

BEFORE THE PUBLIC UTILITIES COMMISSION OF NEVADA

**Rulemaking to implement the provisions of
Senate Bill 204 (2017)**

Docket No. 17-07014

COMMENTS OF THE ENERGY STORAGE ASSOCIATION

Pursuant to Procedural Order No. 5 issued by the Public Utilities Commission of Nevada (“Commission”) on August 22, 2019, in Docket No. 17-07014 Investigation and Rulemaking to Implement Senate Bill (“SB”) 204 (2017), the U.S. Energy Storage Association (“ESA”) respectfully submits these comments for the Commission’s consideration. ESA was one of the parties engaged in informal stakeholder process to develop the draft regulations filed in the above referenced docket on September 12, 2019. ESA applauds all the stakeholders in the informal working group for working collaboratively on a set of complex issues. The consensus document now under consideration by the Commission reflects significant compromise and good faith efforts by all stakeholders involved. In our comments, ESA supports the consensus language in the draft regulation filed by NV Energy on behalf of stakeholders and proposes additional regulatory language for the Commission’s consideration on the non-consensus items.

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 180 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. Further, our members work with all types of energy storage technologies and chemistries, including lithium-ion, advanced lead-acid, flow batteries, zinc-air, compressed air, and pumped hydro among others.

II. COMMENTS ON PROPOSED DRAFT REGULATIONS

The draft regulations filed on September 12, 2019, in the above-referenced docket reflect the productive discussions and compromise by all stakeholders involved. The draft regulations seek to implement the intent of Senate Bill 204 (2017) and the Commission's guidance on its interpretation of the legislation in the December 24, 2018, Order and Report on Whether It Is in The Public Interest to Set Biennial Energy Storage System Procurement Targets. ESA is generally supportive of almost all of the language included in the draft regulations, and our comments are largely focused on recommendations for language that enhances the process. ESA is supportive of the draft regulation's linkage to the integrated resource planning ("IRP") regulations, and the requirement for an energy storage plan that tracks progress towards achieving the target. The information in the plan will ensure full transparency for stakeholders on how NV Energy evaluates the costs and benefits of energy storage and how the target aligns with the utility's IRP and distribution resource planning ("DRP") processes.

Our comments below focus on the outstanding non-consensus items and propose draft language for the Commission's consideration. These items include: (1) the definition of an energy storage target, (2) the final storage target amount, (3) the biennial target amount, (4) requirements for sub-categories of the energy storage procurement target, and (5) additional requirements for data and project solicitations. ESA recommends one correction to the cover

letter filed by NV Energy on September 12, 2019, regarding the consensus and non-consensus items. ESA suggests that the definition of an energy storage target should also be described as a non-consensus item. We provide further detail below.

Energy Storage Target Definition

ESA asserts that the definition of “energy storage target” submitted in the September 12 filing of the draft regulations does not reflect the consensus of the informal group of stakeholders who crafted the regulations. In fact, the definition included in the document submitted to the Commission was proposed late in the drafting process for the group’s consideration but was not ultimately agreed upon by all stakeholders. ESA proposes to revert to the original definition proposed by the group, which we believe better reflects the position of a majority of stakeholders. ESA proposes the following edits to the draft regulations Section 6:

Sec. 6. “Energy storage target” defined. “Energy storage target” means ~~a goal for procurement of cost-effective energy storage~~ the energy storage target established by the Commission pursuant to Section 7 of this regulation.

It is ESA’s position that this language more accurately reflects the statutory language in Senate Bill 204 (2017), which does not discuss the term “goal.” ESA respectfully suggests that this definition does not contradict the Commission’s interpretation of the target in prior orders,¹ and that the draft regulations in full – including (1) the incorporation of the target into the Integrated Resource Planning process, (2) the option for a waiver or deferral of the target (Section 8.6 of the legislation) if there is no need or resources were not cost-effective, and (3) the review of the program every three years (Section 8.5 of the legislation) – further align the regulation with the

¹ Public Utilities Commission of Nevada, Order and Report on Whether It Is in The Public Interest to Set Biennial Energy Storage System Procurement Targets, December 24, 2018, pg. 15.

