

Testimony Christopher Warfel, P.E. Entech Engineering, Inc.
Block Island Power Company Testimony
Docket 5192,
January 3, 2022

1 My name is Christopher Warfel; I am a registered professional engineer, with thirty-five years of
2 experience in the field of energy utilization, including fourteen years of experience in utility generation
3 and twenty-eight years of experience in renewable energy generation. I have lived full time on Block
4 Island, RI since 1997. Since then, I received two national recognition awards and one State of Rhode
5 Island Governor's Award for my work in renewable energy. I sit on the test development committee for
6 the North American Board of Certified Energy Practitioners (NABCEP) for the advanced design and
7 installation certifications and have done so for over 18 years. I have designed, inspected, and/or installed
8 over 1,200 renewable energy systems for various state renewable energy programs including Rhode
9 Island. My CV is Attachment One.

10

11 **Preamble**

12

13 I am not acting in the capacity of a professional witness in this submittal, though I have served in that
14 purpose at other times. Instead, I am submitting this information as a customer of Block Island Power,
15 and the owner of a renewable energy/energy efficiency company, both of which should have standing
16 during this rate case. In preparing for writing this document, I reviewed previous submittals to the Public
17 Utilities Commission and/or Division. One such submittal was dated April 23, 2005, over sixteen years
18 ago. I have tried to provide to the regulatory authorities the insight of my experience towards the goal that
19 such experience carries weight and credibility towards improving the economic and environmental
20 sustainability of Block Island Power Company (BIPCo), Block Island, and Rhode Island. With the
21 creation of an electrical cooperative, I believe BIPCo has a better ability to work cooperatively and
22 constructively towards these goals.

23

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24 The current management has done an admirable job of improving circuit reliability through an aggressive
25 tree trimming and pole replacement program. The voltage upgrade should further help reduce line losses
26 and extend the life of circuits load carrying capabilities. The attention to pole rental fees has brought in
27 receivable revenue that was not being collected previously.

28

29 The purpose of my testimony is to encourage the inclusion of actions that I believe will further improve
30 our utility's future as an important component of our economy and environmental impact. I will **bold** and
31 underline what I am asking of the Commission and Staff.

32 **1) Community Solar**

33

34 Community solar has been adopted in several communities in Rhode Island. Block Island, with its
35 constrained land resources is another community that can enjoy the benefits of such a program.

36 Barriers to ratepayers include

- 37 1) Home ownership is extremely expensive and those who cannot afford a home and wish to
38 participate are currently excluded from buying from a "greener" source as BIPCo's requested and
39 the PUC approved BIPCo's request to be the sole provider of utility electricity to its customers.
- 40 2) The Town of New Shoreham's Planning Committee recently passed through the Town Council a
41 more restrictive and regulatory burdensome process for homeowners to install residential ground
42 mounted solar systems. While we are drafting language to ease this burden, we see no quick
43 solution to the current new requirements. We have found that people seek ground mounted
44 systems because either: a) they do not want a roof mounted system, b) their roof is not oriented
45 well for a system, or c) the roof is not large enough for a system. The Planning restrictions are

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46 onerous. One must go through almost a year long process if they wish to put a system in the front
47 setback of their property (defined as the property line that abuts the road all the way to the house).
48 Please realize, the front setback is so defined that you could live on a dirt, dead end road and
49 virtually have no place to install a system in your yard by right. As I said, we are working on this.
50 Community Solar would allow people caught in this regulatory quagmire to invest in solar in areas
51 without this constraint. Commensurate with the adoption of Community Solar could be the use of
52 modules that are being exchanged for more powerful modules. The power density is much greater
53 and in most cases, the physical characteristics are compatible with conventional mounting
54 systems. The reuse of these modules could provide a very low cost renewable energy resource to
55 Block Island.

56 **I am requesting the Commission and Staff direct BIPCo develop the policies needed to establish**
57 **a Community Solar program subject to review and approval by the PUC subject to public**
58 **review and comment.**

59 **2) Net Metering**

60 Approximately 1.5 years ago, we began a process of requesting discussions as an agenda item at
61 Board meetings regarding management's position on Net Metering policy including the apparent
62 reaching of the PUC mandated cap of 3%. At issue was 1) was the cap calculated correctly, 2) was
63 management's representation that customer generation was a subsidy by other ratepayers to the tune
64 of \$20,000 per 1% of cap, 3) metering requirements, and 4) Zero Export Defined as not Net Metering.
65

66 **a. The Cap**

67 We worked with the Board and Management to define projects more accurately to a reasonable level.

68 **b. The Subsidy**

69 Our experience in writing and submitting testimony in Rhode Island and utilities in other states rate
70 cases was used to examine if the current policy was a subsidy as represented. Several customers and I
71 collaborated on the impact of customer generation upon BIPCo and could not develop an analysis that
72 supported management's position. We realized that approximately 3.5% of BIPCo's customer base
73 (as a function of meter count) could not be causing the economic harm as was represented.

74
75 We advocated that BIPCo adopt a policy that would value energy exported by a customer's system to
76 BIPCo at Avoided Cost plus any externality value that could be brought to bear financially. Customer
77 generation used internally (inside the meter) would be valued at tariff rate. In this manner, we felt that
78 customer generation would approach being valued similar to an energy conservation opportunity and
79 the argument and process of banking and withdrawing excess generation and hence its valuation
80 would be eliminated. We felt this was fairer to the utility and sent a proper price signal to the owner.
81 We felt that the "smart meters" deployed by BIPCo would facilitate this method.

82
83 Our discussions with BIPCo lasted over approximately one year and we were very pleased that BIPCo
84 apparently has adopted what we recommended.

85

86

87 **c. Metering Requirements**

88

89 We would like the secondary meter BIPCo is advocating for to be analyzed for its necessity. What is
90 its purpose? We have told the Board and Management that this meter will not provide meaningful
91 solar energy production information if indeed that is what is being sought. This is explicitly true for
92 multimode (battery) systems which have two ac outputs, not one. We believe the meter is being
93 required so that BIPCo can disconnect solar energy production remotely by software that can be added
94 to the smart meters. BIPCo may have long-term desires for such control, but if their perspective is
95 long term, than long-term planning should pervade throughout their planning. Please see **Expert**
96 **Planning Process** below for further discussion.

97

98 **We are requesting that the Commission and Staff received from BIPCo the need for this meter,**
99 **and how it is to be used.**

100

101 **d. Zero Export Defined as Not Net Metering**

102 During the past year, BIPCo management and the Town of New Shoreham Building Department
103 collaborated in a policy that solar permits would not be approved without a BIPCo approved Net
104 Metering agreement. This greatly alarmed us and we raised this issue with the Town, and BIPCo.

- 105 a) The agreement was not public
106 b) The Building Official was on the Board of BIPCo
107 c) The process was not documented
108 d) The Town Manager thought it acceptable as she cited DEM and Town coordination, which we
109 pointed out, was in State law and not developed between two individuals or between a utility and
110 Town.
111 e) Apparently the Building Official and BIPCo management were forwarding discussions not meant
112 for the other party without our knowledge.

113
114 This greatly impacted our work. BIPCo maintained that the Cap had been reached and no projects
115 could be interconnected, and the Town would not issue a permit so that the projects could at least be
116 constructed in anticipation of the new Net Metering agreement because of this dubious and previously
117 unknown coordination.

118
119 We attempted several avenues of reason.

- 120 1) The projects would not be connected to the Utility Service Panel but could still be installed.
121 This was “Not Allowed” by BIPCo unbeknownst to us, and the Building Department
122 continued to refuse to issue building permits without justification. We pointed out that since

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123 the system was not connected to the utility, the Net Metering concern was moot and the permit
124 needed to be issued. This was still “Not Allowed” and no permit was issued.

