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Emission Rate Credits (ERCs) in the Clean Power Plan

An FAQ for States and Stakeholders

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Emission Rate Credits (ERCs) in the Clean Power Plan

EPA’s Clean Power Plan allows each state to determine whether Electric Generating Units (EGU) will have to meet a rate-based standard (designated in pounds of CO₂ emitted per megawatt-hour of electricity produced), or a mass-based limit (measured in total tons of CO₂ emissions). In a rate-based state, state regulators will assign each EGU an allowable CO₂ emission rate. An EGU can meet its obligations either by operating at or below the assigned rate or by operating at a higher rate and holding Emission Rate Credits (ERCs) that administratively adjust its actual rate downward.

This document addresses definitional and legal questions about ERCs. Broadly, the document answers:

1. What are Emission Rate Credits?
2. How do Emission Rate Credits interact with existing tradable instruments?
3. How will EPA and states ensure the integrity of the Emission Rate Credit market?

When it issued the final Clean Power Plan, the EPA also proposed a model rate-based trading rule. The final model rule can be adopted by a state, and will serve as the basis for the federal plan in states that do not submit a satisfactory plan, if EPA opts to impose a rate-based federal plan. A rate-based federal plan will govern ERCs in states where it applies. This paper focuses on ERCs created under a state plan, and highlights aspects of the proposed model rule to suggest approaches that EPA might approve in state plans.

I. What are Emission Rate Credits?

An ERC is an administratively created, tradable instrument with a unique serial number that “represent[s] one MWh of actual energy generated or saved with zero associated CO₂ emissions” (40 C.F.R. §60.5790). When held and retired by an EGU, an ERC allows that EGU to adjust its emission rate as follows:

$$\text{Adjusted emission rate} = \frac{\text{EGU CO}_2 \text{ Emissions}}{\text{MWh EGU Generation} + \text{MWh ERCs}}$$

For instance, a NGCC Unit may have the following operating parameters:

- Annual Generation: 1,000,000 MWh;
- Operating Emission Rate: 900 lbs. CO₂ per MWh; and therefore
- Total Annual Emissions: 900 × 1,000,000 = 900,000,000 lbs.

If that unit also holds ERCs representing 250,000 MWh of zero-emission energy, it will have an adjusted emission rate of 720 lbs. CO₂ per MWh, as illustrated below.

$$\text{Adjusted emission rate} = \frac{900,000,000 \text{ lbs.}}{1,000,000 \text{ MWh} + 250,000 \text{ MWh ERCs}} = 720 \text{ lbs. CO}_2 \text{ per MWh}$$

A. Who must hold and retire ERCs?

In a state with a rate-based plan, an EGU that operates at a higher emission rate than the rate it is assigned must hold and retire ERCs. To demonstrate compliance, the EGU must retire a sufficient number of ERCs to adjust its emission rate downward to the rate allowed under the plan.

B. Who can generate ERCs?

EGUs and “eligible resources” can generate ERCs. Eligible resources include zero-emitting generators powered by wind, solar, geothermal, hydro, wave, tidal, and nuclear, as well as qualified biomass, waste-to-energy, and combined heat and power (CHP) units not regulated by the Clean Power Plan. These resources must either commence operation or increase their capacity after December 31, 2012; only new or additional capacity may generate ERCs. Eligible resources must generate in a state with a rate-based plan or contract to deliver energy into a rate-based state. Biomass, waste-to-energy, nuclear, and CHP units must be located in a rate-based state to generate ERCs (§60.5800). Eligible resources may also include energy savings measures installed in rate-based states after December 31, 2012.

A state may identify other eligible resources, so long as they began generating or saving energy after December 31, 2012 and meet the locational restrictions described in the previous paragraph. A state may also restrict the definition of eligible resource by allowing only some of the technologies identified by EPA to generate ERCs, and could prohibit EGUs from generating one or both types of ERCs (see below).

EPA proposes that a rate-based federal would limit eligible resources to concentrated solar, geothermal, nuclear, and utility-scale projects powered by wind, solar photovoltaics, or hydro (§62.16435).

