

March 29, 2023

VIA ELECTRONIC MAIL ONLY

Sherri L. Golden, RMC New Jersey Board of Public Utilities 44 South Clinton Avenue, 9th Floor Post Office Box 350 Trenton, New Jersey 08625-0350 Board.secretary@bpu.nj.gov

Re: In the Matter of the Light Emitting Diode Streetlight Program

Docket No. QO22110710

Dear Secretary Golden:

On March 1, 2023, the New Jersey Board of Public Utilities ("BPU" or "Board") staff ("Staff") issued a request for comments *In the Matter of the Light Emitting Diode ("LED") Streetlight Program* ("LED Request"). Jersey Central Power & Light Company ("JCP&L" or the "Company") appreciates the opportunity to comment on the LED Request. The Company hopes that the Board will find JCP&L's comments and suggestions helpful as it continues its consideration of this important topic.

JCP&L provides the answers below in response to Staff's questions.

<u>Question 1</u>: Do you have a complete inventory of streetlights in your service territory, including type (bulb, light fixture and pole), ownership, vintage, original cost, accumulated depreciation, and remaining service life? Please provide the most granularity possible in narrative form with a level of detail that would explain what information you have with respect to each of the listed items.

<u>JCP&L Response</u>: The Company maintains data concerning streetlights in its service territory within multiple systems. Data included within these systems includes information about in-service year/vintage, original cost, ownership (*note*, all LED streetlights are company-owned), accumulated depreciation, type (*i.e.*, incandescent, sodium vapor, mercury vapor, LED) and wattage.

<u>Question 2:</u> What is your process and schedule for validating the streetlights inventory mentioned in Question #1 above, and when was it most recently validated?

<u>JCP&L Response</u>: As noted above, the Company maintains data regarding streetlights in multiple systems. The manner of input/modification of such data varies by system, but the Company does not presently have an audit or "validation" process.

<u>Question 3:</u> How many gas streetlights, if applicable, do you have in your service area? Please provide the breakdown according to the location in each applicable municipality.

JCP&L Response: The Company is not aware of gas streetlights in its service territory.

<u>Question 4:</u> Of the streetlights in your service area, how many are municipally-owned, and how many are utility owned?

<u>JCP&L Response</u>: The vast majority of streetlights in JCP&L's territory are Companyowned. The Company estimates that the number of municipally-owned streetlights is 793, which are all non-LED type, as of March 2023. The comparable number (*i.e.*, using data pulled from the Company's billing system) of Company-owned streetlights is 206,333. Note, the Company's tariff provides that customer-owned streetlights must be "installed on customer provided and installed poles located in areas which allow them to be clearly discernable from non-customer owned street light facilities".

<u>Question 5:</u> How regularly do you replace the bulbs in the current streetlight fixtures? Please describe your streetlight replacement program(s).

<u>JCP&L Response:</u> Lamps (*i.e.*, bulbs) are generally replaced when the existing lamp fails. More details describing the Company's replacement program are included in the JCP&L Municipal Streetlighting Handbook included as Attachment A.

<u>Question 6</u>: Physical Lights

A. LED Inventory

i. What is your current LED inventory in terms of: (a) how many you have, (b) vintage year, (c) fixture types, (d) color temperature (Kelvin), (e) brightness levels (lumen output), and (f) costs for each bulb type?

<u>JCP&L Response</u>: Please see Attachment B, which provides data showing the number of LED streetlights JCP&L has as of March 10, 2023: (i) in stock in FirstEnergy warehouses and allocated to JCP&L; (ii) in stock at JCP&L facilities; and (iii) on order ("Open PO Qty"). This data does not include vintage (these are new fixtures). All of the Company's selected LED lights are available in both 3,000 kelvin and 4,000 kelvin. Lumens and color temperature information are found in the descriptive information in Attachment B.

Note also that the Company's supplier has the capacity to supply 5,000 LED units per month for JCP&L and can increase that to 15,000 or more with 60 days' notice.

The costs to customers for LED streetlight service are dictated by the Company's tariff. See Attachment C for the tariff provisions related to streetlighting (LED Streetlighting Service Tariff Sheet 38-40).

ii. What type of LED fixtures and bulb types (brightness level and color) could a municipality in your service territory order? Can municipalities order LED fixture and bulb types of their choice from you?

<u>JCP&L Response:</u> In the Company's tariff provisions noted above, the following LED streetlights are available to municipalities:

Lamp		
Wattage	Туре	Lumens
30	Cobra Head	2400
50	Cobra Head	4000
90	Cobra Head	7000
130	Cobra Head	11500
260	Cobra Head	24000
50	Acorn	2500
90	Acorn	5000
50	Colonial	2500
90	Colonial	5000

Under its LED streetlighting service, JCP&L offers cobra head luminaires and colonial and acorn post lights. The cobra head luminaires are available in wattages of 30, 50, 90, 130 or 260 watts. The post top lights are available in wattages of 50 and 90 watts. JCP&L offers LED luminaires in color temperatures of 3,000 and 4,000 kelvin.

iii. Do you provide bulk discounts on LED purchases and, if so, what are they?

<u>JCP&L Response:</u> No. Generally, JCP&L does not sell items out of inventory to customers and, therefore, there are no bulk discounts available.

iv. Do you have a standard contract under which a municipality must procure its streetlights?

<u>JCP&L Response</u>: Yes; *see* the attached JCP&L Municipal Lighting Handbook (Attachment A, pages 8 and 23) for the standard contract provisions for streetlights, which provisions are included in the Company's tariff.

B. Non-LED Inventory

i. What is your current non-LED inventory? Please describe the models and numbers of each.

JCP&L Response: Please *see* Attachment B, which provides data showing the number of non-LED streetlights JCP&L has (i) in stock in FirstEnergy warehouses and allocated to JCP&L; (ii) in stock at JCP&L facilities; and (iii) on order ("Open PO Qty"). For non-LED inventory, the Company only maintains high pressure sodium ("HPS") luminaires in stock; it does not keep sodium vapor luminaires in stock.

As noted in the Company's recently filed base rate review (*see*, BPU Docket No. ER23030144), the Company is proposing to sunset its Sodium Vapor Street Lighting Service ("SVL"), due to lack of availability and cost of replacement equipment.

Over the past several years, original equipment manufacturers of sodium vapor streetlights have curtailed production of these luminaires in favor of LED luminaires. In the Company's observation, nearly all sodium vapor post top, decorative and specialty lights have been discontinued and are unavailable for purchase. The result has been a tightening of supply and an increase in costs to purchase new and maintain existing sodium vapor luminaires. With these developments, the Company believes it is prudent to plan to eliminate service under its SVL Service Classification, while giving customers a reasonable timeframe to plan for this change.

ii. What are the costs of bulbs for each streetlight fixture type?

<u>JCP&L Response</u>: These items are competitively bid, and thus the cost paid by the Company is considered commercially sensitive by the Company and its suppliers. Therefore, the information is not being provided herein.

The customer contribution to cost of streetlights and fixtures is provided in the Company's tariff under the Service Classifications SVL (Sodium Vapor Streetlight Service Tariff sheet 28-30), MVL (Mercury Vapor Street Lighting Service – no longer available), ISL (Incandescent Street Lighting Service Tariff Sheet 34-36 – no longer available), and LED (LED Streetlighting Service Tariff Sheet 38-40). *See* Attachment C.

Question 7: Poles

A. How does your ownership model for the poles work? Please explain.

<u>JCP&L Response:</u> The Company's "model" is that it owns all of its poles on which it installs streetlights.

B. Do you ever give municipalities an opportunity to purchase the poles from you?

<u>JCP&L Response:</u> The Company will under no circumstances provide the option to purchase poles carrying power lines. Such poles require utility company personnel expertise to be maintained safely. Electric distribution lines must be located on utility-

owned poles that have regular maintenance cycles and which may be replaced in an emergency. In addition, JCP&L does not have a process in place for allowing municipalities to purchase streetlight-only poles. Only in limited circumstances may the Company consider the sale of lighting-only streetlight assets.

It is worth noting that counties and municipalities currently specify the location of streetlights and have the ability to shop for their generation service providers. Further, to the extent that electric utilities are able to integrate smart technologies into their systems, any options attendant thereto may be made available to municipalities via tariff and/or special contract. If municipalities purchase LED streetlights, municipalities will bear the responsibility of applying these technologies and owning and constructing the supporting infrastructure either themselves or using a contractor.

C. If municipalities do own the poles, what maintenance, replacement, or other pole-related services do you as an EDC provide to those municipalities?

JCP&L Response: See prior response.

D. What challenges exist now to installing new technologies on poles such as motion activation, smart streetlight technologies, gunshot detection, traffic cameras, Wi-Fi hotspots, electric vehicle charging equipment, etc.? Please describe.

JCP&L Response: The equipment mentioned in this question are of varying class and character, and challenges associated with each depend upon the type of pole at issue, the owner of the attachment, and the desired location, as well as legal considerations. Safety is, of course, always of primary concern. In addition, generally poles must remain climbable particularly in outage restoration events when bucket truck access is limited or blocked. Proposals for many of these items require pole attachment agreements to be in place and, with respect to the Company's standards, must be considered on a case-by-case basis. However, the associated challenges and need to ensure access to maintain and repair Company facilities, maintain proper clearances, and provide for the safety of employees and the general public do limit the circumstances under which the Company would be agreeable to such attachments.

<u>Question 8:</u> Lighting Standards

A. What standards (list all, including Bright Sky standards) do you use to inform which types of lights can be installed along various roadways, as well as in parking areas and around parks, schools, hospitals, universities, other campuses?

<u>JCP&L Response</u>: Pursuant to its tariff and as noted earlier, under its streetlighting service, JCP&L offers cobra head luminaires and colonial and acorn post lights. The cobra head streetlights are available in wattages of 30, 50, 90, 130 or 260 watts. The post top lights are available in wattages of 50 and 90 watts. The Company offers LED luminaires in color temperatures of 3,000 and 4,000 kelvin temperatures.

All 3,000-kelvin cobra head streetlights the Company installs are Dark Sky Standardcompliant. They are purchased with recessed light emitters that do not require external shields for compliance but can be fitted with shields, which the Company stocks, when needed.

The Company's lighting material specifications include a range of standards including water resistance, lightning protection, extended warranty requirements, and driver current limitations for heat management. JCP&L offers Dark Sky Standard-compliant streetlights with a color temperature of 3000 kelvin. This includes all cobra head streetlights. In addition, the Company's current contract includes an extended 10-year warranty for performance covering color drift or light failure.

B. How does compliance with each of these standards influence the range of fixtures you can offer to municipalities for their usage?

<u>JCP&L Response</u>: The Company offers both 3000 and 4000 kelvin color temperatures. Dark Sky Standard compliance requires limited light trespass and a warmer color temperature of 3000 kelvin or lower.

<u>Question 9</u>. Under an accelerated LED replacement program, please describe how the stranded cost issues with respect to the following could be resolved: (A) current inventory regarding spare streetlight bulbs, (b) currently operational bulbs that have been placed in light fixtures but have not yet reached the end of their useful life.

<u>JCP&L Response</u>: The Company believes that stranded cost remains a significant barrier for municipalities to convert to LEDs. The Company's current tariff structure approved by the BPU establishes a cost to convert to LEDs, specifically, "[w]here Customer requests replacement of existing non-LED streetlight luminaire with an LED streetlight luminaire, prior to its failure, the Customer is responsible for a one-time payment of the estimated average undepreciated luminaire cost (i.e., net book value) of the existing non-LED streetlight luminaire as set forth in the table below, prior to installation of the replacement LED streetlight." The tariff also allows for payment of this cost over a five-year period.

The Company strongly believes that there are societal benefits to the installation of highefficiency streetlighting and a practical basis to share the stranded costs among all customers. Until there is a socialization among customers of all the stranded costs associated with the conversion to LED streetlights, which in the case of JCP&L is more than \$90 million, the costs to convert will remain a significant impediment to municipalities making such conversions. And thus, it will also remain an impediment to the State's goal of broad deployment of LED streetlights, a goal the Company supports.

The Company encourages the Board to consider the securitization of the stranded costs of existing luminaires that would be associated with an accelerated or mass LED deployment

program, as a mechanism to spread recovery of the stranded costs over an extended period of time, with associated carrying costs lower than those available to the utilities.

Question 10: Tariffs

A. What is the current utility tariff and corresponding rate structure under such tariff for electric and gas streetlights, respectively?

JCP&L Response: See Attachment C for the tariff provisions related to streetlighting.

B. What tariff and what rate structure are you using when municipalities seek to pursue an LED streetlight conversion?

<u>JCP&L Response:</u> See Attachment C referencing the Service Classification LED in the Company's tariff for the applicable streetlight provisions for LED conversion.

C. What issues have you encountered with your current tariff structure with municipalities interested in conducting an LED streetlight conversion?

<u>JCP&L Response</u>: Based on anecdotal feedback, the Company believes the cost of conversion, including stranded cost recovery, remains the prevailing obstacle to the successful conversion to LED streetlights. The Company's current tariff structure approved by the BPU establishes a cost to convert luminaires prior to their failure to LEDs, as noted above. In addition, as JCP&L offers Contribution Fixtures pursuant to its tariff, under which the Customer makes an upfront payment at the time of installation to reduce monthly costs, to maintain the lower monthly rate, customers with Contribution Fixtures are responsible for those upfront payments (*i.e.*, contributions toward the cost of the new LED luminaire) in addition to stranded costs.

D. Some utilities have designed tariffs to allow municipalities that convert streetlights to LEDs to pay the associated purchase, conversion, and/or stranded costs over time at a rate no greater than the electric energy cost savings, thereby avoiding any cost increase for the municipalities or ratepayers in general.

i. Do you have such a tariff to prevent cost impacts for municipalities?

<u>JCP&L Response</u>: No. However, as noted above, under the Company's tariff provisions within the LED Streetlight classification, there are options for the customer to pay for the stranded costs ("average undepreciated luminaire cost") over a 60-month period. The pricing per month is specified in that tariff provision. With respect to "conversion costs", under the Company's tariff, regardless of whether the conversion to LED occurred at

failure of the non-LED fixture, there is no "conversion charge" in addition to the charge for average undepreciated luminaire cost noted above, except in the case of certain non-standard installations.

ii. If not, do you intend to develop one to support LED streetlight conversions?

<u>JCP&L Response</u>: No; the Company has adopted the tariff provision noted above with the Board's approval. The Company is not presently considering the tariff design noted in the Board's question.

iii. What would be the impact of such a tariff on ratepayers in general?

<u>JCP&L Response:</u> The Company has not analyzed the proposed tariff design noted in the Board's question.

iv. What do you see as the overall benefits and drawbacks of such a proposal?

<u>JCP&L Response:</u> The Company has not analyzed the proposed tariff design noted in the Board's question.

D. Would there be a benefit for municipalities to own the streetlights that are converted? In other words, if renting now, they would have the option to purchase and own the streetlights and be responsible for the replacement.

<u>JCP&L Response</u>: The Company has not completed an analysis of this proposal. The Company does not offer this service and its tariff requires that Customerowned streetlights must be installed on Customer-owned poles.

E. What are the benefits of the utilities retaining ownership and maintenance of the streetlights that are converted?

<u>JCP&L Response</u>: As noted earlier, a very small proportion of streetlights in the Company's territory are presently owned by customers, and the tariff requires that those streetlights must be installed on Customer-owned poles (i.e., not attached to Company facilities). The Company does not provide a streetlighting service for Customer ownership of LED streetlights attached to Company-owned poles in its tariff. There are likely significant economies of scale associated with continued utility ownership, maintenance, repair, procurement, and the like, relative to municipal ownership, but the Company has not performed an analysis comparing different ownership models.

<u>Question 11:</u> Please describe any additional services that utilities may provide that are integrated into the conversion of LED fixtures.

JCP&L Response:

There are features and benefits from "connected" lighting that may be desirable to certain JCP&L customers. LED streetlight dimming and brightness control according to a

programmed schedule and/or motion sensing can increase aesthetics, safety, and energy efficiency. For example, LED streetlights may be brightened for safety during entrance and exit to entertainment and sporting events. Likewise, LED streetlights may be dimmed for customer aesthetics and to reduce light pollution, better preserving the natural night environment. LED connected streetlights are environmentally friendly as they reduce energy consumption and therefore carbon dioxide emissions. Also, LED connected streetlights are dark sky compliant and effective at managing light pollution.

From a utility perspective, connected street lighting is consistent with Distribution Grid of the Future concepts by proactively identifying device failures (thereby reducing truck-rolls), contributing to more precise geographic information system ("GIS") locations and enabling more accurate billing and accounting records. Also, connected streetlights can be integrated into work management systems to reduce customer calls by eliminating the need for customers to report light outages.

In its recently filed base rate review (*see*, BPU Docket No. ER23030144), the Company has proposed to add to its LED Tariff a negotiated contract street lighting service on an individual basis. Such contracts may provide for advanced functionality and associated equipment, including but not limited to: controllers; dimming capabilities; sensors; or other network enabled functions. All costs of these advanced functionalities not covered under the LED Tariff will be borne by the contracting customer. This is an optional service and other customers will not subsidize services under the special contract.

* * *

JCP&L again thanks the Board for the opportunity to provide these comments. If you have any questions, please do not hesitate to contact me.

Very truly yours,

Andrew D. Hendry Senior Advisor Jersey Central Power & Light Company



Attachment A



A FirstEnergy Company

MUNICIPAL LIGHTING HANDBOOK

January 2021

This Municipal Lighting Handbook (the "Handbook") has been developed to provide information regarding the street light options that Jersey Central Power & Light Company ("JCP&L" or the "Company") offers, along with corresponding installation charges and monthly rates (based on JCP&L's applicable Tariff for Service – BPU no. 13, Electric, (the "Tariff"), effective December 1, 2020, or as otherwise indicated herein for applicable rate schedules). It also contains directions on how to apply for new streetlights, upgrades or removals, and how to report street light problems to the Company.

As a convenience, a listing of Company approved street light manufacturers has also been included on pages 30 through 33, along with website addresses where the latest photometric data can be found for the lighting fixtures that are offered. These websites also contain lighting design software that you may find helpful. You may contact JCP&L at 1-800-662-3115 for answers to any street lighting questions or concerns that are not addressed in this Handbook. You may also contact the Regional External Affairs Consultant responsible for your Municipality for any questions and concerns you might have regarding street lighting. Regional External Affairs Consultant contact information is listed on pages 28 & 29.

This Handbook is subject to amendment from time to time and will be re-issued on an as-needed basis. It is the responsibility of the user to obtain the most current version, which can be located at https://firstenergycorp.com. The current edition of this Handbook supersedes all previous issues and instructions. The Tariff rates used to derive the "Monthly Cost" and the "Monthly Rate" throughout this version are based on rates effective January 1, 2021 and are subject to change.

The information contained within this Handbook is supplementary to, and does not intentionally conflict with, the Company's current applicable tariffs, or such applicable State and Municipal Laws and Ordinances as may be in force within the states, cities, towns, or communities in which the Company furnishes electric service. It is always necessary to refer to, and comply with, applicable state statutes, rules and regulations, local ordinances, and the Company's Tariff, as on file with, and approved by, the New Jersey Board of Public Utilities ("NJBPU"). To the extent that any included information contradicts any terms in the Company's current applicable Tariff, the Tariff provision shall govern. This information is general and does not include every detail or every lawful requirement.

