

Memorandum

From: Seth Handy

To: RI PUC

Date: August 4, 2023

Regarding: Docket 5000 - Storage

Thank you for this opportunity to comment on the PUC recommendations arising out of this docket.

The general assembly ordered the PUC "to undertake a docket with storage participation to study energy storage value streams and compensation mechanisms" and then "report on whether new tariffs or programs are necessary to achieve energy storage goals."

1) Procedural Concerns

The stakeholder participation in this docket was overly prescribed and incomplete. It started with PUC staff's instruction not to comment until/unless as specifically requested. That alone indicates limited opportunity for stakeholder participation in the recommendations as they were developed. Open dialogue is the means to a best reasoned result. Once stakeholders, including this firm, began to comment robustly, the stakeholder process quickly shut down and us stakeholders were deprived of any further opportunity to participate. At that point we had to just await the PUC recommendations.

We remain very concerned about the recent trend that would give stakeholders much less opportunity to meaningfully participate in administrative proceedings at the PUC and the DPUC. That includes attempted and successful utility challenges to intervention, claims that state administrative agencies can and should represent private interests that are based on specific experience and are commercial and hence inherently unknown to public entities, proceedings allowing limited and prescribed right to stakeholder scope of participation and comment, procedural schedules that do not allow for or allow inadequate time for real stakeholder consideration and response. It is very different to have the opportunity to comment on recommendations after they issue than to actively participate in the formation and testing of the recommendations.

In this proceeding, it was unclear whether/how input from storage stakeholders, if ever formally acknowledged/accepted, was actually incorporated into the PUC's recommendations. Having now received the recommendations, it seems clear that this was less about "storage participation" and more about agency decision making despite stakeholder input. This process inappropriately truncated stakeholder participation in the formation of storage recommendations.

2) The PUC's substantive recommendation

In section 4.2.7, the PUC concludes that “storage is not Likely Needed to Meet the RES or Act on Climate Before 2032.” There is absolutely not a chance that such a recommendation would have been made given robust stakeholder participation. That recommendation severely and fundamentally undermines the goals of the Act on Climate, the RI Energy Plan (Energy 2035) and many other sources of RI energy policy, all of which set the goal of becoming more self-reliant, more secure, and making our energy system more affordable through building our own a local and more distributed clean energy economy. That clearly cannot happen without robust regulatory support for and development of energy storage.

To rely on the RES and RECs to achieve compliance with the Act on Climate and our firmly established calls for energy transformation is an insecure, unstable and unaffordable strategy. The report itself admits fundamental uncertainty about the availability of RECs in RI:

While not all of these RECs are truly available to be used for compliance with Rhode Island RES (for example, they may be under contract to settle in other states), the facility owners' registration of their generation units with the PUC indicates some willingness to sell these RECs to Rhode Island entities that have RES obligations. (p 36)

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. (p 37)

To undermine our own need for storage resources in RI by relying on an uncertain stream of largely imported RECs coming from the development of projects predominantly outside of RI, is not good policy. It fundamentally contradicts our resolve to “Act on Climate” by ceding our obligation and opportunity to other states that are more proactive in embracing the transformation to a new energy economy.

This is an “opportunity” because despite the PUC's monomaniacal focus on cost, this transformation promises great economic opportunity for RI. We cannot seize the positive economic benefit of a local, distributed energy economy unless we stop relying on imports and effectively exporting our energy jobs and immediately put the mechanics in place to upstart this distributed energy economy here at home. As the report indicates, one essential element and mechanic of such a transformation to a more sustainable, secure and affordable energy system is robust development of storage.

We submit (as we have long submitted, as have others, including perhaps most clearly the expert Karl Rabago, see eg <https://ripuc.ri.gov/eventsactions/docket/4568page.html>) that unless regulators and the utility acknowledge and compensate distributed generation for the system benefits storage provides, you/they will always undervalue and (consequently)

will not get the benefits. Docket 4600 clearly says that - we cannot expect to get benefit that we will not pay for. Recently, RI's energy regulators have too long allowed the undervaluing of the systemic benefits of a distributed energy system. As examples, they have allowed a failure to identify non-wires alternative to infrastructure investment and they have refused to require a locational incentive in the Renewable Energy Growth program. Our utility's interest in wires alternatives does not incent it to analyze system constraints, structure proposals or select third party proposals that are more economical than its preferred wires alternative.

