



*South Carolina Solar Council*

# Annual Awards Presentation

May 18, 2021



**Elise Fox**  
*Special Recognition*

# Economy Inn North Charleston

*Business*  
*Solar Champion*  
Kyle Franklin

195.7kW Helix PV System  
450 SunPower 435W Modules





# Solar for Students Program

*Education*  
*Solar Champion*

# Aiken County Public School District

## Organization Solar Champion



2 MWdc / 824kWac  
across six different sites



# Project Host

*Non-Profit  
Solar Champion*



# Jeff Hilton

*Dustin Schultz Resident  
of the Year Award*



- 24.6kw Roof Mount
- 3 SolarEdge Inverters
- 2 LG Chem Batteries
- Controlled by a SolarEdge Energy Hub



*South Carolina Solar Council*

# Solar Matrix

Presenter: Nick Safay

Electric Provider	Service Area	1:1 Net-Metering?	Retail Rate	DG Rate	Monthly DG Charge	Rebate	Other Incentive	Monthly Billing Charge
Dominion until 5/31/21	Charleston, Beaufort, Aiken, Columbia	Yes	\$0.120	\$0.125	N/A	N/A	N/A	N/A
Dominion beginning 6/1/21	Charleston, Beaufort, Aiken, Columbia	No	Time of Use Rate Structure	Time of Use (TOU) Rate Structure	TBD	N/A	N/A	TBD
Duke Energy Progress Applications until 5/31/21	Florence	Yes, Annual Settlement for Excess Generated Energy	\$0.120	\$0.120	N/A	N/A	N/A	\$11.78
Duke Energy Carolinas Applications until 5/31/21	Greenville, Spartanburg, Anderson	Yes, Annual Settlement for Excess Generated Energy	\$0.120	\$0.120	N/A	N/A	N/A	\$11.96
Duke Energy Progress Applications 6/1/21 thru 12/31/21 - <u>Proposed</u>	Florence	Yes, Monthly Settlement for Excess Generated Energy	\$0.120	\$0.120	N/A	N/A	N/A	\$11.78
Duke Energy Carolinas Applications 6/1/21 thru 12/31/21 - <u>Proposed</u>	Greenville, Spartanburg, Anderson	Yes, Monthly Settlement for Excess Generated Energy	\$0.120	\$0.120	N/A	N/A	N/A	\$11.96
Duke Energy Progress Applications on or after 1/1/22 - <u>Proposed</u>	Florence	Yes, monthly settlement for Excess Generated Energy, netting within Pricing Period	Time of Use Rate Structure	Critical Peak energy per kWh \$0.25322 On-Peak energy per kWh \$0.16165 Off-Peak energy per kWh \$0.09851 Super-Off-Peak energy per kWh \$0.07316	\$3.95 per kW for greater than 15 kWdc	TBD	N/A	\$14.63
Duke Energy Carolinas Applications on or after 1/1/22 - <u>Proposed</u>	Greenville, Spartanburg, Anderson	Yes, monthly settlement for Excess Generated Energy, netting within Pricing Period	Time of Use Rate Structure	Critical Peak energy per kWh \$0.25 On-Peak energy per kWh \$0.151760 Off-Peak energy per kWh \$0.087586 Super-Off-Peak energy per kWh \$0.060268	\$5.86 per kW for greater than 15 kWdc	TBD	N/A	\$13.09
Santee Cooper	Myrtle Beach, Conway, Pawley's Island, Moncks Corner	No	Summer \$0.1197 Winter \$0.0997	Summer \$0.0416 Winter \$0.0384	\$4.40/kW	N/A	N/A	\$21.50
Horry Electric Coop	Myrtle Beach, Conway, Little River, Loris	No	\$0.092	\$0.0274	\$57.00	N/A	N/A	\$20.00
Santee Electric Coop	Georgetown	Yes	\$0.125	\$0.125	\$5.00/kW	N/A	N/A	\$21.00
Berkeley Electric Coop	Monks Corner, John's Island	No	\$0.12	\$0.056	N/A	N/A	N/A	\$30.00
Palmetto Electric Coop	Bluffton, Hilton Head	Yes	\$0.11	\$0.11	N/A	N/A	N/A	\$17.00
Edisto Electric Coop	Dorchester County	No	\$0.145	\$0.085	N/A	N/A	N/A	\$12.00
Coastal Electric Coop Option 1	Walterboro	No	\$0.134	\$0.00	N/A	N/A	N/A	\$12.00
Coastal Electric Coop Option 2	Walterboro	Yes	\$0.114	\$0.11	\$42.00	N/A	N/A	\$0.00
Pee Dee Electric Coop	Florence	Yes	\$0.100	\$0.100	\$5.00/kW	N/A	N/A	\$27.50
Blue Ridge Electric Coop	Greenville, Spartanburg	No	\$0.12	\$0.051	N/A	N/A	N/A	\$28.50-\$31.00
Aiken Electric Coop	Aiken					N/A	N/A	\$0.09/day
Black River Electric Coop	Sumter	Yes	\$0.105	\$0.105	N/A	N/A	N/A	\$15.00
Broad River Electric Coop	Newberry, Spartanburg	No	\$0.115	\$0.04209	N/A	N/A	N/A	\$24.50
Fairfield Electric Coop	Fairfield, York							
Laurens Electric Coop	Anderson, Greenville							
Little River Electric Coop	Greenwood, McCormick							
Laurens Electric Coop	Kershaw, Lancaster							
Marlboro Electric Coop	Marlboro, Dillon							
Mid-Carolina Electric Coop	Aiken, Lexington							
Newberry Electric Coop	Newberry, Lexington							
Tri-County Electric Coop	Orangeburg, Richland							
York Electric Coop	Lancaster, York							



