

Legacy Solar Co-op

Request For Proposal

Antigo Public Library

617 Clermont St, Antigo, WI 54409

2023 Solar Project

Release Date: **February 24, 2023**

Site Visit Date*: **March 9, 2023 (2:00pm)**

Proposal Due Date: **March 22, 2023**

**Full timeline on next page*

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Contact Information:

To inquire, please contact one of the appointed representatives listed below.

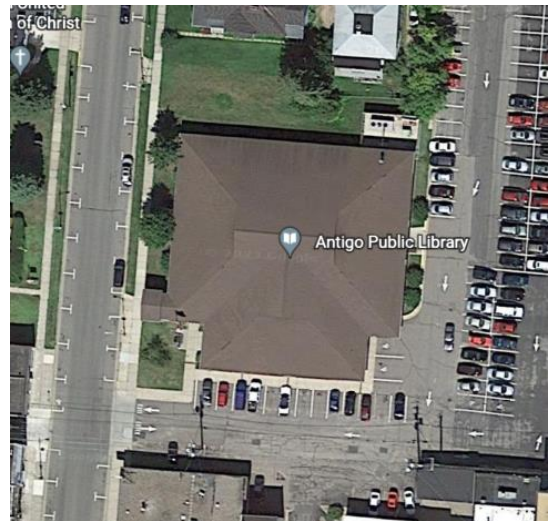
- Primary contacts
 - Tony Hartmann, Legacy Solar Co-op; (tony@legacysolarcoop.org; 608-215-4446)
 - Peter Fiala, Legacy Solar Co-op; (peter@legacysolarcoop.org; 608-443-7820)
- Site contacts
 - Ada Demlow, Director (director@antigopl.org; 715-623-3724, ex. 102)
 - Brian Grabowsky, Facility Director (bgrabowsky@antigopl.org; 715-623-3724, ex. 104)

Note: The Antigo Public Library reserves the right to modify this RFP and send out amendments as needed, including expanding or contracting the scope of this project to fit optimal value parameters.

1. Introduction

The **Antigo Public Library** has approved moving forward with this RFP document as a framework for adding onsite solar electric and battery storage. The time is right to move forward with this project given the availability of newly available incentives through the Inflation Reduction Act (IRA), and the PSC Energy Innovation Grant they finalized in December 2022. This project will serve as a demonstration of their commitment to sustainability and the community.

The library plans to sign a contract in the next 60 days after an engineering, procurement, and construction firm (vendor) for this project is chosen, with construction to begin at a mutually agreed upon time in approximately the 3rd quarter of 2023 or as soon as possible.



2. RFP Process

Legacy Solar Co-op, library and City of Antigo staff will review the submitted proposals and choose the best value proposition, or otherwise conform to any bidding requirements that may apply, including the 'lowest responsible bidder'. An installer will be announced according to the timeline below and will be contracted directly by the Antigo Public Library with oversight from the City of Antigo and Langlade County. **All project and RFP information, including a Schedule of Values document is available in this [Google Drive folder](#).**

3. Site Background

Site Details

The Antigo Public Library is located at 617 Clermont St, Antigo, WI 54409. This is the largest and primary location of the library, which has a total of three locations that serve communities in Langlade County. The building has unobstructed west, east and south roof spaces that are virtually unshaded. The roof is approximately 10 years old, with a pitch of an estimated 14-16 degrees. Wood joists are 24 inches on center and roof snow load is rated at 40 pounds per square foot. See structural drawings in the [Google Drive folder](#).

Long term infrastructure resiliency for Antigo and Langlade County residents through the recent investments in 100% LED lighting and major HVAC renovation have dramatically reduced library utility costs. Further utility cost reduction will be achieved through using solar PV and battery storage. This project will include a foundation-funded educational display showing real-time system information on energy output, battery storage, etc. The successful bidder will need to work with library to connect system monitoring to this display.

The library has plans to transition the library's 20-year-old gas-powered bookmobile to electric and add an electric vehicle charging station for public use as a free amenity for the downtown business visitors and shoppers.

Site drawings are available in the [Google Drive folder](#).

Utility Information

The library uses between 100,000 and 110,000 kWh per year, ranging between 6,000 and 11,000 kWh/month. The library meter is billed at the [CG-1](#) WPS billing rate of 12.318 cents/kWh (Small Commercial / Industrial 3 phase). The billing rate changed from [CG-5](#) in March of 2021. On-peak use was highest from June through September 2022, ranging from 59-82% of the total. On-peak hours are from 7am-10pm (winter) and 7am-11pm (summer). There are no demand charges and no interval data available. Billing information can be found in the [Google Drive folder](#).

