

TERMINOLOGY

Renewable Energy Certificate (REC) is issued whenever “one megawatt-hour (MWh) of electricity is generated and delivered to the electricity grid from a renewable energy resource.”¹ An entity owning the REC “has exclusive rights to make claims about ‘using’ or ‘being powered with’ the renewable electricity associated with that REC.”² A REC can be “bundled” – acquired together with the associated electricity – or “unbundled” – acquired separately from the associated electricity.³

Power Purchase Agreement (PPA), also sometimes called a direct or a physical PPA, is an agreement, usually long-term, between a power generator and a customer (such as a corporate buyer) that allows purchasing of RECs and associated power.⁴ In a direct/physical PPA, the power generator and the customer are in the same grid region, allowing for the delivery of electricity to the customer.⁵

Virtual Power Purchase Agreement (VPPA), also sometimes called a financial PPA or Contract for Differences, is an agreement, usually long-term, between a power generator and a customer (such as a corporate buyer), in which renewable power is not physically delivered to the customer, but is instead sold into the grid located near the power generator.⁶ The customer purchases the electricity and the RECs at a fixed price, but the generator sells the generated electricity into the grid system for an open market price.⁷ The power generator then pays the difference to the customer if the agreed-upon VPPA fixed price is less than the market price or receives money from the customer if the agreed-upon price is more than the market price.⁸ The customer gets the associated RECs.⁹

Green Tariffs, are “optional programs in regulated electricity markets offered by utilities and approved by state public utility commissions (PUCs) that allow larger commercial and industrial customers to buy bundled renewable electricity from a specific project through a special utility tariff rate,” usually through long-term agreements.¹⁰ Green tariff programs vary from one utility to another and have largely, to date, been offered for new electricity load.

1. EPA. Renewable Energy Certificates (RECs). Available at: <https://www.epa.gov/greenpower/renewable-energy-certificates-recs> (Sept. 21, 2018). For a sense of scale, 1 MW of power delivery provides enough electricity for the instantaneous demand of approximately 750-1,000 homes. California ISO. California ISO Glossary. Available at: http://www.energy.ca.gov/glossary/ISO_GLOSSARY.PDF (Sept. 21, 2018).

2. EPA. Renewable Energy Certificate Monetization. Available at: <https://www.epa.gov/repowertoolbox/renewable-energy-certificate-monetization> (Sept. 21, 2018).

3. EPA. Unbundled Renewable Energy Certificates (RECs). Available at: <https://www.epa.gov/greenpower/unbundled-renewable-energy-certificates-recs> (Sept. 21, 2018).

4. Royal, Hans. What is the Difference between Direct and Financial PPAs for Corporate Buyers? Available at: <http://hub.resourceadvisor.com/latest-perspectives/what-is-the-difference-between-direct-and-financial-ppas-for-corporate-buyers> (Dec. 7, 2018); <http://hub.resourceadvisor.com/new-blog-stream/ppa-101> (Dec. 7, 2018)

5. Id.

6. Id.

7. Id.

8. Id.

9. Id.

10. EPA. Utility Green Tariffs. Available at: <https://www.epa.gov/greenpower/utility-green-tariffs> (Sept. 21, 2018).