All our energy. All the time.



February 20, 2025



Island Regulatory & Appeals Commission PO Box 577
Charlottetown PE C1A 7L1

Dear Commissioners:

Please find attached an electronic copy of Maritime Electric's 2025 Supplemental Capital Budget Request Application for the approval of Utility-Scale Community Renewable Generation projects.

This Application details a proposed partnership between Maritime Electric and local community groups to develop two utility-scale renewable energy generation projects, contingent on Government funding. Each of the projects, one located in Prince County and the other in Queens County, include a utility-scale battery energy storage system to facilitate shifting load to off-peak demand periods and to provide grid support capabilities.

If you require further information, please do not hesitate to contact me at 902-629-3701.

Yours truly,

MARITIME ELECTRIC

Michelle Francis
Vice President.

Finance & Chief Financial Officer

MF09 Enclosure

CANADA

PROVINCE OF PRINCE EDWARD ISLAND

BEFORE THE ISLAND REGULATORY AND APPEALS COMMISSION

IN THE MATTER of Section 17(1) of the *Electric Power Act* (R.S.P.E.I. 1988, Cap. E-4) and **IN THE MATTER** of the Application of Maritime Electric Company, Limited for the approval of a 2025 Supplemental Capital Budget Request for Utility-Scale Community Renewable Energy Generation projects.

APPLICATION

AND

EVIDENCE OF

MARITIME ELECTRIC COMPANY, LIMITED

February 20, 2025

TABLE OF CONTENTS

1.0	APPLICATION	1
2.0	AFFIDAVIT	3
3.0	EXECUTIVE SUMMARY	5
4.0	INTRODUCTION 4.1 Corporate Profile 4.2 Purpose 4.3 Background	7
5.0	RATIONALE 5.1 Project Description	10 10 10 17
6.0	CONCLUSION	18
7.0	PROPOSED ORDER	19

CONFIDENTIAL INFORMATION FILED SEPARATELY

APPENDIX A - Project A

APPENDIX B - Project B

1	1 1.0 APPLICATION		
2	2		
3	3 CANADA		
4	4		
5	5 PROVINCE OF PRINCE EDWARD ISLAND		
6	6		
7	7 BEFORE THE ISLAND REGU	LATORY	
8	8 AND APPEALS COMMISS	SION	
9	9		
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11	11 IN THE MATT	TER of Section 17(1) of the <i>Electric</i>	
12	12 Power Act (R.S	S.P.E.I. 1988, Cap. E-4) and IN THE	
13	13 MATTER of t	he Application of Maritime Electric	
14	14 Company, Lir	nited for the approval of a 2025	
15	15 Supplemental	Capital Budget Request for Utility-	
16	Scale Commu	nity Renewable Energy Generation	
17	17 projects.		
18	18		
19	19 <u>Introduction</u>		
20	20 Maritime Electric Company, Limited ("Maritime Electric"	Maritime Electric Company, Limited ("Maritime Electric" or the "Company") is a corporation	
21	incorporated under the laws of Canada with its head or registered office at Charlottetown and		
22	22 carries on a business as a public utility subject to the	Electric Power Act engaged in the	
23	production, purchase, transmission, distribution and sale of	production, purchase, transmission, distribution and sale of electricity within Prince Edward Island	
24	24 ("PEI").		
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28	, , , , ,	•	
29	· ,	estern and Central, PEI.	
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31		•	
32		interests of Maritime Electric and those of its customers and will, if approved, allow the Compan	
33	to pursue necessary capital additions at a cost that is, in all circumstances, reasonable.		

