BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS
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IN THE MATTER OF POSSIBLE MODIFICATIONS TO THE ARIZONA CORPORATION COMMISSION'S ENERGY RULES	**Docket No. RU-00000A-18-0284**

COMMENTS OF THE U.S. ENERGY STORAGE ASSOCIATION

ESA respectfully submits these comments for the consideration of the Commissioners and Arizona Corporation Commission Staff ("Staff") in response to proposed revisions to the Commission's Renewable Energy Standard and Tariff ("REST"), resource planning and electric/gas energy efficiency rules submitted in the above referenced docket on April 25, 2019.

ESA appreciates the opportunity to provide comments on Staff's initial modifications to the Commission's energy rules. ESA shares the Commission's concern that updates to Arizona's existing energy rules are required to reflect the immense technological changes that have taken place over the past decade, and shares its interest in driving a transition to a low-carbon and more efficient electric grid. In our comments below, ESA reiterates its recommendation that an energy storage target be incorporated into the clean energy plans under consideration at the Commission and proposes additional language for Staff and the Commissioners' consideration to better incorporate such a target. Additionally, ESA provides recommendations for edits to the Clean Peak program in the draft rules.

I. ABOUT THE U.S. ENERGY STORAGE ASSOCIATION

ESA is the national trade association dedicated to energy storage, working toward a more resilient, efficient, sustainable and affordable electricity grid – as is uniquely enabled by energy storage. With more than 170 members, ESA represents a diverse group of companies, including independent power producers, electric utilities, energy service companies, financiers, insurers, law firms, installers, manufacturers, component suppliers and integrators involved in deploying energy storage systems around the globe.

II. RESPONSE TO DRAFT REVISIONS TO ENERGY RULES

As noted in our comments filed on March 25, 2019, ESA contends that energy storage must be an integral part of a clean energy discussion currently underway at the Commission.[1] ESA respectfully recommends that the Commission consider separate but complimentary policies to enable energy storage to operate across the grid in a way that optimizes the transition between existing and new generation. A clean energy goal at the scale being considered among stakeholders in this docket requires polices to maintain system reliability and affordability, including an explicit energy storage target that ensures the deployment of grid infrastructure in the form of standalone and co-located energy storage, to better integrate both baseload and intermittent generation sources. Additional market-based mechanisms to drive down demand and increase low-cost/low-emissions energy delivered during peak hours and incentives for distribution-connected energy storage are also a key pillar of a clean energy future. Below ESA provides recommendations for how to incorporate these elements into Arizona's energy rules.

[1] Comments of the Energy Storage Association, Docket No. RU-00000A-18-0284, March 25, 2019, pgs. 4-6.

1. Include an Explicit Energy Storage Goal Along With A Clean Energy Goal and Clean Peak Standard

ESA contends that an energy storage target is needed to build the flexible grid infrastructure critical to achieving the clean energy, and that such a target would align with the vision articulated in the plans put forward by Commissioners Dunn, Kennedy and Tobin. ESA notes that such a target is absent from the initial proposed revisions of the energy rules as filed by Staff on April 25, 2019. An energy storage target could be incorporated into the Integrated Resource Planning ("IRP") rules, providing the utility with a clear policy signal as it models scenarios and selects a preferred plan in its IRP to better align with the Commission's policy objectives. Importantly, incorporation into the IRP process also ensures that if there is no need or the resource is not the most competitive and best fitting resource to address a given need, then there is a process to request a waiver or deferral of the target so that the utility has flexibility in meeting its storage requirements.

ESA agrees with Commissioner Tobin's proposal that a 3,000 megawatt ("MW") by 2030 target is a reasonable policy objective, with a process to review that target along the way. That target would be cumulative and, given the immense investment announcements made in energy storage already by the Arizona Public Service Company and a proposal for a 2,000 MW pumped storage facility under consideration,[2] the target amount is reasonable and achievable.

For Commission and Staff consideration, ESA recommends the following definition for an energy storage system and an energy storage goal:

[2] Big Chino Valley Pumped Storage Project, see details at: https://www.bigchinovalleypumpedstorage.com/docs/default-source/bcv/itc_bcv_projectprofile_nov2018.pdf

"Energy Storage System" means a commercially available technology that is capable of retaining energy, storing the energy for a period of time, and delivering the energy at a later time, including, without limitation, by chemical, thermal or mechanical means.

