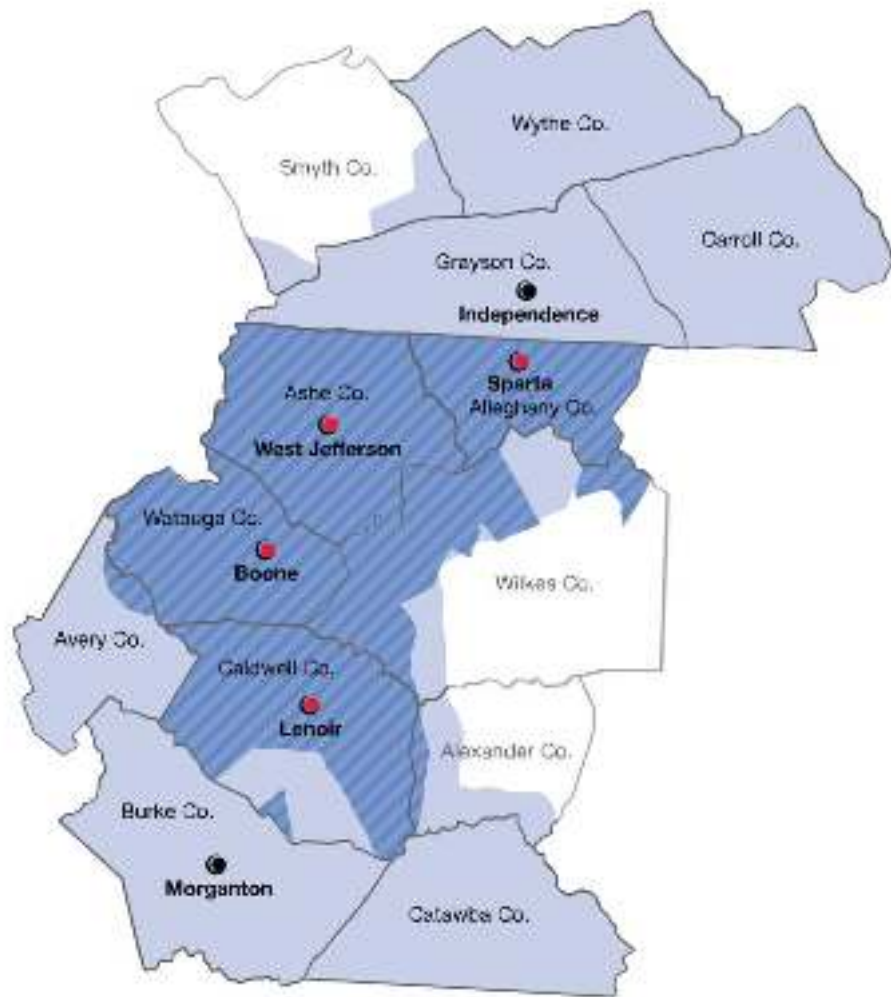


got community  
solar?



Jon Jacob  
Energy Solutions Marketing Manager  
[jjacob@blueridgeenergy.com](mailto:jjacob@blueridgeenergy.com)





**NC** Electric  
Cooperatives

Your Touchstone Energy® Cooperatives

# Innovation & Engagement



Community Solar Projects  
Utility Scale Solar Projects  
Microgrid and Storage Projects  
Energy Efficiency Projects

2016



# Solar made simple

## NO UPFRONT EXPENSE

Subscribe to the solar energy produced by one or more panels for just \$4.50 per panel monthly

## SOLAR FOR EVERYONE

If you rent or your roof is not well oriented, shaded or due for replacement soon; community solar gives you access to clean, renewable energy

## LOWER YOUR BILL

If you use more than 1000 kWh a month; a subscription to community solar can help you save money on your monthly electric bill

## REDUCE YOUR FOOTPRINT

The energy produced by 3 solar panels will offset more than a ton of CO<sub>2</sub> emissions annually



















---

# Blue Ridge Community Solar

4 solar gardens

384 kW (AC) total - 1472 325w panels

96 kW (AC) / 117 kW (DC) – 368 panels per array

Fixed orientation: West/South-West (240°)



