



## Report of ORS's Review of the South Carolina Public Service Authority's Outdoor Lighting Program

South Carolina  
Office of Regulatory Staff

December 2021

## **Executive Summary**

The South Carolina Office of Regulatory Staff (“ORS”) provides this Report pursuant to the request of the Plantation Lakes Property Owner’s Association, the Heritage Plantation Owner’s Association, and other customers (collectively the “POA/HOAs”) of the South Carolina Public Service Santee Cooper (“Santee Cooper”) for a review of Santee Cooper’s Private Outdoor Lighting Service (“Outdoor Lighting Program”) based on questions raised by the POA/HOAs regarding Santee Cooper’s methodology in setting outdoor lighting rates.<sup>1</sup> ORS’s review of Santee Cooper’s Outdoor Lighting Program included an evaluation of the overall structure, management, implementation, and customer costs for the Outdoor Lighting Program. Additionally, ORS conducted virtual interviews and meetings with Santee Cooper personnel, the POA/HOAs’ representatives, personnel from Dominion Energy South Carolina, Inc. (“Dominion”), and personnel representing both Duke Energy Carolinas, LLC and Duke Energy Progress, LLC (collectively noted in this Report as “Duke”).

## **Findings**

ORS provides the following findings based on its review of Santee Cooper’s Outdoor Lighting Program:

1. Santee Cooper typically does not retain copies of signed Outdoor Lighting Program rental agreements after the lights and poles have been installed, the rental agreement terms have expired, and customers are on a month-to-month basis.
2. Santee Cooper maintains two (2) rental agreements, one (1) for standard and one (1) for decorative/premium lighting.
3. Santee Cooper’s current rental agreements do not clearly identify who maintains ownership of all facilities necessary for service including fixtures and poles.
4. Santee Cooper limits light emitting diode (“LED”) conversions to fifty (50) lights per-year, per-customer to ensure there is adequate fixture inventory and sufficient personnel available to complete the requests.
5. ORS observed that monthly outdoor lighting bills do not provide sufficient detail as to the specific poles and fixtures for which customers are paying. For a customer to verify the specific poles, fixtures, types, and quantities included in the bill, the customer must contact Santee Cooper and request Santee Cooper to provide a screen shot or similar

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<sup>1</sup> Pursuant to Section 26 of Act 90, the provisions of Act 90 vesting ORS with the duties, responsibilities, authority, and jurisdiction to make inspections, audits, and examinations of Santee Cooper relating to its electric rates and service beginning January 1, 2022. Notwithstanding the provisions of Act 90, Santee Cooper and ORS mutually entered into a Memorandum of Understanding (executed August 4, 2021) that granted ORS the ability to conduct inspections, audits, and examinations of Santee Cooper as it pertains to the Outdoor Lighting Program prior to the effective date of Act 90.

picture of the billing database. This process lacks transparency and creates barriers for customers to verify the accuracy of their bills.

6. Santee Cooper currently deploys LED lights with a Correlated Color Temperature (“CCT”) of 4000 Kelvin (“K”).
7. The monthly rental charge for LED fixtures in Rate Schedule OL-17 varies based on the fixture cost.
8. ORS reviewed Santee Cooper’s most recent Cost of Service Study (“COSS”) which was performed in 2015. ORS confirmed that the Rate Schedule OL-17 was designed based on the 2015 COSS to meet the revenue requirements for Santee Cooper.
9. ORS requested that Santee Cooper perform a cost and rate analysis for two (2) of the POA/HOA’s, identified as the Santee Cooper Lighting Rate Calculation Example (“Calculation Example”). ORS determined the Santee Cooper analysis was performed in accordance with general industry practices and resulted in the rates reflected in Rate Schedule OL-17. ORS also reviewed the energy costs and cost causation methodology used by Santee Cooper for the outdoor lighting class of customers as a whole. ORS determined the energy costs and methodology used by Santee Cooper was performed in accordance with general industry practices and resulted in the rates reflected in Rate Schedule OL-17.
10. ORS reviewed Santee Cooper’s continuing property records and depreciation schedules for the two (2) POA/HOAs. ORS determined that while some equipment may have fully depreciated, neither of the POA/HOA’s lighting systems were fully depreciated and the net present value has not reached \$0.00.
11. Santee Cooper’s rates are constrained by the terms and conditions of the settlement agreement reached in Civil Action No. 2019-CP-23-6675, *Cook v. Santee Cooper* (“*Cook v. Santee Cooper*”), which required a rate freeze for Santee Cooper until the end of 2024. Therefore, current rates may not change until January 1, 2025, at the earliest.
12. The POA/HOAs do have an option in the current rental agreement that allows for the POA/HOAs to cancel the outdoor lighting service. Upon cancellation, Santee Cooper will remove the lights at no charge once all terms and conditions of the rental agreement have been met.
13. Santee Cooper identified three (3) proposed lighting options as alternatives to resolve the complaints raised by the POA/HOAs. Currently, there is no agreement between Santee Cooper and the POA/HOAs regarding Santee Cooper’s three (3) proposed lighting options, and Santee Cooper has not completed or prepared for implementation the three (3) proposed options.

## **Recommendations**

ORS makes the following recommendations based on its review of Santee Cooper's Outdoor Lighting Program:

1. Santee Cooper should maintain copies of all signed rental agreements associated with the Outdoor Lighting Program until such time as said rental agreements are terminated and customers either: 1) execute new rental agreement for new lighting systems; or 2) customers elect to no longer participate in the Outdoor Lighting Program and the old lighting systems are removed by Santee Cooper.
2. Santee Cooper should combine the two (2) lease agreements into a single lease agreement to help prevent possible confusion among customers and other parties as well as simplify the administrative burden on Santee Cooper.
3. For clarity and transparency, Santee Cooper should include in the rental agreement explicit language regarding the ownership of all outdoor lighting facilities including fixtures, lamps, controls, poles, hardware, transformers, conductors, and other appurtenances.
4. Santee Cooper should investigate and revise the LED conversion process to accommodate full LED conversion requests based on schedules that incorporate supply chain and manpower constraints.
5. Santee Cooper should revise the monthly billing for outdoor lighting to break out pole type and fixture type by line item. This modification would increase transparency, remove a barrier for customer questions regarding their bills, and bring the rental lighting bills closer into alignment with other rental or lease invoicing practices across the industry.
6. Santee Cooper should fully evaluate the CCT of LED lighting and strongly consider the use of LED lamps with CCT of 3000K moving forward to address customer complaints.
7. Santee Cooper should monitor the average cost of new LED fixtures to ensure that charges for new installations are updated to match the marketplace costs and correspond to the respective monthly rental charges published on Rate Schedule OL-17, Exhibit B (as permitted by the Cook v. Santee Cooper settlement).
8. Santee Cooper should complete the development of the three (3) proposed lighting options, communicate the completed product(s) to both ORS and the interested customers, facilitate an educational meeting to explain the final product(s) to both ORS and any interested customers, and implement the chosen proposed option for those customers who choose to participate.

## **Background**

Initial discussions regarding Santee Cooper's Outdoor Lighting Program were initiated between Santee Cooper and the POA/HOAs in 2019. Subsequent meetings occurred in the Fall of 2020 and continued into 2021. The POA/HOAs contacted ORS to discuss the Santee Cooper Outdoor Lighting Program in July 2021. ORS and Santee Cooper drafted a Memorandum of Understanding ("MOU") to facilitate the review process and outline the administrative and legal terms of ORS's review. On August 4, 2021 ORS and Santee Cooper executed the MOU for the ORS review of Santee Cooper's Outdoor Lighting Program.

ORS conducted two (2) separate meetings to initiate the review, the first with Santee Cooper on August 8, 2021, and the second with the POA/HOA representatives on September 1, 2021. The meetings introduced the scope and methodology of ORS's review, established communications with the ORS personnel, and discussed specific questions with both Santee Cooper and the POA/HOAs regarding the Outdoor Lighting Program. At the completion of the review, ORS committed to issue a report detailing the review including its findings and/or recommendations.

## **ORS Review**

In accordance with South Carolina Code of Laws, Section 58-4-10(A) and (B), ORS represents the public interest of South Carolina in utility regulation. The public interest, as defined by Section 58-4-10(B), is as follows:

The concerns of the using and consuming public with respect to public utility services, regardless of the class of customer, and preservation of continued investment in and maintenance of utility facilities so as to provide reliable and high-quality utility services.

The scope of ORS's review included: structure, management, implementation of the Outdoor Lighting Program, infrastructure, customer service, cost of service, rate design, and Santee Cooper's proposed options for resolving the POA/HOAs' questions and concerns. ORS conducted multiple meetings and interviews with Santee Cooper personnel on various topics related to the Outdoor Lighting Program. Additionally, ORS met and interviewed personnel from Dominion and Duke to compare their Outdoor Lighting Programs to Santee Cooper's.

ORS issued three (3) Requests for Production of Books, Records, and Other Information ("Information Requests") to Santee Cooper, which included a total of forty-six (46) multipart questions. The Information Requests included, but were not limited to historical information, procedures, guidelines, general practices, regulations and requirements, lease agreements, customer data, technical and engineering data, maintenance, materials and equipment, cost of service information, rate design data, other various financial and cost related information, depreciation, applicable rates and schedules, and subsequent follow-up and clarification questions. A copy of the ORS Information Requests and responses from Santee Cooper are included in Appendices A-1, A-2, and A-3 to the Report.<sup>2</sup>

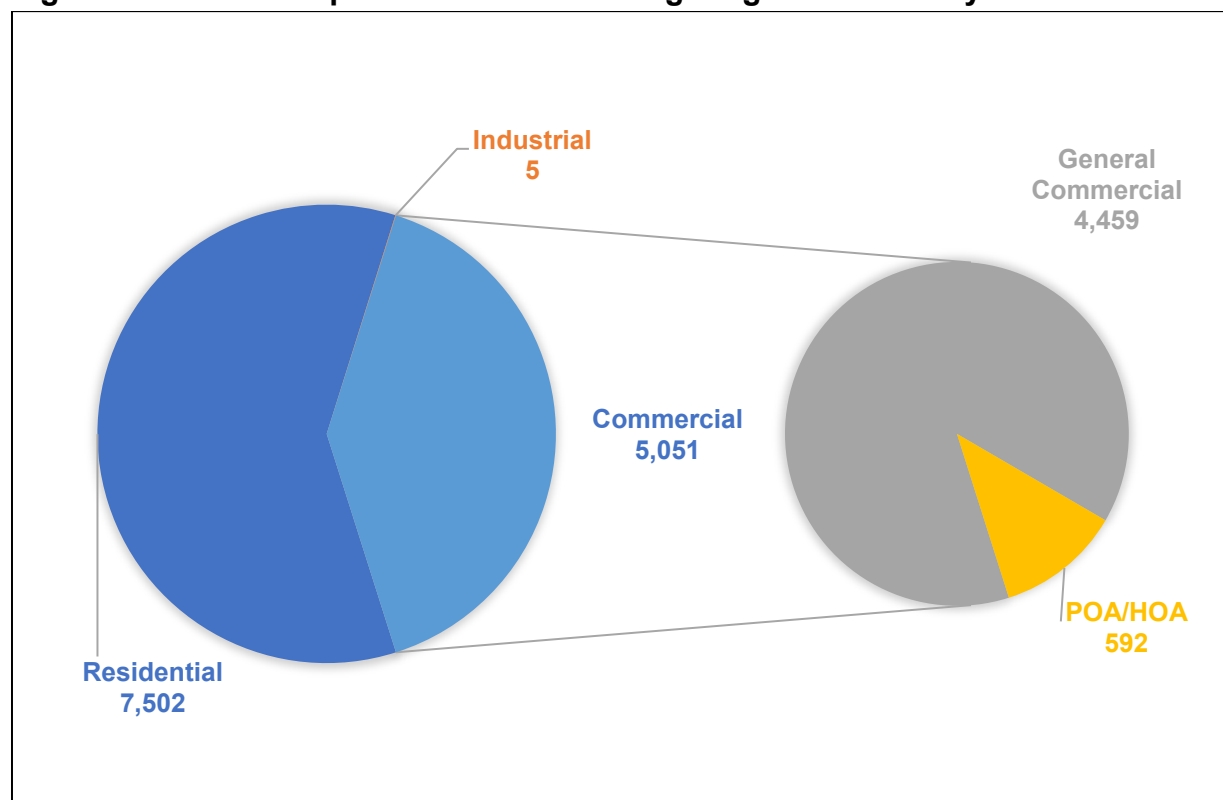
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<sup>2</sup> The Public Version of Santee Cooper's responses are included in Appendices A-1, A-2, and A-3. All responses designated by Santee Cooper as "Confidential" have been redacted or are not included.

## I. Outdoor Lighting Program Overview

Santee Cooper offers the Outdoor Lighting Program to retail customers that reside in Santee Cooper's direct service territory within Berkeley, Georgetown, and Horry counties. Outdoor lighting services offered by Santee Cooper include design of the lighting system, providing and installing the necessary materials, equipment, and infrastructure, ongoing system maintenance, depreciation, and all other necessary charges required to provide reliable and high-quality service. The Outdoor Lighting Program is open to all customer types including residential, commercial, and industrial customers.<sup>3</sup> At the time of this review there were approximately 11,966 total customers<sup>4</sup> participating in the Outdoor Lighting Program. Figure 1 illustrates the breakdown of outdoor lighting customer classes. 592 of the commercial customers represented POA/HOAs accounting for approximately 5% of the overall customer class.

**Figure 1: Santee Cooper Private Outdoor Lighting Customers by Class<sup>5</sup>**



<sup>3</sup> Response to ORS Request 2-12.

<sup>4</sup> Responses to ORS Requests 1-6, 1-7, and 2-12.

<sup>5</sup> Response to ORS Request 2-12.

### **A. Program History**

Santee Cooper has operated the Outdoor Lighting Program since approximately 1982. Around 1999, Santee Cooper began to offer a decorative/premium “Heritage Collection” to accommodate developer requests for higher-end decorative fixtures and poles.<sup>6</sup> As lighting technology evolved, available fixture types have followed, including Mercury Vapor (“MV”), High Pressure Sodium (“HPS”), and Metal-Halide (“MH”) fixtures. In 2015, all MV lamps were replaced with HPS.<sup>7</sup> At present, HPS and MH fixtures are still in use; however, all new and replacement fixtures are LED technology. Fixture types and technology are further discussed in Section II of this Report.

### **B. Program Initiation**

Customers and/or commercial builders and developers initiate the process for new outdoor lighting by completing and submitting a Rental Lighting Agreement to the Santee Cooper Distribution Design Engineering department. Santee Cooper provides new commercial builders and developers in the service territory a “Lighting Letter” as part of an easement information package that details the Outdoor Lighting Program. This Lighting Letter is sent when new communities and neighborhoods are under development.<sup>8</sup> This Lighting Letter, an example of which is provided as Attachment 1, communicates the benefits of the Outdoor Lighting Program, which include no upfront charges and no additional maintenance costs beyond the monthly rate. ORS reviewed examples of easement packages sent to builders and developers.<sup>9</sup>

When a developer builds a subdivision, the developer has the option to design, procure, and install an independent area lighting system or participate in the Outdoor Lighting Program. For commercial customers, Santee Cooper assigns an engineer to the outdoor lighting project to work with the customer to specify arrangement, pole type, and fixtures. Santee Cooper line crews or contract crews are dispatched to install and maintain the system.<sup>5</sup> Once the subdivision is developed, the developer often designates future Outdoor Lighting Program payments as the responsibility of the POA/HOA.<sup>10</sup>

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<sup>6</sup> Response to ORS Request 1-4.

<sup>7</sup> Response to ORS Request 1-11.

<sup>8</sup> Response to ORS Request 1-1.

<sup>9</sup> Response to ORS Request 2-3.

<sup>10</sup> Response to ORS Request 1-1(a).



### **C. Commercial Terms and Conditions**

The Santee Cooper Private Outdoor Lighting Service is structured as a rental agreement. The pole and fixture monthly rental charges are prescribed on Santee Cooper Private Outdoor Lighting Service Schedule OL-17 (“Rate Schedule OL-17,” Attachment 2). The monthly rental charges are inclusive of base energy charges. Customer bills include adjustments for Fuel Adjustment Clause (“FAC-17”), Demand Sales Adjustment Clause (“DSC-17”), and Economic Development Adjustment Clause (“EDA-17”). In addition, customers enter into a Rental Lighting Agreement, which includes specific project details, commercial terms, and conditions. Santee Cooper maintains two (2) separate outdoor rental lighting agreements: one (1) for standard lighting and one (1) for decorative/premium “Heritage” lighting. The Outdoor Rental Lighting Agreement is provided as Attachment 3 to this Report. The Heritage Rental Lighting Agreement is provided as Attachment 4. The initial rental agreement length historically has ranged from three (3) to seven (7) years, depending on the type of lighting fixtures installed. Table 1 below shows the length of contract term for each lighting fixture type. Each rental agreement contains penalties should the customer terminate the agreement early. After the rental agreement term is complete, the lighting system is billed to the customer on a month-to-month basis. Santee Cooper performs all maintenance on the lighting system including any necessary replacement of system components. After the rental agreement term has ended, Santee Cooper may remove the system at no additional cost if the customer elects to no longer participate in the Outdoor Lighting Program.

**Table 1: Outdoor Rental Lighting Agreement Periods**

<b>Fixture Type</b>	<b>Contract Period (Years)</b>
Light Emitting Diode (LED)	7
High Pressure Sodium (HPS)	3
Metal-Halide (MH)	5

Santee Cooper typically does not retain copies of signed Outdoor Lighting Program rental agreements after the lights and poles have been installed, the rental agreement terms have expired, and customers are on a month-to-month basis.<sup>11</sup> ORS recommends that Santee Cooper should maintain copies of all signed rental agreements associated with the Outdoor Lighting Program until such time as said rental agreements are terminated and customers either: 1) execute new rental agreements for new lighting systems; or 2) customers elect to no longer participate in the Outdoor Lighting Program and the old lighting systems are removed by Santee Cooper.

<sup>11</sup> Response to ORS Request 2-1.

#### D. Comparison to Other Utilities

Santee Cooper provided ORS with Table 2 as shown below, which compares a sample decorative fixture and pole combination with estimates of neighboring, anonymized utilities.<sup>6</sup> Table 2 indicates that Santee Cooper's pricing for the specific decorative fixture and pole reviewed is slightly less than the other utilities. ORS reviewed the tariffs, terms, and conditions approved by the South Carolina Public Service Commission ("PSC" or the "Commission") for Dominion and Duke and found Santee Cooper's pricing and program conditions to be generally consistent with those of Dominion and Duke.

**Table 2: Outdoor Lighting Program Sample Price Comparison Summary**

Provider	Fixture	Fixture Charge	KWH Usage	Energy Charge @.0661/KWh	Fixture and Energy Charge	Decorative Pole Cost	Total Monthly Charges	Contract Terms (Years)
Santee Cooper	Hampton 175W MH	\$11.70	73	\$4.83	\$16.53	\$22.30	\$38.83	5
Santee Cooper	Kingston 150W MH	\$13.10	61	\$4.03	\$17.13	\$22.30	\$39.43	5
Provider 1	Acorn, Round or Octagonal MH				\$16.64	\$23.85	\$40.49	10
Provider 2	Decorative						\$45.00	25
Provider 3	Decorative				\$22.08	\$20.30	\$42.38	3 or 10

Santee Cooper conducted a survey of public power utilities that are members of the American Public Power Association ("APPA"), Large Public Power Council ("LPPC"), and Utility Analytics Institute ("UAI"). Santee Cooper stated that the responses showed most of the surveyed utilities administer their Outdoor Lighting Program via calculated rates through a rental agreement contract.<sup>12</sup>

ORS reviewed the responses from utilities surveyed by Santee Cooper.<sup>13</sup> Of the seven (7) public power utilities who responded to the survey, all utilities operate a rental lighting program. None of the utilities offer an option for the customer to purchase; however, two (2) of the utilities allow sales of individual lighting systems on a case-by-case basis. One (1) county public utility district collects via the rental agreement both capital and operation and maintenance ("O&M") costs for the initial ten 10-year term. After the initial 10-year term expires, the county public utility district only collects O&M charges. Another municipal utility incorporates a "Contributed" rate option, thereby reducing the monthly rate by allowing customers to pay down capital costs quicker. By electing this

<sup>12</sup> Response to ORS Request 1-5.

<sup>13</sup> Response to ORS Request 2-8.

“Contributed” option, the customer accepts responsibility for all costs to replace poles or fixtures due to damage.

ORS met with representatives from Dominion and Duke regarding their outdoor lighting programs to independently benchmark Santee Cooper’s Outdoor Lighting Program. ORS found that Dominion, Duke, and Santee Cooper structure their outdoor lighting programs similarly. Both Dominion and Duke utilize rental agreements with specified contract terms and lengths similar to Santee Cooper. The monthly rental rates and the outdoor lighting services provided by Dominion and Duke are consistent with Santee Cooper’s program and the programs include specific monthly fees for outdoor lighting services which include design of the lighting system, providing and installing the necessary materials, equipment, and infrastructure, ongoing system maintenance, depreciation, and all other necessary charges required to provide reliable and high-quality service. The monthly rental rates and any additional riders for Dominion and Duke are published as tariffs and approved by the Commission. Dominion and Duke, like Santee Cooper, are also transitioning to LED technology. The Dominion tariff, identified as Rate Schedule 18, allows customer contribution in aid of construction (“CIAC”) for installation construction costs that exceed four (4) times the estimated annual revenue.<sup>14</sup> Duke Energy Carolinas, LLC, as part of its Rate Schedule PL, maintains an extra monthly charge equal to 1.0% of the estimated installed cost difference between decorative and standard luminaires.<sup>15</sup>

In reviewing the rental agreements from Dominion and Duke, ORS found that these companies maintain a single rental agreement with consistent terms and conditions for both types of lighting configurations: standard or decorative/premium. In comparison, Santee Cooper maintains two (2) rental agreements, one (1) for standard and one (1) for decorative/premium lighting. ORS recommends that Santee Cooper should combine the two (2) lease agreements into a single lease agreement to help prevent possible confusion among customers and other parties as well as simplify the administrative burden on Santee Cooper.<sup>16</sup>

Additionally, both Dominion and Duke’s rental agreements explicitly state that each utility maintains ownership of all facilities necessary for service including fixtures and poles. Santee Cooper’s current rental agreements do not clearly identify who maintains ownership of all facilities necessary for service including fixtures and poles. For clarity and transparency, ORS recommends that Santee Cooper should include in the rental agreement explicit language regarding the ownership of all outdoor lighting facilities

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<sup>14</sup> “Rate 18 - Underground Street Lighting.” Rates & Tariffs | South Carolina | Dominion Energy, <https://www.dominionenergy.com/south-carolina/rates-and-tariffs>.

<sup>15</sup> “Rate PL - General Service, Street and Public Lighting Service.” Duke Energy, <https://www.duke-energy.com/Home/Billing/Rates>.

<sup>16</sup> Response to ORS Requests 1-1(a), 2-1(a), and 2-1(b).

including fixtures, lamps, controls, poles, hardware, transformers, conductors, and other appurtenances.

ORS learned from Dominion and Duke that that homeowner associations have discussed purchasing their outdoor lighting system from the utilities. Duke stated that once the homeowner associations learn of the cost associated with maintenance and upkeep to the systems, all have opted not to pursue a purchase of the system. Dominion stated that there have been two (2) instances where they have received requests to remove lighting systems. In the first instance, a homeowner association of a large subdivision in Mt. Pleasant requested to take ownership and maintain the Dominion lighting infrastructure. Dominion reached an agreement with the homeowner association whereby Dominion agreed to remove the lighting system but left the underground conduit. The homeowner association then purchased and installed their own system. In the second instance, a commercial customer wanted to install their own parking lot area lighting. Again, Dominion removed their facilities for the customer to install their own outdoor lighting system.

## **II. Overview of Santee Cooper Outdoor Lighting Program Infrastructure**

The Santee Cooper Outdoor Lighting Program generally utilizes outdoor pole/arm-mounted luminaires for commercial, industrial, and residential customers. As discussed in Section I, the program started with MV, HPS, and MH fixtures. MV, HPS, and MH are collectively classified as High Intensity Discharge (“HID”) type lamps. Prior to 2015, all MV lamps were replaced with HPS. In 2015, Santee Cooper began researching LED technology.<sup>17</sup> Santee Cooper launched an LED Pilot Program with various municipalities to evaluate LED technology and validate associated rates.<sup>18</sup> HPS and MV fixtures are still installed throughout Santee Cooper’s service territory. All new and replacement fixtures are LED.<sup>19</sup> Tables 3, 4, and 5 below contain excerpts from the Santee Cooper “Light the Night” brochure as published on their website.<sup>20</sup> Tables 3, 4, and 5 illustrate the range of outdoor lighting options currently offered by Santee Cooper.

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<sup>17</sup> Response to ORS Request 1-11.

<sup>18</sup> Response to ORS Request 2-13.







<sup>19</sup> Response to ORS Request 1-1(a).

<sup>20</sup> Response to ORS Request 1-1(a).

Table 3: Standard LED Lighting

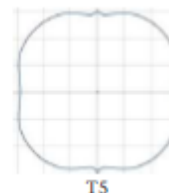
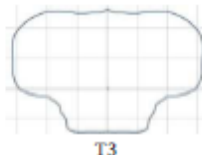
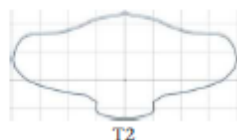
Fixture Type	Description	Wattage and Type	Lumens	Area of Illumination	Monthly Charge
	<b>Traditional</b> A 70W LED replacement for the 150W HPS Traditional fixture. Mounting height is 14' on a round, tapered, black fiberglass pole.	70W LED	5962	60' x 90'	\$8.95
	<b>Area</b> An LED replacement for the 150W - 1000W shoebox fixtures. The 70W fixture has mounting heights of 16' or 25'. The 210W and 275W fixtures have mounting heights of 25' and 34'. All are mounted on either fiberglass or aluminum, round, tapered poles. Recommended for commercial use.	70W LED T3 SM 210W LED T3 MED 210W LED T5 MED 275W LED T3 LRG 275W LED T5 LRG	7,829 23,250 24,673 30,491 32,391	65' x 105' 105' x 170' 155' x 155' 135' x 215' 200' x 200'	\$7.85 \$14.20 \$14.20 \$16.82 \$16.82
	<b>Private</b> A 50W LED replacement for the standard dusk-to-dawn fixture. Mounting height is 25' on existing Santee Cooper poles or on a separately-installed wood pole. Recommended for use in residential areas. Provides best light distribution without the acrylic refractor.	50W LED T5	4,814	85' circle	\$6.16
	<b>Roadway</b> An LED replacement for 50W - 400W HPS Roadway fixtures. Typically mounted on wood utility poles at 25', it can also be mounted on a 25' aluminum pole. The 210W fixture is not recommended for residential communities.	70W LED T2 SM 140W LED T2 MED 210W LED T3 LRG	8,090 15,685 23,250	65' x 150' 85' x 190' 105' x 170'	\$7.79 \$11.52 \$14.20
	<b>Floodlight</b> An LED replacement for 400W - 1000W floodlights. Can be mounted on several types of Santee Cooper poles with mounting heights of 30' - 35'. Recommended for commercial use only.	150W LED SM 300W LED LRG	18,800 38,700	105' x 120' 145' x 155'	\$13.98 \$18.40
<b>Standard Poles and Prices (each per month)</b> Standard wood poles used for lighting are 30' (\$4.58) and 35' (\$5.25). Used with Private, Roadway or Floodlights. 25' Aluminum satin finish pole, \$12.09. Used with Roadway for streets and parking lots. 35' Aluminum bronze pole, \$20.70. Used with Shoebox and Floodlights for parking lots and other large area lighting. 20', 30' and 40' Fiberglass bronze pole, \$5.84, \$13.19 and \$13.30 respectively. Used with Shoebox and Floodlights for streets and parking lots. 18' Fiberglass black pole, \$5.66. Used with Traditional. Can also accommodate Heritage fixtures.  <i>Prices may vary due to fuel adjustment and any applicable taxes. Prices indicated above are monthly costs including the approximate energy charge. Area of illumination refers to minimum level of approximately .25 foot-candle.</i>					

**Table 4: The Heritage LED Collection**

Fixture Type	Description	Wattage and Type	Lumens	Area of Illumination	Monthly Charge
	<b>The Prince George</b> Historically-styled octagonal with "crowned" top. Used for streetscapes, walkways, residential communities and retail store parking lots. Combine with a decorative 14' pole from The Heritage Collection.	100W LED T3	6,100	65' x 11.5'	\$19.48
	<b>The Kingston</b> Octagonal-style with a contemporary flare. Used for streetscapes, walkways, residential communities and retail store parking lots. Combine with a decorative 14' pole from The Heritage Collection.	100W LED T3	6,100	65' x 11.5'	\$19.48
	<b>The Lexington</b> The simple elegance of an Acorn-style. Used for streetscapes, walkways, residential communities and retail store parking lots. Combine with a decorative 14' pole from The Heritage Collection.	80W LED T3	9,303	65' x 11.5'	\$13.57
	<b>The Hampton</b> Acorn-style with gold accessories. Used for streetscapes, walkways, residential communities and retail store parking lots. Combine with a decorative 14' pole from The Heritage Collection.	80W LED T3	8,353	65' x 11.5'	\$15.77
	<b>The Washington</b> Large acorn-style. Used for streetscapes and retail store parking lots. Combine with a decorative 14' pole from The Heritage Collection.	100W LED T3	10,709	65' x 12.5'	\$21.69
	<b>The Teardrop</b> Hanging-Pendant style. Used for streetscapes and roadways in commercial and retail applications. Installed with a davit arm on either 20' or 25' decorative concrete pole.	175W LED T3	20,073	20' Pole - 95' x 15.5' 25' Pole - 100' x 17.5'	\$23.34




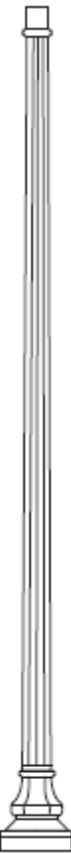
All decorative fixtures above can be installed on double brackets.