INTRODUCTION	1
ELIMNATION OF MERCURY VAPOR STREET LIGHTS	2
OUTDOOR LIGHTING SERVICE (Floodlights and Area Lights)	2
STREET LIGHTING SERVICE OPTIONS	3
APPLICATION PROCEDURE FOR STREET LIGHTING	4
Installation of New Street Lights	4
Upgrading Existing Street Lights	5-6
Removal of Existing Street Lights	7
STREET LIGHTING OPTIONS - OVERHEAD	7
Standard Lighting Bracket Options	8
1. Standard Cobra Head SVL	9-10
2. Colonial Standard SVL Side-Mounted	11
3. Ornate Colonial SVL Side-Mounted	12
STREET LIGHTING OPTIONS - UNDERGROUND	13
1. Colonial Post Top Sodium Vapor Luminaire	14
2. Ornate Colonial Post Top SVL on 16' Fiberglass Pole - I	15
3. Ornate Colonial Post Top SVL on 12' 9" Ornate FG Pole - II	16
4. Ornate Acorn Style Post Top SVL on 12' 9" Ornate FG Pole	17
5. Cobra Head Sodium Vapor Luminaire on 30' Fiberglass Pole	18
6. Cobra Head Sodium Vapor Luminaire on Aluminum Pole	19
LED STREET LIGHTING	20
LED Lighting Options	21
1. Standard Cobra Overhead - LED	22
2. Post Top Colonial Style -Underground - LED	23
3. Post Top Acorn Style -Underground - LED	24
4. Cobra Head on 30' Fiberglass Pole Underground - LED	25
5. Cobra Head on Aluminum/Steel Pole - Underground - LED	26
STREET LIGHT MAINTENANCE PROCEDURE	27
On - Line Street Light Outage Report Form	27
External Affairs Consultants Central Region	28
External Affairs Consultants Contact Information Central Region	28
External Affairs Consultants Northern Region	29
External Affairs Consultants Contact Information Northern Region	29
APPROVED STREET LIGHT MANUFACTURERS	30-33
COST COMPARISON BASED ON LUMENS & TYPE OF LIGHT	34

INTRODUCTION

The purpose of this Handbook is: to provide guidance on the application process for new or upgraded street lighting installations along public roadways; to catalog the Street Lighting Options that are available from JCP&L; and to provide information on the installation costs and monthly rates for each of these Lighting Options. (Please note that the monthly rates provided in this Handbook are subject to change.)

JCP&L does <u>not</u> make lighting recommendations and does not provide street lighting *design* service. It is up to the Municipality to specify the desired level of illumination for a given location with the corresponding bracket size. However, the Company will provide a street lighting *layout* once the Municipality has decided on the appropriate spacing for the type of street lighting fixtures selected. As a convenience, photometric data that you will need to develop a street lighting design can be obtained from the various lighting manufacturers' websites listed on page 30.

The Company's Tariff provides for three basic types of lighting service: Light Emitting Diode Street Lighting (LED), Sodium Vapor Street Lighting (SVL) and Outdoor Lighting. The typical street lighting installation is overhead construction comprised of a Cobra Head fixture on a wood distribution pole, known as a **"fixture"** pole. The Company also offers decorative Colonial type luminaires that can be installed on fixture poles. There are also several streetlights offered for installation in underground residential service areas, including the standard Colonial Post Top, as well as more decorative street Lighting Options.

Please note that the Company will no longer install streetlights for the illumination of Municipal parking lots, driveways, walkways, or Park & Ride facilities. The Company will only install streetlights along public rights-of-way for the illumination of roadways.

Also, the Company will no longer install decorative lighting for "streetscape" projects where a Municipality constructs a "downtown" area revitalization project. Private electrical contractors are available for streetscape installations, and JCP&L will coordinate service requirements for the new lighting fixtures, either metered or unmetered (in extraordinary circumstances) service (see paragraph on "Customer Fixtures," page 3).

Revisions to this Handbook will be posted on JCP&L's website as soon as practicable after they are made, but revisions may be effective prior to their posting. For more details on JCP&L's Street and Outdoor Lighting Service, refer to the Company's Tariff at <u>https://firstenergycorp.com.</u> Select JCP&L as the operating company, and then click on Tariff under General Information in the lower left corner of the screen. Refer to the Current Tariff Part III, "OL", "SVL" or "LED".

ELIMINATION OF MERCURY VAPOR STREET LIGHTS

Mercury Vapor street lighting service has been restricted in JCP&L's Tariff since July 1982. Sodium Vapor fixtures were considered standard at that time due to their superior energy efficiency. The Tariff provided for the Company to maintain all the existing Mercury Vapor streetlights, but new Mercury Vapor fixtures would not be installed after that date.

The Energy Policy Act of 2005 (42 USC §13201 et seq.) bans the manufacture or import of Mercury Vapor ballasts after January 1, 2008. This Act does NOT prohibit the continued maintenance of Mercury Vapor fixtures beyond this date – as long as inventory remains. Once inventory has been depleted however, any Mercury Vapor fixtures that require new ballasts will need to be replaced with Sodium Vapor fixtures.

Please refer to the table on page 5, under "**Upgrading Existing Street Lights**," which shows the Mercury Vapor and Sodium Vapor lamp wattage options. Since Sodium Vapor fixtures are more energy efficient than Mercury Vapor, a smaller lamp size may provide equal or greater lumen output per kilowatt-hour of electricity, resulting in a net savings in the monthly energy cost. The current difference in cost is shown in the same table on page 5.

OUTDOOR LIGHTING SERVICE (FLOODLIGHTS AND AREA LIGHTS)

Outdoor Lighting Service consists of High-Pressure Sodium (HPS) Area Lights and Sodium Vapor (SV) Floodlights. Outdoor Lighting Service is not available for the illumination of public streets and highways. This service is provided from "dusk to dawn" with operation controlled by a photoelectric cell; timers are not available for shorter periods of operation. The Company will only install HPS area lights or SV floodlights on existing wood distribution poles where secondary facilities are located along existing Company rights-of-way. The Company will not install new poles for Outdoor Lighting Service on private property nor will the Company install HPS area lights or SV floodlights on buildings.

STREET LIGHTING SERVICE OPTIONS

JCP&L offers three service options for **SVL** Street Lighting Service, with three corresponding monthly rates. The three service options are categorized as **Company Fixtures, Contribution Fixtures**, and **Customer Fixtures**.

Company Fixtures

Company Fixtures refer to all street lighting equipment including brackets and luminaires installed by the Company at its expense in accordance with its standard specifications, and all other equipment necessary in rendering the required Service installed on wood distribution poles or Street Light Poles. Company Fixtures shall be owned, operated, maintained and serviced by the Company.

Contribution Fixtures

Contribution Fixtures refer to Company Fixtures for which installation the customer has paid the following Contributed Installation Cost. Contribution Fixtures shall be owned, operated, maintained and serviced by the Company. **Contributed Installation Cost:** The Contributed Installation Cost, per fixture, shall be equal to the cost shown on Tariff Part II, Appendix A – Exhibit III, for Street Light Luminaire.

Customer Fixtures

Customer fixtures refer to all customer-provided and installed street lighting equipment, including brackets, luminaires, and wire required for connection by the Company to a designated point on the Company's existing distribution facilities. Such fixtures must be contiguous, and installed on customer provided and installed poles located in areas that allow them to be clearly discernable from non-customer-owned street light facilities. Customer fixtures and poles must be installed in accordance with the current edition of the National Electrical Code, as well as equipment standards established and approved by the Company. Any necessary maintenance, repairs, or replacements to Customer Fixtures or poles, including lamp and control switch replacements, or luminaire cleaning, shall be made by the Customer.

Engineering Study Fee

Depending on the scope of Customer/Applicant requested streetlight project, JCP&L may require an Engineering Study Fee from the project requester, before initiating and proceeding with the project.

APPLICATION PROCEDURE FOR STREET LIGHTING

Installation of New Street Lights

Underground Residential Subdivision:

The installation of new streetlights can only be authorized by a Municipality, since the Municipality is ultimately responsible for paying the monthly street lighting bills. When a Municipality requires the installation of new streetlights in an Underground Residential Subdivision (URD), the developer must obtain Municipal approval for the proposed lighting layout and provide the Company with initial information concerning the Municipality's street light requirements for a given subdivision.

If the Municipality desires a fixture style other than the standards offered by JCP&L, the Company will furnish metered or unmetered (in extraordinary circumstances) connection points for the installation of Customer Fixtures (refer to page 3.)

JCP&L will install streetlights in a URD Subdivision as part of the installation of electrical distribution facilities only after the developer has obtained approval of the street lighting layout from the Municipality, and after the developer has executed all necessary contracts/agreements and paid all required costs pursuant to JCP&L's Tariff.

Individual Street Light Requests:

When a Municipality desires to have new streetlight installed or existing streetlight(s) upgraded or converted to LED(s) in an area other than a new URD Subdivision, please use the **Street Light Request Form.** The form can be emailed to you by your Regional External Affairs Consultant (refer to pages 28 & 29) or contact the JCP&L Customer Service Center at 1-800-662-3115 to initiate your request. **Please note: The following information is needed.**

- □ Name of Municipality
- SVL or LED Street lighting Account number
- □ Type of lighting desired (overhead or underground service)
- □ Style/Fixture Type (Cobra, Ornate, Colonial, etc.)
- □ Bracket Size See Page 8
- Locations (House numbers, street names, lot/block numbers)
- Pole number
- Billing Rate (Company (SVL, LED) or Contribution Fixture SVL, LED)
- Lamp Wattage (based on availability for light style)

The Regional External Affairs Consultant will initiate a telememo and forward the work request and the Street Light Request Form to an appropriate Company representative who will create a Notification. The Notification will be assigned to a Layout Technician who may contact the requestor and the Regional External Affairs Consultant to obtain further details. The Layout Technician will prepare the work package along with any costs associated with the requested installation/removal. Upon receiving the necessary payments, permits, etc., the street light work order will be released to be scheduled.

TERM OF CONTRACT- The contract term of the Street light Contract for the installation of SVL Company Fixtures will be five (5) years and for LED Company Fixtures will be fifteen years (15), and in each case, on a monthly basis after the expiration of the term. If street light service is terminated before the end of the contract term, the Municipality will be billed the total of each light's monthly fixture charge, plus the KWH Distribution Charge applicable to each light's billing month KWH, times the remaining months of the contract term.

Street light upgrades can be classified into three categories:

- (1) An increase in lamp wattage, subject to the limitations of the luminaire style
- (2) Conversion of an existing light type to another type
- (3) Conversion of standard fixtures to ornate fixtures

To request an increase in lamp wattage for an existing streetlight, the Municipality may contact the Customer Service Center at **1-800-662-3115** to initiate the process. The Municipality must furnish the location of the streetlights to be upgraded, preferably with a street address and the Company's pole number, which can be found on the pole. Refer to the Street Lighting Options section of this Handbook to determine the maximum wattage for each fixture style that the Company offers. The assigned Layout Technician may contact the requestor for additional information. The Layout Technician will prepare the work package along with any costs associated with the upgrade. Upon receiving payment, the street light upgrade work order will be scheduled.

Conversions of Mercury Vapor (MVL) or Incandescent streetlights (ISL) to LED streetlights or Sodium Vapor (SVL) shall be scheduled in accordance with the Company's Streetlight Conversion Program. The Company may limit the number of conversions to no more than 5% of the lamps served under this service classification (*i.e.*, SVL) at the end of the previous year. LED and SVL lamps are more energy efficient and may provide greater light output per kilowatt-hour of electricity resulting in a net savings in the monthly energy cost. The difference in monthly charges is shown in the same table below for MVL and page 6 for ISL. (See chart on page 34 for additional information)

Jersey Central Power& Light A FirstEnergy Company MERCURY VAPOR, LED, SODIUM VAPOR Wattage, Lumens & Cost								
Wattage & Lamp Type	Delivered* Lumens	SUMMER Monthly Cost (\$)		Wattage & Lamp Type	Delivered* Lumens	SUMMER Monthly Cost (\$)		Cost Difference
100 W MVL	2,800	\$ 8.73		30 W LED	3,900	\$ 7.67		-\$1.06
175 W MVL	5,390	\$12.20		90 W LED	9,000	\$10.52		-\$1.68
250 W MVL	8,400	\$15.36		90 W LED	9,000	\$10.52		-\$4.84
400 W MVL	15,750	\$22.34		260 W LED	27,800	\$20.72		-\$1.62
100 W MVL	2,800	\$ 8.73		50 W SVL	2,800	\$ 8.24		-\$0.49
175 W MVL	5,390	\$12.20		100 W SVL	6,650	\$10.53		-\$1.67
250 W MVL	8,400	\$15.36		150 W SVL	11,200	\$ 12.70		-\$2.66
400 W MVL	15,750	\$22.34		250 W SVL	19,250	\$ 18.25		-\$4.09
700 W MVL	28,000	\$36.00		400 W SVL	35,000	\$25.96		-\$ 10.04

The monthly charges being compared in the following two tables are "Company Fixture" charges for Summer months, June through September. The Lumen values for LED streetlights are those for Cobra Head with 3000 Kelvin Temperature, which is Warm White color. (Refer to page 21 for LED Street Lighting details)

*Delivered Lumens provided for comparison purposes between LED, MVL and SVL Cobra Head type Fixtures. LED Lumen Values listed are representative of GE manufactured fixtures. MVL and SVL lumen values at 70% of source lumens due to loss of trapped lumens.

Jersey Central Power & Light INCANDESCENT, LED, SODIUM VAPOR A FielEnergy Company Wattage, Lumens & Cost								
Wattage & Lamp Type	Source Lumens	SUMMER Monthly Cost (\$)		Wattage & Lamp Type	SUMMER Monthly Cost (\$)		Cost Difference	
105 W ISL	1,000	\$ 5.78		30 W LED	3,900	\$ 7.67		\$1.89
205 W ISL	2,500	\$ 9.59		30 W LED	3,900	\$ 7.67		-\$1.92
327 W ISL	4,000	\$14.15		50 W LED	5,300	\$ 8.33		-\$5.82
448 W ISL	6,000	\$18.83		90 W LED	9,000	\$10.52		-\$8.31
105 W ISL	1,000	\$ 5.78		50 W SVL	2,800	\$ 8.24		\$2.46
205 W ISL	2,500	\$ 9.59		50 W SVL	2,800	\$ 8.24		- \$1.35
327 W ISL	4,000	\$14.15		70 W SVL	4,410	\$ 9.22		- \$4.93
448 W ISL	6,000	\$18.83		100 W SVL	6,650	\$10.53		-\$8.30

*Delivered Lumens provided for comparison purposes between LED, MVL and SVL Cobra Head type Fixtures. LED Lumen Values listed are representative of GE manufactured fixtures. MVL and SVL lumen values at 70% of source lumens due to loss of trapped lumens. (See chart on page 34 for additional information) (Refer to page 20 for LED Street Lighting details)

Trapped Lumen Reference, provided by GE, for High Intensity Discharge (HID) bulbs such as MVL and SVL -"The 'trapped lumens' of HID are due to the fact that HID lamps are round/tubular and there is an unexposed 'back-side' that allows for the light to bounce around inside the optical compartment and in many cases, return through the lamp and therefore get blocked or trapped where this light is not utilized. LED's are simply a single-sided light source where the light is emitted out in a single direction or from a single side of its 'housing'. As such, the above shortcoming of the old technologies does not exist for LED's."

Any Municipality that would like to initiate the Sodium Vapor Lighting (SVL) Conversion Program must contact the Company's Customer Service Center at **1-800-662-3115.** There will be NO labor charge for this type of conversion due to obsolescence, although as mentioned earlier, the Company may limit the number of conversions to no more than 5% of the lamps served under this service classification (SVL) at the end of the previous year.

Also, if the Company must replace a Mercury Vapor (MV) or Incandescent luminaire (ISL) *(i.e.,* the fixture, not the bulb) due to failure or damage, it will be replaced with a SVL luminaire sized according to the chart shown above and on page 5. The associated accounts will be adjusted to reflect the change in billing.

A Municipality interested in replacing existing Standard Overhead Street lights (Cobra Heads) to Ornate overhead fixtures may contact the Company's Customer Service Center at **1-800-662-3115** to initiate the request. This type of change will involve billing for the removal of the existing fixtures and installation of the Ornate fixtures, plus additional charges for removal of any lights that have been installed less than five years. Ornate overhead fixtures are installed with a 2.5' bracket located 15' above ground (see pages 11 & 12). Therefore, in order to maintain the same level of illumination, additional fixtures may be required.

REMOVAL OF EXISTING STREET LIGHTS

When a Municipality desires to have certain streetlights taken out of operation, it must contact the Company's Customer Service Center at **1-800-662-3115**. It will be necessary to provide the location of the streetlights, including street address and Company pole number. The streetlight is left in place, but the photoelectric cell is removed to prevent the light from operating.

Should the Municipality desire to have a fixture physically removed, there will be billing charges for the associated labor. If the **Term of Contract** has NOT been satisfied, there will be additional charges involved for early termination as described under **"Term of Contract"** on page 5 for **SVL** and page 20 for **LED** luminaires.

STREET LIGHTING OPTIONS – OVERHEAD

Street Light Option 1:

The Company will install NEW SVL Cobra Head luminaires on a standard 8' bracket as shown on pages 10 for SVL on existing wood distribution **"fixture poles"**, without installation charge, when such facilities are requested by a Municipality.

Street Light Option 2:

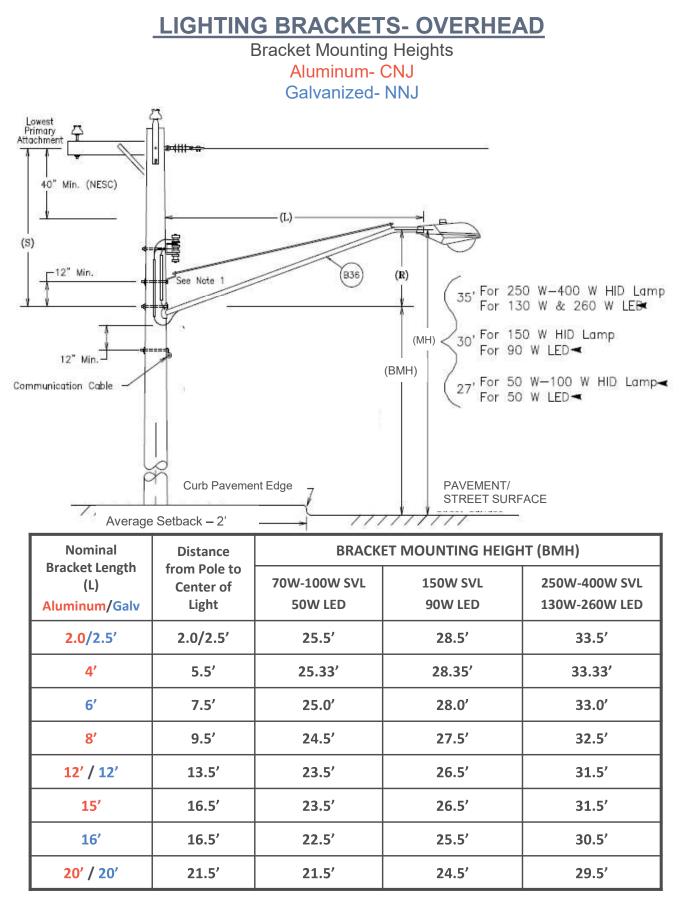
The Company offers a gray or black SVL Colonial Post Top luminaire shown on page 11 and a black SVL Ornate Colonial shown on page 12 for installation on **"fixture poles"** with a 2' or 2.5' bracket respectively. The prices shown for these lights are for new installations only where there are no existing streetlights. **This Street Light Option is not available for LED Lights.**

If a new wood distribution **"fixture pole"** is needed along a public right-of-way in order to install a SVL streetlight, the Company will install the pole, standard 8' bracket, one span of street light wire without charge to the Municipality.

