



Town of Southbury
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REQUEST FOR PROPOSAL

Solar PV System Services

Due Date and Time: 5 pm, Friday, November 10, 2023



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Town of
Southbury
Connecticut

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Introduction

Town of Southbury is soliciting proposals from qualified solar PV (solar) providers to design, build and possibly finance for the installation of a standardized “carport” supported solar photovoltaic project with rated AC output of approximately 50kW in its first phase. The contractor is responsible for all project permitting and if Town of Southbury decides to move forward with a PPA or lease financed project, the contractor is expected to maintain the system for the term of the agreement. Respondents shall have demonstrated experience designing, planning, scheduling, permitting, and constructing complete solar electric systems, have relationships with/knowledge of local utilities, providing project financial analysis and rebate support, providing system monitoring and maintenance, and have established onsite safety standards.

General Conditions

1. Each respondent is responsible for reviewing and understanding all terms of this Request for Proposal. Failure to thoroughly examine or request clarification on RFP terms may result in disqualification.
2. Any bid may be withdrawn at any time prior to the due date with a written request signed by the authorized respondent representative. Revised proposals may be submitted up to the original due date/time.
3. Issuance of this RFP and receipt of proposals does not commit the Town of Southbury to move forward with an award or complete the project described. Town of Southbury reserves the right to postpone the RFP award process, to accept or reject any or all proposals received in response to this RFP, and to modify the scope of the project at any time.
4. An award under this RFP may not be based solely on the lowest price but will be made to the respondent with the overall best value proposal. The successful proposal will meet the project site design guidelines and provide service level acceptable to the Town of Southbury.
5. Bid proposals shall remain valid for 60 days after private opening of the proposals. If Town of Southbury decides to move forward with a certain bid, contract will be executed in the 60-day timeframe or contractors will be allowed to revise pricing.
6. Upon award, successful respondent shall secure all appropriate licenses to complete the scope of work included in this RFP.



RFP Schedule

The schedule for this RFP is as indicated below. It may be modified at the discretion of Town of Southbury. An addendum will be issued in the event of any scheduling changes.

| Project Milestone | Date/Time |
|---|---------------------------------|
| RFP Advertised/released | Thursday, October 12, 2023 |
| Mandatory Site Walk/Pre-Proposal Conference | Monday, October 20, 2023, 9 am. |
| Requests for Information (RFIs) Due | Friday, October 27, 2023 |
| Answers to RFIs distributed | Friday, November 3, 2023 |
| Notice of Intent to Submit Proposal | Monday, November 6, 2023 |
| Proposal Due | Friday, November 10, 2023 |
| Notice of Intent to Award | Friday, December 1, 2023 |
| Fully Executed Contract | Thursday, February 1, 2024 |
| Project Notice to Proceed | Thursday, February 1, 2024 |
| System Operation Date | Wednesday, January 1, 2025 |

Mandatory Site Walk

Mandatory pre-bid meeting and site walk are scheduled for the week of October 20th. All interested firms must attend this required site visit. Participants will meet at the Town Hall, 501 Main Street South, Southbury, CT 06488 at 9:00 am. Technical questions will be answered at this meeting. Please submit the names of those attending the site walk by Thursday, October 26, 2023.

Request for Information

Please submit questions via email to Dan Colton, financedirector@southbury-ct.gov by Friday, October 27, 2023. Responses to questions will be shared with all bidders.

Notice of Intent to Submit Proposal

Respondents must present their notice of intent to submit a proposal to Dan Colton, financedirector@southbury-ct.gov by Monday, November 6, to ensure receipt of all addendums and other project documents. Addendums to this RFP based on submitted technical questions, along with changes to the proposal schedule, will be issued via email to Dan Colton, financedirector@southbury-ct.gov.

RFP Submission Guidelines

Hard copy (4 copies) submission and a copy on a thumb drive.

Selection Process

Depending on the number and quality of the proposals received, Town of Southbury reserves the right to either select a vendor or shortlist two to three companies. Shortlisted companies will be asked to meet with Town of Southbury to present their proposal to the decision team and answer any outstanding questions.

