SHARING SOLAR: A SWEEPING NEW APPROACH

Issue Brief #1: "How does local solar-plus-storage improve resiliency?"

Photo Credit: Josh Bell / Citizen Times

As North Carolina rebuilds after Hurricane Helene, and as scientists redouble their warning of even stronger storms to come, it is more important than ever that NC residents and leaders demand a transition to generating and storing solar power where electricity is being used – on roofs, parking areas and vacant lots close to towns and cities.

Expanding solar-plus-storage (SPS) can greatly improve the ability of our grid to withstand and recover from storms, equipment failures and acts of malice. Greater resilience is one reason NC WARN is proposing *Sharing Solar*, a fresh approach that can quickly spread local SPS across North Carolina.

Reduces Reliance on Vulnerable Power Lines: High voltage power lines and other traditional infrastructure are particularly vulnerable to high winds and flooding. Hurricane Helene damaged and destroyed thousands of power poles and towers, along with substations, causing more than 2 million Duke Energy customers to lose power in the Carolinas.

But in Hot Springs, NC, a microgrid was able to restore continuous power to the town with only solar and batteries, despite Hot Springs' substation being washed away.

Keeps Emergency Facilities Online: Distributed energy projects like local solar and on-site batteries can reduce reliance on towers and poles, reduce the need to move electricity across the grid and keep emergency facilities operational during outages.

Under NC WARN's Sharing Solar proposal, critical facilities like schools, fire/EMS facilities, hospitals, local government buildings and others deemed most vulnerable to climate challenges will be prioritized for SPS installations.

Using Solar During Outages: Current solar owners with batteries can continue to use their systems during outages through "solar islanding," which temporarily disconnects them from the larger grid. Solar owners without batteries would be able to island with the installation of a transfer switch, but doing so is prohibited by Duke Energy for controversial reasons. Solar islanding can help limit the number of customers affected by an outage and speed up response and recovery.

Reduces Strain on Grid: Local solar also reduces strain on the grid during peak demand, helping to prevent blackouts, avoiding use and construction of fracked gas-fired plants and making the system more robust overall.

Sharing Solar could be implemented quickly & easily... Why don't we at least give it a try?

OTHER KEY BENEFITS:

- Cost sharing for clean energy across all customers
- Reduced need for fracked gas plants and associated rate hikes
- Helps phase out fossil fuels quickly
- Solar is cheaper than other forms of power
- Builds on proven models working in other states
- Increased access to solar for individuals, businesses and communities
- Duke Energy can still profit while avoiding high risk nuclear power
- Takes advantage of unused rooftop, parking lots and other space
- Supports our solar industry
- Creates jobs in small towns and cities across the state

Read more at
www.ncwarn.org/our-work/sharing-solar/

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