The Power Sector Transformation Report observed that

While many industries have become more efficient over the last few decades by leveraging information technologies to more fully utilize capital investment, Rhode Island's peak to average demand ratio is 1.98, meaning that nearly half of the utility's capital investment is not utilized most of the time. (pp. 14-15). . .Over the last decade, Rhode Island did not need more than 1200 MW of capacity during most hours. The electric grid has been built to ensure that those few hours a year that approach 2000 MW of demand can be met. The top 1% of hours cost the state ratepayers around 9% of spending, at around \$23 million, while the top 10% of hours cost 26% of costs at \$67 million, as illustrated in Figure 4. To meet peak demand, our system currently invests in solutions that are more expensive than is necessary. https://ripuc.ri.gov/sites/g/files/xkgbur841/files/utilityinfo/electric/PST-Report_Nov_8.pdf (pp. 14-15)

Any least cost procurement analysis has to consider the opportunity to reduce existing and established system costs rather than just the value of offsetting need for incremental investment. RIGL 39-1-1 reads:

(d) The legislature also finds and declares, as of 1996, the following:

- (1) That lower retail electricity rates would promote the state's economy and the health and general welfare of the citizens of Rhode Island;
- (2) That current research and experience indicates that greater competition in the electricity industry would result in a decrease in electricity rates over time;
- (3) That greater competition in the electricity industry would stimulate economic growth;
- (4) That it is in the public interest to promote competition in the electricity industry and to establish performance-based ratemaking for regulated utilities;
- (5) That in connection with the transition to a more competitive electric utility industry, public utilities should have a reasonable opportunity to recover transitional costs associated with commitments prudently incurred in the past pursuant to their legal obligations to provide reliable electric service at reasonable costs;
- (6) That it shall be the policy of the state to encourage, through all feasible means and measures, states where fossil-fueled, electric-generating units producing air emissions affecting Rhode Island air quality are located to reduce such emissions over time to levels that enable cost-effective attainment of environmental standards within Rhode Island; and

(7) That in a restructured electrical industry the same protections currently afforded to low-income customers shall continue.

(e) The legislature further finds and declares as of 2006:

(1) That prices of energy, including especially fossil-fuels and electricity, are rising faster than the cost of living and are subject to sharp fluctuations, which conditions create hardships for many households, institutions, organizations, and businesses in the state;

(2) That while utility restructuring has brought some benefits, notably in transmission and distribution costs and more efficient use of generating capacities, it has not resulted in competitive markets for residential and small commercial-industrial customers, lower overall prices, or greater diversification of energy resources used for electrical generation;

(3) That the state's economy and the health and general welfare of the people of Rhode Island benefit when energy supplies are reliable and least-cost; and

(4) That it is a necessary move beyond basic utility restructuring in order to secure for Rhode Island, to the maximum extent reasonably feasible, the benefits of reasonable and stable rates, least-cost procurement, and system reliability that includes energy resource diversification, distributed generation, and load management.

Our state energy plan and our renewable energy statutes all indicate that distributed energy resources (efficiency, demand side management, distributed generation) can and will reduce system costs. DER can reduce the need for and cost of existing requirements for transmission. After a very thorough and data-driven analysis, the RI Energy Plan concludes that continuing business as usual is our most expensive alternative.

In a transformative scenario, a locally managed and self-reliant energy system promises to significantly reduce total operating costs, including (as one example) the cost of utility infrastructure investment and maintenance expenses and associate overhead. This is evidenced by the recent authorization and trend of RI municipalities reacquiring their streetlights and by the adoption of municipal aggregation programs.

The answers to cost benefit questions pivot depending on the framework and context within which they're considered. If you answer based on the status quo the conclusions will go one way, but if you answer based on the implementation of the current state law mandates and policy they will go another. As you know, RI law now not only mandates hugely scaled reliance on clean and largely intermittent energy sources but also demands large scale electrification of our thermal and transportation sectors. Low electric load scenarios will be exceedingly rare in that future, even considering variability between night and day. The general assembly has mandated that we plan for that world of high and variable load. Incremental compartmentalization of value propositions based on long lists of individual factors undermines the role storage plays in a transformed energy economy. Under any low load scenario, the use of storage to consume otherwise curtailed renewable energy will reduce overall grid emissions. Storage can also be used to balance fossil generation operations to run more efficiently. Use of storage for ancillary services (e.g., frequency reg) can reduce the stress and maintenance costs that fossil generation would otherwise incur when providing such ancillary services.

The role of storage in reducing the need to invest in incremental transmission or distribution wires and equipment is especially important in light of the clean energy economy mandated by the general assembly.

The Act on Climate holds all administrative agencies responsible to take all measures they can to achieve the statutory climate objectives. Given those mandates, the PUC is an environmental and health regulator (as is every state agency in RI) in addition to being an economic regulator.

Please rethink your recommendation to wait until 2032 before we put the mechanics in place to build storage.