*South Carolina Solar Council*

**Utility Update**

# Dominion Energy South Carolina Renewable Energy

through 4/30/2021

## Solar Photovoltaic – 1,019 MW (12,069 systems)

- Residential 84.7 MW
- Commercial/Industrial 34.2 MW
- Utility Scale 884.3 MW
- Community Solar 16.0 MW



# NET METERING 3.0 EXPIRATION NOTIFICATION

[www.dominionenergy.com/south-carolina/save-energy/solar-for-your-home](http://www.dominionenergy.com/south-carolina/save-energy/solar-for-your-home)

## Net Metering 3.0 Expiration

As outlined in [Third Net Energy Metering for Renewable Energy Facilities \("NEM"\)](#), service to this NEM Rider will be closed to new participants as of June 1, 2021.

We have designated the application deadlines below.

Complete details of this expiration can be found here: [Net Energy Metering 3.0 Program Expiration Notice – May 2021](#).



# PSC of SC Solar Choice Directive

1. A requirement to take service under Rate 5 TOU rate, which provides a more accurate and cost-based rate that can also serve as a platform for additional DERs that a customer-generator may adopt.
2. A minimum bill based on properly calculated customer-related costs. The Joint Solar Choice Proposal includes a \$13.50 minimum bill (which would include a \$9.00 BFC) as a placeholder for the purpose of analyzing the proposal, recognizing that the exact minimum bill and BFC should be set only after the Commission determines in the pending rate case whether it is improper to consider distribution grid costs (such as poles, wires, and transformers) as "customer-related."
3. Maintaining annual netting, but crediting excess on-peak generation against on-peak usage (and excess off-peak generation against off-peak usage), with any excess exports credited at avoided cost rates at the end of each year, which encourages sizing of systems no more than offset their annual usage.
4. Non-residential customer-generators will take service under DESC's Rate 16 [time-of-use rate general service].
5. All excess on-peak kWh shall be rolled over the subsequent months as credits only against subsequent on-peak consumptions.
6. Annual excess net exports will be applied as a bill credit at the same rate as the Commission determines from its Order in Docket No. 2019-182-E.
7. The customer-generator shall have all right and title to own and transfer RECs attributable to their generation.

# Current DESC Rate 5 (TOU)

## RATE PER MONTH

### I. Summer Months of June-September

<b>A. Basic Facilities Charge:</b>	\$	13.00	
<b>B. Energy Charge:</b>			
All on-peak kWh @	\$	0.27222	per kWh
All off-peak kWh @	\$	0.09024	per kWh
<b>C. Minimum Bill:</b>			
The monthly minimum charge shall be the basic facilities charge and the Distributed Energy Resource Program charge, as stated below.			

### II. Winter Months of October-May

<b>A. Basic Facilities Charge:</b>	\$	13.00	
<b>B. Energy Charge:</b>			
All on-peak kWh @	\$	0.24492	per kWh
All off-peak kWh @	\$	0.09024	per kWh
<b>C. Minimum Bill:</b>			
The monthly minimum charge shall be the basic facilities charge and the Distributed Energy Resource Program charge, as stated below.			