**Light Distribution Types**



Prices may vary due to fuel adjustment and any applicable taxes. Prices indicated above are monthly costs including the approximate energy charge. Area of illumination refers to minimum level of approximately .25 foot-candle.

**Table 5: Heritage Collection Poles**

Low Country	Dunes	Atlantic	Long Bay*
Fluted 14' fiberglass \$22.30 per month	Fluted 14' fiberglass \$22.30 per month	Fluted 14' fiberglass \$18.98 per month	Fluted** 20' and 25' concrete \$28.90/\$31.10 per month
			
<p>*These items are special order. Delivery lead times should be verified before ordering.</p>			
<p>**This pole requires a concrete foundation to be provided by the customer. Santee Cooper will provide a foundation detail, the anchor bolts, and conduit stub-outs for construction.</p>			

All lighting fixtures utilized as part of the Outdoor Lighting Program are qualified products under the Design Lights Consortium (“DLC”) industry standard requirements.<sup>21</sup> DLC seeks to promote high quality, high efficiency lighting solutions in the commercial lighting sector throughout the US and Canada. DLC maintains a Qualified Product List of high efficiency products which have met or exceeded pre-defined category requirements.<sup>22</sup>

Santee Cooper’s outdoor lighting systems are designed to comply with lighting and glare ordinances enacted by various municipalities. Santee Cooper specifically referenced Sections 510 of the Horry County Planning and Zoning Ordinance, which specifies general light and glare requirements. Article IX of the ordinance also defines general corridor overlay provisions and establishes luminaire heights pertaining to specific major highway corridors in addition to generic restrictions on luminaire heights near residentially zoned parcels.<sup>23 24</sup>

Santee Cooper outdoor lighting is designed, constructed, and installed utilizing work practices in accordance with the National Electric Code (“NEC”), National Electric Safety Code (“NESC”), Santee Cooper Overhead and Underground Distribution Standards Manuals, and other applicable standards.<sup>25</sup> The “Underground Distribution Standards Drawing L-16U Traditional Style Outdoor Light,” included as Attachment 5, contains an excerpt from the Santee Cooper Overhead and Underground Distribution Construction Manual.

Santee Cooper uses ESRI ArcGIS software to design outdoor lighting layouts. For residential developments, Santee Cooper’s best engineering practice is to install one rental light for every three lots where average lot frontage is 50’ to 60’ wide. In developments with larger lots, rental lights are generally placed on every other lot corner, or as requested by the developer. For commercial and industrial customers, the architect generally specifies foot-candle or lumen limits to ensure parking lots do not exceed ordinance glare requirements. The Santee Cooper project design group utilizes Acuity Brands Visual Lighting software to ensure foot-candle design requirements are met. For individual residential lighting requests, the customer may have specific location(s) for installation or may have a foot-candle requirement. For illustrative purposes, Figure 2 depicts an example layout produced by Santee Cooper Area Engineering for a residential subdivision outdoor lighting work request.<sup>26</sup>

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<sup>21</sup> Response to ORS Request 1-2.

<sup>22</sup> “DLC (Design Lighting Consortium).” LightLab International LLC. Phoenix, AZ, <https://www.lightlabint.com/dlc-design-lighting-consortium.html>.

<sup>23</sup> Response to ORS Request 2-5.

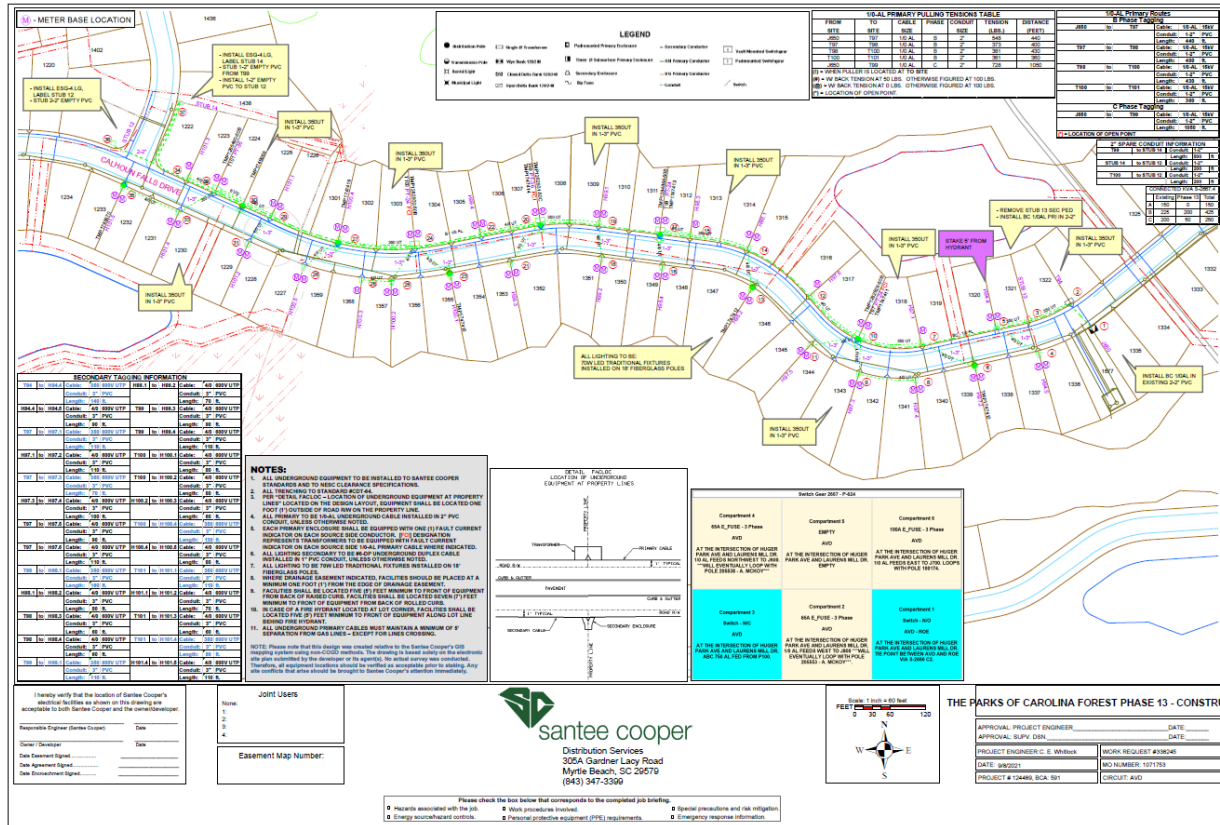
<sup>24</sup> “Horry County South Carolina Zoning Ordinance Simplification.” Horry County Government, <https://www.horrycounty.org/Departments/Planning-and-Zoning>.

<sup>25</sup> Response to ORS Request 1-1.

<sup>26</sup> Response to ORS Requests 1-2, 2-5.



Figure 2: Example Outdoor Lighting Work Request for Residential Subdivision



Upon completion of a work request design, a Santee Cooper or contract line crew is dispatched to install the lighting system. For new subdivisions and developments, the poles and associated fixtures are typically installed at the same time as the backbone infrastructure that serves each of the development’s lots.<sup>27</sup>

Santee Cooper stated that equipment “end of life” is determined as the time when a fixture stops working. The Santee Cooper estimates “useful life” timeframes to develop appropriate debt service models. Table 6 summarizes the useful service lives of the major outdoor lighting equipment components.<sup>28</sup>

<sup>27</sup> Response to ORS Request 1-2.

<sup>28</sup> Response to ORS Request 2-1.

**Table 6: Outdoor Lighting Equipment Useful Lifetimes**

<b>Equipment</b>	<b>Useful Lifetime (Years)</b>
Non-LED Fixtures	10
LED Fixtures	15
Steel/Aluminum/Fiberglass Poles	15
Wood Poles	30

### **III. Customer Service**

Santee Cooper maintains the fixtures and poles for residential, commercial, and industrial customers in accordance with the terms of the Outdoor Rental Lighting Agreement and the Heritage Rental Lighting Agreement. As lighting fixtures fail or stop working, they are repaired or replaced with the LED equivalent fixture. Additionally, Santee Cooper maintains the entire outdoor lighting system, including poles, fixtures, wires, and conduits. Santee Cooper guarantees that rental lights are repaired within three (3) working days after being notified that repairs are needed. Santee Cooper maintains a digital “Rental or Street Light Outage” report under the “Outdoor LED Lighting” page of their website.<sup>29</sup>

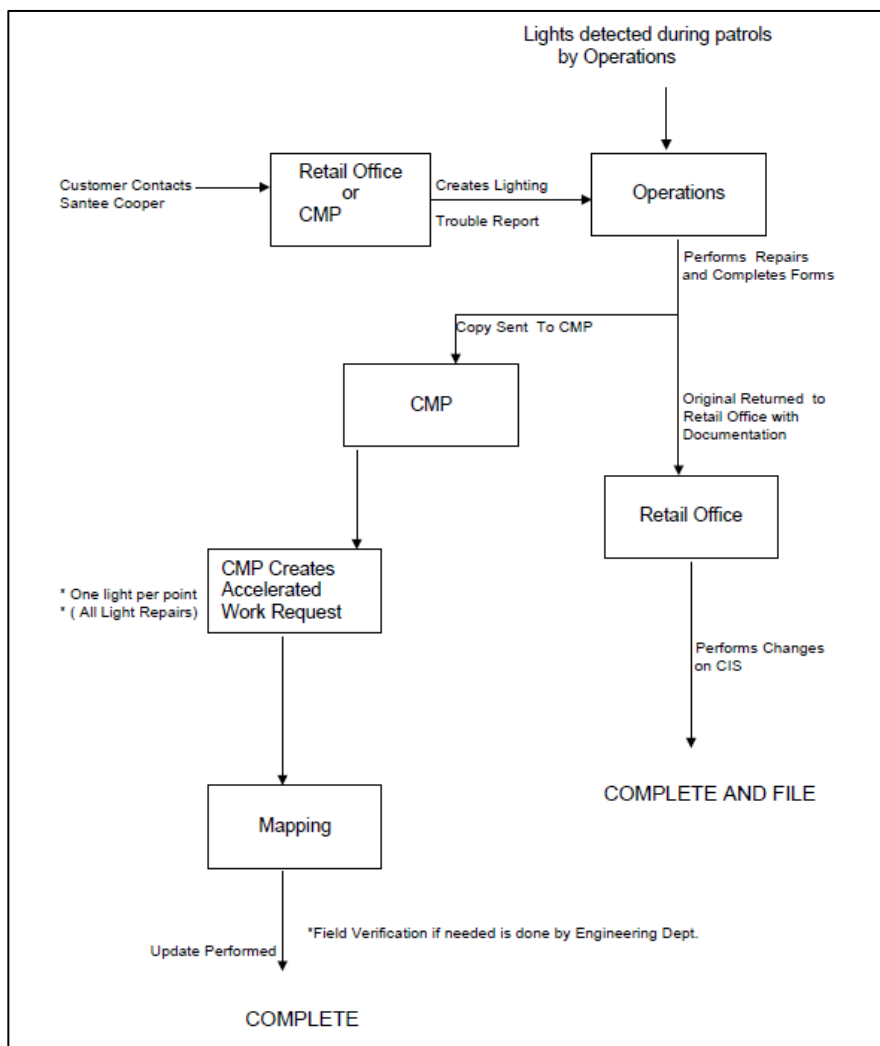
#### **A. Outdoor Lighting Repair Program**

Santee Cooper performs outdoor lighting system repairs based on lights identified through a customer generated repair ticket or as identified during distribution line crew “Light Patrols.” Light Patrols are performed by a Santee Cooper distribution line crews in their assigned service area for municipal lights monthly and for all other lighting on a quarterly basis. For municipalities and high-profile areas, the Light Patrol rides through the area at night specifically looking for streetlights that are broken or not burning. For residential areas, repairs are completed as identified or when notified by the customer. Figure 3 diagrams the lighting trouble report ticket workflow.<sup>30</sup>

<sup>29</sup> Response to ORS Request 1-1.

<sup>30</sup> Response to ORS Request 2-19.

**Figure 3: Lighting Trouble Report Ticket Flowchart**



In instances where a vehicle damages a pole or fixture, Santee Cooper replaces the pole and fixture at the Santee Cooper's cost and bills the third-party at fault for damages. If the incident is a hit-and-run and there is no third-party to bill, Santee Cooper replaces the pole and fixture and absorbs that cost as part of maintenance.<sup>31</sup>

<sup>31</sup> Response to ORS Request 1-1.

## **B. LED Conversions**

If customers have existing HID Lighting and they wish to convert to the LED equivalent fixture, Santee Cooper charges a \$30 LED conversion fee per fixture. The LED conversion fee covers crew time to travel, remove, and replace the working HID fixture with an LED fixture. Santee Cooper limits LED conversions to fifty (50) lights per-year, per-customer to ensure there is adequate fixture inventory and sufficient personnel available to complete the requests.<sup>32</sup> Santee Cooper stated that it reviews LED conversion requests on a case-by-case basis and makes the necessary adjustments as needed to ensure safety and consistency with outdoor lighting throughout a subdivision.<sup>33</sup> Santee Cooper should have the planning and scheduling capability to complete full LED conversions as requested with the acknowledgement that LED conversions requiring more than fifty (50) lights may have longer lead times due to supply chain and manpower constraints. ORS recommends that Santee Cooper should investigate and revise the LED conversion process to accommodate full LED conversion requests based on schedules that incorporate supply chain and manpower constraints.

## **C. Customer Complaints**

ORS requested copies of all documents related to customer complaints received by and/or generated by Santee Cooper related to the Outdoor Lighting Program as part of its review. Santee Cooper responded that:

Most customers are satisfied with Santee Cooper's Outdoor Lighting Program and appreciate the fact that for a monthly fee, all repairs, bulb, photocell, fixture, and pole replacements, painting, and general maintenance are taken care of by Santee Cooper Technicians. The most recent and significant complaints related to Santee Cooper's Outdoor Lighting Program primarily pertain to costs, and the fact that the POA/HOAs believe that they have paid for the outdoor lighting systems at least twice.<sup>34</sup>

Santee Cooper provided ORS with email communication and meeting minutes from public outreach sessions with POA/HOAs in the Grand Strand region. No specific complaints concerning maintenance, continuity of service, quality of equipment, or customer service were identified or provided. The core issue of the POA/HOAs' complaints is with the monthly rental charges for outdoor lighting. The POA/HOAs have stated the equipment associated with their respective outdoor lighting systems has been paid for. The basis for energy rates and monthly rental charges are discussed in further detail in Section IV of this Report.

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<sup>32</sup> Response to ORS Request 1-1(a).

<sup>33</sup> Response to ORS Request 1-1.

<sup>34</sup> Response to ORS Request 1-12.

Table 7 outlines the timeline of significant customer communication between POA/HOAs, and the Santee Cooper Outdoor Lighting Program team as provided by Santee Cooper.<sup>35</sup>

**Table 7: Customer Communications with POA/HOAs**

Date	Correspondence
July 19 <sup>th</sup> , 2019	Email from Carlita Goff (Santee Cooper) to Bob Sweet (POA/HOAs)
August 1 <sup>st</sup> , 2019	Email/Letter from Bob Sweet to Carlita Goff
August 8 <sup>th</sup> , 2019	Email from Carlita Goff responding to Bob Sweet
August 23 <sup>rd</sup> , 2019	Email from Bob Sweet following up to response from Carlita Goff
August 30 <sup>th</sup> , 2019	Email from Carlita Goff responding to follow up from Bob Sweet
April 30 <sup>th</sup> , 2020	Email from Doug Decker (POA/HOAs) to Carlita Goff
May 15 <sup>th</sup> , 2020	Email from Carlita Goff responding to Doug Decker
June 5 <sup>th</sup> , 2020	Email form Doug Decker following up to response from Carlita Goff
June 30 <sup>th</sup> , 2020	Email from Carlita Goff responding to follow up from Doug Decker
October 14 <sup>th</sup> , 2020	Santee Cooper & POA/HOAs Stakeholder Meeting #1
November 18 <sup>th</sup> , 2020	Santee Cooper & POA/HOAs Stakeholder Meeting #2
January 14 <sup>th</sup> , 2021	Santee Cooper & POA/HOAs Stakeholder Meeting #3
July 30 <sup>th</sup> , 2021	Email from POA/HOAs to Santee Cooper - Meeting #3 follow up questions
August 20 <sup>th</sup> , 2021	Email from Santee Cooper to POA/HOAs responding to Meeting #3 follow up questions

During ORS's review the POA/HOA's identified three (3) other complaints: 1) a lack of transparency in billing of outdoor lighting, 2) the color spectrum of LED Fixtures, and 3) fixture cost of LEDs.

#### **D. Billing Transparency for the Outdoor Lighting Program**

In reviewing correspondence between the POA/HOAs and Santee Cooper, ORS observed that monthly outdoor lighting bills do not provide sufficient detail as to the specific poles and fixtures for which customers are paying. Specifically, the Outdoor Lighting Program bills only summarize total new charges per month and include line items with generic descriptions such as, "pole rental fees," "light fixture fees," "lighting energy charge," additional rider adjustments, and "sales tax."<sup>36</sup>

For a customer to verify the specific poles, fixtures, types, and quantities included in the bill, the customer must contact Santee Cooper and request a screen shot or similar picture

<sup>35</sup> Response to ORS Request 1-12.

<sup>36</sup> Response to ORS Request 2-20.

of the billing database. This process lacks transparency and creates barriers for customers to verify the accuracy of their bills. ORS recommends that Santee Cooper should revise the monthly billing for outdoor lighting to break out pole type and fixture type by line item. This modification would increase transparency, remove a barrier for customer questions regarding their bills, and bring the rental lighting bills closer into alignment with other rental or lease invoicing practices across the industry.

### **E. LED Fixture Correlated Color Temperature**

Certain POA/HOA directors complained about new LED lamp “brightness” and “intensity.” Santee Cooper has addressed brightness and glare issues by employing shielding on a case-by-case basis. The general POA/HOA concerns related to the CCT of the LED lights deployed by Santee Cooper. Color temperature is a measure of the spectral content of light. Higher CCT values indicate a greater amount of blue light that a fixture emits. Santee Cooper currently deploys LED lights

.<sup>37</sup> Since 2016, the American Medical Association (“AMA”) and the International Dark-Sky Association (“IDA”) have recommended limiting the CCT of outdoor lighting to 3000K.<sup>38</sup> These recommendations are based on a growing body of evidence linking blue-rich LED lighting with detrimental effects on human health and wildlife. The Illuminating Engineering Society of North America ANSI/IES LP-11-20 recommends a maximum CCT of 3000K for area lighting in commercial zones. The DLC is also incorporating the 3000K CCT limit in their draft “Luna” technical requirements.<sup>39</sup> Santee Cooper provided ORS with specification sheets for a standard LED fixture, decorative LED fixture, and LED replacement lamps. Each of these specification sheets has an option for 3000K CCT.<sup>40</sup> ORS recommends Santee Cooper should fully evaluate the CCT of LED lighting and strongly consider the use of LED lamps with CCT of 3000K moving forward to address customer complaints.

### **F. LED Fixture Cost**

POA/HOAs’ directors have consistently expressed frustration that the cost savings from lower energy consumption does not fully offset the higher fixture monthly rental charge.<sup>41</sup> Upon review of information provided by Santee Cooper, ORS determined that fixture material cost is only one component of the overall cost to customers. Other costs include direct labor, direct equipment, corporate overhead expenses, indirect allocated costs, O&M expenses, debt service interest payment, proportional contribution to the capital

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<sup>37</sup> Responses to ORS Requests 1-12 and 2-14.

<sup>38</sup> “AMA Report Affirms Human Health Impacts from LEDs.” International Dark-Sky Association, 20 Feb. 2019, <https://www.darksky.org/ama-report-affirms-human-health-impacts-from-leds/>.

<sup>39</sup> LUNA Technical Requirements Version 1 Draft 2. Design Lights Consortium, 13 Sept. 2021, <https://www.designlights.org/our-work/luna#versionID-1>.

<sup>40</sup> Response to ORS Request 1-12.

<sup>41</sup> Response to ORS Request 1-12.

improvement fund and payment to the state (in lieu of taxes).<sup>42</sup> Note that Santee Cooper's bond covenants require Santee Cooper to deposit a percentage of revenues into a capital improvement fund. Table 8 provides an excerpt from Rate Schedule OL-17, Exhibit B, which highlights the monthly rental charges corresponding to respective LED fixture. The monthly rental charge for LED fixtures in Rate Schedule OL-17 varies based on the fixture cost. ORS recommends that Santee Cooper should monitor the average cost of new LED fixtures to ensure that charges for new installations are updated to match the marketplace costs and correspond to the respective monthly rental charges published on Rate Schedule OL-17, Exhibit B (as permitted by the *Cook v. Santee Cooper* settlement).

**Table 8: Monthly Rate Schedule Excerpt of Available Experimental LED Fixtures**

<b>Experimental Fixtures</b> (Energy Not Included in Monthly Rental Charge)			
70	\$51-\$150 Range, LED	Varies by Fixture	\$ 5.10
71	\$151-\$250 Range, LED	Varies by Fixture	\$ 6.20
72	\$251-\$350 Range, LED	Varies by Fixture	\$ 7.30
73	\$351-\$450 Range, LED	Varies by Fixture	\$ 8.41
74	\$451-\$550 Range, LED	Varies by Fixture	\$ 9.51
75	\$551-\$650 Range, LED	Varies by Fixture	\$ 10.61
76	\$651-\$750 Range, LED	Varies by Fixture	\$ 11.72
77	\$751-\$850 Range, LED	Varies by Fixture	\$ 12.82
78	\$851-\$950 Range, LED	Varies by Fixture	\$ 13.92
79	\$951-\$1050 Range, LED	Varies by Fixture	\$ 15.03
80	\$1051-\$1150 Range, LED	Varies by Fixture	\$ 16.13

#### IV. Cost of Service and Rate Design

In traditional rate making, a utility's cost to provide electrical service to customers is used to determine the revenue requirement and then, based on the results of the cost of service, the rate design for the various customer classes can be developed. To determine the cost of service, a utility performs a COSS. The COSS identifies the cost of providing service to each customer class as a function of load and service characteristics. The COSS is based on actual utility plant and expenses that are consistent with providing service. The COSS then allocates or directly assigns the operating revenues, operating expenses, and utility plant items to each customer class to provide a revenue target for each customer class. The reason for the assignment is so each class of customers or services pays the cost that the utility incurs to serve that class to avoid unjustified price discrimination. Simply put, the COSS specifically identifies the cost responsibility for expenses and utility plant items that should be allocated to the customer class(es) causing the cost to be incurred. This allocation methodology is referred to as "cost causation."

<sup>42</sup> Response to ORS Request 1-23.

The major components utilized in the development of a COSS are functionalization, classification, and allocation. Functionalization is the process of categorizing investments and operating costs according to their function which is either, production, gathering, transmission, or distribution. Classification further groups these costs based on the service being provided and related causation of the costs, namely demand-related, commodity-related, or customer-related. The costs are then allocated based upon cost causation principles, and the COSS analysis provides information useful for designing individual rate schedules as well as providing support for justifying rate differentials to customers. It should be noted that the COSS is not an exact science and reasonable people can disagree on the proper cost of service.

ORS studied the most recently completed COSS that was performed by (or under the supervision of) Santee Cooper as well as the Santee Cooper's rate design structure, methodology, and analyses. ORS found that the methodology used by Santee Cooper to develop the COSS followed standard industry COSS practices. Santee Cooper's COSS provides a reasonable assessment and allocation of revenues, operating expenses, and utility plant items. ORS confirmed that Santee Cooper's rates are developed from the COSS.

The core issue of the POA/HOA's complaint is that they have paid for their outdoor lighting system after a certain period of time or after the equipment serving their community has fully depreciated. ORS reviewed Santee Cooper's most recent COSS which was performed in 2015<sup>43</sup>. ORS confirmed that the Rate Schedule OL-17 is designed based on the 2015 COSS to meet the revenue requirement for Santee Cooper. The Santee Cooper COSS identifies and allocates costs to a class of customers. Customers of Santee Cooper are categorized into residential, commercial, industrial, and lighting customers. These classes are assigned rates and schedules based on the Santee Cooper COSS. All of the costs for the lighting class are determined based on the expenses experienced by Santee Cooper for providing outdoor lighting service including, but are not limited to installation, maintenance, equipment replacement, operations, administration, and capital costs. The costs for the customer class are tracked and recorded on the books of Santee Cooper in an aggregate manner. The POA/HOAs are included within the lighting class of customers that receive service under Rate Schedule OL-17. Rate Schedule OL-17 identifies the rates for the entire Outdoor Lighting Program and all customers within that customer classification. If an electric utility were to breakout and isolate a single customer or a subset of individual customers from a designated class grouping and designate individual rates for those customers, it could lead to a potentially unmanageable number of rates being calculated and determined on a system. This is neither in line with typical

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<sup>43</sup> Response to ORS Request 1-15.



rate making policies, nor practical for rate making purposes. Rate Schedule OL-17 applies to all customers of that class, and as such the rates for customers are determined based on the customers on the system as a whole, not on an individual basis.