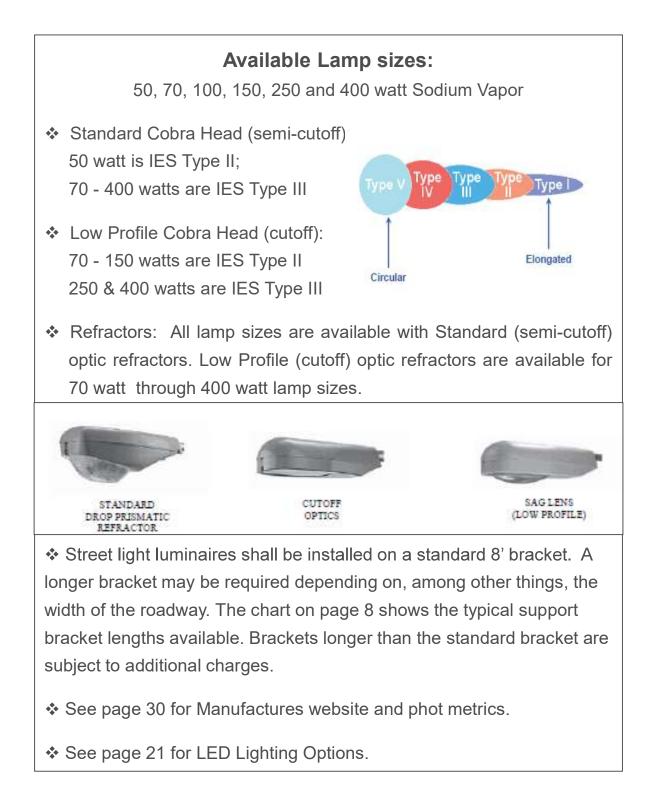
"Span poles" which are installed to carry wire to "fixture poles", shall be installed with the associated wire only upon payment of a non-refundable contribution.

<u>MVL, ISL, SVL</u> - The Municipality will be responsible for providing and paying the costs of all traffic control including police assistance where and when needed. If the Municipality is unable to provide the required traffic control, the Company will provide the traffic control with the Municipality paying all associated costs. The Municipality will also be responsible for all fees associated with required permitting.

<u>LED Lighting</u> - The Municipality will be responsible for providing and paying the costs of police assistance when deemed necessary by local authorities. The Company will provide basic traffic control (flaggers) at no cost to the Municipality. When traffic control (flagging) labor hours exceed construction labor hours (considered non-basic traffic control) the Municipality will be responsible for paying the differential in costs between basic and non-basic traffic control. The Municipality will also be responsible for all fees associated with required permitting.

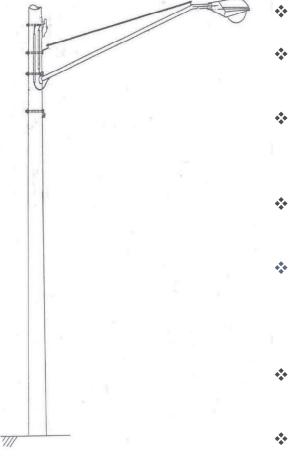


STANDARD COBRA HEAD - SVL



1. STANDARD COBRA HEAD - SVL

ON A WOOD POLE WITH AN 8' BRACKET

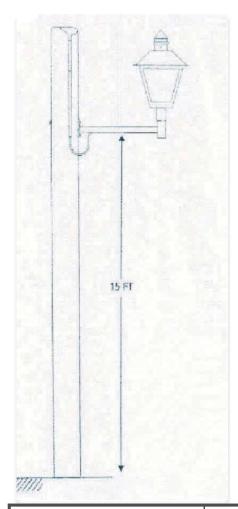


- Available for overhead service.
- Available sizes: Sodium Vapor:
 50, 70, 100, 150, 250 & 400 watt
- There is no installation cost for a NEW overhead SVL fixture on a wood pole with a standard 8' bracket.
- Additional fees may apply for brackets larger than 8'.
- See table below for Company and Contribution fixture rates. Contribution Fixtures require a one-time payment of \$674.67 per fixture.
- Refer to the Company's Tariff & chart on page 34 for additional details.
- See page 21 for LED Lighting Option.

Jersey Powe A FirstEnergy C	r Central r & Light	STANDARD COBRA HEAD SODIUM VAPOR LUMINAIRE				
LAM	P SIZE		MC	ONTHLY RATE		
	IES	COMPAN	IY FIXTURE	CONTRIBU	TION FIXTURE	
WATTS	TYPE	Jun - Sep	Oct – May	Jun – Sep	Oct – May	
50	II MSCO	\$ 8.24	\$ 8.24	\$ 3.95	\$ 3.95	
70	III MSCO	\$ 9.22	\$ 9.22	\$ 4.93	\$ 4.93	
100	III MSCO	\$ 10.53	\$ 10.53	\$ 6.24	\$ 6.24	
150	III MSCO	\$ 12.70	\$ 12.70	\$ 8.41	\$ 8.41	
250	III MSCO	\$ 18.25	\$ 18.25 \$ 18.25		\$ 12.87	
400	III MSCO	\$ 25.96	\$ 25.98	\$ 20.58	\$ 20.60	

2. <u>COLONIAL STANDARD SIDE-MOUNTED – SVL</u>

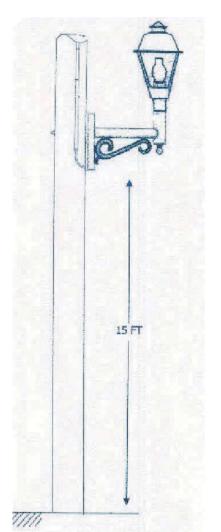
WITH 2' ALUMINUM BRACKETS ON WOOD POLE



- Available for overhead service.
- Available sizes Sodium Vapor Lights: 50, 70, 100 & 150 watt.
- Available in Gray only on standard bracket shown.
- There is no installation cost for a NEW overhead SVL Colonial fixture installed on a wood pole with a standard bracket.
- See table below for Company and Contribution fixture rates. Contribution Fixtures require a one-time payment of \$674.67 per fixture.
- Refer to the Company's Tariff for additional billing details.
- Not Available in LED.

Jersey Powe A FirstEnergy C	r Central r & Light	COLONIAL STANDARD SODIUM VAPOR LUMINAIRE SIDE-MOUNTED			
LAN	IP SIZE	MONTHLY RATE			
	IES	COMPANY	FIXTURE	CONTRIBUTION	FIXTURE
WATTS	TYPE	Jun -Sep	Oct -May	Jun -Sep	Oct -May
50	MS III	\$ 8.24	\$ 8.24	\$ 3.95	\$ 3.95
70	MS III & V	\$ 9.22	\$ 9.22	\$ 4.93	\$ 4.93
100	MS III & V	\$ 10.53	\$ 10.53	\$ 6.24	\$ 6.24
150	MS III	\$ 12.70	\$ 12.70	\$ 8.41	\$ 8.41

3. ORNATE COLONIAL SIDE-MOUNTED - SVL WITH 2.5' ALUMINUM BRACKET ON WOOD POLE



- Available for overhead service.
- Only available sizes Sodium Vapor Light: 70 & 100 watt
- Available in Black Only.
- Installation cost: \$524.70 per fixture.
- See table below for Company and Contribution fixture rates. Contribution Fixtures require a one-time payment of \$674.67 per fixture.
- Refer to the Company's Tariff for additional billing details.
- Not Available in LED.

Jerse Pow A FirstEnergy	ey Central ver & Light	ORN		NIAL LUMINAI IOUNTED	RE		
LAM	P SIZE	MONTHLY RATE			MONTHLY		
	IES	COMPANY F	IXTURE	CONTRIBUTION FIXTURE			
WATTS	TYPE	Jun -Sep	Oct -May	Jun -Sep	Oct -May		
70	MS III & V	\$ 9.22	\$ 9.22	\$ 4.93	\$ 4.93		
100	MS III & V	\$ 10.53	\$ 10.53	\$ 6.24	\$ 6.24		

STREET LIGHTING OPTIONS - UNDERGROUND

Underground service for streetlights is furnished by the Company in new Underground Residential Subdivisions (URD) consisting of three or more building lots, or in conventional underground secondary networks found in more urban areas of the Company's service territory. Conventional underground networks can be found in portions of Asbury Park, Belmar, Bradley Beach, Deal, Freehold Borough, Harding Township, Lakewood, Long Branch, Monmouth Beach, Morristown, Neptune, Point Pleasant Beach, Pompton Lakes, Red Bank, Rumson, Spring Lake, and Summit.

The standard Lighting Option offered by the Company for installation in URDs is the Colonial Post Top Luminaire on a 16' fiberglass pole. This standard is an economical choice and is available in gray or black in Sodium Vapor or black in LED. There are several additional Ornate options available in Sodium Vapor only, including an Ornate Colonial Post Top with two post choices. An Acorn Style Post Top Luminaire is available in SVL or LED in Black on a 12' 9" post.

There is one additional lighting choice for underground residential subdivisions, which consists of a Cobra Head luminaire with a 6' bracket, mounted on a 30' gray fiberglass pole available in both SVL and LED. This type of installation allows for greater separation between lights due to the increased mounting height.

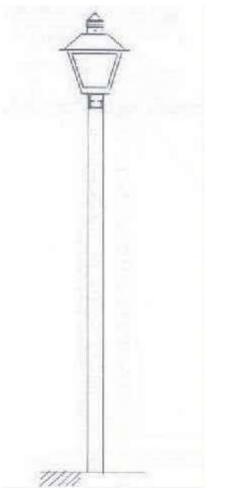
The installation costs shown on the following pages for the various underground street light fixtures **are only applicable for new installations within URD's made at the time of initial construction.** The cost to retrofit additional streetlights within a URD Subdivision subsequent to initial construction will be subject to additional charges. These charges may include certain preparation fees, traffic control costs (if not provided by the Municipality), permit fees, etc.

The SVL or LED Cobra Head luminaire shown on an aluminum/steel pole is typically only installed in conventional underground network areas. The pole is available in two heights, with a 6' standard mounting bracket. There is no charge to the Municipality for this type of installation in a conventional underground network area, provided there are no existing streetlights that would need to be removed (see page 7 regarding removal costs).

Please note that the installation costs shown on the following pages for the various underground fixtures are greater than the values found in Appendix A, Part II of the Company's Tariff. The difference is due to the fact that the costs shown herein reflect the inclusion of the CIAC Tax Gross-up due to the fact that the Company must pay Federal and State Income Taxes on all Contribution-in-Aid-of-Construction, in accordance with Section 3.14, Part II of the Tariff.

1. COLONIAL POST TOP - SVL

WITH 16' FIBERGLASS POLE

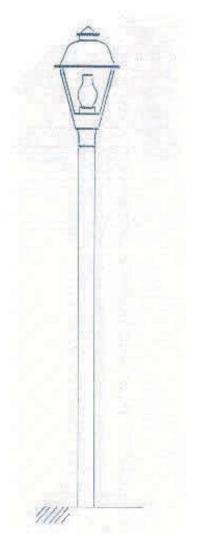


- Available for underground service.
- Available sizes Sodium Vapor: 50, 70 100 & 150 watt
- Smooth surface or textured in gray and black.
- Installation cost: \$426.50 per fixture.
- See table below for Company and Contribution fixture rates. Contribution Fixtures require a one-time payment of \$674.67 per fixture.
- Refer to the Company's Tariff for additional billing details.
- See page 23 for LED Lighting Option in Black only.

Jersey Powe	Central er & Light	COLONIAL POST TOP STANDARD LUMINAIRE SODIUM VAPOR LIGHT				
LAM	P SIZE	MONTHLY RATE				
	IES	COMPANY	RATE	CONTRIBUTI	ON RATE	
WATTS	TYPE	Jun -Sep	Oct -May	Jun -Sep	Oct -May	
50	MS III	\$ 8.24	\$ 8.24	\$ 3.95	\$ 3.95	
70	MS III & V	\$ 9.22	\$ 9.22	\$ 4.93	\$ 4.93	
100	MS III & V	\$ 10.53	\$ 10.53	\$ 6.24	\$ 6.24	
150	MS III	\$ 12.70	\$ 12.70	\$ 8.41	\$ 8.41	

2. ORNATE COLONIAL POST TOP-1 SVL

WITH 16' FIBERGLASS POLE

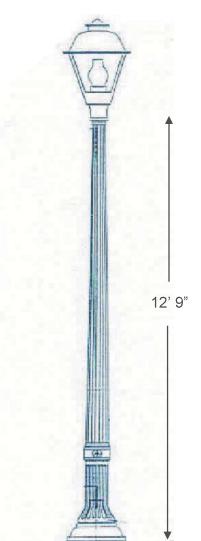


- Available for underground service.
- Available sizes in Sodium Vapor: 70 & 100 watt in black only
- Installation cost: \$1,198.88 per fixture
- See table below for Company and Contribution fixture rates. Contribution Fixtures require a one-time payment of \$674.67 per fixture.
- Refer to the Company's Tariff for additional billing details.
- NOT available in LED.

Jersey Powe A FirstEnergy C	Central er & Light ompany	ORNATE COLONIAL POST TOP SODIUM VAPOR LUMINAIRE-I				
LAN	IP SIZE	MONTHLY RATE				
	IES	COMPAN	Y RATE	CONTRIBUTION RATE		
WATTS	TYPE	Jun -Sep	Oct -May	Jun -Sep	Oct -May	
70	MS III & V	\$ 9.22	\$ 9.22	\$ 4.93	\$ 4.93	
100	MS III & V	\$ 10.53	\$ 10.53	\$ 6.24	\$ 6.24	

3. ORNATE COLONIAL POST TOP-II SVL

WITH 12' 9" ORNATE FIBERGLASS POLE



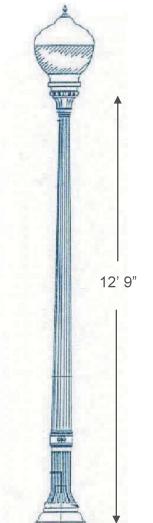
- Available for underground service.
- Available sizes in Sodium Vapor 70 & 100 watt in black only.
- Installation cost \$2,999.54 per fixture.
- See table below for Company and Contribution fixture rates. Contribution Fixtures require a one-time payment of \$674.67 per fixture.
- Refer to the Company's Tariff for additional billing details.
- ✤ NOT available in LED.

(Installed on JCP&L screw base)

Jerse Powe A FirstEnergy (y Central er & Light Company	ORNATE COLONIAL POST TOP SODIUM VAPOR LUMINAIRE- II				
LAN	IP SIZE	MONTHLY RATE				
	IES	COMPAN	NY RATE	CONTRIBUTION RATE		
WATTS	TYPE	Jun -Sep	Oct -May	Jun -Sep	Oct -May	
70	MS III & V	\$ 9.22	\$ 9.22	\$ 4.93	\$ 4.93	
100	MS III & V	\$ 10.53	\$ 10.53	\$ 6.24	\$ 6.24	

4. ORNATE ACORN STYLE POST TOP - SVL

WITH 12' 9" ORNATE FIBERGLASS POLE



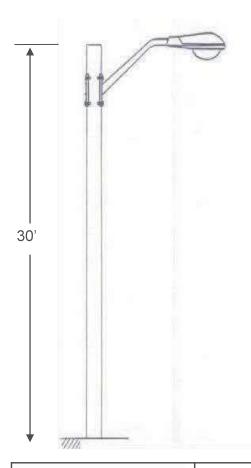
- Available for underground service.
- Available sizes in Sodium Vapor: 70 & 100 watt in black only
- Installation cost: \$3,778.93 per fixture.
- See table below for Company and Contribution fixture rates. Contribution Fixtures require a one-time payment of \$674.67 per fixture.
- Refer to the Company's Tariff for additional billing details.
- See page 24 for LED Lighting Option.

(Installed on JCP&L screw base)

Jerse Powe	y Central er & Light Company	ORNATE ACORN STYLE POST TOP SODIUM VAPOR LUMINAIRE				
LAM	P SIZE	MONTHLY RATE				
	IES	COMPANY RATE		CONTRIBUTION RATE		
WATTS	TYPE	Jun -Sep	Oct -May	Jun -Sep	Oct -May	
70	MS III & V	\$ 9.22	\$ 9.22	\$ 4.93	\$ 4.93	
100	MS III & V	\$ 10.53	\$ 10.53	\$ 6.24	\$ 6.24	

5. COBRA HEAD - 6' BRACKET - SVL

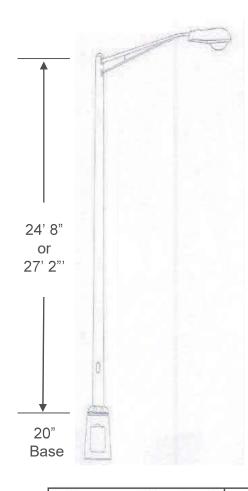
WITH 30' FIBERGLASS POLE



- Available for underground service.
- Available sizes in Sodium Vapor: 70, 100, 150, 250 & 400 watt in gray only.
- Fiberglass pole cost \$1,315.73 per fixture.
- See table below for Company and Contribution fixture rates. Contribution Fixtures require a one-time payment of \$674.67 per fixture.
- Refer to the Company's Tariff & chart on page 34 for additional details.
- See page 25 for LED Lighting Option.

Jersey Central Power & Light A FirstEnergy Company		COBRA HEAD SODIUM VAPOR LUMINAIRE 6' BRACKET				
LAM	IP SIZE	MONTHLY RATE				
	IES	COMPA	NY RATE	CONTRIBU	TION RATE	
WATTS	TYPE	Jun - Sep	Oct - May	Jun – Sep	Oct - May	
70	III MSCO	\$ 9.22	\$ 9.22	\$ 4.93	\$ 4.93	
100	III MSCO	\$ 10.53	\$ 10.53	\$ 6.24	\$ 6.24	
150	III MSCO	\$ 12.70	\$ 12.70	\$ 8.41	\$ 8.41	
250	III MSCO	\$ 18.25	\$ 18.25 \$ 18.25		\$ 12.87	
400	III MSCO	\$ 25.96	\$ 25.98	\$ 20.58	\$ 20.60	

6. <u>COBRA HEAD ON ALUMINUM POLE- SVL</u> WITH 24' 8" OR 27' 2" POLE ON 20" TRANSFORMER BASE



- Available for underground service.
- Pole available in natural aluminum finish only.
- Available sizes in Sodium Vapor: 50, 70, 100, 150, 250 & 400 watt.
- There is no installation cost for this fixture when used in an underground area served by a manhole/duct network.
- See table below for Company and Contribution fixture rates. Contribution Fixtures require a one-time payment of \$674.67 per fixture.
- Refer to the Company's Tariff & chart on page 34 for additional details.
- See LED Lighting Option on page 26.

