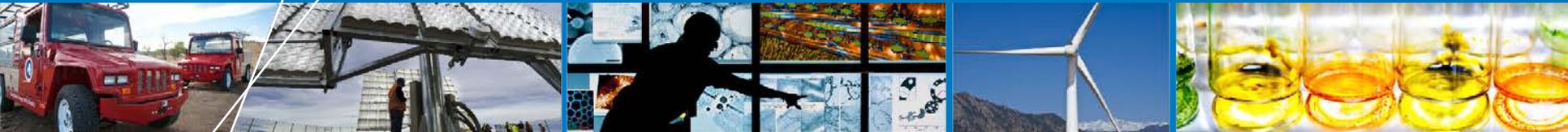


**Thank you for joining the
Green Power Network webinar,**



**Encouraging Solar Development
through Green Energy Tariffs
for Large Utility Customers**

September 18, 2014

The webinar will begin shortly.

Housekeeping

- Participants are joined in listen-only mode.
- Use the Q&A panel to ask questions during the webinar. We will hold all questions until after both speakers have presented.
- This webinar is being recorded. The slides will be posted to:
<http://apps3.eere.energy.gov/greenpower/events/archive.shtml>.

Presenters

**Autumn F. Proudlove,
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**Jim Kennerly,
Senior Policy Analyst,
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Encouraging Solar PV Development Through Renewable Energy Tariffs for Large Utility Customers

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Policy Analyst

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Formerly the NC Solar Center

Agenda

- About the NC Clean Energy Technology Center & the SunShot Solar Outreach Partnership
- What are Renewable Energy Tariffs?
- Benefits of Renewable Energy Tariffs
- Characteristics of Renewable Energy Tariffs
- Case Studies: Duke Energy Carolinas & Dominion Virginia Power
- Key Considerations and Emerging Practices
- Questions

About the NC Clean Energy Technology Center

- Formerly known as the NC Solar Center
- Public service center in NC State University's College of Engineering
- Mission is to advance a sustainable energy economy by providing education, demonstration, and support for clean energy technologies, practices, and policies
- Work on several U.S. DOE-funded projects

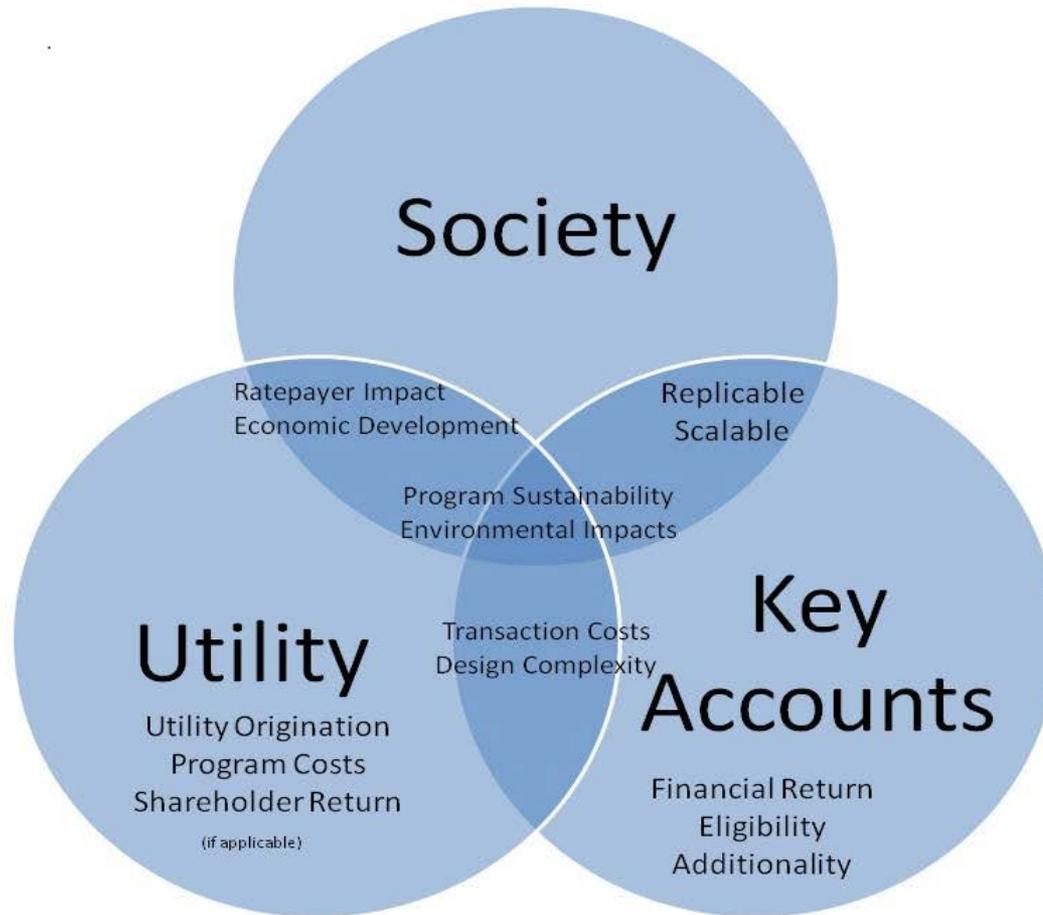
About the SunShot Solar Outreach Partnership