ORS requested that Santee Cooper perform a cost and rate analysis for two (2) of the POA/HOAs as seen in Attachment 6, Calculation Example. The Calculation Example identified the specific costs associated with Santee Cooper's requirements to provide service for lighting customers under Rate Schedule OL-17. The specific cost categories include labor, equipment, material, overhead, allocated (such as crew/labor supervision, travel, and other costs not directly included in work management), and contribution to the capital improvement fund. ORS also requested that Santee Cooper provide all supporting data and calculations for the 2015 COSS. ORS reviewed Santee Cooper's analyses from 2015 to 2018 for the lighting class. Due to the rate freeze imposed by the *Cook v. Santee Cooper* settlement agreement, Santee Cooper did not provide, and ORS did not review the change in expenditures from 2018 through 2021 as seen in Attachment 7. The information ORS reviewed included but was not limited to load data, lighting class revenue requirements, projected revenues, proposed rates, O&M expenses, and various distribution of expenses for operations. In addition to the Santee Cooper cost and rate analysis, ORS reviewed the interest costs on capital costs. ORS met with Santee Cooper to discuss Santee Cooper's rate design and cost structure, the costs for the lighting class, and how the information correlates to the COSS. ORS determined the Santee Cooper analysis was performed in accordance with general industry practices and resulted in the rates reflected in Rate Schedule OL-17. ORS also reviewed the energy costs and cost causation methodology used by Santee Cooper for the outdoor lighting class of customers as a whole. ORS determined the energy costs and methodology used by Santee Cooper was performed in accordance with general industry practices and resulted in the rates reflected in Rate Schedule OL-17.<sup>44</sup>

ORS reviewed depreciation studies and other utility plant documentation provided by Santee Cooper. ORS met with Santee Cooper to discuss the depreciation of the specific equipment related to the Outdoor Lighting Program and services provided by Santee Cooper to the POA/HOAs. The different pieces of equipment, such as poles and fixtures, utilized in the Outdoor Lighting Program depreciate over different timespans. In 2018, HID technology started to be incrementally replaced with newer LED technology. In addition, Santee Cooper has added individual poles and fixtures more recently than the initial development of the neighborhood. The Outdoor Lighting Program equipment contained in the continuing property records for Heritage Plantation has an estimated net book value of approximately \$71,762.33 as of June 20, 2020. The Outdoor Lighting Program equipment contained in the continuing property records for Plantation Lakes has an

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<sup>44</sup> Response to ORS Request 1-21(a), 1-21(b), 1-21(c), 2-20(a), 2-20(b), 2-20(c), and 2-20(d).

estimated net book value of approximately \$274,428.10 for decorative/premium lighting. Santee Cooper analyzed factors such as replacement, maintenance, design, and engineering to determine the net book value. As Santee Cooper repairs and/or replaces the older MV, HPS, and MH technology with LED technology, depreciation for the equipment will be extended due to the replacement of certain components. ORS reviewed Santee Cooper's continuing property records and depreciation schedules for the two (2) POA/HOAs. ORS determined that while some equipment may have fully depreciated, neither of the POA/HOA's lighting systems were fully depreciated and the net present value has not reached \$0.00.<sup>45</sup>

It should be noted that Santee Cooper's rates are constrained by the terms and conditions of the settlement agreement reached in *Cook v. Santee Cooper*, which required a rate freeze for Santee Cooper until the end of 2024. Therefore, current rates may not change until January 1, 2025, at the earliest.

The POA/HOAs do have an option in the current rental agreement that allows for the POA/HOAs to cancel the outdoor lighting service. Upon cancellation, Santee Cooper will remove the lights at no charge once all terms and conditions of the rental agreement have been met. Should the POA/HOAs choose to remove the outdoor lighting systems, the POA/HOAs may independently conduct a cost-benefit analysis with estimated annual ongoing maintenance and other costs to maintain the system after initial capital investment to determine if it would be economical to install an independent system.<sup>46</sup>

## **V. Santee Cooper's Proposed Lighting Options**

Prior to the start of ORS's review, Santee Cooper began to evaluate proposals for alternative lighting options to resolve the complaints raised by the POA/HOAs. The development of Santee Cooper's proposed lighting options were the result of initial collaborative and meaningful discussions between Santee Cooper and the POA/HOAs regarding the Outdoor Lighting Program. During the course of ORS's investigation, Santee Cooper identified three (3) proposed lighting options. Santee Cooper noted during ORS's investigation that all three (3) proposed lighting options are still being evaluated and vetted by Santee Cooper's Internal Lighting Lead Team. The three (3) proposed lighting options are described in detail in parts A, B, and C of this section. As noted previously, Santee Cooper cannot adjust or change its rates until January 1, 2025, at the earliest. However, the proposed options may be implemented more quickly as they do not result in a rate change.<sup>47</sup>

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<sup>45</sup> Responses to ORS Request 1-23 and 2-21.

<sup>46</sup> Response to ORS Requests 1-1(a), 1-1(e), 1-1(f), and 2-1(a), and 2-1(b).

<sup>47</sup> Response to ORS Requests 1-5(e) and 2-11.

While Santee Cooper and the POA/HOAs engaged in communications, discussions, and meetings regarding the Outdoor Lighting Program, the last identified meeting between Santee Cooper and the POA/HOAs was on August 20, 2021. Currently, there is no agreement between Santee Cooper and the POA/HOAs regarding Santee Cooper's three (3) proposed lighting options. Based on the information available to ORS, Santee Cooper has not completed or prepared for implementation the three (3) proposed options. ORS recommends that Santee Cooper should complete the development of the three (3) proposed lighting options, communicate the completed product(s) to both ORS and the interested customers, facilitate an educational meeting to explain the final product(s) to both ORS and any interested customers, and implement the chosen proposed option for those customers who choose to participate.<sup>48</sup>

#### ***A. Purchase Plan Option***

The Purchase Plan Option is a purchase of the outdoor lighting system. This includes all equipment such as poles, fixtures, wires, conduits, etc. Each purchase would be subject to an evaluation performed by Santee Cooper's Financial Accounting Department on a case-by-case basis. Customers may execute an Asset Purchase Agreement for the sale of the outdoor lighting system. According to Santee Cooper, the Asset Purchase Agreement form has not been fully developed and is currently under review by Santee Cooper. The Asset Purchase Agreement would include an equipment listing to identify the poles and fixtures sold. The methodology to calculate the cost to the customers for the Purchase Plan Option would be based on the net book value less depreciation and Capital Improvement Fund Requirement negotiated with the customers. Santee Cooper Area Engineering would work with customers and their associated electricians to determine meter base locations for the installation of meter bases and disconnects prior to turnover of the outdoor lighting system to the customers. This option is still under evaluation and has not been finalized by Santee Cooper.<sup>49</sup>

#### ***B. Premium Lighting Contribution Plan***

The Premium Lighting Contribution Plan option, formerly known as the Developer Program Contributor Rate, would apply to new subdivisions. This option would require the developer to pay a one-time, up-front capital payment reflecting the cost difference between decorative lighting and standard lighting. As part of this option, the developer would be required to sign a Premium Lighting Contribution Plan Agreement which has not yet been completed by Santee Cooper. The developer's payment would be collected as part of the Line Extension Application Agreement. One of the concerns raised by the POA/HOAs is they have no input in the selection of poles and fixtures installed by a

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<sup>48</sup> Response to ORS Requests 2-11(c), 2-11(d), and 2-14.

<sup>49</sup> Responses to ORS Requests 1-5(e) and 2-11.

developer. The POA/HOAs' noted that this obligates them to pay the cost of decorative lighting chosen by the developer without the option to pay for less expensive standard lighting. This option is still under evaluation, but implementation of this option would require the appropriate approvals within Santee Cooper for implementation. Those approvals would require this option to pass a Best Interest Test to ensure that the rate does not cause other lighting customer classes to subsidize outdoor lighting (i.e., to ensure that cost causation principles are adhered to and costs are allocated to the proper customer classes causing the costs to be incurred). As such, Santee Cooper would need to evaluate and enact an experimental rate and assess determine the monthly rental cost.<sup>50</sup>

### ***C. Buy Down the Rate Option***

The Buy Down the Rate Option allows for customers with existing decorative fixtures and decorative/premium lighting to buy down the rate to standard lighting. The same calculation methodology as described in Purchase Plan Option would be utilized (net book value less depreciation and Capital Improvement Fund Requirement) to determine the correct cost. This option is still under evaluation, but implementation (as noted in the Premium Lighting Contribution Plan option) would require the appropriate approvals within Santee Cooper for implementation. Those approvals would require this option to pass a Best Interest Test to ensure that the rate is not causing other lighting customer classes to subsidize outdoor lighting (i.e., to ensure that cost causation principles are adhered to and costs are allocated to the proper customer classes causing the costs to be incurred). As such, Santee Cooper would need to evaluate and enact an experimental rate and assess determine the monthly rental cost.<sup>51</sup>

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<sup>50</sup> Responses to 1-5(e) and 2-11.

<sup>51</sup> Responses to 1-5(e) and 2-11.

## **Conclusion**

This Report details the findings of ORS's review and several recommendations regarding Santee Cooper's Outdoor Lighting Program and the issues and concerns raised by the POA/HOAs. The POA/HOAs have stated that the equipment associated with their respective outdoor lighting systems has been fully paid for by the POA/HOAs, which is the core issue of the complaint. Further, the POA/HOAs also have a concern regarding the Santee Cooper charges associated with the delivery of energy to the POA/HOAs. However, both of the POA/HOAs complaints do not consider the Santee Cooper allocation of costs to serve the POA/HOAs, the rate making process, the rate design, and the specific types of services provided to customers of the lighting class.

ORS determined that Rate Schedule OL-17 and the Outdoor Rental Lighting Agreement (as well as the Heritage Rental Lighting Agreement) do not include an option for the POA/HOAs to own the equipment of the Santee Cooper outdoor lighting system. Santee Cooper owns the outdoor lighting system equipment. Therefore, depreciation of the POA/HOAs' outdoor lighting system equipment does not impact the rates to customers.

The POA/HOAs are individual customers of a larger lighting class of customers. Customers in the lighting class pay the same rates for service as identified in Rate Schedule OL-17. Santee Cooper does not segregate lighting customers based on other factors for rate setting purposes. According to Rate Schedule OL-17, all lighting customers share in Santee Cooper's costs for providing outdoor lighting service including, but not limited to installation, maintenance, equipment replacement, operations, administration, and capital costs directly associated with the provision of electric service. ORS determined that Rate Schedule OL-17 was developed by Santee Cooper in accordance with industry rate setting practices. One of the primary purposes for the COSS is to determine the load or demand on the system, what the projected revenues from the lighting class will be, and then equate that to the revenue requirements for the utility to adequately provide reliable and high quality service to its customers. As such, even though a piece of equipment may depreciate over time in the Outdoor Lighting Program and because Santee Cooper will continue to provide electric service to the customers of the lighting class, lighting class customers may not experience a rate reduction.

To conclude, ORS determined that Santee Cooper followed industry practices and guidelines for setting Rate Schedule OL-17 associated with the Outdoor Lighting Program rental agreements. Rate Schedule OL-17, as designed, allows Santee Cooper to recover all costs associated with service for the lighting class of customers. ORS identified several recommendations that Santee Cooper may implement to improve its Outdoor Lighting Program, allow for more transparency, and provide options to customers who desire an

alternative to the current rental agreements. ORS observed that before its review, Santee Cooper and the POA/HOAs engaged in constructive and cooperative discussions in an attempt to resolve their disputes. ORS encourages Santee Cooper to continue their discussions with the POA/HOAs with the goal of reaching mutually acceptable solutions in a collaborative manner and for Santee Cooper to work towards implementing the recommendations outlined in this Report.

**ORS.SC.GOV**

Office of Regulatory Staff

1401 Main Street

Suite 900

Columbia, SC 29201



**Attachment 1: Lighting Letter**

April 13, 2020

Mr. Brad Brundage  
DR Horton, Inc.  
4073 Belle Terre Blvd.  
Myrtle Beach, SC 29579

Dear Mr. Brundage:

**Re: Heather Glen Phase 3- Link# 535628 / WR# 314038**

Santee Cooper is pleased that you have chosen our service area for your development. We have a lease lighting program that offers a variety of street and area lighting selections. For your information, we have enclosed pamphlets that show some of the different types of lighting we offer. We have recently added our "Heritage Collection" that includes six new styles of decorative lights and poles. I feel sure that one of these styles could be used in your development for street or area lighting.

Santee Cooper's lease lighting program has some benefits that may be of interest to you. There are no upfront charges. Once the lights are installed and working, you will be billed a monthly fee, which includes installation and electricity costs associated with the lights. There are no maintenance costs. The monthly fee covers any maintenance on the lights. All you need to do is contact Santee Cooper when a light needs to be repaired.

We would like to hear from you. Please complete the bottom portion of this letter and indicate whether you are interested in Santee Cooper's lease lighting program and return this along with our letter-of-agreement.

If you have any questions, please call Engineer **Timothy Vereen** at (843) 347-3399, extension **3003**.

\_\_\_\_\_  
Please sign above

\_\_\_\_\_ Interested

\_\_\_\_\_  
Telephone Number

\_\_\_\_\_ Not Interested

**SOUTH CAROLINA PUBLIC SERVICE AUTHORITY**



**RATE SCHEDULES**

**EFFECTIVE FOR BILLS RENDERED ON OR  
AFTER APRIL 1, 2017**



**SOUTH CAROLINA PUBLIC SERVICE  
AUTHORITY  
(SANTEE COOPER)**

**LIGHTING**

**Attachment 2: Rate Schedule OL-17**

Rate Code: OL

OL-17

SOUTH CAROLINA PUBLIC SERVICE AUTHORITY  
(SANTEE COOPER)  
PRIVATE OUTDOOR LIGHTING SERVICE  
SCHEDULE OL-17

Section 1. Availability:

This Schedule is available in the retail service area of the Authority in Berkeley, Georgetown, and Horry Counties, South Carolina.

Section 2. Applicability:

This Schedule is applicable for outdoor yard and area lighting to retail customers where the Authority installs and furnishes the lighting equipment including lamps, fixtures, and the necessary lighting circuits and fittings. The monthly facilities and energy charges set forth in Section 4 are applicable only to lighting fixtures located so as to be furnished energy by existing facilities, poles and transformers on existing poles, or through the addition of not more than one (1) wood pole for attachment of each lighting fixture. Where extension of primary lines or special facilities or more than one (1) new pole per lighting fixture is required, the cost of constructing such additional facilities shall be repaid by the customer requesting service. Energy purchased under this Schedule may not be resold or shared with others.

Section 3. Character of Service:

The Authority shall provide the outdoor yard and area lighting service hereunder including providing, installing, and maintaining the necessary facilities such as requisite poles and light fixtures on a contractual basis. Upon request for service, the Authority will require the execution of an agreement between the customer and the Authority (the "Outdoor Rental Lighting Agreement"). Energy delivered hereunder shall be alternating current 60 Hertz at the nominal standard voltage of the Authority, as available.

Section 4. Monthly Rates and Charges:

The monthly charges hereunder shall include the following charges:

(A) Basic Monthly Charges:

## (1) Pole and Fixture Rental Fees:

There shall be a monthly charge for each pole and fixture furnished by the Authority, based on the type and characteristics thereof, determined in accordance with Exhibits A and B hereto. Such Exhibits A and B may be amended by the Authority from time to time to reflect the standard types of poles and fixtures the Authority will make available.

## (2) Energy Charges:

## (a) Base Energy Charge:

For each fixture, there shall be a base energy charge of \$0.0661/kWh for all kWh of energy use.

**Attachment 2: Rate Schedule OL-17**

Rate Code: OL

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## (b) Fuel Adjustment Charge:

The Authority's Fuel Adjustment Clause FAC-17 is applicable to all energy sales hereunder, with " $F_v/S_b$ " and "K" of the formula in said clause being equal to \$0.03641/kWh and 0.13, respectively.

## (c) Demand Sales Adjustment:

The Authority's Demand Sales Adjustment Clause DSC-17 is applicable to all energy sales hereunder.

## (d) Economic Development Sales Adjustment:

The Authority's Economic Development Sales Adjustment Clause (EDA-17), or its currently applicable successor clause, if any, is applicable to all energy sales hereunder.

(B) Additional Facilities Charge:

The Basic Monthly Charges herein apply only to fixtures located so as to be furnished energy by existing facilities, poles and transformers on existing poles, and/or through the addition of not more than one pole for the attachment of each lighting fixture. Additional facilities, including the extension of primary lines, or special facilities, or more than one (1) new pole per lighting fixture, will be furnished by the Authority where the customer agrees to pay the cost of constructing such additional facilities.

(C) Minimum Charge:

The minimum charge shall be the same as the monthly charges set forth in Sections 4.A. and 4.B. hereinabove.

(D) Taxes:

Amounts for "payments in lieu of taxes," as prescribed by the Code of Laws of South Carolina §58-31-80, §58-31-90, and §58-31-100, as amended, have been included in the establishment of the above monthly rate. The charges computed at the above monthly rate also shall be subject to all other taxes, payments in lieu of taxes, franchise fees, assessments, and surcharges imposed by any governmental authority. In addition, South Carolina Sales Tax, if any, will be added to each bill unless the customer has furnished the Authority evidence of specific exemption secured by the customer from the South Carolina Tax Commission or its successor.

Section 5. Determination of Energy Usage:

The Authority, at its option, may meter the monthly kWh energy usage of light fixtures provided hereunder. Otherwise, each unmetered fixture shall be deemed to use the estimated average monthly kWh energy set forth in the currently effective Exhibit B hereto.

Section 6. Payment:

(A) Bills for service hereunder shall become part of and shall be added to the customer's monthly account for metered electric service.

**Attachment 2: Rate Schedule OL-17**

Rate Code: OL

OL-17

(B) Bills will be rendered monthly on a net basis. All bills are due and payable at the offices of the Authority or at such other place as the Authority may designate within fifteen (15) days after the date in which the bill is mailed or otherwise rendered. When the outdoor light is the only account with the Authority and payment of the bill is not received by said due date, the amount of the bill shall be increased on the next bill rendered and on subsequent bills rendered each month thereafter until paid by the larger of fifty cents (\$0.50) or two percent (2%) of (i) the amount calculated under Section 4 of this Schedule or (ii) the total amount then outstanding including late payment charges. If the outdoor light is billed in conjunction with another account and payment of the bills is not received by said due date, then the total bill shall be increased on the next bill rendered and on subsequent bills rendered each month thereafter by the larger of fifty cents (\$0.50) or two percent (2%) of (i) the total amount calculated under this Schedule or (ii) the total bill then outstanding including late payment charges.

**Section 7. Period of Contract:**

The Outdoor Rental Lighting Agreement shall become effective on the date the lighting fixtures are first installed and operated and shall remain in effect for a period of three (3) years and thereafter until terminated by either party giving to the other thirty (30) days' notice. In the event that the customer transfers, terminates or, for any reason, discontinues outdoor yard and area lighting service and/or electric service to the property on which the rental lighting is installed, the following charges shall become due and payable and may be paid in whole or in part by any deposit for electric service that the customer may have made:

The greater of (i) the sum of the monthly charges for all remaining months of the effective terms of the Outdoor Rental Lighting Agreement, or (ii) fifty dollars (\$50.00) for each fixture mounted on existing facilities, or (iii) one hundred fifty dollars (\$150.00) for each fixture and pole that is caused to be removed due to termination of the Outdoor Rental Lighting Agreement.

In the event the customer wishes to terminate the private outdoor lighting service due to the sale, lease, or rental to others of the property on which lights are installed and the new party wishes to continue the rental agreement, the Authority shall release the customer from the termination charges provided for herein at such time that the new customer makes application for electric service and signs and Outdoor Rental Lighting Agreement for the remaining months of the original agreement.

**Section 8. Limitations of Service:**

(A) The Authority assumes the responsibility for ordinary maintenance of poles, equipment and lamps with all maintenance work to be performed during normal working hours at the discretion of the Authority.

(B) The Authority shall use reasonable diligence to provide a constant service to the lighting fixtures, but if such service or equipment shall fail or be interrupted, or become defective through acts of nature, or public enemies or by accident, strikes, labor troubles or by actions of the elements, or for any cause beyond its reasonable control, the Authority shall not be liable therefore.

(C) The Customer shall assume responsibility of providing reasonable protection to the lighting installation from accidental collision by motor vehicle and other similar equipment and shall further assume responsibility of providing the installation protection against vandalism.

(D) The Authority reserves the right to terminate private outdoor lighting service immediately upon the threat of damage or continued damage to the installed equipment.

**Attachment 2: Rate Schedule OL-17**

Rate Code: OL

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Section 9. Terms and Conditions:

This Schedule is subject to the Authority's Terms and Conditions of Retail Electric Service currently in effect and the "Outdoor Rental Lighting Agreement" executed between the customer and the Authority.

A customer may have a portion of the customer's electrical energy supplied by customer-owned generation provided the customer is in compliance with Santee Cooper's then-current Standard for Interconnecting Customer-Owned Generation.

Adopted December 7, 2015  
Effective for bills rendered on and after April 1, 2017

Supersedes:  
Schedule OL-16, Effective April 1, 2016

**Attachment 2: Rate Schedule OL-17**

Rate Code: OL

OL-17

SOUTH CAROLINA PUBLIC SERVICE AUTHORITY  
(SANTEE COOPER)  
PRIVATE OUTDOOR LIGHTING SERVICE  
SCHEDULE OL-17

Exhibit A  
Schedule of Available Poles and Arms

Available Pole and Arm Type		Monthly Charge
1	Wood Standard, 30'	\$ 4.58
2	Wood, 35'	\$ 5.25
3	Wood, 40'	\$ 6.19
4	Fiberglass, Round, Black, 18'	\$ 5.66
5	Fiberglass, Round, Brown, 20'	\$ 5.84
6	Fiberglass, Round, 30'	\$ 13.19
7	Fiberglass, Round, 40'	\$ 13.30
8	Aluminum Standard, 25'	\$ 12.09
9	Aluminum, Round, 35'	\$ 20.70
10	Fiberglass, Round, 30' Breakaway DOT	\$ 18.77
11	Light Pole, \$301-\$400	\$ 10.17
12	Light Pole, \$401-\$500	\$ 11.72
13	Light Pole, \$501-\$600	\$ 13.22
14	Light Pole, \$601-\$700	\$ 14.77
15	Light Pole, \$701-\$900	\$ 17.04
16	Light Pole, \$901-\$1100	\$ 20.07
17	Light Pole, \$1101-\$1300	\$ 22.30
18	Light Pole, \$1301-\$1500	\$ 24.50
19	Light Pole, \$1501-\$1700	\$ 26.70
20	Light Pole, \$1701-\$1900	\$ 28.90
21	Light Pole, \$1901-\$2100	\$ 31.10
22	Light Pole, \$2101-\$2300	\$ 33.30
23	Light Pole, \$2301-\$2500	\$ 35.50
24	Light Pole Arm, \$201-\$400	\$ 6.22
25	Light Pole Arm, \$401-\$600	\$ 9.69
26	Light Pole Arm, \$601-\$800	\$ 12.60
27	Light Pole Arm, \$801-\$1000	\$ 15.40

## Attachment 2: Rate Schedule OL-17

Rate Code: OL

OL-17

SOUTH CAROLINA PUBLIC SERVICE AUTHORITY  
(SANTEE COOPER)  
PRIVATE OUTDOOR LIGHTING SERVICE  
SCHEDULE OL-17

Exhibit B  
Schedule of Available Light Fixtures and Shield

	Available Fixture Type	Average Monthly kWh Usage	Monthly Rental Charge
1	100 Watt, HPS, Private	41	\$ 5.39
2	150 Watt, HPS, Private	61	\$ 6.76
3	150 Watt, HPS, Traditional	61	\$ 8.40
4	150 Watt, HPS, Roadway	61	\$ 7.74
5	150 Watt, HPS, Modern (Shoebox)	61	\$ 11.64
6	250 Watt, HPS, Roadway	103	\$ 10.73
7	250 Watt, HPS, Shoebox	103	\$ 14.85
8	400 Watt, HPS, Flood Light	164	\$ 15.80
9	400 Watt, HPS, Roadway	164	\$ 15.06
10	400 Watt, HPS, Shoebox	164	\$ 19.40
11	400 Watt, MH, Flood Light	164	\$ 16.74
12	400 Watt, MH, Galleria	164	\$ 18.55
13	1000 Watt, MH, Flood Light	410	\$ 33.92
14	1000 Watt, MH, Galleria	410	\$ 36.06
15	\$301-\$400, 70 Watt, MH	29	\$ 12.22
16	\$301-\$400, 175 Watt, MH	73	\$ 15.13
17	\$301-\$400, 150 Watt, HPS	61	\$ 14.44
18	\$401-\$500, 70 Watt MH	29	\$ 13.62
19	\$401-\$500, 175 Watt MH	73	\$ 16.53
20	\$401-\$500, 150 Watt HPS	61	\$ 16.11
21	\$401-\$500, 250 Watt MH	103	\$ 18.51
22	\$401-\$500, 250 Watt HPS	103	\$ 18.89
23	\$401-\$500, 400 Watt MH	164	\$ 22.54
24	\$401-\$500, 400 Watt HPS	164	\$ 22.92
25	\$401-\$500, 1000 Watt MH	410	\$ 38.80
26	\$401-\$500, 1000 Watt HPS	410	\$ 39.18
27	\$501-\$600, 70 Watt MH	29	\$ 15.02
28	\$501-\$600, 175 Watt MH	73	\$ 17.93
29	\$501-\$600, 150 Watt HPS	61	\$ 17.73
30	\$501-\$600, 250 Watt MH	103	\$ 19.91
31	\$501-\$600, 250 Watt HPS	103	\$ 20.51
32	\$501-\$600, 400 Watt MH	164	\$ 23.94
33	\$501-\$600, 400 Watt HPS	164	\$ 24.54
34	\$501-\$600, 1000 Watt MH	410	\$ 40.20
35	\$501-\$600, 1000 Watt HPS	410	\$ 40.80
36	\$601-\$700, 70 Watt MH	29	\$ 16.42
37	\$601-\$700, 175 Watt MH	73	\$ 19.33
38	\$601-\$700, 150 Watt HPS	61	\$ 19.13
39	\$601-\$700, 250 Watt MH	103	\$ 21.31

## Attachment 2: Rate Schedule OL-17

Rate Code: OL

OL-17

Exhibit B  
Schedule of Available Light Fixtures and Shield

	Available Fixture Type	Average Monthly kWh Usage	Monthly Rental Charge (2)
40	\$601-\$700, 250 Watt HPS	103	\$ 21.91
41	\$601-\$700, 400 Watt MH	164	\$ 25.34
42	\$601-\$700, 400 Watt HPS	164	\$ 25.94
43	\$601-\$700, 1000 Watt MH	410	\$ 41.60
44	\$601-\$700, 1000 Watt HPS	410	\$ 42.20
45	\$701-\$800 175 Watt, MH	73	\$ 20.73
46	\$701-\$800 150 Watt, HPS	61	\$ 20.53
47	\$701-\$800 250 Watt, MH	103	\$ 22.71
48	\$701-\$800 250 Watt, HPS	103	\$ 23.31
49	\$701-\$800 400 Watt, MH	164	\$ 26.74
50	\$701-\$800 400 Watt, HPS	164	\$ 27.34
51	\$701-\$800 1000 Watt, MH	410	\$ 43.00
52	\$701-\$800 1000 Watt, HPS	410	\$ 43.60
53	\$801-\$900 175 Watt, MH	73	\$ 22.13
54	\$801-\$900 150 Watt, HPS	61	\$ 21.93
55	\$801-\$900 250 Watt, MH	103	\$ 24.11
56	\$801-\$900 250 Watt, HPS	103	\$ 24.71
57	\$801-\$900 400 Watt, MH	164	\$ 28.14
58	\$801-\$900 400 Watt, HPS	164	\$ 28.74
59	\$801-\$900 1000 Watt, MH	410	\$ 44.40
60	\$801-\$900 1000 Watt, HPS	410	\$ 45.00
61	\$901-\$1000 175 Watt, MH	73	\$ 23.53
62	\$901-\$1000 150 Watt, HPS	61	\$ 23.33
63	\$901-\$1000 250 Watt, MH	103	\$ 25.51
64	\$901-\$1000 250 Watt, HPS	103	\$ 26.11
65	\$901-\$1000 400 Watt, MH	164	\$ 29.54
66	\$901-\$1000 400 Watt, HPS	164	\$ 30.14
67	\$901-\$1000 1000 Watt, MH	410	\$ 45.80
68	\$901-\$1000 1000 Watt, HPS	410	\$ 46.40
69	Vandal Shield (1)	-	\$ 1.90
<b>Experimental Fixtures</b> (Energy Not Included in Monthly Rental Charge)			
70	\$51-\$150 Range, LED	Varies by Fixture	\$ 5.10
71	\$151-\$250 Range, LED	Varies by Fixture	\$ 6.20
72	\$251-\$350 Range, LED	Varies by Fixture	\$ 7.30
73	\$351-\$450 Range, LED	Varies by Fixture	\$ 8.41
74	\$451-\$550 Range, LED	Varies by Fixture	\$ 9.51
75	\$551-\$650 Range, LED	Varies by Fixture	\$ 10.61
76	\$651-\$750 Range, LED	Varies by Fixture	\$ 11.72
77	\$751-\$850 Range, LED	Varies by Fixture	\$ 12.82
78	\$851-\$950 Range, LED	Varies by Fixture	\$ 13.92
79	\$951-\$1050 Range, LED	Varies by Fixture	\$ 15.03
80	\$1051-\$1150 Range, LED	Varies by Fixture	\$ 16.13



**Attachment 2: Rate Schedule OL-17**

Rate Code: OL

OL-17

Exhibit B  
Schedule of Available Light Fixtures and Shield

	Available Fixture Type	Average Monthly kWh Usage	Monthly Rental Charge (2)
81	\$1151-\$1250 Range, LED	Varies by Fixture	\$ 17.23
82	\$1251-\$1350 Range, LED	Varies by Fixture	\$ 18.34
83	\$1351-\$1450 Range, LED	Varies by Fixture	\$ 19.44
84	\$1451-\$1550 Range, LED	Varies by Fixture	\$ 20.54

Note 1: Vandal Shields may be required for fixtures receiving damage more than once during any consecutive three year period.

