Electric Company Green Tariff Programs Update

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Executive Summary

Over the past year, an increasing number of electric companies have developed regulated, subscription-based renewable energy offerings (often called “green tariffs”), which provide customers streamlined, low-risk access to clean energy solutions that support their sustainability goals.1 This brief provides updates on the growing role and importance of green tariffs to meet corporate customer needs; recently developed green tariffs; and the design attributes of green tariffs that are important to corporate customers. Key highlights include:

- So far in 2020, green tariffs have accounted for 37 percent of all corporate renewable energy procured, which is a significantly higher percentage than in prior years.
- Since January 2020, six green tariff programs have been filed, expanded, or launched in Florida, Georgia, New Mexico, Virginia, and Wyoming.
- As of August 2020, 36 electric company green tariff programs were approved or pending, offering more than 10,200 megawatts (MW) of carbon-free energy in 21 states. Of this amount, 8,600 MW were approved.
- However, green tariffs only account for 4 percent of total U.S. renewable energy capacity today and have room to grow. Other corporate deals (i.e., non-regulated) account for 11 percent of total U.S. renewable energy capacity.
- Corporate customers support large scale, subscription-based programs that offer easy-to-understand, transparent, and flexible contract terms. One good example is Florida Power & Light’s SolarTogether program, which was approved by the Florida Public Service Commission (PSC) in March 2020.
- The continued evolution of green tariffs includes solutions to meet customer demand for time-matched and location-tied use of carbon-free energy that matches the customer’s consumption. For example, NV Energy recently filed a plan with the Nevada PSC to procure 350 MW of solar and approximately 280 MW of battery storage to supply clean energy that matches the load profile of a nearby data center. A recent example of

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1 A green tariff is a price structure, or an electricity rate, offered by a local electric company and approved by a state's Public Utility Commission that allows eligible customers to source up to 100 percent of their electricity consumption from carbon-free (e.g., renewable or renewable-plus) resources. Through a green tariff, customers can purchase both the energy from a renewable-plus energy project like a community solar facility and the associated renewable energy certificates. See World Resources Institute. https://www.wri.org/our-work/project/clean-energy/utility-green-tariffs#:~:text=A%20green%20tariff%20is%20a,their%20electricity%20from%20renewable%20resources
customer demand for time-matched clean energy is Google’s September announcement of its plan to achieve 24/7 carbon-free energy by 2030.

**Customer demand for electric company clean energy solutions is increasing**

Increased demand for renewable energy by corporate customers is not a new trend. In fact, nearly 38 gigawatts (GW) of renewable energy have been procured by these customers since 2012, with one-fourth (10 GW) procured in 2019 alone. Of the 38 GW procured, approved green tariff programs represented 8,600 MW or 24 percent of total procurements. The new development is that electric company green tariffs as a percentage of total renewable energy procurements increased significantly in 2020. So far in 2020, green tariffs have accounted for nearly 37 percent of all corporate renewable energy deals, representing 2,462 of 6,722 MW (see Figure 1).

**Figure 1: Corporate Renewable Energy Deals Including Both Green Tariffs and Other Renewable Energy Deals**

<table>
<thead>
<tr>
<th>Year</th>
<th>Other Corporate RE Deals</th>
<th>Green Tariffs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>50</td>
<td>2,600</td>
</tr>
<tr>
<td>2013</td>
<td>320</td>
<td>1,800</td>
</tr>
<tr>
<td>2014</td>
<td>1,200</td>
<td>400</td>
</tr>
<tr>
<td>2015</td>
<td>3,120</td>
<td>50</td>
</tr>
<tr>
<td>2016</td>
<td>1,950</td>
<td>15</td>
</tr>
<tr>
<td>2017</td>
<td>3,163</td>
<td>23</td>
</tr>
<tr>
<td>2018</td>
<td>7,343</td>
<td>78</td>
</tr>
<tr>
<td>2019</td>
<td>10,182</td>
<td>48</td>
</tr>
<tr>
<td>2020 YTD</td>
<td>6,722</td>
<td>2,462</td>
</tr>
</tbody>
</table>

*Source: 1. REBA. Corporate Renewable Deals. [https://rebuyers.org/deal-tracker/](https://rebuyers.org/deal-tracker/)

It is encouraging to see the growth in green tariff offerings, as well as increased engagement by corporate customers with electric companies during the program design phase and positive regulatory actions in 21 states. Still, the fact remains that these programs are a relatively small share of wind and solar energy capacity in the U.S. For perspective, green tariff program capacity (8.6 GW approved to date) only accounts for four percent of all solar and wind capacity available in the U.S. In fact, all corporate renewable energy deals, including green tariffs (38
GW), account for only approximately 15 percent of all solar and wind capacity in the U.S. (see Figure 2).

