

RI Office of Energy Resources
Cal Brown (cbrown@seadvantage.com)
Jacob Nichols (jnichols@seadvantage.com)

September 1, 2023

Re. RFI on RI Community Net Metering Program

Dear Cal and Jacob:

I write on behalf of MassAmerican d/b/a Gridwealth to comment on your request for information about RI's Community Net Metering program. Thank you for this opportunity to comment.

Policy Context

The purpose of the net metering program is

to facilitate and promote installation of customer-sited, grid-connected generation of renewable energy; to support and encourage customer development of renewable generation systems; to reduce environmental impacts; to reduce carbon emissions that contribute to climate change by encouraging the local siting of renewable energy projects; to diversify the state's energy generation sources; to stimulate economic development; to improve distribution system resilience and reliability; and to reduce distribution system costs.

R.I. Gen. Laws § 39-26.4-1. In 2023, the general assembly directed RI OER to “design the net metering credit rate and factor in federal energy funding and tax credits to develop the most cost-effective rate for community solar projects. . .[and] file a benefit and cost analysis with any program proposal filed to the Rhode Island public utilities commission.” In doing so, OER should be attentive to RI's State Energy Plan (Energy 2035) (<https://energy.ri.gov/resources/major-initiatives/state-energy-plan>)

The impacts of our energy use are far-reaching and consequential—Rhode Islanders currently spend approximately \$3.6 billion on power and fuel each year, sourced mainly from out-of-region fossil fuels that annually emit over 11 million tons of greenhouse gases into the atmosphere. (Exec Summ, p 1)

The Plan's findings send a clear message: Rhode Island cannot afford a business-as-usual course of action that increases energy security risks to the state, costs more than viable alternative paths, and fails to meet our obligation to mitigate the worst consequences of global climate change. Because the impact of longterm planning and investment choices will reverberate for decades to come, we must be especially prudent and strategic as we address the weighty energy policy decisions that face us today. (Exec Summ, p 4)

RI's Power Sector Transformation report (https://ripuc.ri.gov/sites/g/files/xkqbur841/files/utilityinfo/electric/PST-Report_Nov_8.pdf) further informs OER's cost benefit effort. It says:

The demands on Rhode Island's electric distribution system are rapidly evolving, driven by consumer choice, technological advancement and transformative information. The state's electric utility and regulatory framework were developed in an era in which demand for electricity consistently increased, technology changed incrementally, customers exerted little control over their electricity demand, electricity flowed one-way from the utility to customers, and the risks of climate change were unknown. Today, none of those factors is true: demand for electricity has plateaued; many customers generate their own power; electricity flows to and from customers; technologies are being introduced at rapid pace; and the need to mitigate and adapt to climate change is real. In these new circumstances, the traditional regulatory

framework will not continue to serve the public interest. It will continue to push consumer prices upward without a corresponding increase in value for customers. This report presents recommendations to transform the power sector for these new circumstances and help control long term costs for consumers. (Exec Summ, p 7)

The demands on Rhode Island’s electric distribution system are rapidly evolving, driven by consumer choice, technological advancement and transformative information. The state’s electric utility and regulatory framework were developed in an era in which demand for electricity consistently increased, technology changed incrementally, customers exerted little control over their electricity demand, electricity flowed one-way from the utility to customers, and the risks of climate change were unknown. Today, none of those factors is true: demand for electricity has plateaued; many customers generate their own power; electricity flows to and from customers; technologies are being introduced at rapid pace; and the need to mitigate and adapt to climate change is real. In these new circumstances, the traditional regulatory framework will not continue to serve the public interest. It will continue to push consumer prices upward without a corresponding increase in value for customers. This report presents recommendations to transform the power sector for these new circumstances and help control long term costs for consumers. Id.

the cost of electricity will continue to increase if nothing changes. A new regulatory framework will fundamentally change the trajectory of costs both by avoiding system costs and by forcing the utility to find more value from our electric distribution system, creating additional revenue streams. Id. at 8.

