYSTEM INTEGRATION

Ulteig's team of System Integration professionals offers an extensive set of Supervisory Control and Data Acquisition (SCADA) and networking design services. These services can be part of an upfront collaborative effort on a greenfield site or added to an existing site. Our experts will work with you to deliver a customized solution that meets your specific needs.

- SCADA design and integration
  - RTU programming
  - Custom HMI display development
  - SCADA commissioning
  - Systems audit
  - Systems upgrade/refresh
  - Plant optimization
  - NERC CIP compliance
  - Owner's engineering
  - Network hardening
  - Network monitoring
- Network design and integration
- Historical data collection and custom reporting
- System event alerts
- Alarm scheme design and integration
- Custom coding
- Trending display configurations
- Synchrophasors
- Plant control for PV and BESS

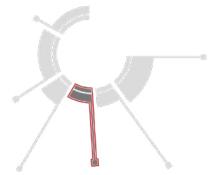
OUR ENGINEERS TEST COMMUNICATIONS,  
I/O AND PROGRAMS/CONFIGURATIONS IN OUR  
**ADVANCED ENERGY LAB (AELAB),**  
A CONTROLLED ENVIRONMENT DESIGNED TO MIMIC MULTIPLE  
SUBSTATION CONFIGURATIONS.

# TRANSMISSION

Ulteig's Transmission Line team brings unparalleled expertise and dedication to every project, guiding clients seamlessly from initial concept through detailed engineering and construction. With a deep understanding of the complexities involved, they ensure each phase is meticulously planned and executed, leveraging innovative solutions to deliver high-quality results. Starting from conceptual routing studies, feasibility analysis, establishing performance specifications and standards through permitting, and detailed design for lines up to 500kV, our team is prepared to handle every aspect of your project.

- Transmission line design up to 500kV
- Environmental permitting support
- ROW acquisition support, including 3D renderings
- Project planning and scoping
- Transmission Line Routing Studies
- Design criteria development
- Facility studies
- Shielding, grounding and lightning studies
- Electromagnetic Field (EMF) studies
- Audible Noise (AN) studies
- Underground design
- Steel design
- Lattice tower analysis
- Foundation design
- Optical Ground Wire (OPGW) replacements
- Line capacity studies
- Switch design
- Structure design and analysis
- Stormwater Pollution Prevention Plans (SWPPP)
- Material procurement support and specifications
- Construction specification, management, observation and support
- Reconductored studies and projects
- Transmission line ratings
- Technical training
- Owner's engineer support
- Integrated transmission planning





# DISTRIBUTION

At Ulteig we pride ourselves on the level of field experience our engineers have and continue to practice. Many of the engineers in our distribution group started their careers in the field and continue to use that gained knowledge to benefit our clients. Once a complete design is delivered to our clients we continue to be in contact with them throughout the construction process to ensure they understand and are satisfied with all aspects of our design.

## DISTRIBUTION SYSTEM HARDENING

- Design criteria development
- Full structure analysis and design
- Review of existing system and recommendations for system hardening
- Review of outage data and design standards recommendations
- Underground design
- Strategic underground analysis and recommendations
- Reliability-driven system review and recommendations
- Wildfire protection review and recommendations

## DISTRIBUTION PLANNING AND ANALYSIS

- GIS mapping
- Power quality studies
- Load flow studies
- Volt/VAR compensation studies
- Arc flash studies
- Load and DER interconnection studies
- Protection coordination studies
- Environmental studies
- Loss reduction studies
- Hosting capacity analysis
- System forecasting and long-range planning studies

## DISTRIBUTION DESIGN AND STAKING

- Overhead and underground design
- Existing facilities inventory
- High-accuracy GIS data collection and 360 video integration
- Structure and clearance modeling and analysis
- Construction staking and support
- Transformer and conductor sizing
- Permitting
- Experience working within numerous client design systems
- Full project support: seamless collaboration with Ulteig's survey, right-of-way, environmental and GIS teams
- Project types include:
  - Overhead to underground conversion
  - System improvement/life extension: reconductoring, pole replacements
  - Pole replacements
  - DOT relocation
  - Joint use
  - Duct bank design
  - New residential and commercial developments
  - Feeder design
  - Storm damage inventory

# ENERGY STORAGE

The energy professionals at Ulteig can help you model an optimum standalone battery storage system or help design a new renewables plus storage project to help you minimize costs and maximize revenue. We leverage expertise across Lifeline Sectors and Service Disciplines to provide a comprehensive project approach.

