



YOUR UTILITY RATE SPECIALISTS
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POWER NOTES - DUKE ENERGY NC EDITION

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SOLAR ENERGY TAX CREDITS EXTENDED

The U.S. Congress just extended the Investment Tax Credit (ITC) for solar energy through 2022.

Between 2016 and 2019, the ITC on solar energy installations is 30%. That means if you spend \$30,000 on a solar energy installation, the federal government will give you a \$9,000 credit towards your tax bill for the year. If you don't owe any taxes, they will write you a check for your credit.

Between 2020 and 2022, the credits will gradually decline to 10%.

SOLAR PHOTOVOLTAICS VS. SOLAR HOT WATER

Solar photovoltaics (PV) involves using solar panels to directly generate electricity from the sun's rays. PV is the most common type of solar energy today and is the focus of this newsletter.

Solar hot water involves using solar panels to heat water. These types of systems were common in the 1970's, but are not seen very often today. They are limited to facilities that need large quantities of hot water like laundromats, car washes, hotels, spas and some industrial facilities.

DUKE ENERGY'S SCG RIDER: SMALL CUSTOMER GENERATOR RIDER

This rider provides payments to both residential and non-residential customers who generate electricity and sell it to Duke Energy. The electricity must be generated from solar, wind or other renewable energy sources.

The electricity generated may be used to offset electricity purchases that would have otherwise been made by the customer. During those times, the customer is effectively receiving the same amount for the energy he generates as he is paying Duke for the energy he purchases.

When the customer generates more energy than used within the facility, the surplus energy will be fed back into the Duke Energy system. Duke Energy will pay the customer for that energy at rates that are described in their Schedule PP – Purchased Power. Those rates are favorable and allow the customer to sign up to lock in prices for up to 15 years.

Used in conjunction with the investment tax credits previously described, Rider SCG can make solar power a viable and economically attractive option for many customers. For additional details, go to the following links:

<https://www.duke-energy.com/pdfs/NCRiderSCG.pdf>

<https://www.duke-energy.com/pdfs/NCSchedulePP.pdf>

UMS ACCEPTS CREDIT CARD PAYMENTS

To pay your UMS bill by credit card, please contact Mary Mooney at (888)867-3230 ext. 109.



SOLAR ENERGY INSTALLATIONS

The two most common ways to install solar panels is to mount them on the roof of a building or put them in an open field.

Rooftop installations tend to be somewhat smaller and may be more costly to install. However, they have the advantage of not taking up additional land.



Many field based installations are relatively large, covering several acres of land. These are often funded by companies that specialize in installing solar farms in many locations.



POWER LINES NECESSARY FOR SOLAR ENERGY

Duke Energy must have power lines on your property with adequate capacity to receive your solar energy.

For most rooftop installations that is not a problem because Duke Energy already has power lines on the property to serve the building.

For field based installations, availability of adequate power lines can be a problem. Always verify the availability of adequately sized power lines before proceeding with a solar farm. The cost of extending power lines to the property can be quite significant and can make the overall project uneconomical.

IS SOLAR ENERGY COST-EFFECTIVE?

By itself, solar energy is not cost effective compared to other sources of electricity. However, when you include the effects of the Investment Tax Credit and the incentives described above, solar energy is very cost effective in many cases.

It is often a long-term investment that provides a competitive return on investment for many years.

IS SOLAR ENERGY FOR YOU?

If you have a large unshaded flat roof or a southern-facing roof and you are willing to make a significant capital investment, solar energy might be a good alternative for you.

If you have an unshaded lot that you do not need for other purposes and are willing to invest the capital, you might be a good candidate for a solar farm.

LEASE YOUR ROOF OR LAND FOR SOLAR ENERGY

There are companies that will lease your roof or land to install their solar panel equipment.

If you want to support solar power, but you don't have the capital to buy and install the panels on your own, may want to use this approach.

You can help the environment and earn money from your roof or land.

Questions?

Contact Brian Coughlan at (910) 793-6232 ext. 102. I will be glad to talk with you.

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