- 125 2) We discussed several times the ability of these projects to be programmed to not export solar
126 energy back to BIPCo through the zero export option. We explained several utilities had
127 developed this required (most importantly in Hawaii) so that the projects were not Net
128 Metered. We presented **R.I. Gen. Laws § 39-26.4-1** to the Board after Management contended that
129 it defined zero export as Net Metering. Our review was 180 degrees from that and we asked
130 that the Board discuss this in the near future.

131 Management has stated that zero export is not going to be a concern with the new Net Metering
132 policy, but we still believe it is important and informative for the PUC to determine if **R.I. Gen. Laws §**
133 **39-26.4-1** defines zero export as Net Metering. We see no basis for Management’s position that it does
134 and ask for clarification.

135
136 Our research into Hawaii’s program in this area seems to clearly delineate between Net Metering and
137 Zero Export (defined as Customer Self Generation). They are two distinct programs, and there is even
138 a third option that a system that is grandfathered into the Net Metering program, can add to their
139 system as long as Zero Export is enacted in the programming. We have included information on this
140 in Attachment Two.

141 **We are requesting that Commission and Staff review R.I. Gen. Laws § 39-26.4-1, and issue an**
142 **opinion on whether Zero Export is Net Metering.** It does not seem possible to us that a system that
143 does not export to the utility can be defined as a Net Metered system.

144 **3) Expert Planning Process**

145
146 Rhode Island’s Public Utilities Commission was recently awarded federal funds to receive technical
147 assistance from the National Laboratories to:

148 *“help state regulators make decisions and develop innovative solutions to improve grid reliability and*
149 *resiliency, enable the adoption of new technologies, promote energy and environmental justice, and*
150 *develop strategies to decarbonize their electric grids.”*

151 We are on the record requesting that the BIPCo Board seek out expertise in customer generation and
152 storage technology so that in the planning process, BIPCo is knowledgeable and informed on the state
153 of the art and highly probable outcomes of this technology in the near and midterm future. We have
154 made this request as we believe such knowledge is not resident currently, nor should there be the
155 expectation that it be so. Operating a distribution system is a very different skill set and it would be
156 unreasonable to expect one person to be able to be knowledgeable, skilled, and have the time
157 and resources to devise and implement such important strategies.

158
159 **We are asking that you allow in our rate base, monies to make such expertise available through**
160 **an RFP process, and/or make resources awarded to the PUC by the DOE available to Block**
161 **Island Power Company.**

162

163 **4) Use of More Qualified Contractors**

164

165 The current management came from the Vermont Electric Cooperative. It has been noted that the
166 contracts for:

167 a) Tree trimming

168 b) Distribution system line and pole upgrade

169 c) Voltage conversion

170

171 have been given to those with a prior relationship to management's work in Vermont. We understand the
172 bootstrapping that management was faced with upon taking the job at Block Island Power Company, and
173 that is may seem more efficient, with less chance for issues to use vetted resources. This most likely is
174 not a good long term solution for Block Island. We would think the cost of transporting trucks,
175 equipment, personnel, (and housing them) from Vermont is not the most cost effective option available,
176 and does not help Block Island Power Company establish relationships with more local expertise.

177

178 **We are requesting that the Commission and Staff make inquiries of the decision-making process**
179 **with respect to required bidding procedures and encourage the integration of more local resources**
180 **if prudent.**

181 **5) Metering**

182 Attachment 3 contains a recent memo from us to BIPCo's management and board. We had promised
183 at the last meeting that we would provide such a document. It shows a range of issues that we felt

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184 needed to be discussed. I would like the PUC to review item 5, which we have added below with
185 respect to encouraging BIPCo to make more of the potential of these meters available to the
186 customers.

187
188 *5) Increase the effectiveness of Smart Meter technology*

189 *The customers, through Block Island Power, have invested in “Smart Meter” technology. The full*
190 *capabilities of this technology do not appear to be known and/or well understood. We previously*
191 *requested permission of BIPCo to work directly with the company that makes the software to understand*
192 *the technology’s capabilities if the utility was unwilling or unable to allocate the resources to do so. That*
193 *request was rebuffed, which leaves a lot of issues in the dark.*

194 *a) Tangential to this request was an analysis of meters that exported energy with the purpose of*
195 *identifying solar electric systems working and connected to the BIPCo system. We were made aware of*
196 *one such system that apparently was put in by the owner with no permits and no interconnection. We*
197 *brought this information to BIPCo to make them aware of the situation and really do not know where that*
198 *situation stands, and yes we are an interested party and it is our business. We have attempted to work*
199 *cooperatively with BIPCo on many issues. As everyone knows, no two people see eye-to-eye all the*
200 *time, but if the goals are common, consensus normally prevails.*

201 *b) Determine how to make the export power register of the Smart Meters visible through SmartHub with*
202 *written instructions. c) Require that a manual be available via the BIPCo website that details how to use*
203 *SmartHub. I challenge the Board to use SmartHub and experiment with extracting data. It has not been*
204 *easy, and some of this may have to do with the speed of our Internet service.*

205 *d) The Board should hold a conference call with the software vendor of SmartHub to discuss these issues*
206 *with audience participation at a future Board meeting.*

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207

208 This concludes this portion of my submittal. Thank you for this opportunity.

209

210 Christopher Warfel

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ATTACHMENT ONE

Christopher Warfel, PE
PO Box 871, Block Island, RI 02807 (401) 466-8978

Career History

ENTECH Engineering, Inc. (11/1997 - Present)

Block Island, RI

ENTECH provides innovative solutions to a wide array of unusual or problematic situations for those who utilize energy, and other valuable and constrained resources. Clients include the energy services and utilization industries, federal, state and local government, public utility commissions, and research-based organizations. ENTECH has an excellent record of exceeding its customer's expectations.

- Lead content developer and instructor to NY for First Responder, Building Officials, Engineer, and Installers on NEC and ICC Building Code compliant methods addressing their needs with respect to photovoltaic systems. Over 12,000 individuals were trained in four years.
- DOE Region 1 (NY/NE) Lead Instructor for SITN Photovoltaic Technology
- IREC/NYSERDA content development and instructor to Building/Electric Code Officials, Fire and Rescue Officials, Engineers, Architects and Installers.
- IREC Clean Energy Workforce Advanced PV Instructor
- Consultant to various state energy departments, specializing in renewable energy, and energy utilization program administration and technical (inspection/design review) and financial/market analysis assistance.
- Instructor to Solar Powers America cities in solar thermal design, installation and inspection of OG100 and OG300 systems.
- Quality assurance inspection and design review engineer for renewable energy programs and non-governmental clients throughout the United States.
- Administrator of largest DOE grant for reducing diesel electric generation by utilizing renewable energy technologies. Accomplishments include development of innovative financing program for low incomes households. Results will be transferred to appropriate areas with US and territories.
- NABCEP Solar Electric Test Development Committee Member
- Continuous services to government, industrial and commercial businesses seeking to improve their energy, material, and labor efficiency.
- Conducted statewide evaluation of architectural and engineering design and specification practices to provide basis for upgrading state energy code and better focus utility energy conservation programs.
- Developed model to determine cost-effective composting solutions to communities facing increased solid waste disposal costs. This process involved surveys, interviews, chemical and volumetric analysis to derive the optimal solution.
- Design engineer of renewable energy systems for use in aquaculture including upwellers, hoists, and sorting machinery.