## We provide certainty around energy storage development and investment decisions.

- Modeling and studies
- Business case development
- Owner's engineer support
- Interconnection and permitting
- Technical bid support
- Decision making road map (siting, application and size)

## Our experienced multidiscipline teams deliver context-sensitive designs to meet your unique needs.

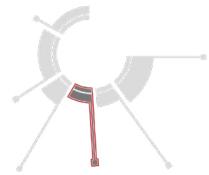
We've completed 10+GW of utility-scale SCADA design, programming, and commissioning across North America.

- Conceptual design
- Balance of plant/system engineering
- High-voltage engineering
- Owner's Engineering
- EPC support
  - Permitting
  - Environmental
  - Survey and staking
  - Procurement and logistics
- Use-case consulting
- AC/DC coupled and stand-alone
- Plant-level PV and storage integration
- SCADA
- Power plant control
- Performance and financial reporting
- Commissioning
- Networking and NERC/CIP security
- Hardware and software supply

## We align with our clients' requirements and objectives to ensure safe and timely project delivery.

- Project and construction management
- Equipment FAT support
- Testing and commissioning (third-party)
- Asset management
- O&M Analytics
- Construction surveying
- Environmental monitoring
- Design and engineering
- Energy market modeling
- Project life cycle costing





# RENEWABLES GENERATION BALANCE OF PLANT/SYSTEM (BOP/S)

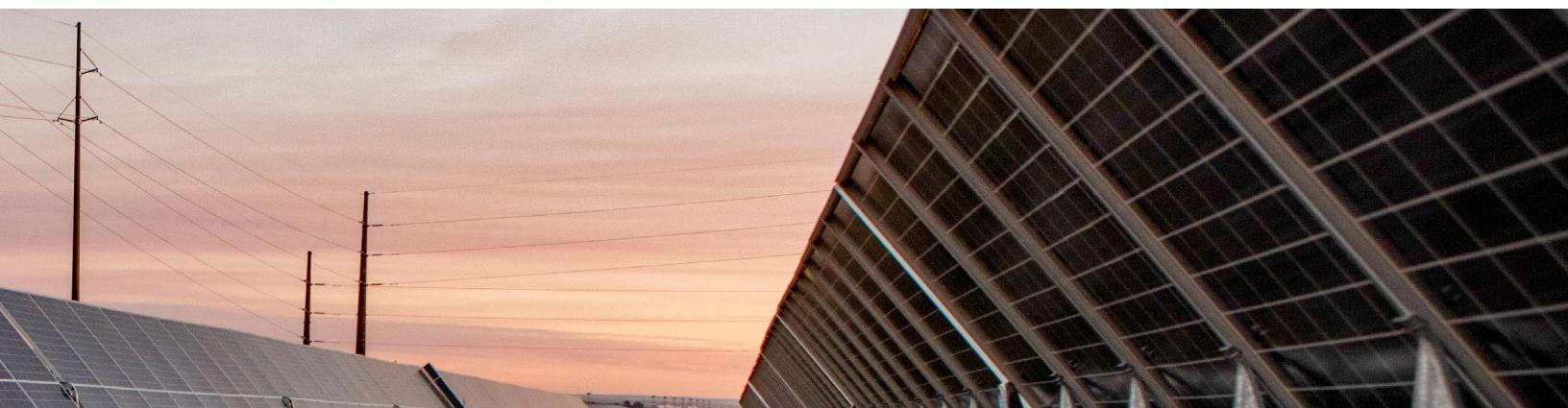
Ulteig's experience and history in the BOP/S market allows us to leverage our historical knowledge of past projects with a deep understanding of new market trends in the industry. From the 34.5kV collection system to access road design, including permitting and construction survey, we have the experience to support wind, solar and battery energy storage from the initial conceptual layouts in the development phase through final design, construction, and operations and maintenance of the facility

