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PALO ALTO CLEAN

CLEAN LOCAL ENERGY ACCESSIBLE NOW

2012 PROGRAM HANDBOOK

City of Palo Alto Utilities
March 2012

Questions about
Palo Alto CLEAN?

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Program Overview

Palo Alto CLEAN (Clean Local Energy Accessible Now) is a program to purchase electricity generated by solar electric systems located in CPAU service territory, which coincides with the city boundaries. The power is separately metered and delivered wholesale to CPAU, and it is then used to fulfill CPAU's renewable goals. Programs like this are sometimes also known as "feed-in tariff" programs, which refers to the fact that the power is "fed into" the electric grid. None of the power is used to offset the host customer's load, in contrast to a net metering program.

The program will unfold over multiple years, but in the first year, 2012, it will involve the purchase of up to 4 MW of capacity from solar resources located in Palo Alto. Eligibility rules may vary in future program years.

Summary of Program Rules

- City of Palo Alto Utilities (CPAU) will sign power purchase agreements (PPAs) for the output of eligible solar-powered generating facilities totaling up to 4 MW of capacity for the 2012 program year.
- Each PPA will entitle CPAU to the entire output of the generating facility, including all energy, renewable energy credits (RECs), and capacity attributes, if any.
- The energy from the generating facility must be delivered to CPAU. No part of the energy may be used to serve the customer load on the host site or any other customer load.
- Generating facilities must be located in the CPAU service territory (which corresponds to the Palo Alto city limits).
- Each generating facility must be 100 kW or larger, based on the total AC rated capacity of the system as listed on the California Energy Commission's (CEC) list of eligible modules and inverters (PV USA Test Conditions multiplied by the inverter efficiency). For the purpose of this program, a single generating facility is a set of generating units whose output is measured by a single revenue meter.
- Generating facilities must be solar powered, but can be mounted on rooftops, carports, or the ground. CPAU service

territory is most suitable for rooftop- or carport-mounted installations.

- Generating facilities required by the California Independent System Operator (CAISO) to participate in ISO markets (typically those facilities larger than 1 MW) are subject to additional scheduling and forecasting requirements.
- There are no limitations on how many generating facilities any single developer or customer may develop in Palo Alto for the 2012 program year.
- Developers are responsible for obtaining CEC Certification. RECs from the project will be created and tracked in WREGIS. CPAU will register each generator under its own WREGIS account and will be responsible for uploading meter data.
- Project developers may not seek other CPAU ratepayer-funded rebates for the generating facility. Any facility that has already received a rebate is not eligible for the program.

Timeline of a Palo Alto CLEAN Project

The chart below shows how you can expect your Palo Alto CLEAN project to progress:

Site Identification	Identify a site for your project. Ensure that your site can accommodate the minimum project size and technology. See Section 0.
Site Control	Obtain site control. See Section 0.
Preliminary Design	Develop a preliminary design for the project. See Section 2.3.
Application Submittal	Submit an application. Application submittal deadlines are 5:00 pm on the last day of every calendar month to receive a contract in the following month. For example, to receive a contract in May, submit by 5:00 pm on April 30. CPAU will notify you on the first day of the month whether it has sufficient capacity to accept your project, in which case CPAU will send you a signed contract within two weeks. If there is insufficient capacity to accept all projects, CPAU will request bids from all applicants for the remaining program capacity allocation. See Section 2.0.
Permit Submittal	Prepare your project for Building Permit and Interconnection Submittal. Your permit application will be accepted at the City's Building Division and routed to our Electric Engineering Division for interconnection review. See Section 3.0.
Permit Review	The Building Division and Electric Engineering Division will return initial comments. At this time, if the interconnection will require no significant review or costs, the Electric Engineering Division will send an interconnection agreement for your signature. If additional interconnection review is required, an Advance Engineering Fee may be required. See Section 3.0.
Interconnection Agreement	Upon receipt of the Interconnection Agreement you will be required to submit a deposit for any interconnection costs. At this time you may terminate your PPA instead of submitting the deposit and proceeding with interconnection. If you exercise this option your full reservation

deposit will be returned, but not any permit review fees. See Section 3.0.

