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## **1.0. Invitation**

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Capital Region Water (CRW) requests professional consultant services from a qualified provider or project team for the development and design of a ground-mount solar photovoltaic (PV) installation at its Water Services Center in Harrisburg, PA. CRW is seeking a qualified technical assistance provider to serve as a partner in project development.

While the term proposal is used interchangeably with qualifications package, the materials requested of respondents are of a more general nature consistent with qualifications. Respondents will demonstrate experience developing, designing, and consulting in the deployment of solar PV systems, have knowledge of local utilities, provide project financial analysis and incentive support, and provide guidance for future system construction, oversight, monitoring, and maintenance.

Detailed scope and fee agreements will be required of the consultant following selection of a qualified provider/team.

## **2.0. General Information/Project Description**

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CRW, an independent municipal authority, owns and operates the drinking water, wastewater and stormwater systems for Harrisburg and portions of surrounding communities serving over 60,000 residents and businesses with drinking water and 130,000 with wastewater services. CRW is interested in developing a solar PV project to reduce electricity purchases (kWh/mo), associated electricity costs (\$/mo), and impact on the climate by reducing greenhouse gas emissions. CRW is seeking to directly finance and own the system compared to a power purchase agreement (PPA) or alternative. The selected provider/consultant will complete a cost-benefits analysis to inform the project approach.

The Dr. Robert E. Young Water Services Center at 100 Pine Drive in Harrisburg, PA has been identified for a ground-mount solar PV system, anticipated to be sized at about 1500 kW or greater to offset 100% of the site's annual energy usage and be interconnected behind the meters. CRW is also interested in net metering potential for facilities within close proximity to the Water Services Center. CRW's Administrative Offices are located at 3003 N. Front Street in Harrisburg, PA 17110, and its Susquehanna River Pumping Station is located at 3015 N. Front Street, Harrisburg, PA 17110.

The annual electricity demand of the Water Services Center is about 2,000,000 kWh. A 2022 usage summary is included below:

Meter Read Dates	Electricity Usage (kWh)
01/21/22 - 02/18/22	136,800
02/18/22 - 03/21/22	145,800
03/21/22 - 04/20/22	181,000
04/20/22 - 05/19/22	172,800
05/19/22 - 06/20/22	198,000
06/20/22 - 07/22/22	190,800
07/20/22 - 08/18/22	189,000
08/18/22 - 09/19/22	199,800
09/19/22 - 10/18/22	174,600
10/18/22 - 11/16/22	174,600
11/16/22 - 12/16/22	176,400
12/16/22 - 01/19/23	214,200

Monthly reporting, including a summary of utility usage is available at <https://capitalregionwater.com/board-meetings/#documents>.

### 3.0. Pre-Proposal Meeting/Site Visit

A pre-proposal meeting to provide site access will be held Monday, January 29, 2024, at 1:00 PM EST at CRW's Dr. Robert E. Young Water Services Center located at 100 Pine Drive in Harrisburg, PA. This meeting is not mandatory. Attendees must RSVP to Tanya Dierolf at [tanya.dierolf@capitalregionwater.com](mailto:tanya.dierolf@capitalregionwater.com) to receive specific directions and meeting information. Site schematics will be available at the meeting. Any oral response provided is considered tentative.

Written inquiries must be received by 12:00 PM EST on January 31, 2024. Questions after this time will not be accepted. If needed, responses will be posted at [www.capitalregionwater.com](http://www.capitalregionwater.com) as an addendum on February 7, 2024.

### 4.0. Proposal and Selection Schedule

Task	Date
RFP Issued	January 8, 2024
Pre-Proposal Site Visit	January 29, 2024
Written Inquiries/Clarifications due to CRW	January 31, 2024 by 12:00 PM EST

Inquiry Response/Addenda Issued (if necessary)	February 7, 2024
Proposals Due	February 21, 2024 by 12:00 PM EST
Interview Period (as necessary; please reserve this time)	March 5-7, 2024
Selection of Consultant/Award	March 27, 2024
Commence Work	April 2024

If CRW wishes to conduct interviews, selected firms will be notified by February 29, 2024. Interviews will be scheduled for the week of March 4, 2024.