Texas New Mexico Power, Facility Works, Inc. (08/1996 - 11/1997)

Fort Worth, TX

Director of Engineering

FWI entered into the deregulated energy services business as part of Texas New Mexico Power's diversification process. My position as Director of Engineering in a startup company gave me the ability to utilize much of my experience in a very fast pace environment. Although this company did not survive so the parent company could be a more valuable buyout candidate, the Engineering Department could point to many successes in its short history.

- Formed and directed the Engineering Services Department reaching a staff of five engineers, two technicians and three sales engineers.
- Integrated department's function and devised procedures/processes with Sales and Operations to provide a cohesive approach to delivering customer-desired products.
- Provided sophisticated HVAC, lighting, facility automation controls, renewable and conventional generation and industrial process evaluation and design services.
- Responsible for the design and installation of the company's LAN/WAN system.
- Developed Performance Contracting Product including methodology, contracts and verification protocol.
- Conceived and installed Key Account Tracking System to create intelligence gathering and dissemination.
- In the first fourteen months, the Engineering department ran at a profit with \$435,000 under contract, \$3.2M as the preferred proposal for consideration, and \$5.4M awaiting customer decision for implementation.

Northeast Utilities/Public Service of New Hampshire (3/86 - 8/96)

Manchester, NH

Senior Engineer

- Member of first-in-the-nation all customer classes electricity purchasing deregulation pilot program which provided opportunity to interface with regulators, utilities and competitors. Specific accounts included municipal, small commercial and industrial segments.
- Program Administrator of Energy Conscious Construction Program for industrial and commercial customers. Program exceeded all market penetration goals while having 72% lower overhead when compared against all other NU subsidiaries.
- Chairman of Cogeneration Task Force that formed and directed corporate cogeneration strategy. This strategy included a very customer-focused strategy and the development of a customer generation analysis methodology and software, which resulted in retaining greater than 98% of at-risk sales. Life cycle contribution value of retained sales was estimated at \$125M.
- Developed innovative use of coal fly ash that reduced annual disposal costs by \$400,000 by sponsoring a successful University of New Hampshire and Department of Transportation research and demonstration project, and by renegotiating existing contracts.

Education

- Master of Mechanical Engineering, University of Massachusetts, Amherst, MA
- Bachelors of Science, Forestry Engineering-School of Environmental and Resource Engineering, State University of New York College of Environmental Science and Forestry
- Bachelors of Science, Syracuse University
- Certificate in Professional Studies- Finance, Rivier College, Nashua, NH

Professional Memberships Past/Present

- Adjunct Faculty, Community College of Rhode Island, *Design and Installation of Solar Electric Systems [40hr]*, New Hampshire College, *Energy and the Environment [40hr]*
- National Society of Professional Engineers
- Association of Energy Engineers
- American Society of Heating Refrigeration and Air Conditioning Engineers
- Radiant Heating Association
- Cogeneration Institute
- American Institute of Facility Engineers
- North American Board of Certified Energy Practitioners

Published Articles/Presentations

- "Techno-Economic Study of Autonomous Wind Driven Reverse Osmosis Desalination Systems," Solar and Wind Technology, Vol. 5, No. 5, 1988.
- "Energy Auditing Methods Worth the Time," Association of Energy Engineers Regional Meeting, Chicago and Boston, 1992.
- "Cogeneration Analysis," New Hampshire ASHRAE, 1993. "Energy Auditing Methods for Utilities," Energy Engineering, Vol. 90, No. 2, 1993.
- "Self Generation Economics for Sawmills," PSNH and NH State Office of Forestry, 1994.
- "Positioning Your Company for Deregulation," Energy Management Consortium, Southwest Members Meeting, Spring 1997.
- "Risk/Reward of Energy Efficiency in the Industrial Capital Budgeting Process," American Council for an Energy Efficient Economy, 1998 Summer Symposium, Monterey, CA.
- "Quantifying the Hurdle Rates of Industrial Energy Efficiency Investments", Energy Magazine, October, 1998
- "The Block Island Renewable Energy Grant, Right/Wrong/Better", Fall US DOE Region One SEP Conference, October, 2000.
- "Performance of Renewable Powered Upwellers", National Shellfish Association Annual Meeting, Mystic, CT April 17, 2002
- "Results of the Block Island Renewable Energy Grant Program, Considering the Alternative", American Solar Energy Society Annual Meeting, Reno, NV, June 18, 2002
- Advanced Design of Photovoltaic Systems, NYSERDA Buildings Conference, March 2010
- Design, Installation, and Inspection of Solar Domestic Water Heating System, Solar Powers America, 2009, 2010.
- Utilization of Renewable Energy Technology for Off-grid, Battery/Hybrid Powered Equipment in Aquaculture, Northeast Aquaculture Conference & Exposition, Boston, MA January 9-11, 2019

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ATTACHMENT TWO

Smart Export Program

Program Features

- **PV + Battery:** New option for customers to install a rooftop PV system plus a battery energy storage system.
- **Smart Charging and Exporting:** Customer's battery storage system will typically charge from the PV system during the daytime (9am – 4pm) and power their home in the evening. Option to export energy to the grid during evening, overnight, and early morning (4pm – 9am).
- **Annual True-Up:** Energy export credits will be reconciled on an annual basis. Excess credits expire at the end of the year (with utility cost reduction benefiting all customers).
- **Energy Credits:** Customers will be credited on monthly bill for electricity sent to the grid during the evening, overnight, and in the early morning (4pm – 9am).

Program Capacity:		
HECO: 25 MW	HELCO: 5 MW	MECO: 5 MW
Approximately 3,500-4,500 customers may enroll in the Smart Export program throughout the HECO service territories.		

Credit Rates and Export Windows for Interim Smart Export Program for the HECO Companies			
12 a.m. – 9 a.m.		9 a.m. – 4 p.m.	4 p.m. – 12 a.m.
O'ahu	14.97 ¢/kWh	No credit	14.97 ¢/kWh
Hawai'i Island	11.00 ¢/kWh		11.00 ¢/kWh
Maui	14.41 ¢/kWh		14.41 ¢/kWh
Moloka'i	16.64 ¢/kWh		16.64 ¢/kWh
Lāna'i	20.79 ¢/kWh		20.79 ¢/kWh
The export credit rates will remain fixed for five (5) years.			

Program Requirements

- **Application:** Streamlined interconnection application with the Hawaiian Electric Companies.
- **Smart Net Meter:** The utility installation of a Smart Net Meter that can measure the bi-directional flow of energy between the Smart Export system and the grid and ensure reliable operation.
- **Advanced Inverter:** Advanced inverters provide support to the electric grid during different types of grid disturbances. Activating these functions in new Smart Export systems will help maintain a stable and reliable grid.

Customer Grid Supply+ Program (CGS+)

Program Features

- **Direct-to-Grid:** New option for customers to install a solar PV-only system that exports energy to the electric grid during the daytime, but will need to utilize new equipment that allows the electric utility to manage power from the system when necessary to maintain a stable grid.
- **Lower Upfront Investment:** Allows for a direct to grid exporting PV system with no energy storage needed.
- **Annual True-Up:** Energy export credits will be reconciled on an annual basis. Excess credits expire at the end of the year (with utility cost reduction benefiting all customers).
- **Energy Credits:** Customers credited on monthly bill for electricity sent to the grid.

Credit Rates for the CGS+ Program for the HECO Companies	
Island	CGS+ Credit Rate
Oahu	10.08 ¢/kWh
Hawai'i Island	10.55 ¢/kWh
Maui	12.17 ¢/kWh
Moloka'i	16.77 ¢/kWh
Lāna'i	20.80 ¢/kWh

The export credit rates will remain fixed for five (5) years.