Procedure 1 Filed herewith is the Affidavit of Jason C. Roberts, T. Michelle Francis and Enrique A. Riveroll 2 which contains the evidence on which Maritime Electric relies in the Application. 3 4 Dated at Charlottetown, Province of PEI, this 20th day of February, 2025. 5 6 7 for D. Spencer Campbell, K.C. 8 9 10 STEWART MCKELVEY 11 65 Grafton Street, PO Box 2140 12 Charlottetown PE C1A 8B9 13 Telephone: 902-892-2485 14 Facsimile: 902-566-5283 15 Solicitors for Maritime Electric Company, Limited 16

1	2.0 AFFIDAVIT	
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3	CANADA	
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5	PROVINCE OF PRINCE EDWARD ISLAND	
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7	BEFORE THE ISLAND REGULATORY	
8	AND APPEA	LS COMMISSION
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11		N THE MATTER of Section 17(1) of the <i>Electric</i>
12		Power Act (R.S.P.E.I. 1988, Cap. E-4) and IN THE
13		MATTER of the Application of Maritime Electric
14		Company, Limited for the approval of a 2025
15		Supplemental Capital Budget Request for Utility-
16 17		Scale Community Renewable Energy Generation projects.
18	٢	nojecis.
19	ΔΕ	FIDAVIT
20	A	
21	We, Jason C. Roberts of Suffolk, T. Michelle	Francis of Emyvale and Enrique A. Riveroll of New
22	Dominion, in Queens County, Province of Prince Edward Island, MAKE OATH AND SAY AS	
23	FOLLOWS:	
24		
25	We are the President and Chief Executive O	fficer, Vice President, Finance and Chief Financial
26	Officer and Vice President, Sustainability	and Customer Operations for Maritime Electric,
27	respectively, and as such have personal known	owledge of the matters deposed to herein, except
28	where noted, in which case we rely upon the information of others and in which case we verily	
29	believe such information to be true.	
30		
31	Maritime Electric is a public utility subject to the provisions of the <i>Electric Power Act</i> engaged in	
32	the production, purchase, transmission, distribution, and sale of electricity within PEI.	

1	We prepared or supervised the preparation of the	evidence and to the best of our knowledge and	
2	belief the evidence is true in substance and in fact.		
3			
4	Section 7 contains a proposed Order of the Comr	mission based on the Company's Application.	
5			
6	SWORN TO SEVERALLY at		
7	Charlottetown, Prince Edward Island,		
8	the 20 th day of February, 2025.		
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10		778	
11		Jason C. Roberts	
12		Morally,	
13		1 Vogy auna	
14		T. Michelle/Francis	
15		80h.	
16		C 7 June	
17		Enrique A. Riveroll	
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19	Ω , M		
20	Gerline Mon		
21	A Commissioner for taking affidavits		
22	in the Supreme Court of Prince Edward Island.		

3.0 EXECUTIVE SUMMARY

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 3

Maritime Electric works to provide electricity at a reasonable cost in a safe and environmentally responsible manner. With electrification occurring nationwide to mitigate climate change challenges, the amount of electricity customers require daily is increasing. The Canadian and PEI Governments have set net zero electricity goals, and Maritime Electric has established a 55 per cent greenhouse gas ("GHG") emissions reduction target by 2030 (from 2019 baseline values) to align with these goals. Public interest in renewable energy initiatives and additional on-Island supply of electricity with cleaner attributes are key contributors to meeting the future service interests of Island customers. To meet these objectives, a combination of additional solar and wind energy and demonstration energy storage systems have been recommended by industry planning consultants from the Commission, Maritime Electric and PEI Government.

This Application seeks approval from the Commission to proceed with the development of two utility-scale renewable energy projects in partnership with local community groups, contingent on securing government funding. The first project, Project A, is a partnership with a community group located in Prince County. The second project, Project B, is a partnership involving multiple community partners, located in Queens County. Each project proposal also includes a utility-scale battery energy storage system ("BESS") to facilitate shifting load to off-peak demand periods and grid support capabilities.

The proposed projects are structured with a minority percentage capital investment from Maritime Electric, in conjunction with grant funding and community capital investment to make up the remaining majority percentage of the project construction costs. Maritime Electric's investment is calculated to maintain cost neutrality for customers. This means that the cost to Maritime Electric is comparable to the cost to purchase the equivalent amount of energy from the New Brunswick Energy Marketing Corporation ("NBEM"), resulting in less than 0.1 per cent impact to customer rates. To meet this objective, partner capital investment and grant funding of 50 to 61 per cent of total project capital cost will be required.

