Project Brief

Substation Construction
Stanhope Municipal Utilities

- Construction of a new 69-12.47 kV Substation
- Delta to Wye distribution system conversion
- Detailed financial modeling of alternatives
- Electric retail rate development

After careful consideration of the alternatives and rate impacts on its customer base, Stanhope Municipal Utilities (SMU) approved proceeding with the construction of its own substation and “wye-ing out” its distribution system.

Following the decision, a full cost-of-service rate study was completed for SMU’s customers. This study also allocated the costs of providing service to the proposed rate classes, with the goal of having each rate class pay its fair share of the costs of operating the electric system (including covering its share of the cost of the proposed facilities). The proposed rate changes were adopted, which led to SMU successfully issuing electric revenue bonds, with an overall interest rate averaging less than 3%, covering maturities of up to 20 years.

The project construction process involved a high level of coordination among many parties. Public bidding processes were used to acquire major materials and contractors to build the new substation and convert the distribution system. Webster City Municipal Utilities (SMU’s electric system operations & maintenance provider) directed much of the complicated process of cutting over to the new facilities, aided by DGR engineers and field technicians.

Not only was the project completed in time to coordinate with the regional transmission system voltage upgrade, but the overall cost of the project was significantly under the original project estimate. Costs were reduced due to some of the unique ways the materials acquisition and construction processes were executed.

Funds for the work were obtained at reasonable long-term cost to SMU, and the new retail rates necessary to support the debt service were implemented. Overall, DGR was able to assist SMU in all aspects of the project, from initial evaluation, to design and financing, through final construction.

- Responsibility and involvement in all phases of the project, from project feasibility to final testing and checkout
- High-level of coordination among multiple entities