Upon mutual agreement between CRW and the selected consultant, a kick-off meeting with CRW will likely be scheduled for April 2024.

## 5.0. Scope of Services/Scope of Work

Capital Region Water has outlined the scope of services below to solicit proposals from qualified solar providers/consultants for development and design services. This is the range of tasks CRW expects to complete. Please reference, respond, and critique the scope of services within the proposal. The goal of this RFP is to identify a solar partner with the necessary experience to ensure a well-executed process. The consultant may be engaged in future project phases, including bidding and construction oversight.

The successful consultant will have demonstrated experience planning, designing, permitting, constructing, interconnecting, and operating a solar PV system. The consultant will provide guidance regarding best practices for commissioning a solar project to determine responsibilities of CRW compared to a third party. Respondents should be familiar with utility regulations, provide project financial analysis, and standardized documents and processes. All project permitting and interconnection would be managed by the consultant in compliance with applicable laws, regulations, ordinances, and industry best practices. A final scope of services will be provided by the selected consultant prior to award. CRW reserves the right to modify the scope of the project at any time.

### Task 1: Project Assessment/Development Services

1. Provide technical assistance in the development and planning of a solar project. This includes but is not limited to site assessment, project feasibility and financial analysis, and design recommendations.
2. Provide regular (i.e., monthly) progress reports indicating work completed and pending, information needed or requested, any risk factors and associated analysis of impacts and potential solutions to minimize risk. This may require recurring meetings.

3. Assist with funding and incentive assistance and coordination services, including preparation and timely submission of applications and reimbursement requests.
4. Develop cost-benefit analyses, including cash flow schedule based on anticipated costs, income, and savings for various financing and ownership alternatives, including direct ownership compared to a public-private (PPA) option.
5. Aid in determining scope of Operations and Maintenance (O&M) requirements, including system performance, monitoring, notifications, and troubleshooting and preventative maintenance and inspection expectations.
6. Provide copies of applicable municipal ordinances or unique regulatory requirements, detailed information on local permitting practices and any permit application forms.

Task 2: Project Design Services

Provide design documents for all elements of the project, including, but not limited to, structural/architectural, mechanical, and electrical. Intent is to develop a design for a PV system that maximizes system size and renewable output. The system and components are expected to have a demonstrated record of performance with robust warranties, meet the needs and requirements of the WSC, and allow for reliable and safe construction methods.

1. Attend a project kickoff meeting and progress meetings, as necessary.
2. Obtain all necessary information and issue requests for information to CRW and other applicable parties as needed. CRW is committed to timely response.
3. Assess site topography and geotechnical attributes to estimate costs related to project installation.
4. Consider operational specifics to ensure little to no interference with the function/purpose of the WSC.
5. Complete PA One-Call request and identify all utilities.
6. Advise to and/or obtain all documentation required to qualify each system for available rebates and incentives, required permits, interconnection agreements, and any other regulatory approvals.
7. Determine ownership and limits and utility interconnection requirements.
8. Prepare necessary utility interconnection agreements and environmental permits necessary to install a ground-mounted system.
  - a. Mounting system shall be either directly anchored into the ground or ballasted on the surface without ground penetration. Mounting system design needs to meet applicable building code requirements with respect to any loading factors. Panels' tilt angle shall be based on site latitude and wind loading factors.
  - b. Ground cover, vegetation management, and stormwater management shall be considered.
9. Prepare preliminary design drawings for the project.

