



INNOVATIVE SOLAR PHOTOVOLTAIC APPLICATIONS AT NEW YORK CITY WASTEWATER TREATMENT PLANTS QUESTIONS AND ANSWERS

PIN #:85617RFI002

Request for Information Regarding Innovative Solar Photovoltaic Applications at New York City Wastewater Treatment Plants

Questions and Answers

The following questions were submitted to the Department of Citywide Administrative Services (DCAS) and the Department of Environmental Protection (DEP) as per instructed in the RFI Regarding Innovative Solar Photovoltaic Applications at New York City Wastewater Treatment Plants, PIN #: 85617RFI002.

The following information is intended to inform responses to the scope of this RFI. This document, and the related RFI, is not intended as a solicitation for the award of a contract, nor a prerequisite or preclusion for participation in any future solicitation. The City is under no legal, monetary, or contractual obligation to respondents to this RFI. This RFI, and any documents submitted in response thereto, do not constitute and will not give rise to any legally binding obligation on the part of the City. The City reserves the right to proceed in any matter that it, in its sole discretion, deems appropriate.

As specified in the responses below, the City requires respondents to sign and submit a Non-Disclosure Agreement (NDA) to receive additional documents (electrical diagrams, load data, site maps, etc.). Please find the NDA available here: https://1drv.ms/f/s!Ak1H9KY_sYNfpGb_YvPQNM3w2Lf6, and attached to this document. The signed NDA is to be submitted to solar@dcas.nyc.gov, after which instructions for receiving this information will be provided.

The DEP authorized photos from the site visits are available here: https://1drv.ms/f/s!Ak1H9KY_sYNfoVnhliRbBtdueWwM

1. Does DCAS and DEP intend to award projects based on the responses to the RFI?

- a. No awards will be made based on the responses to this RFI. The RFI is for information gathering purposes only, meant to inform the City’s solar strategy at WWTPs.

2. Are DCAS and DEP planning to issue an RFP? If so, can you provide a timeframe for its issuance?

- a. At this time, there is no specific timeframe for any future RFP or solicitations developed as a result of this RFI. The findings from the RFI will be used to inform planning for the scope of work this RFI addresses, including project time frames/scheduling and possible future solicitations.

3. Is there an anticipated schedule for procurement?

- a. There is no anticipated schedule for a procurement related to the scope of the RFI at this time. The City will use the information provided from this RFI to inform the development of any future procurements, including project schedule and timelines required for procurement. However, given the City’s commitment to install 100 megawatts of solar PV capacity by 2025 (as outlined in the *One City: Built to Last* plan), all of the City’s future solar programming will be designed to achieve this goal within the 2025 timeframe.

4. Will a single team be selected for all sites?

- a. In the event of a procurement related to the scope of this RFI, the City will determine whether a single vendor/team of vendors will be selected for an individual or multiple WWTPs, given that the RFP or solicitation includes more than a single WWTP. As allowed by the City's procurement rules, the City reserves the right to award the scope of work as seen fit to a single vendor or multiple vendors.

5. Will the RFP have special requirements in the procurement process for Women or Minority Owned Business Enterprises? If so, what are the requirements?

- a. Please review the City's M/WBE regulations and participation goals here: <https://www1.nyc.gov/nycbusiness/description/minority-and-womenowned-business-enterprise-certification-program-mwbe>. No M/WBE requirements have been specified for the purposes of responding to this RFI. In the event of an RFP or solicitation related to the scope of this RFI, all M/WBE requirements or goals will be specified.

6. Who was awarded the Port Richmond WWTP Power Purchase Agreement RFP?

- a. Tangent Energy Solutions was the awarded vendor of the Power Purchase Agreement for the Port Richmond WWTP. The same PPA includes three additional City facilities (two public schools and a Dept. of Transportation facility), also awarded to Tangent Energy Solutions.

7. Could DCAS share a list of the site visit attendees?

- a. Yes, please see this list attached to this document.

8. Would it be possible to see a more in-depth breakdown of the electric bills?

- a. No, detailed electricity billing data cannot be shared at this time.

9. Can DCAS please describe the utility rate plan that the City is currently under? What are the kW and kWh charges?

- a. Please see attached to this document a summary of the City of New York's electricity utility rates; the WWTPs are under the "WPCP" service classification.

10. Can DCAS and DEP provide interval load data for the sites?

- a. DCAS and DEP will provide average consumption interval data, as well as minimum and maximum interval load data for each of the WWTPs. All respondents wishing to receive this data must sign and submit the Non-Disclosure Agreement (NDA) available at https://1drv.ms/f/s!Ak1H9KY_sYNfpGb_YvPQNM3w2Lf6, and attached to this document. Please submit the signed NDA to solar@dcas.nyc.gov, and instructions to receive the dataset will be shared.

