THE EMPIRE DISTRICT ELECTRIC COMPANY d.b.a. LIBERTY						
P.S.C. Mo. No.	6	Sec.	3		Original Sheet No.	<u>1b</u>
Canceling P.S.C. Mo. No.		Sec.			Original Sheet No.	
For <u>ALL TERRITORY</u>						
		LED STREET LIGHTING PILOT				

## PROGRAM GOALS

The LED pilot study's primary goals are:

- Determine the overall suitability and feasibility of offering LED street lighting as an option,
- determine community and municipal acceptance of LED street lighting,
- establish serviceability and maintenance costs associated with the LED lights
  - validation of mortality rates of the LED fixtures,
  - o verify the manufacturer's projected energy usage, and
- facilitate the determination of permanent LED SAL lighting rates based upon the financial and operating characteristics gathered during the duration of the LED pilot study.

## PROGRAM PARAMETERS

- The program shall be limited to up to five (5) locations in up to five (5) different cities or municipalities within Empire's Missouri service territory currently taking street lighting service from Empire.
  - Empire will select the location of each LED street light installation in consultation with the municipality involved.
  - The individual LED street light locations selected will consist of two blocks of continuous roadway preferably connecting areas of principal traffic generation within a city or be important rural roadway into a city.
- The LED pilot study will have a term of three years to facilitate the tracking of financial and mortality statistics over an extended period.
- LED lights installed as part of the study will replace existing luminaires on existing lighting standards or be provided for completely new street light installations in place of the existing standards for new street light installations.
- LED fixtures installed as part of the pilot study are limited to 150 and/or 250 W HPS equivalence.
- LED fixtures installed during the pilot study that fail may be replaced with standard fixtures available under the Company's existing street light tariffs if the existing LED fixture is no longer available or is determined by the Company to not meet the evaluation criteria for the pilot.

Missouri Public Service Commission ER-2019-0374; EN-2021-0038; YE-2021-0041

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- The rates charged for the LED lights installed during the duration of the LED pilot study shall be identical to the rates charged for the street lighting fixtures replaced by the LED fixtures during the pilot. The rates charged for the LED lights installed during the duration of the LED pilot study shall be the currently effective rates set forth in P.S.C. Mo. No. 5, Section 3, Sheet No. 1, which rates are subject to change from time to time pursuant to the authorization of the Missouri Public Service Commission.
- Pilot program costs to be tracked:
  - All costs associated with the pilot study will be tracked to potentially facilitate the development of a permanent LED SL tariff at the conclusion of the pilot study. Among the costs to be tracked include, but are not limited to the following: installed cost, depreciation assuming a twenty-year LED fixture life, maintenance costs and energy costs, which will be metered.
- After two years of operation, the Company will evaluate the results at the pilot location(s) and report the results to the Missouri Public Service Commission.