Program Requirements

- **Application:** Streamlined interconnection application with the Hawaiian Electric Companies.
- **Communications and Controllability:** Controllability may be provided by a third party that can send data to the utility. The third party will provide a flexible mechanism to reduce CGS+ system output while leaving the customer's load connected when needed to ensure reliable operation of the grid. Alternatively, customers may elect to have HECO install a separate smart production meter that will provide utility data collection and controllability to ensure reliable operation of the grid.
- **Advanced Inverter:** Provides support to the electric grid during different types of grid disturbances. Activating these functions in new CGS+ systems will help maintain a stable and reliable grid.

Program Capacity		
HECO: 35 MW	HELCO: 7 MW	MECO: 7 MW
Approximately 5,000-6,000 customers may enroll in the CGS+ program throughout the HECO service territories.		

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ATTACHMENT THREE

, Date: December 27, 2021

To: Jeffrey Wright, Manager, Block Island Power Company; Board, Block Island Power Company/Block Island Utility District; Customers (Shareholders) of the Block Island Power Company/Block Island Utility District

cc: Town Council, Town of New Shoreham, Town Manager, Town of New Shoreham, Conservation Commission, Planning

From: Christopher Warfel.

Re: Agenda Items for Discussion

At the last monthly Board Meeting I said I would write to you to ask for action on a variety of items. I make this request of having the rather unusual perspective of working for an electric utility, being Director of Engineering for an Energy Service Company, Manager of Energy Efficient Construction, an energy efficiency program, and engineer, designer and installer of renewable energy projects over my 35 years of professional work. I believe my requests are reasonable and will improve the future of Block Island Power Company versus the traditional approaches that are not very innovative, and do not take advantage of the technology and broader thinking available to us. Some of the items have been submitted previously. They are included here as they have received no action with any definitive explanation and we would appreciate a clear response.

1) Net Metering Configuration

Attachment A is a BIPCo provided drawing for Net Metering. It is unlike any I have ever seen. In all honesty, I do not understand it, and it is not like schematics the industry is required to develop when undertaking their projects. I am requesting that a full three-line diagram be developed and presented for review. Attachment B is an example of such a diagram. It is a little clunky and could be improved, but it does convey more information.

2) Coordination with Block Island Stakeholders

I am asking the Board to consider approaching other governmental and quasi-governmental organizations to discuss energy utilization and management programs, on-island energy generation, and other similar topics. Each organization should be prepared to make clear their short and long term goals on these topics and what their plans are for implementation. I suspect the Town of New Shoreham has very little in the way of meaningful planning, yet they are a major factor in these areas and needs to get much more involved and informed.

3) Create a Survey

Customer interaction for planning purposes is not very good. Often the meetings are sparsely attended. My belief is that consumers are largely unaware of issues in this field, and often are not comfortable speaking out on an issue that is difficult to understand. Utility issues are a science unto itself and require a lot of effort and experience to understand.

I've discussed creating a survey back in March so you could reach out to your customers and gain an understanding of their interests and concerns. Like many other things, this seems to have evaporated from consideration without explanation. I would suspect that ideas like this don't have the internal resources to see the light of day or that there is no interest. That is the worst part. If you don't agree, go on the record stating your concerns. It sends a very bad message to us when there is zero response, and foments apathy.

4) Review of Energy Efficiency Program

It would be appropriate for an update to be given on the effectiveness of the current energy efficiency program. Who has participated, what are the measures being implemented, how is cost effectiveness be measured, etc. Equally important, is to begin discussions on future similar initiatives. I firmly believe that a load management study should be initiated. We have some conflicting information regarding its effectiveness, specific to the benefit of managing our load shape. We have been told the current power contract does not recognize load management's cost effectiveness, and we have also been told that managing peak makes an energy storage system possibly viable. These are two contradictory positions as I understand it, and it is vital to our planning future to understand the correct reality.

5) Increase the effectiveness of Smart Meter technology

The customers, through Block Island Power, have invested in "Smart Meter" technology. The full capabilities of this technology do not appear to be known and/or well understood. We previously requested permission of BIPCo to work directly with the company that makes the software to understand the technology's capabilities, if the utility was unwilling or unable to allocate the resources to do so. That request was rebuffed, which leaves a lot of issues in the dark.

- a) Tangential to this request was an analysis of meters that exported energy with the purpose of identifying solar electric systems working and connected to the BIPCo system. We were made aware of one such system that apparently was put in by the owner with no permits and no interconnection. We brought this information to BIPCo to make them aware of the situation and really do not know where that situation stands, and yes we are an interested party and it is our business. We have attempted to work cooperatively with BIPCo on many issues. As everyone knows, no two people see eye-to-eye all the time, but if the goals are common, consensus normally prevails.
- b) Determine how to make the export power register of the Smart Meters visible through SmartHub with written instructions.
- c) Require that a manual be available via the BIPCo website that details how to use SmartHub. I challenge the Board to use SmartHub and experiment with extracting data. It has not been easy, and some of this may have to do with the speed of our Internet service.
- d) The Board should hold a conference call with the software vendor of SmartHub to discuss these issues with audience participation at a future Board meeting.

This is from NISC's website:

National Information Solutions Cooperative (NISC) is an information technology company that develops and supports software and hardware solutions for our Member-Owners who are primarily utility cooperatives and broadband companies across the nation. NISC is an industry leader providing advanced, integrated IT solutions for consumer and subscriber billing, accounting, engineering & operations, as well as many other leading-edge IT solutions.

From the office of Christopher Warfel

At NISC, our focus is service excellence and innovative information technology solutions that enable our Member-Owners to excel in customer service, maximize diversification opportunities, and compete effectively in the changing utility and broadband industries.

NISC is not your typical software vendor. And the difference is you.

As a cooperative we're owned by you—the Members we serve—and commit our whole selves to partnerships with Members that enrich and build upon their connection with their communities.

Our roots stretch back to the mid-1960s, providing a level of stability and history of innovation you won't often find in the software industry. And whether you've been partnering with us for one year or 40, we're committed to your success and will be with you every step of the way.

The NISC Difference may set us apart from other software providers, but connects us to you.

6) Review of RIGL with respect to the definition of Net Metering.

I had previously asked the Board to review the full net metering RI General Law w/r to zero export. I disagreed with management's interpretation codified in the latest minutes. I did not want to pursue this until the Board had reviewed the material as it just would have disintegrated into two people at loggerheads. It is attached. One may think that the point will be moot once the Rate Case is settled, however the Board needs to agree on this as it is a strategic technical issue and needs to be understood. I cannot see how zero export is net metering. The intent is to encourage renewable energy generation, and the project that was caught in this and the Building Official's and the President's unwritten and unadopted policy of coordinating Building Permits with a Net Metering policy that was evolving made it impossible to install that project in a timely manner.

7) Community Solar

Management is more or less against Community Solar, citing the unknown of developers appearing and implementing projects that are counter to the utility's interests. This seems not to be understanding of the concept of Community Solar, and perhaps not understanding prudent strategies to mitigate those concerns (which we (and perhaps the Board) need to understand better).

I spent two years before Planning attempting to update the solar ordinances, and you need to understand that if you want to encourage renewable energy generation, then you need to review the adopted ordinance and work for its change. I am going to do that, but your support would be important. The adopted ordinance is actually more restrictive in many ways.

I made you and the Town aware of funding for Brownfield solar development, and I think if you really look at this as an opportunity, you could coordinate a project on Town land. See 2) above.

Thank you for your time.