C. How many ERCs are generated for each MWh of energy?

Eligible resources that emit no CO₂, such as wind, solar, and nuclear, generate one ERC per MWh. Energy efficiency measures also generate one ERC per MWh saved, based on measured savings (§60.5800).

Any EGU regulated under the Clean Power Plan can generate ERCs for operating at an emission rate lower than the rate assigned to it in the state plan. In the model rule, EPA proposes the following formula for calculating the number of ERCs from any EGU (§62.16434):

$$\text{ERCs} = \frac{\text{EGU Assigned Rate} - \text{EGU Operating Rate}}{\text{EGU Assigned Rate}} \times \text{MWh EGU Generation}^a$$

An NGCC can also generate ERCs by increasing generation over its 2012 output to displace higher emitting generation. These so-called “gas-shift” ERCs can be retired only by coal-fired plants to demonstrate compliance (§60.5795(a)(2)). EPA proposes this formula in the model trading rule (§62.16434):

$$\text{Gas Shift ERCs} = \left(1 - \frac{\text{EGU Operating Rate}}{\text{Fossil Steam Performance Standard}}\right) \times \text{MWh EGU Generation} \times \text{Incremental Generation Factor}$$

In the proposed model rule, EPA calculated Incremental Generation Factors, which estimate how much NGCC generation represents a shift from coal to natural gas, for each compliance period (Table 2).

If a state plan includes CHP, waste-to-energy, or biomass units, the state must propose accounting methods for calculating the number of ERCs that each type of resource generates. For CHP and waste-to-energy, EPA proposes deducting the CO₂ emissions related to a unit’s thermal output from its overall emissions to calculate the creditable “incremental” emissions. For biomass, a state plan must propose an accounting method and explain why each proposed feedstock qualifies as an emission reduction approach. EPA might

^a In the rule’s preamble, EPA states that ERCs may be issued based on the difference between an EGU’s operating rate and a “reference rate,” and explains that the reference rate may be the EGU’s assigned rate or “another CO₂ emission rate.” However, EPA does not provide examples of other acceptable rates.

allow biomass in the federal plan; if it does, it states it will likely specify a list of pre-approved fuels informed by comments and EPA’s Framework for Assessing Biogenic CO₂ Emissions from Stationary Sources.

D. What steps must a state take to enable the creation of ERCs?

A state plan must authorize the creation of ERCs and use of ERCs by EGUs to demonstrate compliance. In addition, the state or its designated agent must provide certain registration, awarding, tracking, and verification functions, to ensure the integrity of these instruments.

In some states, existing statutes may provide regulators with sufficient authority to regulate ERCs. Regulators in other states may need new legislative authorization. The most basic statutory authority must enable regulators to evaluate applications from EGUs and eligible resources, award ERCs, track ERCs through an online tracking system, adjust ERC accounts due to errors, and certify an independent verifier to confirm underlying energy production or savings (§60.5805). State agencies or designated third parties could provide these functions, and multiple states could centralize these functions.

If EPA finalizes a rate-based federal plan, it proposes to use the agency’s existing allowance tracking and compliance system (ATCS) to track ERCs, and in any case may provide a tracking system for ERCs awarded under state plans. As discussed below, existing Renewable Energy Credit (REC) tracking systems could provide platforms for ERC tracking systems.

E. What is the process for awarding an ERC?

All EGUs and eligible resources approved pursuant to a state plan to generate ERCs must register with an EPA-approved tracking system (§§60.5810). To receive ERCs in its account, the resource must submit a measurement and verification (M&V) report (§60.5835) and a verification report from an independent verifier. More detail is provided on this process in part III.

F. Can a single ERC be used to comply with a state measure and to adjust an EGU emission rate?

No. An ERC may not be used to comply both with a Clean Power Plan state measure^b in one state and with an EGU emission standard in another state (§60.5790(c)(3)).

G. Can an Eligible Resource in one state be awarded ERCs by another state?

Yes. An eligible resource located in one state may register under another state’s plan. A resource may only register in one state. The state that registers the resource is the only state that may award ERCs.

H. Can an ERC awarded by one state be used for compliance by an EGU in another state?

The state plan determines whether an ERC awarded by one state can be used by an EGU in another state.

