TOWN of FALMOUTH
REQUEST FOR PROPOSALS

For Landfill Solar Photovoltaic (PV) Array

October, 2019

The Town of Falmouth has been conducting preliminary research since late 2015 to site a large-scale solar array on its closed landfill on Woods Road. Given the new and favorable changes in Maine's current solar policy, the Town is soliciting proposals from qualified firms to provide proposals for this project. This Request for Proposals is to identify solar energy firms/contractor to design, permit, install, offer financial options, potentially own, operate, and/or maintain the PV system. The Town is interested in proposals for a system that maximizes the site and provides the best financial return for the Town, and would like this system to be operational by the Summer of 2020.

There is a mandatory Pre-Bid Meeting in Falmouth Town Hall on November 4, 2019 at 2:00 PM.
Proposals are due by 2:00 PM on November 21, 2019.

BACKGROUND INFORMATION

In 2016, the Town consulted with the engineering firm TRC to perform a feasibility study and report. Based on its findings, it was determined that the closed Falmouth landfill, with its southerly-orientated plateau design, is optimal for a PV array. The suitable area was deemed to be approximately four (4) acres in size. The 2016 estimate of the maximum DC electrical generation potential, based on the suitable area, was estimated at 1,159 kW (AC power 1MW).

Based on this study, the entire plateau of the landfill with slopes below the 15 percent threshold would be suitable for an array. The side slopes are not suitable because they are too steep. The landfill has relatively few gas vents and no defined drainage ways in the suitable slope areas.

The TRC study titled "Photovoltaic solar array feasibility study Woods Rd. landfill" is attached as Appendix A. Additional information regarding the review of the landfill's feasibility for solar power generation can be found in the Appendices, which include the following:

- Memorandum titled "Geotechnical/Landfill Assessment for Solar Installation at the Woods Rd Landfill".
- TRC Memo: Wetlands, Vernal Pool Assessment
- TRC Diagram: Conceptual electrical diagram for 900 kW array; i.e. mock Interconnection Application with CMP.
- US Fish and Wildlife Service: Review of threatened and endangered species
- Maine Dept. of Agriculture, Conservation, and Forestry: Review of rare botanical features
- Maine Historic Preservation Commission: Review of site for historical significance.
- Maine Department of Environmental Protection: Guidance document for installing solar panels on a closed landfill

PROJECT SCOPE AND STANDARDS

The project scope includes design of, permits for, installation of, financial options for, potential ownership of, potential operation, and/or maintenance of the PV system. Submitters must respond to all aspects outlined in this RFP.

DESIGN

1. Provide a proposed array configuration including model heights, rack spacing, and ballast block types. The Town is not limiting proposals to fix-tilt PV systems, but welcomes any other technologies deemed appropriate for the site.

PERMITS

2. Obtain the required permits, interconnection agreements and any other regulatory approvals will be the responsibility of the contractor.

3. Project must be permitted by the Maine Department of Environmental Protection and meet the DEP's guidelines for post-closure use of a landfill for a solar array and the United States Environmental Protection Agency (EPA) general guidelines.

4. Developers must work with Central Maine Power on the Interconnection Application as well as potential interconnection and acoustical studies at the expense of the developer. The project must meet all the requirements of the local utility.

5. Developers shall be responsible for obtaining any/all local approvals and permits, including but not limited to, the following:

    a. Planning Board Approval
    b. Building Permit
    c. Electrical Permit

6. The system will be required to meet both the national electric code and international building code.

7. Proposal must include financing proposal/s, The Town is interested in understanding the variety of options for financing this project in order to make the best decision for the Town. Options may include, but not be limited to, the following:

    - Bonding opportunities, e.g. Clean Renewable Energy Bonds, Qualified Energy Conservation Bonds Energy Credits for power generated;
    - Tax-exempt leasing;
    - Third party financing;
    - Power Purchase agreement;
    - Direct ownership

The Town will also consider any alternative approaches and other financing options not

mentioned above. The Town is however, interested in offsetting the municipal energy load generated from the system to the fullest extent practicable.

Financial analysis must include accelerate depreciation of the system, as well at federal tax incentives. Also, provide any 'buyback' pricing, return on investment information, and any other pertinent financial data that will assist the Town in reviewing the proposals. Appendix B includes Falmouth's electricity totals and associated costs.

