



CRS

center for  
resource  
solutions

[SUBMITTED ELECTRONICALLY VIA EMAIL TO A-and-R-Docket@epa.gov]

January 21, 2016

The Honorable Gina McCarthy, Administrator  
Environmental Protection Agency (EPA)  
U.S. EPA Headquarters—William J. Clinton Building  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

**Re: Comments of Center for Resource Solutions (CRS) on Proposed Federal Plan and Model Trading Rules for the Clean Power Plan, Docket ID: EPA-HQ-OAR-2015-0199**

Dear Administrator McCarthy:

CRS appreciates this opportunity to comment on the October 2015 Proposed Federal Plan Requirements for Greenhouse Gas Emissions From Electric Utility Generating Units Constructed on or Before January 8, 2014; Model Trading Rules; Amendments to Framework Regulations (“Proposed Rule”). Following an introduction to CRS, we have organized our comments into a primary comment and a series of other comments on the Proposed Rule below.

**Introduction to CRS**

CRS is a 501(c)(3) nonprofit organization that creates policy and market solutions to advance sustainable energy. Since 1997, CRS has been instrumental in the development of landmark state, regional and national renewable energy and climate policies. CRS has also provided regular technical assistance and guidance to electricity attribute tracking systems and other electricity sector functional support entities around the country.

CRS also administers the Green-e® programs. Green-e Energy is North America’s leading independent consumer protection program providing certification and verification for renewable electricity and Renewable Energy Certificates (RECs) in the U.S. voluntary market. In 2013, that program certified the majority of the U.S. voluntary renewable energy market and 89% of retail REC sales. Green-e Climate is a global retail standard for carbon offsets sold in the voluntary carbon market. Green-e Marketplace recognizes and verifies the claims of companies that use certified renewable energy and carbon offsets to reduce their impact. Stakeholder-driven standards supported by rigorous verification audits are a cornerstone of Green-e and enable CRS to provide independent third-party certification of environmental commodity transactions in voluntary markets. The Green-e environmental and consumer standards are overseen by an independent governance board of industry experts, including representatives from environmental nonprofits, consumer advocates, and purchasers. Our standards have been developed and are periodically revised through an open stakeholder process. Green-e program documents, including the standards, contract templates, and the annual verification report, are available at [www.green-e.org](http://www.green-e.org).

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## **Primary Comment**

- 1. Protect voluntary action by including a voluntary renewable energy set-aside of allowances in the mass-based federal plan and model rule, as well as a mechanism to retire Emission Rate Credits (ERCs) on behalf of the voluntary renewable energy market (where voluntary renewable energy is issued ERCs) in the rate-based federal plan and model rule.**

Additional elements are needed in the proposed Federal Plan and Model Rules in order to avoid negative impacts to voluntary demand for and private investment in renewable energy (RE). Specifically, to support continued investment in and growth of voluntary RE, the proposed CPP Federal Plan and Model Rules should include the following.

- A mass-based Federal Plan and Model Rule should include a set-aside of allowances for voluntary RE that is structured similarly to California’s Voluntary Renewable Electricity Reserve Account<sup>1</sup> and/or the Regional Greenhouse Gas Initiative’s (RGGI’s) voluntary RE market set-aside provision<sup>2</sup>.
- A rate-based Federal Plan and Model Rule should include a mechanism to retire ERCs on behalf of the voluntary RE market (if voluntary RE is issued ERCs), rather than allowing them to be used for compliance by (to adjust the rates of) affected electric generating units (EGUs).

### **Background on the Voluntary RE Market**

Thousands of businesses and organizations along with millions of individuals across the country purchase green power in the U.S. voluntary RE market.<sup>3</sup> These individuals and organizations, including over 1,300 that participate in the EPA’s Green Power Partnership and some of the largest Fortune 500 companies, voluntarily use billions of kilowatt-hours of RE annually.<sup>4</sup> Many do this as part of their commitment to reduce their greenhouse gas (GHG) footprint. These commitments to RE and avoided greenhouse gas emissions on the grid currently go beyond that which is attributed to state or federal policy. In order to maintain strong participation in the voluntary RE market, it will be important to ensure that these commitments to investing in RE and avoided greenhouse gas emissions continue to go beyond what is attributable to state and federal policies.