State plans that require each EGU to meet the EPA performance rate by 2030 (1,305 lbs/MWh for Fossil Steam units; 771 lbs/MWh for NGCCs) may be “trading ready,” meaning that an EGU may use an ERC awarded by any other trading-ready state that also applies those rates. Under a multi-state plan that requires all EGUs to achieve the same rate, EGUs may only use ERCs awarded by a state within their multi-state region. If a state applies any other rate to its EGUs, EGUs may only use ERCs awarded by their state.

^b The Clean Power Plan allows a state to submit a plan that relies on programs that the state adopts and implements as a matter of state law. Such “state measures” are enforceable only under state law, and are not included in and codified as part of the federally enforceable state plan.

II. How do Emission Rate Credits interact with existing tradable instruments?

This section explains that Emission Reduction Credits or Creditable Emission Reductions created under other Clean Air Act programs and Renewable Energy Credits (REC) may not be used to demonstrate compliance with the Clean Power Plan, and discusses whether a REC may be converted into an ERC and whether a single MWh of energy can generate multiple instruments.

A. Are ERCs in the Clean Power Plan the same as Emission Reduction Credits that already exist under many states' laws?

Many states already have laws about Emission Reduction Credits or “Creditable Emission Reductions” that are used to comply with Clean Air Act requirements, such as national ambient air quality standards.

These existing tradeable instruments are created by state law and represent the difference between emissions of a particular pollutant as compared to a baseline level of emissions prior to some action.¹ Clean Power Plan ERCs represent one MWh of energy generated or saved with zero associated CO₂ emissions. The two types of credits represent different things and are not interchangeable. To avoid application of the existing statutes and regulations to Clean Power Plan ERCs, laws that enable the creation of Clean Power Plan ERCs should specify that existing laws about Clean Air Act credits do not apply.

B. Can an EGU retire a REC to demonstrate compliance with the Clean Power Plan?

The second type of existing instrument is a Renewable Energy Credit (REC), a generic term for a tradable certificate that may be defined through contract or state law to signify that a quantity of electricity was generated by certain types of resources, or to represent the environmental attributes of a quantity of electricity. RECs are used primarily by state-regulated utilities to comply with a state renewable portfolio standard (RPS), or by businesses to make marketing claims about the electricity they consume.²

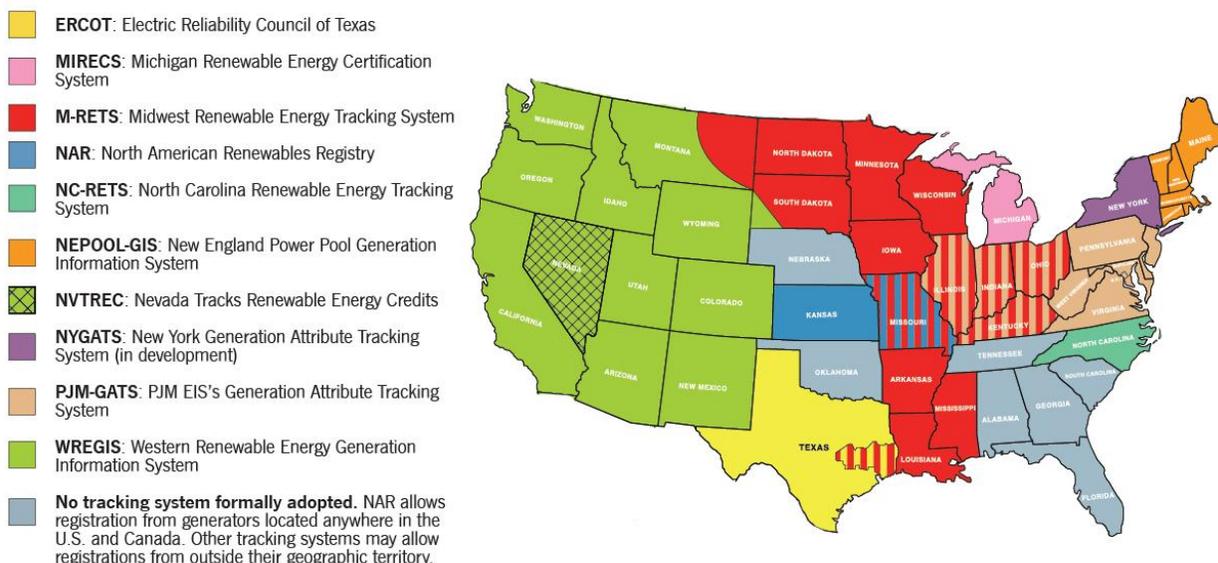
EPA requires that an ERC “represent one MWh of actual energy generated or saved with zero associated CO₂ emissions” (§60.5790). A REC and an ERC may both represent one MWh of renewable electricity, but they are different instruments. EPA is requiring that EGUs use ERCs to demonstrate compliance (§60.5790).