That report advised OER to:

3.4 Compensate locational value. State regulators and policymakers should develop a strategy to compensate the value of distributed energy resources based, in part, on their location on the distribution system. Id. at 11.

4.1 Design rates to increase system efficiency. The utility should design electricity rates to encourage electric vehicle users to charge their cars outside of peak demand time and make their batteries available to the grid in order to maximize system benefits. Id. at 12.

The Systems Integration Rhode Island (SIRI) report (<https://energy.ri.gov/resources/electric/systems-integration-rhode-island-siri>) also concluded that:

As Rhode Island’s energy system evolves, we face new challenges and opportunities. Utility operators will need to manage distributed generation in a system originally designed for centralized production and one-way power flow. This new requirement at the distribution level will entail new types of investment and operating expertise to allow management of distributed resources in a manner that enables more efficient solutions for customers. At the same time, some distributed energy resources offer the promise of creative new ways to manage and optimize energy demand. Furthermore, utility planners can reduce, defer, or possibly avoid traditional investments in certain types of grid infrastructure to meet growing electric demand by using strategically deployed energy efficiency, renewable energy, or other “non-wires alternatives” projects. For utility regulators, the changing system may raise new questions about traditional utility planning processes, rate structures, cost recovery mechanisms, incentives and weighing the benefits and costs of new investments. As Rhode Island successfully facilitates a transition to a more distributed grid that values, integrates, and plans for growth in customer resources, it will stimulate further economic development in its clean energy industry sector; give consumers and communities more opportunities to take control of and manage their energy costs and preferences for greater system efficiency; lower costs than would otherwise be experienced in the future; and help the state meet climate goals by reducing greenhouse gas emissions. (Intro, p 6)

It recommends that OER:

Determine if Rhode Island's existing suite of renewable energy promotion processes are adequately serving the state's clean energy goals. Task the DG Board and interested stakeholders with reviewing processes to assess the complementary nature of the programs and what improvements could improve their effectiveness. As a starting point, stakeholders should develop criteria to apply to this exercise (2016 – 2017). 3. Coordinate among renewable incentive programs to ensure optimal design and delivery. 4. Integrate renewable programs into utility planning (see Recommendation #1). 5. Use the results and findings of the previous items to inform future policy discussions about any updates, changes, or additions to Rhode Island's renewable energy processes. (at p 23)

It is important that the state's many large investments in past studies and plans carefully inform its policies regarding community remote net metering policies (CRNM) and the evaluation of their costs and benefits moving forward.

Comment

The CRNM is for Communities. It should be designed to benefit Communities. The realizable benefits are not only monetary in nature – they also have, to do with quality of life, safety and resilience. DER selected by the program should be tangibly close to the Community they are a part of and benefitting. The DER should be deployed close to load it is serving with strong preferences for systems in densely populated areas (urban and suburban areas), or on Commercial and Industrial locations that directly adjoin the densely populated urban/suburban area.

DER provides multiple benefits: siting, location, and compound uses. Projects sited closer to load provide more local and regional benefits through community engagement. DER system should be designed to provide emergency electrical power in the event of grid outages. For instance, the Community could be load connected to the same electric feeder that the DER is connected to so that in the event of a grid outage or problem at the substation, the circuit would island via a transfer switch and be powered from the DER until grid services are restored.

CRNM can be designed effectively to serve the purposes of OER's microgrid report, *Resilient Microgrids For Rhode Island Critical Services* (<https://energy.ri.gov/renewable-energy/energy-storage/battery-storage/resilient-microgrids-critical-services>)

The United States faces a critical national vulnerability: over-reliance on an Electric Power System (EPS) or "grid" that serves us very well under normal conditions but is vulnerable to prolonged disruptions from a range of natural and man-made hazards, despite the historical best practices of regulated utilities. . .