Note 2: All monthly rental charges include energy charges unless otherwise specified.

Note 3: Experimental fixtures do not include energy charges. Energy charges will vary based on specific fixture energy requirements and will be in addition to the stated rental charges.

### Attachment 3: Outdoor Rental Lighting Agreement



## OUTDOOR RENTAL LIGHTING AGREEMENT

Account Name: \_\_\_\_\_

Phone: \_\_\_\_\_ Email Address: \_\_\_\_\_

Service Location: \_\_\_\_\_

Billing Address: Street: \_\_\_\_\_ Apt/Unit/Lot #: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Are lights being added to an existing Account?  Yes, Account #: \_\_\_\_\_  No, Start new Account

**New Lighting Accounts may require a security deposit based on the type and total number of lights requested. Please contact customer service at 1-800-804-7424 for further information regarding the required deposit.**

**The undersigned has read and agrees to be bound by the terms of this Outdoor Rental Lighting Agreement.**

Print Name: \_\_\_\_\_ SSN/FID: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Office Use Only**

Engineer: \_\_\_\_\_ W.R.#: \_\_\_\_\_ Meter Base #: \_\_\_\_\_

Add/Remove/ Cap/Replace	Pole Code	Pole Number(s)	Light Code	# of Lights on Pole	Date Installed or Removed	Comments

<b>Code/Description</b>	<b>HID Lights</b>		<b>Poles</b>	
	01 - 100 HPS Private 03 - 150 HPS Traditional 04 - 150 HPS Roadway 05 - 150 HPS Shoebox 09 - 250 HPS Roadway 10 - 400 HPS Flood 11 - 400 HPS Roadway	15 - 250 HPS Shoebox 16 - 400 HPS Shoebox 19 - 1000 MH Flood 24 - 400 PMH Flood 25 - 150 PMH Shoebox 30M - 400 PMH Shoebox 30I - 1000 MH Shoebox	A - Wood, Standard 30' B - Fiberglass, Bk 18' D - Alum, Street Lt. 25' E - Fiberglass, Br 20' F - Fiberglass, Br 40'	G - Wood, Standard 35' H - Wood, Standard 40' LPF - Fiberglass, Br 30' OOA - Alum., anchor base, 35' Z - Existing Service Pole
	<b>LED Lights</b>		Service type: <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Municipal	
Area Sm 50W T2 - L2 Area Sm 70W T3 - L10 Area Med 210W T3 - L6 Area Med 210W T5 - L9 Area Lg 275W T3- L12 Area Lg 275W T5 - L7	Flood Sm 150W - L13 Flood Lg 300W - L11 Private 50W - L14 Roadway Sm 70W - L4 Roadway Med 140W - L8 Roadway Lg 210W - L5 Traditional 70W - L1	SA ID: _____ Account ID: _____		

SC0009A (05/03/2017) (f/b) p/e/i

## Attachment 3: Outdoor Rental Lighting Agreement

### SANTEE COOPER OUTDOOR RENTAL LIGHTING AGREEMENT

#### 1. Initial Installation and Charges

Units will be installed and electric service will be delivered at charges as set forth by the current Santee Cooper "Private Outdoor Lighting Service," Rate Schedule, as may be revised from time to time, and in accordance with Santee Cooper's Terms and Conditions of Retail Electric Service, available at Santee Cooper's retail office.

#### 2. Conditions of Service

- (a) Lighting equipment including lamps, fixtures, and the necessary lighting circuits, poles, and fittings will be furnished and installed by Santee Cooper.
- (b) The monthly charges applicable include facilities and energy charges and apply only to fixtures located so as to be furnished energy by existing facilities, poles, and transformers on existing poles, or through the addition of not more than one wood pole for attachment of each lighting fixture. Where extension of primary lines or special facilities or more than one new pole are required, the cost of such construction shall be paid by the Customer.

#### 3. Billing

Bills for service hereunder shall be billed in accordance with the current Santee Cooper "Private Outdoor Lighting Service," Rate Schedule, as may be revised from time to time and shall either become part of and added to the Customer's monthly metered account for electric service, or billed on a separate OL (Outdoor Lighting) account and shall be paid by the Customer in accordance with the Santee Cooper's Terms and Conditions of Retail Electric Service.

#### 4. Maintenance

Santee Cooper assumes the responsibility for ordinary maintenance of poles, equipment and lamps, with maintenance work to be performed during normal working hours at the discretion of Santee Cooper.

#### 5. Continuity of Service

- (a) Santee Cooper shall use reasonable diligence to provide a constant service to the lighting fixtures, but if such service or equipment shall fail or be interrupted, or become defective through acts of nature, or public enemies, or by accident, strikes, labor troubles, or by actions of the elements, or for any cause beyond its reasonable control, Santee Cooper shall not be liable therefore.
- (b) The Customer shall assume responsibility of providing reasonable protection of the lighting installation from accidental collision by motor vehicle and other similar equipment and shall further assume the responsibility of providing the installation protection against vandalism. Damage caused by collision or vandalism will be repaired by Santee Cooper and costs arising out of such repairs will be charged to the responsible party causing the damage.
- (c) Santee Cooper reserves the right to terminate this agreement immediately upon the threat of damage or continued damage to the installed equipment.

#### 6. Term

- (a) This agreement shall become effective on the date the lighting fixtures are first installed and operated and shall remain in effect for a period of either three (3) years and thereafter for High Intensity Discharge (HID) fixtures or seven (7) years thereafter for Light Emitting Diode (LED) fixtures until terminated by either party giving to the other thirty (30) days' notice in writing.
- (b) In the event the Customer transfers, terminates or for any reason discontinues electric service to the property on which rental lighting is installed under the terms of this agreement, the following charges shall become due and payable and may be paid in whole or in part by any deposit for electric service that the Customer may have made: The lesser of (1) the sum of the monthly charges for all remaining months of the effective term of this agreement; or (2) fifty dollars (\$50) for each HID fixture, two hundred fifty dollars (\$250) for each LED fixture mounted on existing facilities; or (3) one hundred fifty (\$150) dollars for each fixture and pole, three hundred fifty dollars (\$350) for each LED fixture and pole that is cause to be removed due to termination of this agreement.
- (c) In the event the Customer wishes to terminate this agreement due to the sale, lease or rental to others of the property on which lights are installed under the terms of this agreement, and the new party wishes to continue the rental agreement, Santee Cooper shall release the Customer of the charges provided for in 6(b) provided the new customer makes application for electric service and signs a rental lighting agreement for the remaining months of the prior Customer's agreement.

### Attachment 4: Heritage Rental Lighting Agreement



### HERITAGE RENTAL LIGHTING AGREEMENT

Account Name: \_\_\_\_\_

Phone: \_\_\_\_\_ Email Address: \_\_\_\_\_

Service Location: \_\_\_\_\_

Billing Address: Street: \_\_\_\_\_ Apt/Unit/Lot #: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Are lights being added to an existing Account?  Yes, Account #: \_\_\_\_\_  No, Start new Account

**New Lighting Accounts may require a security deposit based on the type and total number of lights requested. Please contact customer service at 1-800-804-7424 for further information regarding the required deposit.**

**The undersigned has read and agrees to be bound by the terms of this Outdoor Rental Lighting Agreement.**

Print Name: \_\_\_\_\_ SSN/FID: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Office Use Only**

Engineer: \_\_\_\_\_ W.R.#: \_\_\_\_\_ Meter Base #: \_\_\_\_\_

Add/Remove/ Cap/Replace	Pole Code	Pole Number(s)	Light Code	# of Lights on Pole	Date Installed or Removed	Comments

<b>Code/Description</b>	<b>HID Lights</b>		<b>Poles</b>	
	2AK - 150 PMH, Kingston	3FK - 150 PMH, Berkeley	MGF - 14' f/g Atlantic, Sm	QPC DG - 20' conc. long Bay-MB
	2CK - 150 PMH, Drayton	5GL - 250 PMH, Washington	NEF - 14' f/g Atlantic, FI	RQC DG - 25' conc. long Bay-MB
	2DK - 150 PMH, Lexington	6HK - 150 PMH, Teardrop	NCF - 14' f/g Low Country, Sm	QPC DR - 20' conc. long Bay-NMB
3BK - 150 PMH, Prince George	6HM - 400 PMH, Teardrop	OAF - 14' f/g Low Country, FI	RQC DR - 25' conc. long Bay-NMB	
3EK - 150 PMH, Hampton		OIF - 14' f/g Dunes, FI		
	<b>LED Lights</b>		<b>Special</b>	
L21 - Kingston 100W	L25 - Hampton 80W	OKC - 14' conc., Loris	OIZ 2 - 14' f/g w/6" tenon - Gr Du	
L22 - Drayton 100W	L26 - Berkeley 80W	OKC BW - 14' conc., Boardwalk	4YZ - Dbl Bracket - Gr Du	
L23 - Lexington 80W	L27 - Washington 100W	OIZ - 14' f/g - Gr Du		
L24 - Prince George 100W	L3 - Teardrop 175W			
	<b>Arms/Brackets</b>		Service type: <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Municipal	
2YX - C Bracket	4DD - Dbl Davit Arm, 4'	SA ID: _____		
2YY - CS Bracket	6DA - Davit Arm, 6'	Account ID: _____		
4DA - Davit Arm, 4'	6DD - Dbl Davit Arm, 6'			

## Attachment 4: Heritage Rental Lighting Agreement

### SANTEE COOPER HERITAGE COLLECTION RENTAL LIGHTING AGREEMENT

#### 1. Initial Installation and Charges

Units will be installed, with the exception of the concrete foundations, and electric service will be delivered at charges as set forth by the current Santee Cooper "Private Outdoor Lighting Service" Rate Schedule as may be revised from time to time, and in accordance with Santee Cooper's Terms and Conditions of Retail Electric Service, available at Santee Cooper's retail offices.

#### 2. Conditions of Service

- (a) With the exception of the concrete foundations, lighting equipment including lamps, fixtures, and the necessary lighting circuits, poles, and fittings will be furnished and installed by Santee Cooper. Any exception must be submitted in writing and approved by Santee Cooper before installation of any associated lighting equipment.
- (b) The monthly charges applicable include facilities and energy charges and apply only to fixtures located so as to be furnished energy by existing facilities, transformers or secondary enclosures. Where extension of primary lines or special facilities are required, the cost of such construction shall be paid by the Customer.

#### 3. Billing

Bills for service hereunder shall be billed in accordance with the current Santee Cooper "Private Outdoor Lighting Service" Rate Schedule, as may be revised from time to time and shall either become part of and added to the Customer's monthly metered account for electric service, or billed on a separate OL (Outdoor Lighting) account and shall be paid by the Customer in accordance with the Santee Cooper's Terms and Conditions of Retail Electric Service.

#### 4. Maintenance

Santee Cooper assumes the responsibility for ordinary maintenance of poles, equipment and lamps, with maintenance work to be performed during normal working hours at the discretion of Santee Cooper.

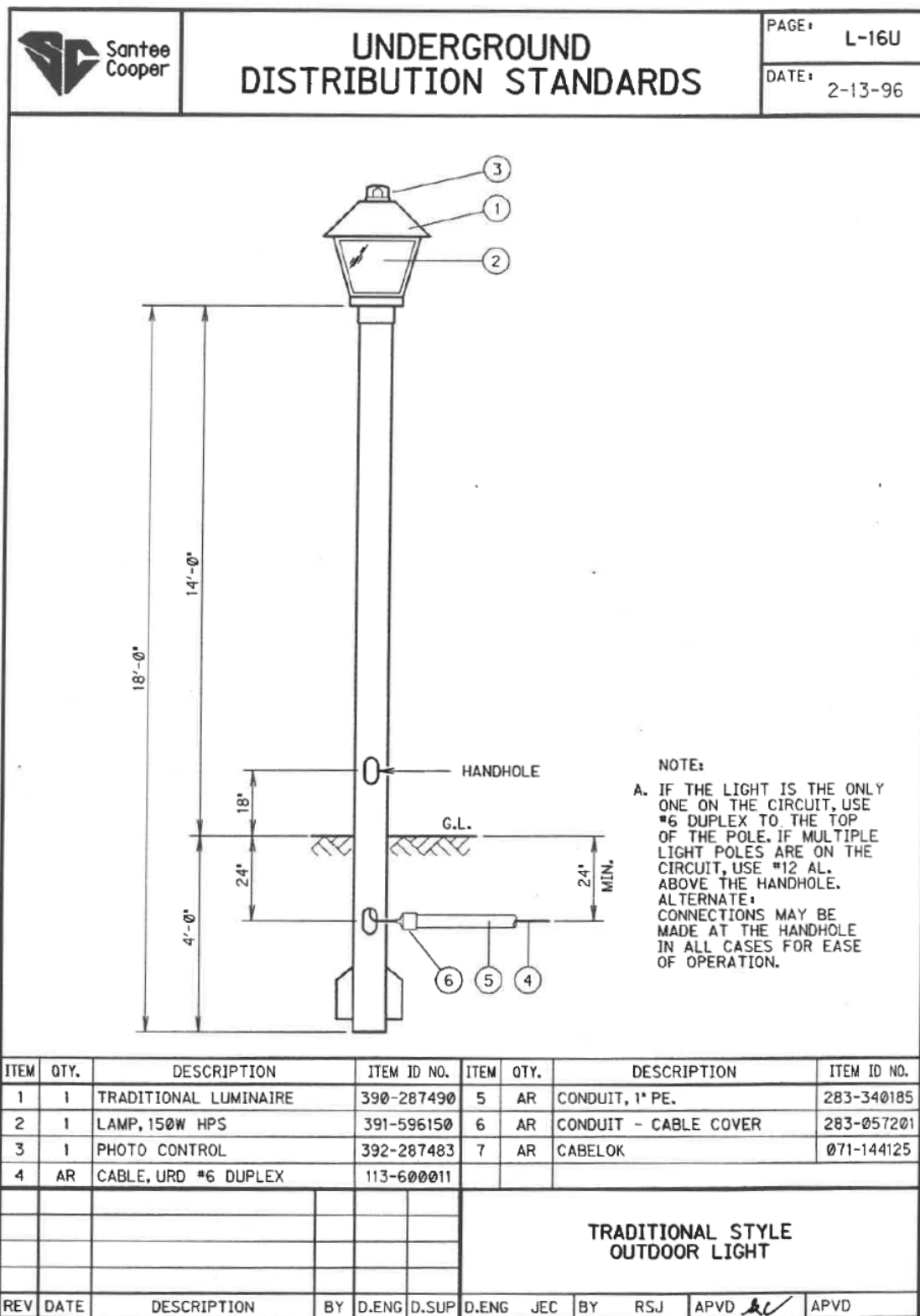
#### 5. Continuity of Service

- (a) Santee Cooper shall use reasonable diligence to provide a constant service to the lighting fixtures, but if such service or equipment shall fail or be interrupted, or become defective through acts of nature, or public enemies, or by accident, strikes, labor troubles, or by actions of the elements, or for any cause beyond its reasonable control, Santee Cooper shall not be liable therefore.
- (b) The Customer shall assume responsibility of providing reasonable protection of the lighting installation from accidental collision by motor vehicle and other similar equipment and shall further assume the responsibility of providing the installation protection against vandalism. Damage caused by collision or vandalism will be repaired by Santee Cooper and costs arising out of such repairs will be charged to the responsible party causing the damage.
- (c) Santee Cooper reserves the right to terminate this agreement immediately upon the threat of damage or continued damage to the installed equipment.

#### 6. Initial Installation and Chargers Term

- (a) This agreement shall become effective on the date the lighting fixtures are first installed and operated and shall remain in effect for a period of five (5) years and thereafter for High Intensity Discharge (HID) fixtures or seven (7) years and thereafter for Light Emitting Diode (LED) fixtures until terminated by either party giving to the other thirty (30) days' notice in writing.
- (b) In the event the Customer transfers, terminates or for any reason discontinues electric service to the property on which rental lighting is installed under the terms of this agreement, the following charges shall become due and payable and may be paid in whole or in part by any deposit for electric service that the Customer may have made: The lesser of (1) the sum of the monthly charges for all remaining months of the effective term of this agreement; or (2) two hundred fifty dollars (\$250) for each fixture mounted on existing facilities; or (3) seven hundred fifty (\$750) dollars for each fixture and pole that is cause to be removed due to termination of this agreement.
- (c) In the event the Customer wishes to terminate this agreement due to the sale, lease or rental to others of the property on which lights are installed under the terms of this agreement, and the new party wishes to continue the rental agreement, Santee Cooper shall release the Customer of the charges provided for in 6(b) provided the new customer makes application for electric service and signs a rental lighting agreement for the remaining months of the prior Customer's agreement.

Attachment 5: Underground Distribution Standards Drawing L-16U



dlst/uds/l-16u.dgn

## Attachment 6: Calculation Example

### Santee Cooper Lighting Rate Calculation Example

*All capital and rate values are from 2015 Santee Cooper Rate Study*

**Capital Calculations\***

	175W MH Hampton Fixtures	14' Fiberglass Low Country Fluted Poles
Labor	98.70	185.87
Equipment	14.89	59.90
Matl-Fixture	450.00	1,200.00
Matl-Other	17.85	61.52
Overhead	98.19	199.27
Alloc. Cost	78.77	151.52
CIFR	<u>74.26</u>	<u>163.90</u>
<b>Total Capital Cost per Item</b>	<b>\$832.66</b>	<b>\$2,021.98</b>

**Simulated Bill Calculations\***

Monthly Facilities Charge (From 'Facilities Charge' worksheet)	1.40%	1.10%	
Monthly Lease Charge (Total Capital Times Facilities Charge)	\$11.70	\$22.30	
Total Fixtures	220	220	<b>Total</b>
<b>Total Monthly Estimated Costs</b>	<b>\$2,574.00</b>	<b>\$4,906.00</b>	<b>\$7,480.00</b>
<b><u>Estimated Monthly Itemized Costs</u></b>			
O&M Expense	\$203.92	\$507.09	
Interest Payment	\$815.68	\$2,028.35	
Principal Payment	\$1,297.00	\$1,879.97	
CIF & Payment To State	<u>\$257.40</u>	<u>\$490.60</u>	
Total Facilities Charge	\$2,574.00	\$4,906.00	

\*Calculations use only one fixture type and one pole type for simplification

**Calculation of Facilities Charge (as a percent of Installed Capital Cost)**

	Fixtures	LED/Non-Wood Poles	Wood Poles	
O&M Expense	1.25%	1.25%	1.25%	Street lighting Maintenance Expenses / Street lighting Gross Plant.
Years Debt Service Paid	10	15	30	
Interest Payment	5.00%	5.00%	5.00%	
Principal Payment	7.95%	4.63%	1.51%	
<b>Total Annual Debt Service Percentage</b>	<b>12.95%</b>	<b>9.63%</b>	<b>6.51%</b>	
<b>Total of O&amp;M Expense and Debt Service</b>	<b>14.20%</b>	<b>10.88%</b>	<b>7.76%</b>	
CIF Requirement and Payment to State	1.58%	1.21%	0.86%	
<b>Annual Facilities Charge</b>	<b>15.78%</b>	<b>12.09%</b>	<b>8.62%</b>	
<b>Monthly Facilities Charge</b>	<b>1.40%</b>	<b>1.10%</b>	<b>0.80%</b>	Used in 'Bill Calculation' Section.
<b><u>Facilities Charge Breakdown</u></b>				
O&M Expense	7.92%	10.34%	14.51%	
Interest Payment	31.69%	41.34%	58.03%	
Principal Payment	50.39%	38.32%	17.47%	
CIF & Payment To State	<u>10.00%</u>	<u>10.00%</u>	<u>10.00%</u>	
<b>Total Facilities Charge</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	

**Lighting Revenue Requirements By Major Functional Classification (\$000)**  
**Test Year 2016**  
**(Dollars in Thousands)**

Description	Total (a)	Production Demand (b)	Production Energy (c)	Transmission (d)	Distribution (e)	Customer Accounts (f)	Sales & Other (g)
Operation & Maintenance Expenses							
Production:							
Fuel	10,530	434	10,096	0	0	0	0
Purchased Power	1,835	348	1,487	0	0	0	0
Other Production O&M	2,809	1,803	1,006	0	0	0	0
Total Production O&M	15,174	2,585	12,589	0	0	0	0
Transmission Expenses	323	0	0	323	0	0	0
Distribution Expenses	459	0	0	0	243	216	0
Customer Accts., Svc. & Info. Exp.	671	0	0	0	0	671	0
Sales Expenses	0	0	0	0	0	0	0
Administrative & General - Labor	1,517	644	162	154	132	411	13
- Property Ins.	85	81	0	2	1	0	0
Total Administration & General	1,602	726	162	156	134	411	13
Total Operations & Maintenance Exp.	18,230	3,310	12,751	479	377	1,298	13
Sums in lieu of Taxes	60	60	0	0	0	0	0
Payment to State	295	184	1	21	16	74	0
One Time Contribution to the State	0	0	0	0	0	0	0
Subtotal	354	243	1	21	16	74	0
Debt Service and Lease Payments							
Bonds & Other Borrowed Funds	8,314	4,128	17	465	2,039	1,663	1
Lease Payments	0	0	0	0	0	0	0
Total Debt Service & Lease Payments	8,314	4,128	17	465	2,039	1,663	1
Working capital	0	0	0	0	0	0	0
Total Revenue Req. Before CIFR	26,897	7,682	12,769	965	2,432	3,035	14
Incremental Debt Service Coverage	0	0	0	0	0	0	0
Total Revenue Req. Before CIFR	26,897	7,682	12,769	965	2,432	3,035	14
CIF Requirement	3,449	1,661	7	187	820	773	0
Gross Requirement	30,346	9,343	12,776	1,152	3,253	3,809	15
Less: Interest and Miscellaneous Income	(195)	(97)	(0)	(11)	(48)	(39)	(0)
Other Operating Revenues	(244)	(102)	0	(43)	(50)	(49)	0
Off-System Sales	(1,055)	(264)	(791)	0	0	0	0
Net On-System Requirements	28,853	8,880	11,984	1,098	3,154	3,721	15
Less: Non-Firm and Economic Development Sales	(2,169)	(461)	(1,590)	(118)	0	0	0
Less: Wholesale Sales	(14,747)	(6,176)	(7,689)	(797)	0	(85)	0
<b>Total Cost of Service</b>	<b>11,936</b>	<b>2,243</b>	<b>2,705</b>	<b>184</b>	<b>3,154</b>	<b>3,636</b>	<b>15</b>



**Lighting Revenue Requirements By Major Functional Classification (\$000)**  
**Test Year 2017**  
**(Dollars in Thousands)**

Description	Total (a)	Production Demand (b)	Production Energy (c)	Transmission (d)	Distribution (e)	Customer Accounts (f)	Sales & Other (g)
Operation & Maintenance Expenses							
Production:							
Fuel	10,857	450	10,407	0	0	0	0
Purchased Power	1,879	366	1,512	0	0	0	0
Other Production O&M	2,850	1,885	965	0	0	0	0
Total Production O&M	15,585	2,701	12,884	0	0	0	0
Transmission Expenses	317	0	0	317	0	0	0
Distribution Expenses	461	0	0	0	245	216	0
Customer Accts., Svc. & Info. Exp.	649	0	0	0	0	649	0
Sales Expenses	0	0	0	0	0	0	0
Administrative & General - Labor	1,563	666	166	158	136	424	14
- Property Ins.	88	84	0	2	1	0	0
Total Administration & General	1,651	750	166	161	137	424	14
Total Operations & Maintenance Exp.	18,663	3,451	13,049	477	383	1,289	14
Sums in lieu of Taxes	62	62	0	0	0	0	0
Payment to State	297	194	1	21	15	67	0
One Time Contribution to the State	0	0	0	0	0	0	0
Subtotal	359	256	1	21	15	67	0
Debt Service and Lease Payments							
Bonds & Other Borrowed Funds	8,494	4,487	14	491	1,957	1,543	1
Lease Payments	0	0	0	0	0	0	0
Total Debt Service & Lease Payments	8,494	4,487	14	491	1,958	1,543	1
Working capital	56	11	38	2	1	4	0
Total Revenue Req. Before CIFR	27,572	8,205	13,103	991	2,356	2,903	14
Incremental Debt Service Coverage	0	0	0	0	0	0	0
Total Revenue Req. Before CIFR	27,572	8,205	13,103	991	2,356	2,903	14
CIF Requirement	3,424	1,752	6	192	764	711	0
Gross Requirement	30,996	9,956	13,108	1,183	3,120	3,614	15
Less: Interest and Miscellaneous Income	(379)	(200)	(1)	(22)	(87)	(69)	(0)
Other Operating Revenues	(259)	(104)	0	(48)	(55)	(51)	0
Off-System Sales	(1,151)	(278)	(873)	0	0	0	0
Net On-System Requirements	29,208	9,374	12,235	1,113	2,978	3,494	15
Less: Non-Firm and Economic Development Sales	(2,261)	(499)	(1,644)	(119)	0	0	0
Less: Wholesale Sales	(15,147)	(6,445)	(7,808)	(807)	0	(87)	0
<b>Total Cost of Service</b>	<b>11,800</b>	<b>2,430</b>	<b>2,783</b>	<b>188</b>	<b>2,978</b>	<b>3,407</b>	<b>15</b>

**Lighting Revenue Requirements By Major Functional Classification (\$000)**  
**Test Year 2018**  
(Dollars in Thousands)

Description	Total (a)	Production Demand (b)	Production Energy (c)	Transmission (d)	Distribution (e)	Customer Accounts (f)	Sales & Other (g)
Operation & Maintenance Expenses							
Production:							
Fuel	10,930	457	10,473	0	0	0	0
Purchased Power	1,804	377	1,427	0	0	0	0
Other Production O&M	2,929	1,899	1,030	0	0	0	0
Total Production O&M	15,662	2,732	12,930	0	0	0	0
Transmission Expenses	315	0	0	315	0	0	0
Distribution Expenses	476	0	0	0	254	223	0
Customer Accts., Svc. & Info. Exp.	671	0	0	0	0	671	0
Sales Expenses	0	0	0	0	0	0	0
Administrative & General - Labor	1,612	686	170	164	141	437	14
- Property Ins.	91	87	0	2	1	0	0
Total Administration & General	1,703	774	170	166	142	437	14
Total Operations & Maintenance Exp.	18,828	3,506	13,100	481	396	1,331	14
Sums in lieu of Taxes	64	64	0	0	0	0	0
Payment to State	297	199	0	22	15	61	0
One Time Contribution to the State	0	0	0	0	0	0	0
Subtotal	361	263	0	22	15	61	0
Debt Service and Lease Payments							
Bonds & Other Borrowed Funds	8,488	4,659	12	508	1,880	1,427	1
Lease Payments	0	0	0	0	0	0	0
Total Debt Service & Lease Payments	8,488	4,659	12	508	1,880	1,427	1
Working capital	32	6	22	1	1	3	0
Total Revenue Req. Before CIFR	27,709	8,434	13,135	1,012	2,292	2,822	15
Incremental Debt Service Coverage	0	0	0	0	0	0	0
Total Revenue Req. Before CIFR	27,709	8,434	13,135	1,012	2,292	2,822	15
CIF Requirement	3,378	1,791	5	195	723	663	0
Gross Requirement	31,087	10,225	13,139	1,208	3,015	3,485	15
Less: Interest and Miscellaneous Income	(311)	(171)	(0)	(19)	(69)	(52)	(0)
Other Operating Revenues	(274)	(107)	0	(52)	(61)	(54)	0
Off-System Sales	(1,274)	(294)	(980)	0	0	0	0
Net On-System Requirements	29,228	9,654	12,159	1,137	2,885	3,378	15
Less: Non-Firm and Economic Development Sales	(2,271)	(473)	(1,647)	(151)	0	0	0
Less: Wholesale Sales	(15,203)	(6,718)	(7,697)	(701)	0	(87)	0
<b>Total Cost of Service</b>	<b>11,754</b>	<b>2,463</b>	<b>2,814</b>	<b>286</b>	<b>2,885</b>	<b>3,291</b>	<b>15</b>

## **Appendix A-1**

### **South Carolina Office of Regulatory Staff's First and Continuing Request for Production of Books, Records, and Other Information and Responses**

IN RE: South Carolina Office of Regulatory Staff )  
 Review of the South Carolina Public Service )  
 Authority's Outdoor Lighting Program )  
 \_\_\_\_\_ )

**SOUTH CAROLINA OFFICE  
 OF REGULATORY STAFF'S  
 FIRST AND CONTINUING  
 REQUEST FOR PRODUCTION  
 OF BOOKS, RECORDS, AND  
 OTHER INFORMATION**

**TO: SHAWAN GILLIANS, ESQUIRE, ATTORNEY FOR THE SOUTH CAROLINA  
 PUBLIC SERVICE AUTHORITY:**

The South Carolina Office of Regulatory Staff (“ORS”) hereby requests, pursuant to the Memorandum of Understanding (the “MOU”) executed on August 4, 2021 that the South Carolina Public Service Authority (hereafter referred to as “Santee Cooper” or the “Company”) provide responses electronically (and in writing where required) by October 4, 2021 to ORS at 1401 Main Street, Suite 900, Columbia, South Carolina, 29201.