Maritime Electric's investment in these projects will provide a number of customer benefits. Electricity customers across PEI will benefit from the cost neutrality approach to utility participation. Using funding opportunities will achieve the project's goal of securing energy at

SECTION 3.0 – EXECUTIVE SUMMARY

avoided cost. This will add a portion of fixed energy supply cost into Maritime Electric's supply mix reducing the impact of future market changes on energy purchases. Customers gain increased access to utility-scale solar which has been identified as a cost competitive renewable energy generation option, second only to onshore wind energy. Renewable energy generation projects built and operated with the transparency of a regulated utility model provides value and visibility to PEI customers.

Maritime Electric will act as project lead, having demonstrated the ability to deliver projects effectively, both for annual capital projects and as construction agent. These utility-scale solar projects will use industry leading practices in all phases of construction, while providing strategic economic efficiencies. The projects align with the PEI Government's sustainable community's strategy and public interest. As an experienced energy generation operator, Maritime Electric will deliver safe, secure and reliable electricity generation projects.

Maritime Electric will be a minority owner in business partnerships with community and Indigenous partners. Maritime Electric will operate and maintain the generation facility and have control of operational decision-making for the life of the project. Energy generated from the facility will be priced to align with the *Renewable Energy Act "Minimum Purchase Price"*. Maritime Electric's capital investment in the projects will be included in rate base, the project will be cost neutral for customers.

- 22 By establishing partnerships with local communities and leveraging grant funding opportunities,
- 23 Maritime Electric can provide customers with increased access to renewable energy under a
- regulated model with minimal impact to rate payers.

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Sargent & Lundy Capacity Resource Study – December 2022

4.0 INTRODUCTION

1 2 3

4.1 Corporate Profile

- 4 Maritime Electric owns and operates a fully integrated power system providing for the purchase,
- 5 generation, transmission, distribution and sale of electricity throughout PEI. The Company's head
- 6 office is located in Charlottetown with generating facilities in Charlottetown and Borden-Carleton.

7

- 8 Maritime Electric is the primary provider of electricity on PEI delivering approximately 90 per cent
- 9 of the electrical energy supplied to Islanders. To meet customer energy demand and supply
- requirements, the Company has contractual entitlement to capacity and energy from NB Power's
- Point Lepreau Nuclear Generating Station and an agreement for the purchase of capacity and
- system energy from NB Power delivered via four submarine cables owned by the Province of PEI.
- 13 Through various contracts with the PEI Energy Corporation, the Company also purchases the
- 14 capacity and energy from 92.5 megawatts ("MW") of wind generation and 10 MW of solar
- generation on PEI. In the event that the contractual agreements fail to provide all the energy
- required by customers, the Company owns and operates 90 MW of on-Island backup generation.

17

- 18 Maritime Electric is a public utility subject to the PEI Electric Power Act. As a public utility, the
- 19 Company is subject to regulatory oversight and approvals of the Commission. IRAC's jurisdiction
- to regulate public utilities is found in the Electric Power Act and the Island Regulatory and Appeals
- 21 Commission Act.

2223

4.2 Purpose

- 24 Maritime Electric submits this application (the "Application") seeking approval of a 2025
- 25 Supplemental Capital Budget Request for Utility-Scale Community Renewable Energy
- Generation projects. A summary of the projects is provided in Section 5.1 and details are provided
- in the confidential appendices.

28 29

4.3 Background

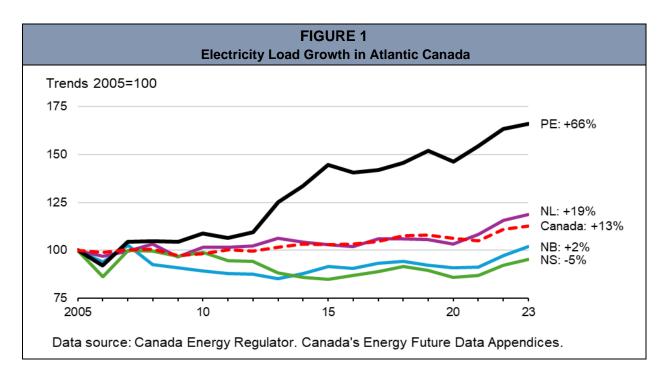
- 30 Maritime Electric is continually working to meet the growing electricity needs of its customers, with
- a focus on delivering safe, reliable, and affordable electricity, while helping meet Federal and PEI
- 32 Government net zero targets. The Federal Government is committed to achieving a net zero
- electricity system by 2035 and the PEI Government has proposed a net zero energy target by

