

## Quick Guide: Renewable Energy Certificates (RECs)

Federal agencies can purchase renewable energy certificates (RECs) to meet Federal renewable energy goals for sites where on-site generation is impossible, impracticable, or cost-prohibitive. RECs can also be used to help Federal agencies meet greenhouse gas (GHG) emissions reduction goals. FEMP facilitates this process by providing support and technical assistance to Federal agencies interested in purchasing renewable energy certificates.

### What is a REC?

Renewable energy systems produce two distinct products: generic electricity and renewable energy certificates. These products can be sold together or unbundled and sold separately. RECs are not electricity; instead, RECs represent the environmental attributes of renewable energy generation and can be bought or sold separately from the electricity.

A REC represents the generation of one megawatt-hour (MWh) of electricity from an eligible source of renewable energy. Each REC denotes the underlying renewable generation source, location of the generation, year the renewable generation came online, vintage (date the RECs were generated), and other characteristics associated with the generator. Certificate tracking systems have been established in different states and regions across the country to issue and record the exchange of RECs, making REC markets even more transparent and accessible to Federal agencies.

When purchasing RECs, Federal agencies do not need to switch from their current electricity supplier. Instead, agencies can buy a fixed amount of RECs independent of their daily or monthly electricity consumption profile. This independence creates greater flexibility than purchasing bundled renewable power from a utility or in a competitive electricity market.

For agencies with facilities in multiple locations, purchasing RECs can facilitate a consolidated approach for meeting renewable energy goals by eliminating the time-consuming process of procuring renewable



Photo from Alstom 2010, NREL/PIX 18207

energy for different facilities through multiple suppliers. Because this allows for aggregate REC purchases for multiple sites, check with your agency before proceeding to determine whether REC purchases are already being made at the agency level.

### Federal Renewable Energy Requirements Satisfied by RECs

Multiple laws and executive orders define requirements for the use of renewable energy in Federal facilities. RECs can only be used to satisfy goals associated with renewable energy consumption or the environmental benefits of renewable energy consumption. This includes meeting GHG emissions reduction goals.

**Energy Policy Act (EPAc) of 2005:** EPAc 2005 requires Federal agencies to consume increasing amounts of renewable energy; specifically:

- 3 percent in fiscal year (FY) 2007-2009
- 5 percent in FY 2010-2012
- 7.5 percent in FY 2013 and thereafter

EPAc 2005 defines renewable energy as “electric energy generated from solar, wind, biomass, landfill gas, ocean (including tidal, wave, current, and thermal), geothermal, municipal solid waste, or new hydroelectric generation capacity achieved from increased efficiency or additions of new capacity at

an existing hydroelectric project.” Because it defines renewable energy broadly, many different REC types can count towards an agency’s renewable energy consumption requirement under EPAc 2005.

#### **Executive Order (E.O.) 13423:**

An important consideration in REC purchases, E.O. 13423 mandates that at least half of renewable energy used by the Federal government must come from “new” renewable sources in service after January 1, 1999.

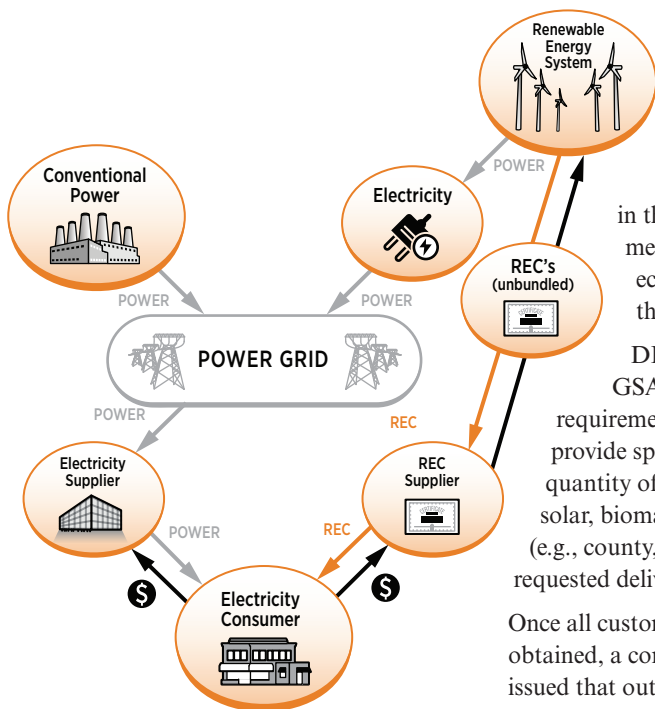
#### **Renewable Energy Guidance:**

For additional information on RECs, refer to the FEMP Renewable Energy Requirement Guidance for EPAc 2005 and E.O. 13423, available on the FEMP website. Section 3.3 contains important REC purchase requirements, such as third-party verification. The guide is available online at [www.femp.energy.gov/pdfs/epact05\\_fedrenewenergyguid.pdf](http://www.femp.energy.gov/pdfs/epact05_fedrenewenergyguid.pdf).