C. Can a state convert a REC into an ERC?

The Clean Power Plan does not prohibit a state from converting a REC into an ERC, so long as the REC was generated by an eligible resource under the Clean Power Plan that has submitted a certified M&V report (as discussed in I.B and I.D), and includes the right to claim that the associated electricity has no CO₂ emissions. A state could design a process to convert RECs from eligible resources into ERCs.

Depending on the definition, a REC may signify that a quantity of electricity was generated by certain resources or represent the environmental attributes of a quantity of electricity. For instance, the Edison Electric Institute’s (EEI) Master Contract, a model agreement for the purchase and sale of electricity and associated products,³ defines three types of RECs. A “Basic REC” certifies that one MWh of electricity was generated by a renewable resource but does not include any environmental attributes of that electricity. This type of REC may not be converted into an ERC because it does not provide the holder with the right to claim that the electricity has zero associated CO₂ emissions. The model contract’s “Standard REC” includes all “Environmental Attributes” of the associated energy. This type of REC could be convertible. The contract’s “Specified REC” includes specified environmental attributes and may be converted into an ERC if it includes the right to claim that the associated electricity has no CO₂ emissions.

REC tracking systems are well-positioned to facilitate the conversion process. They credit registered generators with RECs based on production, and allow utilities to hold and retire RECs to demonstrate compliance with state RPS requirements. EPA notes in the Clean Power Plan’s preamble that many REC tracking systems include “well-established safeguards, documentation requirements, and procedures” that could be adapted to provide the functions necessary for ERC generation and tracking (see I.D). As illustrated by the map, existing tracking systems provide widespread coverage. States’ laws often designate a regional or single-state entity to track RECs.^c



Map adapted from The Environmental Tracking Network of North America, <http://www.etnaa.org/learn.html>.

D. Can one MWh of renewable energy generate both an ERC and a REC?

The Clean Power Plan does not prohibit a resource from generating an ERC and a REC from a single MWh of energy. Whether both instruments can be generated from a single MWh of electricity depends on the definition of the associated REC. As discussed, a REC may include environmental attributes that provide the REC holder with the right to claim that the MWh of electricity has no associated emissions. The creation of a second instrument representing a MWh with “zero associated CO₂ emissions,” such as an ERC, would conflict with the REC holder’s right to that claim and double-count the environmental benefits. Other RECs merely track the energy generated from particular resources. These definitions are unlikely to create any exclusivity, and could allow for the creation of an ERC.

With the exception of New England’s tracking system, multi-state tracking systems create RECs that include all environmental attributes of the associated electricity.⁴ These expansive definitions prohibit the creation of an ERC from the same MWh of electricity. However, such RECs could potentially be split into two instruments: a REC that does not include the right to claim that the associated electricity has no CO₂

^c Some of these entities have long-standing roles in the electricity industry. PJM-GATS is owned by PJM, a FERC-regulated Independent System Operator. NEPOOL-GIS is owned by the New England Power Pool, a voluntary association of market participants formed in 1971. WREGIS is administered by the Western Electricity Coordinating Council, which oversees reliability standards in the western interconnection.

emissions, and an ERC. These RECs would have limited value in the current REC market as several states' RPS laws explicitly require utilities to retire RECs that include environmental attributes.⁵

North Carolina law provides a path forward for states that want to allow a MWh of energy to be used for compliance with both the state's RPS and the Clean Power Plan. A REC is defined by North Carolina law as a tradable instrument that represents one MWh of renewable energy but "does not include the related emission reductions, including, but not limited to reductions of . . . carbon dioxide."⁶ Utilities meet their RPS requirement by holding such RECs, and North Carolina maintains its own REC tracking system. This REC definition allows for the creation of an ERC from the same MWh of energy. Because of its unique definition, North Carolina RECs are not yet compatible with other tracking systems.⁷ This limits compliance flexibility because utilities in other states are not able to use North Carolina RECs.