7

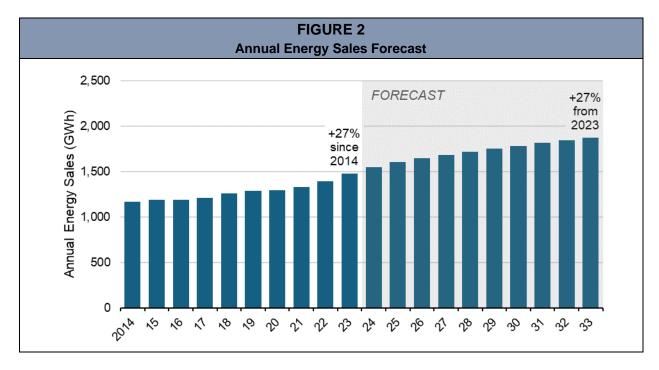
2030 with a particular focus on sustainable communities, including the introduction of a Community Renewable Energy Generation Fund ("CREG"). This initiative follows two decades of renewable energy-centric strategic initiatives by the PEI Energy Corporation. Collectively, these initiative objectives target greater energy self-sufficiency, local economic opportunities and reducing GHG emissions.

Maritime Electric has recognized the Federal and PEI Government initiatives and has set its own GHG emissions reduction target of 55 per cent by 2030 (from 2019 baseline values). To meet this target, Maritime Electric estimated that adding 100 MW of wind and 120 MW of solar generation, or a combination thereof, is required. This analysis highlighted the importance of bringing additional cleaner energy generating sources onto the grid. The proposed Maritime Electric utility-scale solar projects aim to meet public policy and customer needs.

The combination of PEI's high electrical load growth and Federal and PEI Government GHG emissions reduction initiatives creates an even greater need for additional cleaner energy generation. Load growth on PEI has been driven by the transition away from burning fossil fuels (i.e., electrification) and population growth. Figure 1 demonstrates that PEI's load growth since 2005 is over five times the Canadian average.



As load growth on PEI is expected to continue, the demand for energy is also expected to continue to increase, as shown in Figure 2. Maritime Electric forecasts a 27 per cent increase in annual energy sales for the 10-year period from 2024 to 2033. This will require the addition of new cleaner energy sources to maintain and improve upon the grid's non-emitting energy supply mix, as discussed in Section 5.2, and to meet increased energy needs.



Understanding climate risks and recognizing opportunities to reduce the GHG intensity of electricity provided to customers supports the proposed investment in renewable energy projects. Climate scenario analysis undertaken by Fortis Inc. (Maritime Electric's parent company) is detailed in the Fortis 2024 Climate Report.² Conducting science-based climate scenario analysis identifies high and low emission scenarios to inform operational plans for the future. This evidence-backed data further highlights the importance of meeting carbon reduction targets. Maritime Electric is proposing these two renewable generation projects in order to contribute to the necessary carbon reduction efforts, while working to build system resiliency with on-Island solar and storage technologies.³

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² Fortis Climate Report 2024. https://www.fortisinc.com/docs/default-source/environment-reports/fts-2024-climate-report-final.pdf?sfvrsn=fc5d7298_0

A Report on Maritime Electric's Climate Change Adaptation Strategy, Spring 2024. https://www.maritimeelectric.com/media/parnwo2h/climate-change-adaptation-strategy-final_june-14-2024.pdf

5.0 RATIONALE

5.1 Project Description

Maritime Electric is proposing to lead the development and operation of two utility-scale solar energy projects on PEI in partnership with community and Indigenous organizations. The proposed projects are up to 32 MW each and are projected to supply an average of 40,000 megawatt-hours ("MWh") of electricity annually to Maritime Electric customers.⁴ This equates to powering approximately 4,000 households and eliminating an estimated 5,680 tonnes of carbon dioxide equivalent ("CO₂e") emissions from current grid sources per project.⁵ Both projects incorporate a BESS in support of the addition of renewable generation to the grid.

