NC GreenPower Annual Report to the North Carolina Utilities Commission

Docket No. E-100 Sub 90

November 20, 2023

Overview

In the order issued May 31, 2022, the North Carolina Utilities Commission requested that a report be submitted annually on or before December 1 describing NC GreenPower's ongoing and planned programs and services. The report shall include performance targets, goals and metrics being used to monitor financial and mission impacts for each program and service. The following is a summary of 2023 activities and a look at initiatives currently under development.

2023 Activities

NC GreenPower continued administering its three main programs: renewable energy certificates (RECs), carbon offsets (COs) and Solar+ Schools. Utilizing monthly reports from participating electric utilities, NC GreenPower tracked donors who supported these programs as well as customers who purchased RECs and COs.

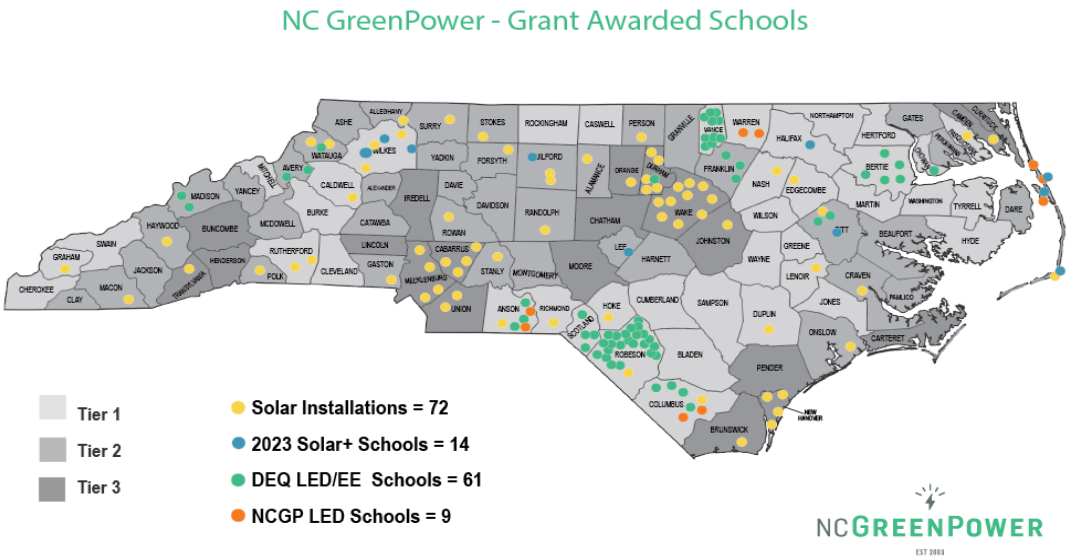
In the September financial report, net contributions for RECs and COs were ahead of budget by $21,000 and $55,000, respectively, due to increases in donations and purchases. Solar+ Schools' net contribution was behind budget by $157,000 due to the timing of projects, but it should catch up by year's end. As directed by the NC GreenPower board of directors, reserve funding will be utilized to support Solar+ Schools and other program expenses.

This year's Solar+ Schools goal was to provide grants for educational solar arrays and STEM curriculum to 15 schools. To date, 12 schools have accepted the grant and two are in the approval process, bringing the total to 14 schools. All schools are in Tier 1 or Tier 2 counties, and they represent a mix of elementary, middle, high and full K-12 schools. In the 2023 program year, Solar+ Schools worked in two new counties and impacted over 5,600 additional students and teachers.

While past Solar+ Schools grant awardees received a 5-kilowatt (kW) solar array, the revised 2023 program offers a 20-kW array, which costs approximately $52,000 for a roof-mounted system and $75,000 for a ground-mounted system. Schools will benefit from the larger array by realizing ~15-20% savings on electrical costs annually. This year, all costs associated with the solar installations and STEM curriculum are covered by NC GreenPower. For the 2024 program year, NC GreenPower plans to award these educational solar packages to nine schools.

Program Impacts to Date

The map below shows the impacts of Solar+ Schools since its inception in 2015, along with NC GreenPower's school LED lighting installations. Overall, 86 schools in 46 counties have been awarded solar grants and STEM curriculum, benefiting approximately 60,000 students.



New Initiatives

In cooperation with the National Energy Education Development Project (NEED), NC GreenPower intends to roll out in early 2024 a STEM curriculum program aimed at public and private K-12 North Carolina schools. The goal is to recruit 30 schools to participate in a yearlong initiative that will provide teacher training on topics such as the science of energy, clean energy and workforce development. Sixty teachers will participate and share their knowledge in the classroom with more than 6,000 students. NC GreenPower plans to continue this effort on a yearly basis, training teachers with the potential to reach tens of thousands of students across the state.

Summary

NC GreenPower's current focus remains helping North Carolina's K-12 schools. In 2023, this help has been realized primarily by providing support for solar installations and clean energy education for students, but other opportunities being explored include further assistance with energy efficiency upgrades and planning for electric vehicle charging infrastructure.