11. Is DCAS and DEP interested in a solution that includes solar as well as other on-site generation or other sustainable energy solutions?

- a. The primary objective of this RFI to gather information about the opportunities and challenges to developing specifically large-scale solar PV systems. However, respondents are welcome to propose secondary solutions in addition to solar PV, particularly if these solutions enhance/enable the effectiveness of the solar PV.

12. Should all respondents assume the same interconnection cost so as to have an "apples-to-apples" comparison of pricing?

- a. While the RFI does request preliminary cost estimates or financing options (see “Submission Requirements” section F), this information will not be considered a bid, nor will respondents’ provided cost data be ranked or scored against each other as it would in an RFP solicitation. DCAS and DEP have requested this high-level cost data to aide in informing a comprehensive solar strategy for WWTP facilities, but it will be considered informative only. We ask all respondents use their knowledge of the New York City solar market to provide accurate as possible cost estimates, including estimated interconnection costs. In the event of an RFP solicitation, the City will consider standardizing assumptions such as interconnection costs.

13. Should each bidder assume the same soiling derate from bird waste on the modules so as to have an “apples-to-apples” comparison?

- a. We ask all respondents use their knowledge of New York City solar market to provide as accurate as possible information, including any factors that would derate system performance. In the event of an RFP solicitation, the City will consider standardizing assumptions that would impact selection criteria. At this time, the City does not have an assessment of PV system derating impacts from bird waste at the WWTPs.

14. Will DEP release as-built drawings of the plants with the RFP, if and when it is issued?

- a. In the event of an RFP soliciting the procurement of solar PV at City WWTPs, the RFP will include any information deemed necessary to inform the requested scope of work. If determined necessary, and at the City’s discretion, any as-built drawings and/or electrical diagrams will be included issued with the RFP to inform proposals.

15. Is submitting a response to this RFI required to be eligible for a future RFP?

- a. No, a response to this RFI is not required for eligibility to respond to any future or RFP or solicitation related to the scope of this RFI or otherwise.

16. What makes the three WWTPs identified in the RFI a priority over the other City-owned WWTPs?

- a. Three WWTPs (Wards Island, 26th Ward, and Newtown Creek) were as identified as priority sites for the scope of this RFI. This was done primarily to narrow the scope of the RFI to specific facilities, allowing DCAS and DEP to host site visits to inform the RFI responses. The three priority sites were selected due to their varying characteristics, including size, location, age, the availability of space and open land. While the three WWTPs were identified as priority sites for this RFI, any future activity regarding solar PV at city-owned WWTPs will not necessary be limited to nor include these three sites. Respondents to the RFI are welcome to submit responses focusing on any or all of the three priority WWTPs, or any of the additional City-owned WWTPs.

17. Are there any restrictions how many WWTPs may have solar PV installed per year?

- a. No such restrictions have been specified at this time.

18. Is union labor required?

- a. All City projects must adhere to the wage and labor standards outlined in Labor Law Sec. 220.

19. Is domestic content required?

- a. The use of domestic materials is not required as part of the response to this RFI. Recent DCAS solar projects have not required domestic content, although it is unclear at this time if any future work related to the scope of this RFI would require domestic content.

20. *Would sites be installed sequentially, or concurrently? Does DCAS and DEP anticipate a pilot phase first?*

- a. For the purpose of this RFI, it should be assumed that multiple sites may be implemented concurrently. DCAS and DEP have yet to determine if the scope of this RFI would ideally be implemented across a single or multiple WWTPs simultaneously. DCAS and DEP may consider the option of a “pilot” phase with a limited scope; the objective of the RFI is to inform this planning, but the scope of any future implementation will be subject to the decision of the City of New York.

21. *Does the City of New York qualify for NY-Sun and NYSERDA incentives? If not, are there comparable New York Power Authority (NYPA) or Federal Department of Energy incentives that might be utilized for these installations?*

- a. Yes, the City of New York qualifies for most NY-Sun incentives and the NYSERDA MW Block incentive program. There are no NYPA or Federal Department of Energy incentives for which the City directly is eligible. However, for any third-party solar ownership models with the City (i.e. a PPA), the owner/developer may utilize the Federal ITC or any other relevant incentives.

