



January 20, 2021

Arizona Corporation Commission (ACC)
Docket Control
1200 W. Washington Street
Phoenix, AZ 85007

RE: Docket No. RU-00000A-18-0284. Comments of Center for Resource Solutions (CRS) on Modifications to the Commission's Energy Rules and Notice of Proposed Rulemaking

Chairwoman Lea Márquez Peterson and Commissioners:

CRS appreciates this opportunity to provide comments on proposed modifications to the Commission's Energy Rules ("Proposed Rules") and the December 1, 2020 Notice of Proposed Rulemaking. Our primary comments focus on required documentation for an electric utility to "demonstrate its ability to deliver energy from Clean Energy Resources and Renewable Energy Resource to its Customers" in Sec. R14-2-2704(D). All recommendations are underlined.

Background on CRS and Green-e®

CRS is a 501(c)(3) nonprofit organization that creates policy and market solutions to advance sustainable energy. CRS provides technical guidance to policymakers and regulators at different levels on matters related to renewable energy policy design, accounting, tracking and verification, market interactions, and consumer protection. CRS also administers the Green-e® programs. For over 20 years, Green-e® has been the leading independent certification for voluntary renewable electricity products in North America. In 2019, Green-e® certified retail sales of almost 69 million megawatt-hours (MWh), serving over 1.6 million retail purchasers of Green-e® certified renewable energy, including over 113,000 businesses.¹

¹ See the 2020 (2019 Data) Green-e® Verification Report here for more information: <https://resource-solutions.org/g2020/>.

Primary Comments

1. Utilities need a uniform compliance instrument to demonstrate delivery of clean and renewable energy to customers and track carbon emissions associated with energy from generating units serving retail sales in compliance with Sec. R14-2-2704(B)(4).

Due to the nature of the shared electric grid, clean power and associated emissions are not physically delivered to customers or retail load. Emissions occur at the point of generation and are separate from physical power. The carbon emissions associated with retail sales of electricity cannot be directly measured and should reflect exclusive ownership of tracked and verified generation attributes.

Sec. R14-2-2704(D) of the Proposed Rules requires only that utilities provide documentation of either transmission rights to deliver energy from those resources to the utility's system or a control area operator scheduling the energy from those resources for delivery to the utility's system to demonstrate delivery of clean and renewable energy to their customers. This is insufficient as the totality of the state's requirements related to tracking and verification for compliance with Sec. R14-2-2704(B)(4). Additional requirements and use of a compliance instrument to track and verify delivery of clean and renewable energy to utility customers and greenhouse gas (GHG) emissions associated with retail sales will be critical to ensure the integrity of a clean energy standard in Arizona.

2. Utilities should be required to use renewable energy certificates (RECs)—specifically, Western Renewable Energy Generation Information System (WREGIS) certificates, where available—to demonstrate delivery of renewable energy and associated carbon emissions to customers and track attributes including carbon emissions associated with renewable energy serving retail sales in compliance with Sec. R14-2-2704(B)(4).

WREGIS certificates (generally called RECs) are the most sophisticated and consistent mechanism to verify unique delivery of renewable generation attributes, including GHG emissions, in Arizona and across the West. The use of WREGIS certificates for compliance with the proposed clean energy standard would avoid double counting, which may occur, for example, where an electric utility reports zero-emissions energy from a renewable energy resource to the Commission for compliance with R14-2-2704(B) while the RECs associated with the same MWh of generation are used for compliance or to serve voluntary customers (i.e. to verify delivery of the same zero-emissions energy) in a different state, or different customers in Arizona. Double counting would damage the integrity of the program and undercut the clean energy target. It would mean Arizona ratepayers would not be getting what they are paying for.

RECs are the legally enforceable contractual instrument for verifying use and delivery of renewable electricity in voluntary and compliance renewable electricity markets in the West and across the United States.² RECs were created to prevent double counting of renewable energy delivery or sale to multiple consumers, or more than once by a particular consumer.

We recommend changes similar to the previous Kennedy Proposed Amendments No. 2, which add definitions for REC and WREGIS and require that, “compliance shall be monitored, accounted for, and transferred through the use of RECs as recorded by the Western Renewable Energy Generation Information System.” While Commissioner Kennedy’s proposed amendment was to Sec. R14-2-2705 of the previous version of Staff’s proposal, we recommend that this requirement be added in or after Sec. R14-2-2704(D) of the Proposed Rules.