OWNERSHIP, OPERATIONS, AND MAINTENANCE

8. State proposed options for ownership, operations, and maintenance.

9. The Town will require warranty information for all components of the array.

TIMELINE

10. Provide a timeline for major project development:

    1. Design: including design element specifications and on-site oversight procedures during construction which will need to be written specifically for the landfill in order to prevent long-term damage to the landfill cap. Examples of these design element specifications and oversight procedures could include:

        • Predesign of temporary access roads on the landfill,
        • Pre-selection of ballast block/rack system to minimize on-cap traffic,
        • Use of string inverters rather than large on-cap inverters,
        • Use of lower ground pressure equipment only on the cap,
        • Enforce setback distances from gas vents,
        • Minimize disturbed areas,
        • Conduct test pits before trenching,
        • Excavate with hand tools or control depth trencher,
        • Use of full time, onsite monitoring of the landfill condition, and
        • Frequent communication with Town staff.

    2. Permits
    3. Contractual Agreement
    4. Construction
    5. Post-Construction to include monitoring and maintenance

QUALIFICATIONS AND EXPERIENCE

1. Provide proof of financial capability to demonstrate the developer's ability to deliver the project and timely financing for given project. Include prior experience from financing partners of successfully completed local government projects;

2. Provide qualifications of the organizational team. Include complete description of company's background as well as resumes for assigned team members highlighting prior experience and technical capacity to manage complex projects,

3. Provide a minimum of 3 references and general descriptions of successfully completed

projects of similar size; at least one being a municipal project;

4. Provide experience with installer safety record; claims history and judgments; and worker's compensation experience modification rating from the past 3 years, and sample safety plan for this type of project.

SUBMITTAL REQUIREMENTS

The deadline for submitting a Requests for Proposals is November 21, 2019 at 2:00 PM. One proposal shall be submitted in a sealed package, labeled "Falmouth, ME Landfill Solar Proposal". Submittals sent via e-mail will also be accepted. Responses and any questions about this request should be directed to:

Kimberly Darling, Falmouth Energy & Sustainability Coordinator,
Town of Falmouth
271 Falmouth Road,
Falmouth, ME, 04105
207-699-5337
kdarling@falmouthme.org

QUESTIONS

Any questions and answers and any changes to this RFP will be posted on the Town's web page at https://www.falmouthme.org/current-bids-rfps/pages/current-bids-rfps. Interested parties should consult the web page prior to submitting their proposals.

TIMELINE

October 21, 2019—Bid Issuance
November 4, 2019 at 2:00 PM —Mandatory Pre-Bid Meeting in Falmouth Town Hall
November 14, 2019 at 3:00 PM—Questions due
November 21, 2019 at 3:00 PM —Bids Due

EVALUATION CRITERIA

Evaluation criteria will include the following: Proposer Qualifications and Experience, Technical Proposal and complete project proposal summary form, Project Costs, Implementation Plan and Schedule, and Contract Terms and Conditions.

ATTACHMENTS INCLUDED

Appendix A— Photovoltaic solar array feasibility study Woods Rd. landfill to include:

- Memorandum titled "Suggested Natural Resources Studies and Preliminary Analysis of Potential State and Federal Permitting Requirements"
- Memorandum titled "Geotechnical/Landfill Assessment for a Solar Installation at the
- Woods Road Landfill"

- Memorandum titled “Electrical Generation/Interconnection Assessment for a Solar
- Installation at the Woods Road Landfill”
- PUC Chapter 324—Forms and Agreements: Level 2, Level 3 and Level 4 Interconnection Application
- Memorandum titled “Delineation of Protected Natural Resources at Falmouth Transfer Station Property”
- 900KW AC Single Line Diagram
- US Fish and Wildlife Service: Review of threatened and endangered species
- Maine Dept. of Agriculture, Conservation, and Forestry: Review of rare botanical features
- Maine Historic Preservation Commission: Review of site for historical significance.
- Maine Department of Environmental Protection: Guidance document for installing solar panels on a closed landfill

Appendix B— Falmouth’s electricity totals and associated costs
Appendix C-- Project proposal form
Appendix D-- Maine Department of Environmental Protection: landfill closure certificate
Appendix E— Landfill closure site plan: As-built/Record Drawing

RESERVATIONS

The Town reserves the right to reject any or all submissions, or to request additional information, waive any conditions or criteria set forth in this Request for Qualifications and accept any proposal it may deem to be in the interest of the Town.