Jersey Central Power & Light A FirstEnergy Company		CO		SODIUM VAPOR LUMINAIRE DN ALUMINUM POLE			
LAM	P SIZE		MON	ITHLY RATE			
IES		COMPAN	Y RATE	CONTRIBUTION RATE			
WATTS	TYPE	Jun - Sep	Oct - May	Jun – Sep	Oct - May		
50	II MSCO	\$ 8.24	\$ 8.24	\$ 3.95	\$ 3.95		
70	III MSCO	\$ 9.22	\$ 9.22	\$ 4.93	\$ 4.93		
100	III MSCO	\$ 10.53	\$ 10.53	\$ 6.24	\$ 6.24		
150	III MSCO	\$ 12.70	\$ 12.70	\$ 8.41	\$ 8.41		
250	III MSCO	\$ 18.25	\$ 18.25	\$ 12.87	\$ 12.87		
400	III MSCO	\$ 25.96	\$ 25.98	\$ 20.58	\$ 20.60		

LED STREET LIGHTING

TERM OF CONTRACT – Fifteen (15) years for each Company Fixture installation and thereafter on a monthly basis. Where special circumstances apply or special or unusual facilities are supplied, contracts of more than fifteen years may be required. Service that is terminated before the end of the contract term shall be billed the total of 1) each light's monthly Fixture Charge plus 2) the per KWH Distribution Charge applicable to each light's Billing Month KWH, times the remaining months of the contract term. (Removal costs are discussed on page 7). Restoration of Service to lamps before the end of the contract term shall be made at the expense of the customer. (Tariff Part III Sheet No. 39)

Where the installation of additional facilities, including, but not limited to; poles, wire, transformers, and brackets, is required to provide service to a fixture, Customers shall be responsible for payment of a Non-Refundable Contribution in Aid of Construction determined under Appendix A charges (see Tariff Part II) when applicable, or otherwise under billing work order costs estimates, which costs are subject to gross-up for applicable income taxes. Also, additional charges may apply under **Term of Contract** conditions for both **SVL** and **LED** lighting. Other fees may also apply such as: Highway Permits, Excess traffic control cost, certain preparation fees, etc. Please refer to the Original Sheet No. 37 - 40 of Part III of JCP&L's Tariff for more detail.

Service Classification LED (light-emitting diode) is available for installation of twelve (12) or more **LED** fixtures per request. **LED** streetlight is a solid-state light that uses a semi-conductor to convert electricity into light. KWH Charges are based on a standard illumination schedule of 4200 hours per year.

Scheduling LED Conversions: LED conversions of sodium vapor, mercury vapor or incandescent streetlights shall be scheduled at the **Company's reasonable discretion**. (Refer also to chart on pages 5-6 for applicable Wattage, Lumens, Cost and cost differential details).

JCP&L will <u>NOT</u> install decorative underground lighting for streetscape projects, Municipal parking lots, driveways, walkways, or Park & Ride facilities. JCP&L will only install streetlights along public right-of-way for the illumination of roadways. (For existing JCP&L owned street lighting in areas other than along Public Roadways, lighting may be converted to LED Luminaires. (Does not apply to Floodlights or Outdoor Area Lights).

LED LIGHTING OPTIONS

Option 1- LED Overhead Cobra:

The Company will install a NEW LED Cobra Head Luminaire with a standard 8' bracket on a wood distribution "fixture pole" (see pg. 7) in overhead area, with charges, when such facilities are requested by a Municipality* for 12 or more lights per request.

Option 2- Cobra Head on 30' Fiberglass/Aluminum Post:

The Company will install a NEW LED Cobra Head Luminaire with a standard 8' bracket in underground area, with charges, on a 30' Fiberglass post or on an Aluminum pole located within a Network Duct system only, for 12 or more lights per request.

Option 3- LED Black Colonial Post Top:

The Company offers one style of LED Black Colonial Post Top luminaire on a 16' Fiberglass post in underground area, with charges, for 12 or more lights per request.

Option 4- LED Black Acorn Post Top:

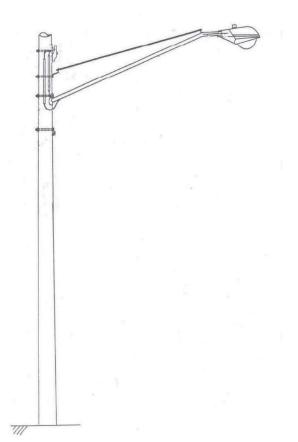
The Company offers one style of LED Black Post Top Acorn Luminaire on a 12' 9' Ornate Black Fiberglass post in underground area, with charges, for 12 or more lights per request.

		41 H	Cobra Head – I	.ED	45			
	Wattage	IES Distribution	4000K Lumens	3000K Lumens	Mounting HT.			
	30 W	TYPE III	4,000	3,900	See Page			
	50 W	TYPE III	5,400	5,300	8			
CONTRACT OF	90 W	TYPE III	9,200	9,000	for			
	130 W	TYPE III	14,200	13,700	Mounting			
	260 W	TYPE III	28,900	27,800	Heights			
	Gray only	120 -277 V & 480	V see page 22	S De S	S. 25472			
		1	Post Top Colonial	- LED				
1	Wattage	IES Distribution	4000K Lumens	3000K Lumens	Mounting HT.			
T	50 W	TYPE III	4,400	4,200	16'			
TIT	90 W	TYPE III	7,800	7,400	16'			
	50 W	TYPE V	4,900	4,700	16'			
	90 W	TYPE V	8,200	7,700	16'			
•	Black only 120 – 277 V see page 23							
.0.		-	Post Top Acorn -	1	F			
1	Wattage	IES Distribution	4000K Lumens	3000K Lumens	Mounting HT.			
5	50 W	TYPE III	5,800	5,400	12'9"			
	90 W	TYPE III	14,400	13,300	12'9"			
		V	5,800	5,400	12'9"			
-	50 W	TYPE V	5,000	57.00				

* The 4000K LED color is cool white and the 3000K LED color is warm white. LED Lumen Values listed are representative of GE manufactured fixtures.

1. STANDARD COBRA OVERHEAD - LED

ON WOOD POLE WITH A STANDARD 8' BRACKET (see pg. 8)



- Available in overhead service.
- Available sizes in LED: 30, 50, 90, 130, & 260 watt
- The installation cost for wood 'fixture pole' will be based on billing costs order estimates.
- Two Contribution Fixture options are available:

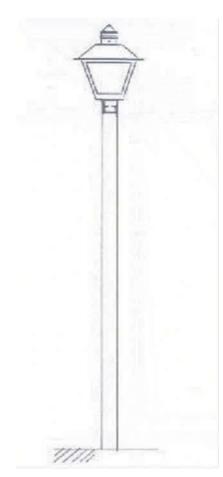
WATTS	(a)	(b)	
30	\$358.38	\$209.20	
50	\$354.88	\$205.70	
90	\$403.55	\$254.37	
130	\$492.97	\$343.79	
260	\$694.22	\$545.04	

Refer to the Company's Tariff Part III, Original
 Sheet No. 37 – 39 for additional detail information.

Jersey Central Power & Light A FirstEnergy Company					STANDARD COBRA - LED				
LAMP SIZE - IES TYPE III			MONTHLY RATE						
W	LUMENS		СОМРА	NY RATE	CONTRIBUTION RATE (a)		CONTRIBUTION RATE (b)		
	4000K	3000K	Jun -Sep	Oct -May	Jun -Sep	Oct -May	Jun -Sep	Oct –May	
30	4,000	3,900	\$.7.67	\$ 7.67	\$ 3.85	\$ 3.85	\$ 5.44	\$ 5.44	
50	5,400	5,300	\$ 8.33	\$ 8.33	\$ 4.61	\$ 4.61	\$ 6.20	\$ 6.20	
90	9,200	9,000	\$10.52	\$10.52	\$ 6.13	\$ 6.13	\$ 7.72	\$ 7.72	
130	14,200	13,700	\$13.38	\$13.38	\$ 7.65	\$ 7.65	\$ 9.24	\$ 9.24	
260	28,900	27,800	\$20.72	\$20.73	\$12.54	\$12.55	\$14.13	\$14.14	

LED Lumen Values listed are representative of GE manufactured fixtures.

2. POST TOP COLONIAL STYLE - LED



WITH 16' FIBERGLASS POLE

- Available in underground service.
- Available sizes in LED: 50 watt & 90 watt, black only.
- The installation cost for Post Top Colonial on 16' Fiberglass pole: \$674.22.

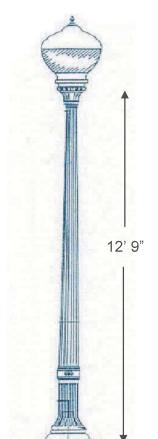
Two Contribution Fixture options are available:

WATTS	(a)	(b)
50	\$619.38	\$470.20
90	\$793.88	\$644.70

Refer to Company's Tariff, Part III, Original Sheet
 No. 37 -39 for additional detail information.

Jersey Central Power & Light A FirstEnergy Company			POST TOP COLONIAL - LED					
LAMP SIZE - IES TYPE III & V				MONTHLY RATE				
VV	W LUMENS		COMPAI	NY RATE	CONTRIBUTION RATE (a)		CONTRIBUTION RATE (b)	
	IES TYPE III							
	4000K	3000K	Jun -Sep	Oct -May	Jun -Sep	Oct -May	Jun -Sep	Oct –May
50	4,400	4,200	\$ 10.68	\$ 10.68	\$ 4.61	\$ 4.61	\$ 6.20	\$ 6.20
90	7,800	7,400	\$15.85	\$15.85	\$ 6.13	\$ 6.13	\$ 7.72	\$ 7.72
IES TYPE V								
50	4,900	4,700	\$ 10.68	\$ 10.68	\$ 4.61	\$ 4.61	\$ 6.20	\$ 6.20
90	8,200	7,700	\$15.85	\$15.85	\$ 6.13	\$ 6.13	\$ 7.72	\$ 7.72

LED Lumen Values listed are representative of GE manufactured fixtures.



3. POST TOP ACORN STYLE - LED

WITH 12' 9" ORNATE FIBERGLASS POLE

- Available for underground service.
- Available sizes in LED: 50 watt & 90 watt, in black only
- The installation cost for Decorative post: \$2,474.88.
- Two Contribution Fixture options are available:

WATTS	(a)	(b)	
50	\$1,295.80	\$1,146.62	
90	\$1,243.30	\$1,094.12	

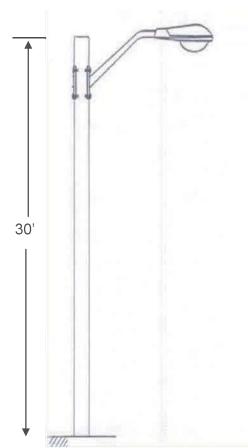
Refer to the Company's Tariff, Part III, Original Sheet
 No. 37 - 39 for additional detail information.

(Installed on JCP&L screw base)

Jersey Central Power & Light				I	POST TOP COLONIAL - LED				
LAMP SIZE - IES TYPE III & V				MONTHLY RATE					
W	W LUMENS		Compai	NY RATE	CONTRIBUTION RATE (a)		CONTRIBUTION RATE (b)		
	IES TY	PE III							
	4000K	3000K	Jun -Sep	Oct -May	Jun -Sep	Oct -May	Jun -Sep	Oct –May	
50	5,800	5,400	\$ 17.21	\$ 17.21	\$ 4.61	\$ 4.61	\$ 6.20	\$ 6.20	
90	14,400	13,300	\$19.42	\$19.42	\$ 6.13	\$ 6.13	\$ 7.72	\$ 7.72	
	IES TYPE V								
50	5,800	5.400	\$ 17.21	\$ 17.21	\$ 4.61	\$ 4.61	\$ 6.20	\$ 6.20	
90	14,400	13,300	\$19.42	\$19.42	\$ 6.13	\$ 6.13	\$ 7.72	\$ 7.72	

LED Lumen Values listed are representative of GE manufactured fixtures.

4. COBRA HEAD – 6' BRACKET - LED WITH 30' FIBERGLASS POLE



Available for underground service.

Available sizes in LED: 30, 50, 90, 130, and 260 watt, in gray only.

The installation cost for Fiberglass pole cost: \$1,360.13.

Two Contribution Fixture options are available:

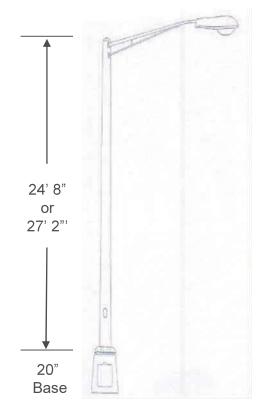
WATTS	(a)	(b)
30	\$358.38	\$209.20
50	\$354.88	\$205.70
90	\$403.55	\$254.37
130	\$492.97	\$343.79
260	\$694.22	\$545.04

Refer to the Company's Tariff, part III, Original Sheet No. 37 – 39 for additional detail information.

	Jersey C Power &	Light	STANDARD COBRA - LED						
LAM	P SIZE - IES	S TYPE III		MONTHLY RATE					
W	LUN	IENS	COMPANY RATE CONTRIBUTION RATE CONTR (a)					JTION RATE (b)	
	4000K	3000K	Jun -Sep	Oct -May	Jun -Sep	Jun -Sep Oct -May		Oct –May	
30	4,000	3,900	\$.7.67	\$ 7.67	\$ 3.85 \$ 3.85		\$ 5.44	\$ 5.44	
50	5,400	5,300	\$ 8.33	\$ 8.33	\$ 4.61	\$ 4.61	\$ 6.20	\$ 6.20	
90	9,200	9,000	\$10.52	\$10.52	\$ 6.13 \$ 6.13		\$ 7.72	\$ 7.72	
130	14,200	13,700	\$13.38	\$13.38	\$ 7.65 \$ 7.65		\$ 9.24	\$ 9.24	
260	28,900	27,800	\$20.72	\$20.73	\$12.54	\$12.55	\$14.13	\$14.14	

LED Lumen Values listed are representative of GE manufactured fixtures.

5. <u>COBRA HEAD ON ALUMINUM POLE - LED</u> WITH 24' 8" OR 27' 2" POLE ON 20" TRANSFORMER BASE



- Available for underground service. Pole available in natural aluminum finish only.
- Available sizes in LED: 30, 50, 90, 130 and 260 watt.
- The installation cost for Aluminum pole will be based on billing costs order estimates.

Two Contribution Fixture options are available:

WATTS	(a)	(b)
30	\$358.38	\$209.20
50	\$354.88	\$205.70
90	\$403.55	\$254.37
130	\$492.97	\$343.79
260	\$694.22	\$545.04

Refer to the Company's Tariff, Part III, Original Sheet
 No. 37 – 39 for additional detail information.

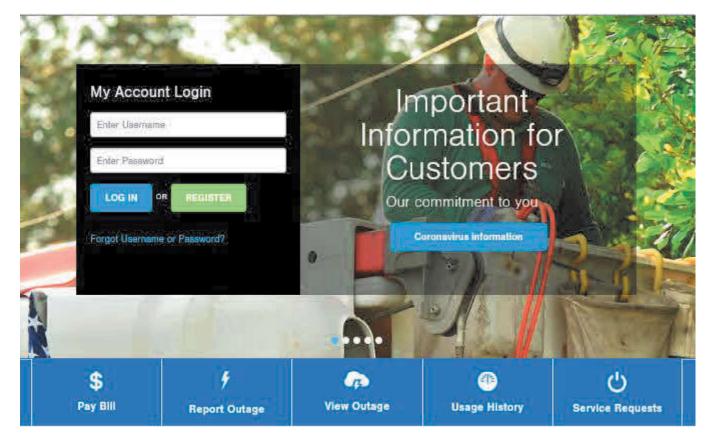
Jersey Central Power & Light A FirstEnergy Company STANDARD COBRA - LED								
LAMP	SIZE - IE	S TYPE III			MONT	HLY RATE		
W	LUN	/IENS	COMPAN	IY RATE	CONTRIBUTION RATE (a)			JTION RATE (b)
	4000K	3000K	Jun -Sep	Oct -May	Jun -Sep	Jun -Sep Oct -May		Oct –May
30	4,000	3,900	\$.7.67	\$ 7.67	\$ 3.85 \$ 3.85		\$ 5.44	\$ 5.44
50	5,400	5,300	\$ 8.33	\$ 8.33	\$ 4.61	\$ 4.61	\$ 6.20	\$ 6.20
90	9,200	9,000	\$10.52	\$10.52	\$ 6.13 \$ 6.13		\$ 7.72	\$ 7.72
130	14,200	13,700	\$13.38	\$13.38	\$ 7.65 \$ 7.65		\$ 9.24	\$ 9.24
260	28,900	27,800	\$20.72	\$20.73	\$12.54	\$12.55	\$14.13	\$14.14

LED Lumen Values listed are representative of GE manufactured fixtures.

STREET LIGHT MAINTENANCE PROCEDURE www.firstenergycorp.com

A Municipality can contact the Company at 1-800-662-3115 to report a street light problem. Notification should include a street address, the number of the nearest building, crossroad or landmark, as well as the Municipality. Reporting the pole number, when available, would be very helpful to the Company.

Another way to contact the Company regarding street light problems is to visit our web site at **www.firstenergycorp.com**. Once you are on the JCP&L's home page, select "View or Report Outages" from the menu below.



This action will bring you to a page with several options listed on the left. Select "Report Lighting Problem".

