



ELECTRIC DISTRIBUTION AUTOMATION SERVICES

OVERVIEW

In the dynamic landscape of energy distribution, optimizing systems for resilience, efficiency, and maximum uptime is paramount. ENTRUST employs a turnkey engineering approach for the implementation of distribution automation and overall grid resiliency. With a focus on overall system stability and optimization as well as feeder modernization, our expertise at ENTRUST extends from meticulous planning and design engineering to the practical implementation of system solutions.

These solutions include Fault Location, Isolation, Service Restoration (FLISR), and Volt-Var Optimization (VVO) programs as well as Substation Automation and SCADA. Our turnkey approach emphasizes close collaboration between planning, protection, telecommunications, automation, and design teams and a commitment to streamlining the processes between these teams.

THE PROCESS

ENTRUST's turnkey engineering approach ensures a seamless progression through the entire process. First, our planning teams conduct area studies and strategically determine locations for devices in substations and on feeders based on historical voltage readings, circuit reliability and outage criteria. Once the area plans are approved, the project transitions to the capable hands of our design and engineering teams. Throughout design and engineering, ENTRUST provides comprehensive support, including system protection, permitting, telecommunications, and construction-ready drawings. As the project moves into construction, we offer construction management support to ensure the designs are implemented seamlessly. Collaborating with the utility, our Automation team provides support in partial or full implementation of the various solutions. Finally, as a vital step in project documentation, we meticulously provide as-builts. This systematic and collaborative process underscores the effectiveness of our turnkey approach for Distribution Automation projects.

Through years of experience, the phased approach that ENTRUST has developed allows us to keep projects on schedule and under budget. Below is a sample of the process for a FLISR project broken down by phase:

1. Planning Phase

- Circuit modeling
- Load flow analysis
- Identification of device locations
- Operating scenario recommendations for each FLISR device, including centralized or distributed solution

2. Engineering Phase

- Scope refinement & constructability review
- Protection engineering
- SCADA engineering

3. Design Phase

- Collection of field data for proposed locations
- Pole Loading and clearance analysis
- Construction print and bill of material creation
- Permitting

4. Construction

- Construction Management
- System automation solution implementation
- As-builts

KEYS TO SUCCESS

Our turnkey approach for reliability projects is ideal for any organization wishing to modernize the grid. Our commitment stems from many groups within our organization communicating openly and collaborating effectively. We work closely with clients to foster transparency and consistency in the overall process. To enhance collaboration and understanding, we ensure staff familiarization with client tools and effective cross-training. During the design phase, the importance of local teams cannot be overstated. Collaboration proves invaluable during field identification and constructability reviews. Real-world considerations are considered, ensuring that plans align with practical constraints.



BENEFITS

Reduced timeline: This is achieved through a streamlined planning, engineering, and design process, where efficient procedures from planning to construction are implemented, minimizing delays.

Cost reduction: Minimizing project handoffs between various internal groups or external contractors innately fosters efficiency. These efficiencies are tangibly captured as cost savings passed along to the client.

Streamlined Contracting: Our phased approach reduces the contracting and administrative burden associated with large, multifaceted programs, providing the client with one point of contact responsible for delivery.

CONCLUSION

ENTRUST's grid resiliency and distribution automation services offer a holistic solution, from planning and engineering to implementation. Our expertise in grid modernization, emphasizing efficiency, collaboration, and technical excellence enables us to be an effective partner for projects both large and small. From meticulous planning to innovative engineering and design, we guide you through every step of the process. Join us in revolutionizing your power distribution network for a brighter, more resilient future.