The voluntary RE market is important in every state—either to supply the voluntary market or as a source of demand for voluntary RE.<sup>5</sup> According to the latest report from the National Renewable Energy Laboratory (NREL), using 2014 data, voluntary retail sales of RE totaled 74 million MWh per year,

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<sup>1</sup> See title 17, CCR, section 95841.1.

<sup>2</sup> See Section XX-5.3(d) of the RGGI Model Rule, 12/31/08 final with corrections.

<sup>3</sup> O’Shaughnessy, E. *et al.* (October 2015). *Status and Trends in the U.S. Voluntary Green Power Market (2014 Data)*. National Renewable Energy Laboratory (NREL). Technical Report NREL/TP-6A20-65252. Available at: <http://www.nrel.gov/docs/fy16osti/65252.pdf>.

<sup>4</sup> For more information about the importance and impact of voluntary green power purchasing, visit <http://www.epa.gov/greenpower/>. Also see NREL’s market analysis at [http://www.nrel.gov/analysis/market\\_green\\_power.html](http://www.nrel.gov/analysis/market_green_power.html).

<sup>5</sup> See NREL market analysis ([http://www.nrel.gov/analysis/market\\_green\\_power.html](http://www.nrel.gov/analysis/market_green_power.html)) as well as the 2014 Green-e Verification Report, available at <http://green-e.org/docs/2014%20Green-e%20Verification%20Report.pdf>.

growing at 10% per year.<sup>6</sup> This means the voluntary RE market represents 26% of all non-hydro renewable generation nationally, equivalent to 58% of all new Renewable Portfolio Standard (RPS) renewable generation.<sup>7</sup>

The CPP could negatively affect the voluntary market by reducing the impact of RE purchased by businesses and households nationwide. If RE that is sold into the voluntary market is included in CPP compliance—meaning it gets issued an ERC for use in a rate-based state or is located in a mass-based state without a set-aside of allowances for voluntary RE—these voluntary actions to purchase and develop RE will no longer go beyond what is required by law for GHG emissions from existing units. These purchases will support state CPP compliance, making it easier for fossil units to comply by increasing the supply of ERCs and/or reducing mass emissions. But, the actions of voluntary purchasers will no longer be surplus to regulatory requirements of a state (“regulatory surplus”) with regard to GHG emissions reductions at affected units since they get factored into the reductions that a state reports to EPA.

Existing voluntary markets for RE value regulatory surplus for GHG emissions. Companies and individuals willing to go beyond compliance levels can continue to drive global GHG emissions reductions—provided that the Federal Plan and Model Rules are properly structured. Without such provisions, demand for RE in voluntary markets will likely decline. The result is not just negative impacts on the growth of RE investments, but also the elimination of the CPP compliance contributions that strong voluntary RE markets offer. Experience with Renewable Energy/Portfolio Standards demonstrates that both compliance and voluntary markets are more successful when they are designed to operate on a side-by-side basis. Our recommendations for the Federal Plan and Model Rules would ensure that voluntary actions continue to deliver incremental emissions reductions—and not simply reduce the costs of CPP compliance for regulated entities.

The Natural Resources Defense Council (NRDC), Pace Energy and Climate Center, Renewable Northwest, the Solar Energy Industries Association (SEIA), the Union of Concerned Scientists (UCS), and many others support such approaches.<sup>8</sup>

#### Allowance Set-aside for Voluntary RE in a Mass-based Federal Plan and Model Rule

For states covered by a mass-based federal plan or using a mass-based model rule, there are proven regulatory mechanisms that have already been implemented in California and the RGGI to support and enhance the existing voluntary RE market and deliver actual emissions reductions for voluntary investors.

The California and RGGI mechanisms are designed slightly differently and EPA could choose to model a voluntary RE set-aside in the mass-based federal plan and model rule after either. For example, states in RGGI set aside allowances based on actual generation (supply used for voluntary sales) submitted by the

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<sup>6</sup> O’Shaughnessy, E. *et al.* (October 2015). *Status and Trends in the U.S. Voluntary Green Power Market (2014 Data)*. National Renewable Energy Laboratory (NREL). Technical Report NREL/TP-6A20-65252. Available at: <http://www.nrel.gov/docs/fy16osti/65252.pdf>.