## DETERMINATION OF ON-PEAK HOURS

### A. On-Peak Hours:

Summer Months of June-September:

The on-peak summer hours are defined as the hours between 2:00 p.m.-7:00 p.m., Monday-Friday, excluding holidays.\*

Winter Months of October-May:

The on-peak winter hours are defined as the hours between 7:00 a.m.-12:00 noon, Monday-Friday, excluding holidays.\*

### B. Off-Peak Hours:

The off-peak hours in any month are defined as all hours not specified as on-peak hours.

\*Holidays are: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

# Current DESC Rate 16 (TOU)

## RATE PER MONTH

<b>I. Basic Facilities Charge:</b>		<b>\$ 23.15</b>
<b>II. Energy Charge:</b>		
A. On-Peak kWh		
1. Months of June-September	\$ 0.21714	per kWh
2. Months of October-May	\$ 0.16562	per kWh
B. Off-Peak kWh		
First 1,000 off-peak kWh @	\$ 0.08836	per kWh
Excess over 1,000 off-peak kWh @	\$ 0.09308	per kWh

## DETERMINATION OF ON-PEAK HOURS

### A. On-Peak Hours:

June-September:

The on-peak summer hours are defined as the hours between 1:00 p.m.-9:00 p.m., Monday-Friday, excluding holidays.\*

October-May:

The on-peak non-summer hours are defined as those hours between 6:00 a.m.-10:00 a.m. and 6:00 p.m.-10:00 p.m. Monday-Friday, excluding holidays.\*

### B. Off-Peak Hours:

The off-peak hours in any month are defined as all hours not specified as on-peak hours.

\*Holidays are: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.



## Spring Utility Update

EFFECTIVE APRIL 30, 2021

### Residential

- Net Metering Available for applications through May 31, 2021 for current offer of full retail Net Metering.

Approved and Installed		
	Customers	MW
DEC	8833	98.72
DEP	1812	21.89

As of April 30, 2021

- Effective June 1, 2021, Act 62 requires the Solar Choice Tariff to be offered by utilities.

### Commercial

- Net Metering Available for applications through May 31, 2021 for current offer of full retail Net Metering.
- Effective June 1, 2021, Act 62 requires the Solar Choice Tariff to be offered by utilities.

### Utility

- Continued work on the Queue Reform for the management of the interconnection requests
- Avoided cost proceeding has begun with a filing on May 17.

Operating or Under Construction	# of Projects	Total MW
	89	415

- Green Source Advantage Program – Opened March 29, 2021
  - 200 MW program (150 MW DEC and 50 MW DEP)
  - Customers and Renewable Suppliers negotiate terms for PPA
  - Duke Energy facilitates transaction
  - Renewable projects can be located in balancing authority customer is served in.

### Community

#### Shared Solar – Act 236

DEC – 3 MW

DEP – 1 MW

Program is fully subscribed for the Market Rate and Income-Qualified customers. Waiting lists are available.

To join waitlist:

<https://www.duke-energy.com/our-company/environment/renewable-energy/solar-energy/sc-solar-energy-programs/shared-solar>

#### Community Solar Act 62

PSC proceeding opened.

Stakeholder engagement underway for discussions on program development and options.

Filed letters updating PSC on discussion with Stakeholders



## **Spring Utility Update**

**MAY 18, 2021**

### **Special Highlights**

**Solar Choice Metering Tariff - Dockets 2020-264-E and 20202-265-E**  
**Filed with PSCSC, still to be approved.**  
**Effective Date: June 1, 2021**

#### **Residential**

**Interim Solar Choice Tariff – Applications Received between June 1, 2021 and December 31, 2021**

**Continue Full Retail Net Metering with Monthly Netting of Energy**

**Excess Energy for the Billing Month is credited at the approved avoided cost rate**

**Monthly Application Cap: DEC 1,200 kW DEP 300 kW**

**A waiting list established once the cap is met each month**

**Solar Choice Tariff – Applications Received after January 1, 2022.**

**Interim Solar Choice Tariff customers may transition to SCT on or after January 1, 2022**

**Tariff Design is a Time-of-Use rate – Details of Rate Filing on PSC Website**

**Netting of energy within pricing periods; on-peak energy netted with on-peak energy and off-peak energy netted with off-peak energy**

