

Ecogy Energy

May 12, 2023

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VIA EMAIL

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Karen Bradbury, Rhode Island Office of Energy Resources (OER),
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RE: Evaluation of Rhode Island Distributed Generation Policies Stakeholder Workshop #5: DRAFT Benefit-Cost Analysis Results

Dear Cal Brown, Jim Kennerly, Stephan Wollenburg, and Karen Bradbury,

Ecogy Energy, based in Newport, RI and founded in 2010, is an experienced developer, financier, and owner-operator of distributed generation projects across the U.S. and Caribbean. In the Renewable Energy Growth Program (REG Program) program, Ecogy has 7 operational rooftop projects and other projects in the pipeline that are in various stages throughout the development cycle such as interconnection, permitting, and construction. Please accept the comments below as Ecogy Energy's response with regard to the Evaluation of Rhode Island Distributed Generation Policies Stakeholder Workshop #5: DRAFT Benefit-Cost Analysis Results on May 5, 2023.

Thank you to the Rhode Island Office of Energy Resources ("OER") in partnership with Sustainable Energy Advantage, LLC ("SEA") for conducting a public stakeholder process to evaluate Rhode Island's Distributed Generation policies, aiding in the General Assembly's possible adjustments to net metering, virtual net metering, and Renewable Energy Growth laws. The stakeholder process has given the development community a voice to express concerns and support for various proposals and legislation that might be passed and implemented – which is critical to ensuring businesses like Ecogy can continue to support the clean energy transition with Rhode Islanders. Policymaking is a complex process and the analysis behind it is even more complex, therefore Ecogy believes this analysis should be expanded to include (1) pricing

monetary adders for beneficial siting to be implemented to encourage siting on “preferred sites” and; (2) to model a REG program structure that provides more project certainty, as discussed in Ecogy’s comments on April 6, 2023 in response to the Evaluation of Rhode Island Distributed Generation Policies Stakeholder Workshop #3: Methodology for Estimating DG Capacity Need and Evaluating Potential DG Policy Approaches.

Modeling Implications: Renewable Energy Growth (REG) Program

Ecogy Energy maintains that a Benefit-Cost Analysis (BCA) only approach favors business as usual; therefore, it's possible that an alternative approach should be discussed to properly capture the advantages and drawbacks of the Rhode Island renewable energy market in regards to modeling an expansion of in-state Distributed Generation (DG) programs to contribute towards meeting the Act on Climate electric sector goals. We discuss the topic further in the February 16, 2023 comments for the Evaluation of Rhode Island Distributed Generation Policies Stakeholder Meeting #1.

In 2021, Rhode Island produced 87% of its power from natural gas, the highest percentage of any state.¹ The majority of the state's remaining net generation was produced by biomass, wind, and solar energy sources. According to EnergySage, the average electric rates in Rhode Island cost 29 ¢/kilowatt-hour (kWh).² On March 13, 2023, the Rhode Island Public Utilities Commission (PUC) approved the following with regard to the Renewable Energy Growth (REG) 2023 Program Year (PY) in Docket 22-39-REG at its Open Meeting.

¹ “U.S. Energy Information Administration - EIA - Independent Statistics and Analysis.” EIA, www.eia.gov/state/analysis.php?sid=RI#:~:text=In%202021%2C%20Rhode%20Island%20generated,%2C%20wind%2C%20and%20biomass%20resources. Accessed 11 May 2023.

² “Electricity Cost in Rhode Island: 2023 Electric Rates.” EnergySage, www.energysage.com/local-data/electricity-cost/ri/. Accessed 11 May 2023.



Renewable Energy Class	Ceiling Price (¢/kWh)	
	Including Post-Tariff Revenue	Excluding Post-Tariff Revenue
Small Solar I	27.75	31.25
Small Solar II	26.15	26.65
Medium Solar (>25-250 kW)	25.65	25.65
Commercial Solar I (>250-500 kW)	22.05	22.35
Commercial Solar II (>500-1000 kW)	19.05	19.55
Large Solar	14.35	15.45
Wind	19.15	19.95
Anaerobic Digestion	19.05	19.05
Small Scale Hydropower	31.95	32.45
Community Remote – Commercial Solar I (>250-500 kW)	25.15	25.15
Community Remote – Commercial Solar II (>500-1000 kW)	21.91	22.35
Community Remote – Large Solar	16.50	17.77
Community Remote – Wind	21.15	21.75

Figure 1 Renewable Energy Growth (REG) 2023 Program Year (PY) Ceiling Prices. All REG ceiling prices including Post-Tariff Revenue were less than the average electric rates in Rhode Island cost 29 ¢/kilowatt-hour (kWh) except Small Scale Hydropower. All REG ceiling prices excluding Post-Tariff Revenue were less than the average electric rates in Rhode Island cost 29 ¢/kilowatt-hour (kWh) except Small Solar I.