## CIVIL, STRUCTURAL AND GEOTECHNICAL ENGINEERING

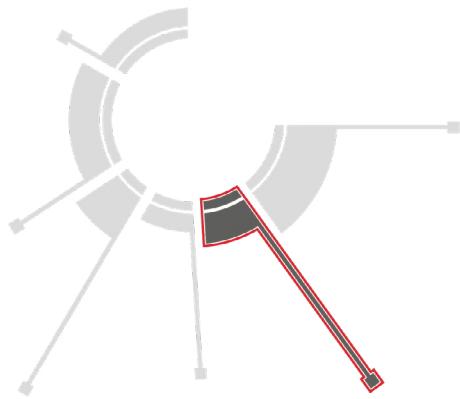
- Desktop hydrology study
- Pile design
- PV array grading design
- Access road design
- Crane pad design
- Earthwork analysis
- Stormwater treatment design
- Erosion and sediment control design
- Site evaluation and conceptual layouts
- Road profile optimization
- Bill of materials
- Detailed design
- Existing road studies and delivery flow analysis
- Geotechnical due diligence
- Battery energy storage

## COLLECTION SYSTEM (AC/DC)

- Optimized layout and cable design
- Collection design studies
- System design studies
- Equipment installation design
- Material specifications
- Permit support
- Construction support
- Energy production studies
- Dynamic modeling
- Transient analysis
- Harmonic studies
- Arc flash studies
- NERC compliance



# PROJECT DELIVERY SERVICES



**PROJECT MANAGEMENT** – Our project managers have experience throughout a project's life cycle, from initial development through construction and operation. We coordinate and streamline all aspects of the project, working with subcontractors and arranging all necessary services to ensure objectives are being met. Your project's success is our highest priority, and we consistently deliver creative solutions, on time and within budget.

**PROGRAM MANAGERS** – Our program managers can focus on the big picture, providing consistent and integrated services as a holistic strategy. These professionals coordinate all your projects to integrate multiple design disciplines and ensure all projects in your portfolio are consistently delivered the way you need them. Our priority is to help you meet your overall strategic goals. When you need help in executing a large volume of projects, our professionals can supplement the expertise of your internal team for as long as you require it.

## COST CONTROLS

- Project budget development
- Project cost and cash flow forecasting
- Project cost estimating
- Pay application processing
- Change order reviews

## SCHEDULING

- Critical path schedule modeling
- Schedule scenario forecasting
- Earned value analysis

## SCOPE

- Contract management
- RFI management
- Procurement and logistics coordination
- Financing due diligence

## SAFETY

- Site safety audits

## QUALITY AND RISK MANAGEMENT

- Continuous risk management
- Qualitative and quantitative risk analysis
- Issues tracking and resolution
- Quality management

## COMMUNICATION

- Coordination with stakeholders
- Progress reports and meetings
- Document control

# CONSTRUCTION MANAGEMENT

Our Construction Management services are tailored to meet the unique demands of each client and their projects to ensure that we maximize value. At Ulteig, we pride ourselves on maintaining a level of flexibility in our approach that allows us to respond quickly across the continually evolving industries that we support.

## WHAT WE DO

Ulteig carefully coordinates your assigned team to fit the scope of work to ensure that construction needs are addressed. In the pre-construction phase, our team uses practical risk analysis strategies to identify potential project risks and formulate responses to optimize the construction plan while ensuring all scenarios and outcomes are appropriately accounted for.

After that, our teams will actively monitor, report on, and maintain all site activities from ground-breaking through testing, commissioning, energization, and close-out, communicating project updates in real-time with stakeholders so that decisions can be made proactively throughout.

## VALUE-ADD SERVICES

Using Ulteig's full breadth of resources, we can provide you with these unique value-add services:

- Real-time construction status
- Cost reporting
- Conflict resolution
- Lessons learned/debrief meetings
- Request for Information (RFI) management
- Environmental monitoring, mitigation and restoration
- Disciplined change control
- Document control
- Major equipment deliveries
- Third-party engineering design reviews
- Constructability reviews
- Material tracking and management

## ALTERNATIVE DELIVERY METHODS

- Construction Manager-at-Risk (CMAR)
- Lump sum design-build
- Progressive design-build
- Construction Manager/General Contractor (CMGC)
- Contractor-led Engineer Procure Construct (EPC)
- Owners rep services