**Figure 2: U.S. Renewable Capacity by Source in 2019 (Percent of Renewable Energy Capacity)**

The economic realities and continued uncertainties of the COVID-19 pandemic are impacting corporate demand for renewable energy. A mid-year 2020 analysis from Bloomberg New Energy Finance found corporate contracts for wind and solar energy are roughly 30 percent lower than 2019 levels. As hesitancy by corporate customers to sign long-term renewable energy contracts [e.g., power purchase agreements (PPAs) and virtual power purchase agreements (VPPAs)] increases, electric company green tariff programs have an opportunity to fill in this void. Green tariff programs can help corporate customers achieve their carbon reduction goals while avoiding the contract risks associated with a PPA.

Source: 1. REBA. Corporate Renewable Deals. [https://rebuyers.org/deal-tracker/](https://rebuyers.org/deal-tracker/)

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In 2020, electric companies continued to develop green tariffs

Year to date, six programs, totaling 3.3 GW, have been filed, expanded, or launched in Florida, Georgia, Kentucky, New Mexico, Virginia, and Wyoming – bringing the total number of electric company programs approved or pending to 36 in 21 states.

**SolarTogether – Florida Power & Light Company: Launched March 2020**

- In March 2020, the Florida Public Service Commission (PSC) approved Florida Power & Light Company’s (FPL’s) SolarTogether program, a 1,490 MW community solar resource comprised of 20 solar facilities. SolarTogether offers contracting flexibility, bill savings over time, and convenience to participants with no upfront costs. Subscriptions are designated to the account holder (not the location) and may be transferred within FPL’s service territory under the account holder’s name. Participants are able to end or reduce their subscription at any time without penalty after the first billing cycle and are not tied to a long-term contract. Of the 1,490 MW, 75 percent is reserved for commercial and industrial customers and was fully subscribed at program launch due to a successful pre-registration campaign. Twenty-six customers that operate in FPL’s service territory submitted letters supporting the program to the Florida PSC. While the 25 percent of program capacity allocated for residential customers is not fully subscribed yet, the capacity subscribed to date from residential customers enrolled already exceeds the cumulative capacity from residential net energy metered customers over the past 10 years.

**Clean Energy Connection – Duke Energy Florida: Filed July 2020 (pending)**

- On July 1, 2020, Duke Energy Florida filed the Clean Energy Connection program with the Florida PSC. Depending on commission approval and construction timelines, Duke Energy anticipates the program to be available to customers in 2022 with approximately 750 MW allocated as follows: 487 MW to large commercial and industrial customers; 75 MW to local government customers; 161 MW to residential and small business customers; and 26 MW to low-income customers. Similar to the design of FPL’s SolarTogether program, subscribers receive monthly bill credits equal to the value of solar energy produced by their share in the program and see payback within seven years.

**Customer Renewable Supply Procurement Program – Georgia Power: Launched April 2020**

- On April 22, 2020, Georgia Power launched the first of two application periods for its Customer Renewable Supply Procurement (CRSP) program recently approved by the Georgia PSC. The second application period will begin in the second quarter of 2021. The CRSP program was the result of a stipulated IRP agreement in July 2019 and is procuring 1,000 MW of renewable energy designated for renewable subscriptions by commercial and industrial customers. Of the 1,000 MW, 600 MW (300 MW in 2020 and 300 MW in 2021) are available for existing customers with aggregated load of at least 3 MW, and the remaining 400 MW are available for existing or new customers (on a first
come first served basis) with new load greater than 15 MW. Participating customers purchase a monthly subscription and receive hourly credits on their bill based on the actual production of the portfolio of renewable facilities procured to supply the program.

**Solar Direct – PNM: Approved March 2020**

- On March 25, 2020, the New Mexico Public Regulation Commission approved PNM’s Solar Direct program, a 50 MW solar subscription resource for government, university, and large corporate customers with more than 2.5 MW of aggregate load. These customers must commit to take the requested capacity for 15 years. The fixed PPA price of electricity over the term of the subscription will protect these customers from fluctuating fuel costs, and customers will receive fuel and variable O&M credits on their bills based on their subscription levels. In addition, the electricity generated from the solar facility is not subject to the renewable energy rider.