**Netting of energy over the billing month**

**Excess Energy for the Billing Month is credited at the approved avoided cost rate**

**Offer to customer to include energy efficiency component for solar.**

#### **Non-Residential**

##### **Solar Choice Tariff**

**Monthly full retail rate energy netting**

**Excess Energy for the Billing Month is credited at the approved avoided cost rate**

**Customer-Generator may have access to REC's for billing and reporting fee \$1.50 per REC; Discount to \$0.65 per REC if generation meter is installed. Limited availability for generation meter option, 300 customers for DEC and 400 customers in DEP**



# Robert Branton

Solar Program Manager &  
Trade Ally Coordinator

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## Spring Utility Update

EFFECTIVE 5-17-2021

### Residential

- 2021– Offered rebates up to \$6,300
- As of May 17th – 77 residential rooftop installations completed.
  - That equates to 1.3 MW (AC) of rooftop solar generation.
- 112 projects are currently scheduled to be completed before November 30, 2021.
  - Average system size: 6.8 kW (AC)

### Commercial

- Receiving some interest regarding solar generation combined with energy storage to power electric vehicle charging.
  - Covid – 19
- Non-Profits – Solar Share and what we have learned?

### Utility

#### Santee Cooper Solar

- In a partnership with Central, We have accepted bids for the construction of 500MW of solar energy.
- Our current renewable energies plan includes adding of up to 1,000MW of capacity by 2024
  - Additional 500MW by 2031

### Community

#### Colleton Solar Farm – 2.5 MW (AC)

- Contracted Power Production in place until 2033.
  - 161 Current Community Solar customers.
  - 8 Community Solar customer added this year.
    - 2.0 kW average solar subscription.
- Celebration Church first Non-Profit Community Solar Customer



## Spring Utility Update

EFFECTIVE MAY 17, 2021

### Special Highlights

#### **Moving Forward**

- Santee Cooper proposes adding 1,500 MW of new solar power to its generation mix.
- 200 MW of Battery storage
- *500 MW has been contracted*

#### **Bell Bay Solar Farm 1.56 MW (AC)**

- System produces enough power to supply 204 average homes in South Carolina.
- Located in Conway on 10 acres of previously underutilized land.
- Constructed at a cost of under \$3 Million, including the purchase of the property.
- Constructed by Alder Energy Systems.

#### **Jamison Solar Farm 1.2 MW (AC)**

- Project is located on property owned by Tri-County Electric Cooperative (TCEC).
- Named after the Jamison Community near-by.
- This project will produce enough electricity to power 163 average South Carolina homes.

#### **Runway Solar Farm 2.0 MW (AC)**

- Located at the Myrtle Beach Airport. This 17-acre tract of land was previously underutilized land.
- Energy production is enough to meet the needs of 305 average South Carolina homes.
- Special Studies were required to ensure that there is no glare from the panels that would affect pilots or tower personnel.
- EDF Renewables, designed concrete ballast that hold the panels in place for the coastal wind code speeds (132MPH)

***Santee Cooper has also implemented a Solar Share payment plan to help with the upfront cost of the ownership.***



## **Central Electric Power Cooperative, Inc.**

**SPRING MEETING 2021**

- **20 member cooperatives**
- **800,000 + meters**
- **No baseload generation**
- **2 long-term power purchase agreements**
  - **Santee Cooper & Duke Energy**



## **Central Electric Power Cooperative, Inc.**

**SPRING MEETING 2021**

### **Solar Capacity**

- **Community Solar**
  - **18 member cooperatives have installed 4.2 MW to date**
    - **5 MW planned for completion**
- **Berkeley Electric Cooperative first integrated solar + battery system**

### **Residential & Commercial Solar Systems**

- **4,200 + installations**
  - **32.8 MW**



**Central Electric Power Cooperative, Inc.**  
**SPRING MEETING 2021**

# **Berkeley Electric Cooperative Solar & Battery System**

## **Solar Array**

- **120 kW AC / 154 kW DC**
- **Install by Alder Energy**

**Est Annual Production: 230,000 kWh/year**

- **Battery Storage (2 Tesla Power Pack)**
  - **Lithium-Ion technology**
  - **116 kW AC / 464 kWh**



**Central Electric Power Cooperative, Inc.**  
**SPRING MEETING 2021**

## **Solar Initiatives**

- 2018 – Horry County Schools 1.2 MW**
- 2020 – Volvo manufacturing site 6.5 MW PPA**
- 2020 – RFP for 363 MW of solar PPAs**

***“This will give us great long-term flexibility as well as lower pricing of renewable resources for the benefit of our member cooperatives,”***

***-Robert C. Hochstetler, President & CEO of Central***