10. Prepare preliminary technical specifications for the project. Solicit input from solar manufacturers and contractors as needed.
11. Require that equipment used in the system meet applicable product codes or standards.
12. Require systems to comply with applicable building, mechanical, seismic, structural, and electrical codes. Only products listed, tested, identified, or labeled by Underwriters Laboratories (UL) or another nationally recognized testing laboratory shall be designed as components in the project.
13. Require technology warranty information.
14. Prepare final design drawings and final technical specifications (i.e. final design package) for the project addressing any related comments. This may include:
  - a. Project/Solar PV Description: A summary of the solar PV system types, sizes, annual production, and site location.
  - b. Schedule: The equipment procurement and solar PV installation schedule.
  - c. Design and Engineering Documents: The design documents for all elements of the project, including, but not limited to, structural, architectural, mechanical, and electrical. Drawings shall be prepared and professionally sealed in accordance with all applicable regulations.
  - d. Site Drawing: Layout drawing of installation site providing location of all equipment.
  - e. Equipment Details and Specifications: A high-level summary listing all solar PV system equipment and their associated specification sheets, including any related equipment to interconnect the solar PV system to the utility's distribution system.
  - f. Electrical Interconnection: An interconnection agreement to ensure all utility requirements will be met. Ensure PPL-approved interconnect and net-metering is coordinated through PPL's permitting process. All costs associated with utility interconnection shall be borne by CRW.
  - g. Monitoring: A description of controls, monitors, and instrumentation to be used for the solar PV system. This includes web-based monitoring for performance verification.
  - h. Safety Plan: Plan to ensure safety for all personnel.
  - i. Construction Plan: This includes the appropriate documentation, plan, and timeline. All submittals, drawings, disruption plans (limited due to site use), and contract documents shall be reviewed and approved in writing by the consultant prior to submittal for design review/permits. The site, except for the solar PV system footprint, shall be returned to pre-construction condition as needed.
15. Prepare construction contact documents suitable for public bidding of the project.
16. Prepare a final opinion of construction cost at the completion of the project design.
17. Provide electronic copy of design documents to CRW.

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## **6.0. Submittal Requirements for Proposals**

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Consultants are expected to include clear responses to the following information in their proposal. CRW's desires to review uniform submittals in an efficient manner.

A cover letter and/or executive summary may be addressed to CRW. Summarize key provisions of the proposal, including understanding of Capital Region Water's goals, relevant experience, and key timeline dates. This must be limited to 2 pages.

*Understanding and Project/Technical Approach (limit to 6 pages):* Please provide a detailed strategy and approach to the scope of professional services outlined above, include a review of specific tasks within the scope. Describe your approach to planning and designing a solar PV project. Demonstrate an understanding of project management. Describe your technical capability and expertise to address developing, designing, planning, scheduling, and permitting complete solar PV systems. Provide insight on local utilities, financing, and system operations.

*Work Plan and Schedule (limit to 2 pages):* Provide a work plan summarizing your understanding and approach of the scope of services outlined above. The work plan should describe specific instructions for project execution including task deliverables, milestone descriptions, and client communication procedures. A work plan will be submitted to the CRW team for review and approval prior to commencing work. The work plan will be updated and revised as necessary during the project.

*Experience and Qualifications (limit to 6 pages):* Describe the project team's experience, abilities, and qualifications providing similar services as required in this request. Please provide a brief history and description of the firm. Include the firm name, address and contact information, year established, and the office location from which this project would be managed. Experience that demonstrates a record of successful innovation and an integrated project approach will be well favored. In demonstrating experience, include the range of services and capabilities offered specific to each of the tasks above. Within the description include experience implementing solar PV projects.

It's expected any team will have professional engineering and energy staff, including, and not limited to, licensed engineers, licensed general/mechanical contractors, planners, certified energy managers, and/or financial experts. Clearly identify any subconsultants performing work outside of your firm, and include the name, scope of work, and qualifications for each subconsultant. Include any explanation of unique value-add services or why your firm is better qualified to provide these services compared to a competitor.

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Please provide up to three specific projects completed by your firm within the past three to five years similar in scope and complexity. At least one relevant experience project completed must include a ground-mount solar PV project comparable in size. Include project names, system sizes (kW), location, and a brief two-three sentence project description, including description of services provided and all available tax credits, incentives, and/or subsidies used to finance the project. Highlight any key personnel involved in the work and permitting and interconnection experience with the local utility. Provide up to three (3) project references, including contact information.

