TOWN OF DENMARK

3707 Roberts Road
Carthage, NY 13619

REQUEST FOR PROPOSAL

DESIGN/BUILD OF SOLAR PHOTOVOLTAIC ARRAY

Solicitation

The Town of Denmark, NY is soliciting proposals from a qualified Contractor to design and install a roof mounted and/or a comparable ground mounted solar photovoltaic electric generating system.

Contractor must demonstrate the ability to perform the work described in the Scope of Services set forth in this solicitation and have significant experience successfully performing comparable work.

1.0 SCOPE OF SERVICES

1.1 Objective

The objective of this Request for Proposal (RFP) is to identify and select the most qualified turnkey photovoltaic (PV) system Contractor for the design and installation of a roof mount and/or a comparable ground mount solar photovoltaic array. Contractor should prepare system summary detailing location, size, equipment, and a sample cash flow analysis detailing expected savings (both kwh and dollar). Array shall be capable of producing approximately 70,000 kWh annually. Contractor shall complete all NYSERDA application materials for receipt of NY-Sun incentive.

1.2 General

The scope of services provided by the Contractor/Vendor shall include all tasks required to design and install a roof mount and/or a comparable ground mount solar photovoltaic array for the Town of Denmark. The scope shall also include, but not be limited to, securing all permits and approvals from governing agencies, all labor, taxes, services, permit fees, and equipment necessary to produce a fully operational solar PV system. Contractor shall be NYSERDA approved for the NY-Sun program.

The proposal shall contain a detailed explanation of the complete project and delineation of all work tasks to be performed by the awarded Contractor.

1.3 Description

The proposal is for one Photovoltaic system to be located on the property owned by the Town of Denmark. Proposer is to determine feasibility and costs.

1.4 Design, Engineering, & Permitting

Design/engineer the solar PV system to maximize the solar energy resources, taking into

consideration the customer's electrical demand and load patterns, proposed installation site, available solar resources, existing site conditions, proposed future site improvements, and other relevant factors. All array designs must be completed by an engineer licensed in New York State.

Provide design documents that provide the following minimum information:

- Timeline/Project Schedule
- System description
- Equipment details and description
- Layout of installation
- Layout of equipment
- Selection of key equipment
- Specifications for equipment procurement and installation
- All engineering associated with structural and mounting details
- Performance of equipment components, and subsystems
- Integration of solar PV system with other power sources
- Electrical grid interconnection requirements
- Controls, monitors, and instrumentation
- System performance monitoring

Identify an appropriate location for the solar PV inverter equipment and its related components and environmental control systems that will meet the following criteria:

- Ease of maintenance and monitoring
- Efficient operation
- Low operating losses
- Secured location and hardware
- Compatibility with existing facilities
- Avoidance of flood-prone areas
- Visual harmony

Awarded Contractor will secure from governing agencies and the utility company all required rights, permits, approvals, and interconnection agreements at no additional cost to the Town of Denmark. The Town of Denmark will become the signatory on applications, permits, and utility agreements only where necessary. Awarded Contractor will provide all application materials to NYSERDA for award of NY-Sun incentive.

1.5 Installation

Supply all equipment, materials, and labor necessary to install the solar PV systems and integrate them with other power sources.

1.6 Electrical Interconnections

Supply and install all equipment required to interconnect the solar PV systems to National Grid distribution system. The awarded Contractor will fulfill all application, required studies, and testing procedures to complete the interconnection process. All costs associated with utility interconnection shall be borne by the awarded Contractor.

1.7 Commissioning & Acceptance Testing

During the start-up, the Town of Denmark, and/or its independent engineer/consultant, shall observe and verify each system performance. Required commissioning and acceptance test services include:

- Starting up the solar PV systems until it achieves the performance requirements
- Conducting the performance testing over a consecutive twenty-four (24) hour period
- Conducting the successful delivery of power within thirty (30) days following completion of the system, meeting each benchmark.

1.8 Operation and Maintenance Manuals and As-Built Drawings

Provide three (3) sets of operation, maintenance, and parts manuals for the solar PV system. The manual shall cover all components, options, and accessories supplied. It shall include maintenance, troubleshooting, and safety precautions specific to the supplied equipment. Provide three (3) sets of as-built drawings including one (1) on CAD. These requirements shall be delivered prior to acceptance of the solar PV system.

1.9 Monitoring

Monitoring of system performance and providing public education and outreach is a required element of the RFP.

Provide the equipment and services to monitor, analyze, and display historical and live solar electricity generation data. The regularly collected data should reflect, but not be limited to, the following:

- System performance
- System availability
- Average and accumulated output
- Capacity factor
- Degradation

- Cost avoidance

The data acquisition system shall be designed for turnkey, remote operation. Data shall be transmitted via Internet from the site to a remote site that can be accessed by the Town of Denmark at any time.