# Alleghany District Office: Sparta, NC



# Former Sara Lee Plant: Jefferson, NC







Sherwood Substation: Vilas, NC





Patterson School: Happy Valley, NC



# Program Details

PPA Term: 20 years + 5 year option

Sites: 3 leased, one owned by Blue Ridge

Capacity Factor during Peak Demand (2-6 pm):  
60.78%

Generation from all sites is totalized

Pro rata share of generation per panel

Net Metering + Net Billing Rates available

Members pay 7 cents per kWh consumed

Members receive 7 cents per kWh generated

Panel subscription: \$4.50/mo.

Average Panel Generation: 36 kWh/mo.



## Advantages

All members can participate in community solar

No upfront cost to members

Subscription model allows easy transfer of panels if members move or change mind

Orientation maximizes peak demand reduction which benefits all members not just subscribers

## Challenges

Members have to speak to a Energy Services Specialist to sign up

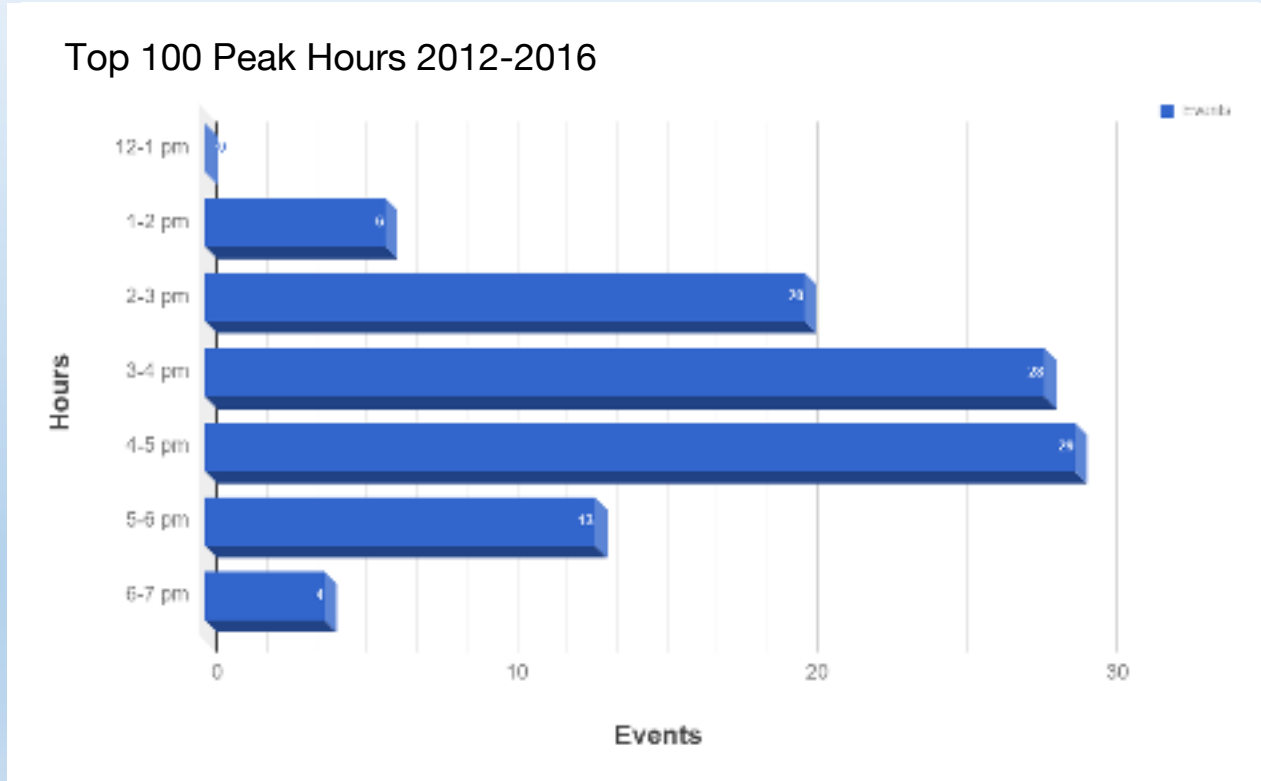
Explaining Net Metering and Net Billing rate options to members