E. Do existing contracts for the sale of RECs also transfer the rights to ERCs?

They might, as long as the renewable generator selling the RECs meets EPA's requirements for an eligible resource.

As discussed in II.C, EEI's Master Contract defines a "Standard REC," as including all "Environmental Attributes" of the associated energy. The contract's explanatory notes state that a Standard REC "includes within it any future allowances (or credits)." Existing contracts for the transfer of RECs using EEI's Standard REC definition also likely transfer the rights to the same number of ERCs. The purchaser could potentially convert the Standard RECs into ERCs, or could split the Standard REC into Specified RECs that do not include the right to claim that the associated electricity has no CO₂ emissions, and ERCs.

F. Can an ERC also be used to demonstrate compliance with other Clean Air Act programs?

An ERC that is used to meet the Clean Power Plan would be ineligible to demonstrate compliance with another Clean Air Act program. For other Clean Air Act programs, EPA requires that an emission credit be "surplus," meaning that they are not used to meet another Clean Air Act requirement. A single credit therefore may not be used for more than one program. States can still take advantage of the Clean Power Plan's co-benefits, such as reduced ozone. In a future state implementation plan, a state could receive credit for its Clean Power Plan implementation by accounting for it in its projected baseline emissions.

III. How will EPA and states ensure the integrity of the ERC market?

EPA requires state plans to include "mechanism[s] to adjust the number of ERCs issued if any are issued based on error (clerical, formula input error, etc.)" and "to temporarily or permanently revoke the qualification status of an eligible resource" (§60.5805). The proposed model rule would deduct the issued ERCs from the eligible resource's ERC-tracking account to correct for an error. If the resource holds an insufficient amount of ERCs to make up for the mistake, EPA would require it to surrender sufficient ERCs – presumably purchased from the market – within thirty days. EPA also proposes to permanently suspend an ERC producer's account if there is "intentional misrepresentation" (§62.16450).

Fraudulent ERCs are discussed in more detail below.

A. What steps has EPA mandated to prevent the creation of fraudulent ERCs?

As mentioned in part I, to earn ERCs, a resource must file an eligibility application that includes an EM&V plan, register with an ERC tracking system, and submit an M&V report verified by an independent third

party (§§60.5805, .5810, .5830, .5835). The independent verifier may not have any financial or other interest in the subject of its verification report that could impact its impartiality (§60.5880). All registration, EM&V, and verification documents must be publicly available (§§60.5810).

In addition, each ERC's serial number allows it to be traced to the resource that generated it. An EGU's compliance report must show that each ERC it is retiring is from an eligible resource (§60.5860).

B. Can EPA take an enforcement action against an entity that creates a fraudulent ERC?

The Clean Air Act provides the federal government with the authority to assess criminal penalties against any person who knowingly makes false statements in a document filed pursuant to a state plan (42 U.S.C. § 7413(c)(2)(A)). Creating a fraudulent ERC would require the offender to intentionally file false information, such as a fake M&V report. Because that report is mandated by a state plan submitted pursuant to the Clean Power Plan, the offender could be penalized under the Clean Air Act.

The Renewable Fuel Standard (RFS) provides a relevant comparison. Pursuant to the Energy Policy Act of 2005 and Energy Independence and Security Act of 2007, EPA issued rules that require petroleum refiners and importers of transportation fuel to meet renewable fuel targets. Parties demonstrate compliance by holding Renewable Identification Numbers (RINs), each of which represents a gallon of qualified renewable fuel. Like ERCs, RINs are serial numbers that may be sold separately from the underlying commodity.

