

PROJECT INFORMATION

Project Name: **Electric System Reliability Improvements**

Project #: **ELE044**

Year First Shown in CIP: **1988**

Funding Status: **Partially Funded**

Is this a Budget Amendment?

Amendment Date: **08/25/2020**

PROJECT DESCRIPTION:

LPC continues to make reliability improvements on the electrical distribution system. Projects each year are customized to meet current needs. As our underground infrastructure ages, installing additional fault indication devices and constructing system loops improves service by reducing outage restoration times. Future projects include installing additional distribution loops, fault indicators, and transformer change outs. The unfunded amounts each year for 2020-2024 are for distribution automation and demand response projects for improved system operation and reliability. Automated feeder tie switches and fault indicators with remote communication are two examples of intelligent distribution devices that will be researched to incorporate into LPCs SCADA and Outage Management systems. For additional demand reductions, an unfunded project is listed to deploy a system-wide street light control system.

PROJECT JUSTIFICATION:

The planned projects enhance existing facilities through improved operating conditions, distribution system reliability and cost management. Distribution automation improvements will be necessary to operate the electric distribution system when distributed generation such as solar, battery systems, and electric vehicles are operating in mass on the electric distribution system. The equipment will be necessary to provide the functionality needed to operate the system safely and maintain the high levels of reliability.

SUPPORTING ENVISION LONGMONT GUIDING PRINCIPLES AND FOCUS AREA ALIGNMENT:

- | | | |
|--|--|--|
| <input type="checkbox"/> GP1:Livable Centers,Corridors & Neighborhoods | <input type="checkbox"/> GP2:Complete, Balanced & Connected Transp Sys | <input type="checkbox"/> GP3:Housing,Services,Amenities & Oppt for All |
| <input checked="" type="checkbox"/> GP4:A Safe, Healthy, and Adaptable Community | <input type="checkbox"/> GP5:Responsible Stewardship of Our Resources | <input type="checkbox"/> GP6:Job Grwth & Economic Vitality-Innov & Col |
| <input checked="" type="checkbox"/> Sugar Mill / Highway 119 Gateway | <input checked="" type="checkbox"/> St. Vrain Creek Corridor | <input checked="" type="checkbox"/> Hover Street Corridor |
| <input checked="" type="checkbox"/> Midtown / North Main | <input checked="" type="checkbox"/> Area of Change | <input checked="" type="checkbox"/> Downtown / Central Business District (CBD) |

Other Related Plans:

Related CIP Projects:

PROJECT COSTS:

| | 2020/Yr1 | 2021/Yr2 | 2022/Yr3 | 2023/Yr4 | 2024/Yr5 | Project TOTAL |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|----------------------|
| | 260,000 | 300,000 | 900,000 | 1,000,000 | 1,100,000 | 3,560,000 |

SOURCE OF FUNDS:

| Funded | 2020 | 2021 | 2022 | 2023 | 2024 | 2020-2024 TOTAL |
|-----------------|---------------|---------------|---------------|---------------|---------------|------------------------|
| Electric | 160,000 | 100,000 | 100,000 | 100,000 | 100,000 | 560,000 |
| Unfunded | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Unfunded TOTAL |
| Electric | 100,000 | 200,000 | 800,000 | 900,000 | 1,000,000 | 3,000,000 |

LOCATION MAP:

VARIOUS LOCATIONS