*Project Management (limit to 3 pages, including any organizational chart):* Please provide information regarding the proposed project team and information regarding capabilities and experience of personnel directly assigned to the project. If your firm boasts additional qualifications, including licensing or accreditation, please include these accolades and a description of relevance. Be sure to include any additional information or special expertise that may distinguish the project team from other firms. Only profile qualifications and individuals that will be working on this project.

**Project Manager** – Provide the name and contact information of the proposed project manager responsible for leading the project and all associated communications. Describe how the Project Manager will lead the project. Identify who will have primary technical responsibility for specific tasks within the scope of services.

*M/W/DBE Participation:* It is the intent of Capital Region Water to ensure nondiscrimination in the award and administration of contracts, to create a level playing field on which minority, women, veteran, service-disabled-veteran, and LGBT-owned business enterprises can compete fairly for Capital Region Water contracts and subcontracts. To learn more about CRW's Business Diversity Program and the associated plan, visit: [Business Diversity Program - Capital Region Water](#).

By responding to this RFP, the proposer agrees to champion CRW's M/W/DBE plan and support its success through the execution of work for CRW. The proposer agrees to take all necessary steps to maximize participation of qualified M/W/DBE firms on any work not self-performed. Consultants are encouraged to demonstrate a commitment to business diversity.

*Cost Proposal:* Provide a not-to-exceed fee, including all expenses for each task within the Scope of Services. In addition to the fee, provide a fee schedule of hourly rates for all personnel identified as part of the project team. Also provide an expected distribution of time (by percentage) that personnel are expected to contribute to the work.

This Cost Proposal should be submitted/attached as a separate document from the Proposal document and clearly identified as the "Cost Proposal".

## 8.0. Submission of Proposals

- Please follow the format of this RFP when submitting Proposals.
- Proposals must be received by **12:00 PM EST on February 21, 2024**.
- Submit one (1) electronic copy of the information requested. Hard copies will not be accepted. The electronic copy shall be a PDF file type and 8.5"x11" format. The electronic copy is to be submitted via email to [tanya.dierolf@capitalregionwater.com](mailto:tanya.dierolf@capitalregionwater.com).
- The subject line of the submittal email shall include "Proposal – Solar Energy Development" and firm/company name.
- The body of the email shall contain the full title of the RFP, name of the respondent and point of contact including name, phone, and email address. Please note that CRW has an email attachment size limit of 50 MB.

## 9.0. Selection Criteria

Proposals will be evaluated based on content and responsiveness to requirements. If CRW desires to conduct one-hour interviews (30-min presentation, 30-minute question/answer period), invited respondents will be notified by February 29, 2024. Consultant teams should prepare to participate in interviews March 5-7, 2024.

Final selection will consider Proposals and any presentation/responses provided if interviewed. Consultant teams will be evaluated based on the following criteria and weighting relevance:

Evaluation Criteria	Weight
Understanding and Project/Technical Approach	25
Work Plan and Schedule	20
Experience/Qualifications	25
Project Management, including M/W/DBE Participation	15
Value	15

## 11.0. General Terms and Conditions

- CRW reserves the right to reject any and all Proposals and to select the Proposal that it determines to be in the best interest of CRW.
- All submittals shall become property of CRW and will not be returned. Late submittals will not be evaluated.



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- Proposals will remain in effect for CRW review and approval for 90 days from the submission deadline.
  - CRW reserves the right to negotiate any associated contracts and associated scope of work. The actual extent of services under any contract as a result of this RFP is to be determined and subject to the approval of CRW's Board of Directors and is effective only upon their approval. The scope of work may be reduced, or the work conducted in phases.
  - Consultants are encouraged to add to, modify, and/or clarify tasks as appropriate to deliver a high-quality product at the most reasonable expense. Any and all changes must be communicated in writing and are subject to CRW approval.
  - If consultants incorporate CRW branding into the Proposal response, brand standards should be met. Please see <http://capitalregionwater.com/media-kit/> for additional information.

## **12.0. Resources**

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For additional insight, please see CRW's website at <https://capitalregionwater.com/>.