March 16, 2020

Arizona Corporation Commission
1200 W. Washington Street
Phoenix, AZ 85007

RE: Docket No. RU-00000A-18-0284. Comments of Center for Resource Solutions (CRS) on Possible Modifications to the Commission’s Energy Rules and Stakeholder Meetings and Workshops Held March 10 and 11, 2020

Chairman Burns and Commissioners:

CRS appreciates this opportunity to provide comments on elements of Staff's February 18, 2020 Third Revised Proposed Draft Rules (“Staff’s Draft Rules”), the Joint Stakeholder Proposal for New Energy Rules (“the Joint Stakeholder Proposal”), and Stakeholder Meetings and Workshops held March 10-11, 2020 (“the Workshops”). Our comments are focused on requirements for demonstrating compliance with the Renewable Energy Standard and Tariff (REST) in Staff’s Draft Rules, the Clean Energy Standard (CES) and Distributed Renewable Energy Requirement (DRER) in the Joint Stakeholder Proposal, and Clean Peak Standards (CPS). Our specific comments and recommendations are numbered for ease of reference.

**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 2018, Green-e® certified retail sales of over 62 million megawatt-hours (MWh), serving over 1.2 million retail purchasers of Green-e® certified renewable energy, including 61,000 businesses.¹

¹ See the 2019 (2018 Data) Green-e® Verification Report here for more information: [https://resource-solutions.org/g2019/](https://resource-solutions.org/g2019/)
**Comments on Staff's Draft Rules**

As Ms. Briana Kobor of Vote Solar noted in her presentation at the Workshops on behalf of the Joint Stakeholders, Staff's Draft Rules do not appear to require Renewable Energy Certificates (RECs) for compliance with the REST, which could lead to double counting. Staff is proposing to eliminate Article 18, where the REST and compliance requirements currently exist, and to create a new Article 27 where rules for several different programs will be combined. This makes the redline in Staff's Draft Rules somewhat opaque. However, it appears that the Energy Implementation Plan (EIP) under Sec. R14-2-2705 is where a utility would demonstrate compliance with the REST, and subsection (F) represents the total of the “necessary proof” that Staff would require for demonstrating delivery of energy from renewable resources, and REC retirement is not included.

1. In that case, REC retirement should be included in Sec. R14-2-2705(F) of Staff's Draft Rules.

2. But regardless, REC retirement should be required for REST compliance in order to avoid double counting.

Since RECs are the common tracking and accounting mechanism used in Renewable Portfolio Standard (RPS) programs in neighboring states as well as the voluntary renewable energy market, if RECs are not required for REST compliance in Arizona, the same MWh may be used for delivery of renewable energy to customers in Arizona, based on transmission rights and scheduling information, and also for a different state’s RPS program and customers, or a specific voluntary buyer in either in Arizona or a different state, based on procurement and retirement of the REC.

We were also unable to find a requirement for Commission approval of the EIP under Staff's proposed rule.

3. There should be some evaluation or auditing of REST compliance reports, including some verification of REC retirement, to ensure Arizona ratepayers are getting what they are paying for.

**Comments on the Clean Energy Standard (CES) in the Joint Stakeholder Proposal**

4. CRS generally supports regulating greenhouse gas (GHG) emissions from the electricity sector in Arizona. CRS is also generally supportive of the CES as proposed by the Joint Stakeholders.

To our knowledge, the CES as proposed by the Joint Stakeholders has not been adopted in any other state. There has been some discussion and evaluation of it as a pilot or demonstration program in New Mexico.
5. The Clean Energy Credit (CEC) and the crediting and compliance system for the CES that has been proposed by the Joint Stakeholders is different from and perhaps more complicated than those used or proposed in other states for similar clean energy programs. As a result, it may be difficult to link this CES program with others.

A CEC does not represent a quantity of GHG emissions; neither does it represent a MWh of generation at a certain GHG emissions rate. Rather, CECs are issued for each metric ton of emissions below an all-coal generation scenario—1,000 metric tons per gigawatt-hour (GWh) of Arizona load. In contrast, cap-and-trade programs in California and states participating in the Regional Greenhouse Gas Initiative (RGGI) are mass-based air regulations and “source-based” programs that use allowances and offsets representing 1 metric ton of GHG emissions. Other “load-based” clean energy/power sector programs either use RECs that represent 1 MWh of generation from carbon-free, renewable sources (e.g. the Clean Energy Transformation Act in Washington State).

6. CRS strongly supports the steps taken by the Joint Stakeholders to ensure that there will be no double counting with RECs under the CES.

