



OCTOBER 2024

Cumberland County Government Office

RFP (SOLAR ARRAY)

PREPARED BY

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Maine Solar Solutions

www.mainesolarsolutions.com



October 25, 2024

Travis Kennedy
Cumberland County Government Office
27 Northport Dr
Portland, Maine

Maine Solar Solutions is grateful for the opportunity to submit a proposal to the Cumberland County Government Office's RFP for a Photovoltaic Rooftop Solar Array in its effort to reduce electricity costs and meet County sustainability goals while minimizing the facility's impact on the environment.

We are excited to share our passion and expertise in electrification. We look forward to the opportunity to work with you as a partner and achieve an easy, affordable, and climate-friendly solution for the Cumberland County Government Office.

Cost to install a 23.1 kW PV System - \$58,821

Maine Solar Solutions will provide engineering, design, procurement of materials and installation of the PV array.

Thank you for your time and consideration.

Sam Zuckerman

Sam Zuckerman

Owner, Maine Solar
Solutions

Contact for Proposal
Sean Moulton
Commercial Solar Business Development
sean.m@mainesolarsolutions.com
207-710-3475

EXECUTIVE SUMMARY

We at Maine Solar Solutions understand the desire to cut costs and reduce environmental impact. As such, we have designed an array to maximize and minimize those goals, respectively.

Sean Moulton will be the liaison between Maine Solar Solutions and the Cumberland County Government Office during the proposal review period and beyond if given the opportunity to install this project. He has spent 14 years in the solar industry and brings the experience, know-how, and understanding that goes with that tenure.

Key timeline milestones for the project include site visit, contract signing, interconnection application, permitting, installation, inspection and energization.

Our design of this 23.1 kW solar array will include:

- Forty-two (42) 550-watt SEG modules
- One (1) SolarEdge 17.3 kW inverter
- Twenty one (21) SolarEdge P1101 Optimizers
- SolarEdge monitoring system.

COMPANY PROFILE

Founded in 2012 in Portland, Maine, Maine Solar Solutions designs, installs, and services solar electric systems, battery backup, and off-grid systems for residential and commercial customers. Our goal is to empower you with the information you need to make an informed decision about your solar electric solutions and provide you with the best solar experience in the state. We have installed over 18,500 kW in the state of Maine.

Who We Are:

- We are a company built on values of integrity and honesty. We believe in providing you with exceptional customer service and treating everyone with kindness and respect. As a local Maine-based team, we are dedicated to sustainability and supporting the neighborhoods and businesses we call home.
- With over a decade of industry knowledge and experience, we design your solar electric system tailored to your individual needs and energy goals, ensuring the best return on your solar investment.
- We are committed to customer satisfaction. Satisfaction is achieved by being responsive to your questions, installing high-quality equipment, and following the highest standard of workmanship.
- We take pride in our consultative approach to going solar. We maintain clear communication from initial contact through project completion. We're with you throughout your entire solar journey and beyond.

WE ARE A BUSINESS THAT MAKES SAFETY A PRIORITY.

Attached you will find a copy of our safety manual and Certificate of Insurance

REFERENCE 1



DOCK AND DOOR HANDLING



PROJECT SPECS:

LOCATION: Saco, Maine
Install Year: 2021

PROJECT SPECS:

72 KW System Size
168 Q-Cell 430 Watt Panels
2 SolarEdge SE43.2KUS 208v
inverters

CONTACT INFO:

Karl Rausch

Phone:
207-391-3620

Email:
klausrausch@outlook.com



REFERENCE 2



SERVICEMASTER CLEAN



PROJECT SPECS:

LOCATION: Auburn, Maine

Install Year: 2021

PROJECT SPECS:

49.59 KW System Size

114 REC 435 Watt Panels

2 SolarEdge SE40KUS 408v

Inverter



CONTACT INFO:

Carl Carlson

Co-owner

Phone:

207-653-0714

Email:

ccarlson@smfireandwater.com



REFERENCE 3



REPLENOVA FARM



PROJECT SPECS:

LOCATION: Durham, ME
Install Year: 2019

PROJECT SPECS:

23.305 KW System Size
59 Q-Cell 395 Watt Panels
2 SolarEdge SE10000H-US
Inverter



CONTACT INFO:

Gary Goodrich
Owner

Phone:
207-409-0446

Email:
g.goodrich@replenoVA.com



PROJECT TEAM

Our Maine-based, in-house team—including designers, warehouse, installation crews, and licensed electricians—is committed to delivering top-quality solar installations that follow industry best practices. We're excited to partner with the Cumberland County Government Office on its Photovoltaic Rooftop Solar Array RFP, helping reduce electricity costs, meet sustainability goals, and minimize environmental impact.



Sam Zuckerman
Owner

Sam's passion for renewable energy and efficient building practices led to a career in solar. Before founding Maine Solar Solutions in 2012, Sam was the sole salesperson and project manager for a Portland-based Solar Electric and HVAC contractor. Over the past 12 years, Sam has grown the company from 2 to 50 employees and now focuses on financial management, business operations, and general oversight. Sam also regularly presents educational content to community groups.



Sean Moulton
Commercial Solar Business Development

With 14 years of renewable energy experience, Sean specializes in building commercial solar projects. His extensive background spans residential solar, home energy efficiency, and community solar. Sean also co-founded a company focused on community solar, a key achievement highlighting his commitment to advancing the industry. His expertise positions him to drive impactful commercial solar projects and contribute to Maine Solar Solutions' and the state of Maine's renewable energy efforts.