"Energy Storage Goal" means an amount of eligible energy storage systems (megawatts) that each Affected Utility must procure of the statewide storage target of 3,000 MW by 2030 based on its share of peak load as of January 1, 2020.

The Energy Implementation Plan section of the rules (section R.14-2-2703, subsection A and B) would then include the energy storage target as a third requirement after the renewable energy goal and clean peak goal. ESA proposes the following language:

R.14-2-2703 (A)

3. Each Affected Utility shall be required to satisfy its portion of the Energy Storage Goal relative to its share of peak load as of January 1, 2020.

R.14-2-2703 (B)

1. Renewable Energy Goal, an Energy Storage Goal and a Clean Peak Goal proposed for the following three calendar years;

In addition, ESA recommends the inclusion of the following language to support a request for a waiver or deferral of the energy storage target if the utility either does not have identified need or energy storage was not as cost effective as other solutions. Under the Waiver Provision section, R14-2-2710 (B), ESA recommends the following amendments and new language:

2. "Data supporting the Affected Utility's assertions as to the burden of compliance and the potential benefits to customers that would result from compliance, including costs assumptions that are based on data that is less than one year old; and

4. A satisfactory demonstration that an effort was made to solicit the resources needed to meet the goals identified in R14-2-2703 (A)(3) and an explanation of why they were not the most cost-effective solution relative to other resources.

2. Implement Policies to Reduce Costs and Meet Peak Demand to Complement the Aggressive Clean Energy Goal

As noted in our previous comments, ESA respectfully proposes that market-based programs and incentives to reduce peak demand and emissions during peak periods are complementary to a clean energy goal.[3] ESA commends Staff for providing such a program in the draft revisions to the energy rules through the Clean Peak Goal. While an aggressive clean energy goal can provide important benefits and savings to customers, such a goal does not ensure that the high costs of serving peak demand are addressed. Commissioner Dunn rightfully recognizes this in his proposal.

While ESA is generally supportive of the Clean Peak Goal outlined in the draft revisions, two revisions are critical to ensuring customers receive the benefits the program is intended to achieve. ESA recommends the following modifications and provides draft language for the Commission's consideration related to the incorporation of a baseline in the program and the inclusion of standalone energy storage.

[3] Comments of the Energy Storage Association, Docket No. RU-00000A-18-0284, March 25, 2019, pg. 6-7.

To ensure incremental new capacity is installed as a result of the clean peak program, an affected utility should be required to increase the levels of eligible Clean Peak Resources delivering during the clean peak based off of an initial minimum baseline that determines how many of those kilowatt hours are already being provided during the peak before the program became effective. As such, it is important the draft revisions to the rules proposed by Staff be modified to reflect the baseline minimum as a starting point. To that end, ESA proposes the following revisions:

"Each Affected Utility shall establish a Clean Peak Goal which requires at least 15% of its retail kilowatt hour sales during the time of peak demand above the set baseline minimum to be derived from Clean Energy Resources by 2035."

And the baseline minimum should be incorporated into the definitions section as follows:

"Baseline minimum" means the amount of existing eligible clean peak standard resources delivering electricity during peak hours as of January 1, 2020.

As ESA has noted in the past, enabling standalone energy storage systems to qualify for any peak demand reduction program is critical to ensuring maximum benefits for customers and does not violate the objectives of the program. Rather than solely relying on energy storage co-located with renewable generators, ESA recommends a pathway for eligibility for standalone storage where it can be "virtually paired" with a renewable resource. Any technology capable of meeting the policy objectives of the program (i.e., reducing emissions in a cost-effective way during peak periods) should be able to participate – including standalone energy storage.

Under the "virtual pairing" concept, standalone energy storage systems would be able to demonstrate the acquisition of a renewable energy credit from an eligible renewable energy

resource for every hour it would like to receive a clean peak credit. If the Commissioners and Staff agree with this recommendation, ESA proposes the following revisions to the eligible Clean Peak Resources section in R14-2-2705(D):

4. Eligible "Standalone Energy Storage Systems" are ones that aquire a renewable energy credit from an Eligible Renewable Energy Resource as defined in R14-2-2701 (61) for every hour during the determined peak period that the resource discharges electricity.

III. CONCLUSION

ESA appreciates the opportunity to provide these comments and recommendations on the implementation of reforms to the energy rules. We look forward to continuing to work with the Commission and other stakeholders to update the energy rules to reflect the policy positions of the Commission and State.

Respectfully submitted this 29th day of May, 2019.

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