National planning and action to reduce these risks is thus far insufficient to the scale of the problem, and evidently national preparedness for this type of emergency is lacking. A large burden of preparedness falls on state and local shoulders. (Exec Summ, p 4)

The good news is that solutions are available to reduce these risks and provide other benefits as well. Distributed Energy Resources (DERs) such as combined heat and power, solar energy, wind power, energy storage and energy efficiency can deliver energy services at lower cost, risk and pollution than can the grid alone. Growing deployment of these solutions is increasingly economical due to technological innovation and state-level energy policies. Microgrids can integrate DERs with controls and switchgear to enable both grid-connected and grid-independent operations to energize society's critical infrastructure when the power

is out, and provide other benefits that help maximize DERs' value during normal "blue sky" operations. State level policies and programs can accelerate deployment of these technologies by addressing barriers in the marketplace and the current legal and regulatory environment. (Id. at 5)

RI's CRNM program should encourage carport structures over existing parking lots. They augment safety with under canopy wayfinding and lighting system, keep cars cooler and can help mitigate non-point source water pollution/stormwater run-off, and heat island effects from large expanses of low albedo parking lot/asphalt surfaces. Recognition of the many ancillary benefits of carports must be properly compensated by increasing the net meter bill credit rate for carport systems back up to the former 100% of the net metering credit rate, or providing additional REC value, and by providing a longer amortization period of up to 40 years. Appropriate compensation of these benefits will enable the development of carports which cost substantially more to construct due to their need for significant foundations, their support structure, water management, and other requirements.

Co-location of EV charging capabilities under a carport is logical. There is additional capital cost for this, of course, and the incremental cost should be defrayed with a grant.

If DER is sited on a rooftop, the program should provide funding for a replacement of the roofing surface (unless the roof already has a remaining useful life of 25+ years) and mandate that building roof structure insulation systems comply with current code requirements.

If the goal is efficiency and preservation of benefits for ratepayers, then the utility is the only party that should manage subscription and allocations. For a targeted subscriber base of residential and LMI anything else requires excessive customer acquisition costs and day-to-day upkeep and billing, collection, and bad debt management. Since the Utility is the only party that knows its system and who is connected to it and where, the compensation of Community ratepayers must be administered and managed by the interconnecting utility.

For distributed generation accepted into the program, the utility should be required to find and enroll eligible ratepayers (i.e. those with load along the same circuit as the DG). The utility should be required to compensate the DG monthly for its metered production of kWh x the CRNM rate, less its agreed upon off-taker discount. The utility should be required to apportion and apply the agreed upon discount to its eligible ratepayers.

Consolidated billing will assist in the credit management of LMI customers as the utilities/PSC already manage this process. But, consolidated billing should ONLY be for the LMI component and not the C&I per the bifurcation as NY with remote net crediting vs consolidated css.

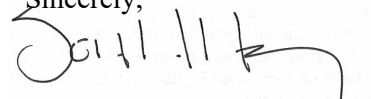
CRNM is net metering of electricity. For DG, title to all other non-electric attributes must remain with the Developer.

In further response to specific questions:

- Question #4 - The concept of microgrid/resilience as backup for critical systems (eg police, fire, etc) could be a separate category with capacity allocation than more traditional community projects.

- Question #7 - OER should use the same LMI definition as found in the IRA requirements for low income and/or disadvantaged communities. Self-attestation is important to qualify LMI subscribers - the process needs to be very simple and easy to sign up customers. LMI subscriptions are a challenge to obtain and manage. Is there a way for opt-out municipal aggregation? This could be particularly valuable with microgrid/resilience localized projects.
- Question #9 - projects should be selected on a first come first serve basis. An annual auction process makes it too difficult to work with third party leasing of rooftop/parking lots.
- Question 12c - allow a project to qualify but maintaining approval process for vendors will increase initial and ongoing operating expenses unnecessarily.

Thank you again for your consideration of these comments and for appropriately weighing all of the benefits of CRNM customers and for redesigning RI's CRNM program to better serve RI's urgent policy interests.

Sincerely,


cc. Shauna Beland (shauna.beland@energy.ri.gov)
Karen Bradbury (karen.bradbury@energy.ri.gov)
Abigail Hasenfus (abigail.hasenfus@energy.ri.gov)