Electric Capital Improvement Projects (CIP) – FY 2022 July 2021.

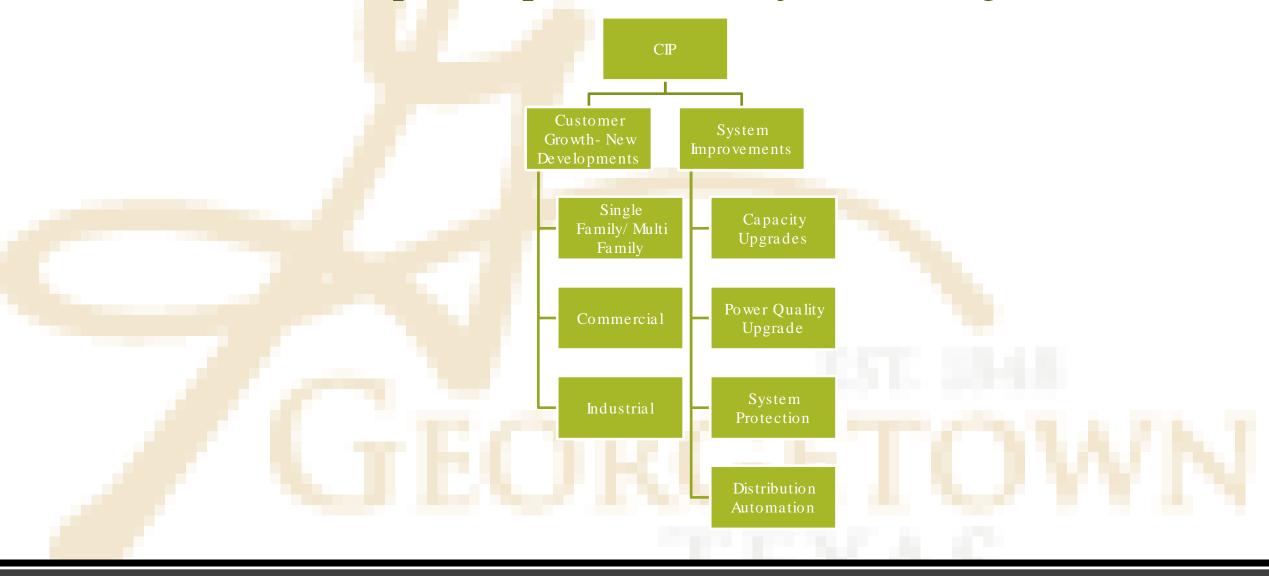
Mike Westbrook – Operations Manager

Jose E Torres – Electric Engineer

Richard Pajestka – Engineering Design Supervisor



Electric Capital Improvement Projects - Categories



CIP- Customer Growth New Development Projects

Customer Growth Driven Projects: These are electric distribution infrastructure additions driven by customer requests.

- 1. Single Family Residential including Detached Multi-family and Duplexes Example: Sun City, Ashby Signature Homes, Various Wolf Ranch Phase's
- 2. Residential Multi-Family Development (Apartments)
 Example: WindMill Hill Multi-Family, WindMill Hill Multi-Family
- 3. Commercial

Example: Wolf Lakes Village Georgetown Medical All Care Therapies

4. Industrial

Example: Titan Development – NorthPark 35 Aviation Drive Master Plan (total estimated load of 20MW)

FY 2022 Budget: \$4,000,000.00

CIP- System Improvements — Capacity/ Un-anticipated/ Upgrades

System Improvements - Capacity/Un-anticipated/Upgrades:

- These improvements to the electric distribution infrastructure are needed in order to handle the
 projected growth (as electric demand increases) and maintain reliable and safe electric service to the
 customers.
- The projects include upgrades to supplement Line Capacity, equipment capacity, and substation capacity.
- 3. The projects also include addition of substation feeder exits to coincide with substation additions and upgrades.

Example: Titan-Aviation Dr to IH35 Underground Addition, Redundant Feed Overhead - IH35 to East Substation, Titan Development Airport Road Upgrades

FY 2022 Budget \$2,250,000.00

CIP- System Improvements – Power Quality

System Improvements – Power Quality Projects help us maintain the required power factor.

- The Electric Reliability Council of Texas (ERCOT) currently requires a minimum power factor of 97% during the peak electric load periods. The City of Georgetown Electrical Utility is required to maintain a load power factor at or above ninety-seven percent by substation distribution feeder.
- Maintaining the desired power factor will improve voltage levels, reduce losses, and reduce conductor and equipment loading. The projects include capacitance studies and adding/removing capacitors as needed.

FY 2022 Budget \$150,000.00

CIP- System Improvements – System Protection and Distribution Automation

- 1. The objective of coordination & protection/sectionalization/distribution automation is to reduce the frequency of unplanned outages and the duration of outages thereby improving the overall system reliability.
 - System protection analysis is performed to evaluate ratings and settings of electric system protective devices.
 - Based on the analysis system protection schemes are developed to improve coordination of the devices and develop switching options to handle contingency conditions.
- 2. Distribution automation options include SCADA Controlled Protection Devices and Sectionalization Devices.

Examples: Downtown O.H. to U.G project, Shell Road back feed project

FY 2022 Budget: \$1,000,000.00

Electric 2022 CIP Budget

ELECTRIC CIP PROJECT CATEGORIES & COST	2022
Customer Growth/New Development Projects	Engineering: \$400,000.00 Construction: \$3,600,000.00 Total: \$4,000,000.00
System Improvements - Capacity/Un-anticipated / Upgrades	Engineering: \$250,000.00 Construction: \$2,000,000.00 Total: \$2,250,000
System Improvements - Power Quality	Engineering: \$15,000.00 Construction: \$135,000.00 Total: 150,000.00
System Improvements - Sectionalization/Coordinating & Protection/Distribution Automation	Engineering: \$100,000.00 Construction: \$900,000.00 Total: 1,000,000.00
FY 2022 Budget Total \$7,400,000.00	

