OUR SAFETY COMMITMENT
Promoting a Culture of Safety First

• Safety is our first priority.
• Customers and the community entrust us to keep safety first when designing pipelines, facilities, and other installations. This includes addressing all regulations and standards, as well as designing for safer maintenance and upgrades in our work product.
• We insist on a safe workplace for our employees, our vendors, our customers, and the community.
• We have set our safety objective at zero for vehicle accidents, property damage, lost time, and medical aid injuries by EN Engineering and our subcontractors.
ABOUT US
What We Do and Who We Serve

EN Engineering provides full lifecycle support for renewable energy assets, including wind, solar, storage and biogas. This includes helping your company decide where to build, how much to build, how and where to connect to the grid, manage the construction, complete operational analysis and ensure regulatory compliance. We can also support your company in insurance, health and safety and financial reviews.

EN has been working with utilities and IPPs for nearly 20 years, and our competitive advantage lies in our ability to adjust to changing regulations and market volatility, as well as our ability to adapt to each client’s specific needs and goals.

Our goal is to become the leading independent provider of engineering services in the renewable energy space. We do this by making our clients feel valued, appreciated and cared-for.
EN ENGINEERING BY THE NUMBERS

30+
Locations with team members licensed in all 50 US States

1800+
Employees company-wide

800+
Design personnel devoted to pipeline and electrical engineering

140+
Programmers dedicated to automation services

0.88
Total Recordable Incident Rate

31+
Languages in which our employees are fluent

30+
NACE International Certified Employees

20+
Process Safety Management (PSM) professionals
Offices local to Trina

Where to Find Us

Warrenville, IL (Headquarters)

700+ Electric Utility Resources

Offices Throughout the Mid-Atlantic

Local Presence, Nationwide Expertise

Juno Beach, FL
OUR EXPERTISE
Where We Excel and How We Help

- Electric Transmission and Distribution
- Substation Engineering and Design
- Smartgrid and DER Development and Design
- SCADA Design and Integration
- System Analysis and Planning
- Project Management and Controls
- Construction and Commissioning Oversight
- Process Safety Management
- NERC Compliance Support
Engineering and Design Overview
Site Layout Design

EN can support developers, utilities and EPC firms with site layouts for renewable facilities, from grading to electrical one-lines.

- Civil Site Grading Plan
- Sediment and Erosion Control Plans
- General Arrangement Drawings
- Mounting/Tracking System Details
- One Line Diagrams
- Safety Labeling & Tagging
- Solar layout diagrams (PV-Syst and other tools)
System Planning, Analysis and Consulting

• Utility-scale transmission and distribution planning studies
• Large generator and merchant transmission interconnection studies
• Renewable resource and energy storage interconnection studies for transmission and distribution
• Project feasibility, economic analysis and screening studies
• Site investigations and evaluations
• Business model feasibility and development
• Economic decision-making analysis
• Understanding electric markets and commercial aspects of power systems
• Project Due Diligence
T&D Line Engineering

Experience in design, siting, routing and permitting of transmission and distribution lines.

- Survey/LIDAR Coordination
- Line Design/Engineering
- Structural Analysis
- Foundation Design
- Permitting/ROW/Easement Coordination
- Traffic Control Plans
Substation Overview

Significant experience in bulk power, sub-transmission and distribution substation design.

- Greenfield/Brownfield Designs
- Owner’s Engineering
- Standards Development
- Modernization/Replacement Program Support
- Bus Configuration/Analysis
- Site Development/Design
Substation Expertise

Electrical Engineering
- Equipment Specification
- Site Layout & Lighting
- Wiring & Schematics
- Bus Design
- Grounding Design
- Battery / Generator Design

Civil / Structural Engineering
- Site Grading
- Foundation Design
- Steel Structure Design
- Mechanical Design

Protection & Controls
- Relay Settings Base File
- Electronic Settings Files
- Communications
- SCADA
- Automation
Project Management

Significant experience in all phases of the project life cycle. Our approach aligns with that of most utilities and we follow the Project Management Institute Five Step Process:

- Project Initiation
- Planning & Design
- Project Execution
- Project Monitoring and Controls
- Project Closeout
Project Controls

Our Project Controls specialists have an array of experience to ensure maintaining adequate cost control for our clients and keeping their projects on schedule

• Budgeting and Forecasting
• Schedule Support and Generation
• Change Management
• Contract Administration
• Cost, Data and Schedule Analysis
• Date Modeling and Reporting
• Database Administration
• Documentation Development
• Process Management
Construction Management

Extensive experience in construction management services for the design and installation of various projects throughout the United States

- Project/Construction Oversight
- Health and Safety Support
- Outage Planning
- Commissioning Oversight
- Constructability Reviews
Testing, Commissioning & Compliance

EN has extensive experience in Protection & Controls Engineering and Commissioning with dedicated team members that hold a depth of knowledge with all major relay manufacturers.

- Relay Commissioning
- T&D Equipment Commissioning/FAT Support
- Distributed Generation Commissioning
- Commissioning Oversight
- NERC Compliance Support
- SCADA/Communications Commissioning
Quality Control and Accuracy are critical aspects of our business at EN.

Registered as an Engineering and Consulting firm that is compliant with:

ISO 9001:2015 Quality Standard
Engineering Support for Operations

- End-of-Warranty inspections and reporting
- Long Term Service Agreement (LTSA) gap analysis
- SPCC plan creation, updating and PE stamping
- Major component inspections
- Root cause analysis
- Preventative and predictive maintenance analysis
- High Voltage relay management substation engineering
- Computerized Maintenance Management Systems (CMMS)
- Control system integration
- Control system overlays
Regulatory Compliance Support
Kestrel Power Engineering
NERC Compliance Support

- Joined EN Engineering February 2020

- Kestrel provides consulting services, on site testing, and tuning services for the utility industry focusing on generator control and compliance with the regulatory requirements imposed by NERC, Regional Reliability Organizations and Independent System Operators.

- These include turnkey support of NERC standards MOD-025, MOD-026, MOD-027, PRC-019, PRC-024, PRC-025, PRC-026, and PRC-027.

- Kestrel has experience in working with NextEra (renewable, fossil, and nuclear)
WHY CHOOSE EN ENGINEERING
Who We Are and How We Can Help You

Safety
Relentless commitment to safety for our employees, our vendors, our clients, and our communities

Expertise
Strong focus on the energy industry; nationally recognized subject matter experts; highly-experienced, industry-trained core staff

Location
Network of 30+ offices close to key energy sectors and critical industry hubs

Quality
Strict quality control procedures; proven methodologies; impeccable resources; continuous communication with client and project team members

Value
Complete projects on-time and on-budget with low risk to client

Diversity
EN Engineering utilizes diversity contractors and has implemented a comprehensive Disadvantaged Business Enterprise (DBE) initiative across our services that complies with the needs of our clients

Large enough to serve you nationally, small enough to serve you with our senior staff and industry-leading experts.