There is a risk of double counting since, first, the CES regulates the emissions associated with retail electricity load. Again, it is different in that way from a mass-based air regulation like RGGI or California’s program. Second, RECs are used to verify delivery of renewable energy in state and voluntary renewable energy programs across the country. Issuance of both a REC and a CEC for the same MWh of generation would double count the emissions factor of renewable generation, resulting in either two different emissions claims on the same MWh, or disaggregation of the emissions attribute from the REC, damaging the integrity of the accounting instrument. It would be double counting for a supplier to report delivery of zero-emissions power for the CES and earn CECs on that basis, and for a different supplier to report delivery of the same renewable zero-emissions power based on the REC.

Importantly, the Joint Stakeholder Proposal includes a REC retirement requirement in the definition of Clean Energy Credit. This prevents double counting, both between different state programs (e.g. the REST and the CEC) and between Arizona and other state or voluntary programs. It correctly ensures there can be no compliance credit for delivery of renewable energy without REC retirement. In this way, it represents an essential synchronization of accounting mechanisms, based on how the program is structured, so that this program works properly with existing REC programs and markets.

It is worth noting that retirement of RECs for CEC issuance does not necessarily affect the REST. It does not prevent the Commission from allowing RECs retired for CEC issuance to nevertheless be retired for the RPS. If utilities wish to bank (and not retire) RECs for future RPS compliance, either they would be issued CECs for that RE when the RECs are retired, or you could allow CECs to be issued for RECs.
banked for the RPS, provided that RECs are tagged in WREGIS as having been claimed for this program. Or crediting under the CES could be aligned with compliance periods for the RPS.

7. CRS strongly supports the steps taken by the Joint Stakeholders to ensure that the CES will not harm the voluntary renewable energy market.

Voluntary buyers of renewable energy expect their investments to support renewable energy that is not used for compliance or otherwise required by law. This enables the voluntary market to make an incremental difference often referred to as “regulatory surplus.” Including REC retirement in the CEC definition ensures regulatory surplus for voluntary users of onsite renewable energy in Arizona and for those that purchase Arizona renewable energy from out-of-state suppliers. Both can claim that their renewable energy is producing emissions benefits above and beyond what is required by law since the generation associated with their RECs cannot be counted under the CES. This removes a significant potential barrier to investment and the development of renewable energy in Arizona, providing both economic and environmental benefits to the state.

The Joint Stakeholder Proposal also appropriately excludes voluntary renewable energy in the definitions of “Dedicated Generation” and “Arizona Load,” which maintains regulatory surplus for in-state utility voluntary renewable energy options in Arizona. The CEC definition in the Joint Stakeholder Proposal would not prohibit an Arizona utility from earning CECs for generation associated with its own voluntary program or REC sales. But since Dedicated Generation is defined not to include voluntary renewable energy and base period emissions are calculated based on Arizona Dedicated Generation, base period emissions will not include Arizona voluntary renewable energy. Also, since the number of CECs is determined by subtracting actual emissions (which voluntary generation will still affect) from the adjusted Arizona Load in GWh times 1,000, removing voluntary renewable energy and renewable energy without RECs from Arizona Load preserves full voluntary benefits for those customers.

**Comments on the Distributed Renewable Energy Requirement (DRER) in the Joint Stakeholder Proposal**

8. CRS generally supports both a distributed generation (DG) requirement in Arizona and the ability of DG customers to control whether or not their generation is used for the REST, i.e. to choose to keep their RECs.

We believe that DG customers that do not provide their RECs to the utility for REST compliance are also participating in clean energy development in Arizona. In fact, these customers are making an incremental difference beyond the REST by keeping their RECs.

9. CRS agrees with the Joint Stakeholders that the current DG carve out should be updated.
First, it is not ideal that customers have to choose between an incentive payment and a voluntary renewable energy purchase and claim that makes a difference beyond the REST. Second, requests for waivers to the DG provision of the current REST by utilities are not a beneficial response to the expiration of the incentive and the end of automatic transfers of RECs to utilities for the REST and DG carve out. If RECs are automatically provided to the utility for compliance, that is unfair to DG customers, and if renewable generation gets automatically counted by the utility for compliance without the REC, that could lead to double counting.

10. CRS requests clarification on whether the DRER as proposed by the Joint Stakeholders is a requirement for production or consumption of energy from DG resources.

The DRER will not be a carve-out of the updated REST, but rather a parallel program. The target is set in terms of retail sales: 10% of total retail sales from distributed generation by 2030. But compliance will be measured based on DG production captured by the dedicated production meters installed by the utility at the customer’s premises. As a result, it appears to be a requirement for production, not delivery/consumption by customers, even though the percentage compliance targets are set as a percent of retail sales.

If it is a requirement for production, RECs associated with the DG would not be double counted, although there would still be a loss of regulatory surplus, as described above, if the RECs are sold into voluntary market.

11. If the DRER is a requirement for production, CRS recommends that targets under this standard also be set in terms of production, rather than retail sales.

12. On the other hand, if the DRER is a requirement for consumption, REC retirement should be required as a part of compliance in order to avoid double counting.