Provide a long term cost for electricity (Kwh) for the term of the awarded contract and any assumptions used in these calculations.

1.10 Warranties and Guarantees

Identify all warranties on system components

1.11 Special Provisions

Special provisions will be based on the specific Library owned facility.

2.0 PROJECT REQUIREMENTS

2.1 Certification

Contractor shall provide proof of current NABCEP and NYSERDA NY-Sun certification.

2.2 Operation & Maintenance Requirements

All respondents must offer a comprehensive onsite operation and maintenance service program for the PV system operations, safety and maintenance activities.

The Contractor's operation and maintenance service program should provide the following minimum requirements:

1. Annual on-site system inspection, including:
    a. System testing (operating current of each electrical string)
    b. Routine preventive maintenance

2. Repair and/or replacement of defective parts (including equipment and labor)

3. System performance monitoring and historical data access for customer via secure website. Data should include:
    a. System energy and power production
    b. Ambient temperature

4. System monitoring by vendor, including:
    a. Reporting of problems to customer
    b. Dispatch of resources for expeditious resolution of problems

3.0 CONTRACTOR QUALIFICATION

Please provide the following information:

- Status (private/publicly-held)
- Number of employees
- Target customers (residential, commercial, industrial, government, etc.)

Project team profile, including:

- Resumes of personnel to be directly involved with the development of the proposed systems.
- Team leader identification for the entire Proposal, including full contact information.
- Identification of each entity, sub-contractor, person or firm involved in the Proposal and their role/responsibility, e.g. design, installation, permitting, equipment supply by component, operations and maintenance.
- Identification of the lead person responsible for each of the entities or firms described in above.
- Resume of Professional Engineer designing project.

3.1 Contractor Experience

- Provide overview of the firm's commercial grid-connected PV experience (do not include residential PV experience)
- Breakdown by application (roof mounted vs. ground mounted) installed by your company
- Average commercial grid-connected PV system size installed by your company during the last five years
- Experience with local government projects

3.2 Contractor References

1) List five (5) or more commercial grid-connected PV projects installed in Jefferson and/or Lewis County over the last five years. Include for each project:
    a) Exact role(s) your organization performed for the project (e.g. material supplier, lead contractor, electrical subcontractor, design, consulting, etc.).
    b) Location.
    c) Application description.

d) Product name/type.
e) Customer name and contact information.
f) Date installed.
g) Project cost.
h) PV module used.
i) KWp rating.
j) Cumulative kWh produced since system installation.
k) Current operational status of system.

2) Provide actual system data for five (5) of the grid-connected projects that demonstrates 90% or better availability of the PV projects used as customer references.

3) Proposals shall demonstrate a proven, robust data acquisition system that includes tracking of site-specific actual kWh production.

4) Proposals shall provide evidence that the proposed technology and equipment would meet or exceed all currently applicable and proposed safety and interconnection standards. All equipment components must be UL1741 SB certified, and meet existing facility structural and fire safety requirements.

5) Proposals shall provide evidence that the proposed technology and equipment would meet or exceed all currently applicable and proposed environmental standards.

Pricing

Provide pricing for a turnkey (design/build) PV system located on property of the Town of Denmark. Pricing should include $/kWh. Pricing shall include NYSERDA NY-Sun incentive to be obtained by the contractor.

Schedule

The Contractor shall provide a proposed schedule for completion of the project. It is the intention of the Town of Denmark to complete the project in 2024.

Incurring Cost

The Town of Denmark is not liable for any cost incurred by entities prior to executing a contract or purchase order.

Selection Process

Proposals will be evaluated by the Town of Denmark based on:

- The competence to perform the services as reflected by past experience in providing the services outlined herein.
- The ability to meet the requirements of this RFP.

- Overall package and financial benefit to the Town.

The Town of Denmark reserves the right to select or short-list any Contractor that, in its opinion and at its sole discretion, is deemed to be most advantageous and in the best interests of the Town and its residents, including granting a preference to local contractors. The Town of Denmark also reserves the right to delay or discontinue this selection process at any time during the process. The Town of Denmark shall not be liable for any cost incurred by any Contractor during the selection process.

Proposal Deadline

Three copies of the Proposal must be delivered to the Town of Denmark, 3707 Roberts Road, Carthage, NY 13619 by October 12, 2023 at 4:00 PM, with opening to be October 16, 2023 @ 6:05PM.

Inquires

Inquiries can be directed to Scott Doyle, Town Supervisor at 3707 Roberts Rd, Carthage, NY 13619 or by phone at 315/493-3846 Ext 6 or email supervisordoyle@townofdenmarkny.org

Please contact Scott Doyle to arrange a site visit of the facility.