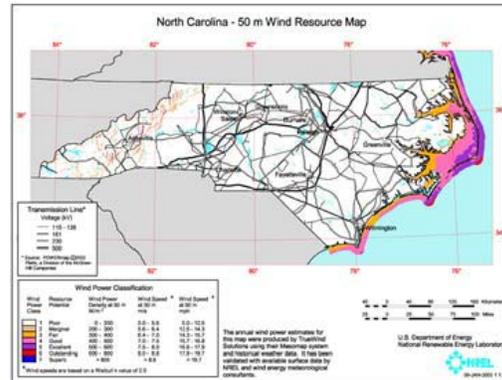


NORTH CAROLINA

Financial Incentives

Renewable Energy Tax Credits – Corporate and Personal

Summary: North Carolina's renewable energy tax credits were revised in 1999. The various older statutes were repealed, and a unified statute that addresses nearly all renewables was enacted. The revised statute provides for an expanded tax credit of 35% of the cost of renewable energy property constructed, purchased or leased by a taxpayer and placed into service in North Carolina during the taxable year. The new tax credits became effective January 1, 2000.



The credit is subject to various ceilings depending on sector and the type of renewable energy system. Credit limits for the various technologies and sectors are as follows:

- A maximum of \$10,500 for residential photovoltaic (solar-electric) systems;
- A maximum of \$3,500 for residential passive and active solar space heating systems;
- A maximum of \$1,400 for solar water heating systems; and
- A maximum of \$2.5 million for all solar, wind, hydro and biomass applications on commercial and industrial facilities, including photovoltaic, daylighting, solar hot water and space heating technologies.

Under North Carolina's tax code, the allowable credit may not exceed 50% of a taxpayer's liability for the year, reduced by the sum of all other credits. Single-family homeowners who purchase and install a qualifying renewable energy system must take the maximum credit amount allowable for the tax year in which the system is installed. If the credit is not used entirely during the first year, the remaining amount may be carried over for the next five years. For all other taxpayers, the credit is taken in five equal installments beginning with the year in which the property is placed in service. If the credit is not used entirely during these five years, the remaining amount may be carried over for the next five years. The credit can be taken against franchise tax, income tax or, if the taxpayer is an insurance company, against the gross premiums tax.

SB 3 of 2007 amended North Carolina's renewable energy tax credit statute to allow a taxpayer who donates money to a tax-exempt nonprofit to help fund a renewable energy project to claim a tax credit. The donor may claim a share of the credit -- proportional to the project costs donated -- that the nonprofit could claim if the organization were subject to tax. HB 2436 of 2008 applied this same mechanism to donations made to units of state and local governments.

Energy Improvement Loan Program

Summary: The Energy Improvement Loan Program (EILP) is available to North Carolina businesses, local governments, public schools and nonprofit organizations for projects that include energy efficiency improvements and renewable energy systems. Loans with an

interest rate of 1% are available for certain renewable energy and energy recycling projects. Eligible renewable energy projects generally include solar, wind, small hydro (less than 20 megawatts) and biomass. A rate of 3% is available for projects that demonstrate energy efficiency, energy cost-savings or reduced energy demand.

In order to qualify for an EILP low-interest loan, a project must (1) be located in North Carolina; (2) demonstrate energy efficiency, use of renewable-energy resources, energy cost savings or reduced energy demand; (3) use existing, reliable, commercially-available technologies; (4) meet federal and state air and water quality standards; and (5) be able to recover capital costs within the loan's maximum term of 10 years through energy cost savings.

Rules, Regulations & Policies

Interconnection

Summary: The N.C. Utilities Commission (NCUC) adopted comprehensive interconnection standards for distributed generation in June 2008. The NCUC standards, which are similar to the Federal Energy Regulatory Commission's (FERC) interconnection standards for small generators, govern interconnection to the distribution systems of the state's three investor-owned utilities: Progress Energy, Duke Energy and Dominion North Carolina Power. The standards apply to all state-jurisdictional interconnections (including interconnection of three-phase generators) regardless of the capacity of the generator, the voltage level of the interconnection, or whether the customer intends to offset electricity consumption or sell electricity.

The NCUC standards, like the FERC standards, use a three-tiered approach to simplify the interconnection process:

- Systems up to 10 Kilowatts (kW) must follow the 10kW Inverter Process of simplified interconnection;
- Systems larger than 10kW and up to two megawatts (MW) must follow the fast track process; and
- Systems greater than two MW must follow the study process.

Utilities may not require residential customers to carry liability insurance beyond the amount required by a standard homeowner's policy (\$100,000 minimum), but non-residential generators are required to carry comprehensive general liability insurance (\$300,000 minimum). Customers that meet certain eligibility requirements are allowed to self-insure. Generators are responsible only for the costs of upgrades and improvements directly associated with a system's interconnection, but these costs may be determined by utilities.

The NCUC established a fee structure for interconnection applications: \$100 for generators up to 20 kW; \$250 for generators larger than 20 kW but not larger than 100 kW; and \$500 for generators larger than 100 kW but not larger than two megawatts (MW). The FERC fee structure applies to the interconnection of systems over 2 MW.

The NCUC has ruled that renewable-energy credits (RECs) generally remain the property of the system owner. However, for net-metered systems, any net excess generation (NEG) and the RECs associated with NEG are granted to the utility once annually.

Legislation enacted by North Carolina in August 2007 required the NCUC to establish interconnection standards for distributed generation systems up to of 10 MW in capacity. The law stated that the commission “shall adopt, if appropriate, federal interconnection standards.” This law also established North Carolina’s Renewable Energy and Energy Efficiency Portfolio Standard (REPS).

Interconnection

Summary: In October 2005, the North Carolina Utilities Commission (NCUC) adopted an order requiring the state's three investor-owned utilities -- Progress Energy, Duke Energy and Dominion North Carolina Power -- to make net metering available to customers that own and operate systems that generate electricity using photovoltaics (solar-electric energy), wind or biomass resources. Micro-hydro systems became eligible for net metering under terms of an NCUC order adopted in July 2006. Systems must be interconnected and operated in parallel with the utility's distribution system.

The maximum capacity of net-metered residential systems is 20 kilowatts (kW); the maximum capacity of net-metered nonresidential systems is 100 kW. Net metering is available on a first-come, first-served basis in conjunction with the utility's interconnection standards, up to an aggregate limit of 0.2% of the utility's North Carolina jurisdictional retail peak load for the previous year. Customers are required to switch to a time-of-use tariff in order to net meter. These tariffs could involve additional charges that do not apply to customers that do not take service under a time-of-use tariff. In general, utilities charge monthly fees for all interconnected systems (including small renewable-energy systems). The NCUC's July 2006 order extended net metering to eligible renewable-energy systems with battery storage.

In its July 2006 order, the NCUC clarified that net-metered customers' on-peak generation (under the time-of-use tariff) may be used to offset off-peak consumption, but not vice versa.

Net excess generation (NEG) is credited to the customer's next bill at the utility's retail rate, and then granted to the utility (annually) at the beginning of each summer season. Any renewable-energy credits (RECs) associated with NEG are granted to the utility when the NEG balance is zeroed out. This provision is designed to limit the size of individual facilities to match on-site power needs, according to the NCUC. Significantly, customer-generators who choose to net meter are not permitted to sell electricity under the NC GreenPower Program.

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