Project Construction

Following Building Permit issuance and signature of the Interconnection Agreement the applicant can proceed with project construction. At some point prior to completing construction CPAU recommends you apply for pre-certification of the project with the California Energy Commission (CEC) to ensure the entire output of the project is certified as eligible to fulfill Renewable Portfolio Standard (RPS) requirements starting on the Commercial Operation Date. Uncertified energy is not eligible for the full contract price. CPAU will commence registration of the project with WREGIS during this time. See Section 4.0.

Commercial Operation

Upon final building inspection CPAU will send a letter memorializing the commercial operation date. At this point CPAU will return your total reservation deposit or any smaller portion of the deposit you are eligible to receive. CPAU will begin sending payments for energy produced, but the payments will be made at the pre-certification rate until the CEC certifies the project as eligible to fulfill RPS requirements. See Section 5.0.

Development of Palo Alto CLEAN Projects

1.0 Site Identification and Control

1.1 Types of Projects Accepted

Solar powered generating facilities are the only projects accepted in the 2012 Program Year. There are no limitations on the type of solar technology used. The generating facility's capacity rating must be larger than 100 kW, based on the CEC-AC rated capacity of the system and inverter. For the purpose of determining the minimum size a generating facility is considered a generating unit or set of units behind a single generation meter.

The solar generating facility may be located anywhere so long as it complies with the 100 kW minimum size and with all City codes and generator interconnection requirements. Ground mounted, rooftop mounted, or carport solar projects are acceptable, but CPAU recommends you investigate the codes and requirements applicable to your site prior to submitting an application.

1.2 Proof of Site Control

Evidence of site control is required in order to submit an application. CPAU requires documentation showing ownership of, a leasehold interest in, or a right to develop property upon which the Generating Facility will be located for the entire term of the contract being requested, or an option to acquire such ownership, leasehold interest, or right to develop.

2.0 Application Process

2.1 Submittal Process

Applicants may submit applications starting on April 2, 2012 for the 2012 Program Year. Applications will be accepted until December 31, 2012. At the beginning of each month CPAU will issue contracts. An application must be complete as of 5:00 pm on the last day of the month in order to be considered for a contract in the following month.

When issuing contracts, CPAU will first total the capacity of all complete project applications submitted in the prior month. If the remaining program capacity is sufficient to accept all of the applications, CPAU will notify the applicants that their applications have been accepted and will mail them executed power purchase agreements (PPAs). If the remaining program capacity is

insufficient to accept all of the applications, CPAU will notify all applicants that it is executing the bid process described in Section 2.5.

2.2 Where and When to Submit

Applicants may submit their applications by e-mail, fax, or in person. The application is considered complete on the date CPAU has received all required documents (see Section 2.3) and the reservation deposit. See Section 2.4, below, for instructions on how to submit a reservation deposit.

➤ By e-mail or fax:

- E-mail address: PACLEAN@cityofpaloalto.org
- Fax Number: 650-617-3140
- For documents requiring signature, a scanned or faxed copy is acceptable for the purpose of determining application completeness, but the originals must be sent by mail.

➤ By mail:

City of Palo Alto, Attn: PA CLEAN
Utilities RMD, 3rd Floor
250 Hamilton Ave
Palo Alto, CA 94301

➤ In person:

Palo Alto Civic Center
250 Hamilton Ave
Utilities Marketing, 3rd Floor
During normal business hours

2.3 Submittal Requirements

The following items are required to submit an application:

- Applicant, system owner, and site owner contact information.
- Description of the generating system
- The rate and contract term being requested
- Preliminary single-line diagram

- Preliminary site diagram showing the project site and layout
- Two signed copies of the Palo Alto CLEAN standard Power Purchase Agreement
- Proof of site control (see 1.2, above)
- Two signed copies of the WREGIS Assignment of Registration Rights Agreement (see 4.3, below)
- Reservation deposit (see 2.4, below)
- Federal Internal Revenue Service Form W-9

2.4 Reservation Deposit

The preferred method for submitting a reservation deposit is a certificate of deposit payable to the City of Palo Alto, but submitting a payment by check or wire transfer is also acceptable:

- **Check:** Checks should be made out to the City of Palo Alto and may be submitted by mail to:

City of Palo Alto, Attn: PA CLEAN
Utilities RMD, 3rd Floor
250 Hamilton Ave
Palo Alto, CA 94301

or in person at the Revenue Collections Desk in the lobby of the Civic Center at 250 Hamilton Ave, Palo Alto, CA during normal business hours.