Sincerely,

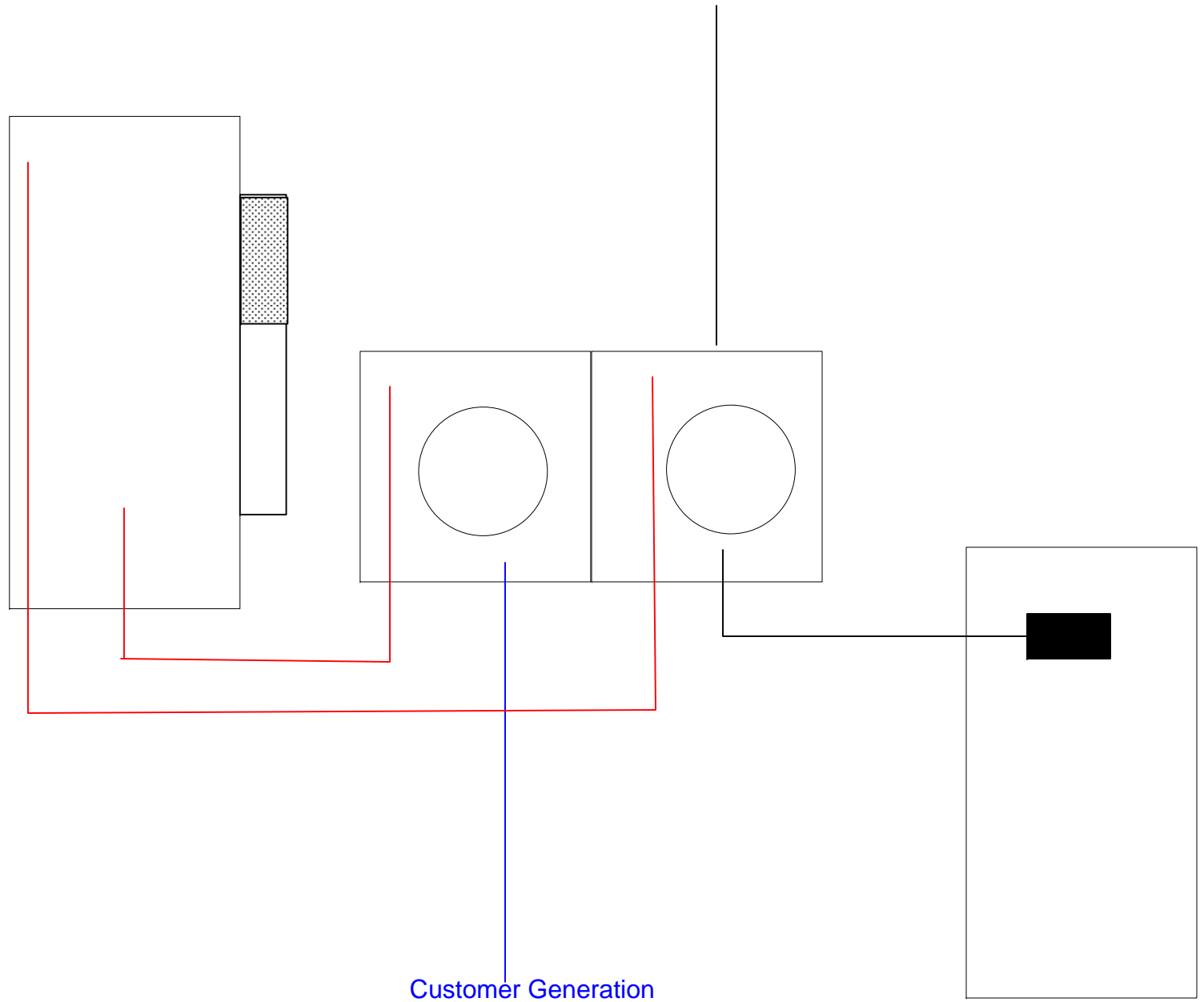


Christopher Warfel, PE


DUAL METER INTERCONNECTION

Attachement A

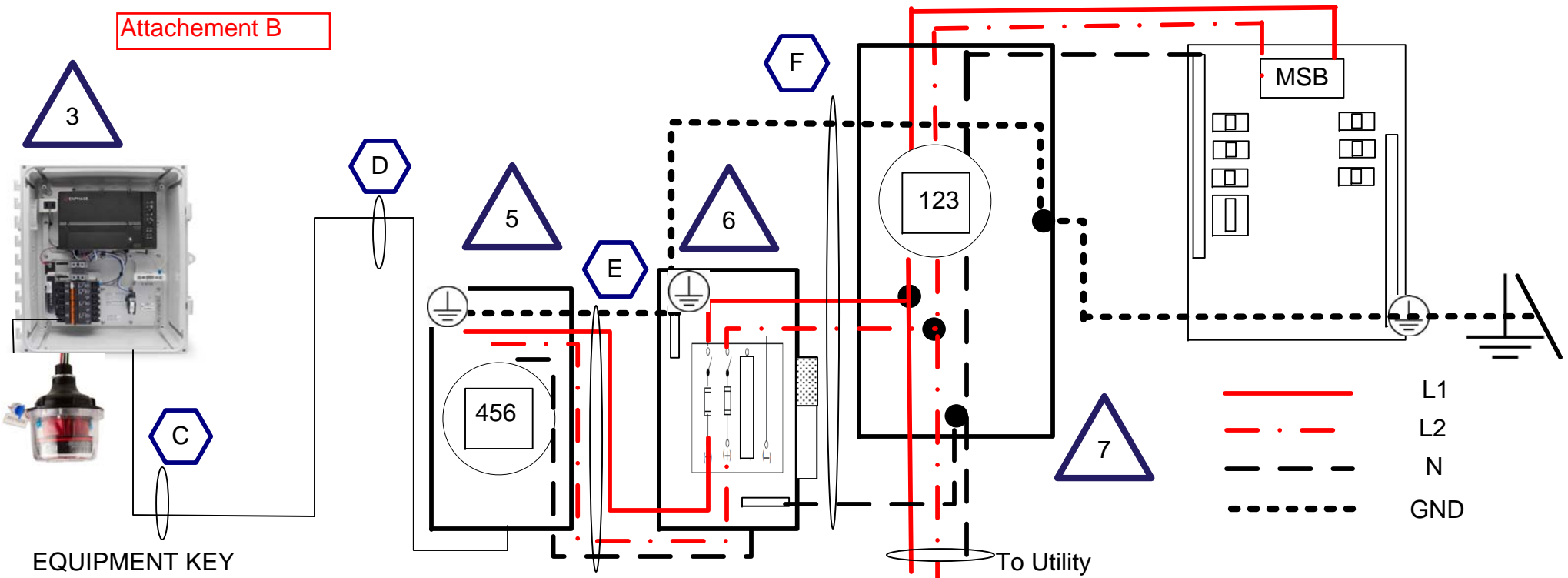
BIPCO




CIRCUIT KEY

 TAG	CIRCUIT TYPE	DESCRIPTION	CONDUIT TYPE	NOTE/OTHER
C, D	Combined Subarrays	THWN-2 6 AWG w 10 EGC/G	3/4" PVC	3W with GND, detail not shown
E, F		THWN-2 6 AWG w 10 EGC/G	3/4" PVC	3W with GND

Attachement B



EQUIPMENT KEY

 TAG	EQUIPMENT	DESCRIPTION	NOTE/OTHER
3	Enphase AC Disconnect/Combiner	Enphase Combiner w Envoy DAS	Grounded (-) conductor not broken, Connected with waterproof connector in DS for maintenance purposes
4			
5	Avoided Cost Meter		
6	Rapid Shutdown Supply Side Disconnect Switch (DS)	Fused	60A, 240VAC 3W with GND, Neutral and Ground Bonded
7	Utility Meter		