22. *Is the information we provide as part of the RFIs confidential or will it be made public in any way?*

- a. The content of the responses, and names of the respondents, to this RFI shall not be confidential. The City will at its discretion share any results and findings of this RFI. However, subject to the provisions of applicable law, at the request of any respondent, the contents of their response, or any portion thereof, may be treated as confidential. Any request to treat a response or portion thereof as confidential should be accompanied by an explanation justifying the applicability of the protection sought. Respondents requesting portions of the RFI be treated as confidential must indicate as so within the RFI response, and indicate as so in writing to solar@dcas.nyc.gov.

23. *What licensing and/or certifications are required by DCAS or DEP for this potential solar project?*

- a. Driver license number, driver license state, date of birth, and full name of all individuals who will be on-site must be provided to the DEP Bureau of Police and Security prior to entering the WWTP boundaries. Any individual performing work at DEP facilities is required to complete HASP training on-site and prior to beginning their work. For operations and maintenance, the DOB BEC standard requirements for general maintenance would apply.

24. *Other than DEP-specific safety training classes or orientation, are there any specific security clearance certifications or security protocols required for working at these WWTP sites?*

- a. Please see question #23.

25. *Please provide higher resolution images of the wastewater treatment plants.*

- a. The high resolution images can be found here:
https://1drv.ms/f/s!Ak1H9KY_sYNfpFvuoZfpx22IGzCi

26. Are there any standing pools of water throughout the facilities that do not have skimmers going across them?

- a. Please question 34, which specifies the various types of tanks and their specific characteristics.

27. Is it possible to utilize a portion of the waterways near any facility?

- a. DEP does not have jurisdiction over the local waterways. Vendor must contact jurisdictional agencies such as the NYSDEC and the USACE for questions about use of waterways.

28. Please provide any site plans, as-buids, electrical one-line drawings, and ideal interconnection points which can be shared.

- a. DCAS and DEP will provide electric diagrams, and identify interconnection points and any changes the WWTPs. Please sign and submit the Non-Disclosure Agreement (NDA) available at https://1drv.ms/f/s!Ak1H9KY_sYNfpGb_YvPQNM3w2Lf6, and attached to this document. Please submit the signed NDA to solar@dcas.nyc.gov, and instructions to receive this information will be shared.

29. Please outline any changes to the facilities that differ from the satellite images (i.e., a building at 26 Ward that is on the image is no longer at the facility).

- a. See Question 28.

30. Where is the ideal Point of Interconnection for each site? What is the interconnection voltage and amperage rating for the noted ideal switchgear?

- a. See Question 28.

31. For potential canopies over the water tanks, what minimum clearance height is required? Are there any setbacks from the water tanks' edge that need to be considered?

- a. Please see question 34, which specifies the various types of tanks and their specific characteristics.

32. At 26th Ward, what is the current status of the open land in the southern parcel? Are there any future plans to use it for another purpose?

- a. There are no known future plans for the majority of the open land to the south of the 26th Ward WWTP facilities. However, due the potential for future regulations and/or compliance needs, DEP cannot guarantee at this time that the area will not be needed in the future. The vendors are encouraged to propose plans with the greatest solar potential, as this may help guide future development at DEP sites.

33. At Newtown Creek, there are many light poles on site which would interfere with canopy placement. Should it be assumed that these can be removed?

- a. For the purpose of this RFI, it may be assumed these lights may be removed. As per question 32, vendors are encouraged to supply solar plans with the greatest potential, as this may help guide future development at DEP sites.

34. Please provide the following design criteria (numbers or insights) for the three priority sites:

- **Minimum vertical clearances:** See table below
- **Other access requirements:** See table below
- **Day-lighting requirements:** None are required
- **Minimum lighting requirements:** Current lighting conditions should not be diminished.
- **Corrosion standards (for finishes):** WWTPs are corrosive environments, and corrosion standards will vary depending on the chemical or mechanical process occurring in the tank and the proximity of the PV system to the tank.
- **Corrosion standards (for electrical components):** See above
- **Finish requirements:** See above

Tank Type	Minimum vertical clearance height needed (feet)	Minimum setback from tank's edge needed (feet)	Minimum perimeter around tank needed (feet)	Other access requirements if any	Has skimmers going across it	Process requires exposure to sunlight
Primary Sedimentation	15 feet	5 to 10 feet	Depends on clearance between tanks	Access to all gates, valves, and other mechanisms for maintenance	Yes	No
Aeration	15 feet	5 to 10 feet			No	No
Final Sedimentation	15 feet	5 to 10 feet			Yes, on influent side	No
Chlorination	15 feet	5 to 10 feet			No	No

In addition to the above dimensional requirements, vendors must ensure that their designs adhere to all federal OSHA regulations.