The projects' financial models, provided in confidential appendices, are based on avoided cost of equivalent energy, which means that the estimated total project cost to Maritime Electric is comparable with the cost to purchase the same energy from other sources.⁶ To meet this objective, grant funding is required in the range of 50 to 61 per cent of the project capital cost. The proposed projects are designed to be cost neutral to Maritime Electric's customers while providing additional on-Island renewable energy generation.

Maritime Electric's over 100 years of experience working with local Island communities and its electrical system knowledge will contribute to the delivery of quality renewable energy projects. The Company's experience and North American reach will be leveraged to operate and maintain the projects, ensuring the facilities meet expected generation capacity. Preliminary details of each project are in Confidential Appendices A and B.

5.2 Benefits

The projects present both cost and other customer benefits which are detailed in this section.

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Calculated using Natural Resources Canada annual photovoltaic potential resource map data for PEI of 1,130 kWh/kWp multiplied by 38,000 kWp estimated installed wattage. kWp is the peak kilowatt rating of solar panels. After applying annual degradation of 0.5 per cent over the project period, the 30-year average expected output is approximately 40,000 MWh annually.

Based on 2023 values, the addition of 40,000 MWh of solar energy to the grid would offset an equivalent amount of electricity generated from a mix including GHG-emitting sources, displacing the associated emissions.

The other source used in the model is the current and estimated forecast NBEM energy purchase price.

Cost Neutral

- 2 The proposed projects will provide access to energy at a cost-neutral price, having less than 0.1
- 3 per cent cost impact to ratepayers, while providing secure, locally generated renewable energy
- 4 (refer to Appendix A.3 and B.3).

The energy generated from the projects will displace energy that Maritime Electric would otherwise purchase from NBEM. To achieve cost neutrality, Maritime Electric's share of the project costs is limited to an amount equivalent to the avoided cost of the same replacement energy if it was purchased from NBEM (i.e., avoided-cost-of-equivalent-energy model). The remaining project costs will be funded by partner investment and government funding.

With the global focus on climate change and efforts to reduce GHG emissions, Federal and Provincial Government-led funding programs are supporting utility-scale capital projects with a particular interest in utility, community and Indigenous involvement. Several funding programs are available within the 2024-2025 fiscal year at the Federal, Provincial, and Municipal Government levels. In most cases, the funding programs are stackable with other types of funding programs to encourage investment by utilities in community and Indigenous renewable energy project partnerships. Through its Smart Renewables and Electrification Pathways program, Natural Resources Canada has provided \$1.87 million for pre-development activities associated with Project A.

 Maritime Electric's participation in the projects will fix a portion of Maritime Electric's energy supply cost. The partnership model, detailed in Section 5.3, provides a cost-effective on-Island renewable energy source. Maritime Electric's capital investment in the project will be included in rate base, and the Company will be responsible for its share of the partnership's operating costs and entitled to its share of the energy generated. Similarly, the other partner(s) will be responsible for their share of the partnership's operating costs and entitled to their share of the energy generated which will be purchased by Maritime Electric at the Minimum Purchase Price. The result for Maritime Electric customers is the net projects costs, over the life of the project, will be comparable to purchasing the equivalent amount of energy from NBEM.

- 32 The proposed projects will result in the delivery of cost-effective renewable energy for customers.
- 33 Utility-scale solar is more cost effective in comparison to other solar generation types and is the

second-most cost-effective renewable generation, with onshore wind energy being the most cost effective. Period of Specifically, utility-scale solar provides a more equitable alternative to net metered roof-top solar, where cross-subsidization exists between non-net metered customers and net-metered customers. This cross-subsidization is due to the legislated value assigned to the net electricity generated to the grid by net metered customers. Net-metered customers are credited a higher value than what other electricity generators are paid to supply electricity to the grid. As a result, customers without net-metered installations are consequently paying for the higher legislated value afforded to the net-metered customer credits. These utility-scale solar projects provide all Maritime Electric customers equal access to the solar energy generated.