#### **Executive Order 13514:**

Guidance for using RECs and other renewable energy to help meet GHG emissions reduction targets is contained in Chapter 4 of the Federal Greenhouse Gas Accounting and Reporting Guidance, which can be found at [www.whitehouse.gov/sites/default/files/microsites/ceq/ghg\\_guidance\\_document\\_0.pdf](http://www.whitehouse.gov/sites/default/files/microsites/ceq/ghg_guidance_document_0.pdf).

When purchasing RECs for GHG emissions reductions, the approach is generally the same as purchasing RECs to meet



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renewable energy goals. The main difference is that the ZIP Code for where the REC was originally generated is required for GHG emissions reductions to properly account for the emissions using the U.S. Environmental Protection Agency (EPA) Emissions and Generation Resource Integrated Database (eGRID). REC suppliers should have this information available.

## Buying RECs

FEMP provides expert support to walk agencies through the REC purchase process. All Federal agencies can participate in the national market where RECs may be offered for sale by utilities, municipalities, private companies, and other organizations. Defense Logistics Agency (DLA) Energy, Western Area Power Administration (Western), and the U.S. General Services Administration (GSA) actively issue procurements throughout the fiscal year

that support agencies in meeting Federal renewable goals. While each agency has its own procurement requirements, the competitive methods used are similar in that they aggregate requirements in an effort to increase economies of scale to reduce the overall cost to customers.

DLA Energy, Western, and GSA typically have a call for requirements that invites customers to provide specific information about the quantity of RECs, source (e.g., wind, solar, biomass, etc.), generation location (e.g., county, state, nationwide), and the requested delivery date.

Once all customer requirements have been obtained, a competitive procurement is issued that outlines terms and conditions in which any interested party must agree. Some of the more important terms and conditions are:

- A requirement for third-party verification to ensure the RECs include all renewable attributes and have not been sold to another party or in a secondary market.
- To identify vintage language, which specifically states when a REC can be generated and used for the purposes of the requirements in the solicitation.
- To provide a source supply plan, which indicates the renewable project(s) the RECs are being sourced from, that includes location, ZIP Code, renewable resource, capacity of the plant, and online generation date.

Offers received against the solicitation are evaluated to ensure all customer requirements, terms, and conditions are met. Awards are typically made to the offeror deemed technically acceptable with the lowest overall cost to the government.

## FEMP Assistance & Services

For agencies interested in purchasing RECs, FEMP can help facilitate the

process. FEMP also offers training to help Federal agencies understand and meet Federal energy management requirements with renewable energy technologies and best practices.

Consult the FEMP events calendar for upcoming training opportunities, and the FEMP training database to view on-demand training.

## Resources:

### Buying RECs

Western Area Power Administration

Randy Manion  
720-962-7423  
[manion@wapa.gov](mailto:manion@wapa.gov)

[www.wapa.gov/powerm/pmtags.htm](http://www.wapa.gov/powerm/pmtags.htm)

DLA Energy

Andrea Kincaid  
703-767-8669  
[andrea.kincaid@dla.mil](mailto:andrea.kincaid@dla.mil)

[www.desc.dla.mil/DCM/DCMPPage.asp?pageid=589](http://www.desc.dla.mil/DCM/DCMPPage.asp?pageid=589)

General Services Administration

Ken Shutika  
202-260-9713  
[ken.shutika@gsa.gov](mailto:ken.shutika@gsa.gov)  
[www.gsa.gov/portal/content/104491](http://www.gsa.gov/portal/content/104491)

### FEMP Website

[www.femp.energy.gov/technologies/renewable\\_purchasingpower.html](http://www.femp.energy.gov/technologies/renewable_purchasingpower.html)  
[www.femp.energy.gov/news/events.html](http://www.femp.energy.gov/news/events.html)  
[www.femp.energy.gov/training](http://www.femp.energy.gov/training)

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