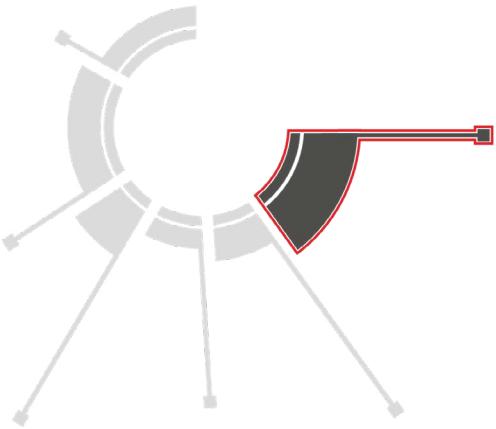
# PROJECT MANAGEMENT

Successful project management begins by assessing and aligning with our clients' requirements and objectives. It culminates with safely delivering projects on time and on budget, despite any issues and obstacles that challenge that objective. Exceptional project management is distinguished by attentive and responsive communication with clients and stakeholders, perpetual proactive risk management and creative resolution of conflicts and issues. Ulteig project managers consistently deliver this value to our clients by employing sophisticated schedule modeling and project controls techniques coupled with expert judgment attained through years of experience delivering successful energy and infrastructure projects. Acting as the project owner's representative and advocate, Ulteig project managers leverage this expertise on behalf of our clients to consistently deliver unparalleled service and value that yields tangible results for the projects we manage.

- Coordination with stakeholders
- Qualitative and quantitative risk analysis
- Perpetual risk management
- Critical path schedule modeling
- Schedule scenario forecasting
- Project cost estimating
- Project budget development
- Project cost and cash flow forecasting
- Earned value analysis
- Contract administration
- Bid package preparation
- Architect/engineer/contractor selection
- Pay application processing
- Change order reviews
- RFI management
- Issues tracking and resolution
- Procurement and logistics coordination
- Permit compliance
- Progress reports and meetings



# ASSET MANAGEMENT



Managing and optimizing assets has never been more important. At Ulteig, asset management focuses on using data, information, insights, technology and engineering to manage your day-to-day business needs as well as identifying and prioritizing strategic asset management, investment decisions and long-term planning. Our team of experts works with you to capture and use data to develop insights critical to determining an informed, prioritized asset management and investment roadmap for your business.

- Technology evaluation
- Data sharing and integration
- Analysis, reporting and planning
- Asset optimization and information management
- Insight development
- Discovery and assessment
- Application hosting, development and maintenance



# WHAT MAKES ULTEIG DIFFERENT?

We are committed to creating a positive experience for our clients throughout a project's duration, offering the advantage of accessibility through exceptional project management, attentiveness and responsive communication. Ulteig anticipates needs and delivers results with trademark accuracy and timeliness. We proactively manage risks, constantly reassess priorities, and strategically align with our clients' vision, objectives and requirements. We tailor designs and services to meet and exceed expectations.

**IT'S ALL ABOUT CONNECTING** with clients and their needs. Throughout the process, we are accessible and transparent, listening and solving through the daily connections that are essential to this work. Our clients and their customers depend on these connections that ultimately bring essential services to millions. While our experience spans the nation, we maintain a hometown feel.

**A STRONG CONNECTION IS FOUNDATIONAL,** whether it involves wires, roads, pipes or people committed to working together for a common purpose. Ulteig generates the connections that strengthen infrastructure — planning, collaborating and creating reliable solutions for our clients and the communities they serve.