WWTP Site Visit Attendees

Organization	Name
ACDC Systems	Prakash Dave
Arcadis	Vatche Minassian
Best Energy Power	Kevin J. Muchnick
Borrego Solar	Devon Branch
CB&I Facilities & Plant Services	Robert Ivers
CB&I Facilities & Plant Services	Thomas Farrell
Current, by GE	Alex Norman
EnterSolar	Lucie Dupas
EnterSolar	Corey Hindin
NYPA	Evan Kolkos
NYPA	Christina Iwaniw
Silver Lining Solar	Barrett Silver
Solar Liberty	Joe Vigneron
Solar Power Network	Shaheer Aziz
SolarCity	Paul Morini
Standard Solar	Saad Khan
SunPower	Becky Gallagher
SunPower	Stephen Hopkins
Syncarpha Capital, LLC	Ian Diamond
Tangent	Tom Hammond
UGE International	Gabriela Suriano
UGE International	Alex Soares
UGE International	Carlos Berger
UGE International	Tim Woodcock
Vanguard	Peter Osowski

DEPARTMENT OF CITYWIDE ADMINISTRATIVE SERVICES
DIVISION OF ENERGY MANAGEMENT



This sheet provides summary rate information for City government utility accounts as of March 2016 (delivery rates as of March 2015). It is intended as a general guide; many rates vary monthly.

ELECTRICITY RATES (NEW YORK POWER AUTHORITY):

Service Classification	Production		Delivery			Facility Points (\$/Point)
	Energy (¢/kWh) Summer [Pk/Off-Pk] Winter [Pk/Off-Pk]	Demand (\$/kw)	Energy (¢/kWh)	Demand Low Ten., (\$/kW) Summer Winter	Demand High Ten., (\$/kW) Summer Winter	
General Small (062)	6.156 5.647	na	18.16	na	na	na
General Large, Conventional (069)	4.240 3.731	12.11	na	22.69	20.43	na
General Large, TOD (069)	5.346/3.233 4.272/3.143	12.39	na	44.70 16.87	24.74 10.56	na
Street Lighting	4.143	1.49	na	22.69	20.43	10.17
Pub. Buildings, Conventional (091)	4.220 3.711	12.12	na	22.69	20.43	na
Pub. Buildings, TOD (091)	5.356/3.198 4.259/3.106	14.04	na	44.70 16.87	24.74 10.56	na
All-Elec Schools, Conventional (093)	4.457 3.953	6.55	na	22.69	20.43	na
WPCP, Conventional (098)	4.085 3.576	6.00	na	22.69	20.43	na
WPCP, TOD (098)	5.501/3.388 4.427/3.299	11.07	na	44.70 16.87	24.74 10.56	na

- TOD: Energy On-Peak, 8:00am to 10:00pm Monday to Friday; Demand On-Peak, 8:00am - 6:00pm Monday to Friday; other times are Off-Peak.
- Summer: June through September; Winter: October through May.
- Rates covering production costs are subject to a monthly Energy Charge Adjustment to cover unexpected fluctuations.
- Accounts whose metered demand is less than 75% of the maximum demand in the prior 12 months will be subjected to production minimum demand billing equal to the current rates multiplied by 75% of the earlier maximum demand (39% and 18 months for delivery).
- Power factor charge of \$1.41/kvar for billable reactive power applied based on facility size, for facilities with power factor < 95%.

OTHER:

ELECTRICITY: Electricity is supplied by the Public Service Electric and Gas (PSE&G), formerly Long Island Power Authority (LIPA) in the Rockaways, and by upstate utilities mainly for the DEP watershed areas.

NATURAL GAS: Natural gas is provided by Con Edison and NGrid in non-heating, and in firm and interruptible heating, categories. [Firm: the utility company provides gas at all times. Interruptible: the customer must switch to an alternate fuel under certain conditions, strictly determined by temperature or by the utility company.] Gas rates include costs for the commodity and for delivery. Commodity rates can change monthly; delivery rates are regulated by the Public Service Commission. Many accounts have fixed fees and ratcheted rates.

STEAM: Steam is provided by Con Edison. Rates vary by season and size of account.