Jersey Central Power& Light A Firstfinergy Company

BURLINGTON COUNTY

Ron Crocker Chesterfield Township New Hanover Township North Hanover Township Pemberton Borough Pemberton Township (Browns Mills) Southampton Township Springfield Township Woodland Township Wrightstown Borough

MERCER COUNTY

Ron Crocker Robbinsville Township

Jim Markey: East Windsor Township Hightstown Borough West Windsor Township

MIDDLESEX COUNTY

Jim Markey Cranbury Township East Brunswick Township Helmetta Borough Jamesburg Borough Monroe Township Old Bridge Township Sayreville Township (Padin) South Amboy City South Brunswick Township Spotswood Borough

MONMOUTH COUNTY

John Meehan Belmar Borough

Brielle Borough Farmingdale Borough Howell Township Lake Como Borough Manasquan Borough Sea Girt Borough Spring Lake Borough Spring Lake Heights Borough Wall Township

Frank Luna Aberdeen Township Allenhurst Borough Asbury Park City Atlantic Highlands Borough Avon-By-The-Sea Borough Bradley Beach Borough Deal Borough Eatontown Borough Fair Haven Borough Hazlet Township Highlands Borough Holmdel Township Interlaken Borough Keansburg Borough

MONMOUTH COUNTY cont'd

Frank Luna Keyport Borough Little Silver Borough Loch Arbor Village Long Branch City Matawan Borough Middletown Township-(Lincroft, Mon Beach, Navesink) Monmouth Beach Borough Neptune City Borough Neptune Township Ocean Township Oceanport Borough Red Bank Borough Rumson Borough Sea Bright Borough Shrewsbury Borough Shrewsbury Township Tinton Falls Borough Union Beach Borough West Long Branch Borough

Ron Crocker Upper Freehold Township

Jim Markey Colts Neck Township Englishtown Borough Freehold Borough Freehold Township Manalapan Township Marlboro Township Millstone Township Roosevelt Borough

OCEAN COUNTY

John Meehan

Bay Head Borough Brick Township Jackson Township Lakewood Township Mantoloking Borough Pt. Pleasant Beach Borough Pt. Pleasant Borough

Ron Crocker

Barnegat Township Beachwood Borough Berkeley Township Island Heights Borough Lacey Township Lakehurst Borough Lavallette Borough Manchester Township Ocean Gate Borough Ocean Township Pine Beach Borough Plumsted Township (New Egypt) Seaside Heights Borough Seaside Park Borough South Toms River Borough Toms River Township

Regional External Affairs Consultant Central Region

John Meehan:

732-370-7280 Work: Cellular: 732-284-1459 jimeehan@firstenergycorp.com

Frank Luna: 732-923-2350 Work:

Cellular: 848-273-0561 fluna@firstenergycorp.com

Jim Markey:

732-723-6652 Work: Cellular: 732-742-0382 Jmarkey@firstenergycorp.com

Ron Crocker: Work: 732-557-6158 Cellular: 848-220-5523 rcrocker@firstenergycorp.com

Regional Extern County	eehan Ocean key Middlesex, Mercer
Ron Crocker	Burlington
John Meehan	Ocean
Jim Markey	Middlesex, Mercer
Frank Luna	Monmouth

JCP&L CENTRAL NEW JERSEY REGION



A FirstEnergy Company

ESSEX COUNTY

<u>Carol Bianchi</u> Maplewood Township Millburn Township Orange Township

Bob Flynn Livingston Township

HUNTERDON COUNTY

Stan Prater:

Alexandria Township Bethlehem Township Bloomsbury Borough Califon Borough **Clinton Town Clinton Township** Delaware Township East Amwell Township Flemington Borough Franklin Township Frenchtown Borough Glen Gardner Borough Hampton Borough High Bridge Borough Holland Township Kingwood Township Lambertville City Lebanon Borough Lebanon Township Milford Borough Raritan Township Readington Township Stockton Borough Tewksbury Township Union Township West Amwell Township

MERCER COUNTY

Jim Markey

Hopewell Township

MORRIS COUNTY

Jose Ortiz

Chester Borough Chester Township Dover Town Jefferson Township Mendham Borough Mendham Township Mine Hill Township Mount Arlington Borough Mount Olive Township Netcong Borough Randolph Township Rockaway Borough Rockaway Township Roxbury Township Victory Gardens Borough Washington Twp Wharton Borough

Bob Flynn

Boonton Town Boonton Township Denville Township East Hanover Township Hanover Township Montville Township Morris Township Morris Plains Borough Mountain Lakes Borough Parsippany Troy Hills Township Peguannock Township

MORRIS COUNTY cont'd

Carol Bianchi

Chatham Borough Chatham Township Florham Park Borough Harding Township Long Hill Township Madison Borough

PASSAIC COUNTY

Bob Flynn

Bloomingdale Borough Riverdale Borough Pompton Lakes Borough Ringwood Borough Wanaque Borough Wayne Township

Jose Ortiz West Milford Township

SOMERSET COUNTY

Bob Flynn Bernards Township

SOMERSET COUNTY

Carol Bianchi

Bedminster Township Bernardsville Borough Branchburg Township Bridgewater Township Far Hills Borough Green Brook Township Hillsborough Township Peapack & Gladstone Boroughs Warren Township Watchung Borough

SUSSEX COUNTY

Jackie Espinoza

Andover Borough Andover Township Branchville Borough Byram Township Frankford Township Franklin Borough Fredon Township Green Township Hamburg Borough Hampton Township Hardyston Township Lafayette Township Montague Township Newton Town Ogdensburg Borough Sandyston Township Sparta Township Stillwater Township Sussex Borough Vernon Township Walpack Township Wantage Township

SUSSEX COUNTY

Jose Ortiz Hopatcong Borough Stanhope Borough

UNION COUNTY

Carol Bianchi

Berkeley Heights Twp Mountainside Borough New Providence Borough Springfield Township Summit City

WARREN COUNTY

Stan Prater Allamuchy Township Alpha Borough Belvidere Town Franklin Township Greenwich Township Hackettstown Town Harmony Township Hope Township Independence Township Knowlton Township Liberty Township Lopatcong Township Mansfield Township Oxford Township Phillipsburg Town Pohatcong Township Washington Borough Washington Township White Township

Jackie Espinoza

Blairstown Township Frelinghuysen Township Hardwick Township

External Affairs Consultant Contact Information

Stan Prater:

Work: 908-689-6880 Cellular: 201-787-5699 rprater@firstenergycorp.com

Jackie Espinoza:

Work: 973-300-2929 Cellular: 862-777-0874 jespinoza@firstenergycorp.com

Carol Bianchi:

Work: 908-608-5010 Cellular: 848-246-9962 cbianchi@firstenergycorp.com

Bob Flynn:

 Work:
 973-331-5386

 Cellular:
 732-772-5527

 rflynn@firstenergycorp.com

Jose Ortiz

Work: 973-537-2660 Cellular: 862-246-1709 ortizj@firstenergycorp.com

Regional External Affairs Consultant County Assignments

County	<u>A</u>
Jackie Espinoza	
Stan Prater	1
Carol Bianchi	
Bob Flynn	
Jose Ortiz	

Sussex Warren, Hunterdon Union, Essex, Somerset, Morris, Essex, Somerset Morris, Sussex

NORTHERN NEW JERSEY REGION

APPROVED STREET LIGHT MANUFACTURES

For your convenience, photometric data can be obtained from the web sites listed below for the following approved street light manufacturers. Search for a particular light using the first three or four letters/numbers from the catalog numbers listed below. Please note that some manufacturers have their own names for the types of lights, such as "Traditionaire", which you will need to cross reference to obtain the correct photometric data.

- Acuity Lighting...... <u>www.acuitybrands.com</u>
- American Electric..... <u>www.americanelectriclighting.com</u>
- Cooper Lighting...... <u>www.cooperlighting.com</u>
- General Electric...... <u>secure.ge-lightingsystems.com</u>
- King Luminaire...... <u>www.kingluminaire.com</u>
- Pemco Lighting...... <u>www.pemcolighting.com</u>

TYPE/SIZE	MANUFACTURER	CATALOG NUMBER						
COBRA HEAD LUMINAIRES - Standard Drop Prismatic Refractor (Semi-Cutoff)								
50 watt - 120 volt IES Type II - MSCO	American Electric Cooper Lighting General Electric	115D70B260 (FE) OVZ50SR22EU0019 M2RR05S1N2AMS2						
70 watt - 120 volt IES Type III - MSCO	American Electric Cooper Lighting General Electric	115D70E360 (FE) OVZ70SR23EH4 M2RR07S1N2AMS3						
100 watt - 120 volt IES Type III - MSCO	American Electric Cooper Lighting General Electric	115D701360 (FE) OVZ10SR23EH4 M2RR10S1N2AMS3						
150 watt - 120 volt IES Type III - MSCO	American Electric Cooper Lighting General Electric	115D706360 (FE) OVZ15SR23EH4 M2RR15S1N2AMS3						
250 watt - 120 volt IES Type III - MSCO	American Electric Cooper Lighting General Electric	115C623300 (FE) OVZ25SWW3EH4 M2RR25S1A2GMS3						
400 watt - 120 volt IES Type III - MSCO	American Electric Cooper Lighting General Electric	125C624300 (FE) OVX40SW23EU1597 MSRL40S1A22RMS3						

TYPE/SIZE	MANUFACTURER	CATALOG NUMBER
COBRA HEAD LUN	IINAIRES - Low Profile Dro	p Prismatic Refractor (Cutoff)
70 watt - 120 volt IES Type II - MCO	American Electric Cooper Lighting General Electric	115D70E2DS (FE) OVG70SR22DU1046 M2RR07SIN2GMS2
100 watt - 120 volt IES Type II - MCO	American Electric Cooper Lighting General Electric	115D7012DS (FE) OVG10SR22DU1047 M2RR10S1N2GMS2
150 watt - 120 volt IES Type II - MCO	American Electric Cooper Lighting General Electric	115D7062DS (FE) OVG15SR22DU1048 M2RR15S1N2GMS2
250 watt - 120 volt IES Type III - MCO	American Electric Cooper Lighting General Electric	115D6233DS (FE) OVG25SW23EU1050 M2RR25S1A2GMS3
400 watt - 120 volt ES Type III - MCO	American Electric Cooper Lighting General Electric	115D6243DS (FE) OVY40SW23EU1051 MSRL40S1A22GMS3
COLONIAL POST	COP LUMINAIRE - Stand	lard
50 watt - IES Type MS III	Cooper Lighting General Electric Pemco Lighting	LXF50SR233U0282 T10R05S1N2LMS3BL055 RNPF50SVL
70 watt - IES Type MS III	American Electric Cooper Lighting General Electric Pemco Lighting	S-470226-1 LXF70SR233U0001 T10R07S1N2AMS3BL055 RNPF70SVL
70 watt - IES Type V	American Electric Cooper Lighting General Electric	S-470227 LXF70SR255U0116 T10C07S1N2AMS5BL055
100 watt - IES Type MS III	American Electric Cooper Lighting General Electric	24710SRN120R3AYEC LXF10SR23H4 T10R10S1N2AMS3BLT

TYPE/SIZE	MANUFACTURER	CATALOG NUMBER					
COLONIAL POST TOP LUMINAIRE - Standard (cont'd)							
100 watt IES Type V	American Electric Cooper Electric General Electric	24710SRN120R5AYECAR10731 LXF10SR255U0117 T10C10S1N2AMS5BL055					
150 watt IES Type MS III	American Electric Cooper Electric General Electric	24715SRN120R3AYEC LXF15SR23H4 T10R15S1N2AMS3BLT					
COLONIAL POST	TOP LUMINAIRE – O	rnate					
70 watt – MS III	Acuity Lighting Cooper Lighting	AVP07S4N120R3PYTLVX UTD 9007 BK					
70 watt – V	Acuity Lighting Cooper Lighting	AVP07SRN120R5PYTLVX UTD 9008 BK					
100 watt – MS III	Acuity Lighting Cooper Lighting	AVP10SRN120R3PYTLVX UTD 9009 BK					
100 watt – V	Cooper Lighting	UTD 009010 BK					
ACORN STYLE PC	ST TOP LUMINAIRE						
70 watt – MS II	King Luminaire	K199-EAR-II-70-SVL-120-K12-PR					
70 watt – V	King Luminaire	K199-EAR-V-70-SVL-120-K12-PR					
100 watt – MS II	King Luminaire	K199-EAR-II-100-SVL-120-K12- PR					
100 watt – V	King Luminaire	K199-EAR-V-100-SVL-120-K12- PR					

LED Manufactures

TYPE/SIZE	MANUFACTURER	CATALOG NUMBER
COBRA HEAD LUMINAII	RES - Standard	<u> </u>
50 & 90 watt IES Type III	General Electric	ERLC GE (50) ERL1 GE (90)
130 watt IES Type III 260 watt IES Type III	General Electric	ERLH GE ERS2 GE
COLONIAL POST TOP LU	IMINAIRE	
50 watt IES Type III	Cooper Lighting	UTR Cooper
50 watt IES Type V	Cooper Lighting	UTR Cooper
90 watt IES Type III	Cooper Lighting	UTR Cooper
90 watt IES Type V	Cooper Lighting	UTR Cooper
ACORN STYLE POS	T TOP LUMINAIRE	
50 watt IES Type III	Cooper Lighting	ACN Cooper
50 watt IES Type V	Cooper Lighting	ACN Cooper
90 watt IES Type III	Cooper Lighting	ACN Cooper
90 watt IES Type V	Cooper Lighting	ACN Cooper

Annualized Cost Comparison Based on Lumens & Type of Light

Jersey Central Power & Light Company Rates effective August 1, 2020 Annualized Cost Comparison based on Lumens and type of light – LED vs SVL, MVL, ISL

Source/ Monthly Lamp Billing Company Total Monthly LED Cobra Head Ballast Delivered Month Fixture kWh Monthly Price Percentage Energy kWh** Lamp Wattage Wattage Lumens* Charge Charges Charge (1) difference Savings Savings \$6.37 \$1.96 \$8.33 LED 50 W 5300 18 SVL 50 W 60 2800 21 \$5.96 \$2.28 \$8.24 \$0.09 1% -14% **SVL 70 W** 85 4410 30 \$5.96 \$3.26 \$9.22 (\$0.89)-10% -40% -5% -57% **MVL 100 W** 121 2800 42 \$4.16 \$4.57 \$8.73 (\$0.40) MVL 175 W 211 5390 74 \$4.16 \$8.05 \$12.21 -32% -76% (\$3.88)**ISL 105 W** 1000 37 \$1.76 \$5.78 \$2.55 44% -51% \$4.02 ISL 205 W 72 \$1.76 \$7.83 \$9.59 (\$1.26) -13% -75% 2500 ISL 327 W \$1.76 \$12.40 \$14.16 -41% -84% 4000 114 (\$5.83) **ISL 448 W** 6000 157 \$1.76 \$17.08 \$18.84 (\$10.51) -56% -89% LED 90 W 9000 32 \$7.04 \$3.48 \$10.52 \$4.57 SVL 100 W 121 6650 42 \$5.96 \$10.53 (\$0.01) 0% -24% -69% MVL 250 W 295 8400 103 \$4.16 \$11.20 \$15.36 (\$4.84) -32% LED 130 W 13700 46 \$8.38 \$5.00 \$13.38 SVL 150 W 176 11200 62 \$5.96 \$6.74 \$12.70 \$0.68 5% -26% ISL 690 W 10000 242 \$1.76 \$26.31 \$28.07 (\$14.69) -52% -81% LED 260 W 27800 91 \$10.83 \$9.90 \$20.73 SVL 250 W 293 19250 103 \$7.05 \$11.20 \$18.25 \$2.48 14% -12% -7% -45% **MVL 400 W** 468 15750 164 \$4.51 \$17.84 \$22.35 (\$1.62) SVL 400 W 498 35000 174 \$7.05 \$18.92 \$25.97 **MVL 700 W** 803 28000 281 \$5.46 \$30.56 \$36.02 (\$10.05) -28% -38% MVL 1000 W 1135 60500 397 \$5.46 \$43.17 \$48.63

* Delivered Lumens provided for comparison purposes between LED, MVL and SVL are those for Cobra Head type Fixtures. LED Lumen Values are those for 3000 Kelvin Temperature, and representative of GE manufactured fixtures. MVL and SVL lumen values are at 70% of source lumens due to loss of trapped Lumens.

** Based on standard illumination schedule of 4200 hours per year, Billing Month KWH was calculated to the nearest whole KWH based on the Lamp wattage of the light, or the nominal lamp and ballast wattage of the light, times the light's annual burning hours per year, divided by 12 months per year, divided by 1000 watts per KWH.

Jersey Central Power and Light

Туре	Short Material Description	Long Material Description		Warehous e On Hand	Warehouse On Hand	Warehous e On			Open PO Qty
LED	LUMINAIRE UNDERPASS LED 90W M-V 3K GRAY	WALL OR JUNCTION BOX, 600 VOLT, 14-3, TYPE UFDUPLEX WIRING LEADS, INCLUDES DALI AND ANSI LABEL WITH 30 WATT, 4K, T4	EA	0	0	2	0	2	0
LED	LUMINAIRE FLOOD LED 260W 3K MV TY6X6 BZ	LUMINAIRE, LED FLOODLIGHT, 260 WATT, 120-277 VOLT, DARK BRONZE COLOREDFIXTURE AND FULL YOKE TO BE PAINTED SAME AS FIXTURE, OPTICS ARE IES 6X6TYPE DISTRIBUTION, 40,000 LUMENS, COLOR 3K, WITH A TWIST LOCK 7- PINRECEPTACLE AND A LONG LIFE PHOTOCONTROL, 6' #14/3 MIN. CORD, IEEE/ANSIC136.2-10KV/5A SURGE SUPRESSION, DALI DRIVER INSTALLED FOR POTENTIALCONNECTED LIGHTING INTEGRATION, RECOMMENDED REPLACEMENT FOR 1000 WATTHID.	EA	1	0	0	0	1	0
LED	LUMINAIRE PT ACORN LED 50W TY3 KNG 3K BK	LUMINAIRE, LED, POST TOP MOUNTED, 120 VOLTS, 50 WATTS, TYPE III, COLOR BLACK, ACORN STYLE.	EA	2	0	0	0	2	0
LED	LUMINAIRE COBRA LED 90W M-V TYPE III 3K	LUMINAIRE, LED, 120-277 VOLT, 90 WATT, IES TYPE III,COLOR GRAY, MAST ARM MOUNTED, COBRA STYLE, 7,000 LUMENS3000 KADDED DALI DRIVER AND SPECIAL WATTAGE LABEL SHOWING WATTAGE <(>&<)>WITH TEXT READING "3K" AND "TYPE III" PER FE SPEC.	EA	3	17	81	0	101	0
LED	LUMINAIRE LARG PT COL LED 90W M-V 3K TY3	LUMINAIRE LARG PT COL LED 90W M-V 3K TY3LUMINAIRE, LARGE COLONIAL POST TOP LED LUMINAIRE, 90W,120-277 VOLT, 3000 KELVIN CCT LIGHT COLOR, IES TYPE III OVAL LIGHTDISTRIBUTION, 5,000 LUMEN OUTPUT MINIMUM WITH LONG-LIFE PHOTOCONTROL;FIXTURE COLOR IS BLACK, ANDIT IS POST TOP MOUNTED. THIS LARGER STYLECOLONIAL NOW REQUIRES THIS DISTINCTION IN THE DESCRIPTION TO DESIGNATE ADIFFERENCE FROM THE NEWLY CHOSEN SMALLER COLONIAL, WHICH WAS SELECTEDDURING THE 2022 BLANKET AWARD. *** SPEC SECTION MS 12-667 FE ***	EA	5	6	0	0	11	0

LED	LUMINAIRE LG GR PT COL LED 90W MV 4K TY3	LUMINAIRE, LARGE GRAY COLONIAL POST TOP LED LUMINAIRE,90W, 120-277 VOLT, 4000 KELVIN CCT LIGHT COLOR, IES TYPE III OVAL LIGHTDISTRIBUTION, 9,392 LUMEN OUTPUT WITH LONG-LIFE PHOTOCONTROL; FIXTURECOLOR IS GRAY, AND IT IS POST TOP MOUNTED. THIS LARGER STYLE COLONIALNOW REQUIRES THIS DISTINCTION IN THE DESCRIPTION TO DESIGNATE ADIFFERENCE FROM THE NEWLY CHOSEN SMALLER COLONIAL, WHICH WAS SELECTEDDURING THE 2022 BLANKET AWARD. *** SPEC SECTION MS 12-667 FE ***	EA	29	0	0	0	29	0
LED	LUMINAIRE COBRA/SEC LED 50W M-V TYP3 3K	LUMINAIRE, COBRAHEAD/SECURITY, LED, 50 WATT, 120-277 VOLT, IESDISTRIBUTION TYPE III(3), LIGHT COLOR 3K CHROMATICITY, FIXTURE COLORGRAY, MAST ARM MOUNTED, COBRA STYLE, 6,200 LUMENS ADDED DALI DRIVER AND SPECIAL WATTAGE LABEL SHOWING WATTAGE VALUE WITH LABEL TEXT PER FE SPECREADING "3K" AND "TYPE III"	EA	107	50	37	0	194	0
LED	LUMINAIRE PT COL LED 50W M-V TY3 4K GR	LUMINAIRE, LED, 120-277 VOLT, 50 WATT, IES TYPE III,COLOR GRAY, POST TOP MOUNTED, COLONIAL STYLE, 2,500 LUMENS	EA	154	0	0	0	154	0