In Rhode Island, costlier fossil fuels are the cause of predicted increases in power rates, making Rhode Island-produced renewable energy an even better alternative. Rhode Islanders continue to see electric rate increases year after year due to market factors and the lingering effects of the COVID-19 pandemic, including businesses that supply jobs to the state being “hit with ‘deplorable’ surprise electric bills.”³ **Increasing the deployment of renewables in all categories and system types should be seen as a solution to the volatility of fossil fuel markets, resulting in long-term economic and environmental solutions when locking in a feed-in-tariff rate for 20-years.**

³ Sherman, Eli, and Sarah Guernelli. “More Ri Businesses Hit with ‘deplorable’ Surprise Electric Bills.” WPRI.Com, 9 May 2023, www.wpri.com/target-12/more-ri-businesses-report-getting-deplorable-surprise-electric-bills/?utm_source=ActiveCampaign&utm_medium=email&utm_content=PBN%2BMorning%2BCall&utm_campaign=Call_2023_0509.

Slide 25: Overarching Observations

“As expected, 10 MW projects (permitted in the VNM program but not currently in REG) and 20 MW projects (not currently permitted in either REG or VNM) benefit from economies of scale, since these projects are generally cheaper on a \$/MWh basis”

“Assumed increases in interconnection costs for resources over 1 MW largely offset expected non-interconnection capital and operating cost declines”

Still, for REG modeling implications, SEA discussed that projects 5-10 MW and 10-20 MW would be included, relative to maximum 5 MW current size. During the Evaluation of Rhode Island Distributed Generation Policies Stakeholder Meeting #5 on May 5, 2023, Jim Kennerly stated that this was chosen to be examined after careful consideration of legislation proposed and discussions with OER that included alternative size categories for REG - particularly SB 684 Sub A.

Interconnection is already being pushed out further and becoming more costly, so bringing the possibility of larger project sizes into the study may be harmful, especially with the current political climate in Rhode Island. Understanding that a diversity of project types and sizes are critical to meeting climate goals, the state must acknowledge that in addition to local permitting hurdles, 10-20 MW projects take 3-5 years to build, which results in climate goals not being attained rapidly.

Ecogy believes OER should have taken more time to study the most effective pricing for monetary adders for beneficial siting to be implemented and encourage siting on “preferred sites” - projects ratepayers clearly want to see. Successful solar markets have done so and continue to improve their processes and availability incentives. According to the latest Solar Energy Industries Association (“SEIA”) solar market insights and policy updates in all 50 states and Washington, D.C through 2022, New York solar ranks 4th nationally, Massachusetts solar ranks 17th nationally, and New Jersey solar ranks 10th nationally while Rhode Island solar ranks 37th. Neighboring states rank particularly higher in equitable solar through community solar, spreading benefits to low income communities and disadvantaged communities that need savings, economic development, and support the most. Rhode Island renewable energy deployment has become stagnant, without creating a market for rooftops, parking lot canopies, brownfield, and other adders.

Table 1. Examples of Canopy Adders in New York and Massachusetts

State Program	Canopy Adder Incentives
Solar Massachusetts Renewable Target (SMART) Program ⁴	\$0.06 (\$/kWh)
NY-Sun Con Edison Parking Canopy ⁵	\$0.20 (\$/W) ⁶

Table 2. New Jersey Successor Solar Incentive (SuSI) Program - ADI Incentives (NJ-SREC-II) Per Market Segment. Small Net-Metered Non-Residential projects located on Rooftop, Carport, Canopy and Floating Solar projects are given higher values compared to other categories.

Market Segments	System Size MW (dc)	Incentive Values (\$/SREC-II)	*Public Entities ((\$20 Adder)
Small Net-Metered Non-Residential located on Rooftop, Carport, Canopy and Floating Solar	Projects smaller than 1 MW (dc)	\$110	\$130

*“Public Entity” is defined as a customer that is a State entity, school district, county, county agency, county authority, municipality, municipal agency, municipal authority, New Jersey public college, or New Jersey public university.