AVERAGE CITYWIDE BLENDED ALL-IN MONTHLY RATES FOR ELECTRICITY, GAS AND STEAM:

		Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	CY15
Electricity	\$/KWH	0.138	0.134	0.142	0.186	0.138	0.154	0.159	0.148	0.153	0.139	0.117	0.120	0.144
Gas	\$/THERM	0.898	0.768	0.750	0.700	0.731	0.690	0.687	0.589	0.598	0.614	0.677	0.766	0.745
Steam	\$/MLB	32.718	34.654	38.575	36.859	17.692	15.140	14.837	14.764	15.088	16.152	29.795	30.319	28.079

NONDISCLOSURE AGREEMENT

This Nondisclosure Agreement (“Agreement”) is made as of _____, 2016, by and among the City of New York (the “City”), acting by and through the New York City Department of Environmental Protection (“DEP”), and _____, having an office at _____, (the “Recipient” and, together with the City, the “Parties”).

WHEREAS, in September, 2016, DEP, in partnership with the City’s Department of Citywide Administrative Services (“DCAS”), issued a request for information (“RFI”) to identify innovative applications of solar photovoltaic (“PV”) systems to supply clean renewable electricity to DEP wastewater treatment plants (“WWTPs”); and

WHEREAS, the RFI requests that proposers develop high-level assessments or descriptions of potential solar PV systems that can be installed at DEP WWTPs; and

WHEREAS, certain firms responding to the RFI have requested additional information to aid in their development of a response; and

WHEREAS, while DEP agrees that the additional requested information would facilitate complete and accurate RFI responses, some of the information is confidential, pertains to critical infrastructure, and/or is otherwise of a sensitive nature;

NOW, THEREFORE, in consideration of the mutual promises and covenants made herein, the Parties hereby agree as follows:

1. As used herein, “Confidential Information” shall mean any and all technical, business, infrastructure, engineering or other information which is delivered or disclosed by or on behalf of the DEP, and which DEP has identified as confidential by marking such documents “CONFIDENTIAL, NOT FOR PUBLIC DISCLOSURE.”
2. The Recipient will at all times keep all Confidential Information confidential in accordance with the terms of this Agreement (and will cause its officers and employees to whom any Confidential Information is disclosed to do so) and shall not deliver or disclose (of permit any of its officers and employees to deliver or disclose) any Confidential Information.

3. The Recipient shall not use any Confidential Information for any purpose except in connection with the preparation of its RFI response.
4. Without limiting any other obligations of the Recipient under this Agreement, the Recipient agrees that it will safeguard all Confidential Information delivered to it against disclosure in violation of this Agreement by employing procedures to protect such Confidential Information that are no less secure than the procedures that the Recipient uses to protect its own non-public, confidential or proprietary information in the normal course of its business, provided that if DEP hereafter requests that the Recipient employ specific measures against disclosure with respect to any specific Confidential Information, the Recipient agrees to be bound by such measures. If so requested by DEP, the Recipient agrees to acknowledge (i) the receipt by the Recipient of any Confidential Information provided to it hereunder, and (ii) the return of any Confidential Information to DEP pursuant to Section 6 below.
5. If the Recipient is requested or required or becomes legally compelled (by deposition, interrogatories, subpoena, civil investigative demand or similar process) to disclose any Confidential Information (any such request, requirement or compulsion being referred to herein as a "Request"), the Recipient shall promptly give notice of the same to DEP so that DEP may seek an appropriate protective order or other appropriate remedy and/or waive compliance with the terms of this Agreement with respect to such Request. In the absence of a protective order or other limiting remedy or waiver by DEP with compliance with respect to any such Request, the Recipient agrees that (a) it will not provide in response to such Request (or permit any of its Representatives to so provide) any Confidential Information unless and except to the extent that it is advised in a written opinion from its counsel that it is legally required to do so, and (b) it will exercise its best efforts to obtain assurance that confidential treatment will be accorded such Confidential Information that is so disclosed.
6. Upon completion of its RFI response, or upon request by DEP at any time, the Recipient shall return or destroy all Confidential Information provided to the Recipient.
7. The Parties agree that in the event of a breach of this Agreement by the Recipient, DEP shall be entitled to equitable relief, including injunctive relief and specific performance, in addition to all other remedies available at law or equity.
8. This Agreement shall be governed by the laws of the State of New York.

9. This Agreement may be executed in multiple counterparts, each of which shall be deemed an original.
10. This Agreement constitutes the entire agreement between the Parties with respect to the subject matter hereof. It shall not be modified except by a written agreement dated subsequent to the date of this Agreement and signed by both Parties.

IN WITNESS WHEREOF, the parties have duly executed this Agreement as of the date first written above.

[_____]
By: _____
Name: _____
Title: _____

CITY OF NEW YORK, by its DEPARTMENT
OF ENVIRONMENTAL PROTECTION

By: _____
Name: _____
Title: _____
Date: _____