<sup>7</sup> Based on figures from O’Shaughnessy, E. *et al.* (October 2015). *Status and Trends in the U.S. Voluntary Green Power Market (2014 Data)*. National Renewable Energy Laboratory (NREL). Technical Report NREL/TP-6A20-65252. Available at: <http://www.nrel.gov/docs/fy16osti/65252.pdf>.

<sup>8</sup> See Endorsements listed at <http://resource-solutions.org/cpp-comment-guidance> and the Previous Comments on Voluntary RE Set-aside Mechanisms listed below.

voluntary market. That is, the state retires allowances on behalf of the voluntary RE sales that have applied. The states may have caps on the total number of allowances that can be set aside. In California, by contrast, rather than match exactly what is submitted by the voluntary market, the state has set a fixed amount of allowances to set aside for the voluntary RE market (a fixed percent of the total allowance budget—0.5% of the allowances from budget years 2013-2014 and 0.25% from budget years 2015-2020), which will not match the demand exactly. To date, there have been more than enough allowances in the CA set-aside to cover voluntary demand.

Also, in RGGI, the voluntary RE seller (or in the case of direct sales and onsite self-generation, the voluntary consumer or generator) using RE supply from within the RGGI footprint applies to the set-aside in the RGGI state in which the voluntary *sale* was made. In California, by contrast, the RE seller (generator, purchaser, or owner of self-generation) applies to the set-aside for any in-state generation. The California approach may be simpler in this respect.

#### ERC Retirement Mechanism for Voluntary RE in a Rate-based Federal Plan and Model Rule

In order to protect regulatory surplus in the voluntary market in a rate-based state, the federal plan and model rules must incorporate a mechanism to retire ERCs on behalf of the voluntary RE market (effectively an “ERC set-aside,” if voluntary RE is issued ERCs), rather than allowing them to be used for compliance by (to adjust the rates of) affected EGUs. This approach is preferred to disallowing ERCs from being issued for voluntary RE altogether, which would be the alternative state-driven requirement to restore regulatory surplus for the voluntary market.

If ERCs are issued for voluntary RE, a state set-aside of ERCs for the voluntary RE market should involve compensation for ERC providers whose ERCs are set aside by the state paying for the ERCs it sets aside for the voluntary market at fair market value. Such payment for the ERCs in the set-aside is appropriate since the state has an interest in encouraging voluntary markets. This option parallels an allowance set-aside (described above) where the state “pays for” the allowances by foregoing revenue that it could have earned by selling them (in the case of allocation by auction). In the case of allowances, the state already has them, but in the case of ERCs, the state must create a mechanism to acquire them, for example by a standing offer to buy at a set price, or by a reverse auction where they buy a stated quantity at the lowest offered prices.

Alternatively, the state may assess the cost of the set-aside to all ERC providers equally by issuing ERCs at less than 1 to 1 to all providers—e.g. if the total size of the ERC set-aside is A, total ERC applications is B, and the actual amount of ERCs earned by an ERC provider is C, then ERCs would be issued to each provider according to  $C - ((A/B)*C)$ .

Interstate trading of ERCs may make it difficult to assess the cost of the set-aside to affected EGUs that use ERCs.

#### Additional Resources

- *Renewable Energy in the EPA Clean Power Plan. Parts 1 and 2: Introduction to Emission Rate Credits and Interactions With and Impacts on RECs and Renewable Energy Markets*, October 16, 2015, <http://resource-solutions.org/site/wp-content/uploads/2015/10/Renewable-Energy-In-the-EPA-CPP-1.pdf> and <http://resource-solutions.org/site/wp-content/uploads/2015/10/Renewable-Energy-In-the-EPA-CPP-2.pdf>.
- *RGGI State Set-Aside Provisions for Voluntary Renewable Energy (VRE)*, Draft August 21, 2009, [http://www3.epa.gov/greenpower/documents/events/rggi\\_status\\_table.pdf](http://www3.epa.gov/greenpower/documents/events/rggi_status_table.pdf)