Federal investigations revealed that entities were generating RINs without producing any renewable fuel. The offenders were indicted under the Clean Air Act for making false statements to EPA about their supposed fuel production, and under federal laws that generally apply to fraudulent schemes, such as laws about wire fraud and money laundering.⁸

C. Can EPA take an enforcement action against an EGU that retires a fraudulent ERC?

EPA does not explicitly address what consequences a state plan must have for an EGU that has retired fraudulent ERCs. EPA proposes in the model trading rule that an EGU must surrender two ERCs for each ERC it failed to retire to meet its rate under the plan, regardless of the reason for its noncompliance (§62.16535). In addition, EPA and citizens will retain the right to take enforcement action under the Clean Air Act against EGUs that fail to hold sufficient ERCs, while states may take action against non-compliant EGUs under the Clean Air Act and state law (§60.5775).

An EGU's good faith efforts will count in its favor. First, EPA may not seek criminal penalties against an EGU for holding fraudulent ERCs unless the EGU knows the ERCs are fraudulent (42 U.S.C. § 7413(c)). Second, EPA or a court "shall take into consideration" a company's good faith efforts to comply with the Clean Air Act when assessing any civil penalty (42U.S.C. § 7412(e)). Evidence that an EGU sought to purchase legitimate ERCs should reduce – or forestall – any penalty.

Again, the RFS program provides relevant examples. Initially, the RFS regulations established a "buyer beware" approach that urged obligated parties to "use good business judgment when deciding whether to purchase RINs from any particular seller."⁹ When EPA discovered that some RIN generators had created fraudulent RINs, EPA issued Notices of Violations to more than twenty companies that had retired these fraudulent RINs to meet their compliance obligations. The companies settled with EPA, paying fines and retiring valid RINs to account for the fraudulent RINs.¹⁰

EPA subsequently amended the RFS regulations to create a voluntary quality assurance program.¹¹ A company that retires a verified RIN for compliance purposes may assert an affirmative defense if the RIN is later found to be invalid.¹² The company would avoid penalties but would have to replace invalid RINs.¹³

The Clean Power Plan takes quality assurance a step further and requires ERC verification by an independent party. While EPA is retaining its right under the Clean Air Act to impose penalties on EGUs that retire fraudulent ERCs, EGUs should be able to rely on an affirmative defense of “good faith,” provided that their ERCs are certified by an independent verifier and generated by resources approved by the state. The ERC verification process thus provides EGUs with a layer of protection that companies that retired unverified RINs that were later found to be fraudulent did not have.

D. Can EPA take an enforcement action against a state in which a third party creates fraudulent ERCs?

No. The Clean Air Act does not provide federal enforcement authority against a state in which entities are violating the Act. The Clean Air Act does allow EPA to implement a state plan if it finds that violations “*are so widespread* that such violations appear to result from a failure of the State in which the plan or permit program applies to enforce the plan or permit program effectively . . .” ((42U.S.C. § 7413(a)(2)) (emphasis added). If fraudulent ERCs are “widespread” in a particular state, EPA could assert authority to implement that state’s plan, provided it first gives notice to the state and an opportunity to remedy its failure.

Endnotes

¹ See *Duquesne Light Co. v. U.S. E.P.A.*, 166 F.3d 609, 611–612 (3rd Cir. 1999).

² For instance, the Federal Trade Commission’s Guide for the Use of Environmental Marketing Claims states that it would be “deceptive” for a business to claim that it uses renewable energy unless it holds RECs. 16 CFR § 260.15.

³ The contract is available at: <http://www.eei.org/resourcesandmedia/mastercontract/Pages/default.aspx>. The REC annex is available at: <http://www.eei.org/resourcesandmedia/mastercontract/Pages/Annexes.aspx>.

⁴ PJM-GATS Operating Rules (May 2014), available at: <http://www.pjm-eis.com/~media/pjm-eis/documents/gats-operating-rules.ashx> (section 8 – Creation of Certificates); M-RETS Operating Procedures (Aug. 11, 2014), available at: <http://www.mrets.org/wp-content/uploads/sites/8/2014/03/Operating-Procedures-09-09-14.pdf> (Section 10 – Creation of Certificates and RRCs); NAR Operating Procedures (Apr. 2013), available at: http://www.narecs.com/wp-content/uploads/sites/2/2013/12/NAR-Operating-Procedures_April_2013.pdf (Section 7 – Creation of Certificates); WREGIS Operating Rules (Jul. 15, 2013), available at: <https://www.wecc.biz/Corporate/WREGIS%20Operating%20Rules%20072013%20Final.pdf> (Section 12 – Creation of Certificates).