Project Background

Objective

The Town of Southbury's interest in pursuing solar photovoltaic projects reflects the following prioritized goals:

1. Offset or reduce grid electricity use/electricity bills.
2. Develop a solar construction and financial strategy that offsets as much of the energy use of the town buildings as possible and can be used to offset the electrical costs of other municipal buildings.
3. Build solar photovoltaic structures to store equipment underneath.
4. Meet sustainability goals/ minimize impact on the environment.
5. Reliability

Town of Southbury Background

Southbury is a town in western New Haven County, Connecticut, United States. Southbury is north of Oxford and Newtown, and east of Brookfield. Its population was 19,879 at the 2020 census. Southbury comprises sprawling rural country areas, suburban neighborhoods, and historic districts. It is a short distance from major business and commercial centers, and is within 80 miles (130 km) of New York City and 40 miles (64 km) of Hartford; the latter the capital of Connecticut.

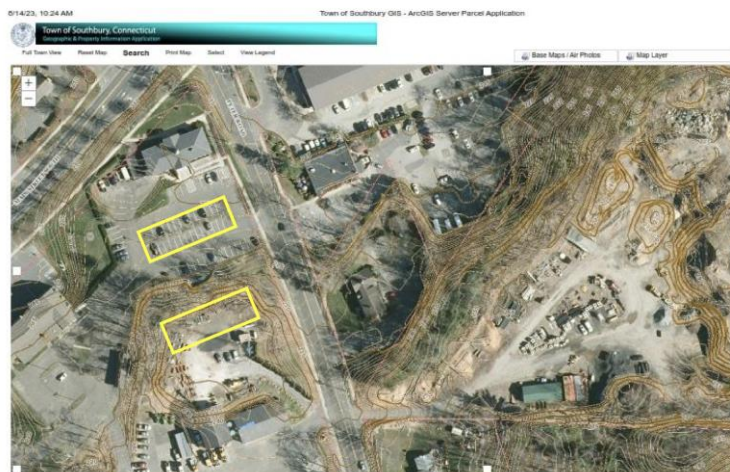
Project Description

The project site is located at Peter Rd, Southbury.

Overview:

The Town of Southbury is considering a solar installation at the public works facilities to offset Town electrical costs. There are two potential sites near each other, designated on the picture below. These installations could potentially be done in phases. Each site would be carport or similar structure high enough to shelter heavy duty equipment, fire trucks, police vehicles and impounded vehicles (14') and use a standard configuration to simplify construction and maintenance. The northern most site is the police station, and the other site is atop a small hill in the public works yard. There are a number of other potential sites for future installations, including a solar farm at the Transfer Station, but it is desired to complete the installation of one of these sites first.

TO Southbury, CT
Multi Site PV Solar Concept - Siting





Desired Characteristics:

- **System Size:** The solar system shall be comprised of an array of photovoltaic panels and electrical equipment components generating a minimum of 75,000 kWh.
- **Project Financing:** The Town of Southbury is strongly considering a cash purchase but will also consider Power Purchase Agreement (PPA) or Lease, two of those options or all three.
- **System Ownership Information:** Town of Southbury would own the system under a cash purchase whereas another party would own the system under a PPA or Lease.
- **Operation & Maintenance:** The selected Company will provide O&M services, including 1 panel washing per year, for 20 years following the installation of the project. Please include O&M costs as a separate line item for a cash purchased system.
- **Monitoring** – the system will include monitoring systems to measure the system's energy production, including WIFI or cellular network monitoring and a display kiosk at the library.

Scope of Work

The goal of this RFP is to identify a solar partner with the necessary experience to ensure a fully managed and well executed process. The successful respondent will have demonstrated experience financing, designing, planning, scheduling, permitting and constructing, interconnection and owning a solar PV system. Contractor is responsible for all permitting. Respondents must have worked with Eversource regulations, provide project financial analysis and have established onsite safety standards.

Design Guidelines

Contractor should consider the following guidelines when designing the solar system.

Carpport Solar – The Contractor shall:

- Develop a design for a new photovoltaic system. Not all locations identified need to be utilized.
- Assess the site for suitability to carport structures and the shading limitations.
- Develop the electrical load profile analysis from EV charging points and/or other electrical loads.
- Develop the wind and snow loading on the canopies and in turn the foundation and structure design.
- Develop an aesthetic that is acceptable to the Town Planning Department and Commission.
- Use a system with fixed tilt with an orientation that maximizes annual kWh production.
- Develop and install a system layout that meets local fire department, code, and ordinance requirements.