PROJECT ROLE: Serve as the Project Liaison between Maine Solar Solutions and the Cumberland County Government Office throughout the proposal review process and project implementation.



Jacob Bradley
Master Electrician & Head Of Field Operations

Jacob, a Master Electrician licensed in Maine and New Hampshire, brings over ten years of experience in commercial, industrial, and residential electrical work. He manages a team of 7 licensed electricians and 15 electrical helpers at Maine Solar Solutions, ensuring all projects comply with the National Electric Code and company standards. Jacob's background includes designing and installing power distribution systems for new construction, lighting projects, service upgrades, utility distribution, and industrial systems.

PROJECT ROLE: Installation, supervision, inspection.

CERTIFICATIONS: Master Electrician License: MS60022068; Osha 10-Hour Construction Safety & Health; Fall Protection Safety



Jose Mejia

Operations Manager - Project Manager for this RFP

As Operations Manager at Maine Solar Solutions, Jose leverages his ironworking and project management background to ensure smooth operations and support field crews. With experience across diverse construction projects, Jose excels in job prep, client coordination, and collaboration with sales teams, builders, and subcontractors. Jose has an associate certification from the North American Board of Certified Energy Practitioners (NABCEP) and a Bachelor of Science in Architecture. His expertise, from installing large steel structures to crafting intricate railings, brings a unique skill set to his role.

PROJECT ROLE: Operations & Project Manager

CERTIFICATIONS: North American Board of Certified Energy Practitioners (NABCEP): PVA-061323-015275

Installation Team

Maine Solar Solutions has three installation teams comprised of 25 skilled professionals, including Maine-licensed electricians, apprentices, and electrical helpers. Every installer holds an electrical or helper license; all field employees are either OSHA-10 certified or actively completing certification. They are also trained in Fall Safety Arrest procedures. **Meet your team leads below.**

Nick Cassidy

PROJECT ROLE: Project Lead Electrician

CERTIFICATIONS: Master Electrician License: MS60022784; Osha 10-Hour Construction Safety & Health; Fall Protection Safety

Cameron Cullaz

PROJECT ROLE: Project Lead Installer

CERTIFICATIONS: Helper's Electrician License: HP20047748; Osha 10-Hour Construction Safety & Health; Fall Protection Safety



SCOPE OF WORK

The proposed system consists of forty two (42) SEG 550 watt solar panels. These will be connected to one 17.3 kW SolarEdge inverter and twenty one (21) SolarEdge Optimizers. The capacity of the system will be 23.1 kW DC and a maximum AC capacity of 17.3 kW. The solar array will be mounted on the UniRac EcoFoot 2+ ballasted roof mounting system at a tilted pitch of ~5 degrees and an orientation of 149 degrees (SE). Based on this design, pitch and orientation, and using PV Watts software, we estimate this system to produce 27,226 kWh per year. This solar project will comply with all state and local electrical codes. Our installation protocols meet all OSHA standards. Due to Portland's adherence to National Fire Protection Agency requirements, our array will maintain a four foot setback from all roof edges. Our price does NOT include a kiosk for educational purposes. This is something we'd be willing to do but don't have experience and therefore an estimate of the cost of one. That would be additional to our listed price.

System Size and Components

23.1 kW DC

42x count of SEG Solar 550 watt panels

1 Solar Edge 17.3 kW inverter -

21x SolarEdge P1101 optimizers

SolarEdge Monitoring Web based portal

UniRac EcoFoot2+ Base with accompanying racking materials

Warranty Information

Our work - 5 year workmanship warranty provided by Maine Solar Solutions

Solar Modules - 15 year material and workmanship, 25 year linear power output provided by SEG Solar

Inverters - 12 years provided by SolarEdge

Optimizers - 25 years provided by SolarEdge

*All Warranty Spec sheets can be found attached at the end of the document

PRODUCTION GUARANTEE

90% kWh production guarantee for year 1 with a degradation factor of .7% per year for 20 years. Performance will be measured using our monitoring software and paid out annually.

PRICE PROPOSAL

Panel Manufacturer	SEG 550 Watt Silver Frame
Array Size	23.1 kW Array
Number of Panels	42
Size of Inverter	SolarEdge_208v 17k
Modeled Annual Output	27,226 kWh/yr
System Cost	\$58,821
Value of 30% Federal Tax Credit	(\$17,646)
Net System Cost	\$41,175
Cost Per Watt	\$2.55

Year	1
Net Savings	\$ (35,553.51)
Credit Value	\$ 4,886.39
Tax Savings	\$ 17,646.00
REC Value	\$ 735.10
Warrantied Productio	27226
Delta	\$ (35,553.51)
IRR	17%
20 Year Net Savings	\$77,743

SAFETY

Please see our safety manual in **Exhibit A**

PROPOSED SCHEDULE

The first step will be to schedule an engineering and pre-install site visit to confirm preliminary project designs. Once this step is completed, we will finalize the contract. After contract signing, Maine Solar Solutions will start with interconnection and permitting.

Once interconnection is approved, permits have been pulled and materials delivered onsite, we'll start the installation process, after installation, there will be a building/electrical inspection. From there, the utility will schedule and perform a witness test. Upon completion of the witness test, we will receive Permission To Operate and we can turn the system on!