To demonstrate use of clean energy resources for which WREGIS certificates are not currently issued, e.g. large hydropower, the Commission should require that utilities demonstrate contractual specification of acquisition and retirement of nonpower generation attributes. To prevent double counting for these resources, we recommend that the Commission require demonstration that the attributes have been contractually retired on the utility’s behalf or cannot be otherwise transacted. For reference, see language in the California Energy Commission’s (CEC’s) final rule on Power Source Disclosure: “Procurements from nuclear or large hydroelectric generating units cannot be classified as specified purchases if the associated environmental attributes have been claimed by, or traded to, a separate party.”³

The Commission can set eligibility restrictions on renewable and clean energy that is used for compliance, based on location, type of procurement (e.g. bundled power contracts vs. “unbundled”), or other criteria, if desired, and still use RECs as the compliance instrument. RECs are an accounting instrument; they do not dictate any policy preferences around eligibility of supply.

The Commission may be creating a barrier to private investment in Arizona if it chooses not to use RECs. More than half of new renewable energy capacity additions in the West in 2018 were to serve non-compliance demand.⁴ The voluntary renewable energy market leverages private, non-ratepayer funding to support renewable energy sources. Those businesses and other voluntary buyers will not make investments in renewable energy that can be double counted or if they cannot verify exclusive

² See Jones, T. et al. (2015). *The Legal Basis of Renewable Energy Certificates*. Center for Resource Solutions. <https://resourcesolutions.org/wp-content/uploads/2015/07/The-Legal-Basis-for-RECs.pdf>.

Also see U.S. Federal Trade Commission (FTC). (February 5, 2015). *Letter to Sheehey Furlong & Behm P.C. regarding Petition to Investigate Deceptive Trade Practices of Green Mountain Power Company In the Marketing of Renewable Energy to Vermont Customers*. p. 3-4. http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2015/20150205_docket-na_letter.pdf.

³ 20 CCR § 1393.A.7.

⁴ Barbose, G. (July 2019). *U.S. Renewables Portfolio Standards 2019 Annual Status Update*. Lawrence Berkeley National Laboratory. Pg. 18. http://eta-publications.lbl.gov/sites/default/files/rps_annual_status_update-2019_edition.pdf.

use and carbon benefits with RECs. Without REC retirement for compliance with this section, Arizona customers that voluntarily purchase renewable energy cannot demonstrate that their generation is not being used for compliance and/or delivered to other customers.

Furthermore, under the Proposed Rules, voluntary buyers in Arizona would have to procure certified renewable energy from outside of Arizona and from where it can be verified that the generation has not been claimed and that it is not being used for compliance. In 2019, the Green-e® program certified over 4.4 million MWh in sales to retail customers in Arizona. This shows strong demand for voluntary renewable energy in the state. Using RECs for the clean energy standard would allow for this demand to be met by resources in Arizona and the surrounding region—allowing Arizona the opportunity to capture the private investment dollars that may otherwise go elsewhere.

3. RECs are the appropriate compliance instrument for the carbon- or emissions-based clean energy standard in the Proposed Rules.

While RECs have historically been used for renewable energy (fuel type) standards, RECs are also necessary for programs, like the Proposed Rules, that measure and regulate the *emissions associated with retail sales or delivered to retail load*. Emissions (like fuel type) cannot be directly measured at the point of delivery or consumption. Instead, RECs represent the aggregated attributes of renewable generation, including its zero-emissions attribute. This is why states with similar emissions-based and load-based⁵ clean energy standards use RECs to track emissions associated with renewable energy to load. Washington State’s Clean Energy Transformation Act is one such example.⁶

Documenting delivery of zero-emissions power from renewable sources without RECs, as proposed, could double count emissions (as described above). More fundamentally, emissions allocated to Arizona load should match the fuel type allocated to Arizona load—these two attributes of generation should remain bundled together—because emissions are determined by fuel type. The only way to ensure alignment is to incorporate RECs in both renewable and carbon load-based accounting frameworks.

For these reasons, the vast majority of U.S. government agencies and leading non-governmental organizations (NGOs) in the renewable energy and climate change field recognize the role of RECs in retail carbon accounting, including the U.S. Environmental Protection Agency (EPA), the National

⁵ “Load-based” policies (also called consumption-based or demand-based policies) measure and regulate what is consumed, delivered, sold to, or serving load in some particular place (or determine “retail claims” for a particular place). They can be distinguished from “source-based” policies (also called production-based policies), which measure and regulate what is generated at the source. Load-based accounting requires a tracking instrument or method for allocating generation to load, because specified, clean power and emissions are not physically delivered, separate from physical power, and cannot be measured or verified at the point of consumption. The point of regulation or reporting entity for load-based policies is often the utility or load-serving entity (LSE).