- *Support Voluntary Purchases of Clean, Safe, 21st Century Energy With an Off-the-Top Rule Under Cap and Trade*, May 18, 2009, <http://resource-solutions.org/site/wp-content/uploads/2015/08/CT-Policy-Brief.pdf>
- *Implications of Carbon Regulation for Green Power Markets*, April 2007, <http://apps3.eere.energy.gov/greenpower/resources/pdfs/41076.pdf>

#### Previous Comments on Voluntary RE Set-aside Mechanisms

- *Joint Letter in Support for Voluntary Renewable Energy Set-Aside in the Proposed California Cap-and-Trade Program*, December 13, 2010, [http://resource-solutions.org/site/wp-content/uploads/2015/08/Voluntary-Renewable-Set-Aside\\_12-13-10.pdf](http://resource-solutions.org/site/wp-content/uploads/2015/08/Voluntary-Renewable-Set-Aside_12-13-10.pdf)
- *Comments of Renewable Energy markets Association (REMA) on a Western Climate Initiative (WCI) paper*, February 19, 2010, [http://www.renewablemarketers.org/pdf/file\\_111.pdf](http://www.renewablemarketers.org/pdf/file_111.pdf)
- *Letter to Senator Boxer on Recommended Changes to Cap-and-Trade Design Under ACESA to Support the Voluntary Renewable Energy Market*, July 23, 2009, [http://resource-solutions.org/site/wp-content/uploads/2015/08/Senate\\_EPW\\_off\\_the\\_top\\_072309.pdf](http://resource-solutions.org/site/wp-content/uploads/2015/08/Senate_EPW_off_the_top_072309.pdf)
- *Coalition letter to Kevin Kennedy, CARB Office of Climate Change on the issue of off-the-top treatment of voluntary renewable energy purchases*, June 7th, 2010, [http://www.resource-solutions.org/pub\\_pdfs/nonprofit\\_and\\_clean\\_energy\\_coalition\\_7\\_7\\_2010.pdf](http://www.resource-solutions.org/pub_pdfs/nonprofit_and_clean_energy_coalition_7_7_2010.pdf)
- *Letter to Claudia Orlando, California Air Resources Board supporting off-the-top approach to voluntary renewable energy purchases in a California cap-and-trade program*, June 12th, 2009, <http://resource-solutions.org/site/wp-content/uploads/2015/08/Center-for-Resource-Solutions-comment.pdf>

#### **Other Comments**

##### Trading between States Covered by State Plans and States Covered by the Federal Plan

#### **2. Allow use of interoperable EPA-designated tracking systems for interstate trading between EGUs in states covered by state plans and EGUs in states covered by the federal plan.**

EPA is proposing to allow interstate trading between EGUs in states covered by the federal plan and EGUs in states covered by state plans if the state plans implement the same type of trading program as the federal plan, the state plan uses an identical compliance instrument, the state plan is a ready-for-interstate-trading plan, the state plan uses an EPA-administered tracking system (Sec. III.A.1, p.64977). EPA has requested comment on expanding this to include a state plan that uses an EPA-designated tracking system that is interoperable with an EPA-administered system.

We support allowing interstate trading linkages between states covered by the federal plan and states with an approved state plan meeting the proposed conditions for linkages and that use an EPA-designated tracking system that is functionally interoperable with an EPA-administered tracking system. If formal registration with EPA by the state using the EPA-designated tracking system is necessary or helpful in terms of ensuring that the tracking systems are functionally interoperable, in the case of either or both rate-based trading and ERC tracking systems or mass-based trading and allowance tracking systems, then we are also support such registration. However, if such a registration requirement can be avoided (i.e. functional interoperability can be ensured without registration), this will simplify the process for states.

### Mass-based Federal Plan and Model Rule

We have three comments regarding the proposed RE set-aside in the mass-based Federal Plan and Model Rule.

**3. Reframe the proposed RE allowance set-aside as an allowance allocation mechanism, as opposed to a set-aside.**

As proposed, the RE allowance set-aside is not a true “set-aside” in that allowances are not taken out of circulation or set aside. Rather, it is an allowance allocation mechanism. We suggest that this be clarified, so that true set-asides (such as the voluntary RE set aside that we propose here) are differentiated and may be considered separately.

