

July 5, 2023



Dear North Carolina Utilities Commission Chair and Commissioners:

Blue Ridge Women in Agriculture
PO Box 67
Boone, NC 28607

We are writing to let you know that Blue Ridge Women in Agriculture (BRWIA) support fair net metering in New River Light and Power (NRLP) territory. We understand that NRLP is owned and operated by Appalachian State University (AppState), and thus is owned by the State of North Carolina.

Blue Ridge Women in Agriculture is a non-profit organization, based in Boone, working to build a more sustainable and resilient High Country food system. We do this by creating market channels, providing educational opportunities for producers, and increasing demand for local food. Promoting the self-sufficiency of the High Country community is central to our mission, and we see renewable energy as a central tenet of that mission.

The NRLP docket you are now considering, E-34, Sub 54, includes the first opportunity in well over a decade for the Town of Boone to implement better rooftop solar policies. As you may know, Boone has very few solar roofs, also called “distributed” solar. Generally speaking, distributed solar is any solar, whether residential or commercial, that is located on the distribution grid, and is less than ~1 MW (megawatt). For context, 1 MW is about the size that a WalMart would use. The average residential solar installation in NC is ~7 kW.

NRLP sells electricity to the following customers: the Town of Boone’s buildings, including water treatment plant, the Police Department headquarters, Boone’s administrative buildings, etc.; as well as ~9,000 individual meters in Boone (mostly residences); the Boone downtown district, which includes the BRWIA headquarters; and AppState. Approximately 25-30% of the electricity that NRLP purchases is sold to AppState, while the rest (~75%) is sold to Boone residents and businesses. Thus, Boone’s residents and businesses – including BRWIA -- have an enormous stake in the outcome of this docket. We take our responsibility to our customers and producers seriously, and multiple surveys by NRLP demonstrate that its customers clearly want the opportunity to add rooftop solar (and batteries) to their homes.

We know well that NRLP’s current solar tariff, called “buy-all sell-all,” or “forced sale,” has resulted in very few solar installations in Boone. The reason is that “forced sale” rate design does not allow customers with rooftop solar to use any of the solar electricity generated by the system that the customer paid for. In other words, if a Boone resident spends \$15,000 to \$30,000 to purchase solar to put on their roof, they cannot use any of the electricity generated by that system. What happens to the solar electricity generated? NRLP forces its customers – thus the term “forced sale” – to send that electricity to the grid, and pays the customer-generator with solar ~3-5 cents/kWh. What happens to those kWhs? The laws of physics determine that the electrons are used by the nearest electricity consumer, i.e. a neighbor of the person who has a solar roof. NRLP then sells that solar kWh to that nearby neighbor for the going retail rate, i.e. ~12-13 cents/kWh.

Blue Ridge Women in Agriculture builds an equitable, sustainable High Country local food system by supporting producers and cultivating connections that educate, inspire, and increase the demand for local food.

(828) 386-1537 | www.brwia.org

E-34 SE
OFFICIAL COPY

JUL 05 2023

Why would Boone residents spend \$15,000 to \$30,000 for a system they can't use? Every kWh generated is basically a gift to NRLP. We are hoping that AppState, whose byline is "defining sustainability since 1899," will understand the need for a far different policy, one that allows local, rooftop solar to thrive in our small town.

We would appreciate if NRLP would reconsider its current programs and offer its captive customers, especially low-income and fixed income, as well as non-profits like churches and shelters that serve the neediest among us.

NRLP has done a number of surveys over the years, and over and over, survey respondents have indicated that – like the rest of NC's residents – they overwhelmingly want clean energy, especially solar. Attached is a recent survey by EnergySage that shows that the cost of solar in NC. The relevant numbers are:

- Average cost of installed panels in NC: \$2.93/watt (\$2,930/kW)
- Thus, an average 5 kW solar system will cost \$12,452 - \$16,848
- Including the 30% federal tax rebate (which also covers installation), the total cost to a homeowner (with a tax "appetite") the total system cost for 5 kW is: \$10,841; and for 10 kW, ~\$22,000.

There are additional benefits BRWIA recognizes from rooftop solar, such as:

- Reduced air and water pollution from polluting fossil fuel power plants (see discussion below)
- Local jobs, as the U.S. Department of Energy reports that solar power creates an astounding 79 times more jobs per MWh (megawatt-hour) generated than fossil fuels

It's clear that climate change is getting worse by the week. Unfortunately, NRLP has tied customers into purchasing fossil gas (also called "natural" gas) is used to generate 85% of NRLP's electricity. This is problem for the following reasons:

- Fossil gas is 86 times worse for the climate than carbon dioxide (CO2)
- Over 70% of fossil gas in the U.S. is generated from "fracking", which is known to cause birth defects, contaminate water supplies, cause asthma and explode. The use of fracked gas to generate electricity has increased over 10 times in the past 20 years, from ~4% of NC's total electricity to the current 40%.
- Fossil gas prices are extremely volatile, with enormous price spikes during the past few years, especially during "polar vortex" events.
- The U.S. is exporting ever-greater amounts of fossil gas as LNG (liquefied natural gas), which is even more damaging to the environment than fracked gas sold in the U.S. The reason is that there are many more opportunities for LNG to leak, and the process of producing the gas, shipping it to an LNG terminal, compressing the gas by chilling it to minus 240 degrees Fahrenheit, shipping that gas overseas, and then re-gasifying the LNG, is extremely energy-intensive.
- Fossil gas is a huge accelerant for climate change. As climate scientist Kevin Anderson has stated, "methane is a bridge fuel – to a 4 degrees C hotter world."
- Scientists now estimate that we will breach the 1.5 degree C threshold as soon 2023 (this year) to 2027. After that, it's only a matter of time before global average temperatures rise to 2 degrees C, a number that is viewed with alarm by nearly every climate scientist in the world.

Blue Ridge Women in Agriculture builds an equitable, sustainable High Country local food system by supporting producers and cultivating connections that educate, inspire, and increase the demand for local food.

E-34 sub 54

OFFICIAL COPY

JUL 05 2023

BRWIA requests that the NCUC:

- Require NRLP to provide its customers fair net metering. Thus, we reject NRLP's request for \$6.17/kW/month charge, and request that the monthly fee be a more reasonable \$1.50-\$2.00/kW/month. This would mean that a customer with a 10 kW system would pay \$15-\$20 per month to NRLP for a customer-paid, customer-sited solar system.
- Encourage NRLP to help its customers find and use rebates provided by the Inflation Reduction Act (IRA), and to provide energy efficiency programs that are useful, especially for non-profits and local services that serve the most needy in Boone. There are many examples of good energy efficiency programs in the database provided by NC State's Database of Incentives for Renewable Energy (DSIRE-USA).
- Increase transparency and information provided to customers. Although the photos of the NRLP dam are lovely, the website provides little useful information.

Thank you for your consideration.

If you have any questions, please reach out to Liz Whiteman at Blue Ridge Women in Agriculture: liz@brwia.org.

Sincerely,
Liz Whiteman
Executive Director
Blue Ridge Women in Agriculture

Blue Ridge Women in Agriculture builds an equitable, sustainable High Country local food system by supporting producers and cultivating connections that educate, inspire, and increase the demand for local food.

(828) 386-1537 | www.brwia.org