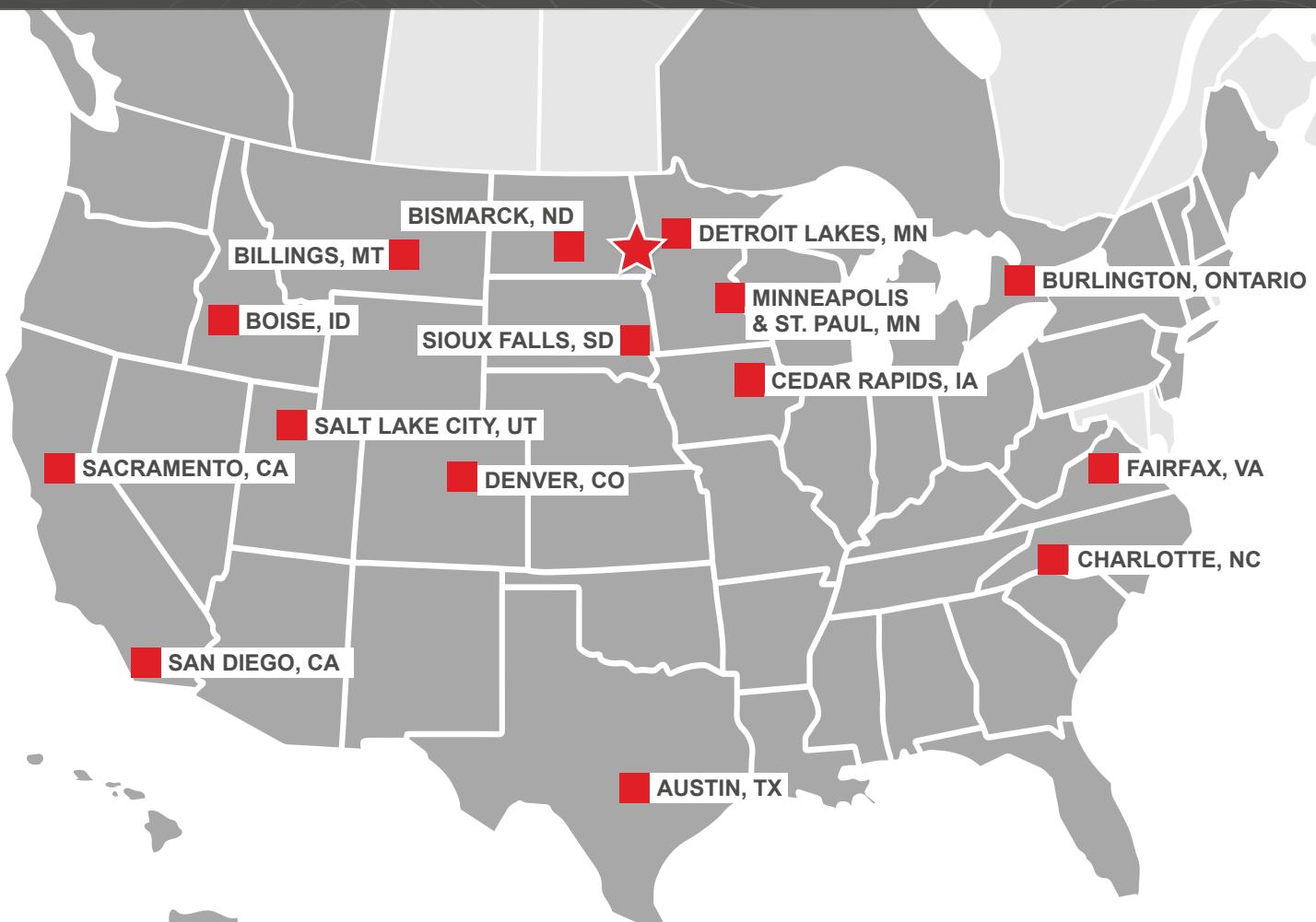
## WE LISTEN. WE SOLVE.®

Our tagline captures the essence of our unique position in the marketplace. "We listen" speaks to partnership, to becoming integrated in our clients' business and truly understanding their needs. We are constantly listening. "We solve" is the promise we make to clients and their communities — we offer comprehensive, long-lasting solutions. This represents everything Ulteig stands for.

# LOCATIONS AND CONTACT

We have locations throughout North America to best serve our surrounding communities.

DISCOVER AN ULTEIG LOCATION NEAR YOU. →



## ★ FARGO, ND (CORPORATE HQ)

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■ STATES AND PROVINCES  
WITH ULTEIG EMPLOYEES





**Ulteig**

Ulteig delivers comprehensive engineering/design, program management, technical services and field services that strengthen infrastructure vital to everyday life. An employee-owned company, Ulteig connects people and resources to develop compelling, integrated solutions across the Lifeline Sectors® of power, renewables, transportation and water. Ulteig leverages its expertise throughout North America with a wide range of public and private clients.