⁵ The Explanatory Notes to EEI’s Master Contract note that the Standard REC, which includes all environmental attributes, “most closely represents the predominant product[] traded in [REC] markets.” The following states explicitly define a REC as including environmental attributes for purposes of RPS compliance:

- California: CAL. PUB.UTIL. CODE § 399.12 (defining a REC as including “all renewable and environmental attributes associated with the production of electricity”)
- Colorado: 4 COLO. CODE REGS. § 723-3:3652 (y) (defining a REC as “a contractual right to the full set of non-energy attributes, including any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, directly attributable to a specific amount of electric energy generated from a renewable energy resource . . .”);
- Delaware: 26 DEL. ADMIN. CODE 3008-1.0 (defining a REC as including “all the Generation Attributes equal to 1 megawatt-hour of electricity derived from Eligible Energy Resources” and defining “Generation Attributes” as including emissions);

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- Illinois: 20 ILL. COMP. STAT. 3855/1-1 (defining a REC as “a tradable credit that represents the environmental attributes of a certain amount of energy produced from a renewable energy resource”);
 - Montana: MONT. ADMIN. R. 69-3-2003 (14) (defining a REC as “includ[ing] all of the environmental attributes associated with that 1 megawatt-hour unit of electricity production”)
 - New Jersey: N.J. STAT. ANN. § 48:3-51 (defining a REC as “a certificate representing the environmental benefits or attributes of one megawatt-hour of generation ”);
 - New Mexico: N.M. LAWS § 62-16-3. F. (defining a REC as “represent[ing] all the environmental attributes from one kilowatt-hour of electricity generation from a renewable energy resource”);
 - Ohio: OHIO ADMIN. CODE §4901:1-40-01(BB) (defining a REC as including “the environmental attributes associated with one megawatt-hour of electricity generated by a renewable energy resource”);
 - Oregon: OR. ADMIN. R. 330-160-0015 (15) (defining a REC as “a unique representation of the environmental, economic, and social benefits associated with the generation of electricity from renewable energy sources ”); and
 - Washington: WASH. REV. CODE ANN. § 19.285.030 (20) (defining a REC as “includ[ing] all of the nonpower attributes associated with that one megawatt-hour of electricity”).

⁶ N.C. GEN. STAT. § 62-133.8 (6).

⁷ The NC-RETS operating agreement notes in Appendix F that certificates generated in North Carolina may not be exported to other regional tracking systems. <http://www.ncrets.org/wp-content/uploads/sites/7/2014/03/NC-RETS-Operating-Procedures.docx>. The document does not provide an explanation, but a plausible reason is because the other tracking systems create certificates that include all environmental attributes, while North Carolina’s does not.

⁸ See, e.g., USA v. Hailey, Docket No. 11-cr-00540 (D. Md. Oct 03, 2011) (Entry 65, indicting the defendant for filing a false report with EPA and for making false material statements to EPA in response to a request for information).

⁹ GP & W, INC., d/b/a, Center Oil Company v. International Exchange Services, 2012 WL 4513851 (E.D. MO., 2012) (citing U.S. E.P.A., Regulation of Fuels and Fuel Additives: Renewable Fuel Standard Program, 72 Fed.Reg. 23,900, 23,950 (May 1, 2007)).

¹⁰ Mark Drajem, Bloomberg News, U.S. EPA Settles with 30 Companies Over Fake Fuel Credits (Apr. 20, 2012), available at: <http://www.bloomberg.com/news/articles/2012-04-20/u-s-epa-settles-with-refiners-over-fake-renewable-fuel-credits>.

¹¹ U.S. E.P.A., RFS Renewable Identification Number (RIN) Quality Assurance Program, 79 Fed. Reg. 42078 (Jul. 18, 2014).

¹² 40 C.F.R. 80.1473.

¹³ 40 C.F.R. 80.1474.