



Department of Administration
Environmental Collaboration Office (ECO)

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TO: Public Works Committee

FROM: Environmental Collaboration Office

SUBJECT: Renewable Energy Certificates

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At the February 20, 2020 Public Works meeting, a question regarding the legal basis for renewable energy certificates (RECs) came up. The following memo addresses this question, explains what RECs are and how they are issued and retired.

What is a Renewable Energy Certificate?

A renewable energy certificate, or REC, is a market-based instrument that represents the property rights to the environmental, social and other non-power attributes of renewable electricity generation. RECs are issued when one megawatt-hour (MWh) of electricity is generated and delivered to the electricity grid from a renewable energy resource.

RECs include several data attributes, including:

- Certificate Data
- Certificate type
- Tracking system ID
- Renewable fuel type
- Renewable facility location
- Nameplate capacity of project
- Project name
- Project vintage (build date)
- Certificate (generation) vintage
- Certificate unique identification number

- Utility to which project is interconnected
- Eligibility for certification or RPS
- Emissions rate of the renewable resource

When a renewable energy generator (like a wind farm or solar power plant) generates a megawatt-hour (MWh) of power, it creates two sources of value. It creates electricity, which it can sell at prevailing market rates. And under federal law, it receives one REC – a certificate saying that it generated one MWh of electricity from clean sources, which it can also sell. This means every renewable generator in the US (as long as it meets certain criteria) has two revenue streams: electricity and RECs.

If you are an industrial customer who buys 1,000 MWh a year from your utility, which mostly offers coal and natural gas power, and you also buy 1,000 RECs, you could officially say you are powered by 100 percent clean electricity.

These RECs can be bought and sold and are a kind of currency. It is simply a way of giving the positive externalities of renewable energy generation a tangible representation in the marketplace. But only the party that "retires" the REC — i.e., takes it out of circulation — can claim the environmental benefits.

RECs sound complicated and somewhat counterintuitive, and the whole idea of buying and selling greenness can be a bit unsettling. That leads many people to assume that the system must be a scam — a bunch of paper shuffling and double counting. This is an understandable reaction. In reality, however, the system of RECs is quite well-established and tightly monitored.

There are regional tracking organizations (see map below) that give each REC a unique identifying number and every transaction involving the REC must be registered with such an organization. These organizations ensure that environmental benefits do not get double counted, that no one claims environmental benefits they are not due, and that RECs stay retired when they are retired.

[Source: <https://www.vox.com/2015/11/9/9696820/renewable-energy-certificates>]

What is the legal basis of RECs?

RECs are the accepted legal instrument through which renewable energy generation and use claims are substantiated in the U.S. renewable energy market. RECs are supported by several different levels of government, regional electricity transmission authorities,

nongovernmental organizations (NGOs), and trade associations, as well as in U.S. case law. For additional information, please see the Center for Resource Solutions paper on [The Legal Basis for Renewable Energy Certificates \(PDF\)](#).

[Source: <https://www.epa.gov/greenpower/renewable-energy-certificates-recs>]

In voluntary transactions (unlike circumstances where utilities are complying with Renewable Portfolio Standard requirements), REC ownership is negotiated between the buyer and the seller, and should be clearly established by a contract. Claims about purchasing or using renewable energy should only be made if REC ownership can be documented.

Wisconsin Regulations

Wisconsin statute relating to RECS for utilities:

<http://docs.legis.wisconsin.gov/statutes/statutes/196/378/2/bm>

Wisconsin Public Service Commission Chapter 118:

http://docs.legis.wisconsin.gov/code/admin_code/psc/118/04

(Note: Double counting is prohibited under Chapter 118.08

http://docs.legis.wisconsin.gov/code/admin_code/psc/118/08)