Code Specifications

All power generation and transmission equipment must be UL listed for its designed use. Construction must comply with current adopted State Building Code, which includes: International Building Code, National Electric Code (NEC) and State Fire Marshall (if applicable).

- **Modules:** System modules shall be UL1703 listed, and CEC-listed
- **Inverters:** Shall be UL1741 listed and must be CEC-listed with an efficiency of 95% or higher

Contractor Responsibilities

The final design package and documents shall include the following but are not all required in the proposal stage. Please reference the proposal requirement section for detailed bid submission requirements:

- Description of the solar system
- Construction documents and engineering calculations that are signed and sealed by a licensed architect or engineer
- Layout drawing of installation site providing location of all equipment



- Equipment details and specifications
- Schedule for equipment procurement and installation
- Description of how Eversource grid interconnection requirements will be met
- Description of controls, monitors, and instrumentation to be used for the solar system
- Equipment and installation manuals
- Safety plan
- Quality control plan
- Operations and Maintenance manuals for system operations and performance monitoring over the life of the contract
- Web-based monitoring for 20 years
- Close out report including the following information: system nameplate size, the overall installed cost of the system and estimated and guaranteed annual kilowatt hour (kWh) production (if applicable).

Warranties

The solar provider's standard system warranty coverage should cover modules, inverter, racking and workmanship (assuming the Town of Southbury owns the system).

- **Modules:** 25-Year Power Output & 10 Workmanship Limited Warranty
- **Inverter:** 10-Year Limited Warranty, Provide a price and/or plan for inverter replacement in year 11 and beyond
- **Racking:** 10-Year Limited Warranty priority
- **Workmanship:** 1 Year Limited Warranty

System Monitoring

Monitoring of system performance and providing public education and outreach is an important element of this RFP. The Town of Southbury will favor a proposal that includes a turnkey monitoring system that can be integrated into the Town of Southbury computer system for display on the Town of Southbury website. The system should display and analyze historical and live solar electricity generation data. Additionally, the regularly collected data should reflect, but not be limited, to the following:

- Average and accumulated output (kWh/kW and total kWh)
- Capacity factor
- Air quality emissions averted (and real world equivalents conversion)

The selected vendor must design and install a solar monitoring system, complete an on-site kiosk (viewing station area) designed specifically for educational purposes.

Operation and Maintenance of System

The successful respondent will be required to provide operation and maintenance of the entire solar electric system for 20 years for a cash purchase or the term of the PPA or lease. Operations and maintenance services include:

- Online monitoring
- Performance monitoring, notification, and troubleshooting – must have personnel available to notify Town of Southbury of an outage or decrease in system production.
- Corrective maintenance to mitigate any risk to the system or minimize down time
- System Performance Reports that compares actual production to predicted production
- Preventative maintenance and inspections to identify and fix problems before they occur, including infrared photography for hot spots, manufacturer recommended maintenance, hardware torque checks, and array cleanings
- Weed abatement for ground mount



If Town of Southbury decides to own the system, prior to system start-up, the successful respondent shall supply Town of Southbury two copies of all Component Product Data and Component Operation and Maintenance manuals. The information shall be sufficient for Town of Southbury to evaluate and ensure appropriate O&M is being completed over the life of the system. Examples of components include solar panels, conduit, inverter, net metering equipment, etc. Project as-builts that detail location of all above and underground utilities and components shall be submitted within 30 days of system start-up.

Proposal Requirements

Please provide 1 original, 4 copies, thumb drive with electronic files to Dan Colton.

Please print double sided on recycled paper. Hard copies must be delivered to the First Selectman's Office no later than Friday, November 10, 2023. Proposals received after this time will be returned to the respondent un-opened. Proposals will not be considered for award unless submitted in the format described below. It is the responsibility of the respondent to ensure that the submittal is received in a timely manner. Fax proposals will not be accepted. Hard copy proposal must be submitted to the following address:

First Selectman's Office
Town of Southbury
501 Main Street South
Southbury, CT 06488
(203) 262-0647

Proposal Format

Please include the following sections in your proposal submittal in the following order.