Other Customer Benefits

In addition to the cost benefit, this section details the other customer benefits resulting from these projects including regulatory transparency, improved access to cleaner energy, benefits of battery storage, access to renewable energy credits, predictable energy supply, industry expertise and societal benefits.

Regulatory Transparency

Maritime Electric's participation in renewable energy generation projects, as a regulated utility, provides a level of transparency to Island customers. Maritime Electric is subject to scrutiny by the Commission which ensures that the projects are evaluated carefully, considering long-term customer benefits and public interests, while unregulated renewable generators are typically not subject to this level of oversight. The Commission will have a valuable role in assessing the prudency of the projects and will have visibility into the short- and long-term operating efficiencies of the assets. Customers will obtain value from the regulatory process.

Improved Access to Cleaner Energy

Maritime Electric recognizes the need for additional renewable energy generation on PEI and has established a GHG reduction target of 55 per cent from 2019 baseline by 2030. Maritime Electric also acknowledges the PEI and Federal Government emissions reduction targets and the need for additional on-Island renewable energy generation sources that are located within the communities of PEI. Maritime Electric has been working to meet these goals and, in 2023, 82 per

-

Sargent & Lundy Capacity Resource Study – December 2022

cent of the energy supplied to customers originated from carbon-free sources. In 2021, on-Island heavy fuel oil generating capacity was phased out through the decommissioning of the Charlottetown Thermal Generating Station.

Maritime Electric supports renewable energy generation sources and currently purchases 100 per cent of the wind and solar energy produced by the PEI Energy Corporation, in addition to integrating over 40 MW of net metering solar generation agreements onto the grid. Table 1 details Maritime Electric's 2023 energy supply mix.

TABLE 1 Energy Supply Mix for 2023			
	MWh	%	
System Energy Purchases from NB Power	1,074,300	72.6	
Point Lepreau Participation (Nuclear)	194,300	13.1	
On-Island Wind Generation	189,400	12.8	
On-Island Solar Generation	18,500	1.3	
On-Island Diesel-Fired Generation	2,300	0.2	
TOTAL	1,478,800	100.0%	

To meet Maritime Electric's 2030 GHG reduction target, the addition of approximately 120 MW of solar energy and 100 MW of additional wind energy to the grid, or a combination thereof, is required. This Application will address some of this need and also contribute to maintaining and improving upon the 82 per cent carbon-free supply mix.

Maritime Electric is obligated to meet both the energy and capacity demands of its customers. Energy obligations are the need to meet the system's electrical load continuously throughout the day. Capacity obligations are the required reserve capacity necessary to meet the Maritime Area reliability standards in accordance with the Northeast Power Coordinating Council. This application is focused on meeting the Company's energy needs while contributing to sustainability targets.

Utility-scale solar is a viable energy resource to further assist in diversifying the renewable energy mix on PEI. As an intermittent renewable resource, solar is considered to be more predictable

than wind, which allows solar generation to complement other renewable energy sources,

2 particularly in consideration of PEI's existing and future wind generation projects.8

3 4

Battery Storage

- 5 The projects in this Application will each incorporate a BESS that could serve as capacity
- 6 resources. The BESS would also serve as a demonstration installation for Maritime Electric to
- 7 assess the extent of system functionality and the potential use of stored energy during system
- 8 peak load when wind generation is low on PEI. The PEI system peak load typically occurs during
- 9 the hour between 17:00 and 18:00 in the winter months, which is after sunset when no solar
- energy is being generated. The BESS could be used during this time.

11

- 12 The addition of a BESS at each project site provides renewable energy integration opportunities
- as a utility use-case demonstration. For example, when renewable energy generation exceeds
- load, the excess renewable energy can be stored in the battery. Then the stored energy can be
- discharged to the grid at a later time when needed. Balancing the system load is an important
- aspect of the electricity transition towards net zero goals and the delivery of reliable cleaner
- 17 energy to customers.

18

- As more renewable generation connects to the grid, it is expected that there will be periods when
- 20 energy from renewable generation will exceed customer demand, potentially resulting in energy
- being curtailed. Pairing battery storage with each project mitigates this risk, potentially avoiding
- 22 any curtailment by allowing renewable energy to be shifted and used during peak load periods.
- This results in more renewable energy access for customers.