Jersey Central Power and Light

Typ e	Short Material Description	Long Material Description	UoM	Bethel Warehous e On Hand	Connellsvill e Warehouse On Hand	Warehous	JCP&L On Hand 3/10/23	Total On Hand 3/10/23	Open PO Qty
HPS	LUMINAIRE PT ACORN HPS 100W 120V TY5KING	LUMINAIRE, HIGH PRESSURE SODIUM, POST TOP MOUNTED, 120 VOLTS, 100 WATT, TYPE V, COLOR BLACK, ACORN STYLE.	EA	1	1	0	9	11	7
HPS	LUMINAIRE COBRA HPS 150W 480V TY3	LUMINAIRE HPS 150W 480V ROADWAY TY 3 LUMINAIRE, 150W/55V, HPS COBRA, 480V, NPF REACTOR BALLAST, TYPE III DISTRIBUTION, GRAY, TWIST LOCK PC RECEPTACLE, PLUG IN STARTER, ACRYLIC REFRACTOR., PER FE SPECIFICATION 12- 652.	EA	1	0	0	0	1	0
HPS	LUMINAIRE COBRA HPS 400W 120V TY3	LUMINAIRE 400W, HPS COBRA, 120V, CW BALLAST, TYPE III DISTRIBUTION, GRAY, TWIST LOCK PC RECEPTACLE, PLUG IN STARTER,GLASS REFRACTOR. FE SPECIFICATION: 12-652	EA	1	6	40	37	84	104
HPS	LUMINAIRE FLOOD HPS 250W M-V 7X6 GRAY	LUMINAIRE,250W,HPS FLOOD,MULTI- V/120,7X6,GRAY LUMINAIRE 250W, HPS FLOOD, MULTI-V/120, CW BALLAST, 7x6 DISTRIBUTION, GRAY, TWIST LOCK PC RECEPTACLE, PLUG IN STARTER. DOOR ASSEMBLY WITH LATCHES FOR TOOL-FREE ENTRY. YOKE TO BE PAINTED SAME AS FIXTURE OR GALVANIZED. 6' #16/3 MIN. CORD. MULTI-VOLT BALLAST PRE-WIRED 120V.	EA	1	0	87	0	88	0
HPS	LUMINAIRE FLOOD HPS 250W 120V BRZ	LUMINAIRE, HIGH PRESSURE SODIUM,FLOODLIGHT, 120 VOLT, 250 WATT, BALLASTTYPE HPF, IES TYPE 6 X 6, DARK BRONZE,WITH SIX (6) FT MINIMUM NO. 12 UF CABLE,AND HAVE REQUIRED FASTENERS INSTALLEDFOR BOTH GLARE AND VANDAL SHIELDS.	EA	2	0	0	35	37	24
HPS	LUMINAIRE PT ACORN HPS 70W 120V TY5KING	LUMINAIRE, HIGH PRESSURE SODIUM,POST TOP MOUNTED, 120 VOLTS, 70 WATTS,TYPE V, COLOR BLACK, ACORN STYLE.	EA	2	0	0	1	3	0
HPS	LUMINAIRE COBRA HPS 100W 120V TY2 LOW PR	LUMINAIRE, HIGH PRESSURE SODIUM,HORIZONTAL-COBRA HEAD, 100 WATT, 120VOLT, REGULATING BALLAST,TYPE HPF,TYPE II MCO,(BUT FURTHER LIMITED TO LESS THAN 1% UPLIGHT), LOW PROFILE REFRACTOR	EA	2	114	9	4	129	0
HPS	LUMINAIRE COBRA HPS 150W 120V TY2 LOW PR	LUMINAIRE, HIGH PRESSURE SODIUM,HORIZONTAL-COBRA HEAD, 150 WATT, 120VOLT, REGULATING BALLAST, TYPE HPF,TYPEII MSCO,(BUT FURTHERLIMITED TO LESS THAN 1% UPLIGHT)LOW PROFILE REFRACTOR	EA	2	0	0	0	2	0
HPS	LUMINAIRE PT COL HPS 70W 120V TY5 BLK	LUMINAIRE, HIGH PRESSURE SODIUM, POSTTOP, 120 VOLT, 70 WATT, IES TYPE V,BLACK, STYLE STANDARD COLONIAL.	EA	3	0	0	1	4	0
HPS	LUMINAIRE COBRA HPS 70W 120V TY2 LOWPRO	LUMINAIRE, HIGH PRESSURE SODIUM,HORIZONTAL-COBRA HEAD, 70 WATT, 120VOLT, REACTOR BALLAST, TYPE NPF, IESTYPE II MSCO,(BUT FURTHERLIMITED TO LESS THAN 1% UPLIGHT)LOW PROFILE REFRACTOR.	EA	3	0	0	3	6	0

HPS	LUMINAIRE COBRA HPS 150W 120V TY3	LUMINAIRE 150W/55V, HPS COBRA, 120V, NPF REACTOR BALLAST, TYPE III DISTRIBUTION, GRAY, TWIST LOCK PC RECEPTACLE, PLUG IN STARTER, ACRYLIC REFRACTOR. FE SPECIFICATION: 12-652	EA	3	2	211	99	315	132
HPS	LUMINAIRE PT COL ORNATE HPS 70W TY5 BLK	LUMINAIRE, HIGH PRESSURE SODIUM, POSTTOP, 120 VOLT, 70 WATT, IES TYPE V,SUITABLE FOR SEACOAST ENVIRONMENTS,BLACK, ORNATE STYLE COLONIAL WITHORNAMENTAL OIL LAMP LIKE CHIMNEY,AND POLYCARBONATE LENS PANELS,PER SPECIFICATION 12-633 FE	EA	4	0	0	3	7	0
HPS	LUMINAIRE COBRA HPS 400W MULTI-V TY3	LUMINAIRE, HIGH PRESSURE SODIUM, HORIZONTAL-COBRA HEAD, 400 WATT, MULTI- VOLT (SET @ 120V), HPF REGULATING BALLAST, IES TYPE IIIMSCO.	EA	4	19	47	0	70	24
HPS	LUMINAIRE PT COL SM HPS 100W TY5 BLK	LUMINAIRE, HIGH PRESSURE SODIUM, POSTTOP, 120 VOLT, 100 WATT, IES TYPE V,BLACK, STYLE STANDARD COLONIAL.	EA	5	2	0	9	16	12
HPS	LUMINAIRE PT COL ORNATE HPS 100W TY3 BLK	LUMINAIRE, HIGH PRESSURE SODIUM, POSTTOP, 120 VOLT, 100 WATT, IES TYPE MS III,SUITABLE FOR SEACOAST ENVIRONMENTS,BLACK, ORNATE STYLE COLONIAL WITHORNAMENTAL OIL LAMP LIKE CHIMNEY,AND POLYCARBONATE LENS PANELS,PER SPECIFICATION 12-633 FE.	EA	5	0	0	12	17	0
HPS	LUMINAIRE PT ACORN HPS 70W 120V TY2KING	LUMINAIRE, HIGH PRESSURE SODIUM, POST TOP MOUNTED, 120 VOLTS, 70 WATTS, IES TYPE II, COLOR BLACK, ACORN STYLE.	EA	5	0	0	8	13	0
HPS	LUMINAIRE PT COL STD HPS 50W TY5 GRAY	LUMINAIRE, HIGH PRESSURE SODIUM, STANDARDPOST TOP COLONIAL, 120 VOLT, 50 WATT, IES TYPE V,GRAY, SUITABLE FOR SEACOAST ENVIRONMENTPER SPECIFICATION 12- 633 FE	EA	7	0	0	2	9	0
HPS	LUMINAIRE PT COL HPS 50W TY3 BLK	LUMINAIRE, HIGH PRESSURE SODIUM, POSTTOP, 120 VOLT, 50 WATT, IES TYPE MS III,BLACK, STYLE STANDARD COLONIAL.	EA	8	0	0	36	44	12
HPS	LUMINAIRE PT COL STD HPS 70W TY5 GRAY	LUMINAIRE, HIGH PRESSURE SODIUM, STANDARDPOST TOP COLONIAL, 120 VOLT, 70 WATT, IES TYPE V,GRAY, SUITABLE FOR SEACOAST ENVIRONMENTPER SPECIFICATION 12- 633 FE	EA	9	0	0	1	10	0
HPS	LUMINAIRE PT ACORN HPS 100W 120V TY3 BLK	LUMINAIRE 100W, HPS PT ACORN,120V, NPF REACTOR BALLAST,TYPE III DISTRIBUTION,BLACK, TWIST LOCK PC RECEPTACLE,PLUG IN STARTER,GLASS REFRACTOR, GOLD RIBS AND BANDAND WITH 4-1/2" FINIAL,ALL PARTS TO BE SHIPPED IN ONE CARTON	EA	9	0	64	1	74	0
HPS	LUMINAIRE PT COL STD HPS 100W TY5 GRAY	LUMINAIRE, HIGH PRESSURE SODIUM, STANDARDPOST TOP COLONIAL, 120 VOLT,100 WATT, IES TYPE V,GRAY, SUITABLE FOR SEACOAST ENVIRONMENTPER SPECIFICATION 12- 633 FE	EA	10	0	0	6	16	12

HPS	LUMINAIRE PT COL ORNATE HPS 70W TY3 BLK	LUMINAIRE, HIGH PRESSURE SODIUM, POSTTOP, 120 VOLT, 70 WATT, IES TYPE MS III,SUITABLE FOR SEACOAST ENVIRONMENTS,BLACK, ORNATE STYLE COLONIAL WITHORNAMENTAL OIL LAMP LIKE CHIMNEY,AND POLYCARBONATE LENS PANELS,PER SPECIFICATION 12-633 FE.	EA	11	0	0	4	15	0
HPS	LUMINAIRE ROAD HORIZ CUTOF HPS 100W 120V	LUMINAIRE, ROADWAY, HORIZONTAL CUTOFF, HIGH PRESSURE SODIUM,100 WATT, M-C-II PATTERN, 120 VOLT, CW/CWA OR HR BALLAST, TLR	EA	12	16	0	0	28	0
HPS	LUMINAIRE PT ACORN HPS 100W 120V TY2KING	LUMINAIRE, HIGH PRESSURE SODIUM,POST TOP MOUNTED, 120 VOLTS, 100 WATTS,TYPE MS II, COLOR BLACK, ACORN STYLE.	EA	15	0	0	11	26	0
HPS	LUMINAIRE SECURITY HPS 70W 120V D-D TY5	LUMINAIRE, HIGH PRESSURE SODIUM, DUSKTO DAWN, 120 VOLT, 70 WATT, TYPE 5.	EA	16	24	13	13	66	24
HPS	LUMINAIRE FLOOD HPS 150W 120V BRZ	LUMINAIRE, HIGH PRESSURE SODIUM,FLOODLIGHT, 120 VOLT, 150 WATT, BALLASTTYPE HPF, IES TYPE 6 X 6, DARK BRONZE,WITH SIX (6) FT MINIMUM NO. 12 UF CABLE,AND HAVE REQUIRED FASTENERS INSTALLEDFOR BOTH GLARE AND VANDAL SHIELDS.	EA	23	0	0	32	55	24
HPS	LUMINAIRE PT COL STD HPS 150W TY3 BLK	LUMINAIRE HPS 150W STD PTC TY3 BLKLUMINAIRE, HIGH PRESSURE SODIUM,STANDARD POST TOP COLONIAL,120V, 150W, IES TYPE III MSCO,NPF REACTOR BALLAST,BLACK,TWIST LOCK PHOTOCONTROL WITH PHOSPHOR BONZERECEPTACLE CONTACTS,ACRYLIC REFRACTOR,	EA	23	16	28	21	88	48
HPS	LUMINAIRE PT COL HPS 150W 120V TY3 GRY	LUMINAIRE, HIGH PRESSURE SODIUM, STANDARDPOST TOP COLONIAL, 120 VOLT,150 WATT, IES TYPE III,GRAY, SUITABLE FOR SEACOAST ENVIRONMENTPER SPECIFICATION 12- 633 FE	EA	24	0	0	35	59	0
HPS	LUMINAIRE PT COL HPS 70W 120V TY3 BLK	LUMINAIRE, HIGH PRESSURE SODIUM, POSTTOP, 120 VOLT, 70 WATT, IES TYPE MS III,BLACK, STYLE STANDARD COLONIAL.	EA	28	0	0	41	69	36
HPS	LUMINAIRE COBRA HPS 100W 120V TY3	LUMINAIRE 100W, HPS COBRA, 120V, NPF REACTOR BALLAST, TYPE III DISTRIBUTION, GRAY, TWIST LOCK PC RECEPTACLE, PLUG IN STARTER, ACRYLIC REFRACTOR. FE SPECIFICATION: 12-652	EA	45	57	356	177	635	768
HPS	LUMINAIRE PT COL STD HPS 100W TY3 GRAY	LUMINAIRE, HIGH PRESSURE SODIUM, STANDARDPOST TOP COLONIAL, 120 VOLT,100 WATT, IES TYPE III,GRAY, SUITABLE FOR SEACOAST ENVIRONMENTPER SPECIFICATION 12- 633 FE	EA	47	0	0	91	138	144
HPS	LUMINAIRE FLOOD HPS 400W 120V BRZ	LUMINAIRE, HIGH PRESSURE SODIUM,FLOODLIGHT, 120 VOLT, 400 WATT, BALLASTTYPE HPF, IES TYPE 6 X 6, DARK BRONZE,WITH SIX (6) FT MINIMUM NO. 12 UF CABLE,AND HAVE REQUIRED FASTENERS INSTALLEDFOR BOTH GLARE AND VANDAL SHIELDS.	EA	51	0	0	40	91	0

Jersey Central Power and Light

HPS	LUMINAIRE SECURITY HPS 100W 120V D-D TY5	LUMINAIRE, HPS, POLE MOUNTED,120 VOLT, 100 WATT, IES TYPE V,DUSK TO DAWN SECURITY KIT WITH OPTICAL ASSEMBLY,SLIPFITTER, 30" BRACKET, 120V PHOTOCONTROL,AND 1100W HPS LAMP	EA	56	331	32	14	433	858
HPS	LUMINAIRE COBRA HPS 70W 120V TY3	LUMINAIRE 70W, HPS COBRA, 120V, NPF REACTOR BALLAST, TYPE III DISTRIBUTION, GRAY, TWIST LOCK PC RECEPTACLE, PLUG IN STARTER, ACRYLIC REFRACTOR. FE SPECIFICATION: 12-652	EA	59	36	41	152	288	192
HPS	LUMINAIRE PT COL HPS 70W 120V TY3 GRAY	LUMINAIRE, HIGH PRESSURE SODIUM, STANDARDPOST TOP COLONIAL, 120 VOLT, 70 WATT, IES TYPE III,GRAY, SUITABLE FOR SEACOAST ENVIRONMENTPER SPECIFICATION 12- 633 FE	EA	63	0	0	83	146	96
HPS	LUMINAIRE PT COL STD HPS 100W TY3 BLK	LUMINAIRE HPS 100W STD PTC TY3 BLK LUMINAIRE, HIGH PRESSURE SODIUM, STANDARD POST TOP COLONIAL,120V, 100W, IES TYPE III MSCO, NPF REACTOR BALLAST, BLACK, TWIST LOCK PHOTOCONTROL WITH PHOSPHOR BONZE RECEPTACLE CONTACTS, ACRYLIC REFRACTOR.	EA	116	37	292	51	496	168
HPS	LUMINAIRE PT COL STD HPS 50W TY3 GRAY	POST TOP, 120 VOLT,50 WATT, IES TYPE MS III, GRAY, SUITABLEFOR SEACOAST ENVIRONMENTCOLONIAL. PER SPECIFICATION 12- 633 FE	EA	130	0	0	91	221	36
HPS	LUMINAIRE COBRA HPS 50W 120V TY2	LUMINAIRE, HIGH PRESSURE SODIUM,HORIZONTAL-COBRA HEAD, 50 WATT, 120VOLT, REACTOR BALLAST, TYPE NPF, IESTYPE II MSCO.	EA	303	0	0	213	516	192
HPS	LUMINAIRE COBRA HPS 250W 120V TY3	LUMINAIRE 250W, HPS COBRA, 120V, CW BALLAST, TYPE III DISTRIBUTION, GRAY, TWIST LOCK PC RECEPTACLE, PLUG IN STARTER, GLASS REFRACTOR. FE SPECIFICATION: 12-652	EA	328	3	334	111	776	0

2nd Rev. Sheet No. 27 Superseding 1st Rev. Sheet No. 27

Service Classification OL Outdoor Lighting Service

TERM OF CONTRACT: One year for each installation and thereafter on a monthly basis. Service which is terminated before the end of the contract term shall be billed the total of 1) the light's monthly Fixture Charge plus 2) the per KWH Distribution Charge applicable to the light's Billing Month KWH, plus 3) any additional monthly facility charges, times the remaining months of the contract term. Restoration of Service to lamps before the end of the contract term shall be made at the expense of the customer. Restoration of Service to lamps which have been disconnected after the contract term has expired shall require a 5 year contract term to be initialized.

TERMS OF PAYMENT: Bills are due when rendered by the Company and become overdue when payment is not received by the Company on or before the due date specified on the bill.

FACILITIES:

- (a) Location of Facilities: Fixtures, lamps, controls, poles, hardware, conductors, and other appurtenances necessary for Service under this Service Classification shall be owned and maintained by the Company and must be located where they can be maintained by the use of the Company's standard mechanized equipment. Should customer desire that Company relocate its outdoor lighting facilities at any time, the relocation expense shall be paid by the customer.
- (b) Additional Facilities: The per Billing Month charges for poles, transformers and spans of wire furnished by the Company for Service under this Service Classification prior to February 6, 1979 shall respectively be \$0.73, \$2.93 and \$0.68 until such time as there is a customer change or those facilities are no longer utilized exclusively for service under this Service Classification, or if those facilities require replacement. New or replacement facilities furnished after that date shall be provided, at the Company's option under a 5-year term of contract, based upon payment of: (1) the following per Billing Monthly charges to be added to the Flat Service Charge: 35 foot pole: \$6.70; 40 foot pole: \$7.50 Secondary Span: \$3.38; or (2) a single non-refundable contribution determined under Appendix A (See Tariff Part II) charges when applicable; or otherwise (3) upon payment of specific charges determined under billing work order unitized costs.

(c) Maintenance of Facilities: Maintenance of facilities furnished by the Company under this Service Classification shall be scheduled during the Company's regular business hours upon notification by the customer of the need for such service. Maintenance of facilities at times other than during the Company's regular business hours shall be performed at the expense of the customer.

SPECIAL PROVISIONS:

(a) Seasonal Service: Such Service will be rendered when the cost of disconnection and reconnection is paid by the customer. During such months of disconnection, the Billing Month KWH for the light will be zero, such that the per KWH charges for BGS Energy and Reconciliation Charges, Transmission Charge, Nonutility Generation Charge, Societal Benefits Charge, RGGI Recovery Charge, Zero Emission Certificate Recovery Charge, Tax Act Adjustment and JCP&L Lost Revenue Adjustment Mechanism Charge will not be billed. The monthly Fixture Charge, the JCP&L Reliability Plus Charge and a seasonal Distribution Charge will be billed during such months of disconnection. The seasonal Distribution Charge will be equal to the Billing Month KWH for the light on a standard illumination schedule, times the per KWH Distribution Charge.

ADDITIONAL MODIFYING RIDER: This Service Classification may also be modified for other Rider(s) subject to each Rider's applicability, as specified.

STANDARD TERMS AND CONDITIONS: This Service Classification is subject to the Standard Terms and Conditions of this Tariff for Service.

Issued: September 27, 2021 Filed pursuant to Order of Board of Public Utilities Docket Nos. ER20020146 and PUC 04343-2020N dated October 28, 2020 Issued by James V. Fakult, President 300 Madison Avenue, Morristown, NJ 07962-1911

^ - - I⁺

6th Rev. Sheet No. 28 Superseding 5th Rev. Sheet No. 28

Service Classification SVL

APPLICABLE TO USE OF SERVICE FOR: Service Classification SVL is available for series and multiple circuit street lighting Service operating on a standard illumination schedule of 4200 hours per year supplied from overhead or underground facilities on streets and roads (and parking areas at the option of the Company) where required by City, Town, County, State or other Municipal or Public Agency or by an incorporated association of local residents.