Commission’s interpretation of the term “target.” Including language that may have definitional impact, and therefore may introduce contradiction or confusion, is unnecessary.

Energy Storage Target Amount

ESA respectfully recommends that the Commission include a cumulative 1,000 megawatt (“MW”) energy storage target by 2030, based on the findings of the Brattle Group statewide cost-benefit analysis.² In its report, the Brattle Group modeled various energy storage deployment scenarios and concluded that depending on the price outlook, it is likely that the deployment of 1,000 MW of energy storage by 2030 would provide a net benefit to Nevada. Much has changed since the Brattle Group study was completed nearly a year ago, including most notably the increase in the state’s renewable portfolio standard (“RPS”), which is likely to require *additional* deployment of energy storage given that the Brattle Group study did not assume such high levels of renewable penetration. ESA and several other stakeholders concluded that while the Brattle Group study may underestimate the value of energy storage, it is prudent to base the target on the findings of the analysis rather than work off of a number that did not undergo the same rigorous analysis and modeling. As such, ESA recommends the following additions to Section 7 of the September 12 draft regulations:

Sec. 7. *Establishment of statewide targets for energy storage systems.*

- a. *The statewide energy storage target shall be 1,000 megawatts by December 31, 2030, of energy storage system resources procured by affiliated utilities required to file a joint triennial integrated resource plan pursuant to NRS 704.741.*
- b. *Pursuant to NRS 704.796, the Commission establishes the following biennial energy storage targets:*
 1. *December 31, 2020 = 100 megawatts*
 2. *December 31, 2022 = 200 megawatts*
 3. *December 31, 2024 = 400 megawatts*

² The Brattle Group, *Economic Potential for Energy Storage in Nevada*, prepared for the Public Utilities Commission of Nevada, October 1, 2018, available at: https://brattlefiles.blob.core.windows.net/files/14618_economic_potential_for_storage_in_nevada_-_final.pdf.

4. *December 31, 2026 = 600 megawatts*
5. *December 31, 2028 = 800 megawatts*
6. *December 31, 2030 = 1,000 megawatts*

g. The biennial energy storage targets and the requirements in Section 8 of this regulation shall expire the earlier of December 31, 2030, or on the date when the sum total of Commission approved energy storage systems resources procured by the affiliated utilities meets or exceeds the energy storage target of 1,000 megawatts.

While ESA recognizes the importance of considering the duration of energy storage resources in system planning, we assert that given that the energy storage target will be incorporated into existing planning processes such as DRP and integrated resource planning, there is no need to set a specific megawatt-hour target in addition to the MW target amount. ESA notes that the existing planning processes will identify the system's storage duration needs and ensure that those resources are procured.

Additional Target Sub-Categories

The stakeholders in the informal working group discussed, but did not reach consensus, on a proposal to divide the overall energy storage target by points of interconnection or application in order to encourage a diversity of resources and storage applications. ESA strongly asserts that this is critical to drive down costs and achieve the greatest benefit for customers by ensuring that a variety of energy storage applications are deployed. ESA respectfully proposes for the Commission's consideration a requirement that the utility attempt to meet certain minimum levels of its overall energy storage procurement target through various utility planning processes (defined here by point of interconnection), unless it can demonstrate that those resources are not as cost-effective as alternative energy storage resources being considered. ESA recommends that 20% of the overall energy storage target (as measured by capacity) be met through the electric utility's distribution planning process (distribution-connected resources),

while another 20% be transmission connected, including storage-as-transmission solutions. If it is determined that energy storage proposals in the DRP not as cost-effective as alternative bulk system storage resources under consideration, the utility would not be required to procure any of its distribution connected sub-category.