24 25

Additional On-Island Energy Supply

- 26 Increasing on-Island energy generation enhances the amount of on-Island energy supply during
- times when the New Brunswick transmission system limits the amount of energy imported to PEI.
- 28 The proposed projects provide the potential to generate on-Island energy during times when
- transmission system constraints in New Brunswick limit the amount of firm energy (i.e., 300 MW)
- that can be supplied to the subsea cables. This benefit would apply to sunlight hours with a small
- amount of electricity available through the BESS during non-sunlight hours.

The predictability of solar and the relation to the variability of wind are further detailed in the NREL Technical Report <u>Integrating Variable Renewable Energy: Challenges and Solutions</u> (2013).

⁹ Curtailed energy refers to energy from renewable energy plants that could have been generated but is instructed to reduce production due to restrictions.

1 <u>Industry Expertise</u>

Technical expertise in the utility and generation sectors are key elements to Maritime Electric's history of executing major capital projects. The Company's focus on responsible planning practices, as well as detailed and early community engagement and environmental reviews have contributed to setting its major capital projects on a course for success. This experience, as well as grid knowledge and operational expertise stemming from running a 24-hours-a-day and sevendays-a-week ("24/7") service will contribute to the successful delivery of these quality renewable energy generation projects.

The proposed projects are based on Maritime Electric being the operator of the facilities. This provides greater supply of on-Island energy as Maritime Electric will directly ensure that the renewable generation facilities are properly maintained and operated at their rated operating capacity throughout the life of the projects. The existing 24/7 energy control operating infrastructure allows for immediate troubleshooting of unscheduled maintenance incidents. This provides customers with the most efficient operating scenario, resulting in less downtime and better availability of cleaner energy generation.

Maritime Electric also has a network of resources and expertise in partnership structures and the delivery of renewable generation projects through the Fortis Inc. group of companies. Access to expertise at Fortis companies such as UNS Energy Corporation ("UNS") in Tucson, Arizona, will assist in facilitating the successful execution of these projects. UNS owns and operates 54 MW of utility-solar energy. Access to this experience and expertise will provide efficiencies and risk mitigation opportunities. For example, UNS can provide advice on supply chain challenges, operating best practices and lessons learned. In addition, FortisOntario and FortisBC have a history of establishing valuable partnerships with local Indigenous nations which can further inform project activities. FortisOntario has constructed the Wataynikaneyap Transmission Project in partnership with 17 First Nation communities and FortisBC has been in partnership for over a decade with Stz'uminus First Nation and Cowichan Tribes on their Mount Hayes Liquified Natural Gas Facility.

-

Examples include the construction of new substations to meet load growth and the subsea cable interconnection project.

1 Societal Benefits

dollars) per project.11

2 Societal benefits to PEI customers include environmental, social, economic and societal benefits.

 Environmental benefits are the positive impact on environmental factors, particularly as they relate to climate change. The environmental benefit of the proposed projects is the projected displacement of 40,000 MWh annually, by each project, of electricity generated by GHG emitting mix of sources from the grid.

The social benefit of the proposed projects is the reduction of the social cost of GHG ("SC-GHG"). SC-GHG is a measure of the avoided damages from a decrease in emissions or a reduced increase in emissions. The SC-GHG takes into account damages from a variety of climate change impacts, such as changes in net agricultural productivity, human health impacts, property damage from increased flood risk, the value of ecosystem services and disruption of energy systems. Using the Government of Canada's SC-GHG methodology, the estimated avoided social cost from the decrease in emissions associated with these projects equates to \$20.7 million (in C\$2021).

The economic benefit is the amount of money from the projects that will impact the local economy. All partners involved in the proposed projects are local PEI entities with an interest in making local investments for the benefit of PEI. Local economic impact will be realized through local purchases and other directly distributed economic value. The estimated local economic impact from the development of the two projects is net positive, incorporating local construction, consulting services, labour and project capacity building value. The partnership model also allows for a proportional, generation-tied, revenue stream for the community and Indigenous partners to reinvest in local resources, services, programs and initiatives, creating a ripple effect of economic value on PEI.