Opportunity Missed: Warwick Public School

Ecogy Energy won a Request for Proposal (“RFP”) with Warwick Public School in 2021 to develop quality and cost effective solar photovoltaic (PV) systems at four sites with Warwick Public Schools’ Rhode Island properties – because of rooftop conditions and structural concerns, projects transitioned to canopy/carport systems. Ecogy proposed carport projects throughout the schools properties, then the carport adder was taken away in the REG program, therefore we could not move forward with building. The program change took away the ability for Ecogy to support the school in pursuing clean energy solutions, reducing their greenhouse gas (GHG) impacts, and realizing the maximum potential of the land it owns.

⁴ Solar Massachusetts Renewable Target (SMART) Program Eversource Capacity Block, Base Compensation Rate, and Compensation Rate Adder Guideline Tranche 1

⁵ Con Edison Parking Canopy and Rooftop Canopy Incentive Adder Rates for Blocks 6-10

⁶ Previously \$0.30/W

Modeling Implications: Virtual Net Metering (VNM) Program

“Also unlike SMART, BCRs in the alternative VNM case would be set based on the average value of accepted REG bids in the first open enrollment of each year, which would be available to projects on a trailing 12-month basis for any qualified project, and relevant offtaker-based adders rate adders would be as approved by the PUC for that REG Program Year.”

Ecogy submitted comments April 6, 2023 regarding the Evaluation of Rhode Island Distributed Generation Policies Stakeholder Workshop #3: Methodology for Estimating DG Capacity Need and Evaluating Potential DG Policy Approaches - detailing the REG programs Auction Process, Uncertainty, and Volatile REG Development Timeline. OER should seek to model a program structure that provides more project certainty.

Case Descriptions: Virtual Net Metering (VNM)			
Policy Design Element Subject to Change	#1: Extension of Status Quo VNM Policy Design	#2: Alternative VNM Policy Design Scenario	#3: Alternative DG Policy Scenario + Energy Storage for All Projects
Eligible Accounts and Associated Capacity	500 MW of incremental capacity installed by 2033	500 MW of incremental capacity installed by 2033	500 MW of incremental capacity installed by 2033
Compensation Term/ Useful Life	No tariff time limitation (30-year project life assumed)	20-year tariff term (assumes 30-year life, 10 years compensated at wholesale energy + RECs and QF status after tariff term)	Same as #2
Attribute Transfer	Only attribute/commodity transferred to RI Energy and resold is ISO-NE wholesale energy	Energy and RECs transferred to Rhode Island Energy for resale	Same as #2
Compensation Mechanism	Bill credit components remain the same for all projects (LRS+T+T+D)	<ul style="list-style-type: none"> 1 MW and under retain LRS+T+T+D >1-20 MW (or adjacent 10 MW sites compensated at >1-5 MW, >5-10 MW or 10-20 MW REG as-bid value for non-offtaker projects from prior year + offtaker adder) 	Same as Alternative REG case, but with paired energy storage compensation mechanism
Accounts for All Inflation Reduction Act Base/Bonus Tax Credits for Typical Projects?	Yes	Yes	Yes
Eligible Accounts and Associated Capacity	Existing set of eligible public/institutional offtakers unchanged	C&I customers able to participate (thus serving as anchor customers for enhanced LMI participation)	Same as #2
Project Siting Policy	No siting-related changes	<ul style="list-style-type: none"> Siting prohibited on core forests (Greenfield leases assumed to be on C&I-zoned parcels) Projects receive equivalent siting adders to those offered to 20-year REG projects 	Same as #2

Figure 2. Shows under #2: Alternative VNM Policy Design Scenario for Compensation Term/Useful Life that would be a 20-year tariff term (assumes 30-year life, 10 years compensated at wholesale energy + RECs and QF status after term).

Ecogy understands that SEA is not suggesting compensation be at the wholesale rate as clarified by Jim Kennerly in the stakeholder discussion on May 5th. Ecogy understands that SEA is

recommending a cost-based value which is intended to be the revenue requirement of the project - financing (capital and operating costs) costs of the project(s) divided by production to come up with a cost-based incentive value plus any locational based adder to account for location on preferred sites or offtaker based adders to accurately ensure that you're providing sufficient compensation for participation, by those off-takers, such as for Low-to-Moderate Income community (LMI) projects.

