

September 10, 2019

Terry J. Romine
Executive Secretary
Maryland Public Service Commission
William Donald Schaefer Tower
6 St. Paul Street, 16th Floor
Baltimore, MD 21202

RE: In the Matter of Revisions to COMAR 20.50.02 and 20.50.09 – Small Generator Facility Interconnection Standards (RM 68)


Dear Ms. Romine:

The Energy Storage Association (“ESA”) respectfully submits the attached comments in response to the Public Service Commission’s (“Commission”) Notice of Rulemaking and Notice of Rulemaking Session filed August 14, 2019.

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.

The purpose of this letter is to reiterate ESA’s support for the proposed revisions as they relate to energy storage to Code of Maryland Regulations (“COMAR”) 20.50.02 and 20.50.09 – Small Generator Facility Interconnection Standards presented to the Commission on July 22, 2019, in the form of a request to initiate a rulemaking Associated with Public Conference 44 (“PC44”) and Workgroup Report.

Sincerely,



Nitzan Goldberger
State Policy Director
Energy Storage Association

BEFORE THE PUBLIC SERVICE COMMISSION OF MARYLAND

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In the Matter of Revisions to COMAR) **Administrative Docket**
20.50.02 and 20.50.09 – Small Generator) **RM 68**
Facility Interconnection Standards)
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COMMENTS OF THE ENERGY STORAGE ASSOCIATION

Pursuant to the Maryland Public Service Commission’s (“Commission”) Notice of Rulemaking and Notice of Rulemaking Session filed on August 14, 2019, the Energy Storage Association (“ESA”) respectfully submits the following comments for the Commission’s consideration in Rulemaking (“RM”) 68. In these comments, ESA’s provides support for the proposed revisions to Code of Maryland Regulations (“COMAR”) 20.50.02 and 20.50.09 – Small Generator Facility Interconnection Standards presented to the Commission on July 22, 2019 in the form of a request to initiate a rulemaking Associated with Public Conference 44 (“PC 44”). Specifically, ESA lends it support for additions related to energy storage, including “proposed use,” “net system capacity,” and “inadvertent export.” ESA commends the Workgroup lead, John Borkoski, for his leadership and ability to drive consensus among stakeholders on a series of complex issues.

I. ABOUT THE 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 WORKGROUP RECOMMENDATIONS

ESA supports the proposed revisions as presented by the Interconnection Workgroup Phase II Final Report as they relate to energy storage. ESA does not have any revisions to raise concerning the revisions and believes the proposed revisions and Phase II Final Report accurately capture the key regulatory hurdles for interconnecting customer-sited energy storage in Maryland. With these revisions, ESA believes that Maryland’s regulations as they relate to the interconnection of energy storage will be aligned with the energy and environmental policies of the State, including a behind-the-meter tax incentive program¹ and the Energy Storage Pilot Program². As a result of these revisions, customers will be able to interconnect more efficiently and affordably. In our brief comments below, ESA reiterates the importance of the key provisions in front of the Commission for consideration for the interconnection and effective deployment of energy storage systems.

Net System Capacity and Proposed Use

Customer-sited storage systems are unique in that the project owner is able in large part to control the system’s operational profile. Given the fact that these systems are highly controllable, study processes that assume maximum export of the battery at times when the grid

¹ Senate Bill 758 (2017), available at: <http://mgaleg.maryland.gov/2017RS/bills/sb/sb0758E.pdf>

² ORDER NO. 89240 issued on August 23, 2019 initiated docket 9619 to facilitate the Energy Storage Pilot Program to implement SB573 (2019), the Energy Storage Pilot Project Act (the “Act”).

is most constrained will not accurately capture the expected behavior of the battery and will result in undue cost burdens and lengthy study timelines. This problem is particularly pronounced for AC-coupled systems (for customers with solar and energy storage systems). A study that assumes a customer will discharge their PV system and energy storage system at the same time during peak hours is not based on any realistic behavior of a customer and in some cases might be technically impossible. Aggregating nameplate capacity would lead to longer study timelines and unnecessary and costly upgrades. Incorporating a customer's "proposed use," as is put forward in the revised regulations submitted for the Commission's considering on July 22, is therefore a critical component of the interconnection process. Similarly, the inclusion of "net system capacity" in the revised draft regulations would ensure that the system controls are factored into a utility's interconnection study assumptions.

ESA believes the proposed language strikes the right balance between the consideration of responsibilities of the utility to ensure system reliability and safety on the one hand and recognizing the wide variety of applications of energy storage that customers may want to employ through the use of operational controls on the other hand.

Inadvertent Export

As applications of behind-the-meter storage expand and energy storage systems become an integral part of the load management strategy for customers, the inclusion of "inadvertent export" in the proposed revisions put forward by the Workgroup will be important. As energy storage becomes more widely used as a means of managing and offsetting significant portions of on-site consumption needs, the systems being deployed are much more closely aligned with the size of the customer's load, creating a new dynamic. By more closely sizing system with load, particularly for residential customers, situations can arise where the customer's load drops unexpectedly, and the on-site generation or battery may not ramp down quickly enough to adjust

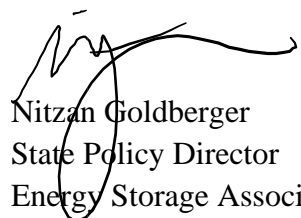
to the new load. In this situation there can be a few seconds of production that cannot be used on-site because the load is no longer there. In those situations, the ability to rely on inadvertent export for those few seconds can facilitate a customer's ability to maintain the balance of the system.

The ability to inadvertently export for a short period of time is important for a customer's ability to load follow large percentage of their energy needs. It is important to note that inadvertent export is very different from planned grid exports. Because of the spontaneous nature of these fluctuations in load as a result of customer behavior patterns, these instances of inadvertent export have a zero coincidence factor.

III. CONCLUSION

The proposed revisions of the interconnection standards submitted for the Commission's consideration on July 22 include the key components needed to avoid unnecessarily long interconnection timelines and high system upgrade costs for customers deploying energy storage that could serve as a hurdle to deployment. ESA appreciates the opportunity to provide these comments in support of the proposed revisions, and looks forward to continuing to work with the Commission and Interconnection Workgroup stakeholders to update the regulations in a way that better reflects the energy policy priorities of Maryland.

RESPECTFULLY SUBMITTED this 10th day of September, 2019.


Nitzan Goldberger
State Policy Director
Energy Storage Association