The DRER, as proposed by the Joint Stakeholders, could lead to double counting if it allocates generation attributes to affected utilities for compliance as a percent of retail sales without using RECs.

Comments on Clean Peak Standards (CPS)

It is important that renewable generation not be double counted in either a) different programs within Arizona, b) in programs of other states, or c) in the voluntary market. Other states, including Massachusetts, have proposed CPS programs that use a new, separate compliance instrument—for example, a “Clean Peak Certificate” (CPC). In this case, and where a qualified REST resource may
generate both a CPC and a REC for electricity generated and delivered to the electric grid during a seasonal peak period, there is potential for double counting with RECs.

While the Commission may determine that it is permissible for the same MWh of renewable generation to be used for both the CPS and the REST (the CPC and the REC used for each, respectively), 1) it should not be permissible for one retail supplier to use the REC for compliance with the REST and a different retail supplier to use the CPC for compliance with the CPS; and 2) it should not be permissible for the REC to be used in another state's RPS or in the voluntary market.

In either case, the environmental attributes of the same MWh may be delivered to different customers. Even in the case that CPCs are defined explicitly not to contain and convey generation attributes, they represent a separate compliance instrument associated with the unit of generation, the issuance and use of which may make those MWh and associated RECs ineligible or undesirable in neighboring RPS programs, and, as discussed earlier, affect regulatory surplus for the voluntary market. The Green-e® program, for example, would need to identify RECs associated with MWh that have also been issued CPCs.

13. To avoid double counting and ensure regulatory surplus for the voluntary market, in the case that both instruments are issued for qualifying generation, the REC and CPC should remain “bundled.” The sale or retirement of either should require the sale or retirement of the other to or for the same entity.

If one is retired to substantiate the creation of the other, that instrument could be sold freely since in this case there is only one instrument.

Compliance with the CPS should require retirement of a REC for each MWh, and verification that the timing of renewable generation was during a qualifying peak period. If RECs can be “time-stamped” in the future, then it may be possible for RECs associated with generation from qualifying facilities during qualifying peak periods to be defined as CPCs, rather than creating a new and separate instrument. If this is possible under the law, it would be preferred and obviate potential double counting.

14. We strongly suggest that the Western Renewable Energy Generation Information System (WREGIS) be designated as the tracking system for CPCs if they are issued separately from RECs.

Issuing, tracking, and retiring CPCs in the same tracking system with RECs has clear advantages in terms of avoiding double counting, transaction costs, inter-registry communications, and potential errors. RECs associated with generation that has received a CPC should be identified, e.g. “tagged,” in the WREGIS.
15. In addition, if storage systems may also qualify for compliance with the CPS, RECs should also be used to substantiate storage and discharge of renewable power by a storage facility.

Otherwise, there can be double counting of renewable MWh in either state RPS markets or the voluntary market. Furthermore, storage facilities should not generate unique RECs since they are not generation resources. This would also double count renewable energy generation.

Compliance with the CPS using a storage system should require all of the following:

- A locally sourced, RPS-eligible REC retired for each MWh stored;
- Verification that electricity was stored when RPS-eligible renewable resources are generating,\textsuperscript{2} OR that the storage facility is directly physically or electrically connected to a renewable energy resource; AND
- Verification that electricity was discharged during a qualifying peak period.

A CPC should only be issued for these storage facilities where all three of these requirements are met. This is because the purpose of a CPS is not just to increase the consumption of renewable energy (in this case, all that would be needed to substantiate compliance would be REC retirement), but also to shift renewable energy generation to the peak periods. Energy storage systems can increase consumption (by charging batteries) at the times when there is an excess of renewable energy and increase production (by discharging batteries) at times of peak load. This requires information about the timing of storage and discharge, which is not typically information that is tracked using RECs, though RECs are needed to prevent double counting.

We do not recommend that RECs that were generated in different grid regions be eligible for qualifying storage systems under a CPS. Whereas electricity customers may make renewable energy usage claims based on RECs that are sourced nationally in the voluntary market, in this case, the RECs are used to characterize bundled electricity that is being stored and discharged at the storage facility. Therefore, these RECs should be sourced from the same grid region where the storage facility is located.

RECs should also be required to verify consumption or delivery of renewable power from storage facilities that are directly physically or electrically connected to a renewable energy resource. In this case, a single REC should be issued once to the combined renewable storage facility for each MWh of power discharged and injected to the grid. Again, the storage equipment should not be treated as a separate generation resource.

\textsuperscript{2} The regulator should have some process to historically verify that the total amount of energy stored during a period of time does not exceed the total amount of RPS-eligible renewable energy generating at that time.
Other scenarios that should be considered by the Commission include:

- Storage facilities that do not charge exclusively when renewable resources are generating on the grid; and
- Where there are significant loses at storage facilities.

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

Sincerely,

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Todd Jones
Director, Policy