



STATE OF RHODE ISLAND
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Public Utilities Commission
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Re: Attorney General’s Comments on Draft Report Concerning Examination of the Value and Need for Energy Storage Resources in Rhode Island Report to the Rhode Island Senate in Response to Resolution 416

Dear Public Utilities Commission:

The following comments are provided by the Attorney General of the State of Rhode Island (“Attorney General”) with respect to the above-referenced *Draft Report* provided by the Public Utilities Commission (“PUC”) on July 10, 2023 in response to Rhode Island Senate Resolution 416 (the “Resolution”). As set forth herein, the Attorney General urges the PUC to take the opportunity with this Draft Report to acknowledge that (1) even strict compliance with Rhode Island legal mandates contained in the Renewable Energy Standard and 2021 Act on Climate do not guarantee carbon-free electricity, (2) potential, if not likely, changes in the renewable energy markets must be accounted for in energy policy; and (3) resources are needed to develop effective tariff systems and other programs to maximize the potential of energy storage.

I. Rhode Island Must Address Climate Change at Every Opportunity

In its very first line, the Senate Resolution which triggered the Draft Report highlights that “emissions from fossil fuels into the atmosphere have changed the earth’s climate leading to surface temperature rise.” The Resolution explicitly states that “[t]o reduce emissions, a transition to clean and renewable technologies is necessary” and highlights the important role of wind and solar to “provide clean energy and reduce dependency on fossil fuels.” The Senate further acknowledged that “[t]o achieve a clean energy future, new technologies must be deployed to support the transition to safe and reliable carbon-free electricity supply[.]”

As we are all increasingly aware, climate change is impacting Rhode Island in multiple ways, including rising average temperatures and sea levels, rising precipitation rates, and rising coastal flooding events. In the past century, Rhode Island temperatures have risen by 4 degrees, with the state experiencing both the highest numbers of above-average days and above-average nights between 2015 and 2020. Jennifer Runkle & Kenneth E. Kunkel, *National Centers for Environmental Information State Climate Summaries 2022: Rhode Island*, <https://statesummaries.ncics.org/downloads/RhodeIsland-StateClimateSummary2022.pdf>. The state has also experienced a below-average number of very cold nights since the 1980s. *Id.* Precipitation rates have also increased in Rhode Island. Overall, Rhode Island has averaged about 54 inches of precipitation per year, which is 8 inches higher than the long-term average. *Id.* This increased precipitation is expected to increase in the coming years, especially in the winter and spring seasons, which bring severe storms. The Ocean State’s coastlines are highly susceptible to flooding from winter weather events and hurricanes. Rhode Island sought FEMA disaster declaration status in 6 of the last 10 years due to substantial coastline flooding. *Id.*

The State’s predisposition to flooding means that Rhode Island is also disproportionately impacted by rising sea levels. Tidal measurements in Newport have risen by about 0.11 inches (2.83 mm) per year, which is equivalent to about 11 inches over a century. *Id.* These sea level changes are expected to bring about both large increases in tidal flood events and smaller, local flooding events. The current sea level rise has already impacted Rhode Island, as the number of tidal flood days has increased overall, with the highest number of days occurring in 2017. *Id.* As sea levels continue to rise, New England is expected to be impacted severely due to the makeup of the land in the area. The National Flood Insurance Program (“NFIP”) expects an increase in expected annual flood damage to rise by 38% to 52% by 2100. By that year, the NFIP predicts that sea levels will rise by 1 to 4 feet. *Id.* All global pathways modelling a path towards limiting the negative consequences of climate change require a “rapid and deep, and in most cases, immediate greenhouse gas emissions reductions in all sectors[.]” Intergovernmental Panel on Climate Change, *2023 Synthesis Report: Summary for Policymakers*, 20, https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_SPM.pdf.

In light of this dire reality, Rhode Island has recently amended its Renewable Energy Standard (“RES”) and passed the 2021 Act on Climate. As a state, we have committed to achieve 100% renewable energy by 2033. *See* R.I. Gen. Laws § 39-26-4(a). We have also committed to reach net zero by 2050 and to meet the Act on Climate’s interim greenhouse gas emission reduction mandates in 2030 and 2040. *See* RI Gen Laws § 42-6.2-9. Failure to do so will result in enforcement against the state and/or its agencies. *See e.g.* RI Gen Laws § 42-6.2-10. These policies were enacted in an effort to incentivize and effectuate practical change and to avoid the disastrous impacts on Rhode Islanders’ health and safety should we fail to allay the worst impacts of climate change.

II. The Draft Report Must Clearly Acknowledge that Technical Compliance With the Law, While Essential, Does Not Guarantee Carbon-Free Electricity

Accordingly, Section 4.2 of the Draft Report, entitled “Facilitating the transition to safe and reliable carbon-free electricity supply”, should clearly acknowledge both the need for technical

compliance and the very real need to combat climate change. It may be fair for the PUC to limit its report to its view of ability to achieve compliance with the RES and the Act on Climate given the available information and the PUC's limited resources. However, it is not inconsequential that the Senate expressed desire to achieve "carbon-free electricity supply" separate and apart from also noting that the State is "on a pathway to achieving net-zero emissions by 2050." Accordingly, the PUC should be more explicit about the fact that technical compliance does not necessarily equate to actually achieving the greatest possible greenhouse gas emission reductions. The report should also clearly distinguish *technical* compliance with the law and achieving truly "carbon-free electricity supply."