Title: Supply Side Connection with Avoided Cost Metering

Drawn by/date: CGW 3/5/21

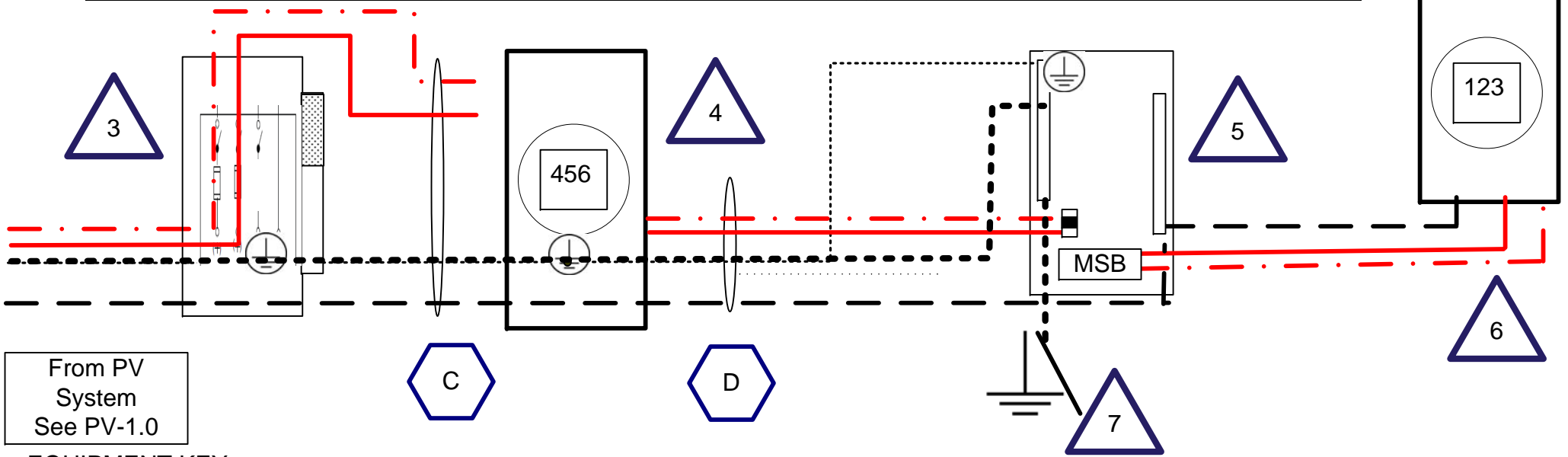
Checked by/date:

Notes:

PV-2.0

CIRCUIT KEY

TAG	CIRCUIT TYPE	DESCRIPTION	CONDUIT TYPE	NOTE/OTHER
C	Combined Subarrays	10 AWG 2W w EGC	.75" PVC	3W with G, connected in NEMA3R JB
D	Shed feeder from Home	6AWG w 6 EGC/GEC	underground	3W with G, connected in MSP



EQUIPMENT KEY

TAG	EQUIPMENT	DESCRIPTION	NOTE/OTHER
3	Rapid Shutdown Switch	240 VAC 30 A	External to shed
4	PV Production Meter		BIPCo provided, located in shed
5	Service Panel		Subpanel is connected with 20 A breaker with panel in accessory building
6	Utility Meter		
7	System Ground		

	Title: Typical Load Side Net Metering Schematic with Extra Utility Required Meter			PV-2.0
	Drawn by/date:	CGW 2/03/21		
	Checked by/date:			
	Notes:			

Title 39

Public Utilities and Carriers

Chapter 26.4

Net Metering

R.I. Gen. Laws § 39-26.4-1

§ 39-26.4-1. Purpose.

The purpose of this chapter 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.

History of Section.

P.L. 2011, ch. 134, § 2; P.L. 2011, ch. 147, § 2.

Title 39

Public Utilities and Carriers

Chapter 26.4 Net Metering

R.I. Gen. Laws § 39-26.4-2

§ 39-26.4-2. Definitions.

Terms not defined in this section herein shall have the same meaning as contained in chapter 26 of this title. When used in this chapter:

(1) "Community remote net-metering system" means a facility generating electricity using an eligible net-metering resource that allocates net-metering credits to a minimum of one account for a system associated with low- or moderate-income housing eligible credit recipients, or three (3) eligible credit-recipient customer accounts, provided that no more than fifty percent (50%) of the credits produced by the system are allocated to one eligible credit recipient, and provided further at least fifty percent (50%) of the credits produced by the system are allocated to the remaining eligible credit recipients in an amount not to exceed that which is produced annually by twenty-five kilowatt (25 KW) AC capacity. The community remote net-metering system may transfer credits to eligible credit recipients in an amount that is equal to or less than the sum of the usage of the eligible credit recipient accounts measured by the three-year (3) average annual consumption of energy over the previous three (3) years. A projected annual consumption of energy may be used until the actual three-year (3) average annual consumption of energy over the previous three (3) years at the eligible credit recipient accounts becomes available for use in determining eligibility of the generating system. The community remote net-metering system may be owned by the same entity that is the customer of record on the net-metered account or may be owned by a third party.

(2) "Electric distribution company" shall have the same meaning as § 39-1-2, but shall not include Block Island Power Company or Pascoag Utility District, each of whom shall be required to offer net metering to customers through a tariff approved by the public utilities commission after a public hearing. Any tariff or policy on file with the public utilities commission on the date of passage of this chapter shall remain in effect until the commission approves a new tariff.

(3) "Eligible credit recipient" means one of the following eligible recipients in the electric distribution company's service territory whose electric service account or accounts may receive net-metering credits from a community remote net-metering system. Eligible credit recipients include the following definitions:

(i) Residential accounts in good standing.

(ii) "Low- or moderate-income housing eligible credit recipient" means an electric service account or accounts in good standing associated with any housing development or developments owned or operated by a public agency, nonprofit organization, limited-equity housing cooperative, or private developer that receives assistance under any federal, state, or municipal government program to assist the construction or rehabilitation of housing affordable to low- or moderate-income households, as defined in the applicable federal or state statute, or local ordinance, encumbered by a deed restriction or other covenant recorded in the land records of the municipality in which the housing is located, that:

(A) Restricts occupancy of no less than fifty percent (50%) of the housing to households with a gross, annual income that does not exceed eighty percent (80%) of the area median income as defined annually by the United States Department of Housing and Urban Development (HUD);

(B) Restricts the monthly rent, including a utility allowance, that may be charged to residents, to an amount that does not exceed thirty percent (30%) of the gross, monthly income of a household earning eighty percent (80%) of the area median income as defined annually by HUD;

(C) Has an original term of not less than thirty (30) years from initial occupancy.

Electric service account or accounts in good standing associated with housing developments that are under common ownership or control may be considered a single low- or moderate-income housing eligible credit recipient for purposes of this section. The value of the credits shall be used to provide benefits to tenants.

(iii) "Educational institutions" means public and private schools at the primary, secondary, and postsecondary levels.

(4) "Eligible net-metering resource" means eligible renewable energy resource, as defined in § 39-26-5 including biogas created as a result of anaerobic digestion, but, specifically excluding all other listed eligible biomass fuels.