Most subscribers opted for only 1 or 2 panels

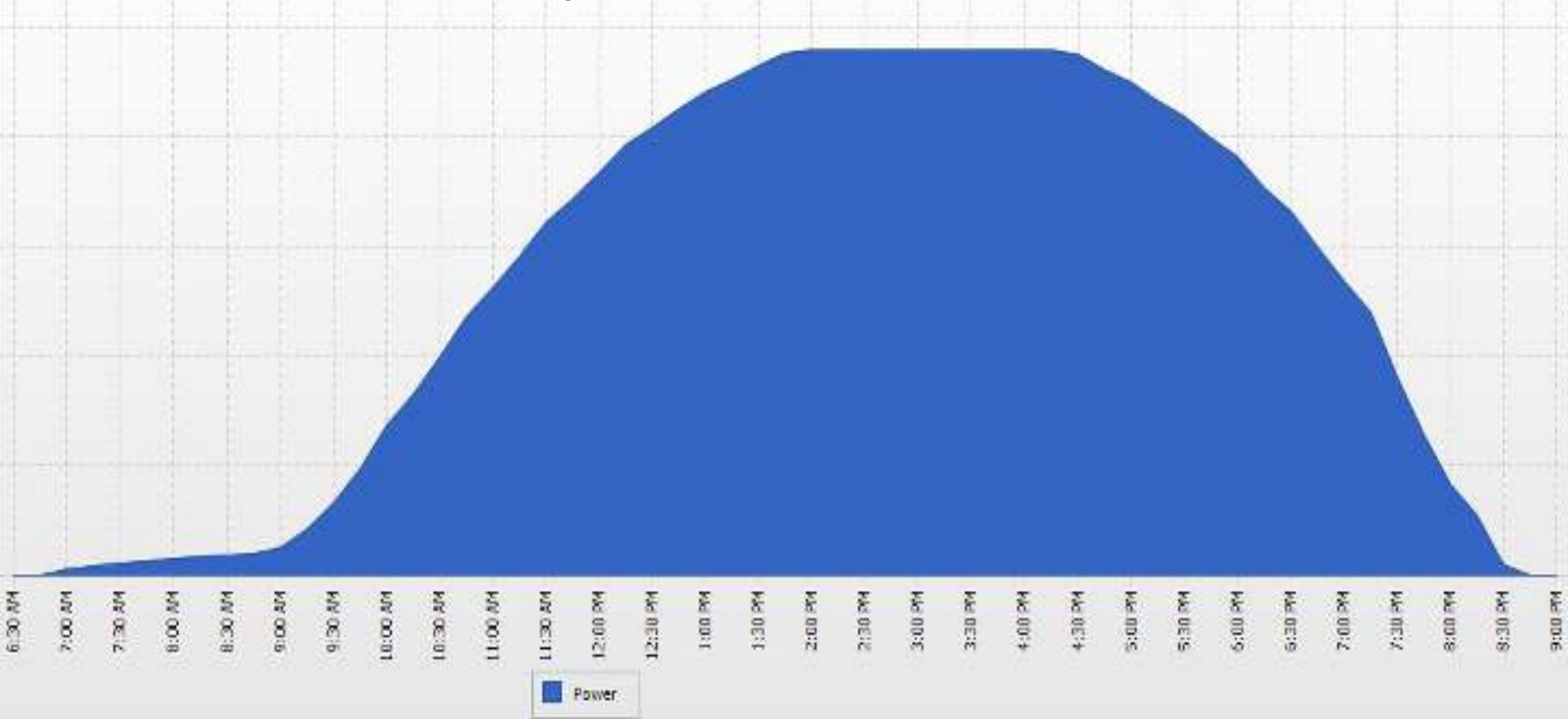
One county enacted a Solar Amendment to Zoning Ordinance during project planning