How are RECS Issued, Traded & Retired

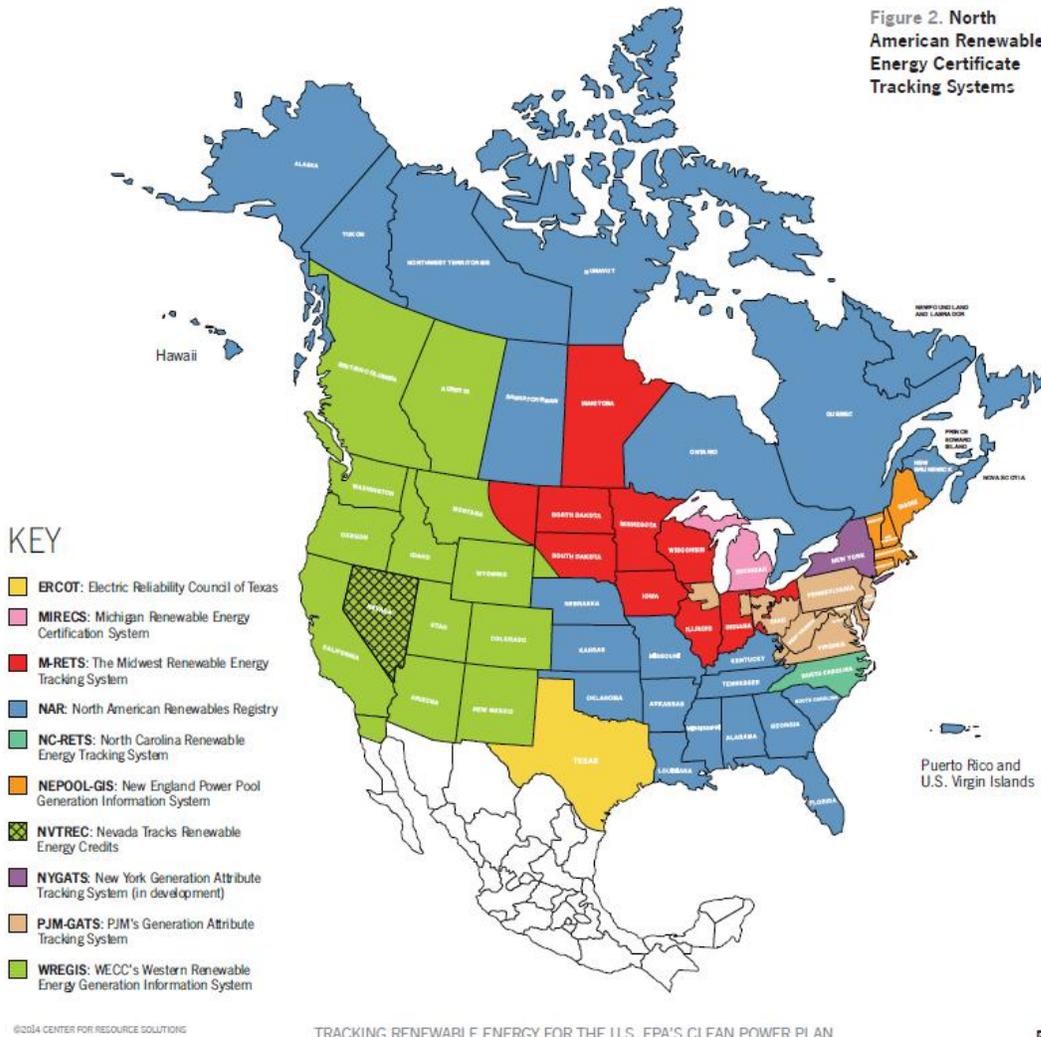
Since RECs can be sold separately from the underlying electricity, the possibility for fraud can exist unless the RECs are tracked from their point of creation to their final point of use. Tracking minimizes the risk of more than one party laying claim to a REC, whether that electricity is placed on the grid or consumed off-grid at a customer's site. Tracking can occur through tracking systems, or through bilateral contract methods.

A tracking system is an electronic database that is used to track the ownership of RECs, much like an online bank account. A tracking system issues a uniquely numbered certificate for each MWh of electricity produced by a generation facility registered in the system, records the ownership of certificates as they are traded, and can retire the certificates once a usage claim is made. Because each MWh has a unique identification number and can only be in one owner's account at any time, this reduces ownership disputes and the potential for double counting.

[Source: <https://www.epa.gov/greenpower/renewable-energy-tracking-systems>]

The regional tracking system for Wisconsin is M-RETS (Midwest Renewable Energy Tracking System).

Figure 2. North American Renewable Energy Certificate Tracking Systems



When a REC is “retired” in a respective tracking system, either by the buyer directly or by the seller on behalf of the buyer, it can no longer be exchanged between tracking system account holders. Note that a REC is also retired once a claim is made that the REC instrument would substantiate (e.g., renewable energy use or environmental claim).

Note that a municipality cannot count electricity obtained from a renewable project towards the renewable electricity goals if the municipality does not retain the RECs or does not purchase replacement RECs.

[Source: https://www.sustainability.gov/pdfs/federal_rec_guide.pdf]