Net Metering Implications

*Title 39 Public Utilities and Carriers Chapter
26.6 The Renewable Energy Growth Program
R.I. Gen. Laws § 39-26.6-23*

§ 39-26.6-23. Intersection of distributed generation and net metering.

(a) Net-metering credits for excess generation shall not be credited during the term of the tariff when the distributed-generation project is receiving performance-based incentive payments under the tariff. After the end of the term of the performance-based incentive tariff applicable to a distributed-generation project, net-metering credits for excess generation in any given month shall be credited to the net-metered account at the applicable rate allowed under the law.

(b) All distributed-generation projects that had begun development prior to the date the commission approves the first set of ceiling price recommendations from the board and that are in operation by no later than July 1, 2016, shall be eligible to continue operation under the net-metering rules that would have been applicable to that self-generation project absent the change in law set forth in this section, provided that the project does not otherwise participate in the performance-based incentive program set forth in this chapter.

It is important to note that the General Assembly states REG projects will receive net metering compensation post-tariff so any efforts to move away from or significantly change net metering leaves REG projects without certainty even further.

Local Permitting Constraints

The State of Rhode Island should be more involved with the permitting of commercial, industrial, and utility scale solar systems at the local level to educate towns on the best solar code to support state goals. Understanding DG Capacity is only valuable if we can deploy technologies rapidly, receive community support, and work in a collaborative environment. The state is in desperate need for permitting guidance and the current process has led to less activity

within the state. It should not be left solely to the developer to educate each town that a company encounters on how to plan for distributed generation projects.

Education from the state is critical to deploying distributed energy resources and should include both a guide specific to the state and outreach to local governments and/ or authorities having jurisdictions (AHJ). Developing a tool for understanding the solar permitting and inspecting process supports efforts to implement a unified permitting process for small to moderate commercial and industrial scale solar PV systems. Standardizing the permitting and inspecting process across the State of Rhode Island will reduce costs for municipalities and solar customers, create local jobs, and advance Rhode Island's clean energy goals. Ecogy is eager to participate in the process and would like to see collaboration from other state departments, solar contractors, and other stakeholders.

Case Study: Sandywoods Solar and the Tiverton Solar Ordinance

The State of Rhode Island, Town of Tiverton Solar Ordinance - ARTICLE XXIV. SOLAR ENERGY SYSTEMS Section 5

Ecogy wants to build a ~250 kW DC ground-mounted solar project in the Town of Tiverton. The project is in partnership with Rhode Island Renewable Energy Growth Program and Sandywoods Land Trust, an affordable housing community focused on sustainability initiatives. Shortly after entering into a Lease Agreement, Tiverton enacted a moratorium on all new solar project applications. The solar ordinance required Ecogy to maintain a standstill for over two years as we waited for a new Solar Ordinance to be passed from November 2018 to November 2022.⁷ The Planning Board's solar ordinance was in response to concerns about how much farmland and woodland would be lost to commercial solar installations.⁸ At present, the new and amended solar code imposes much stricter guidelines that would limit the size of the installations in residential areas because it does not address how Residential Zoned properties should be approached – it instead leaves out any mention and has resulted in the project being rejected.

Ecogy understands the towns development concerns, however, towns are being too restrictive with no clarity on what the path forward is for developers. After Tiverton had the opportunity to receive public feedback for 2-years with example projects in their town that would be considered position solar siting, they did not take public feedback and developer feedback into consideration. Developers that have waited years for the moratorium to be lifted, now have projects that do not fit into the zone's code - even though the projects pose no threat to farm or forestland. The state should facilitate meaningful conservation and work to educate communities

⁷ Tiverton, Rhode Island - Code of Ordinances APPENDIX A - ZONING - ARTICLE XXIV. - SOLAR ENERGY SYSTEMS

⁸ Pobeznik, Marcia. "Limits on Solar Eyed in Ordinance Revision." Newport Daily News, 27 Sept. 2019.
www.newportri.com/story/news/local/2019/09/27/limits-on-solar-eyed-in-tiverton-ordinance-revision/2677031007/.



and towns and build trust regarding permitting and preferred sites. If no steps are taken for resolution in this town and others throughout the state, permitting constraints will leave landowners and the state with wasted and unused REG capacity.

Overall, Ecogy is supportive of the results that while the Alternate REG design increases costs, it also increases benefits proportionally.

We thank you for careful consideration of these comments and appreciate your support of the clean energy industry in the Ocean State.

Warmest regards,

/s/

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