# When Does Peak Demand Occur?



# What does a perfect day look like?



# PV System Overview | BREMC - Allegheny

## PV System Data



Energy and Power >

### Communication Monitoring



PV System Monitoring >

Date:  
8/10/2017

Energy:  
115,451.55 kWh



CO2 avoided:  
80,816.09 kg



Total: 111,598 kWh

### CO2 avoided

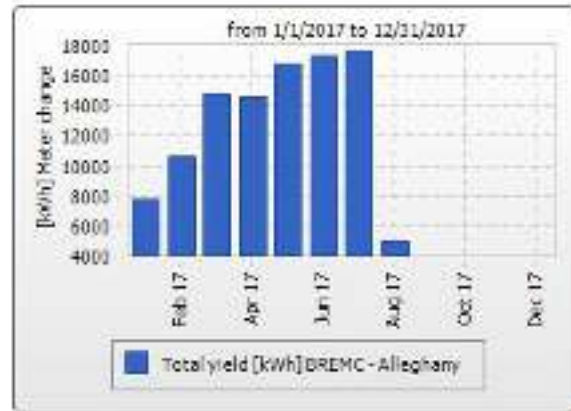


Total: 78 t



Weather for Sparta  
Weather data cannot be determined!

Tomorrow >



1/1/2017 - 12/31/2017





## New event, services highlighted

New health department services and an outdoor relay were among the items presented at the mid-month Dec. 19, county commissioners meeting.

News, PAGE 5A



Wednesday, Jan. 4, 2017

Mostly sunny today with highs in the mid 50s, becoming cloudy later in the week with a chance of snow flurries Thursday and Friday nights. —National Weather Service

## Tourney Tops

The Trojan Varsity Basketball team took the top spot in the Fort Chiswell, Va. tournament over the weekend.

Sports, PAGE 1B



# THE Alleghany News

127<sup>th</sup> YEAR, 21<sup>st</sup> ISSUE

WWW.ALLEGHANYNEWS.COM

## Solar generated electricity available in Alleghany

By BOB BAMBERG  
Staff

Blue Ridge Energy (formerly known as Blue Ridge Electric Membership Corporation) has constructed solar gardens — arrays of solar panels — in four counties it serves, Alleghany, Ashe, Caldwell and Watauga, that will provide electricity for members who opt in for the service. In Alleghany County, the panels are located above the Blue Ridge Energy office at 1889 U.S. 21 South in Sparta.

Each installation is a 100 kW (kilowatt) array consisting of more than 350 ground-mounted

solar panels that will cumulatively power 60 average households. Members have the option of purchasing the power generated by one or more panels on a subscription basis at a rate of \$4.50 per month.

"We expect the panel to generate 36 kW hours of electricity per month on average," said Jon Jacob, an energy solutions manager for the cooperative, in a telephone interview last Friday. That subscription works out to about 12.5 cents per kW hour, compared to 10 cents per kW hour that members currently pay for power. One advantage of subscribing to solar power is that the cost of the power

is fixed at 12.5 cents. "It is fixed for however long you subscribe to the solar garden and we are planning to operate them for 20 years," Jacob said.

Other advantages are that the member does not shoulder the cost of installation and maintenance of rooftop solar. And in many cases rooftop solar may not be an option for a homeowner.

"We've done several studies and only about one home in four is suitable for a solar panel," Jacob said. A home's orientation to the sun, the amount of shade on its roof and whether the condition of the roof can support solar panels all figure into whether rooftop

installation is feasible.