Sodium vapor conversions of mercury vapor or incandescent street lights shall be scheduled in accordance with the Company's SVL Conversion Program, and may be limited to no more than 5% of the lamps served under this Service Classification at the end of the previous year.

CHARACTER OF SERVICE: Sodium vapor lighting for limited period (dusk to dawn) at secondary voltage.

RATE PER BILLING MONTH (All charges include Sales and Use Tax as provided in Rider SUT): (A) FIXTURE CHARGE:

Nominal Ratings

	aango				
Lamp	Lamp & Ballast	Billing Month	Company	Contribution	Customer
Wattage	Wattage	<u>KŴH *</u>	Fixture	<u>Fixture</u>	<u>Fixture</u>
50	60	21	\$ 6.48	\$ 1.82	\$ 0.88
70	85	30	\$ 6.48	\$ 1.82	\$ 0.88
100	121	42	\$ 6.48	\$ 1.82	\$ 0.88
150	176	62	\$ 6.48	\$ 1.82	\$ 0.88
250	293	103	\$ 7.67	\$ 1.82	\$ 0.88
400	498	174	\$ 7.67	\$ 1.82	\$ 0.88

* Based on standard illumination schedule of 4200 hours per year. Billing Month KWH is calculated to the nearest whole KWH based on the nominal lamp & ballast wattage of the light, times the light's annual burning hours per year, divided by 12 months per year, divided by 1000 watts per KWH.

(B) KWH CHARGES: The following charges apply to all Billing Month KWH and to all billing months (January through December). All charges are applicable to Full Service Customers. All charges, excluding Basic Generation Service (default service), are applicable to Delivery Service Customers.

BASIC GENERATION SERVICE (default service):

- 1) BGS Energy and Reconciliation Charges as provided in Rider BGS-RSCP (Basic Generation Service Residential Small Commercial Pricing) (formerly Rider BGS-FP)
- 2) Transmission Charge: \$0.000000 per KWH

DELIVERY SERVICE (Distribution Charge includes Corporation Business Tax as provided in Rider CBT):

- 1) Distribution Charge: \$0.050035 per KWH
- 2) Non-utility Generation Charge (Rider NGC): See Rider NGC for rate per KWH
- 3) Societal Benefits Charge (Rider SBC): See Rider SBC for rate per KWH
- 4) RGGI Recovery Charge (Rider RRC): See Rider RRC for rate per KWH
- 5) Zero Emission Certificate Recovery Charge (Rider ZEC): See Rider ZEC for rate per KWH
- 6) Tax Act Adjustment (Rider TAA): See Rider TAA for rate per KWH
- 7) JCP&L Reliability Plus Charge (Rider RP): See Rider RP for rate per Fixture
- 8) JCP&L Lost Revenue Adjustment Mechanism Charge (Rider LRAM): See Rider LRAM for rate per KWH

TERM OF CONTRACT: Five years for each Company Fixture installation and thereafter on a monthly basis. Where special circumstances apply or special or unusual facilities are supplied, contracts of more than five years may be required. Service which is terminated before the end of the contract term shall be billed the total of 1) the light's monthly Fixture Charge plus 2) the per KWH Distribution Charge applicable to the light's Billing Month KWH, times the remaining months of the contract term. Restoration of Service to lamps before the end of the contract term shall be made at the expense of the customer.

Issued: March 23, 2022

Effective: April 1, 2022

Filed pursuant to Order of Board of Public Utilities Docket No. ER22010028 dated March 9, 2022

Service Classification SVL

TERMS OF PAYMENT: Bills are due when rendered by the Company and become overdue when payment is not received by the Company on or before the due date specified on the bill. Overdue bills thereafter become subject to a late payment charge as described in Section 3.19, Part II.

FACILITIES:

(a) **Company Fixtures:** Company Fixtures refer to all street lighting equipment including brackets and luminaires installed by the Company at its expense in accordance with its standard specifications, and all other equipment necessary in rendering the required Service installed on wood distribution poles or Street Light Poles. Company Fixtures shall be owned, operated, maintained and serviced by the Company.

(b) Contribution Fixtures: Contribution Fixtures refer to Company Fixtures for which installation the customer has paid the following Contributed Installation Cost. Contribution Fixtures shall be owned, operated, maintained and serviced by the Company.

Contributed Installation Cost: The Contributed Installation Cost, per fixture, shall be equal to the cost shown on Tariff Part II, Appendix A – Exhibit III, for Street Light Luminaire.

(c) Customer Fixtures: Customer fixtures refer to all customer provided and installed street lighting equipment, including brackets, luminaires, and wire required for connection by the Company to a designated point on the Company's existing distribution facilities. Such fixtures must be contiguous, and installed on customer provided and installed poles located in areas which allow them to be clearly discernable from non-customer owned street light facilities. Customer fixtures and poles must be installed in accordance with the current edition of the National Electrical Code, as well as equipment standards established and approved by the Company. Any necessary maintenance, repairs, or replacements to Customer Fixtures or poles, including lamp and control switch replacements, or luminaire cleaning, shall be made by the customer.

(d) Fixture Service: Fixture Service refers to the lamp replacement and luminaire cleaning by the Company on a scheduled basis as well as non-scheduled fixture maintenance or replacements as may be necessary. Such non-scheduled Fixture Service shall be made, where practicable, within 72 hours of notification. Fixture Service is provided for Company Fixtures and Contribution Fixtures only. Customer Fixtures currently being provided Limited Fixture Service (limited to lamp and control switch replacement plus luminaire cleaning), may continue such Service at the stated Customer Fixture Charge plus **\$1.03** per Billing Month. However, Limited Fixture Service is not available for new Customer Fixture installations.

(e) Street Light Poles: Street Light Poles are defined as poles installed for street lighting purposes which are not "standard wood distribution-type poles". These street light poles are typically used for underground distribution applications, and would include aluminum, laminated wood and fiberglass poles. Street Light Poles are installed only upon payment of a non-refundable contribution determined under Appendix A (See Tariff Part II) charges when applicable, or otherwise under fixed-price billing work order costs. Street Light Poles which have previously been installed at the Company's cost shall be billed at the monthly Street Light Pole Charge set forth in Special Provision (b), or the customer may make a payment equivalent to the current installed cost of a similar pole. Street light poles may be provided on private property roadways and associated parking areas, such as apartment building and townhouse complexes. Wood distribution-type poles typically required for street light installations served from overhead distribution facilities shall be considered as distribution poles rather than street light

Issued: September 27, 2021

Effective: November 1, 2021

Filed pursuant to Order of Board of Public Utilities Docket Nos. ER20020146 and PUC 04343-2020N dated October 28, 2020

Issued by James V. Fakult, President 300 Madison Avenue, Morristown, NJ 07962-1911

Service Classification SVL

Sodium Vapor Street Lighting Service

(Continued) poles. When such poles include the mounting of street lighting fixtures provided under this Service Classification, they shall be considered as "fixture-poles" and will be installed, with their associated street lighting wire, without charge to the customer. "Span-poles", which are installed to carry wire to "fixture-poles", shall be installed with their associated wire only upon payment of a non-refundable contribution determined under Appendix A charges (see Tariff Part II) when applicable, or otherwise under billing work order cost estimates. Both fixture-poles and span-poles are installed only along public roadways, or for the extension of existing street lighting service on municipal or governmental properties.

(f) General: The Company reserves the right to modify from time to time its specifications relating to street lighting equipment and its installation in order to meet changing conditions. Installations subject to vandalism may be removed at the option of the Company, unless such maintenance costs are provided by the customer.

SPECIAL PROVISIONS:

(a) Seasonal Service: Such Service will be rendered when the cost of disconnection and reconnection is paid by the customer. During such months of disconnection, the Billing Month KWH for the light will be zero, such that the per KWH charges for BGS Energy and Reconciliation Charges, Transmission Charge, Nonutility Generation Charge, Societal Benefits Charge, RGGI Recovery Charge, Zero Emission Certificate Recovery Charge, Tax Act Adjustment and JCP&L Lost Revenue Adjustment Mechanism Charge will not be billed. The monthly Fixture Charge, the JCP&L Reliability Plus Charge and a seasonal Distribution Charge will be billed during such months of disconnection. The seasonal Distribution Charge will be equal to the Billing Month KWH for the light on a standard illumination schedule, times the per KWH Distribution Charge.

(b) Street Light Pole Charge: Where the Company has installed, at its cost, a pole other than a wood distribution pole for a lamp fixture, a per Billing Month Pole Charge of **\$8.64** shall be added to the Fixture Charge specified. Such charge shall not be applicable to a Street Light Pole which has had its installation cost paid for by the customer.

(c) Reduced Lighting Hours: This Special Provision is restricted to previously installed municipal parking lot lighting where the customer desires that energy for such lighting be conserved by having the Service inoperative for six hours per night and the customer reimburses the Company for the cost of any labor and materials required to provide such time control. The Billing Month KWH for lights under this Special Provision will be reduced based on 2010 annual burning hours. The monthly bill shall be the total of 1) the full monthly Fixture Charge plus 2) the reduced Billing Month KWH times all per KWH charges (BGS Energy and Reconciliation Charge, Transmission Charge, Distribution Charge, Non-utility Generation Charge, Societal Benefits Charge, RGGI Recovery Charge, Zero Emission Certificate Recovery Charge, Tax Act Adjustment and JCP&L Lost Revenue Adjustment Mechanism Charge), plus 3) a reduced lighting hours adjustment equal to the Billing Month KWH difference between the standard illumination schedule and the reduced lighting hours schedule for the light, times the per KWH Distribution Charge; plus 4) the full monthly JCP&L Reliability Plus Charge.

ADDITIONAL MODIFYING RIDER: This Service Classification may also be modified for other Rider(s) subject to each Rider's applicability, as specified.

STANDARD TERMS AND CONDITIONS: This Service Classification is subject to the Standard Terms and Conditions of this Tariff for Service.

Issued: September 27, 2021

Effective: November 1, 2021

Filed pursuant to Order of Board of Public Utilities Docket Nos. ER20020146 and PUC 04343-2020N dated October 28, 2020

Issued by James V. Fakult, President 300 Madison Avenue, Morristown, NJ 07962-1911

6th Rev. Sheet No. 31 Superseding 5th Rev. Sheet No. 31

Service Classification MVL

RESTRICTION: Service Classification MVL is in process of elimination and is withdrawn except for the installations of customers receiving Service hereunder on July 21, 1982, and only for the specific premises and class of service of such customer served hereunder on such date.

APPLICABLE TO USE OF SERVICE FOR: Series and multiple circuit street lighting service operating on a standard illumination schedule of 4200 hours per year supplied from overhead or underground facilities on streets and roads where required by City, Town, County, State or other Municipal or Public Agency or by an incorporated association of local residents. At the option of the Company, Service may also be provided for lighting service on streets, roads or parking areas on municipal or private property where supplied directly from the Company's facilities when such Service is contracted for by the owner or agency operating such property.

CHARACTER OF SERVICE: Mercury vapor lighting for limited period (dusk to dawn) at secondary voltage or on constant current series circuits.

RATE PER BILLING MONTH (All charges include Sale and Use Tax as provided in Rider SUT): (A) FIXTURE CHARGE:

<u>Nominal R</u>	<u>latings</u>					
Lamp	Lamp & Ballast	Billing Month	Company	Contribution	Customer	
<u>Wattage</u>	<u>Wattage</u>	<u>KWH *</u>	<u>Fixture</u>	Fixture	<u>Fixture</u>	
100	121	42	\$ 4.52	\$ 1.72	\$ 0.87	
175	211	74	\$ 4.52	\$ 1.72	\$ 0.87	
250	295	103	\$ 4.52	\$ 1.72	\$ 0.87	
400	468	164	\$ 4.90	\$ 1.72	\$ 0.87	
700	803	281	\$ 5.94	\$ 1.72	\$ 0.87	
1000	1135	397	\$ 5.94	\$ 1.72	\$ 0.87	

* Based on standard illumination schedule of 4200 hours per year. Billing Month KWH is calculated to the nearest whole KWH based on the nominal lamp & ballast wattage of the light, times the light's annual burning hours per year, divided by 12 months per year, divided by 1000 watts per KWH.

(B) KWH CHARGES: The following charges apply to all Billing Month KWH and to all billing months (January through December). All charges are applicable to Full Service Customers. All charges, excluding Basic Generation Service (default service), are applicable to Delivery Service Customers.

BASIC GENERATION SERVICE (default service):

- 1) BGS Energy and Reconciliation Charges as provided in Rider BGS-RSCP (Basic Generation Service Residential Small Commercial Pricing) (formerly Rider BGS-FP)
- 2) Transmission Charge: \$0.000000 per KWH

DELIVERY SERVICE (Distribution Charge includes Corporation Business Tax as provided in Rider CBT):

- 1) Distribution Charge: \$0.050035 per KWH
- 2) Non-utility Generation Charge (Rider NGC): See Rider NGC for rate per KWH
- 3) Societal Benefits Charge (Rider SBC): See Rider SBC for rate per KWH
- 4) RGGI Recovery Charge (Rider RRC): See Rider RRC for rate per KWH
- 5) Zero Emission Certificate Recovery Charge (Rider ZEC): See Rider ZEC for rate per KWH
- 6) Tax Act Adjustment (Rider TAA): See Rider TAA for rate per KWH
- 7) JCP&L Reliability Plus Charge (Rider RP): See Rider RP for rate per Fixture
- 8) JCP&L Lost Revenue Adjustment Mechanism Charge (Rider LRAM): See Rider LRAM for rate per KWH

Issued: March 23, 2022

Effective: April 1, 2022

Filed pursuant to Order of Board of Public Utilities Docket No. ER22010028 dated March 9, 2022

JERSEY CENTRAL POWER & LIGHT COMPANY

BPU No. 13 ELECTRIC - PART III

....

Service Classification MVL

TERM OF CONTRACT: Five years for each Company Fixture installation and thereafter on a monthly basis. Where special circumstances apply or special or unusual facilities are supplied, contracts of more than five years may be required. Service which is terminated before the end of the contract term shall be billed the total of 1) the light's monthly Fixture Charge plus 2) the per KWH Distribution Charge applicable to the light's Billing Month KWH, times the remaining months of the contract term. Restoration of Service to lamps before the end of the contract term shall be made at the expense of the customer.

TERMS OF PAYMENT: Bills are due when rendered by the Company and become overdue when payment is not received by the Company on or before the due date specified on the bill. Overdue bills thereafter become subject to a late payment charge as described in Section 3.19, Part II.

FACILITIES:

(a) Company Fixtures: Company Fixtures refer to all street lighting equipment including brackets and luminaires installed by the Company at its expense in accordance with its standard specifications, and all other equipment necessary in rendering the required Service installed on wood distribution poles or Street Light Poles. Company Fixtures shall be owned, operated, maintained and serviced by the Company.

(b) **Contribution Fixtures:** Contribution Fixtures refer to Company Fixtures for which installation the customer has paid the following Contributed Installation Cost. Contribution Fixtures shall be owned, operated, maintained and serviced by the Company. The per Billing Month charges for Contribution Fixtures shall be discontinued only upon payment of a **\$35.57** charge per fixture to cover the cost of removal.

Contributed Installation Cost:	Lamp Wattage	Lamp Wattage	Lamp Wattage
	100, 175, & 250	400	700 & 1000
For currently installed fixture:	\$141.33	\$159.49	\$210.97

(c) Customer Fixtures: Customer fixtures refer to all customer provided and installed street lighting equipment, including brackets, luminaires, and wire required for connection by the Company to a designated point on the Company's existing distribution facilities. Such fixtures must be contiguous, and installed on customer provided and installed poles located in areas which allow them to be clearly discernable from non-customer owned street light facilities. Customer fixtures and poles must be installed in accordance with the equipment standards established and approved by the Company. Any necessary maintenance, repairs, or replacements to Customer Fixtures or poles, including lamp and control switch replacements, or luminaire cleaning, shall be made by the customer.

(d) Fixture Service: Fixture Service refers to the lamp replacement and luminaire cleaning by the Company on a scheduled basis as well as non-scheduled fixture maintenance or replacements as may be necessary. Such non-scheduled Fixture Service shall be made, where practicable, within 72 hours of notification. Customer Fixtures currently being provided Limited Fixture Service (limited to lamp and control switch replacement plus luminaire cleaning), may continue such Service at an additional cost of **\$0.84** per Billing Month.

Issued: September 27, 2021

Effective: November 1, 2021

JERSEY CENTRAL POWER & LIGHT COMPANY

BPU No. 13 ELECTRIC - PART III

2nd Rev. Sheet No. 33 Superseding 1st Rev. Sheet No. 33

Service Classification MVL

Mana in Manan Ofna af Finkfinn Oan ta

(e) Street Light Poles: Street Light Poles refer to all poles other than wood distribution poles, installed, owned and maintained by the Company for street lighting service. Street Light Poles are provided only upon payment by the customer for the installation cost of such pole. Street Light Poles which have previously been installed at the Company's cost, shall be billed at the per Billing Month Street Light Pole Charge set forth in Special Provision (b), or the customer may make a **\$345.22** payment to cover the cost of such previous installation.

(f) General: The Company reserves the right to modify from time to time its specifications relating to street lighting equipment and its installation in order to meet changing conditions. Installations subject to vandalism may be removed at the option of the Company, unless such maintenance costs are provided by the customer.

SPECIAL PROVISIONS:

(a) Seasonal Service: Such Service will be rendered when the cost of disconnection and reconnection is paid by the customer. During such months of disconnection, the Billing Month KWH for the light will be zero, such that the per KWH charges for BGS Energy and Reconciliation Charges, Transmission Charge, Nonutility Generation Charge, Societal Benefits Charge, RGGI Recovery Charge, Zero Emission Certificate Recovery Charge, Tax Act Adjustment and JCP&L Lost Revenue Adjustment Mechanism Charge will not be billed. The monthly Fixture Charge, the JCP&L Reliability Plus Charge and a seasonal Distribution Charge will be billed during such months of disconnection. The seasonal Distribution Charge will be equal to the Billing Month KWH for the light on a standard illumination schedule, times the per KWH Distribution Charge.

(b) Street Light Pole Charge: Where the Company has installed, at its cost, a pole other than a wood distribution pole for a lamp fixture, a per Billing Month Pole Charge of **\$8.64** shall be added to the Fixture Charge specified. Such charge shall not be applicable to a Street Light Pole which has had its installation cost paid for by the customer.

ADDITIONAL MODIFYING RIDER: This Service Classification may also be modified for other Rider(s) subject to each Rider's applicability, as specified.

STANDARD TERMS AND CONDITIONS: This Service Classification is subject to the Standard Terms and Conditions of this Tariff for Service.

Issued: September 27, 2021

Effective: November 1, 2021

6th Rev. Sheet No. 34 Superseding 5th Rev. Sheet No. 34

Service Classification ISL Incandescent Street Lighting Service

RESTRICTION: Service Classification ISL is in process of elimination and is withdrawn except for the installations of customers currently receiving Service, and except for fire alarm and police box lamps provided under Special Provision (c). The obsolescence of this Service Classification's facilities further dictates that Service be discontinued to any installation that requires the replacement of a fixture, bracket or street light pole.

APPLICABLE TO USE OF SERVICE FOR: Series and multiple circuit street lighting service operating on a standard illumination schedule of 4200 hours per year supplied from overhead or underground facilities on streets or roads where required by city, town, county, State or other principal or public agency or by an incorporated association of local residents.