(5) "Eligible net-metering system" means a facility generating electricity using an eligible net-metering resource that is reasonably designed and sized to annually produce electricity in an amount that is equal to, or less than, the renewable self-generator's usage at the eligible net-metering system site measured by the three-year (3) average annual consumption of energy over the previous three (3) years at the electric distribution account(s) located at the eligible net-metering system site. A projected annual consumption of energy may be used until the actual three-year (3) average annual consumption of energy over the previous three (3) years at the electric distribution account(s) located at the eligible net-metering system site becomes available for use in determining eligibility of the generating system. The eligible net-metering system may be owned by the same entity that is the customer of record on the net-metered accounts or may be owned by a third party that is not the customer of record at the eligible net-metering system site and which may offer a third-party, net-metering financing arrangement or net-metering financing arrangement, as applicable. Notwithstanding any other provisions of this chapter, any eligible net-metering resource: (i) Owned by a public entity, educational institution, hospital, nonprofit, or multi-municipal collaborative or (ii) Owned and operated by a renewable-generation developer on behalf of a public entity, educational institution, hospital, nonprofit, or multi-municipal collaborative through a net-

metering financing arrangement shall be treated as an eligible net-metering system and all accounts designated by the public entity, educational institution, hospital, nonprofit, or multi-municipal collaborative for net metering shall be treated as accounts eligible for net metering within an eligible net-metering system site.

(6) "Eligible net-metering system site" means the site where the eligible net-metering system or community remote net-metering system is located or is part of the same campus or complex of sites contiguous to one another and the site where the eligible net-metering system or community remote net-metering system is located or a farm in which the eligible net-metering system or community remote net-metering system is located. Except for an eligible net-metering system owned by or operated on behalf of a public entity, educational institution, hospital, nonprofit, or multi-municipal collaborative through a net-metering financing arrangement, the purpose of this definition is to reasonably assure that energy generated by the eligible net-metering system is consumed by net-metered electric service account(s) that are actually located in the same geographical location as the eligible net-metering system. All energy generated from any eligible net-metering system is, and will be considered, consumed at the meter where the renewable energy resource is interconnected for valuation purposes. Except for an eligible net-metering system owned by, or operated on behalf of, a public entity, educational institution, hospital, nonprofit, or multi-municipal collaborative through a net-metering financing arrangement, or except for a community remote net-metering system, all of the net-metered accounts at the eligible net-metering system site must be the accounts of the same customer of record and customers are not permitted to enter into agreements or arrangements to change the name on accounts for the purpose of artificially expanding the eligible net-metering system site to contiguous sites in an attempt to avoid this restriction. However, a property owner may change the nature of the metered service at the accounts at the site to be master metered in the owner's name, or become the customer of record for each of the accounts, provided that the owner becoming the customer of record actually owns the property at which the account is located. As long as the net-metered accounts meet the requirements set forth in this definition, there is no limit on the number of accounts that may be net metered within the eligible net-metering system site.

(7) "Excess renewable net-metering credit" means a credit that applies to an eligible net-metering system or community remote net-metering system for that portion of the production of electrical energy beyond one hundred percent (100%) and no greater than one hundred twenty-five percent (125%) of the renewable self-generator's own consumption at the eligible net-metering system site or the sum of the usage of the eligible credit recipient accounts associated with the community remote net-metering system during the applicable billing period. Such excess renewable net-metering credit shall be equal to the electric distribution company's avoided cost rate, which is hereby declared to be the electric distribution company's standard-offer service kilowatt hour (KWh) charge for the rate class and time-of-use billing period (if applicable) applicable to the customer of record for the eligible net-metering system or applicable to the customer of record for the community remote net-metering system. The commission shall have the authority to make determinations as to the applicability of this credit to specific generation facilities to the extent there is any uncertainty or disagreement.

(8) "Farm" shall be defined in accordance with § 44-27-2, except that all buildings associated with the farm shall be eligible for net-metering credits as long as: (i) The buildings are owned by the same entity operating the farm or persons associated with operating the farm; and (ii) The buildings are on the same farmland as the project on either a tract of land contiguous with, or reasonably proximate to, such farmland or across a public way from such farmland.

(9) "Hospital" means and shall be defined and established as set forth in chapter 17 of title 23.

(10) "Multi-municipal collaborative" means a group of towns and/or cities that enter into an agreement for the purpose of co-owning a renewable-generation facility or entering into a financing arrangement pursuant to subsection (14).

(11) "Municipality" means any Rhode Island town or city, including any agency or instrumentality thereof, with the powers set forth in title 45.

(12) "Net metering" means using electrical energy generated by an eligible net-metering system for the purpose of self-supplying electrical energy and power at the eligible net-metering system site, or with respect to a community remote net-metering system, for the purpose of generating net-metering credits to be applied to the electric bills of the eligible credit recipients associated with the community net-metering system. The amount so generated will thereby offset consumption at the eligible net-metering system site through the netting process established in this chapter, or with respect to a community remote net-metering system, the amounts generated in excess of that amount will result in credits being applied to the eligible credit-recipient accounts associated with the community remote net-metering system.

(13) "Net-metering customer" means a customer of the electric distribution company receiving and being billed for distribution service whose distribution account(s) are being net metered.

(14) "Net-metering financing arrangement" means arrangements entered into by a public entity, educational institution, hospital, nonprofit, or multi-municipal collaborative with a private entity to facilitate the financing and operation of a net-metering resource, in which the private entity owns and operates an eligible net-metering resource on behalf of a public entity, educational institution, hospital, nonprofit, or multi-municipal collaborative, where: (i) The eligible net-metering resource is located on property owned or controlled by the public entity, educational institution, hospital, or one of the municipalities, as applicable; and (ii) The production from the eligible net-metering resource and primary compensation paid by the public entity, educational institution, hospital, nonprofit, or multi-municipal collaborative to the private entity for such production is directly tied to the consumption of electricity occurring at the designated net-metered accounts.

(15) "Nonprofit" means a nonprofit corporation as defined and established through chapter 6 of title 7, and shall include religious organizations that are tax exempt pursuant to 26 U.S.C. § 501(d).

(16) "Person" means an individual, firm, corporation, association, partnership, farm, town or city of the state of Rhode Island, multi-municipal collaborative, or the state of Rhode Island or any department of the state government, governmental agency, or public instrumentality of the state.

(17) "Project" means a distinct installation of an eligible net-metering system or a community remote net-metering system. An installation will be considered distinct if it is installed in a different location, or at a different time, or involves a different type of renewable energy.

(18) "Public entity" means the federal government, the state of Rhode Island, municipalities, wastewater treatment facilities, public transit agencies, or any water distributing plant or system employed for the distribution of water to the consuming public within this state including the water supply board of the city of Providence.

(19) "Renewable net-metering credit" means a credit that applies to an eligible net-metering system or a community remote net-metering system up to one hundred percent (100%) of either the renewable self-generator's usage at the eligible net-metering system site or the sum of the usage of the eligible credit-

recipient accounts associated with the community remote net-metering system over the applicable billing period. This credit shall be equal to the total kilowatt hours of electrical energy generated up to the amount consumed on-site, and/or generated up to the sum of the eligible credit-recipient account usage during the billing period multiplied by the sum of the distribution company's:

(i) Standard-offer service kilowatt-hour charge for the rate class applicable to the net-metering customer, except that for remote public entity and multi-municipality collaborative net-metering systems that submit an application for an interconnection study on or after July 1, 2017, and community remote net-metering systems, the standard-offer service kilowatt-hour charge shall be net of the renewable energy standard charge or credit;

(ii) Distribution kilowatt-hour charge;

(iii) Transmission kilowatt-hour charge; and

(iv) Transition kilowatt-hour charge.

Notwithstanding the foregoing, except for systems that have requested an interconnection study for which payment has been received by the distribution company, or if an interconnection study is not required, a completed and paid interconnection application, by December 31, 2018, the renewable net-metering credit for all remote public entity and multi-municipal collaborative net-metering systems shall not include the distribution kilowatt-hour charge commencing on January 1, 2050.

(20) "Renewable self-generator" means an electric distribution service customer of record for the eligible net-metering system or community remote net-metering system at the eligible net-metering system site which system is primarily designed to produce electrical energy for consumption by that same customer at its distribution service account(s), and/or, with respect to community remote net-metering systems, electrical energy which generates net-metering credits to be applied to offset the eligible credit-recipient account usage.