**4. Do not limit eligibility for allocation under the RE set-aside to project providers that are also owners and operators of affected EGUs, unless this is necessary to prevent leakage.**

EPA has requested comment on whether to limit eligibility for allocation under the RE set-aside to project providers that are also owners or operators of affected EGUs (Sec. V.D.3.b, p.65023). It is unclear to us how restricting allowance distribution to certain ownership structures would affect the effectiveness of the set-aside to address leakage. Unless there is a good leakage (or other functional integrity) argument for restricting the set-aside to owners/operators of affected EGUs, this would unnecessarily discriminate against RE providers that do not also own regulated fossil units. Another effect of the set-aside (other than to help prevent leakage) is to reallocate value (the price of the allowance) back to RE, which is automatically removed and allocated to affected EGUs by the regulation to the extent that RE displaces generation at affected EGUs and helps them comply.

**5. Explain what happens, if anything, in the case that a RE provider exceeds the MWh projected in a particular generation year, which is the basis for the distribution of set-aside allowances (and as a result receives fewer allowances than are commensurate with what it actually produced).**

EPA proposes that allocation from the RE set-aside be based on projections submitted by RE projects that apply prior to the compliance period, with a true-up after each generation year. If the project received more than it actually generated, EPA proposes that those be subtracted from the following year (Sec. V.D.3.b, p.65024). However, it is unclear what happens if the project received less than it actually produces. Please clarify.

### Rate-based Federal Plan and Model Rule

**6. Further explain the ways in which RE generation can leverage REC tracking systems and other infrastructure in Evaluation, Measurement, and Verification (EM&V) for RE for ERC project registration/validation and ERC verification.**

The EPA’s requirements presume that the quantification of RE generation can leverage the infrastructure and documentation associated with the establishment of RECs and registration of such certificates in REC tracking systems (Sec. IV.D.8.b, p.65003). We are seeking clarification on what this means. For example, does this mean that REC tracking system reports can be used as a part of RE-ERC EM&V? Or, for example, does this mean that REC tracking systems can provide the data or that the data is the same?

**7. Allow use of interoperable EPA-designated tracking systems for ERC tracking in states covered by the rate-based federal plan or using the model rule.**

The EPA is proposing, as part of both types of model trading rules, a federal trading platform that would allow state plans that are ready-for-interstate-trading to operate through a program in which the EPA provides the tracking and compliance system (Sec. IV.D.3, p.64998). The EPA proposes that the rate-based federal trading program use the agency's Allowance Tracking and Compliance System (ATCS) to track the generation, holding, and deduction of ERCs for compliance purposes held by affected EGUs and other entities (Sec. IV.D, p.64997).

We support allowing states covered by a rate-based federal plan the option of using either the EPA's ATCS or a state-approved EPA-designated tracking system. For example, a state may prefer an existing regional REC tracking system as an EPA-designated ERC tracking system if it wants to set other requirements around RECs and ERCs.

**8. Revise the proposal to allow demonstration that a RE measure located in a mass-based state is delivering to meet load in a rate-based state for the purposes of ERC issuance through the provision of a power delivery contract alone in order to align with existing best practice and avoid foregone reductions.**

ERC issuance from measures located in a mass-based state is restricted to RE measures where load-serving entities in the rate-based state have contracted for the delivery of the RE generation that occurs in a mass-based state to meet load in a rate-based state. As part of the federal plan, EPA is proposing that this can be demonstrated through the provision of a power delivery contract or power purchase agreement (PPA) in which an entity in the rate-based state contracts for the supply of the MWhs in question and providing documentation that the electricity was treated as comparable to a generation resource used to serve regional load that included the rate-based state (Sec. III.A.2, p.64978).

However, a PPA alone does not demonstrate that emissions are being displaced in the rate-based state, and could therefore lead to foregone reductions if used as the sole demonstration of this requirement. Rather, in electricity markets, it is most common to demonstrate direct delivery using a NERC tag. Delivery of electricity across a border is proven by showing that electricity was scheduled and delivered through the control area operator. We recommend requiring demonstration of such scheduling and delivery (e.g. using a NERC tag) in order to issue ERCs for RE measures located in a mass-based state.

Thank you for your consideration of our comments and please contact me with any questions, for more information, to discuss further, or if we can otherwise be of assistance.

Sincerely,



Todd Jones  
Senior Manager, Policy and Climate Change Programs