The projects provide a societal impact in aligning with the PEI Government's public policy measures, which aim to have on-Island community and Indigenous partnered renewable

-

Analyzed in accordance with the <u>Social Cost of Greenhouse Gas Estimates – Interim Updated Guidance for the Government of Canada 2023</u> using Table 1 SC-GHG \$/tonne estimates. Prince Edward Island Greenhouse Gas Consumption Intensity estimates referenced from Table A13-3 values in *National Inventory Report 1990-2021: Greenhouse Gas Sources and Sinks in Canada Part 3, Government of Canada 2023.*

generation. The establishment of these facilities aligns with the public interest as represented by

2 the local and federal governments.

3 4

Access to Renewable Energy Certificates

- 5 Renewable energy certificates ("RECs") are an important benefit for customers to realize from the
- 6 on-Island generation of renewable energy. RECs are credits that represent the renewable
- 7 attributes from each MWh of renewable energy generated and delivered to the electricity grid.
- 8 Owning the RECs associated with the projects allows for the environmental attributes to be
- 9 claimed as a GHG emissions reduction. On PEI, RECs are currently owned by the PEI
- 10 government in accordance with the Renewable Energy Act and are not currently available or
- assigned to Maritime Electric's customers. The Company will work with the PEI Government to
- ensure that the RECs associated with these projects are accessible by the project partners.

13 14

5.3 Partnership Structure

- As Maritime Electric will not be the sole owner of the project assets, a different ownership structure
- is needed. Maritime Electric has engaged expert advisors, Fasken Martineau DuMoulin LLP, and
- 17 consulted with FortisBC to provide input on the ownership structure based upon experience with
- 18 comparable project structures. The business partnership structures will be established to achieve
- the most cost-effective projects and transparency to Maritime Electric customers.

1 6.0 CONCLUSION

2 The two utility-scale solar projects proposed in this Application are structured to have less than 3 0.1 per cent cost impact on customer rates, provide additional on-Island renewable energy 4 generation, build knowledge and capacity within Island communities and Indigenous 5 organizations, and align with public interest. The process to obtain regulatory approval of these 6 projects will also provide greater transparency to Islanders. Maritime Electric, with access to 7 capital and extensive long-term planning capabilities, is well-positioned to provide affordable, reliable, and equitable solar energy to customers. The following Appendices provide the financial 8 9 details of rate base impact of the proposed Maritime Electric capital investments and detail the 10 community and Indigenous partnerships and grant funding considerations.

7.0 PROPOSED ORDER 1 2 3 CANADA 4 5 6 PROVINCE OF PRINCE EDWARD ISLAND 7 **BEFORE THE ISLAND REGULATORY** 8 AND APPEALS COMMISSION 9 10 IN THE MATTER of Section 17(1) of the Electric Power Act (R.S.P.E.I. 1988, Cap. E-4) and IN THE 11 MATTER of the Application of Maritime Electric 12 Company, Limited for the approval of a 2025 13 14 Supplemental Capital Budget Request for Utility-Scale Community Renewable Energy Generation 15 16 projects. 17 18 UPON receiving an Application by Maritime Electric Company, Limited ("Maritime Electric") for approval of the Utility-Scale Community Renewable Energy Generation projects pending award 19 20 of government funding; 21 22 AND UPON considering the Application and Evidence in support thereof; 23 24 NOW AND THEREFORE pursuant to the Electric Power Act and the Island Regulatory and 25 Appeals Commission Act, 26 27 IT IS ORDERED THAT 28 29 Pending award of the government funding of each individual project, as outlined in the Application, 30 the Utility-Scale Community Renewable Energy Generation Projects A and B, filed herein on 31 February 20, 2025 are approved to recover all indicated project capital costs of \$30,593,000 for Project A and \$26,195,000 for Project B, and inclusion of Maritime Electric's investment into rate 32 33 base. 34 35 DATED at Charlottetown this _____ day of _____, 2025 36 BY THE COMMISSION 37 38 Chair 39 40 Commissioner 41 42 Commissioner 43