- **Wire Transfer:** To submit by wire transfer, send notification of the payment to both PACLEAN@cityofpaloalto.org and TreasuryNotice2@cityofpaloalto.org. The City's wire transfer information is as follows:

Bank Name: Wells Fargo Bank, N.A.
Bank Routing (RTN/ABA) Number: 121 000 248
Account Number: 412 107 6145
Beneficiary Account Name: City of Palo Alto
Type of Account: Checking
Bank Address, City, State:
420 Montgomery Street, San Francisco, CA 94104
Federal Tax ID #: 94 6000 389
For International Transfer Only:
International SWIFT BIC WFBIUS6S

The deposit will be returned:

- If, for whatever reason, CPAU is unable to accept the application, or if the application is not accepted as a result of the bid process in Section 2.5.
- Upon early termination of the PPA by the applicant prior to Commercial Operation Date, subject to the rules regarding such early termination in Section 7.0 of the PPA.
- Upon the commercial operation date of the project, subject to the rules regarding timely completion of the project in Section 7.0 of the PPA.

2.5 Bid Process Once Capacity Limit is Reached

At the beginning of each month CPAU will total the capacity of all complete applications submitted in the prior month. If the 2012 Program Year capacity limit (4 MW) prevents CPAU from accepting all applications, CPAU will notify all applicants of that fact. Each applicant will be given ten business days from the notification date to submit bid prices at which the energy from its proposed resource will be sold to CPAU. The bid price must be less than the program price for the contract term requested; otherwise CPAU will reject the bid price. Bid price submissions must be rounded to the nearest mil (one-tenth of a cent).

CPAU will award one or more PPAs based on the proposed bid prices. The first award will be made to the applicant offering the lowest bid price and each subsequent award will be made to the applicant offering the next higher price, until the Program Capacity has been attained. Nothing in this process will affect the status or price of power purchase agreements issued in previous months. Any applicant who is not awarded a PPA will have any submitted reservation deposit returned in full.

3.0 Permitting

3.1 Time to Complete Project

Applicants have one year from the execution date of the PPA to achieve Commercial Operation for the proposed project. If Commercial Operation is achieved after that time, the amount of the Reservation Deposit returned is reduced for each full week the project is delayed (see Section 5.1 and Section 7.0 of the PPA). If commercial operation has not been achieved one year plus ten

weeks after the execution date of the PPA, CPAU retains the option to terminate the PPA.

3.2 Permit Submittal

Applicants apply for a building permit and interconnection agreement at the City's Development Center. The Building Division manages the routing of applications for review by all necessary departments. Consult the City's Building Division with questions about building permit requirements and the project review process. The Division maintains pre-submittal and inspection checklists that detail the City's code requirements. Visit the City's website (www.cityofpaloalto.org/building) for the most recent versions of these checklists.

The City's Planning Division typically does not review rooftop solar projects, but if a project will involve landscape changes or carport or ground mounted solar systems, the applicant should consult the Planning Division to understand the code requirements applicable to the proposed project site.

3.3 Interconnection Review

Upon receipt of a project application routed from the City's Building Division, the Electric Engineering Division will review the project to determine whether it qualifies for simplified review or whether supplemental review or an interconnection study is required. If the project qualifies for simplified review the Electric Engineering Division will send the applicant an Interconnection Agreement for signature. If the project does not qualify, the applicant must pay an Advance Engineering Fee for additional evaluation work. Once the additional review is complete the Electric Engineering Division will send the applicant an Interconnection Agreement with an estimate of any additional interconnection costs.

Upon receiving the interconnection agreement the applicant may either 1) execute and return the interconnection agreement along with payment for any additional estimated interconnection costs, or 2) notify CPAU in writing that the applicant is terminating the agreement. If this notification is received within 30 calendar days of the day CPAU notifies the applicant of the interconnection costs, the reservation deposit will be returned in full per Section 7.0 of the PPA. No portion of the building permit fees or Advance Engineering Fees will be returned.

See Utility Rule and Regulation 27 (Generator Interconnection) for more detail on the interconnection process.