4. PV Specifications

Scope of the project: Based on Antigo Public Library's load data, we are asking for installers to submit one proposal:

- a) An array of approximately 90 kW (DC), a minimum 91,000 kWh annually, with panels placed on the west, south and east facing roof planes with battery specification as listed below. Vendors should strive to be as close to this size as possible, with deviations from these specifications being acceptable to conform to appropriate equipment selection (i.e., AC vs DC ratio for chosen inverters) or to accommodate the discrete specs of available technology.
- b) System design should include inverters that are EV circuit ready when the library considers installing them in the next few years.

Electrical System: The installer will be responsible for all applicable PV and storage components, including solar modules, battery, inverters, conduit, racking system and balance of system.

- a) There are two primary 400-amp panels, with a 100-amp and a 125-amp subpanels near the entrance and an additional 125-amp subpanel in the utility room. The two primary 400-amp electric panels are 480Y/277V 3-phase, 4-wire. There is ample space for mounting equipment in panel PP1, but panel RP1 has no slots available.
- b) The electrical feed comes into the building from the transformer located in a mechanical / trash pickup area on a concrete pad outside the building from the electrical room. The transformer in the electrical room is a 45 KVA 3 Phase Siemens model.

Electrical room diagram and loads on the 400-amp panels labeled PP1 and RP1 can be seen in the [Google Drive folder](#).

Equipment: Proposals should include the vendor’s best, cost-effective selection of equipment for the project along with any recommended alternatives and associated price deduction(s)

- a) The library received a Solar for Good cash grant in 2022 so the selection of modules is not restricted, but include the best, cost-effective modules deemed appropriate along with any recommended alternatives and associated price deduction(s).
- b) This project is made possible by a PSC Energy Innovation Grant, which consists of 2009 American Recovery and Reinvestment Act (ARRA) funds. Per the Federal grant requirements, proposals must comply with the Davis Bacon Act (prevailing wage). More information on prevailing wages in Langlade County can be found by visiting the [SAM.gov Wage Determination page](#).
- c) The project must also comply with the Buy American Provision (See [A Desk Guide to Buy American Provisions of the American Recovery and Reinvestment Act of 2009 \(energy.gov\)](#) for more information).
- d) Please include pricing information for the maximum inverter warranty extension (20 or 25 years) in the **Schedule of Values**.

The vendor will also:

- a) Adhere to utility, local, state, and national code compliance for appropriate selection and implementation of equipment and will facilitate the interconnection agreement with Alliant Energy.
- b) Agree to work with the Antigo Public Library to prevent or to remedy any potential power factor issues that may arise with the interconnection of the PV and battery with the local distribution system.
- c) Protect the grounds, buildings, and roof surfaces during the installation.
- d) Provide a workmanship warranty to cover usual and customary items, but should cover for at least 5 years any defect in the roof arising from the solar array that contributed to or caused a roof leak (roof is approximately 10 years old and only subject to a limited warranty on the shingles)
- e) Produce a Structural Engineering Report confirming the capability of the roof framing system to support the added dead-load of the PV panel system is required to be submitted to the Library by the winning bidder prior to any ordering of materials or expenditure of costs for the project. If the structural analysis shows that improvements are needed, an estimate of the retrofit costs is to be submitted with the Structural Engineering Report. These costs are the responsibility of the Library.
- f) Complete project within 12 months of contract signing.

5. Battery

Power outages have been a major concern as the library is an emergency warming and cooling shelter and having energy storage will allow them to offer 24/7 Wi-Fi and device charging in times of traditional infrastructure failure. The library is often the only internet and information lifeline for Langlade County residents in times of crisis so onsite battery backup to maintain building infrastructure and usability is a strong desire¹.

¹ The library fire suppression system is a combination of wet/ dry and pressurized by a traditional air compressor. A sustained power outage would lead to system depressurization and serious flooding damage inside the library. Power backup is critical to prevent this from occurring and causing major damage to library materials and the termination of community services until it

The library board sees the installation of solar panels and battery storage as the first step in being leaders in demonstrating the opportunities that renewable energy can make possible for Langlade County. The library would be the first city/county department to use solar energy for the physical plant and could potentially be the first location in Langlade County to offer EV charging for the public when this project is completed. Currently, the closest EV charging location is well over 60 miles away for many area residents and visitors.

The original battery specified for this project should provide a minimum of 40.5 kWh (or approved equivalent) when fully charged.