**DEFINITIONS**

As used in this Request, “identify” means, when asked to identify a person, to provide the full name, business title, address, and telephone number. As used in this Request, “address” means mailing address and business address. When asked to identify or provide a document, “identify” and “provide” mean to provide a full and detailed description of the document and the name and address of the person who has custody of the document. In lieu of providing a full and detailed description of a document, you may attach to your responses a copy of the document and identify the person who has custody of it. When the word “document” is used herein, it means any written, printed, typed, graphic, photographic, or electronic matter of any kind or nature and includes, but is not limited to, statements, contracts, agreements, reports, opinions, graphs, books, records, letters, correspondence, notes, notebooks, minutes, diaries, memoranda, transcripts, photographs, pictures, photomicrographs, prints, negatives, motion pictures, sketches, drawings, publications, and tape recordings.

The words “you” and “your” refer to the Company as well as its officers, agents, employees (past and present), representatives, successors, or any other person or persons acting for or purportedly acting on the Company’s behalf.

Wherever in this Request a masculine pronoun or possessive adjective appears, it refers to both males and females in accordance with traditional English usage.

### **INSTRUCTIONS**

1. Pursuant to S.C. Code Ann. § 58-4-55(A), all responses shall be submitted under oath.
2. This Request shall be deemed to be continuing so as to require the Company to supplement or amend their responses as any additional information becomes available.
3. In addition to the signature and verification at the close of the responses, the witness(es), employee(s), contractor(s), or agent(s) responsible for the information contained in each response shall be indicated at the bottom of each response.
4. If the Company believes that a response to any of the questions was previously submitted to ORS, please cite the document and page number in the response.
5. If information requested herein is found in other places or other exhibits, reference shall *not* be made to those other places or other exhibits; instead, the information shall be reproduced, and an additional copy shall be produced in response to the Request in the appropriate numerical sequence.
6. If the response to any Request is that the information requested is not currently available, state when the information requested will be available and provided to ORS. This statement is not a waiver of the deadline for all other responses.
7. If you are unable to respond to any of the Requests, or part or parts thereof, please specify the reason for your inability to respond and state what other knowledge or information you have concerning the unanswered portion.
8. If you refuse to disclose any document requested herein, in whole or in part, based on any claim of privilege or immunity, identify the specific privilege or protection claimed and state the basis for the claim, identifying the pertinent circumstances with sufficient specificity to ORS to assess the basis of any such claim. If you have a good-faith objection to any of these Requests, or any part thereof, the specific nature of the objection and whether it applies to the entire Request or to a certain portion thereof shall be clearly stated. If there is an objection to any part of a Request, then the part or parts objected to should be indicated and documents responsive to the remaining unobjectionable parts should be provided.

9. All responses to the Requests below shall be labeled using the same numbers as used herein.
10. Each Request shall be reproduced and included in front of each set of responses.
11. All information requested below, unless otherwise specified, shall be provided in electronic form only unless otherwise requested.
12. All information available in Excel spreadsheets shall be provided in Excel. All Excel spreadsheets shall be working copies with all formulas, links, and calculations intact.
13. Responses containing .pdf documents must be searchable. Each electronic file must be clearly marked with the Response number.
14. For every page produced to ORS that contains confidential information, the page is to be marked “CONFIDENTIAL” in the header. Any specific information which the Company designates as confidential information must also be marked by notation, highlighting, or other conspicuous means.
15. Any inquiries or communications relating to questions concerning clarification of the information requested below should be directed to Benjamin P. Mustian, Esquire [803.737.0898], or Nicole M. Hair, Esquire [803.737.0794], of ORS.

## **REQUESTS**

### **Section I: Procedures, Guidelines, General Practices, and Program Related Information**

- 1-1 Please provide Santee Cooper’s procedures, guidelines, and other documents related to the general practices and requirements of the Outdoor Lighting Program and Outdoor Lighting Rental Program including, but not limited to, the following:
  - (a) Structure and overall setup of the program;
  - (b) Safety, engineering, infrastructure, and design of all Outdoor Lighting types and models;
  - (c) Initiation and implementation of new Outdoor Lighting for residential, commercial, and industrial customers;
  - (d) Maintenance of existing Outdoor Lighting for residential, commercial, and industrial customers;
  - (e) Replacement of existing Outdoor Lighting for residential, commercial, and industrial customers; and
  - (f) Termination and/or removal of existing Outdoor Lighting for residential, commercial, and industrial customers.
- 1-2 Please provide Santee Cooper’s procedures, guidelines, and other documents related to state and federal requirements governing the Outdoor Lighting Program and Outdoor

Lighting Rental Program for the Company's residential, commercial, and industrial customers. Such documents shall include, but not be limited to, the following:

- (a) Outdoor Lighting design;
  - (b) Selection of appropriate Outdoor Lighting;
  - (c) Outdoor Lighting installation;
  - (d) Maintenance of Outdoor Lighting;
  - (e) Outdoor Lighting brightness; and
  - (f) Number of poles/lights/equipment/etc. required for Outdoor Lighting for residential, commercial, or industrial customers.
- 1-3 Please explain in detail how Santee Cooper complies with and meets any and all state and federal requirements applicable to the Outdoor Lighting Program and Outdoor Lighting Rental Program related to ORS Request 1-2 or that may be applicable but not mentioned in ORS Request 1-2.
- 1-4 Please answer the following regarding the history of the Outdoor Lighting and Outdoor Lighting Rental Programs:
- (a) When was the Outdoor Lighting Program initiated?
  - (b) As it relates to ORS Request 1-1, what procedures, guidelines, and general practices were used and have been used throughout the course of the program's history?
- 1-5 Regarding the Company's use of a lease agreement for the Outdoor Lighting Program:
- (a) Please explain why Santee Cooper uses lease agreements for its Outdoor Lighting Program. Please explain in detail and provide supporting documents, data, analyses, etc., as necessary.
  - (b) Is a lease agreement the best practice for use in the Outdoor Lighting Program? Please explain in detail why or why not and provide supporting documents, data, analyses, etc. as necessary.
  - (c) Are lease agreements common for this situation? Please explain. Additionally, please identify and describe any other instances where the Company uses lease agreements in a similar fashion.
  - (d) Is the Company aware of any other utility that uses a lease agreement for their Outdoor Lighting Program? Please explain and provide any known examples.
  - (e) Are there other options available for customers to obtain Outdoor Lightings other than through a lease agreement? If so, please explain in detail.

## **Section II: Infrastructure**

- 1-6 Please identify the following related to the number of residential customers in the Outdoor Lighting and Outdoor Lighting Rental Programs:
- (a) The total number of customers in each Program ;

- (b) The total number of customers associated or affiliated with Property Owners Associations (“POA”) or Homeowners Associations (“HOA”). Please provide the names of the POA’s/HOA’s and their relative locations; and
  - (c) The total number of customers not associated or affiliated with a POA/HOA.
- 1-7 Please identify the total number of commercial and industrial customers in the Outdoor Lighting Program and their relative locations.
- 1-8 Please provide the specifications for all light poles and light fixtures offered in the Outdoor Lighting Program that are currently offered.
- 1-9 Please provide the specifications for light poles and light fixtures that previously have been offered by the Company but are no longer currently used as new or replacement light poles and fixtures.
- 1-10 Please provide the specifications for all bulbs/luminescent devices for the Outdoor Lighting Program that are currently used, as well as those that are no longer utilized.
- 1-11 Please provide any studies, analyses, or evaluations that have been performed (both past and current) on the selection of light poles, light fixtures, and bulbs/luminescent devices for the Outdoor Lighting Program.

### **Section III: Customer Service**

- 1-12 Please provide a copy of any and all customer complaints, customer communications related to complaints, and other similar records and documentation related to customer complaints received by and/or generated by Santee Cooper that are related to the Outdoor Lighting Program. This request includes, but is not limited to, documents related to the following:
- (a) Service reliability of Outdoor Lighting;
  - (b) Service interruption or outages of Outdoor Lighting;
  - (c) Service quality of Outdoor Lighting;
  - (d) Communications between the Company and customers regarding Outdoor Lighting and the Outdoor Lighting Program;
  - (e) Meetings with customers regarding Outdoor Lighting and the Outdoor Lighting Program;
  - (f) Resolutions for complaints related to Outdoor Lighting and the Outdoor Lighting Program; and
  - (g) Any other service-related issues, communications, etc. as they relate to Outdoor Lighting or the Outdoor Lighting Program.

### **Section IV: Cost of Service and Rate Design**

- 1-13 Please provide a Per Book Jurisdictional Cost of Service Study reflecting Santee Cooper’s operations and rates currently in effect. Please include a fully distributed cost analysis for the South Carolina Retail jurisdiction’s operations.



- 1-14 Please provide a fully distributed Pro Forma Cost of Service Study with the current rates annualized for the South Carolina Retail jurisdiction's operations.
- 1-15 Please provide the basis and development of each allocation factor. Using Cost of Service Study methodologies, explain the reasons why Santee Cooper utilizes the specific allocation factors (such as revenue, Peak Demand, etc.) for all components (Rate Base and Total Income for Return) and Pro Forma and Accounting Adjustments, where allocation is not directly assignable.
- 1-16 Please provide a table, using approved rates, showing rates of return by classes of service for total Santee Cooper's Total Electric Operations, Retail Electric Operations and Wholesale Electric Operations.
- 1-17 Please furnish a schedule showing separately the customer, demand, and energy components of rate base and expense, including the totals for each. Please show the Net Operating Income for Return by classes of service based on pro forma Retail Operations Cost Study reflecting current rates.
- 1-18 Please provide the capital cost for each type of fixture included in the Company's Outdoor Lighting Program.
- 1-19 Please provide the maintenance schedule for each type of fixture over the lifetime of the fixture included in the Company's Outdoor Lighting Program. This should include, but be limited to:
- a. Lamp Replacement;
  - b. Ballast Replacement;
  - c. Pole Replacement; and,
  - d. Other maintenance.
- 1-20 Please provide the maintenance costs for each type of fixture over the lifetime of the fixture included in the Company's Outdoor Lighting Program. This should include, but be limited to:
- a. Lamp Replacement;
  - b. Ballast Replacement;
  - c. Pole Replacement; and,
  - d. Other maintenance.
- 1-21 Please provide the following as it relates to the Outdoor Lighting Program:
- (a) Please provide a financial breakdown and explain in detail each item or component (installation cost, maintenance, energy, etc.) for which POA/HOA or individual residential customers pays regarding the Outdoor Lighting Program.

- (b) Please provide an explanation for each item or component identified in response to ORS Request 1-18(a) including a description of each item or component and the service or benefit afforded to customers by each item or component.
- (c) Regarding the Plantation Lakes and Heritage Plantation communities, please specifically break out and explain the financial costs associated with the Outdoor Lighting Program. Please breakdown in detail and explain what the customers pay for regarding the program, identify and explain the basis for each identified cost item, and explain what the customers receive (or what service customers receive) from each identified cost item.

### Depreciation

- 1-22 Please provide all depreciation studies, analyses, and reviews performed for all light poles and light fixtures in the Outdoor Lighting Program for Santee Cooper's entire Outdoor Lighting system. Please include how much customers have spent on the depreciable life of all light poles and light fixtures and what balance is remaining for Santee Cooper's entire Outdoor Lighting system.
- 1-23 Regarding the light poles and light fixtures located in the Plantation Lakes and Heritage Planation communities, please provide and explain in detail the depreciation studies associated with the light poles and light fixtures for these communities. How much have these communities paid for with regards to the depreciable life of the light poles and light fixtures and what balance remains for each community.

---

Benjamin P. Mustian, Esquire  
Nicole M. Hair, Esquire  
**South Carolina Office of Regulatory Staff**  
1401 Main St., Ste. 900  
Columbia, SC 29201  
Phone: (803) 737-0898  
(803) 737-0794  
Email: [bmustian@ors.sc.gov](mailto:bmustian@ors.sc.gov)  
[nhair@ors.sc.gov](mailto:nhair@ors.sc.gov)

September \_\_, 2021

IN RE: South Carolina Office of Regulatory Staff	)	<b>SOUTH CAROLINA OFFICE</b>
Review of the South Carolina Public Service	)	<b>OF REGULATORY STAFF'S</b>
Authority's Outdoor Lighting Program	)	<b>FIRST AND CONTINUING</b>
_____	)	<b>REQUEST FOR PRODUCTION</b>
	)	<b>OF BOOKS, RECORDS, AND</b>
	)	<b>OTHER INFORMATION</b>

**TO: SHAWAN GILLIANS, ESQUIRE, ATTORNEY FOR THE SOUTH CAROLINA PUBLIC SERVICE AUTHORITY:**

The South Carolina Office of Regulatory Staff ("ORS") hereby requests, pursuant to the Memorandum of Understanding (the "MOU") executed on August 4, 2021 that the South Carolina Public Service Authority (hereafter referred to as "Santee Cooper" or the "Company") provide responses electronically (and in writing where required) by October 4, 2021 to ORS at 1401 Main Street, Suite 900, Columbia, South Carolina, 29201.

#### **DEFINITIONS**

As used in this Request, "identify" means, when asked to identify a person, to provide the full name, business title, address, and telephone number. As used in this Request, "address" means mailing address and business address. When asked to identify or provide a document, "identify" and "provide" mean to provide a full and detailed description of the document and the name and address of the person who has custody of the document. In lieu of providing a full and detailed description of a document, you may attach to your responses a copy of the document and identify the person who has custody of it. When the word "document" is used herein, it means any written, printed, typed, graphic, photographic, or electronic matter of any kind or nature and includes, but is not limited to, statements, contracts, agreements, reports, opinions, graphs, books, records, letters, correspondence, notes, notebooks, minutes, diaries, memoranda, transcripts, photographs, pictures, photomicrographs, prints, negatives, motion pictures, sketches, drawings, publications, and tape recordings.

The words "you" and "your" refer to the Company as well as its officers, agents, employees (past and present), representatives, successors, or any other person or persons acting for or purportedly acting on the Company's behalf.

Wherever in this Request a masculine pronoun or possessive adjective appears, it refers to both males and females in accordance with traditional English usage.

### INSTRUCTIONS

1. Pursuant to S.C. Code Ann. § 58-4-55(A), all responses shall be submitted under oath.
2. This Request shall be deemed to be continuing so as to require the Company to supplement or amend their responses as any additional information becomes available.
3. In addition to the signature and verification at the close of the responses, the witness(es), employee(s), contractor(s), or agent(s) responsible for the information contained in each response shall be indicated at the bottom of each response.
4. If the Company believes that a response to any of the questions was previously submitted to ORS, please cite the document and page number in the response.
5. If information requested herein is found in other places or other exhibits, reference shall *not* be made to those other places or other exhibits; instead, the information shall be reproduced, and an additional copy shall be produced in response to the Request in the appropriate numerical sequence.
6. If the response to any Request is that the information requested is not currently available, state when the information requested will be available and provided to ORS. This statement is not a waiver of the deadline for all other responses.
7. If you are unable to respond to any of the Requests, or part or parts thereof, please specify the reason for your inability to respond and state what other knowledge or information you have concerning the unanswered portion.
8. If you refuse to disclose any document requested herein, in whole or in part, based on any claim of privilege or immunity, identify the specific privilege or protection claimed and state the basis for the claim, identifying the pertinent circumstances with sufficient specificity to ORS to assess the basis of any such claim. If you have a good-faith objection to any of these Requests, or any part thereof, the specific nature of the objection and whether it applies to the entire Request or to a certain portion thereof shall be clearly stated. If there is an objection to any part of a Request, then the part or parts objected to should be indicated and documents responsive to the remaining unobjectionable parts should be provided.

9. All responses to the Requests below shall be labeled using the same numbers as used herein.
10. Each Request shall be reproduced and included in front of each set of responses.
11. All information requested below, unless otherwise specified, shall be provided in electronic form only unless otherwise requested.
12. All information available in Excel spreadsheets shall be provided in Excel. All Excel spreadsheets shall be working copies with all formulas, links, and calculations intact.
13. Responses containing .pdf documents must be searchable. Each electronic file must be clearly marked with the Response number.
14. For every page produced to ORS that contains confidential information, the page is to be marked "CONFIDENTIAL" in the header. Any specific information which the Company designates as confidential information must also be marked by notation, highlighting, or other conspicuous means.
15. Any inquiries or communications relating to questions concerning clarification of the information requested below should be directed to Benjamin P. Mustian, Esquire [803.737.0898], or Nicole M. Hair, Esquire [803.737.0794], of ORS.

### REQUESTS

#### Section I: Procedures, Guidelines, General Practices, and Program Related Information

- 1-1 Please provide Santee Cooper's procedures, guidelines, and other documents related to the general practices and requirements of the Outdoor Lighting Program and Outdoor Lighting Rental Program including, but not limited to, the following:

- (a) Structure and overall setup of the program;

1-1 (a) Santee Cooper utilizes the following documents to govern our Outdoor Lighting Program: **Light The Night Brochure**, **Outdoor Rental Lighting Agreement**, **Heritage Rental Lighting Agreement**, **OL-17 2017 Lighting Rates Schedule**, and **Santee Cooper Lighting Directives**. **Santee Cooper's Outdoor Rental Lighting Program Information**, **Santee Cooper's Outdoor Lighting Frequently Asked Questions**, and **Outdoor Lighting Ratemaking White Paper** are all maintained under the Outdoor Lighting section of Santee Cooper's website at [www.santeecooper.com](http://www.santeecooper.com). This information is readily available to all customers who wish to utilize Santee Cooper installed outdoor lighting near their homes for security lighting, in residential and commercial developments, and businesses based on a monthly rental/lease fee per pole and per fixture.

Santee Cooper utilizes the Outdoor Rental Lighting Agreement and the Heritage Rental Lighting Agreement as a 7-year contract between Santee Cooper and its customers for LED lighting. The terms of the contract are outlined on the back of each Rental Lighting Agreement. At the conclusion of the 7-year contract and any other contract terms that have been in effect, the agreement then becomes a month-to-month lease. Santee Cooper migrated from High Intensity Discharge (HID) Lighting, including High Pressure Sodium (HPS) (3-year contract term) and Metal-Halide Lighting (5-year contract term) to LED lighting because LEDs meet the customer demands for new and improved lighting technology, and they are much more energy efficient.

- (b) **Safety, engineering, infrastructure, and design of all Outdoor Lighting types and models;**

I-1 (b) Please reference the **Light The Night Brochure** for the various LED fixture types and pole types offered for the Standard LED Lighting and the Heritage LED Collection. Santee Cooper designs, installs, and constructs all of its outdoor lighting types and models, and infrastructure utilizing safe work practices in accordance with the National Electric Code (NEC), National Electric Safety Code (NESC), the Overhead and Underground Distribution Standards Manuals, and any other applicable standards.

Additionally, some poles installed in medians along Highway 17 Bypass in North Myrtle Beach, along Highway 17 Business in Surfside Beach, and for road improvements and reworks on Highway 501 near Grissom Parkway have breakaway capability installed as a safety feature per SCDOT requirements. The only time that breakaway poles are installed is when they are required by SCDOT.

- (c) **Initiation and implementation of new Outdoor Lighting for residential, commercial, and industrial customers;**

I-1 (c) All customers initiate the process for new Outdoor Lighting through signing and submitting either the Outdoor Rental Lighting Agreement or the Heritage Rental Lighting Agreement to Distribution Design Engineering. Santee Cooper sends all new commercial builders and developers an easement package, which contains a Letter of Agreement, Easement, and Lighting Letter, which has a checkbox for developers to indicate whether they are interested in Santee Cooper's Outdoor Lighting Program. If they are interested in the Outdoor Lighting Program, the Engineer assigned to the developers' projects will follow up with them on the type of poles and fixtures to be installed.

- (d) **Maintenance of existing Outdoor Lighting for residential, commercial, and industrial customers;**

I-1 (d) As part of the Outdoor Rental Lighting Agreement and Heritage Rental Lighting Agreement contract terms, and in exchange for the monthly lease fee,

Santee Cooper maintains the fixtures and poles for residential, commercial, and industrial customers.

Rental or Street Light Outage Report Form:

<https://app.santeecooper.com/Forms/SC0336.jsp>

Customer Care Guarantee:

<https://www.santeecooper.com/My-Account/Customer-Guarantee/Index.aspx>

Lights rented from us will be repaired within three working days.\*

If we fail to replace the faulty equipment (including bulbs, fixtures, globes, and photocells) within three working days\* after being notified that repairs are needed, we'll credit the customer's account by an amount equal to the charge for the lights for one month.

\*Excludes hazardous weather events such as hurricanes, snow, and ice storms, etc.

In instances where a vehicle damages a pole and fixture, Santee Cooper replaces the pole and fixture at our cost and bills the third-party at fault for damages. If the incident is a hit-and-run and there is no third-party to bill, Santee Cooper replaces the pole and fixture and absorbs that cost as part of maintenance.

**(e) Replacement of existing Outdoor Lighting for residential, commercial, and industrial customers; and**

1-1 (e) As part of the Outdoor Rental Lighting Agreement and Heritage Rental Lighting Agreement contract terms and in exchange for the monthly lease fee, Santee Cooper maintains the fixtures and poles for residential, commercial, and industrial customers. As fixtures fail or stop working, they are repaired or replaced with their LED equivalent fixture. Additionally, Santee Cooper maintains the entire outdoor lighting system, which includes poles, fixtures, wires, and conduits.

If customers have existing High Intensity Discharge (HID) Lighting, which includes High Pressure Sodium (HPS) or Metal-Halide (MH) Lighting, and they wish to convert to the LED equivalent fixture, Santee Cooper does charge a nominal \$30 LED conversion fee per fixture. The \$30 LED conversion fee covers travel and cost to remove the working fixture and replace it with its LED equivalent fixture. Santee Cooper customers are limited to 50 lights per year for conversion to ensure that there are adequate resources, materials (fixtures and poles), and inventory available, as well as appropriate personnel to complete the conversion requests. However, if a development has a few more lights than the 50 that are allocated, Santee Cooper will review those requests on a case-by-case basis and make the necessary adjustments as needed to ensure safety and consistency with outdoor lighting throughout the subdivision.

- (f) Termination and/or removal of existing Outdoor Lighting for residential, commercial, and industrial customers.

1-1 (f) Termination and/or removal of existing Outdoor Lighting is covered in the OL-17 Lighting Rate and by the contract terms listed in the Outdoor Rental Lighting Agreement for Standard LED Lighting and the Heritage Rental Lighting Agreement for The Heritage LED Collection Lighting under Section 5. (c) Continuity of Service and Section 6. Term, which states:

#### 5. Continuity of Service

- (a) Santee Cooper shall use reasonable diligence to provide a constant service to the lighting fixtures, but if such service or equipment shall fail or be interrupted, or become defective through acts of nature, or public enemies, or by accident, strikes, labor troubles, or by actions of the elements, or for any cause beyond its reasonable control, Santee Cooper shall not be liable therefore.
- (b) The Customer shall assume responsibility of providing reasonable protection of the lighting installation from accidental collision by motor vehicle and other similar equipment and shall further assume the responsibility of providing the installation protection against vandalism. Damage caused by collision or vandalism will be repaired by Santee Cooper and costs arising out of such repairs will be charged to the responsible party causing the damage.
- (c) Santee Cooper reserves the right to terminate this agreement immediately upon the threat of damage or continued damage to the installed equipment.

#### 6. Term

- (a) This agreement shall become effective on the date the lighting fixtures are first installed and operated and shall remain in effect for a period of either three (3) years and thereafter for High Intensity Discharge (HID) fixtures or seven (7) years thereafter for Light Emitting Diode (LED) fixtures until terminated by either party giving to the other thirty (30) days' notice in writing.
- (b) In the event the Customer transfers, terminates or for any reason discontinues electric service to the property on which rental lighting is installed under the terms of this agreement, the following charges shall become due and payable and may be paid in whole or in part by any deposit for electric service that the Customer may have made: The lesser of (1) the sum of the monthly charges for all remaining months of the effective term of this agreement; or (2) fifty dollars (\$50) for each HID fixture, two hundred fifty dollars (\$250) for each LED fixture mounted on existing facilities; or (3) one hundred fifty (\$150) dollars for each fixture and pole, three hundred fifty dollars (\$350) for each LED fixture and pole that is cause to be removed due to termination of this agreement.
- (c) In the event the Customer wishes to terminate this agreement due to the sale, lease or rental to others of the property on which lights are installed under the terms of this agreement, and the new party wishes to continue the rental agreement, Santee Cooper shall release the Customer of the charges provided for in 6 (b) provided the new customer makes application for electric service and signs a rental lighting agreement for the remaining months of the prior Customer's agreement.

- 1-2 Please provide Santee Cooper's procedures, guidelines, and other documents related to state and federal requirements governing the Outdoor Lighting Program and Outdoor Lighting Rental Program for the Company's residential, commercial, and industrial customers. Such documents shall include, but not be limited to, the following:

1-2 To my knowledge, there are no state or federal requirements.