4.0 Construction

4.1 Building Inspection

Consult the City's Building Division with questions about building inspection process. The Division maintains inspection checklists that detail the City's code requirements. If there are any interconnection facilities to be constructed CPAU will build those facilities during the construction process. Once construction is completed and actual costs are known, CPAU will issue a final invoice for the interconnection facilities. CPAU may require the applicant to make an additional payment to the extent actual costs differ from the estimated costs.

4.2 CEC Pre-Certification

CPAU recommends that the applicant apply for pre-certification of the project from the California Energy Commission (CEC) at some point prior to Commercial Operation. Once the generating facility is completed the applicant must apply for CEC certification (see Section 5.2, below), and pre-certification ensures that certification will begin on the Commercial Operation Date, meaning that all energy output will be certified as eligible to fulfill Renewable Portfolio Standard (RPS) requirements. Per Section 2.4 of the PPA, CPAU will pay for any energy not certified by the CEC at the "Pre-Certification Price" rather than the contract price. See form CEC-RPS-1B published by the CEC for instructions on how to apply.

4.3 WREGIS Registration

During the construction process CPAU will begin registration of the project in WREGIS (the Western Renewable Energy Generation Information System). The system owner is required to assign to CPAU the right to register the project in WREGIS when submitting an application to the Palo Alto CLEAN program. This will enable CPAU to receive Renewable Energy Credits (RECs) from the system directly in its WREGIS account rather than having to execute a transfer of RECs each month. CPAU will be responsible for uploading the meter data to WREGIS each month to enable creation of the RECs.

5.0 Commercial Operation

5.1 Meter Set and Commercial Operation Date

The Commercial Operation Date for the generator is the date of the final building inspection by the City's Building Division. Prior to that CPAU's Electric Meter Shop will set a revenue meter that will be used for billing. Following the final inspection CPAU will send the applicant a letter memorializing the Commercial Operation Date, and the applicant must return a signed copy to CPAU. This letter is required before CPAU can complete WREGIS registration (see Section 4.3 above). WREGIS registration is a prerequisite for CEC Certification (see Section 5.2 below). At this time CPAU will return the entire reservation deposit or any portion of that deposit that the applicant is entitled to under Section 7.0 of the PPA.

5.2 CEC Certification

Within six months following the Commercial Operation Date the applicant is required to have the system certified by the California Energy Commission as eligible to fulfill Renewable Portfolio Standard (RPS) requirements. CPAU will pay for the output of the system at the pre-certification price until this certification is granted (see Section 2.4 of the PPA).

Typically CEC Certification is retroactive to the Commercial Operation Date if 1) the applicant has obtained CEC Pre-Certification for the project (see Section 4.2 above) or 2) the applicant has submitted an application for CEC Certification prior to the commercial operation date. If CPAU receives energy prior to certification and pays for it at the Pre-Certification Price, and that energy is later certified by the CEC as eligible to fulfill RPS requirements, CPAU will issue a true-up equal to the difference between the Pre-Certification Price and the Contract Price upon CEC certification.

See also Sections 2.4 and 3.1 of the PPA, as well as form CEC-RPS-1A published by the CEC.

5.3 Metering and Payment

Payment for the project output will be made monthly based on a City-provided revenue meter. Payment will be made monthly by check. Statements will be available monthly.

Additional Resources

Palo Alto CLEAN program website

www.cityofpaloalto.org/PAClean

City of Palo Alto Utilities Electric Engineering and Operations

www.cityofpaloalto.org/depts/utl/utilities_engineering/electric.asp

CPAU Rule and Regulation 27 (Generator Interconnection)

www.cityofpaloalto.org/depts/utl/news/details.asp?NewsID=44&TargetID=10

City of Palo Alto Utilities Electric Standard Drawings

<http://www.cityofpaloalto.org/depts/utl/news/details.asp?NewsID=1445&TargetID=244>

City of Palo Alto Building Division

www.cityofpaloalto.org/depts/pln/building_division/default.asp

CPA Commercial Building Inspection Checklists

www.cityofpaloalto.org/civica/filebank/blobdload.asp?BlobID=18400

CPA Photovoltaic Inspection Checklist

www.cityofpaloalto.org/civica/filebank/blobdload.asp?BlobID=18400

California Energy Commission Renewables Portfolio Standard Handbook and Generator Certification Application Forms

www.energy.ca.gov/renewables/documents/index.html#rps

Western Renewable Energy Generation Information System (WREGIS)

www.wregis.org/