ESA recommends the following language for the Commission's consideration under Section 7:

h. The utilities shall aim to procure at least 20% of the biennial storage targets in each of two points of interconnection to the grid: (1) distribution system, inclusive of customer-sited locations and (2) transmission system. The remaining 60% of the biennial storage targets can be on any point of interconnection to the grid. If the utilities can demonstrate that the minimum requirement cannot be met cost-effectively, it may provide such information to justify foregoing the minimum requirement for that point of interconnection.

ESA notes that this proposal is in line with the statutory language in SB 204 Section 8 (2), which requires that the Commission adopt regulations "Setting forth the points of interconnection on the electric grid for the implementation of energy storage systems."

Data Requirements for Waiver/Deferral

ESA supports the inclusion of a process to request a deferral or waiver of the energy storage target or biennial targets based on a robust showing, which is aligned with the legislative guidance provided in SB 204. ESA supports the language included in the draft regulations but contends that additional clarity is needed in order to ensure that any such request includes a thorough demonstration that the energy storage target could not be achieved. In the informal discussions leading to the drafting of these regulations, stakeholders identified two main cases where a utility would request a waiver or deferral of the target: either there was no system need to justify the procurement of the resource, or there were alternative resources that provided a more cost-effective and better fitting solution to the utility's specified need.

ESA notes that given the significance of a request to waive or defer the energy storage target or biennial targets, it is appropriate to ensure that a robust demonstration is made that the IRP did not identify any system need for which energy storage could provide a solution. As such, ESA proposes the following addition to the language in Section 8 (f) (2) for the Commission's consideration:

2. Explanation of why the procured cumulative amount did not meet the biennial target including information on whether or not the electric utility has determined that there is a need that could be cost-effectively met by eligible energy storage resources, including capacity, peaking capacity, transmission investments, distribution investment or reduction in peak demand or if a change in the electric utility's need for resources impacted the amounts of energy storage procured as compared to the biennial storage target.

Additionally, the inclusion of recent data is critical to ensure that ratepayers are not burdened with alternative, more expensive investments strictly because of the inclusion of inaccurate cost assumptions. ESA encourages the Commission to consider the inclusion of requirement that the electric utility demonstrate it used the most up-to-date pricing assumptions to justify a waiver or deferral request. Given the steep cost declines in energy storage system costs over the past few years and the continued expected declines over the next decade, ESA notes it is appropriate to require that the justification is based on collection of recent cost information (which ESA defines as being within 15-18 months of the time of filing), and that there be an articulated preference for cost data received from Request for Proposals (RFPs) rather than market intelligence given the variance in costs between states. ESA submits the following additional language in Section 8 (f) (1) for the Commission's consideration:

1. Data or reference to data, supporting the electric utility's assertions in the explanation, including use of recent and relevant price and performance intelligence with a strong preference for data collected through supplier bids and offers rather than consultant or market information.

Energy Storage Plan


ESA supports the language in the draft regulations calling for an energy storage plan that includes information on NV Energy's progress towards achieving the energy storage targets. However, ESA believes that the inclusion of a description of how energy storage is considered in the IRP process will be critical to ensuring that the Commission and stakeholders are able to identify any barriers to energy storage procurement in the IRP. ESA proposes the following language to be added to Section 8(c):

A description of how energy storage resources are being modeled and considered in the existing planning process, including whether the modeling tools were instructed to select energy storage technologies as part of the modeling exercise, and what the energy storage cost assumptions were and the source and date of those cost assumptions.

III. CONCLUSION

ESA appreciates the opportunity to provide these comments in support of the draft regulations under consideration at the Commission. We encourage the Commission to consider and accept our proposed modifications in order to ensure that the regulations are aligned with the legislature's intent and ensure that there is sufficient regulatory guidance to ensure Nevadans benefit from the most cost-effective resources.

Respectfully submitted this 10th day of October 2019.



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Energy Storage Association