- (a) Outdoor Lighting design;



1-2 (a) Santee Cooper utilizes industry standards and Visual Lighting software to design our lighting layouts. All Design Groups also utilize ArcGIS to complete their work request designs.

For the Project Design Group, developers sign a Lighting Letter indicating whether they are interested in Santee Cooper's Outdoor Lighting Program. If they are interested, Santee Cooper installs lights spaced every 3 residential lots to provide adequate coverage levels. However, there are no foot-candle requirements stipulated.

For individual lighting requests, the customer may have a specific location(s) in mind and may or may not have a foot-candle requirement. Various municipalities have lighting and glare ordinances, which Santee Cooper does not exceed. An Area Engineer typically works with the customer to select the appropriate light and pole for the customer's needs.

For commercial lighting requests, there is usually a foot-candle requirement for parking lots. Santee Cooper utilizes Visual Lighting 2020 software by Acuity Brands for these requests to ensure that the lighting layouts don't exceed the specified foot-candle limits set by the architect.

**(b) Selection of appropriate Outdoor Lighting;**

1-2 (b) Santee Cooper has a variety of lighting products suited for roadways, parking lots, and security. Customers request the type of light(s) they want, and our Engineering staff offer advice if needed. All of Santee Cooper's lights meet the industry standard Design Lights Consortium (DLC) qualified products.

**(c) Outdoor Lighting installation;**

1-2 (c) After the work request design has been completed, a Santee Cooper linecrew or contract crew installs the light at no charge. The installation cost is covered in the monthly rental fee.

For new subdivisions and developments, the fixtures and poles are typically installed at the same time as the backbone infrastructure to serve each developers' lots.

**(d) Maintenance of Outdoor Lighting;**

1-2 (d) Once a repair ticket is generated by a Customer Service Representative or a Construction Maintenance Planner, we have a 3-day customer guarantee to repair the fixture.

**(e) Outdoor Lighting brightness; and**

1-2 (e) Various fixtures have different output levels. Customers can choose the lighting level that meets their needs. Engineering staff are available to advise or

assist using the lighting software. Subdivision lighting is generally installed with a typical range of output, i.e., not a wide variety of options. For example, the 70 W LED Traditional Fixture is a popular and cost-effective colonial-style light used in many residential subdivisions throughout Santee Cooper's service territory.

- (f) **Number of poles/lights/equipment/etc. required for Outdoor Lighting for residential, commercial, or industrial customers.**

1-2 (f) The number of poles and lights installed depends on the customer's request. An individual customer may only request 1 light and pole, while a developer might request 30 lights and poles based on the size of the subdivision. Commercial and industrial customers usually have a prescribed foot-candle requirement that their architect has designed, and the number of lights requested is based on that. We use Visual Lighting Software for the lighting design layout.

- 1-3 **Please explain in detail how Santee Cooper complies with and meets any and all state and federal requirements applicable to the Outdoor Lighting Program and Outdoor Lighting Rental Program related to ORS Request 1-2 or that may be applicable but not mentioned in ORS Request 1-2.**

1-3 To my knowledge, there are no state and federal requirements applicable to the Outdoor Lighting Program. However, Santee Cooper designs all lighting projects to meet local city or county ordinances and requirements. All local cities and counties require photometric layouts for all new commercial projects.

- 1-4 **Please answer the following regarding the history of the Outdoor Lighting and Outdoor Lighting Rental Programs:**

- (a) **When was the Outdoor Lighting Program initiated?**

1-4 (a) Based on anecdotal evidence, the Outdoor Lighting Program was initiated prior to 1982, but we are not certain of the actual date. We are continuing to investigate to try and find a definitive start date. The Heritage Collection Outdoor Lighting was added around 1999 following the 1998 Rate Study to accommodate developer requests for nicer, decorative fixtures and poles.

- (b) **As it relates to ORS Request 1-1, what procedures, guidelines, and general practices were used and have been used throughout the course of the program's history?**

1-4 (b) The OL Rate has been consistently used throughout the course of the Outdoor Lighting Program's history. The current one is the OL-17 Rate.

- 1-5 **Regarding the Company's use of a lease agreement for the Outdoor Lighting Program:**

- (a) **Please explain why Santee Cooper uses lease agreements for its Outdoor Lighting Program. Please explain in detail and provide supporting documents, data, analyses, etc., as necessary.**

1-5 (a) Santee Cooper utilizes lease agreements to properly and appropriately recover revenue requirements and costs from the different lighting customer classes over time.

Santee Cooper's rate-making methodology recovers costs spread across the lighting class of customers, and that includes generation, transmission, and distribution components associated with providing power to all customers.

- (b) Is a lease agreement the best practice for use in the Outdoor Lighting Program? Please explain in detail why or why not and provide supporting documents, data, analyses, etc. as necessary.**

1-5 (b) Yes, a lease agreement is an accepted industry standard and best practice with local neighboring utilities and many across the nation. Santee Cooper conducted a survey earlier this year of utility companies belonging to the American Public Power Association (APPA), the Large Public Power Council (LPPC), and the Utility Analytics Institute (UAI). In the responses we received back from the companies surveyed, most administered their Outdoor Lighting Program via calculated rates through a lease agreement and contract.

- (c) Are lease agreements common for this situation? Please explain. Additionally, please identify and describe any other instances where the Company uses lease agreements in a similar fashion.**

1-5 (c) Yes, lease agreements are common practice for this situation.

Additionally, Santee Cooper utilizes lease agreements for our Generator Lease Program.

- (d) Is the Company aware of any other utility that uses a lease agreement for their Outdoor Lighting Program? Please explain and provide any known examples.**

1-5 (d) Lease agreements are standard practices with local utilities and those across the nation for their Outdoor Lighting Programs. Our neighboring utilities, such as Duke, Dominion, and Horry Electric Coop all have lease agreements for their Outdoor Lighting Programs. The length of time of these agreements varies based on the utility ranging from 5 years to 25 years.

- (e) Are there other options available for customers to obtain Outdoor Lightings other than through a lease agreement? If so, please explain in detail.**

1-5 (e) Customers have the option to choose private lights from third-party vendors. This is typically the case with commercial parking lot lights, where business owners may choose to have their own lights installed.

Santee Cooper is currently exploring and evaluating three other possible options where customers could potentially obtain Outdoor Lighting, such as through:

- a Purchase Plan Option,
- an option that recovers the cost differential between premium outdoor lighting and standard outdoor lighting via a one-time, upfront payment from the developer who selected the more expensive fixtures and poles. This allows the HOA/POA that inherits the lighting to pay a lower monthly rate similar to standard lighting, and
- the Buy Down The Rate Option, which would allow existing HOAs/POAs to pay a lower monthly rental rate over time, but Santee Cooper would still own and maintain the outdoor lighting systems.

All three options are still being evaluated and vetted by Santee Cooper's Internal Lighting Lead Team.

## **Section II: Infrastructure**

**1-6 Please identify the following related to the number of residential customers in the Outdoor Lighting and Outdoor Lighting Rental Programs:**

**(a) The total number of customers in each Program;**

1-6 (a) The Outdoor Lighting Program and the Outdoor Lighting Rental Program are one in the same. Santee Cooper has an Outdoor Lighting Program with 11,961 residential customers.

**(b) The total number of customers associated or affiliated with Property Owners Associations ("POA") or Homeowners Associations ("HOA"). Please provide the names of the POA's/HOA's and their relative locations; and**

1-6 (b) There are 592 Property Owners Associations (POA) and Homeowners Associations (HOA). Please see the attached spreadsheet with the names and addresses of these associations.

**(c) The total number of customers not associated or affiliated with a POA/HOA.**

1-6 (c) There are 11,369 customers not associated or affiliated with a POA/HOA.

**1-7 Please identify the total number of commercial and industrial customers in the Outdoor Lighting Program and their relative locations.**

1-7 There are 11,369 total commercial customers and 5 industrial customers in the Outdoor Lighting Program. Please see attached spreadsheet for commercial customers and the Industrial Customers Outdoor Lighting Report. Industrial customers that we bill for outdoor lighting along with a lighting billing summary are listed below:

- Albany International Corporation – 300 Albany Street, Saint Stephen, SC 29479

- CR Bard – 428 Power House Road, Moncks Corner, SC 29461
- Interfor – 2701 Indian Hut Road, Georgetown, SC 29440
- JW Aluminum – 435 Old Mt. Holly Road, Goose Creek, SC 29445
- Matheson Tri-Gas, Inc. – Moncks Corner

### Outdoor Lighting Report for September 2021

Description	Customers	Quantity
Fixture - 1000W Metal Halide Flood lighting	1	1
Fixture - 150W LED Flood Light	1	4
Fixture - 275W LED T5 Area Light	1	14
Fixture - 300W LED Flood Light	4	64
Fixture - 400W HPS Flood Light	1	7
Pole - Fiberglass Round 30'	2	7
Pole - Fiberglass Round 40'	1	1
Pole - Wood Standard 30'	2	26
Pole - Wood Standard 35'	2	9
Pole - Wood Standard 40'	2	7

Number of Lighting Customers: 5

- 1-8 Please provide the specifications for all light poles and light fixtures offered in the Outdoor Lighting Program that are currently offered.

1-8 Please see the [Light the Night\\_April 2020 Brochure](#) pages 5-6.

- 1-9 Please provide the specifications for light poles and light fixtures that previously have been offered by the Company but are no longer currently used as new or replacement light poles and fixtures.

1-9 Please see the [Light the Night\\_April 2016 Brochure](#) pages 5-6.

- 1-10 Please provide the specifications for all bulbs/luminescent devices for the Outdoor Lighting Program that are currently used, as well as those that are no longer utilized.

1-10 Please see the [Light the Night\\_April 2016](#) and [Light the Night\\_April 2020 Brochures](#).

- 1-11 Please provide any studies, analyses, or evaluations that have been performed (both past and current) on the selection of light poles, light fixtures, and bulbs/luminescent devices for the Outdoor Lighting Program.

1-11 Santee Cooper originally offered Mercury Vapor (MV), High Pressure Sodium (HPS), and Metal-Halide (MH) lights when the Outdoor Lighting Program was originally started. Standards Department personnel were responsible for selecting these fixtures as part of Santee Cooper's Outdoor Lighting Program. Prior to 2015, all MV lights were replaced with HPS lights. In 2015, Santee Cooper began researching LED technology.

and after several experimental rates with various municipalities to gain experience with LED lighting. Santee Cooper began offering LED lights that were equivalent to the HPS and MH fixtures. The LED fixtures have the same photometric pattern and output brightness.

### **Section III: Customer Service**

1-12 Please provide a copy of any and all customer complaints, customer communications related to complaints, and other similar records and documentation related to customer complaints received by and/or generated by Santee Cooper that are related to the Outdoor Lighting Program. This request includes, but is not limited to, documents related to the following:

- (a) Service reliability of Outdoor Lighting;
- (b) Service interruption or outages of Outdoor Lighting;
- (c) Service quality of Outdoor Lighting;
- (d) Communications between the Company and customers regarding Outdoor Lighting and the Outdoor Lighting Program;
- (e) Meetings with customers regarding Outdoor Lighting and the Outdoor Lighting Program;
- (f) Resolutions for complaints related to Outdoor Lighting and the Outdoor Lighting Program; and
- (g) Any other service-related issues, communications, etc. as they relate to Outdoor Lighting or the Outdoor Lighting Program.

1-12 Most customers are satisfied with Santee Cooper's Outdoor Lighting Program and appreciate the fact that for a monthly fee, all repairs, bulb, photocell, fixture, and pole replacements, painting, and general maintenance are taken care of by Santee Cooper Line Technicians. The most recent and significant complaints related to Santee Cooper's Outdoor Lighting Program primarily pertain to costs, and the fact that the HOAs/POAs believe that they have paid for the outdoor lighting systems at least twice. These complaints originated from Mr. Robert "Bob" Sweet, Streetlights Chairman for Plantation Lakes POA and Mr. Douglas "Doug" Decker, Director-at-Large for Heritage Plantation HOA. Mr. Sweet and Mr. Decker have both asked questions about their POA/HOA outdoor lighting bill separately, then later joined forces in an effort to persuade Santee Cooper to offer a lower rate or maintenance rate because Mr. Sweet maintained that Plantation Lakes had paid for their lights twice based on annual lease payments made over approximately 18 – 20 years. It should be noted that the original Plantation Lakes developer selected decorative, more ornately styled fixtures and poles for what he deemed a grand and more affluent community.

Mr. Decker was instrumental in creating a blog and website called the Streetlight Fair Rental Alliance, which provided news articles, meeting minutes, and any other information that had been published about Santee Cooper. Mr. Decker engaged several Carolina Forest, Litchfield, and Pawleys Island HOAs as part of the group that met with Santee Cooper for open discussions about their outdoor lighting bills

and how lighting costs could be reduced in three in-person meetings with the Presidents and principals from these HOAs held on October 14, 2020, November 18, 2020, and January 14, 2021 at Santee Cooper's Horry-Georgetown Division Auditorium.

Mr. Sweet advised that Plantation Lakes was paying for lights selected by the developer of Plantation Lakes Subdivision, and that the homeowners had no say in the poles and fixtures that were selected. Plantation Lakes was built as a premier development, and the developer chose the more expensive Heritage Collection poles and fixtures, which were the 14' Low Country Fluted Fiberglass Poles (\$22.30/pole/month) and 175W MH Hampton Fixtures (\$11.70/pole/month) for a total of \$34.00 per pole and fixture combined per month.

It should be noted that Santee Cooper is currently in a rate lock through December 31, 2024, and that new rate studies will be forthcoming in the future.

Additionally, Mr. Sweet presented his own cost analysis regarding what Plantation Lakes had paid and should continue to pay for their poles and fixtures. Mr. Decker and several other HOA Presidents performed their own cost analysis or authored papers on what they thought was incorrect on how Santee Cooper's Outdoor Lighting Program was administered and what we should do going forward.

#### **Section IV: Cost of Service and Rate Design**

For questions 1-13, 1-14, and 1-15, please reference the meeting with Santee Cooper and presentation conducted by Mr. Mike Smith, Santee Cooper's Director of Budget and Pricing, in attendance with Shawan Gillians, Esquire, and Carlita Goff, Distribution Design, also from Santee Cooper, who met with the ORS Team consisting of Ben Mustian, Legal, and Rates personnel, Michael Seaman-Huynh, Brandon Bickley, and Omari Thompson. During this meeting, Mike Smith conducted a presentation on Santee Cooper's outdoor lighting rate-making process in contrast to that of an investor-owned utility on Thursday, September 23, 2021. Santee Cooper's outdoor lighting rates are calculated and derived in a different format and are designed to recover revenue requirements per a cost-based/cash-based utility model. The Outdoor Lighting Rate-making White Paper has been provided for your review along with the Santee Cooper Rates and Rate-Making Practices PowerPoint presentation.

- 1-13 Please provide a Per Book Jurisdictional Cost of Service Study reflecting Santee Cooper's operations and rates currently in effect. Please include a fully distributed cost analysis for the South Carolina Retail jurisdiction's operations.

1-13 Please see the included file "Technical Appendix – Final.xlsx." This file, generated for the most recent Rate Study (2015), includes all allocated projected Revenue Requirements for the Residential, Commercial, Lighting, and Industrial classes for the years 2016, 2017, and 2018.

- 1-14 Please provide a fully distributed Pro Forma Cost of Service Study with the current rates annualized for the South Carolina Retail jurisdiction's operations.**

1-14 Please see the included file "Technical Appendix – Final.xlsx." This file, generated for the most recent Rate Study (2015), includes all allocated projected Revenue Requirements for the Residential, Commercial, Lighting, and Industrial classes for the years 2016, 2017, and 2018.

- 1-15 Please provide the basis and development of each allocation factor. Using Cost of Service Study methodologies, explain the reasons why Santee Cooper utilizes the specific allocation factors (such as revenue, Peak Demand, etc.) for all components (Rate Base and Total Income for Return) and Pro Forma and Accounting Adjustments, where allocation is not directly assignable.**

1-15 Please see the included file "Santee Cooper 2015 Electric COS Study\_FINAL.PDF." This file (on pages 4-5 through 4-10) describes the allocation factors used to allocate Revenue Requirements to customer classes in the 2015 Rate Study and why they were chosen.

- 1-16 Please provide a table, using approved rates, showing rates of return by classes of service for total Santee Cooper's Total Electric Operations, Retail Electric Operations and Wholesale Electric Operations.**

1-16 Rates of Return are not calculated in rate development at Santee Cooper. See Santee Cooper Rates and Rate-Making Practices PowerPoint Presentation conducted on Thursday, September 23, 2021 by Mr. Mike Smith, Director of Budget and Pricing.

- 1-17 Please furnish a schedule showing separately the customer, demand, and energy components of rate base and expense, including the totals for each. Please show the Net Operating Income for Return by classes of service based on pro forma Retail Operations Cost Study reflecting current rates.**

1-17 Please see the included file "Santee Cooper 2015 Electric COS Study\_FINAL.PDF," which includes all components of allocated Revenue Requirements. For additional information, see Santee Cooper Rates and Rate-Making Practices PowerPoint Presentation conducted on Thursday, September 23, 2021 by Mr. Mike Smith, Director of Budget and Pricing.

- 1-18 Please provide the capital cost for each type of fixture included in the Company's Outdoor Lighting Program.**

1-18 Please see the attached spreadsheet, which shows the installation cost of each fixture and pole. The "2017 Input" is the basic information from our Work Management Information System (WMIS). The indirect costs are captured, but not used. Please see the note near column P. The "Adjustments Tab" properly calculates corporate overheads and other allocated costs. The final cost information (material, labor, etc.) is provided to the Rates Group in the tab "2017 Final".



**1-19 Please provide the maintenance schedule for each type of fixture over the lifetime of the fixture included in the Company's Outdoor Lighting Program. This should include, but be limited to:**

**a. Lamp Replacement;**

1-19 (a) If a repair ticket is called in, and the lamp is bad, we will replace it with no additional cost to the customer.

**b. Ballast Replacement;**

1-19 (b) If a repair ticket is called in, and the ballast is bad, we will replace it with no additional cost to the customer.

**c. Pole Replacement; and,**

1-19 (c) If the pole is defective or not safe, we will replace it with no additional cost to the customer. If the pole is subjected to vehicle damage, we will replace the pole and seek payment from the third-party at fault or their insurance company. If the pole is broken due to a vehicle hit-and-run incident, we will replace the pole at Santee Cooper's expense, and we do not recover any funds.

**d. Other maintenance.**

1-19 (d) As previously mentioned, maintenance is performed within 3 days of the repair ticket creation date.

Additionally, Santee Cooper paints poles as requested by various HOAs/POAs as part of ongoing maintenance. If the poles cannot be painted to restore their former appearance, then these poles will be replaced.

**1-20 Please provide the maintenance costs for each type of fixture over the lifetime of the fixture included in the Company's Outdoor Lighting Program. This should include, but be limited to:**

1-20 Santee Cooper does not perform any scheduled, pro-active maintenance. Our repairs are based on lights we discover that are not working on a light patrol or as lights that are not working are reported by customers. The Rates Team uses a query of annual lighting maintenance costs as part of their calculation.

Santee Cooper's maintenance cost is included in our monthly rental light rate per the OL-17 Rates and the Outdoor Rental Lighting Agreement contract terms. There is no further maintenance cost charged to the customer. If a pole is hit by a vehicle, we will charge the third-party at fault or their insurance company for the pole and fixture replacement. If the pole is broken due to a vehicle hit-and-run incident, we will replace the pole at Santee Cooper's expense, and no funds are recovered.

- a. Lamp Replacement;
- b. Ballast Replacement;
- c. Pole Replacement; and,
- d. Other maintenance.

1-21 Please provide the following as it relates to the Outdoor Lighting Program:

- (a) Please provide a financial breakdown and explain in detail each item or component (installation cost, maintenance, energy, etc.) for which POA/HOA or individual residential customers pays regarding the Outdoor Lighting Program.

1-21 (a) Please see the attached Santee Cooper Lighting Rates Calculation Example, which is based on capital and rate values from the 2015 Santee Cooper Rate Study.

- (b) Please provide an explanation for each item or component identified in response to ORS Request 1-21(a) including a description of each item or component and the service or benefit afforded to customers by each item or component.

1-21 (b) Please see the attached Santee Cooper Lighting Rates expanded Calculation Example with more line-item details, which is based on capital and rate values from the 2015 Santee Cooper Rate Study.

- (c) Regarding the Plantation Lakes and Heritage Plantation communities, please specifically break out and explain the financial costs associated with the Outdoor Lighting Program. Please breakdown in detail and explain what the customers pay for regarding the program, identify and explain the basis for each identified cost item, and explain what the customers receive (or what service customers receive) from each identified cost item.

1-21 (c) At the request of Mr. Bob Sweet, Streetlights Chairman for Plantation Lakes, Mr. Mike Smith performed a financial cost analysis and price breakdown for the Plantation Lakes development. See attached paper for Plantation Lakes analysis and the spreadsheets for Plantation Lakes and for Heritage Plantation. They receive outdoor security lighting throughout their developments and amenity lighting surrounding their clubhouses. There are approximately 750 lots within Plantation Lakes Subdivision. Over the last 12 months, Plantation Lakes' average monthly outdoor lighting bill was about \$9,314.68, which equates to approximately \$12.42 per month per homeowner.

#### Depreciation

- 1-22 Please provide all depreciation studies, analyses, and reviews performed for all light poles and light fixtures in the Outdoor Lighting Program for Santee Cooper's entire Outdoor Lighting system. Please include how much customers have spent on the depreciable life of all light poles and light fixtures and what balance is remaining for Santee Cooper's entire Outdoor Lighting system.

1-22 Please see the attached 2015 Santee Cooper Depreciation Study compiled by Black & Veatch, with outdoor lighting specifically described in FERC 371 section of the report.

- 1-23 Regarding the light poles and light fixtures located in the Plantation Lakes and Heritage Plantation communities, please provide and explain in detail the depreciation studies associated with the light poles and light fixtures for these communities. How much have these communities paid for with regards to the depreciable life of the light poles and light fixtures and what balance remains for each community.

1-23 Please see the attached spreadsheets regarding depreciation studies for Plantation Lakes and Heritage Plantation Communities.

**Heritage Plantation Net Present Value**

\$153,455.25 – Pole and Wire Costs

\$ 66,330.55 – Fixture Costs

\$219,785.80 – Total Estimated Lighting System Investment Cost

Additionally, though some of the early installations are fully depreciated, the majority of them are not. The lighting asset system currently installed in Heritage Plantation has an estimated net book value of **\$71,762.33** using the assumptions defined above. With replacement and maintenance costs, in addition to other costs normally added to the material and installation costs (including design, engineering, construction management, etc. during installation) the value is likely more.

\$47,910.36 – Pole and Wire Costs

\$23,851.87 – Fixture Costs

**\$71,762.23 – Current Estimated Net Book Value of Lighting System**

Note: These numbers were calculated as of June 30, 2020.

Plantation Lakes Cost Assessment Summary: See attached spreadsheet for full costs.

Net Book Value of Decorative Outdoor Lights and Poles		<b>\$ 274,428.10</b>				
	Difference	\$	200,181.99			
	CIFR Charges	\$	19,637.85			
	<b>Total Difference</b>	\$	<b>219,819.84</b>			
	<b>Standard Outdoor Lights/Poles</b>		<b>Decorative Outdoor Lights/Poles</b>			
Criteria 1:	Quantity of 232 150wt HPS Traditional Fixtures	vs.	Quantity of 232 175wt MH Hampton Fixtures			
Criteria 2:	Quantity of 220 18ft Black Fiberglass Poles	vs.	Quantity of 220 14ft Lowcountry Fluted Fiberglass Poles			
Criteria 3:	Average Cost per Pole \$513.37	vs.	Average Cost per Pole \$1,986.52			
Criteria 4:	Average Cost per Fixture \$257.01	vs.	Average Cost per Fixture \$889.80			
Criteria 5:	In-Service Date of Assets:	1/1/2004				
(both)						
Criteria 6:	Depreciation Life and Rates:					
(both)						
		<b>Period</b>	<b>Rate</b>	<b>Life/Yrs</b>	<b>Life/Mos</b>	<b>Depr Mos.</b>
		2004-2007	5.75%	17.4	208.8	48
		2008-2013	4.22%	18.4	220.8	72
		2014-2019	2.55%	39.2	470.4	72
		2020-current	3.07%	32.6	391.2	15

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 Nicole M. Hair, Esquire  
**South Carolina Office of Regulatory Staff**  
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 Columbia, South Carolina 29201  
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September 17, 2021

## **Appendix A-1**

**Due to their voluminous nature and in order to make this Report easily accessible, the attachments provided by Santee Cooper in response to ORS's information requests are not included in this document. ORS will provide copies of any non-confidential material upon request.**

## **Appendix A-2**

### **South Carolina Office of Regulatory Staff's Second and Continuing Request for Production of Books, Records, and Other Information and Responses**

## Outdoor Lighting

IN RE:	South Carolina Office of Regulatory Staff )	<b>SOUTH CAROLINA OFFICE</b>
	Review of the South Carolina Public Service )	<b>OF REGULATORY STAFF'S</b>
	Authority's Outdoor Lighting Program )	<b>SECOND AND CONTINUING</b>
	_____ )	<b>REQUEST FOR PRODUCTION</b>
	_____ )	<b>OF BOOKS, RECORDS, AND</b>
	_____ )	<b>OTHER INFORMATION</b>

**TO: SHAWAN GILLIANS, ESQUIRE, ATTORNEY FOR THE SOUTH CAROLINA PUBLIC SERVICE AUTHORITY:**

The South Carolina Office of Regulatory Staff (“ORS”) hereby requests, pursuant to the Memorandum of Understanding (the “MOU”) executed on August 4, 2021 that the South Carolina Public Service Authority (hereafter referred to as “Santee Cooper” or the “Company”) provide responses electronically (and in writing where required) by November 12, 2021 to ORS at 1401 Main Street, Suite 900, Columbia, South Carolina, 29201.

**DEFINITIONS**

As used in this Request, “identify” means, when asked to identify a person, to provide the full name, business title, address, and telephone number. As used in this Request, “address” means mailing address and business address. When asked to identify or provide a document, “identify” and “provide” mean to provide a full and detailed description of the document and the name and address of the person who has custody of the document. In lieu of providing a full and detailed description of a document, you may attach to your responses a copy of the document and identify the person who has custody of it. When the word “document” is used herein, it means any written, printed, typed, graphic, photographic, or electronic matter of any kind or nature and includes, but is not limited to, statements, contracts, agreements, reports, opinions, graphs, books, records, letters, correspondence, notes, notebooks, minutes, diaries, memoranda, transcripts, photographs, pictures, photomicrographs, prints, negatives, motion pictures, sketches, drawings, publications, and tape recordings.

The words “you” and “your” refer to the Company as well as its officers, agents, employees (past and present), representatives, successors, or any other person or persons acting for or purportedly acting on the Company’s behalf.

Wherever in this Request a masculine pronoun or possessive adjective appears, it refers to both males and females in accordance with traditional English usage.

### **INSTRUCTIONS**

1. Pursuant to S.C. Code Ann. § 58-4-55(A), all responses shall be submitted under oath.
2. This Request shall be deemed to be continuing so as to require the Company to supplement or amend their responses as any additional information becomes available.
3. In addition to the signature and verification at the close of the responses, the witness(es), employee(s), contractor(s), or agent(s) responsible for the information contained in each response shall be indicated at the bottom of each response.
4. If the Company believes that a response to any of the questions was previously submitted to ORS, please cite the document and page number in the response.
5. If information requested herein is found in other places or other exhibits, reference shall *not* be made to those other places or other exhibits; instead, the information shall be reproduced, and an additional copy shall be produced in response to the Request in the appropriate numerical sequence.
6. If the response to any Request is that the information requested is not currently available, state when the information requested will be available and provided to ORS. This statement is not a waiver of the deadline for all other responses.
7. If you are unable to respond to any of the Requests, or part or parts thereof, please specify the reason for your inability to respond and state what other knowledge or information you have concerning the unanswered portion.
8. If you refuse to disclose any document requested herein, in whole or in part, based on any claim of privilege or immunity, identify the specific privilege or protection claimed and state the basis for the claim, identifying the pertinent circumstances with sufficient specificity to ORS to assess the basis of any such claim. If you have a good-faith objection to any of these Requests, or any part thereof, the specific nature of the objection and whether it applies to the entire Request or to a certain portion thereof shall be clearly stated. If there is an objection to any part of a Request, then the part or parts objected to should be indicated and documents responsive to the remaining unobjectionable parts should be provided.