III. Renewable Energy Credit and Alternative Compliance Payment Markets Could Change and Energy Policy Must Hedge Against Unknowns

The potential for disparity between true emission reductions and technical compliance with the law is particularly great when it comes to the purchase of Renewable Energy Credits ("RECs") or Alternative Compliance Payments ("ACPs") in order to offset actual emissions. Where RECs represent actual renewable energy generation deemed acceptable to offset emissions, ACPs do not. Instead, ACPs enable financing of additional renewable energy projects through the Renewable Energy Fund. However, there is no quantitative comparison of Renewable Energy Fund projects to their REC value equivalents. These information gaps leave the true value and benefits of ACP purchases unknown.

As noted by the PUC:

Whether or not this supply of RECs remains or becomes economically viable for use to meet the RES and Act on Climate will depend on various factors, including the value of Rhode Island's ACP compared to other states' ACPs, actual energy use in the region, the continued operation of Rhode Island's eligible renewable generation fleet, and the ability and willingness of eligible resources that generate RECs to sell their RECs for use in Rhode Island.

Draft Report at 38. This potential risk is also noted in the most recent Renewable Energy Standard Annual Compliance Report. See RIPUC Annual RES Report for Compliance Year 2021: <https://rhodeislandres.com/wpcontent/uploads/2023/05/2021-RES-Annual-Compliance-Report-1.pdf> at 13. Without thorough review of the effectiveness of ACPs, it cannot be known whether the existence or set prices of ACPs are sufficient to ensure the RES program is capable of achieving net-zero. One complication that could frustrate the effectiveness of ACPs is exactly the problem this Draft Report is designed to address—as more distributed and intermittent resources are added to the grid, the capacity of our current transmission infrastructure is used up. Already, community, small commercial, and residential solar face long lead times for interconnection approvals. At some point, interconnection may no longer be viable or may need to wait general transmission upgrades. There is therefore a ceiling on the effectiveness of ACPs to catalyze new renewable energy generation, as is their intent. Accordingly, the future of ACPs or their price relative to the

price of RECs should not be assumed when determining the need for alternatives such as battery storage. Although the PUC determines that there is a “fair likelihood” that there will be sufficient RECs to comply with the RES and the Act on Climate, the report should make clear that relying on that probability presents an unmitigated risk. *See id.* at Section 4.2.6, *see also id.* at Section 4.2.9. The State’s climate mandates are just that, mandatory, and therefore the PUC’s assessment of need should consider more explicitly the potential for energy storage to help guard against volatility in the REC/ACP market.

As noted in Section 4.2.8 of the Draft Report, “as the penetration of intermittent resources increases in New England, energy storage may become necessary to balance the generation output of these facilities with customer demand for electricity.” Moreover, “[w]ithout the ability to balance load and generation in the future as renewable penetration increases, incremental renewable nameplate capacity will generate fewer and fewer incremental RECs to meet the RES and Act on Climate.” Changes in law and policy can also impact whether technical compliance with the RES or Act on Climate is sufficient. For instance, the RES was accelerated as recently as 2022.

Accordingly, the Attorney General encourages the PUC to adopt a stronger conclusion in Section 4.2.9 that highlights these unknowns to in turn support the need for tariffs and programs today that can build a stronger storage market in the event these resources are needed in the near- to mid-term.

IV. The State Should Devote Resources to Further Studies and Analysis and Should Develop Tariff Frameworks and Programs to Achieve the Benefits That Storage Can Provide

Effective and scalable energy storage is a relatively-new opportunity for the State as it continues as a leader in the fight against climate change. As noted in the Draft Report, energy storage is unique in that it is “inherently flexible and can perform a wide variety of functions to meet system needs.” *Draft Report* at i. As highlighted in the Draft Report, storage has great potential to provide significant benefits – both societal and financial - to the people of Rhode Island. These benefits include the potential to avoid curtailment of traditionally intermittent renewables such as wind and solar, and to reduce the price of Renewable Energy Certificates (“RECs”) and the cost to comply with the Act on Climate. *See e.g., Draft Report* at 11. Accordingly, it is essential that we use this initial review process and report as a catalyst towards more robust analysis that can facilitate careful and targeted policy enactment as soon as possible.

As noted in the Draft Report, the PUC was limited in its resources and was ultimately unable to conduct the necessary studies and analysis to adopt targets for installed storage capacity, or to develop tariff frameworks. At the same time, the PUC notes that it is committed to undertaking that analysis once resources are available. The Attorney General supports future efforts to fully fund additional research and analysis so that the State can effectuate policies that fairly and adequately incentivize development and use of storage resources in a manner consistent with its energy policies and with achieving the greenhouse gas emission reduction mandates of the 2021 Act on Climate.

Sincerely,

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/s/ Nicholas M. Vaz

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