Smith Engineering Consultants, Inc.

Electric Utility Services

An Industry in Transition

With the advent of deregulation, and the new rules governing open transmission access, the electric utility industry faces many challenges, including environmental pressures, costly new baseload capacities, and increasing operations and maintenance costs. The staff at Smith Engineering Consultants has the planning and design experience needed to guide electric utility clients through this highly competitive period.

Answering Difficult Questions

When should an electric utility increase the size of its transmission lines? Put in a new substation? Expand the plant itself? How can a utility minimize losses? Make the most advantageous interconnection agreements with neighboring utilities and/or independent power producers?

With our considerable technical expertise, SEC staff can help utility managers arrive at well-founded business decisions making any utility, whether municipal, investor owned, or co-operative, a more solid, competitive organization.

Value-Added Services for End Users

To be successful in the future, electric utilities must be consumer-oriented. At Smith Engineering, we can help you to help your customers become effective consumers of power by providing energy audits and power quality analyses for major users. Those users become more energy efficient, which benefits their bottom line.

Service Areas Provided

- *Transmission and distribution system planning*
- *Contract development and negotiations*
- *Financing support*
- *Engineering and design*
- *Project management*
- *Operations and maintenance*
- *Public relations*
- *Energy efficiency/power quality*
- *Due diligence and risk analysis*

Projects Completed by Staff

- *Florida Power & Light DistributionEngineering, Lighting, Energy Audits*
- *Lake Worth Distribution System Protection Device Coordination Study and Fault Analysis*
- *City of Sebring Utilities Distribution Inventory*
- *Lake Worth Power Plant Unit S-3 Overhaul*
- *Paragould, AK 69 kV/13.2 kV Substation Relay Settings*
- *Greencove Springs Chapman Substation Feeder #1 Protective Device Coordination*
- *Florida Keys Electric Co-op Work Order Certifications*
- *FKEC/CES Transmission System Loss Allocation*
- *Lake Worth Utilities Annual Report Preparation*

Power Generation

- Boca Raton Airport Expansion (One (1) 60kW, 240V, Single Phase)
- BCOES Emergency Power System (Two (2) 2000kW, Three (3) 1800kW, 4160V)
- Arvin Edison WSD Aqueduct Turnout (One (1) 25kW, 240V, Single Phase)
- NPBCWCD Stormwater Pump Stations (Two (2) 150kW, 480V)
- St. Lucie County Landfill Closure (One (1) 150kW, 480V)
- BCOES Wastewater Transmission System Expansion (One (1) 750kW, One (1) 600kW, 480V)
- City of Miramar Wastewater Pump Station (One (1) 250kW, 480V)
- City of Miramar Wastewater Treatment Plant (Four (4) 1275kW, 4160V)
- FKAA R.O. Plant Rehabilitation (Two (2) 1000kW, One (1) 300kW, 4160V)
- South Florida Water Management District STA-1W Control Structures (Six (6) 20kW, 240V, Single Phase)
- Breaker's Hotel Stormwater Pump Station (One (1) 175kW, 480V)
- Oakton Lakes Stormwater Pump Station (One (1) 150kW, 480V)
- BCOES Wastewater Treatment Plant Improvements (One (1) 2000kW, 4160V)
- City of West Palm Beach Wastewater Treatment Plant Generator Evaluation (Five (5) 1800kW, 4160V Turbines)
- Lake Worth Utilities Unit S-3 Overhaul (One (1) 30MW, 13.2kV Turbine)
- Jackson Memorial Hospital Generation Study (Seven (7) Services, 4160V and 480V)
- Village of Wellington Public Works Complex (One (1) 300kW, 208V)
- Palm Beach Town Hall Generator Study (One (1) 75kW, 240V, Single Phase)
- Blue Lake Corporate Center (Eight (8) 2000kW, 13.2kV)
- Town of Lake Park Fire Station (One (1) 150kW, 208V)
- Baywinds Stormwater Pump Stations (Two (2) 150kW, 480V)
- Village of Wellington Stormwater Pump Station No. 5 (One (1) 125kW, 480V)
- Pompano Airpark Airfield Lighting Vault (One (1) 150kW, 208V)
- Hamilton Bay Stormwater Pump Station (One (1) 125kW, 480V)
- Martin County Landfill Scalehouse (One (1) 125kW, 208V)
- St. Lucie County Landfill Baling Facility (One (1) 500kW, 480V)
- Village of Royal Palm Beach Lift Stations (Three (3) 75kW, 480V)
- Mirasol Stormwater Pump Station (One (1) 750kW, 480V)
- Southeast Caterers Plant (One (1) 300kW, 480V)
- Lynn University Dormitory (One (1) 250kW, 480V)
- City of WPB ECR WWTP Switchgear Automation (Four (4) 1800kW, 4,160V)
- NPBCID PGA Central Stormwater Pump Station (One (1) 600kW, 480V)
- Town of Palm Beach Stormwater Pump Station No. D-14 (One (1) 500kW, 480V)
- Town of Palm Beach Stormwater Pump Station No. D-16 (One (1) 125kW, 480V)
- Town of Palm Beach Stormwater Pump Station No. D-18 (One (1) 125kW, 480V)
- BCSB Coral Springs High School (One (1) 125kW, 480V)
- Alfresh Foods Plant (One (1) 250kW, 480V)
- Village of Wellington Stormwater Pump Station No. 6 (One (1) 450kW, 480V)
- Village of Wellington Stormwater Pump Station No. 3 (One (1) 450kW, 480V)
- Village of Wellington Stormwater Pump Station No. 4 (One (1) 450kW, 480V)
- Village of Golf Water Treatment Plant (One (1) 350kW, 480V)
- Town of Palm Beach Fire Station One (1) 150kW, 480V)
- Town of Ocean Ridge Stormwater Pump Station (One (1) 450kW, 480V)
- Martin County Landfill Transfer Station (One (1) 150kW, 480V)
- City of Lake Worth WTP (One (1) 1,000kW, 480V)
- Virtual Bank Offices (One (1) 150kW, 480V)
- Palm Beach County Fire Station No. 14 (One (1) 150kW, 208V)
- Town of Palm Beach Clarendon Ave. Pump Station (One (1) 300kW, 480V)