9. All responses to the Requests below shall be labeled using the same numbers as used herein.
10. Each Request shall be reproduced and included in front of each set of responses.
11. All information requested below, unless otherwise specified, shall be provided in electronic form only unless otherwise requested.
12. All information available in Excel spreadsheets shall be provided in Excel. All Excel spreadsheets shall be working copies with all formulas, links, and calculations intact.
13. Responses containing .pdf documents must be searchable. Each electronic file must be clearly marked with the Response number.
14. For every page produced to ORS that contains confidential information, the page is to be marked “CONFIDENTIAL” in the header. Any specific information which the Company designates as confidential information must also be marked by notation, highlighting, or other conspicuous means.
15. Any inquiries or communications relating to questions concerning clarification of the information requested below should be directed to Brandon S. Bickley [803-737.0990], Benjamin P. Mustian, Esquire [803.737.0898], or Nicole M. Hair, Esquire [803.737.0794], of ORS.

## **REQUESTS**

### **Section I: Procedures, Guidelines, General Practices, and Program Related Information**

- 2-1 Please answer the following questions regarding the responses to ORS Request 1-1(a):
- (a) Please clarify whether the “Heritage Rental Lighting Agreement” and the “Outdoor Rental Lighting Agreement” are two (2) separate documents or if they are the same document. Also, please indicate if the “Heritage Rental Lighting Agreement” refers to the Heritage LED Collection or if it refers to the Heritage HOA/POA. The response suggests these are separate documents, however only the “Outdoor Rental Lighting Agreement” was attached with the responses. If these are separate documents, please provide a copy of the “Heritage Rental Lighting Agreement. If these are the same document, please indicate so and clarify if the “Heritage Rental Lighting Agreement” selects from the Heritage LED Collection and the “Outdoor Rental Lighting Agreement” selects from the Standard LED Lighting;
  - (b) Please provide signed copies of the Outdoor Lighting lease agreements for the Plantation Lakes and Heritage Plantation HOAs/POAs.
  - (c) The “OL-17 2017 Lighting Rates Schedule” references three (3) years for the initial term period, but the responses indicate a seven (7) year initial term period for the contract. Please explain why the “OL-17 2017 Lighting Rates Schedule” does not indicate an initial term of seven (7) years as noted in the responses? Please indicate

if there are different copies of this document with varying initial term periods and, if so, please explain the rationale for the varying initial term periods? Please identify whether and where seven (7) years is documented in the customer's contract;

- (d) In Section III of "Santee Cooper's Outdoor Rental Lighting Program Information" document, the term "end of life" is used. Please explain the process by which the Company determines "end of life" for any and all equipment in the Outdoor Lighting Program. Please include any documentation or analyses performed in reaching the "end of life" determination;
- (e) Please explain the statement that rates are "not structured to achieve a payback" in detail (this statement appears in Section III of "Santee Cooper's Outdoor Rental Lighting Program Information" document); and
- (f) Both "Santee Cooper's Outdoor Rental Lighting Program Information" and "Santee Cooper's Outdoor Lighting Frequently Asked Questions" documents indicate comparisons were made with other electric utilities. Please provide all supporting documents and evidence the Company has found, obtained, generated, and utilized to develop the comparisons referenced. Please indicate which utilities Santee Cooper used for comparison purposes. Additionally, please explain if the comparison information and data is updated to reflect any cost changes associated with the compared utilities, and if so, at what frequency is it updated? Further, please explain why Santee Cooper's Traditional Fixtures do not have any comparison information or data with other utilities.

2-2 Please answer the following questions regarding the responses to ORS Request 1-1(b):

- (a) Please reference the specific standards used in the National Electric Code, the National Electric Safety Code, and the Overhead and Underground Distributions Standards and Manuals as noted in the response; and
- (b) Please provide the SCDOT requirements regarding breakaway capabilities noted in the response.

2-3 Regarding the responses to ORS Request 1-1(c), please provide three (3) examples of easement packages sent to commercial builders including the Letter of Agreement, Easement, and Lighting Letter and any other materials, written or otherwise, included in the package.

2-4 Regarding the responses to ORS Request 1-1(e):

- (a) Please identify and explain the basis for determining a \$30 nominal charge for LED conversion? Please included all supporting analyses, calculations, documentation, etc.; and
- (b) Please explain why the Company limits customers to 50 lights per year for LED conversion. Please include all supporting analyses, calculations, documentation, etc.

2-5 Regarding the responses to ORS Request 1-2(a), please provide supporting documentation and examples of: the "industry standards," Visual Lighting Software used in the Company's design of lighting layouts, ArcGIS used to complete work request designs, Acuity Brand's Visual Lighting 2020 Software for lighting layouts, and the lighting/glare

ordinances for the various municipalities that the Company is not allowed to exceed. Additionally, please provide supporting evidence used to determine light spacing for every three (3) residential lots referenced in the response.

- 2-6 Regarding the responses to ORS Request 1-2(b), please explain what the Design Lights Consortium is and how Santee Cooper complies with any and all related standards. Please provide any supporting documentation and examples to illustrate the Company's use and compliance with the Design Lights Consortium.
- 2-7 Regarding the responses to ORS Request 1-2(c), please explain why the installation cost is covered in the monthly rental fee. Also, please explain why the Company does not instead utilize a one-time installation fee. Additionally, please identify if the Company includes the installation fee on every monthly rental fee throughout the life of the contract with the customer.
- 2-8 Regarding the responses to ORS Request 1-5(b), please provide the survey that was performed, the response(s) the Company received, and please indicate which utility or utilities provided the survey response.
- 2-9 Regarding the responses to ORS Request 1-5(c), please provide a full explanation of the Generator Lease Program and how those lease agreements relate to the Outdoor Lighting Program lease agreements.
- 2-10 Regarding the responses to ORS Request 1-5(d), please provide the lease agreements for Duke Energy Carolinas, LLC, Duke Energy Progress, LLC, Dominion Energy South Carolina, Horry Electric Cooperative, Inc., and any other utility/provider that Santee Cooper has used in its comparison of its Outdoor Lighting Program. Additionally, please provide any other supporting documents and evidence the Company has found, obtained, generated, and utilized regarding comparisons to its lease agreements and the lease agreements for in-state utilities and utilities across the U.S.
- 2-11 Please answer the following questions regarding the responses to ORS Request 1-5(e):
- (a) Please provide more detail on and explain fully how each of the three (3) other possible options for customers to obtain Outdoor Lighting would work for both the Company and the customer (i.e., the Purchase Plan Option, recovery of the cost differential, and the Buy Down the Rate Option);
  - (b) Please confirm if the Developer Contributor Program is still being considered by the Company. If so, please describe how this option would work for both the Company and the customer; and
  - (c) Please provide a current status of the Company's evaluation and deployment of the possible options discussed in response to ORS Request 1-5(e) as well as the option discussed in 2-11(c) above.
  - (d) Please indicate if there are any updates, changes, or modifications to these options. If so, please explain in full.

## **Section II: Infrastructure**

- 2-12 Please answer the following questions regarding the responses to ORS Requests 1-6(a), (b), (c), and 1-7:
- (a) Please confirm if 11,961 represents total number of customers in the Outdoor Lighting Program or the total number of residential customers;
  - (b) Please confirm if 592 represents the total number of POA's/HOA's in the Outdoor Lighting Program;
  - (c) Please confirm if 11,369 (based on the written responses) or if 7,502 (based on the Excel spreadsheets) represents the total number of residential (not commercial or industrial) customers not associated with POA's/HOA's in the Outdoor Lighting Program;
  - (d) Please confirm if 11,369 (based on the written responses) or 3,867 (based on the Excel spreadsheets) represents the total number of commercial (not residential or POA/HOA) customers in the Outdoor Lighting Program; and
  - (e) Please confirm if the five (5) industrial customers are included in the 11,961 total or if those industrial customers are in addition to that total.
- 2-13 Regarding the responses to ORS Request 1-11, please provide support (i.e., studies, evaluations, analyses, research, etc.) to show how the Company made the determination to use the older lighting models (Mercury Vapor, High Pressure Sodium, and Metal-Halide) as well as for the newer LED lighting.

### **Section III: Customer Service**

- 2-14 Please confirm that there have been no customer communications related to the company's response to 1-12 since the "Santee Cooper and HOA Lighting Progress Update Meeting #3" held on January 14, 2021. If there have been further communications, please provide evidence of those communications.

### **Section IV: Cost of Service and Rate Design**

- 2-15 Please confirm that the sections labeled "2016" of the "Santee Cooper 2015 Electric Cost of Service Study" were used to as the basis to develop the Company's current rates and tariffs.
- 2-16 Please explain in detail how Section 4, Monthly Rates and Charges, paragraph (A)(1), Pole and Fixture Rental Fees of "OL-17 2017 Lighting Rates Schedule" relates to the "Santee Cooper 2015 Electric Cost of Service Study?"
- 2-17 Please provide a detailed explanation and supporting documentation regarding how the capital costs summarized on tab "2017 final" in Excel workbook "2017 Lighting Rate Estimates Draft2" are amortized into the Rate Schedule OL-17 "Pole and Fixture Rental Fees" (the section referenced in ORS Request 2-15).
- 2-18 Regarding the response to ORS Request 1-18, please explain why the indirect costs (Corporate Overhead and Allocated Costs) are identified as being "captured, but not used"

per the written response as well as “for info only and are not used in the rate” per the attached Excel sheet “2017 Lighting Rate Estimates Draft2,” however these costs appear (based on the information provided) to be included and used for the development of monthly rates and depreciation as noted in the tab “2017 Final.”

- 2-19 Please answer the following questions regarding the responses to ORS Requests 1-19 and 1-20:
- (a) Please explain in detail what a light patrol is, what work or actions the Company performs, and the frequency with which they are performed;
  - (b) Please provide any applicable Company policies, procedures, guidelines, or work instructions governing the activities of a light patrol; and
  - (c) Besides a light patrol or a customer initiating a repair ticket, are there any other ways for maintenance to be scheduled or initiated on light poles and any other equipment associated with the Outdoor Lighting Program?
- 2-20 Please answer the following questions regarding the response to ORS Requests 1-21(a), (b) and (c):
- (a) Regarding the 1-21(c) responses, there was an attached document labeled “1-21 (c) Santee Cooper Lighting Rate Calculation Plantation Lakes Example” that appears to be the same document as the one labeled “1-21 (a) Santee Cooper Lighting Rate Calculation Example” (i.e., both documents appear to be the exact same). Please indicate whether this is intentional or if there is a document missing;
  - (b) Where “Santee Cooper Lighting Rate Calculation Example(s)” reference the “2015 Santee Cooper Rate Study” for capital and rate values, please provide specific reference to study page numbers and sections that align to specific values provided within the calculation.
  - (c) Please provide the document “Santee Cooper Lighting Rate Calculation Example” in Excel with all formulas intact. Additionally, please include an explanation as to how the values for each cell were determined.
  - (d) Please provide copies of the Outdoor Lighting bills for both Plantation Lakes and Heritage Plantation HOAs/POAs for the period of January 2019 – January 2021.

### **Section V: Depreciation**

- 2-21 Regarding the responses to ORS Request 1-23, please identify specifically what poles have been fully depreciated and the customers to which those poles are associated. Additionally, please explain why the attached documents submitted as part of the response include PDFs that are copies of the same document provided in response to ORS Request 1-21?

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October \_\_, 2021

## Outdoor Lighting

IN RE: South Carolina Office of Regulatory Staff )  
 Review of the South Carolina Public Service )  
 Authority's Outdoor Lighting Program )  
 \_\_\_\_\_ )  
**SOUTH CAROLINA OFFICE  
 OF REGULATORY STAFF'S  
 SECOND AND CONTINUING  
 REQUEST FOR PRODUCTION  
 OF BOOKS, RECORDS, AND  
 OTHER INFORMATION**

**TO: SHAWAN GILLIANS, ESQUIRE, ATTORNEY FOR THE SOUTH CAROLINA  
 PUBLIC SERVICE AUTHORITY:**

The South Carolina Office of Regulatory Staff (“ORS”) hereby requests, pursuant to the Memorandum of Understanding (the “MOU”) executed on August 4, 2021 that the South Carolina Public Service Authority (hereafter referred to as “Santee Cooper” or the “Company”) provide responses electronically (and in writing where required) by November 12, 2021 to ORS at 1401 Main Street, Suite 900, Columbia, South Carolina, 29201.

**DEFINITIONS**

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The words “you” and “your” refer to the Company as well as its officers, agents, employees (past and present), representatives, successors, or any other person or persons acting for or purportedly acting on the Company’s behalf.

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### **INSTRUCTIONS**

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2. This Request shall be deemed to be continuing so as to require the Company to supplement or amend their responses as any additional information becomes available.
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5. If information requested herein is found in other places or other exhibits, reference shall *not* be made to those other places or other exhibits; instead, the information shall be reproduced, and an additional copy shall be produced in response to the Request in the appropriate numerical sequence.
6. If the response to any Request is that the information requested is not currently available, state when the information requested will be available and provided to ORS. This statement is not a waiver of the deadline for all other responses.
7. If you are unable to respond to any of the Requests, or part or parts thereof, please specify the reason for your inability to respond and state what other knowledge or information you have concerning the unanswered portion.
8. If you refuse to disclose any document requested herein, in whole or in part, based on any claim of privilege or immunity, identify the specific privilege or protection claimed and state the basis for the claim, identifying the pertinent circumstances with sufficient specificity to ORS to assess the basis of any such claim. If you have a good-faith objection to any of these Requests, or any part thereof, the specific nature of the objection and whether it applies to the entire Request or to a certain portion thereof shall be clearly stated. If there is an objection to any part of a Request, then the part or parts objected to should be indicated and documents responsive to the remaining unobjectionable parts should be provided.



9. All responses to the Requests below shall be labeled using the same numbers as used herein.
10. Each Request shall be reproduced and included in front of each set of responses.
11. All information requested below, unless otherwise specified, shall be provided in electronic form only unless otherwise requested.
12. All information available in Excel spreadsheets shall be provided in Excel. All Excel spreadsheets shall be working copies with all formulas, links, and calculations intact.
13. Responses containing .pdf documents must be searchable. Each electronic file must be clearly marked with the Response number.
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15. Any inquiries or communications relating to questions concerning clarification of the information requested below should be directed to Brandon S. Bickley [803-737.0990], Benjamin P. Mustian, Esquire [803.737.0898], or Nicole M. Hair, Esquire [803.737.0794], of ORS.

## **REQUESTS**

### **Section I: Procedures, Guidelines, General Practices, and Program Related Information**

2-1 Please answer the following questions regarding the responses to ORS Request 1-1(a):

- (a) Please clarify whether the “Heritage Rental Lighting Agreement” and the “Outdoor Rental Lighting Agreement” are two (2) separate documents or if they are the same document. Also, please indicate if the “Heritage Rental Lighting Agreement” refers to the Heritage LED Collection or if it refers to the Heritage HOA/POA. The response suggests these are separate documents, however only the “Outdoor Rental Lighting Agreement” was attached with the responses. If these are separate documents, please provide a copy of the “Heritage Rental Lighting Agreement. If these are the same document, please indicate so and clarify if the “Heritage Rental Lighting Agreement” selects from the Heritage LED Collection and the “Outdoor Rental Lighting Agreement” selects from the Standard LED Lighting;

2-1(a) The “Heritage Rental Lighting Agreement” and the “Outdoor Rental Lighting Agreement” are two separate documents. The “Heritage Rental Lighting Agreement” selects from and refers to the Heritage LED Collection only, and the “Outdoor Rental Lighting Agreement” selects from the Standard LED Lighting only. The words Heritage, decorative, or premium may all be used interchangeably

to refer to the more expensive style poles and fixtures that Santee Cooper offers in the Heritage LED Collection. A copy of the “Heritage Rental Lighting Agreement” is attached for your review. The contract terms for the “Heritage Rental Lighting Agreement” are listed on the back of the document or as page 2 of the PDF as we discussed in our meeting with the ORS Team on November 3, 2021.

- (b) Please provide signed copies of the Outdoor Lighting lease agreements for the Plantation Lakes and Heritage Plantation HOAs/POAs.

2-1(b) Santee Cooper does not typically retain copies of signed Outdoor Lighting lease agreements once lights and poles have been installed and are past the contract terms. The signed Outdoor Lighting lease agreements that we have on file for Plantation Lakes and Heritage Plantation HOA are attached for your review.

- (c) The “OL-17 2017 Lighting Rates Schedule” references three (3) years for the initial term period, but the responses indicate a seven (7) year initial term period for the contract. Please explain why the “OL-17 2017 Lighting Rates Schedule” does not indicate an initial term of seven (7) years as noted in the responses? Please indicate if there are different copies of this document with varying initial term periods and, if so, please explain the rationale for the varying initial term periods? Please identify whether and where seven (7) years is documented in the customer’s contract;

2-1(c) We have not been able to locate some historical data regarding Santee Cooper’s Outdoor Lighting Program. However, when Santee Cooper’s Outdoor Lighting Program first originated, High Pressure Sodium (HPS) lighting had 3-year contract terms, and the Outdoor Rental Lighting Agreement at that time reflected a 3-year contract.

As lighting technology evolved, Santee Cooper began using Metal-Halide (MH) lighting and instituted 5-year contract terms for these lights as they lasted longer, but were more expensive than HPS lighting. The Outdoor Rental Lighting Agreement was then modified to reflect 5-year contract terms.

With the continued evolution of lighting technology, LEDs were introduced and found to be a longer lasting, more energy efficient light. A 7-year contract term was implemented for LEDs. While LEDs are more energy efficient, they are also more expensive in some instances, hence the need for a longer contract term to recover some of the initial costs. The Heritage LED Collection was originally implemented due to developer requests for more elegant and decorative lighting. Decorative pole costs start around \$1,200 and up, and the fixtures are in the price ranges indicated in the OL-17 2017 Lighting Rates Schedule and grouped by cost ranges.

The 3-year and 5-year contract terms are found on the back of the Outdoor Rental Lighting Agreement. The 7-year contract terms are covered on the back of the Heritage Rental Lighting Agreement. The rationale for varying contracts depends on the light type and costs set by the Rates Group. Material costs and installation

costs of poles and fixtures were factored in every time a different contract term was set.

All customers, HOAs, and POAs are under the terms of the Outdoor Rental Lighting Agreement or the Heritage Rental Lighting Agreement depending on which agreement they signed. Plantation Lakes and Heritage Plantation HOA have both met their contract terms, and they are now on a month-to-month lease.

The OL-17 2017 Rate Schedule takes all Santee Cooper poles and fixtures into account when calculating the rate.

- (d) In Section III of “Santee Cooper’s Outdoor Rental Lighting Program Information” document, the term “end of life” is used. Please explain the process by which the Company determines “end of life” for any and all equipment in the Outdoor Lighting Program. Please include any documentation or analyses performed in reaching the “end of life” determination;

2-1(d) End of life is determined as the time when a fixture stops working. Each piece of equipment is expected to have a specific useful life. Fixtures are expected to last 10 years, 15 years for LED/Non-Wood Poles (Fiberglass or Aluminum), and 30 years for wood poles as indicated in the Santee Cooper Lighting Rate Calculation Example under years of debt service paid.

- (e) Please explain the statement that rates are “not structured to achieve a payback” in detail (this statement appears in Section III of “Santee Cooper’s Outdoor Rental Lighting Program Information” document); and

2-1(e) Rates are not structured to achieve a payback, which is a common misconception because of the various outdoor lighting contract terms. Every time Santee Cooper has to replace a pole or fixture, theoretically the contract starts over based on the new asset replacement. Once contract terms have been met, the fixture and pole are on a month-to-month lease.

- (f) Both “Santee Cooper’s Outdoor Rental Lighting Program Information” and “Santee Cooper’s Outdoor Lighting Frequently Asked Questions” documents indicate comparisons were made with other electric utilities. Please provide all supporting documents and evidence the Company has found, obtained, generated, and utilized to develop the comparisons referenced. Please indicate which utilities Santee Cooper used for comparison purposes. Additionally, please explain if the comparison information and data is updated to reflect any cost changes associated with the compared utilities, and if so, at what frequency is it updated? Further, please explain why Santee Cooper’s Traditional Fixtures do not have any comparison information or data with other utilities.



[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

2-2 Please answer the following questions regarding the responses to ORS Request 1-1(b):

- (a) Please reference the specific standards used in the National Electric Code, the National Electric Safety Code, and the Overhead and Underground Distributions Standards and Manuals as noted in the response; and

2-2(a) The reference to the National Electric Code (NEC) and National Electric Safety Codes (NESC) were general references. Article 230 covers protective and disconnection devices for customer-owned lighting. Section 230.79 refers to the rating of service disconnecting means, and Section 230.90 covers overcurrent protection, which we are applying to serving customer-owned lighting systems, if and when applicable. Section 300.5 Underground Installation Minimum Cover Requirements refers to burial depth for direct-buried cable and cable in conduit systems, which would apply to lighting served from an underground power source.

Santee Cooper installs #4 DP (overhead duplex wire) secondary to feed overhead lighting installations and #6 UD (underground duplex wire) secondary to feed underground lighting installations. See attached drawing L-16U from Santee Cooper's Overhead and Underground Distribution Construction Manuals.

- (b) Please provide the SCDOT requirements regarding breakaway capabilities noted in the response.

2-2(b) As mentioned in the initial response, SCDOT required actual breakaway connectors on poles on certain major highways. Please see a copy of the breakaway pole specifications for what we purchase when SCDOT mandates that we must install breakaway poles. Also, please see an excerpt from Shakespeare's website. Shakespeare is the manufacturer of the breakaway poles that we purchase.



#### Breakaway Light Poles for Roadway Safety

For roadside installations vulnerable to vehicular impacts, Shakespeare develops and manufactures roadway safety breakaway light poles.

Shakespeare breakaway poles are specially designed to break off and fly over a vehicle that strikes the pole, minimizing danger to the vehicle's occupants. Breakaway light poles are required per AASHTO standards of the Federal Highway Administration (FHWA) in certain applications near roadways.

#### A Shakespeare innovation

Shakespeare created the first composite breakaway light poles. Our breakaway safety lighting standards are available in both direct burial and anchor base styles, with or without a variety of arms, brackets and attachments to complete your installation.

Shakespeare breakaway poles visually match our other Round Tapered Tuff-Poles, so you can mix the standard and breakaway light poles in a geographic location as needed for improved aesthetics.

With decades of expertise in manufacturing high quality lighting poles, Shakespeare offers time-proven composite product designs and durable, triple-UV protective coatings which deliver an attractive solution for highway and roadway safety lighting.

For more information, contact Shakespeare.

## Breakaway Light Poles for Roadway Safety

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With decades of expertise in manufacturing high quality lighting poles, Shakespeare offers time-proven composite product designs and durable, triple-UV protective coatings which deliver an attractive solution for highway and roadway safety lighting.

For more information, contact Shakespeare.

- 2-3 Regarding the responses to ORS Request 1-1(c), please provide three (3) examples of easement packages sent to commercial builders including the Letter of Agreement, Easement, and Lighting Letter and any other materials, written or otherwise, included in the package.

2-3 Please see the three (3) attached examples of easement packages sent to commercial builders which include:

- [Example Easement Package Dunkin Donuts Highway 701 N Link #535922](#)
- [Example Easement Package The Hangout and Key West Shops Link #535929](#)
- [Example Easement Package Pine Lakes Preserve Phase 1 Link #535916](#)

- 2-4 Regarding the responses to ORS Request 1-1(e):

- (a) Please identify and explain the basis for determining a \$30 nominal charge for LED conversion? Please included all supporting analyses, calculations, documentation, etc.; and

2-4(a) The \$30 nominal charge for LED conversion was instituted as part of a travel fee and charge for making a trip to change-out a perfectly viable working fixture to its LED equivalent fixture and dispose of the old one. This charge is outside of the monthly rental cost and is consistent with dispatching a bucket truck (\$16.13/hr) to and from the site to change-out this fixture plus a \$10 trip charge = \$26.13 rounded up to the nearest 10 equals \$30.

- (b) Please explain why the Company limits customers to 50 lights per year for LED conversion. Please include all supporting analyses, calculations, documentation, etc.

2-4(b) Santee Cooper limits customers to 50 lights per year for LED conversions to ensure that there are enough resources, materials (fixtures and poles), especially with the current global supply chain issues, and manpower available to ensure that all customers who desire to do so may participate in the conversion process.

- 2-5 Regarding the responses to ORS Request 1-2(a), please provide supporting documentation and examples of: the “industry standards,” Visual Lighting Software used in the Company’s design of lighting layouts, ArcGIS used to complete work request designs, Acuity Brand’s Visual Lighting 2020 Software for lighting layouts, and the lighting/glare ordinances for the various municipalities that the Company is not allowed to exceed. Additionally, please provide supporting evidence used to determine light spacing for every three (3) residential lots referenced in the response.

2-5 Santee Cooper’s rule of thumb and best engineering practice is to install rental lights every 3 lots, which is typical for developments with 50’ to 60’ wide lots. In developments where the lots are larger, such as Plantation Lakes, the developer requested that rental lights be installed on every other lot corner since these lots are approximately 100’ wide. Santee Cooper’s Project Design Engineers work with the developers assigned to them to agree on lighting placement in various subdivisions.

Municipal glare ordinances generally pertain to major highway corridors. See attached Horry County Planning and Zoning Ordinance where Section 531 references lighting. Additionally, please see attached sample lighting work requests used to illustrate lighting designs created using ArcMap GIS application. These work requests include The Parks at Carolina Forest residential subdivision with outdoor lighting and WR341501, WR342281, and WR340989 showing outdoor lighting designed by Area Engineering.

- 2-6 Regarding the responses to ORS Request 1-2(b), please explain what the Design Lights Consortium is and how Santee Cooper complies with any and all related standards. Please provide any supporting documentation and examples to illustrate the Company’s use and compliance with the Design Lights Consortium.

2-6 The Design Lights Consortium (DLC) is non-profit organization with a mission to achieve energy optimization by enabling controllability with a focus on quality, people, and the environment. As a non-profit, the DLC is committed to improving energy efficiency for commercial lighting throughout North America, and to making a positive climate impact worldwide. It’s our goal to provide a trusted, impartial assessment of the industry’s highest performing lighting products and systems to boost consumer trust and adoption of the technologies that save the most energy. Information about DLC is attached. Santee Cooper adheres to glare ordinances and lumen levels when applicable set by municipalities and other government entities. Commercial developers have lumen levels for their parking lot lighting to ensure that there is not a glare from the lights that are installed. All LED lighting installed is energy efficient.

- 2-7 Regarding the responses to ORS Request 1-2(c), please explain why the installation cost is covered in the monthly rental fee. Also, please explain why the Company does not instead utilize a one-time installation fee. Additionally, please identify if the Company includes

the installation fee on every monthly rental fee throughout the life of the contract with the customer.

2-7 The pole and fixture installation costs are covered in the monthly rental fee so that there are no upfront charges to be paid by the customer. Santee Cooper does not utilize a one-time installation fee because that cost is rolled up into the monthly rental costs. The installation fee is included on every monthly rental fee throughout the life of the contract with the customer.

- 2-8 Regarding the responses to ORS Request 1-5(b), please provide the survey that was performed, the response(s) the Company received, and please indicate which utility or utilities provided the survey response.