⁶ See <https://www.commerce.wa.gov/growing-the-economy/energy/ceta/>.

Renewable Energy Laboratory (NREL), the U.S. Department of Energy (DOE), the U.S. Federal Trade Commission (FTC), the World Resources Institute (WRI), the World Business Council for Sustainable Development (WBCSD), the International Organization for Standardization (ISO), the Union of Concerned Scientists (UCS), and the Natural Resources Defense Council (NRDC), to name only a few.

Other Comments

4. There is an inconsistency between the emissions that must be reduced (and reported annually) and the baseline against which the reduction is measured under the clean energy standard.

Per Sec. R14-2-2701(8) and R14-2-2704(E), “Baseline Carbon Emissions Level” is defined as a utility’s emissions “associated with energy produced from all generating units used to serve its kWh sales.” Whereas, per R14-2-2701(13), “Carbon Emissions” are defined as emissions from generating sources. These are two different quantities of emissions—the former representing retail sales while the later represents generation sources. Sec. R14-2-2704(B)(4) nevertheless requires that an electric utility achieve a 100% reduction in Carbon Emissions (from generation sources) below its Baseline Carbon Emissions Level (associated with retail sales).

If the Commission intends to require a reduction of emissions associated with energy delivered to Arizona customers and used to serve utility retail sales, we recommend either revising the definition of “carbon emissions” at R14-2-2701(13) to mean the carbon emissions associated with resources used to serve a utility’s retail sales OR revising the clean energy standard at R14-2-2704(B)(4) to require that utilities reduce the Carbon Emissions associated with resources used to serve retail sales below its Baseline Carbon Emissions Level, AND revising requirements at R14-2-2704(C)(3) and R14-2-2710(A) to require reporting of Carbon Emissions associated with retail sales.

5. There are inconsistencies between annual reporting requirements and requirements for Clean Energy Implementation Plans.

Per Sec. R14-2-2710(A), utilities must submit an annual compliance report to the Commission detailing compliance for the previous year, including (1) “the actual kWh of energy produced within its service territory or obtained from Clean Energy Resources and Renewable Energy Resources,” and (5) “the total Carbon Emissions disaggregated by all generating units used to serve its kWh sales, expressed in metric tons.” These are slightly different than metrics required per Sec. R14-2-2704(C)(3) for Clean Energy Implementation Plans. Furthermore, energy produced in a utility’s service territory is not necessarily serving retail sales, and it is not clear whether utilities should report all energy produced within their service territories or only energy from clean and renewable energy resources. “Obtained” is

generally undefined (at both R14-2-2710(A)(1) and R14-2-2704(C)(3)(c)) and it may be substantiated differently by different utilities.

We recommend that the energy and emissions information reported annually by utilities under Sec R14-2-2710(A) be consistent with the information included in the Clean Energy Implementation Plan per Sec R14-2-2704(C)(3). We recommend that energy and emissions information that is reported annually be third-party verified similar to the Baseline Carbon Emissions Level. We also recommend that the Commission clarify whether energy “obtained” by a utility, energy from units “used to serve its kWh sales,” and energy that it is “[able] to deliver [...] to its Customers” are equivalent and can be demonstrated based on the documentation provided per R14-2-2704(D).

6. The Proposed Rules do not include a standardized methodology for the calculation of Baseline Carbon Emissions Level, against which a third-party can verify its accuracy. Standardized methodologies are also missing for “Total Carbon Emissions,” and “Total Carbon Emission reductions from the Baseline Carbon Emissions Level.”

Sec. R14-2-2704(C) of the Proposed Rules requires that utilities include in their Clean Energy Implementation Plans, (3) “For the previous three calendar years,” (h) “Total Carbon Emissions, disaggregated;” and (i) “Total Carbon Emission reductions from Baseline Carbon Emissions Level.” Sec. R14-2-2710(A)(5) requires that utilities submit an annual compliance report to the Commission detailing compliance for the previous year, including “the total Carbon Emissions disaggregated by all generating units used to serve its kWh sales, expressed in metric tons.” However, no methodology is provided and utilities may calculate these figures in different ways and using different data.

Sec. R14-2-2704(F) also requires that utilities provide to the Commission their proposed Baseline Carbon Emissions Level and verification from an independent third-party that the Carbon Emissions identified in its Baseline Carbon Emissions Level are accurate, along with any supplemental information and work papers used to make that determination. Sec. R14-2-2704(M) states that Commission Staff may request additional information, including the data used in the electric utility’s analyses. However, again, no standardized methodology for calculation of baseline emissions is provided, and utilities and verifiers may each use different methodologies and standards for determining the accuracy of these emissions. Third-party verifiers will require an accounting protocol or method against which to verify.