CHARACTER OF SERVICE: Incandescent lighting for limited period (dusk to dawn) at secondary voltage or on constant current series circuits.

RATE PER BILLING MONTH (All Charges include Sales and Use Tax as provided in Rider SUT):

(A) FIXTURE CHARGE:

Nominal Ratings			
Lamp	Billing Month		
Wattage	KWH *	<u>Company Fixture</u>	Customer Fixture
105	37	\$ 1.91	\$ 0.87
205	72	\$ 1.91	\$ 0.87
327	114	\$ 1.91	\$ 0.87
448	157	\$ 1.91	\$ 0.87
690	242	\$ 1.91	\$ 0.87
860	301	\$ 1.91	\$ 0.87

* Based on standard illumination schedule of 4200 hours per year. Billing Month KWH is calculated to the nearest whole KWH based on the nominal lamp & ballast wattage of the light, times the light's annual burning hours per year, divided by 12 months per year, divided by 1000 watts per KWH.

(B) KWH CHARGES: The following charges apply to all Billing Month KWH and to all billing months (January through December). All charges are applicable to Full Service Customers. All charges, excluding Basic Generation Service (default service), are applicable to Delivery Service Customers.

BASIC GENERATION SERVICE (default service):

- 1) BGS Energy and Reconciliation Charges as provided in Rider BGS-RSCP (Basic Generation Service Residential Small Commercial Pricing) (formerly Rider BGS-FP)
- 2) Transmission Charge: \$0.000000 per KWH

DELIVERY SERVICE (Distribution Charge includes Corporation Business Tax as provided in Rider CBT):

- 1) Distribution Charge: \$0.050035 per KWH
- 2) Non-utility Generation Charge (Rider NGC): See Rider NGC for rate per KWH
- 3) Societal Benefits Charge (Rider SBC): See Rider SBC for rate per KWH
- 4) RGGI Recovery Charge (Rider RRC): See Rider RRC for rate per KWH
- 5) Zero Emission Certificate Recovery Charge (Rider ZEC): See Rider ZEC for rate per KWH
- 6) Tax Act Adjustment (Rider TAA): See Rider TAA for rate per KWH
- 7) JCP&L Reliability Plus Charge (Rider RP): See Rider RP for rate per Fixture
- 8) JCP&L Lost Revenue Adjustment Mechanism Charge (Rider LRAM): See Rider LRAM for rate per KWH

Issued: March 23, 2022

Effective: April 1, 2022

Filed pursuant to Order of Board of Public Utilities Docket No. ER22010028 dated March 9, 2022

1st Rev. Sheet No. 35 Superseding Original Sheet No. 35

Service Classification ISL Incandescent Street Lighting Service

TERM OF CONTRACT: Five years for each Company Fixture installation and thereafter on a monthly basis. Where special circumstances apply or special or unusual facilities are supplied, contracts of more than five years may be required. Service which is terminated before the end of the contract term shall be billed the total of 1) the light's monthly Fixture Charge plus 2) the per KWH Distribution Charge applicable to the light's Billing Month KWH, times the remaining months of the contract term.

TERMS OF PAYMENT: Bills are due when rendered by the Company and become overdue when payment is not received by the Company on or before the due date specified on the bill. Overdue bills thereafter become subject to a late payment charge as described in Section 3.19, Part II.

FACILITIES:

(a) **Company Fixtures:** Company Fixtures refer to all street lighting equipment including brackets and luminaires installed by the Company at its expense in accordance with its standard specifications, and all other equipment necessary in rendering the required Service, installed on wood distribution poles or Street Light Poles. Company Fixtures shall be owned, operated, maintained and serviced by the Company.

(b) Customer Fixtures: Customer fixtures refer to all customer provided and installed street lighting equipment, including brackets, luminaires, and wire required for connection by the Company to a designated point on the Company's existing distribution facilities. Such fixtures must be contiguous, and installed on customer provided and installed poles located in areas which allow them to be clearly discernable from non-customer owned street light facilities. Customer fixtures and poles must be installed in accordance with the equipment standards established and approved by the Company. Any necessary maintenance, repairs, or replacements to Customer Fixtures or poles, including lamp and control switch replacements, or luminaire cleaning, shall be made by the customer.

(c) Fixture Service: Fixture Service refers to the lamp replacement and luminaire cleaning by the Company on a scheduled basis as well as non-scheduled lamp and control switch replacement as may be necessary. Such non-scheduled Fixture Service shall be made, where practicable, within 72 hours of notification. Customer fixtures currently being provided limited Fixture Service (limited to lamp and control switch replacement plus luminaire cleaning), may continue such Service at the stated Customer Fixture Charge plus **\$1.03** per Billing Month.

(d) Street Light Poles: Street Light Poles refer to all poles, other than wood distribution poles, installed, owned and maintained by the Company for street lighting service. Replacement of Street Light Poles shall be provided only upon payment by the customer for the current installation cost of such replacement poles except when occasioned and such cost recoverable by a third party.

(e) General: The Company reserves the right to modify from time to time its specifications relating to street lighting equipment and its installation in order to meet changing conditions. Installations subject to vandalism may be removed at the option of the Company, unless such maintenance costs are provided by the customer.

Issued: September 27, 2021

Effective: November 1, 2021

2nd Rev. Sheet No. 36 Superseding 1st Rev. Sheet No. 36

Service Classification ISL Incandescent Street Lighting Service

SPECIAL PROVISIONS:

(a) Seasonal Service: Such Service will be rendered when the cost of disconnection and reconnection is paid by the customer. During such months of disconnection, the Billing Month KWH for the light will be zero, such that the per KWH charges for BGS Energy and Reconciliation Charges, Transmission Charge, Nonutility Generation Charge, Societal Benefits Charge, RGGI Recovery Charge, Zero Emission Certificate Recovery Charge, Tax Act Adjustment and JCP&L Lost Revenue Adjustment Mechanism Charge will not be billed. The monthly Fixture Charge, the JCP&L Reliability Plus Charge and a seasonal Distribution Charge will be billed during such months of disconnection. The seasonal Distribution Charge will be equal to the Billing Month KWH for the light on a standard illumination schedule, times the per KWH Distribution Charge.

(b) Fire Alarm and Police Box Lamp Charge: 25 watt lamps serviced by the Company and served from existing secondary facilities will be billed a monthly Fixture Charge of **\$1.12** and **\$0.32** for lamps with individual time controls operated on a standard illumination schedule, and lamps operated 24 hours per day, respectively. Lamps with individual time controls operated on a standard illumination schedule will have a Billing Month KWH of 9 KWH. Lamps operated 24 hours per day will have a Billing Month KWH of 9 KWH. Lamps operated 24 hours per day will have a Billing Month KWH of 9 KWH. Lamps operated 24 hours per day will have a Billing Month KWH of 18 KWH. All per KWH charges (BGS Energy and Reconciliation Charges, Transmission Charge, Distribution Charge, Non-utility Generation Charge, Societal Benefits Charge, RGGI Recovery Charge, Zero Emission Certificate Recovery Charge, Tax Act Adjustment and JCP&L Lost Revenue Adjustment Mechanism Charge) will be billed based on the applicable lamp's Billing Month KWH.

ADDITIONAL MODIFYING RIDER: This Service Classification may also be modified for other Rider(s) subject to each Rider's applicability, as specified.

STANDARD TERMS AND CONDITIONS: This Service Classification is subject to the Standard Terms and Conditions of this Tariff for Service.

1st Rev. Sheet No. 37 Superseding Original Sheet No. 37

Service Classification LED

APPLICABLE TO USE OF SERVICE FOR: Service Classification LED is available for installation of 12 or more LED (light emitting diode) fixtures per request for series and multiple circuit street lighting Service operating on a standard illumination schedule of 4200 hours per year supplied from overhead or underground facilities along public streets and roadways, or for the extension of existing street lighting service on municipal or governmental properties (and parking areas at the option of the Company) where required by City, Town, County, State or other Municipal or Public Agency or by an incorporated association of local residents.

CHARACTER OF SERVICE: LED lighting service is for limited period (dusk to dawn). Standard Service shall be supplied from existing lines, using the Company's standard fixtures and other appurtenances on existing wood distribution poles unrestricted as to their use by Company for purposes other than street lighting, on which existing wood distribution poles the required secondary voltage is present. The rating of the fixture in lumens is for identification and is intended to approximate the manufacturer's standard rating.

RATE PER BILLING MONTH (All charges include Sales and Use Tax as provided in Rider SUT): (A) FIXTURE CHARGE:

COMPANY FIXTURES: Company Fixtures refer to fixtures installed by the Company in accordance with Standard Service and its specifications at its expense. Company Fixtures shall be owned, operated, maintained and serviced by the Company.

COMPANY FIXTURE

Lamp			Billing Month	Company
Wattage	<u>Type</u>	Lumens	<u>KWH*</u>	Fixture
30	Cobra Head	2400	11	\$ 6.47
50	Cobra Head	4000	18	<mark>\$ 6.43</mark>
90	Cobra Head	7000	32	<mark>\$ 6.95</mark>
130	Cobra Head	11500	46	<mark>\$ 7.90</mark>
260	Cobra Head	24000	91	<mark>\$ 10.04</mark>
50	Acorn	2500	18	<mark>\$ 16.46</mark>
90	Acorn	5000	32	<mark>\$ 15.90</mark>
50	Colonial	2500	18	<mark>\$ 9.24</mark>
90	Colonial	5000	32	<mark>\$ 11.11</mark>

CONTRIBUTION FIXTURES: Contribution Fixtures refer to fixtures installed by the Company in accordance with Standard Service and its specifications for which installation the customer has paid the Contributed Installation Cost. The Company provides two contribution levels for the Contributed Installation Cost, at the Customer's option, that have different corresponding monthly charges. Contribution Fixtures shall be owned, operated, maintained and serviced by the Company. Contribution Fixture service does not include or provide for the replacement of the fixture at failure or end of life. A contribution payment to JCP&L shall not give the customer any interest in the facilities, the ownership being vested exclusively in JCP&L.

Contributed Installation Cost: The Contributed Installation Cost, per fixture, shall be equal to the cost shown on Tariff Part II, Appendix A – Exhibit III, for Street Light Luminaire, which costs are subject to gross-up for applicable income taxes.

Issued: September 27, 2021

Effective: November 1, 2021

JERSEY CENTRAL POWER & LIGHT COMPANY

BPU No. 13 ELECTRIC - PART III

^{6th Rev. Sheet No. 38 Superseding 5th Rev. Sheet No. 38}

Service Classification LED

CONTRIBUTION FIXTURE (a)

Fixture			Billing Month	Fi>	kture	Cor	ntribution
Wattage	<u>Type</u>	<u>Lumens</u>	KWH*	Cł	narge	<u>Fix</u>	<u>(ture (a)</u>
30	Cobra Head	2400	11	\$	2.65	\$	358.38
50	Cobra Head	4000	18	\$	2.65	\$	354.88
90	Cobra Head	7000	32	\$	2.65	\$	403.55
130	Cobra Head	11500	46	\$	2.65	\$	492.97
260	Cobra Head	24000	91	\$	2.65	\$	694.22
50	Acorn	2500	18	\$	2.65	\$1	,295.80
90	Acorn	5000	32	\$	2.65	\$1	,243.30
50	Colonial	2500	18	\$	2.65	\$	619.38
90	Colonial	5000	32	\$	2.65	\$	793.88

CONTRIBUTION FIXTURE (b)

Fixture			Billing Month	Fixture	Contribution
<u>Wattage</u>	<u>Type</u>	<u>Lumens</u>	KWH*	<u>Charge</u>	<u>Fixture (b)</u>
30	Cobra Head	2400	11	\$ 4.24	\$ 209.20
50	Cobra Head	4000	18	\$ 4.24	\$ 205.70
90	Cobra Head	7000	32	\$ 4.24	\$ 254.37
130	Cobra Head	11500	46	\$ 4.24	\$ 343.79
260	Cobra Head	24000	91	\$ 4.24	\$ 545.04
50	Acorn	2500	18	\$ 4.24	\$1,146.62
90	Acorn	5000	32	\$ 4.24	\$1,094.12
50	Colonial	2500	18	\$ 4.24	\$ 470.20
90	Colonial	5000	32	\$ 4.24	\$ 644.70

* Based on standard illumination schedule of 4200 hours per year. Billing Month KWH is calculated to the nearest whole KWH based on the wattage of the fixture, times the fixture's annual burning hours per year, divided by 12 months per year, divided by 1000 watts per KWH.

(B) KWH CHARGES: The following charges apply to all Billing Month KWH and to all billing months (January through December). All charges are applicable to Full Service Customers. All charges, excluding Basic Generation Service (default service), are applicable to Delivery Service Customers.

BASIC GENERATION SERVICE (default service):

- 1) BGS Energy and Reconciliation Charges as provided in Rider BGS-RSCP (Basic Generation Service Residential Small Commercial Pricing) (formerly Rider BGS-FP)
- 2) Transmission Charge: \$0.000000 per KWH

DELIVERY SERVICE (Distribution Charge includes Corporation Business Tax as provided in Rider CBT):

- 1) Distribution Charge: \$0.050035 per KWH
- 2) Non-utility Generation Charge (Rider NGC): See Rider NGC for rate per KWH
- 3) Societal Benefits Charge (Rider SBC): See Rider SBC for rate per KWH
- 4) RGGI Recovery Charge (Rider RRC): See Rider RRC for rate per KWH
- 5) Zero Emission Certificate Recovery Charge (Rider ZEC): See Rider ZEC for rate per KWH
- 6) Tax Act Adjustment (Rider TAA): See Rider TAA for rate per KWH
- 7) JCP&L Reliability Plus Charge (Rider RP): See Rider RP for rate per Fixture
- 8) JCP&L Lost Revenue Adjustment Mechanism Charge (Rider LRAM): See Rider LRAM for rate per KWH

Issued: March 23, 2022

Effective: April 1, 2022

Filed pursuant to Order of Board of Public Utilities Docket No. ER22010028 dated March 9, 2022

JERSEY CENTRAL POWER & LIGHT COMPANY

BPU No. 13 ELECTRIC - PART III

Original Sheet No. 39

Service Classification LED

LED Street Lighting Service

TERM OF CONTRACT: Fifteen years for each fixture installation and thereafter on a monthly basis. Where special circumstances apply or special or unusual facilities are supplied, contracts of more than fifteen years may be required. Service which is terminated before the end of the contract term shall be billed the total of 1) the fixture's monthly Fixture Charge plus 2) the per KWH Distribution Charge applicable to the fixture's Billing Month KWH, times the remaining months of the contract term.

TERMS OF PAYMENT: Bills are due when rendered by the Company and become overdue when payment is not received by the Company on or before the due date specified on the bill. Overdue bills thereafter become subject to a late payment charge as described in Section 3.19, Part II.

MISCELLANEOUS:

Non-Standard Installations: Where the installation of additional facilities, including, but not limited to: poles, wire, transformers, and brackets, is required to provide service to a fixture, Customers shall be responsible for payment of a non-refundable Contribution in Aid of Construction determined under Appendix A charges (see Tariff Part II) when applicable, or otherwise under billing work order costs estimates, which costs are subject to gross-up for applicable income taxes.

(a) Changes in Fixture Wattage, Type or Location: Customers will be required to pay the cost for relocation, changes in fixture wattage, fixture type, color (Kelvin temperature) and conversion from an LED light source to another when the age of the fixture is less than 15 years. These costs will include removal cost less salvage and installation cost of the fixture. Except for relocations, the cost will also include the remaining net book value of the existing fixture and, in the case of Contribution Fixtures, payment of the Contributed Installation Cost.

- i) Installation of a new fixture at the same location of the removal of an existing fixture within 12 months will be considered a replacement of the existing fixture and will be subject to charges including the removal cost less salvage for the fixture removed, the installation cost of the new fixture and, if applicable, any Contribution Installation Cost.
- ii) LED conversions of sodium vapor, mercury vapor or incandescent fixtures shall be scheduled at the Company's reasonable discretion. JCP&L reserves the right to limit the number of fixtures conversions in any year to no more than 5% of the total fixtures served at the end of the previous year.

(b) Traffic Control: The Municipality will be responsible for providing and paying the costs of police assistance when deemed necessary by local authorities. The Company will provide basic traffic control (flaggers) at no cost to the Municipality. When traffic control (flagging) labor hours exceed construction labor hours (considered non-basic traffic control) the Municipality will be responsible for paying the differential in costs between basic and non-basic traffic control. The Municipality will also be responsible for all fees associated with required permitting.

(c) Seasonal Service: Such Service will be rendered when the cost of disconnection and reconnection is paid by the customer. During such months of disconnection, the Billing Month KWH for the fixture will be zero. Only the monthly Fixture Charge and a seasonal Distribution Charge will be billed (i.e., Basic Generation Service and other Delivery Service charges will not be billed) during such months of disconnection. The seasonal Distribution Charge will be equal to the Billing Month KWH for the light on a standard illumination schedule, times the per KWH Distribution Charge.

(d) General: The Company reserves the right to modify from time to time its specifications relating to street lighting equipment and its installation in order to meet changing conditions. Installations subject to vandalism may be removed at the option of the Company, unless such maintenance costs are provided by the customer.

Original Sheet No. 40

Service Classification LED

LED Street Liahtina Service

MISCELLANEOUS: (Continued)

Retrofitting of existing, non-LED street lighting: Where requested, the following shall be implemented on an interim basis, pending the resolution of the Board's current stakeholder proceeding addressing LED street lighting issues:

Option 1:

Upon failure, which shall be determined in the Company's sole discretion, and at the Customer's direction, which direction shall be set forth in an LED Replacement Agreement, the Company will replace a non-LED streetlight luminaire with an LED streetlight luminaire.

Option 2:

Where Customer requests replacement of existing non-LED streetlight luminaire with an LED streetlight luminaire, prior to its failure, the Customer is responsible for a one-time payment of the estimated average undepreciated luminaire cost (i.e., net book value) of the existing non-LED streetlight luminaire as set forth in the table below, prior to installation of the replacement LED streetlight.

Option 3:

Where Customer requests replacement of existing non-LED streetlight luminaire with an LED streetlight luminaire, prior to its failure, the Customer shall enter into a Payment Agreement with the Company and shall be responsible for payment for the estimated average undepreciated non-LED luminaire cost (i.e., net book value) of the existing non-LED streetlight luminaire in equal payments over a 60-month period, as set forth in the table below. In the event of termination of service under this Schedule, for any reason prior to the expiration of the Payment Agreement, prior to termination of service, the Customer shall pay to the Company and all amounts due under the Payment Agreement and all costs associated with removal of the LED streetlights.

LED Streetlight - Stranded Costs

	<u>SVL</u>						
	Option #2	Option #3					
	One-time	Equal Payment					
	Payment	60-month Period					
Cobra Head	\$352	\$7.36					
Acorn	\$861	\$18.01					
Colonial	\$493	\$10.31					
MVL							
	Option #2	Option #3					
	One-time	Equal Payment					
-	Payment	60-month Period					
Cobra Head	\$201	\$4.21					
Acorn	\$509	\$10.65					
Colonial	\$287	\$6.00					

ADDITIONAL MODIFYING RIDER: This Service Classification may also be modified for other Rider(s) subject to each Rider's applicability, as specified.

STANDARD TERMS AND CONDITIONS: This Service Classification is subject to the Standard Terms and Conditions of this Tariff for Service.

Issued: October 30, 2020

Effective: December 1, 2020