- **Cover/Transmittal letter:** Cover letter must be addressed to Dan Colton and signed by a legally authorized representative of the respondent. Cover letter must summarize key provisions of the proposal and must include name, address, phone and email of the respondent contact.
- **Executive Summary:** Include key provisions of the proposal, including understanding of Town of Southbury goals, pricing, respondent's role on project, brief description of proposed system, financing, relevant experience of respondent/company, and key timeline dates.
- **Company Profile:** Years in business, description of respondent/company background, applicable state licensing, OSHA background and safety protocol, Insurance, Quality Assurance/Quality Control documentation.
- **Project Experience:** Include projects completed in the last 3 years similar in scope and size to the proposed project. Include project name, system size, location, and brief 2-3 sentence project description. Highlight companies permitting and interconnection experience with local utility.
- **References:** Provide 3 project references with direct client phone numbers.
- **Project Team:** Organization chart and bios (length of time with firm, key projects) of key team members, capability to perform work/workload capacity. Please only profile individual that will directly be working on this project. Clearly identify the project manager.
- **Technical Solution/Scope of Work:** Describe your technical approach to the design and construction of the solar project including:
 - Technical Approach, Design, Equipment, Installation
 - Panel, inverter, racking specifications
 - Equipment and workmanship warranties
 - Exhibits showing proposed layouts and system single line diagrams
 - PVSYST Report indicating production of the proposed system
 - Proposed monitoring system/solution



- Operations & Maintenance Plan offered for the project. Please price O&M plan separately from cash purchase option
- **Production Guarantee:** Provide at least a 90% kWh guarantee for year 1, degrading by a maximum of 0.5%/ for 20 years. Performance guarantee should be measured and damages should be paid on an annual basis.
- **Price Proposal:** Submit as Exhibit G with both printed and electronic versions. At a minimum the proposal must include:
 - A cash purchase, PPA and lease costs and benefits to the town for the system
 - An analysis and detailing of all applicable federal and state financial incentives
 - Upfront and annual O&M costs
 - Year 1, 10, 20, and 30 year financial costs/savings
 - The NPV using the avoided cost provided by Town of Southbury
 - Payback period of the investment
 - PPA proposal should include a percent escalator for the PPA rate
 - All assumptions made in the analysis, including:
 - Annual Electrical Inflation Rate
 - Annual O&M Inflation Rate
 - O&M costs (\$/kW)
 - Insurance (\$/kW)
 - Percent Annual Panel Degradation
- **Safety** – Please include a brief description of the safety practices of your firm, as well as the OSHA Reporting Indicators for the last 3 years.
- **Proposed Schedule** – Identify key project milestones and include any necessary review periods for Town of Southbury.
- **Architectural Renderings of Carport Structures** – with emphasis on aesthetic appeal to facilitate required planning department approvals.

Evaluation/Selection Criteria:

The Town of Southbury will evaluate proposals according to the evaluation criteria below. Result of this step will be the identification of the selection of a proposal for negotiation of a contract. Points will be awarded based on the relative merit of the information provided in the response to the solicitation. Selection based on the total number of points awarded by the evaluation committee.

- | | |
|---|-----------|
| ● Proposal Cost Effectiveness | 35 points |
| ● Technical Approach/ Implementation Schedule | 30 points |
| ● Company Qualifications/Project Experience | 25 points |
| ● Project team, team experience and approach | 25 points |
| ● Performance of system | 30 points |
| ● Delivery performance | 25 points |

Town of Southbury may elect to conduct interviews with selected respondents to ask questions or for more detail on the proposed project. The Town of Southbury reserves the right to seek supplemental information from any respondent at any time after official proposal opening and before award. This will be limited to clarification or more detail on information included in the original proposal. Upon acceptance of a proposal and intent to award, the successful respondent will be required to execute and return all required project documents and certificates of insurance within 10 days from the Notice of Award. Should the selected firm fail or refuse to execute the project documents, the Town of Southbury reserves the right to accept the proposal of the firm offering the next best value to the Town of Southbury.



RFP Exhibits to be Included (Produced by the Proposer):

Exhibit A: Site plan with solar areas identified.

Exhibit B: Structural plans for the solar system

Exhibit C: Building electrical single line

Exhibit D: One year of utility bills

Exhibit E: Hourly electricity consumption data for all meters on property (kWh)

Exhibit F: Contract Terms and Conditions.

Exhibit G: Cost Proposal - Submit electronic cost proposal with RFP response.

Exhibit H: O&M Agreement - Submit copy with RFP response.

Exhibit I: Sample Lease and PPA agreements under these alternatives.

Exhibit J: Architectural Renderings of Carport Structures