2-8 Please see the attached survey questions and responses received from the Large Public Power Council (LPPC), the American Public Power Association (APPA), and the Utility Analytics Institute (UAI) utility companies.

- 2-9 Regarding the responses to ORS Request 1-5(c), please provide a full explanation of the Generator Lease Program and how those lease agreements relate to the Outdoor Lighting Program lease agreements.

2-9 Santee Cooper's Generator Lease Program was only mentioned because ORS requested information on other similar lease programs that Santee Cooper offers. The Generator Lease Program is a separate, stand-alone program that does not relate to or have anything to do with the Outdoor Lighting Program lease agreements. The Generator Lease Program was closed to new enrollees in 2016, but Santee Cooper currently maintains those customers' generators as provided for in the agreements they signed.

- 2-10 Regarding the responses to ORS Request 1-5(d), please provide the lease agreements for Duke Energy Carolinas, LLC, Duke Energy Progress, LLC, Dominion Energy South Carolina, Horry Electric Cooperative, Inc., and any other utility/provider that Santee Cooper has used in its comparison of its Outdoor Lighting Program. Additionally, please provide any other supporting documents and evidence the Company has found, obtained, generated, and utilized regarding comparisons to its lease agreements and the lease agreements for in-state utilities and utilities across the U.S.

2-10 There are no lease agreements to provide. As Gregg Turbeville mentioned in the November 3, 2021 Microsoft Teams Meeting with ORS, the information regarding lease agreements and pole and fixture costs for Duke Energy Carolinas, LLC, Duke Energy Progress, LLC, Dominion Energy South Carolina, and Horry Electric Cooperative, Inc. were all obtained through conversation with various utility representatives. Finding lighting information on these utilities' websites was not easy nor readily accessible. We have one lighting contract obtained from Gainesville Regional Utilities (GRU) that is attached, but was not used in the utilities' poles and fixtures comparisons.

- 2-11 Please answer the following questions regarding the responses to ORS Request 1-5(e):



- (a) Please provide more detail on and explain fully how each of the three (3) other possible options for customers to obtain Outdoor Lighting would work for both the Company and the customer (i.e., the Purchase Plan Option, recovery of the cost differential, and the Buy Down the Rate Option);

2-11(a) All three (3) proposed lighting options are still being evaluated and vetted by Santee Cooper's Internal Lighting Lead Team.

The **Purchase Plan Option** is a straightforward, outright purchase of the outdoor lighting system, which includes the poles, fixtures, wires, and conduits. Santee Cooper's Financial Accounting Department will evaluate any outdoor lighting system purchase requests on an individual case-by-case basis. For those customers that wanted to purchase their outdoor lighting systems, the sale of the assets would be handled using an Asset Purchase Agreement currently under review by our Legal Department. A list of the poles and fixtures sold would be included in a listing attached to the Asset Purchase Agreement. The methodology for the Purchase Plan Option would be calculated based on the net book value less depreciation and CIFR negotiated with the customer. Santee Cooper Area Engineering would work with the customers' electricians to determine meter base locations so that all meter bases and disconnects could be installed prior to turning over the outdoor lighting system to the customer.

The **Premium Lighting Contribution Plan**, formerly known as the Developer Program Contributor Rate, would apply to new subdivisions and would require the developer to pay a one-time, upfront capital payment, which is the cost difference between premium lighting and standard lighting. The payment would be collected as part of the Line Extension Application Agreement (LEAA) for ease of processing, and the developer would sign a Premium Lighting Contribution Plan Agreement, which is still being drafted. The Premium Lighting Contribution Plan Option addresses one of the HOAs'/POAs' concerns that they have no input in the selection of the poles and fixtures installed in a development, and they are obligated to pay the cost of whatever decorative lighting the developer may have chosen. This plan is also still being evaluated and will require the appropriate approvals for implementation. This option would be required to pass a Best Interest Test and to ensure that the rate is not causing other lighting customer classes to subsidize outdoor lighting, an experimental rate would need to be enacted and evaluated to assess what the lower monthly rental cost will be.

The **Buy Down The Rate Cost-based Approach to Decorative Lighting** addresses the HOAs'/POAs' existing decorative fixtures and allows those with premium lighting to buy down the rate to standard lighting. The same calculation methodology of net book value (gross value less depreciation) would again apply. The appropriate approvals would be required for implementation. This option would also be required to pass a Best Interest Test to ensure that the rate is not causing other lighting customer classes to subsidize another for outdoor lighting. An experimental rate would need to be enacted and evaluated to assess what the lower monthly rental cost will be.

- (b) Please confirm if the Developer Contributor Program is still being considered by the Company. If so, please describe how this option would work for both the Company and the customer; and

2-11(b) Yes, the Developer Contributor Program is still being considered by Santee Cooper, but we have changed the name to the **Premium Lighting Contribution Plan** to make it more acceptable to our developers. This plan will require any developer who selects decorative outdoor lighting to pay a one-time, upfront, capital payment for the cost difference between premium/decorative lighting and standard lighting. The Premium Lighting Contribution Plan addresses the HOAs'/POAs' concerns about developers selecting expensive decorative lighting without the HOAs/POAs' input. However, this plan only applies to new residential subdivisions and developments.

Because of possible subsidization of other customer classes, our Director of Budget, Billing, and Pricing will be investigating an experimental rate, which will require appropriate approvals to ascertain what the final lower monthly rental cost would be.

- (c) Please provide a current status of the Company's evaluation and deployment of the possible options discussed in response to ORS Request 1-5(e) as well as the option discussed in 2-11(c) above.

2-11(c) As previously mentioned, all (3) options are still being evaluated by the Internal Lighting Lead Team. The team hopes to complete the evaluation process by December 31, 2021. However, all three (3) options will require the appropriate approvals prior to implementation, and the experimental rate will take several months to assess following approvals.

- (d) Please indicate if there any updates, changes, or modifications to these options. If so, please explain in full.

2-11(d) The only change to the Developer Program Contributor Rate is that the Internal Lighting Lead Team renamed it to the Premium Lighting Contribution Plan to make it more acceptable to our developers.

## **Section II: Infrastructure**

- 2-12 Please answer the following questions regarding the responses to ORS Requests 1-6(a), (b), (c), and 1-7:

- (a) Please confirm if 11,961 represents total number of customers in the Outdoor Lighting Program or the total number of residential customers;

2-12(a) Yes, 11,961 represents the total number of customers in the Outdoor Lighting Program.

- (b) Please confirm if 592 represents the total number of POA's/HOA's in the Outdoor Lighting Program;

2-12(b) Yes, 592 is the total number of POAs/HOAs in the Outdoor Lighting Program.

- (c) Please confirm if 11,369 (based on the written responses) or if 7,502 (based on the Excel spreadsheets) represents the total number of residential (not commercial or industrial) customers not associated with POA's/HOA's in the Outdoor Lighting Program;

2-12(c) Based on the Excel spreadsheets, there are 7,502 total number of residential customers not associated with the POAs/HOAs' in the Outdoor Lighting Program.

- (d) Please confirm if 11,369 (based on the written responses) or 3,867 (based on the Excel spreadsheets) represents the total number of commercial (not residential or POA/HOA) customers in the Outdoor Lighting Program; and

2-12(d) There are 3,867 total number of commercial customers in the Outdoor Lighting Program.

- (e) Please confirm if the five (5) industrial customers are included in the 11,961 total or if those industrial customers are in addition to that total.

2-12(e) No, the 5 industrial customers are not included in the 11,961 total and are in addition to that total. The industrial customers that have outdoor lighting are billed separately by our Moncks Corner Industrial Services Group.

- 2-13 Regarding the responses to ORS Request 1-11, please provide support (i.e., studies, evaluations, analyses, research, etc.) to show how the Company made the determination to use the older lighting models (Mercury Vapor, High Pressure Sodium, and Metal-Halide) as well as for the newer LED lighting.

2-13 This is another situation where historical data dating back to the beginning of the Outdoor Lighting Program is limited. Mercury Vapor (MV) lights were among the very first lights to be installed on Santee Cooper's distribution system. As lighting technology evolved, the company moved through offering High Pressure Sodium and Metal-Halide lighting, both of which are still heavily installed throughout Santee Cooper's service territory. When the more energy efficient, brighter, whiter, and cleaner LED lighting became available, municipalities wanted better lighting for roadways and overpasses, and Santee Cooper sought to gain experience with these lights and began an LED Pilot Program with the various municipalities to field evaluate LEDs.

### **Section III: Customer Service**

- 2-14 Please confirm that there have been no customer communications related to the response to 1-12 since the "Santee Cooper and HOA Lighting Progress Update Meeting #3" held on

January 14, 2021. If there have been further communications, please provide evidence of those communications.

2-14 The last communication was a Project Update requested from Mr. Bob Sweet and Mr. Doug Decker with a response sent to them on August 20, 2021. That information was previously provided in the First ORS Request attachments in question 1-12 that referenced previous complaints and communications with HOAs/POAs.

#### **Section IV: Cost of Service and Rate Design**

2-15 Please confirm that the sections labeled “2016” of the “Santee Cooper 2015 Electric Cost of Service Study” were used to as the basis to develop the Company’s current rates and tariffs.

2-15 The 2017 Technical Appendix values were used.

2-16 Please explain in detail how Section 4, Monthly Rates and Charges, paragraph (A)(1), Pole and Fixture Rental Fees of “OL-17 2017 Lighting Rates Schedule” relates to the “Santee Cooper 2015 Electric Cost of Service Study?”

2-16 Mr. Mike Smith, Santee Cooper’s Director of Budget, Billing, and Pricing provided an explanation of monthly rates and service at the November 3, 2021 Microsoft Teams Meeting with ORS. Mr. Smith will address any other questions and details in the ORS Meeting with Santee Cooper scheduled for November 18, 2021.

2-17 Please provide a detailed explanation and supporting documentation regarding how the capital costs summarized on tab “2017 final” in Excel workbook “2017 Lighting Rate Estimates Draft2” are amortized into the Rate Schedule OL-17 “Pole and Fixture Rental Fees” (the section referenced in ORS Request 2-15).

2-17 Mr. Mike Smith, Santee Cooper’s Director of Budget, Billing, and Pricing will address this question in a group meeting with ORS and Santee Cooper scheduled for November 18, 2021.

2-18 Regarding the response to ORS Request 1-18, please explain why the indirect costs (Corporate Overhead and Allocated Costs) are identified as being “captured, but not used” per the written response as well as “for info only and are not used in the rate” per the attached Excel sheet “2017 Lighting Rate Estimates Draft2,” however these costs appear (based on the information provided) to be included and used for the development of monthly rates and depreciation as noted in the tab “2017 Final.”

2-18 Mr. Mike Smith will address this question in the group meeting with ORS and Santee Cooper scheduled for November 18, 2021.

2-19 Please answer the following questions regarding the responses to ORS Requests 1-19 and 1-20:

- (a) Please explain in detail what a light patrol is, what work or actions the Company performs, and the frequency with which they are performed;

2-19(a) Light patrols are performed by a Santee Cooper linecrew in their particular service area. For municipalities and high-profile areas, the linecrew rides through the area in a bucket truck at night specifically looking for streetlights that are broken or not burning. They repair these lights as they find them.

For residential areas, the linecrew patrols upon request or when the Service Crew is notified that a light(s) need to be repaired. The linecrew uses a program called L-Rod to assist them with patrols. The L-Rod Program picks up the pole as the Line Technician drives by it, then the Line Technician can make adjustments on the laptop in reference to the pole he is driving by.

- (b) Please provide any applicable Company policies, procedures, guidelines, or work instructions governing the activities of a light patrol; and

2-19(b) Light patrols are a departmental best practice, and the linecrews patrol municipal lights monthly and all lighting in other areas quarterly. Please see the attached Lighting Trouble Report Ticket Flowchart regarding light patrols and repairs.

- (c) Besides a light patrol or a customer initiating a repair ticket, are there any other ways for maintenance to be scheduled or initiated on light poles and any other equipment associated with the Outdoor Lighting Program?

2-19(c) In general no, unless there is some other work that impacts that structure, such as scheduled maintenance where a light happens to be on the pole.

- 2-20 Please answer the following questions regarding the response to ORS Requests 1-21(a), (b) and (c):

- (a) Regarding the 1-21(c) responses, there was an attached document labeled “1-21 (c) Santee Cooper Lighting Rate Calculation Plantation Lakes Example” that appears to be the same document as the one labeled “1-21 (a) Santee Cooper Lighting Rate Calculation Example” (i.e., both documents appear to be the exact same). Please indicate whether this is intentional or if there is a document missing;

2-20(a) This was intentional and was discussed in the November 3, 2021 Microsoft Teams Meeting with ORS. Some documents may be mentioned in more than one reply to a question. If that occurred, then you will have the same document with a different question number in front of it in the title.

- (b) Where “Santee Cooper Lighting Rate Calculation Example(s)” reference the “2015 Santee Cooper Rate Study” for capital and rate values, please provide specific reference to study page numbers and sections that align to specific values provided

within the calculation.

2-20(b) Mr. Mike Smith will address this question in the meeting with ORS and Santee Cooper scheduled for November 18, 2021.

- (c) Please provide the document “Santee Cooper Lighting Rate Calculation Example” in Excel with all formulas intact. Additionally, please include an explanation as to how the values for each cell were determined.

2-20(c) Mr. Mike Smith will address this questions in his presentation during the meeting with ORS and Santee Cooper scheduled for November 18, 2021.

- (d) Please provide copies of the Outdoor Lighting bills for both Plantation Lakes and Heritage Plantation HOAs/POAs for the period of January 2019 – January 2021.

2-20(d) **CONFIDENTIAL:** Please see attached documents.

### **Section V: Depreciation**

- 2-21 Regarding the responses to ORS Request 1-23, please identify specifically what poles have been fully depreciated and the customers to which those poles are associated. Additionally, please explain why the attached documents submitted as part of the response include PDFs that are copies of the same document provided in response to ORS Request 1-21?

2-21 Some documents may be mentioned in more than one reply to a question. If that occurred, then you will have the same document with a different question number in front of it in the title. These were Financial Accounting’s Depreciation Studies for the current assets (poles, fixtures, wire, and costs) for Plantation Lakes Subdivision and Heritage Plantation Subdivision.

**[SIGNATURES APPEAR ON FOLLOWING PAGE]**

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October 29, 2021

## **Appendix A-2**

**Due to their voluminous nature and in order to make this Report easily accessible, the attachments provided by Santee Cooper in response to ORS's information requests are not included in this document. ORS will provide copies of any non-confidential material upon request.**

## **Appendix A-3**

### **South Carolina Office of Regulatory Staff's Third and Continuing Request for Production of Books, Records, and Other Information and Responses**



## Outdoor Lighting

IN RE: South Carolina Office of Regulatory Staff )  
 Review of the South Carolina Public Service )  
 Authority's Outdoor Lighting Program )  
 \_\_\_\_\_ )

**SOUTH CAROLINA OFFICE  
 OF REGULATORY STAFF'S  
 THIRD AND CONTINUING  
 REQUEST FOR PRODUCTION  
 OF BOOKS, RECORDS, AND  
 OTHER INFORMATION**

**TO: SHAWAN GILLIANS, ESQUIRE, ATTORNEY FOR THE SOUTH CAROLINA  
 PUBLIC SERVICE AUTHORITY:**

The South Carolina Office of Regulatory Staff ("ORS") hereby requests, pursuant to the Memorandum of Understanding (the "MOU") executed on August 4, 2021 that the South Carolina Public Service Authority (hereafter referred to as "Santee Cooper" or the "Company") provide responses electronically (and in writing where required) by November 5, 2021 to ORS at 1401 Main Street, Suite 900, Columbia, South Carolina, 29201.

**DEFINITIONS**

As used in this Request, "identify" means, when asked to identify a person, to provide the full name, business title, address, and telephone number. As used in this Request, "address" means mailing address and business address. When asked to identify or provide a document, "identify" and "provide" mean to provide a full and detailed description of the document and the name and address of the person who has custody of the document. In lieu of providing a full and detailed description of a document, you may attach to your responses a copy of the document and identify the person who has custody of it. When the word "document" is used herein, it means any written, printed, typed, graphic, photographic, or electronic matter of any kind or nature and includes, but is not limited to, statements, contracts, agreements, reports, opinions, graphs, books, records, letters, correspondence, notes, notebooks, minutes, diaries, memoranda, transcripts, photographs, pictures, photomicrographs, prints, negatives, motion pictures, sketches, drawings, publications, and tape recordings.

The words “you” and “your” refer to the Company as well as its officers, agents, employees (past and present), representatives, successors, or any other person or persons acting for or purportedly acting on the Company’s behalf.

Wherever in this Request a masculine pronoun or possessive adjective appears, it refers to both males and females in accordance with traditional English usage.

### **INSTRUCTIONS**

1. Pursuant to S.C. Code Ann. § 58-4-55(A), all responses shall be submitted under oath.
2. This Request shall be deemed to be continuing so as to require the Company to supplement or amend their responses as any additional information becomes available.
3. In addition to the signature and verification at the close of the responses, the witness(es), employee(s), contractor(s), or agent(s) responsible for the information contained in each response shall be indicated at the bottom of each response.
4. If the Company believes that a response to any of the questions was previously submitted to ORS, please cite the document and page number in the response.
5. If information requested herein is found in other places or other exhibits, reference shall *not* be made to those other places or other exhibits; instead, the information shall be reproduced, and an additional copy shall be produced in response to the Request in the appropriate numerical sequence.
6. If the response to any Request is that the information requested is not currently available, state when the information requested will be available and provided to ORS. This statement is not a waiver of the deadline for all other responses.
7. If you are unable to respond to any of the Requests, or part or parts thereof, please specify the reason for your inability to respond and state what other knowledge or information you have concerning the unanswered portion.
8. If you refuse to disclose any document requested herein, in whole or in part, based on any claim of privilege or immunity, identify the specific privilege or protection claimed and state the basis for the claim, identifying the pertinent circumstances with sufficient specificity to ORS to assess the basis of any such claim. If you have a good-faith objection to any of these Requests, or any part thereof, the specific nature of the objection and whether it applies to the entire Request or to a certain portion thereof shall be clearly stated. If there is an objection to any part of a Request, then the part or parts objected to should be indicated and documents responsive to the remaining unobjectionable parts should be provided.

9. All responses to the Requests below shall be labeled using the same numbers as used herein.
10. Each Request shall be reproduced and included in front of each set of responses.
11. All information requested below, unless otherwise specified, shall be provided in electronic form only unless otherwise requested.
12. All information available in Excel spreadsheets shall be provided in Excel. All Excel spreadsheets shall be working copies with all formulas, links, and calculations intact.
13. Responses containing .pdf documents must be searchable. Each electronic file must be clearly marked with the Response number.
14. For every page produced to ORS that contains confidential information, the page is to be marked “CONFIDENTIAL” in the header. Any specific information which the Company designates as confidential information must also be marked by notation, highlighting, or other conspicuous means.
15. Any inquiries or communications relating to questions concerning clarification of the information requested below should be directed to Brandon S. Bickley [803-737.0990], Benjamin P. Mustian, Esquire [803.737.0898], or Nicole M. Hair, Esquire [803.737.0794], of ORS.

## **REQUESTS**

### **Cost of Service and Rate Design**

- 3-1 Please answer the following questions regarding the response to ORS Requests 1-21(a), (b) and (c):
- (a) Regarding the 1-21(b) responses, the “Santee Cooper Lighting Rates expanded Calculation Example” document was not provided. Please provide. If this document has been provided but is labeled differently, please advise; and
  - (b) Regarding 1-21(c) responses, several documents are mentioned but not provided (i.e., financial cost analysis, price breakdown, paper for Plantation Lakes analysis, and spreadsheets for both Plantation Lakes and Heritage Plantation). Please provide the documents referenced. If these documents have been provided but are labeled differently, please advise.

### **Depreciation**

- 3-2 Regarding the responses to ORS Request 1-22, the 2015 Santee Cooper Depreciation Study was not provided. Please provide.

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Benjamin P. Mustian, Esquire  
Nicole M. Hair, Esquire  
**South Carolina Office of Regulatory Staff**  
1401 Main St., Ste. 900  
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Phone: (803) 737-0898  
(803) 737-0794  
Email: bmustian@ors.sc.gov  
nhair@ors.sc.gov

October \_\_, 2021

## Outdoor Lighting

IN RE: South Carolina Office of Regulatory Staff	)	<b>SOUTH CAROLINA OFFICE OF REGULATORY STAFF'S THIRD AND CONTINUING REQUEST FOR PRODUCTION OF BOOKS, RECORDS, AND OTHER INFORMATION</b>
Review of the South Carolina Public Service	)	
Authority's Outdoor Lighting Program	)	
_____	)	
	)	

**TO: SHAWAN GILLIANS, ESQUIRE, ATTORNEY FOR THE SOUTH CAROLINA PUBLIC SERVICE AUTHORITY:**

The South Carolina Office of Regulatory Staff (“ORS”) hereby requests, pursuant to the Memorandum of Understanding (the “MOU”) executed on August 4, 2021 that the South Carolina Public Service Authority (hereafter referred to as “Santee Cooper” or the “Company”) provide responses electronically (and in writing where required) by November 5, 2021 to ORS at 1401 Main Street, Suite 900, Columbia, South Carolina, 29201.

**DEFINITIONS**

As used in this Request, “identify” means, when asked to identify a person, to provide the full name, business title, address, and telephone number. As used in this Request, “address” means mailing address and business address. When asked to identify or provide a document, “identify” and “provide” mean to provide a full and detailed description of the document and the name and address of the person who has custody of the document. In lieu of providing a full and detailed description of a document, you may attach to your responses a copy of the document and identify the person who has custody of it. When the word “document” is used herein, it means any written, printed, typed, graphic, photographic, or electronic matter of any kind or nature and includes, but is not limited to, statements, contracts, agreements, reports, opinions, graphs, books, records, letters, correspondence, notes, notebooks, minutes, diaries, memoranda, transcripts, photographs, pictures, photomicrographs, prints, negatives, motion pictures, sketches, drawings, publications, and tape recordings.

The words “you” and “your” refer to the Company as well as its officers, agents, employees (past and present), representatives, successors, or any other person or persons acting for or purportedly acting on the Company’s behalf.

Wherever in this Request a masculine pronoun or possessive adjective appears, it refers to both males and females in accordance with traditional English usage.

### **INSTRUCTIONS**

1. Pursuant to S.C. Code Ann. § 58-4-55(A), all responses shall be submitted under oath.
2. This Request shall be deemed to be continuing so as to require the Company to supplement or amend their responses as any additional information becomes available.
3. In addition to the signature and verification at the close of the responses, the witness(es), employee(s), contractor(s), or agent(s) responsible for the information contained in each response shall be indicated at the bottom of each response.
4. If the Company believes that a response to any of the questions was previously submitted to ORS, please cite the document and page number in the response.
5. If information requested herein is found in other places or other exhibits, reference shall *not* be made to those other places or other exhibits; instead, the information shall be reproduced, and an additional copy shall be produced in response to the Request in the appropriate numerical sequence.
6. If the response to any Request is that the information requested is not currently available, state when the information requested will be available and provided to ORS. This statement is not a waiver of the deadline for all other responses.
7. If you are unable to respond to any of the Requests, or part or parts thereof, please specify the reason for your inability to respond and state what other knowledge or information you have concerning the unanswered portion.
8. If you refuse to disclose any document requested herein, in whole or in part, based on any claim of privilege or immunity, identify the specific privilege or protection claimed and state the basis for the claim, identifying the pertinent circumstances with sufficient specificity to ORS to assess the basis of any such claim. If you have a good-faith objection to any of these Requests, or any part thereof, the specific nature of the objection and whether it applies to the entire Request or to a certain portion thereof shall be clearly stated. If there is an objection to any part of a Request, then the part or parts objected to should be indicated and documents responsive to the remaining unobjectionable parts should be provided.

9. All responses to the Requests below shall be labeled using the same numbers as used herein.
10. Each Request shall be reproduced and included in front of each set of responses.
11. All information requested below, unless otherwise specified, shall be provided in electronic form only unless otherwise requested.
12. All information available in Excel spreadsheets shall be provided in Excel. All Excel spreadsheets shall be working copies with all formulas, links, and calculations intact.
13. Responses containing .pdf documents must be searchable. Each electronic file must be clearly marked with the Response number.
14. For every page produced to ORS that contains confidential information, the page is to be marked “CONFIDENTIAL” in the header. Any specific information which the Company designates as confidential information must also be marked by notation, highlighting, or other conspicuous means.
15. Any inquiries or communications relating to questions concerning clarification of the information requested below should be directed to Brandon S. Bickley [803-737.0990], Benjamin P. Mustian, Esquire [803.737.0898], or Nicole M. Hair, Esquire [803.737.0794], of ORS.

## **REQUESTS**

### **Cost of Service and Rate Design**

- 3-1 Please answer the following questions regarding the response to ORS Requests 1-21(a), (b) and (c):
- (a) Regarding the 1-21(b) responses, the “Santee Cooper Lighting Rates expanded Calculation Example” document was not provided. Please provide. If this document has been provided but is labeled differently, please advise; and
 

3-1(a) The “Santee Cooper Lighting Rates Expanded Calculation Example” is attached for your review. This document refers to the outdoor lighting system at Plantation Lakes, but was not labeled as such because it was used in the original meeting with Santee Cooper and the HOAs, so we removed the name for confidentiality purposes. The document is attached and labeled as both 3-1(a) and 1-21(b) for reference.
  - (b) Regarding 1-21(c) responses, several documents are mentioned but not provided (i.e., financial cost analysis, price breakdown, paper for Plantation Lakes analysis, and spreadsheets for both Plantation Lakes and Heritage Plantation). Please provide

the documents referenced. If these documents have been provided but are labeled differently, please advise.

3-1(b) Please see these attached documents. They were originally labeled as 1-23 in response to that question. They have now been relabeled as 3-1(b) and 1-21(c) to correspond to your current questions. The **Santee Cooper Lighting Rates Example** document covers the financial analysis and price breakdown paper of the outdoor lighting poles and fixtures in Plantation Lakes.

I also added the **Plantation Lakes Outdoor Lighting Bill Segment 09022021 To 10052021 Monthly Bill Calculations Sheet** to show how their monthly bill is calculated. With basic calculations, the energy charges are off by \$4.21 due to rounding. However, the Excel spreadsheet calculation with the same name is also attached and shows the exact matching computations for the energy charges. A document containing **Heritage Plantation Outdoor Lighting Bill Segment 09302021 To 10292021 Monthly Bill Calculations Sheet** is also attached.

Additionally, the two Excel spreadsheets with net book values for Plantation Lakes and Heritage Plantation, respectively, are also attached and relabeled as **3-1(b) and 1-21(c) 202210331 Plantation Lakes Net Book Value Comparison 05072021** and **3-1(b) and 1-21(c) 20200630 Heritage Plantation Asset Net Book Value**.

### **Depreciation**

3-2 Regarding the responses to ORS Request 1-22, the 2015 Santee Cooper Depreciation Study was not provided. Please provide.

3-2 Please accept my apologies for not including the latest 2015 Santee Cooper Depreciation Study in the first ORS Request, which I missed in the large transmittal of zipped files. It is now attached for your review and was also forwarded to you by Ms. Shawan Gillians on Friday, October 29, 2021.

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Benjamin P. Mustian, Esquire  
 Nicole M. Hair, Esquire  
**South Carolina Office of Regulatory Staff**  
 1401 Main St., Ste. 900  
 Columbia, SC 29201  
 Phone: (803) 737-0898  
 (803) 737-0794  
 Email: [bmustian@ors.sc.gov](mailto:bmustian@ors.sc.gov)  
[nhair@ors.sc.gov](mailto:nhair@ors.sc.gov)

October 29, 2021



## **Appendix A-3**

**Due to their voluminous nature and in order to make this Report easily accessible, the attachments provided by Santee Cooper in response to ORS's information requests are not included in this document. ORS will provide copies of any non-confidential material upon request.**