**Green Tariff Renewable Power Agreement – Old Dominion Power Company: Approved April 2020**

- On April 6, 2020, the Virginia State Corporation Commission approved Old Dominion Power Company to adjust its electric base rates. In this approval, customers enrolled in the Time-Of-Day Primary Service and Retail Transmission Service rate schedules with a minimum billing load of 10 MW are eligible to contract renewable energy up to 25 MW. Customers that enter into a Green Tariff Renewable Power Agreement pay the standard firm service rate, plus applicable riders and adjustment clauses, in addition to the charges and energy credits set in the agreement. Program costs reflect the renewable energy resource and include transmission costs to deliver the energy.

**Renewable Ready – Black Hills Wyoming – Expansion Approved December 2019**

- In December 2019, the Wyoming Public Service Commission approved Black Hills’ filing to increase the capacity of its Renewable Ready program by 12.5 MW to a total of 52.5 MW due to high customer demand. The wind project to support the Renewable Ready program is now under construction and will be completed and placed into service by the end of 2020. Large customers and governmental agencies with more than 300 megawatt-hours aggregated annually can subscribe to a fixed tariff for 5- to 25-year contract lengths.

### Key attributes of recently developed green tariffs

Green tariff program design, associated customer eligibility, and contract terms and conditions vary depending on regional resources, customer preferences, and regulatory environments. Recent trends in green tariff program design and execution show a shift toward subscription-based programs, shorter-contract length, much more flexible contract terms, and expanded program eligibility to a broader range of customers. Obtaining input from corporate customers early and often has helped limit program design delays, avoid customer confusion on program terms, and gain regulatory approval. In fact, corporate customer support for green tariff programs is a key ingredient for regulatory approval.
Subscription-based programs have seen recent success

In 2020, subscription-based programs became increasingly popular, as FPL and Georgia Power launched the two largest green tariff programs (1,490 and 1,000 MW, respectively), with FPL’s corporate customer allocation now fully subscribed, which is a true demonstration of customer satisfaction. Generally, green tariff programs either set a tariff structure with a fixed subscription-based rate or a variable market-based rate. But some offer a sleeved PPA structure in which the electric company administers a PPA negotiated between the customer and a third-party developer. Some programs offer multiple options to customers: a subscription-based or market rate or a sleeved PPA.

Program eligibility is expanding to a broader range of customers

Customer eligibility has evolved in three ways:

- Customers with existing load are eligible to participate in addition to customers with new load.
- Programs such as FPL’s SolarTogether are reserving a share of program capacity (25 percent) for small business, residential, and low-to-moderate income customers. As program size increases, cost-efficiencies are realized, and, by extending program eligibility, all customers can benefit.
- Programs such as PNM Solar Direct allow customers to aggregate their load across site locations within the service territory to meet the minimum demand eligibility requirements.

Programs continue to improve flexible and transparent contract terms

Many customers, especially those less tied to industrial applications, prefer shorter contract lengths to align with real-estate leases. FPL and Duke Energy both offer month-to-month contracts in their green tariff programs. FPL’s SolarTogether program has no termination fees. In instances where contract durations are longer than preferred, customers seek reasonable and well-communicated termination fees for the green offering programs. Also, some customers with businesses across multiple electric company service territories express the need for consistent contract terms and terminology regarding termination, transfer fees, and bill credits. In other words, it is important for electric companies to offer green tariff programs that are simple to understand, transparent, and flexible and, perhaps, to consider developing industry prototypes.

100 percent carbon-free energy solutions are the next step in green tariff program design

The movement by many large corporations to procure 100 percent renewable energy has dramatically accelerated investments in renewable generation. Now, corporations have an opportunity to go even further by seeking to use 100 percent carbon-free energy across their operations. With minor modifications, green tariff programs can be designed to help customers

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3 Xcel Energy’s Renewable*Connect program also offers month-to-month contracts.
move to the next generation of corporate sustainability by matching emissions-free generation to the time and location of their energy use. One example is NV Energy’s recently filed plan with the Nevada Public Utilities Commission to procure **350 MW of solar and approximately 280 MW of battery storage** that will supply carbon-free energy to match the load profile of a nearby data center. Any excess solar generation stored in the battery facility will be used by NV Energy for summer peaking capacity, which will provide benefits for all customers.

While corporate customers increasingly are engaging with electric companies during the program design phase of green tariffs, many of these customers only can rely on today’s green tariff programs for a limited portion of their carbon-free energy solutions. The fact remains that these programs are still a relatively small share of wind and solar energy capacity in the U.S. Today, green tariff program capacity (8.6 GW approved to date) accounts for only four percent of all solar and wind capacity available in the U.S. In fact, all corporate renewable energy deals, including green tariffs (38 GW), account for only approximately 15 percent of all solar and wind capacity available in the U.S. (See Figure 2).

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