Distribution Planning Relevant Experience

ENTRUST
SOLUTIONS GROUP

ComEd DER Interconnections and Applications
Client: ComEd

Location: Chicago, IL (Midwest Region)

ENTRUST supports ComEd's distributed energy resources (DER) interconnections through ongoing engineering services aimed at conducting comprehensive interconnection studies. These studies evaluate the impact of DER integration on ComEd's electric system and determine necessary capital upgrades to manage increased DER penetration.

Scope of Work
ENTRUST provides expertise to perform the following interconnection studies for proposed DER projects:

- Pre-Applications: Deliver technical data for proposed DER at specific sites.
- Level 1 Studies: Assess lab-certified, inverter-based DER facilities up to 25 kVA capacity.
- Level 4 Studies: Conduct feasibility, system impact, or combined studies for facilities up to 10 MVA capacity.

The studies involve evaluating equipment ratings, voltage behavior, fault current, aggregate DER impact, bi-directional voltage regulation, and protection coordination.

Unique Challenges
Meeting deadlines mandated by the utilities commission while securing enough work to meet ComEd's DBE (Disadvantaged Business Enterprise) spending requirements.

Delivered Solutions
ENTRUST has implemented SmartSheets to improve communication efficiency and has identified appropriate work within the project scope to be outsourced. This approach ensured timely delivery without compromising the schedule or scope. The team also performed application reviews, engineering analyses, and system impact assessments on proposed DER interconnections.

Key Outcomes
This ongoing multi-year project has consistently delivered high-volume engineering studies and application reviews for ComEd, supporting schedule adherence and DBE compliance.

Delivered
- Competitive pricing through unit-based cost modeling.
- Full-time engineers and project managers dedicated exclusively to ComEd efforts.
- A stable and experienced team proficient with ComEd's requirements and processes.

Results
The project demonstrates repeat client satisfaction, high-volume delivery with consistent quality, and successful DBE utilization while meeting stringent timelines. Its success underscores ENTRUST's ability to deliver tailored engineering solutions in complex regulatory environments.

Puget Sound Energy – Protection and Controls, Arc Flash
Client: Puget Sound Energy (PSE)

Location: Washington State

For over a year, ENTRUST has been supporting Puget Sound Energy (PSE) on an ongoing project centered in Washington State. The project involves delivering protective relay settings and engineering support to tackle peak capital workloads.

Scope of Work
ENTRUST provides services such as modeling, coordination, and developing settings for SEL relays (651RA, 351S, 751/751A, 487E, 387) across various equipment, including 12kV reclosers, feeder breakers, transformers, and Distribution Automation (DA) schemes. Additional responsibilities include conducting arc flash fault current studies and managing construction-phase engineering support. Projects range from independent installations to complex brownfield substation rebuilds involving SCADA and capacity upgrades.

Challenges
The large service coverage area presents varying geographical challenges, and the turnaround times for arc flash short circuit requests remain tight.

Solutions Provided
- Delivered arc flash information sheets, protection narratives, and settings files.
- Addressed geographical challenges and streamlined communication by coordinating closely with protection engineers.
- Automated email notifications for arc flash requests to improve responsiveness and task tracking.

Outcomes
- The client has continually expanded ENTRUST's workload, following consistent project success.
- ENTRUST reduced average time per request by working within pre-negotiated, affordable time and expense rates.
- Comprehensive support was provided by a seasoned protection engineer and a Principal engineer throughout the project.

Delivered
- Competitive rates with decreasing time per task.
- Dedicated full-time engineers and project managers for PSE.
- High-caliber engineering leadership for project initiation and execution.

This project stands out due to the autonomy entrusted to ENTRUST. Assigned a year's worth of devices, ENTRUST manages its own schedule to stay ahead of construction crews while accommodating ongoing review updates during construction. This case demonstrates the value of external resources for managing diverse, utility-side tasks, whether for large-scale efforts or repetitive small tasks.