Consumer Information from your Public Power Provider



Solar Overview

North Carolina is a leader when it comes to new solar development. With projects ranging from 1kW residential rooftop systems to 10MW solar farms, the detail surrounding these projects can vary widely. As such, NCMPA1 and your local Public Power Provider are working together to provide a smooth process for completing your solar PV project.

With a Buy All/Sell All approach, we encourage and promote solar PV projects that connect safely to our grid while also ensuring a fair cost distribution among all rate payers.

General Information by Project Size

The appropriate steps for any solar PV project will vary depending upon size and projected system impact. The following guidelines are offered to help with your project. However, it is suggested that you **ALWAYS** contact your local utility **FIRST**.

Inverter-based projects less than or equal to 10kW may follow these steps:

- Review your utility's Interconnection Standards for all generators.
- Complete Interconnection Application for 10kW Certified Inverter process.
- Upon acceptance by your local utility, Interconnection Agreement is signed by both parties.
- Make sure all local permits are properly obtained for related work.
- Power Purchase Agreement form will be signed with fixed or variable rate agreed upon and payment of facility equipment.
- Work with installer to ensure that your generator is properly registered and all appropriate forms have been completed.
- Once project is complete, Certificate of Completion and Acceptance is issued by local utility.





Some PV generators can impact the local utility grid. Therefore, closer review is often needed to determine system impact. Projects between 10kW and 2MW (or non inverter-based) will follow these steps:

- Review your utility's Interconnection Standards for all generators.
- Submit Interconnection Request.
- If local utility accepts project, Interconnection Agreement is signed by both parties.
- The local utility determines that further study is needed, appropriate deposits are paid by owner and study process begins.
- Obtain all local permits for project work.
- Work with the installer to ensure that the generator is properly registered. If renewable energy credit sale is intended, owners may request a quote from ElectriCities.
- Both parties sign Power Purchase Agreement.
- Upon completion, utility issues Certificate of Completion and Acceptance.

Projects larger than 2MW will follow these steps:

• Projects of this size **MUST** follow the more detailed Study Process. Contact with a city representative is suggested.

General Notes for All Systems

Regardless of size, system may be required to pass studies including but not limited to system feasibility and system impact. The cost of these studies and any subsequent utility system upgrades will be the responsibility of the solar PV system owner.

The system owner will be responsible for all work and associated equipment purchases. Typical expenses will include a second meter, permit costs and any work related to utility system interconnection. Interconnection Agreements should be executed before construction begins.

System Payback Example for a 5kW Rooftop System

Incentives currently drive most of the benefit within the North Carolina solar landscape. Today there exists a federal tax credit of 30%. In addition, NCMPA1 offers an avoided cost buy back with rates determined by customer election of a variable or longer term fixed schedule. As long as these assumptions remain in play, a residential 5kW rooftop installation with initial investment of \$12,500 might expect a payback of approximately 15 years. Included in this scenario is an estimated annual utility credit of \$315. A more detailed scenario can be viewed on our website (www. electricities.com). Since tax credits form a significant portion of the calculation, consultation with your tax advisor is recommended.





North Carolina Municipal Power Agency Number 1

NCMPA1 consists of 19 cities and towns in piedmont and western North Carolina, including some of the areas of the largest economic growth. NCMPA1 Participants serve approximately 164,000 customers.