- Part of the U.S. DOE's SunShot Initiative, aiming to make solar cost-competitive with other forms of energy by 2020
- Helps accelerate solar energy adoption at the local level by providing education and technical assistance to local governments
- Focus on soft cost reduction
- NCCETC, SEPA, The Solar Foundation, Meister Consultants Group, IREC, ICLEI, ICMA, NARC, APA

What are Renewable Energy Tariffs?

- Special rate option offered by utilities to their largest revenue-generating customers (called “key accounts”), who are also often the highest energy users
- Customers pay a premium for renewable energy rather than the utility’s standard power mix
- Rates of non-participating customers are not impacted
- Alternative to customer-sited generation and 3rd party power purchase agreements (PPAs)

Benefits of Renewable Energy Tariffs



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Image Credit: Solar Electric Power Association. *Renewable Energy Options for Key Account Customers*. 2014.

Benefits of Renewable Energy Tariffs

Customers & Public:

- Local Government & Economic Development Benefits
- Additionality & Environmental Improvement
- Minimized Ratepayer Impact
- Expanded Access to Renewable Energy

Utilities:

- Economies of Scale & Optimization of Avoided Cost Benefits
- Customer Satisfaction & Retention

Solar PV Technology:

- Reduced Financing Costs
- Reduced Customer Acquisition Costs



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Characteristics of Renewable Energy Tariffs

- Definition of Renewable Energy
- Eligibility Requirements
- Customer Choice of Resource
- Additionality
- REC Treatment
- Aggregate Supply Caps
- Pricing Approach
- Contract Terms
- Reporting Requirements