(21) "Third party" means and includes any person or entity, other than the renewable self-generator, who or that owns or operates the eligible net-metering system or community remote net-metering system on the eligible net-metering system site for the benefit of the renewable self-generator.

(22) "Third-party, net-metering financing arrangement" means the financing of eligible net-metering systems or community remote net-metering systems through lease arrangements or power/credit purchase agreements between a third party and renewable self-generator, except for those entities under a public entity net-metering financing arrangement. A third party engaged in providing financing arrangements related to such net-metering systems with a public or private entity is not a public utility as defined in § 39-1-2.

History of Section.

P.L. 2011, ch. 134, § 2; P.L. 2011, ch. 147, § 2; P.L. 2014, ch. 493, § 1; P.L. 2014, ch. 524, § 1; P.L. 2016, ch. 149, § 3; P.L. 2016, ch. 163, § 3; P.L. 2017, ch. 188, § 1; P.L. 2017, ch. 306, § 1; P.L. 2017, ch. 451, § 17; P.L. 2020, ch. 79, art. 1, § 19.

Title 39

Public Utilities and Carriers

Chapter 26.4 Net Metering

R.I. Gen. Laws § 39-26.4-3

§ 39-26.4-3. Net metering.

(a) The following policies regarding net metering of electricity from eligible net-metering systems and community remote net-metering systems and regarding any person that is a renewable self-generator shall apply:

(1) (i) The maximum allowable capacity for eligible net-metering systems, based on nameplate capacity, shall be ten megawatts (10 MW), effective sixty (60) days after passage. The aggregate amount of net metering in the Block Island Utility District doing business as Block Island Power Company and the Pascoag Utility District shall not exceed a maximum percentage of peak load for each utility district as set by the utility district based on its operational characteristics, subject to commission approval; and

(ii) Through December 31, 2018, the maximum aggregate amount of community remote net-metering systems built shall be thirty megawatts (30 MW). Any of the unused MW amount after December 31, 2018, shall remain available to community remote net-metering systems until the MW aggregate amount is interconnected. After December 31, 2018, the commission may expand or modify the aggregate amount after a public hearing upon petition by the office of energy resources. The commission shall determine within six (6) months of such petition being docketed by the commission whether the benefits of the proposed expansion exceed the cost. This aggregate amount shall not apply to any net-metering financing arrangement involving public entity facilities, multi-municipal collaborative facilities, educational institutions, the federal government, hospitals, or nonprofits. By June 30, 2018, the commission shall conduct a study examining the cost and benefit to all customers of the inclusion of the distribution charge as a part of the net-metering calculation.

(2) For ease of administering net-metered accounts and stabilizing net-metered account bills, the electric distribution company may elect (but is not required) to estimate for any twelve-month (12) period:

(i) The production from the eligible net-metering system or community remote net-metering system; and

(ii) Aggregate consumption of the net-metered accounts at the eligible net-metering system site or the sum of the consumption of the eligible credit-recipient accounts associated with the community remote net-metering system, and establish a monthly billing plan that reflects the expected credits that would be applied to the net-metered accounts over twelve (12) months. The billing plan would be designed to even out monthly billings over twelve (12) months, regardless of actual production and usage. If such election is made by the electric distribution company, the electric distribution company would reconcile payments and credits under the billing plan to actual production and consumption at the end of the twelve-month (12) period and apply any credits or charges to the net-metered accounts for any positive or negative difference, as applicable. Should there be a material change in circumstances at the eligible net-metering system site or associated accounts during the twelve-month (12) period, the estimates and credits may be adjusted by the electric distribution company during the reconciliation period. The electric distribution company also may elect (but is not required) to issue checks to any net-metering customer in lieu of billing credits or carry-forward credits or charges to the next billing period. For residential-eligible net-metering systems and community remote net-metering systems twenty-five kilowatts (25 KW) or smaller, the electric distribution company, at its option, may administer renewable net-metering credits month to month allowing unused credits to carry forward into the following billing period.

(3) If the electricity generated by an eligible net-metering system or community remote net-metering system during a billing period is equal to, or less than, the net-metering customer's usage at the eligible net-metering system site or the sum of the usage of the eligible credit-recipient accounts associated with the community remote net-metering system during the billing period, the customer shall receive renewable net-metering credits, that shall be applied to offset the net-metering customer's usage on accounts at the eligible net-metering system site, or shall be used to credit the eligible credit-recipient's electric account.

(4) If the electricity generated by an eligible net-metering system or community remote net-metering system during a billing period is greater than the net-metering customer's usage on accounts at the eligible net-metering system site or the sum of the usage of the eligible credit-recipient accounts associated with the community remote net-metering system during the billing period, the customer shall be paid by excess renewable net-metering credits for the excess electricity generated up to an additional twenty-five percent (25%) beyond the net-metering customer's usage at the eligible net-metering system site, or the sum of the usage of the eligible credit-recipient accounts associated with the community remote net-metering system during the billing period; unless the electric distribution company and net-metering customer have agreed to a billing plan pursuant to subsection (a)(2).

(5) The rates applicable to any net-metered account shall be the same as those that apply to the rate classification that would be applicable to such account in the absence of net metering, including customer and demand charges, and no other charges may be imposed to offset net-metering credits.

(b) The commission shall exempt electric distribution company customer accounts associated with an eligible net-metering system from back-up or standby rates commensurate with the size of the eligible net-metering system, provided that any revenue shortfall caused by any such exemption shall be fully recovered by the electric distribution company through rates.

(c) Any prudent and reasonable costs incurred by the electric distribution company pursuant to achieving compliance with subsection (a) and the annual amount of any renewable net-metering credits or excess renewable net-metering credits provided to accounts associated with eligible net-metering systems or community remote net-metering systems, shall be aggregated by the distribution company and billed to all distribution customers on an annual basis through

a uniform, per-kilowatt-hour (KWh) surcharge embedded in the distribution component of the rates reflected on customer bills.

(d) The billing process set out in this section shall be applicable to electric distribution companies thirty (30) days after the enactment of this chapter.

History of Section.

P.L. 2011, ch. 134, § 2; P.L. 2011, ch. 147, § 2; P.L. 2014, ch. 200, § 3; P.L. 2014, ch. 216, § 3; P.L. 2016, ch. 149, § 3; P.L. 2016, ch. 163, § 3; P.L. 2017, ch. 155, § 1; P.L. 2017, ch. 164, § 1; P.L. 2017, ch. 188, § 1; P.L. 2017, ch. 306, § 1; P.L. 2021, ch. 315, § 1, effective July 9, 2021; P.L. 2021, ch. 316, § 1, effective July 9, 2021.

Title 39

Public Utilities and Carriers

Chapter 26.4

Net Metering

R.I. Gen. Laws § 39-26.4-4

§ 39-26.4-4. Liberal construction of chapter required.

This chapter shall be construed liberally in aid of its declared purposes.

History of Section.

P.L. 2011, ch. 134, § 2; P.L. 2011, ch. 147, § 2.

Title 39

Public Utilities and Carriers

Chapter 26.4

Net Metering

R.I. Gen. Laws § 39-26.4-5

§ 39-26.4-5. Severability.

If any provision of this chapter or the application thereof to any person or circumstances is held invalid, the invalidity shall not affect other provisions or applications of the chapter that can be given effect without the invalid provision or application, and to this end the provisions of this chapter are declared to be severable.

History of Section.

P.L. 2011, ch. 134, § 2; P.L. 2011, ch. 147, § 2; P.L. 2020, ch. 79, art. 1, § 19.