The solar gardens also benefit

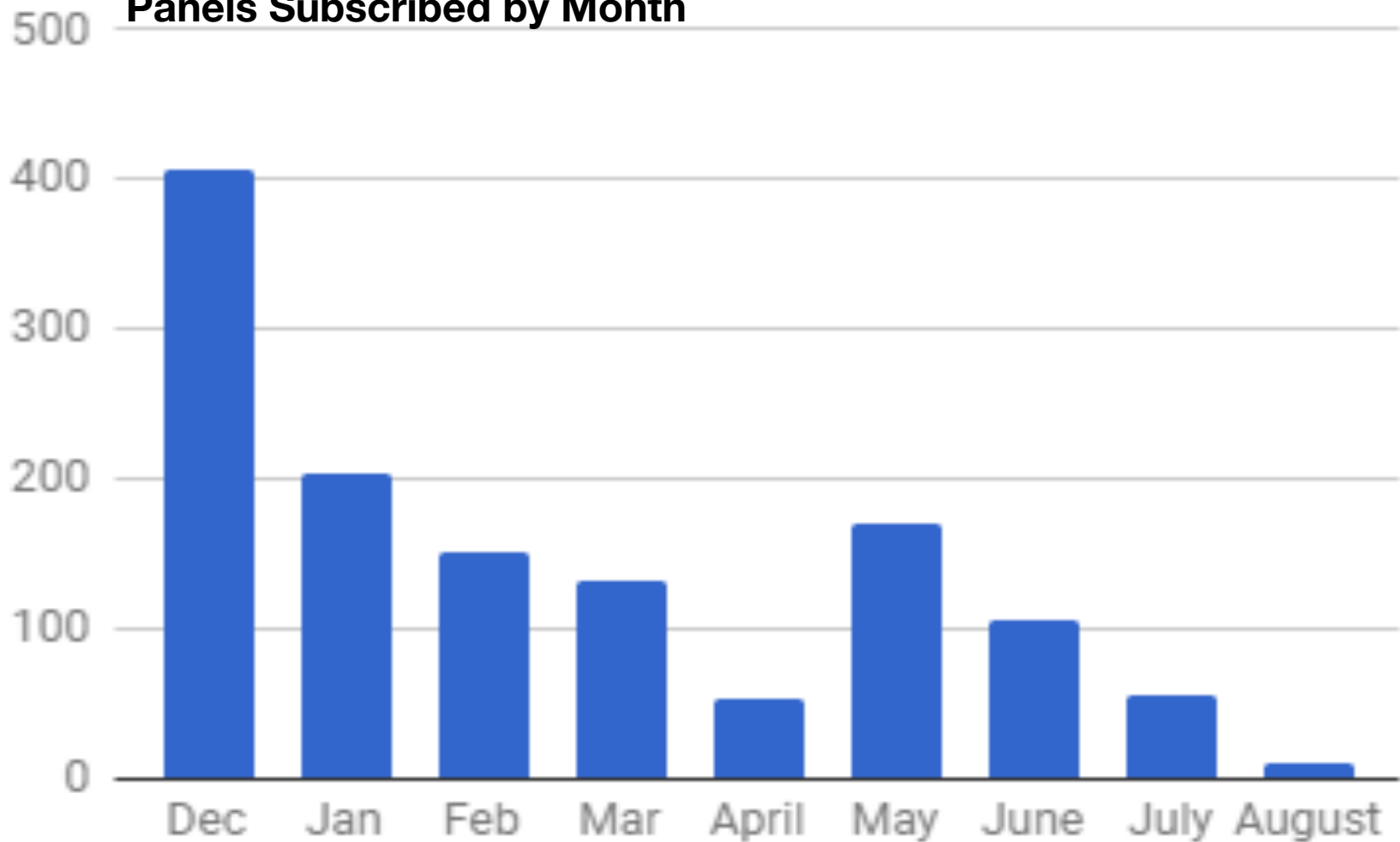
members who don't subscribe be-

See SOLAR, Page 2A



**SOLAR GARDEN**—On the hill above and behind the Blue Ridge Energy office in Sparta sits an array of solar panels that will power homes and businesses in Alleghany County.

## Panels Subscribed by Month



# 88% subscribed

1295 of 1472 panels have been subscribed in 8 months

# 532 members

Average # of panels per subscriber: 2.4

---



# #SoldonSolar

Window clings and thank you notes

Free Community Solar T-Shirt for sharing what members like about the program

Shoot short video telling why they signed up for community solar

Post video to Facebook, Instagram or Twitter with hashtag #SoldonSolar  
Tag @BlueRidgeEnergy



**“If one does not know to which port one is sailing, no wind is favorable.”**

---

- Seneca