6. Required Documentation with Proposal

a) Summary Proposal

This can be a narrative description. Please also fill out the **Schedule of Values** document provided with the breakdown of cost for each system size.

b) Specific Proposal Details

The description should include the following information:

- 1) PV scope in DC and AC given the make/model of specified modules
- 2) PV inverter/s make and model with cut sheet, including information pertaining to warranty extension cost from base (10 or 12 or 15) to 20+ years
- 3) Racking make and model with cut sheet
- 4) Proposed battery option for a total of a minimum of 40.5 kWh
- 5) Expected generation from PV from the proposed solar array size, including:
 - a. Monthly kWh listed
 - b. Reference source/s for generation data
- 6) PV (all in) cost should include the turn-key costs of all permitting, procurement, engineering, construction, commissioning, and Legacy Solar Co-op 5% administration fee (to be considered part of vendor's overhead). See **Schedule of Values** Excel doc in shared [Google Drive folder](#).
- 7) Ice/snow roof-dams to be supplied along the lower perimeter along all panels to avoid injury to Library patrons and parked vehicles
- 8) Breakdown of payment schedule

c) Supporting Documentation Required²

The following information should be provided for completeness of proposal:

- 1) Spec sheets for chosen modules, inverters, racking, attachments, and battery
- 2) Warranty information for each major class of equipment
- 3) PV estimated production calculations for each site (PV-Watts, Helioscope, or other)
- 4) Indicate siting layout and proposed trenching / boring route (generally)
- 5) At least 2 customer references for PV work history

would be repaired. As the updated HVAC system relies upon digital controls a power outage would also make the library uninhabitable with no way to control or monitor the system functions.

² Any proposal that is missing any major class of information will be required to submit within 36 hours of being notified of its absence by City of Antigo staff.

7. Contracting Requirements

If chosen, City of Antigo will require evidence of City of Antigo insurance requirements listed in **Attachment A** at the end of this document.

By the contract date, vendor shall procure and maintain the minimum insurance coverage and limits of liability as designated in the contract and provide certificates of coverage at contract signing.

8. Supporting Documentation for RFP

The [Google Drive folder](#) for this project contains the following. If you are unable to access the folder, please email Peter Fiala at peter@legacysolarcoop.org.

- a) Onsite photos and Google Earth imagery
- b) Billing information
- c) Meter diagrams
- d) City insurance and legal requirements

9. Timeline

The timeline for this project is indicated below, with the City of Antigo / Antigo Public Library maintaining the right to adjust these dates and/or activities with notice to participating Vendors as appropriate.

Friday, Feb 24th	Release of request for proposal to qualified vendors
Thursday, Mar 9th (2:00pm)	Site tour
Wednesday, Mar 22nd (4:00pm)	Vendor proposals should be submitted to installer designated Dropbox folder (<i>sent by invitation</i>)
Week of Mar 27th	Selection of vendor to be announced (<i>pending final board approval</i>)
Week of Apr 17th	Finalize installation contracts & Contracts signing and agreed upon payment schedule
Installation	No later than October 2023

Attachment A



Insurance Requirements for the City of Antigo

- 1) **Insurance.** The Contractor shall not commence work under this contract until he/she has obtained all insurance required under this agreement and such insurance has been approved by the City. Nor shall the Contractor allow any subcontractor to commence work on a subcontract until all similar insurance required of the subcontractor has been so obtained and approved.

Worker's Compensation and Employer's Liability:	Statutory
General Liability:	
Bodily Injury, including death	\$1,000,000 each person \$1,000,000 each occurrence
Property Damage	\$1,000,000 each occurrence
Or Combined Single Limit	\$1,000,000 each occurrence
Independent Contractor's (if applicable) (contingent liability):	
Bodily Injury, including death	\$1,000,000 each person \$1,000,000 each occurrence
Property Damage	\$1,000,000 each occurrence
Automobile Liability:	
Bodily Injury, including death	\$1,000,000 each person \$1,000,000 each occurrence
Property Damage	\$1,000,000 each occurrence
Professional Liability (if applicable)	\$ 1,000,000 indicating if claims made type of policy
Performance and Payment Bond (if applicable)	Contract Amount

An umbrella policy of \$1,000,000 may be used to satisfy the above requirements.
Insurance Requirements continued

Additional Insured:

The City of Antigo must be named as an additional insured with the following format:
City of Antigo
700 Edison Street
Antigo, WI 54409

Endorsement: A copy of the endorsement must be forwarded to the City Clerk-Treasurer's Office. No insurance shall be canceled without notifying the City in writing thirty (30) days prior to cancellation.

- 2) **Proof of Insurance.** The Contractor shall furnish the City with proof of insurance which shall consist of a certificate of insurance.
- 3) **Performance/Payment Bond.** The City may require a Performance Bond and Payment Bond in an amount of the estimated work to be completed for the faithful performance of this contract and for the payment of all persons performing labor and furnishing materials in connection with this contract.
- 4) **Hold Harmless.** Contractor hereby agrees to defend, indemnify, and hold harmless City of Antigo (including Antigo Public Library), its officers, agents, and employees from and against any and all claims, demands, causes of action, suits, and costs in any way connected with Contractor's performance of work related to this contract.