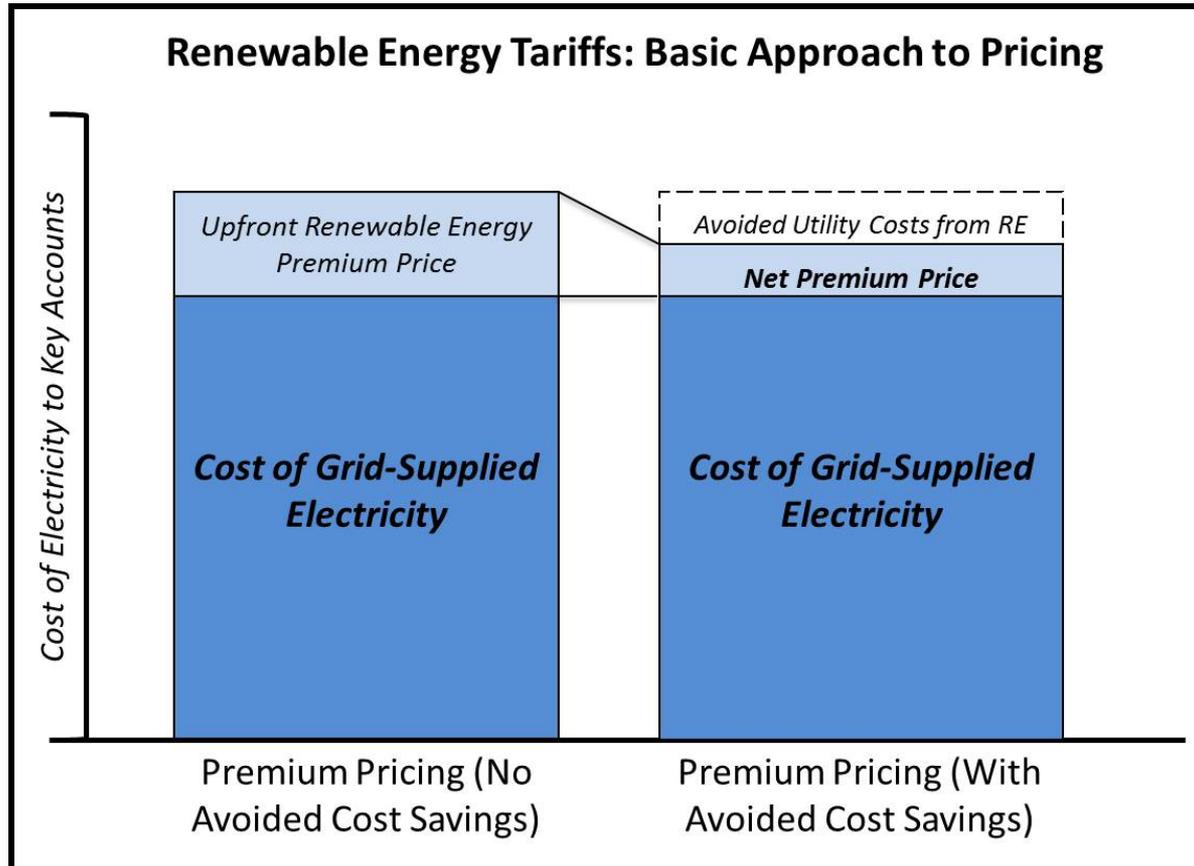


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Pricing of Renewable Energy Tariffs



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Case Study: Duke Energy Carolinas Green Source Rider

- In 2014, Duke Energy Carolinas began offering its pilot Green Source Rider (“Rider GS”)
- Effort was driven in large part by Google
- Customers agree to pay (in addition to their original rate schedule):
 - the full cost of the renewable energy procured/produced,
 - a monthly \$500 administrative fee, and
 - 0.02 ¢/kWh for procured/produced renewable energy *acquired* through the Rider GS agreement
- Program allows customers to receive bill credits based on avoided energy and capacity rate, in ¢/kWh, from monthly *actual* renewable energy procured/produced

Case Study: Dominion Virginia Power Renewable Energy Supply Service Tariff

- In 2014, Dominion Virginia Power began offering its Renewable Energy Supply Service Tariff (“Rider GR”)
- Plan to source the renewable energy from third-party developers within the PJM transmission territory
- Customers are able to specify both type of resource and the generator they would like to purchase the power from
- Utility acts to “sleeve contracts” between the energy provider and customer, purchasing renewable energy from third-party providers under a renewable energy purchase and sales agreement (REPSA)

Key Considerations and Emerging Practices

- Location & Siting of Generation
- Pricing Approach: Eliminating Rate Impacts, Benefitting from Solar PV Cost Declines
- Flexibility, Customer Input, & Education



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Questions?

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