We recommend that the Commission or Commission Staff provide a standardized methodology for calculating emissions and baseline emissions levels, including accounting rules specifying that RECs must be retired by utilities on behalf of their Arizona load in order to assign the emissions of a renewable resource (e.g. zero emissions) to delivered energy for the purposes of reporting under Sec. R14-2-2704(C)(3)(h) and (i), R14-2-2704(F), and R14-2-2710(A)(5).

7. The Proposed Rules do not specify how utilities will demonstrate that the source of energy used to charge a storage system is a clean or renewable energy resource.

Sec. R14-2-2704(D)(3) of the Proposed Rules requires that utilities provide documentation of the source of the energy that is being used to charge Energy Storage System used to meet subsection (B)(3).

We recommend that the Commission provide more detail on how utilities can and should demonstrate the source used to charge a storage system, the documentation that would be acceptable, and detailed requirements for verification and compliance with this section.

8. Annual reporting of utility supply side resource data does not include information about REC ownership and retirement for reported renewable energy.

Sec. R14-2-2710(C) requires annual reporting of supply side resource data, including (l) "For each generating unit and purchased power contract for the previous calendar year" (l) "the fuel type for each generating unit," and (p) "the environmental impacts, including air emission quantities (in metric tons or pounds) and rates (in quantities per megawatt-hour) for carbon dioxide, nitrogen oxides, sulfur dioxide, mercury, particulates, and other air emissions subject to current or expected future environmental regulation."

We recommend that this data include whether RECs were obtained and retired and the quantity of RECs obtained and retired in WREGIS for the utility's load/sales for renewable generation units.

9. Clean and renewable energy that has been or will be imported to California, either directly or through the Western Energy Imbalance Market (EIM), should not be counted toward compliance with Arizona's clean energy standard.

California's cap-and-trade program includes emissions associated with imported electricity. It defines imported electricity as: "electricity generated outside the state of California and delivered to serve load located inside the state of California."⁷ In addition, GHG attribution to California in EIM, "determines if [a] resource is serving load in [the] California GHG compliance area,"⁸ as opposed to load in Arizona, for example. California is accounting for generation attributes delivered to California load under this part of the cap-and-trade program.

⁷ Sec. 95802(a) California's Cap-and-trade Regulation.

⁸ Slide 5 of the California Independent System Operator's (CAISO's) July 15, 2020 presentation to the state of Washington's Clean Energy Transformation Act (CETA) Carbon and Electricity Markets Stakeholder Workgroup (MWG). Available here: https://www.utc.wa.gov/_layouts/15/CasesPublicWebsite/GetDocument.ashx?docID=140&year=2019&docketNumber=190760.

California's program does not require REC retirement in California for renewable imports in order to calculate emissions or determine compliance obligations.⁹ The California Independent System Operator (CAISO) has created a GHG attribution mechanism in the EIM for California. There may be a risk of double counting zero-emissions electricity that is imported to California and reported under that state's Mandatory Reporting Regulation (MRR) where the RECs or other documentation associated with this generation are used for compliance with Arizona's clean energy standard.¹⁰

We recommend that the Commission include a general provision prohibiting double counting; a requirement for retirement of RECs associated with renewable energy that is used for compliance with the clean energy standard, as recommended above; and a provision prohibiting renewable energy that is imported to California, either directly or through the EIM, and associated RECs, from being used toward compliance with R14-2-2704(B)(4) of the Proposed Rules.

Please let me know if we can provide any further information or answer any other questions.

Sincerely,

_____/s/____

Todd Jones

Director, Policy

⁹ See Sec. 94511(a)(4) of the Mandatory Reporting Regulation (MRR): "Imported Electricity from Specified Facilities or Units. The electric power entity must report all direct delivery of electricity as from a specified source for facilities or units in which they are a generation providing entity (GPE) or have a written power contract to procure electricity."

¹⁰ Further explanation is provided in two letters from CRS to the California Independent Emissions Market Advisory Committee (IEMAC) dated Oct 5, 2018 and Aug 22, 2019. Available at: <https://resource-solutions.org/wp-content/uploads/2018/10/CRS-Comments-for-IEMAC-10-5-2018.pdf> and <https://resource-solutions.org/wp-content/uploads/2019/12/CRS-Letter-to-IEMAC-8-22-2019.pdf>, respectively.