

Agenda Report

May 16, 2016

TO: Honorable Mayor and City Council

THROUGH: Municipal Services Committee (May 10, 2016)

FROM: Water and Power Department

SUBJECT: ADOPT INTERCONNECTION AGREEMENT FORMS FOR CUSTOMERS INSTALLING GENERATION EQUIPMENT PURSUANT TO REGULATION 23.

RECOMMENDATION:

It is recommended that the City Council:

1. Find that the proposed action is not a "project" subject to the California Environmental Quality Act ("CEQA") pursuant to Section 21065 of CEQA and Sections 15060 (c)(2), 15060 (c)(3), and 15378 of the State CEQA Guidelines and, as such, no environmental document pursuant to CEQA is required;
2. Adopt the following forms of Interconnection Agreement to satisfy the requirements of the Pasadena Water and Power Department ("PWP") Distributed Generation Facilities Interconnection Requirements ("Regulation 23"):
 - a. *Small Generator Interconnection Agreement (Attachment A)* for "Generation Facilities" (as defined in Regulation 23) interconnected with inverters having a rated capacity up to 15 kilowatts alternating current ("kW-AC");
 - b. *Qualifying Facility Interconnection and Metering Agreement (Attachment B)* for any other Generation Facility that is eligible for Net Energy Metering pursuant to Chapter 13.04 of the Pasadena Municipal Code ("Light and Power Rate Ordinance"); and
 - c. *Generating Facility Interconnection Agreement (Attachment C)* for all other Generation Facilities.

EXECUTIVE SUMMARY:

A total of approximately 875 Pasadena customers have installed their own sources of electrical energy supply such as solar photovoltaic, fuel cells, micro-turbines, cogeneration systems or battery storage equipment ("Generation Facilities"), on their

properties to help offset and manage their electrical demand on PWP's system. In particular, small scale solar installations up to 15 kW-AC have become very commonplace in PWP's service territory and make up approximately 95% of the total installed Generation Facilities. The combined capacity of the smaller solar installations is about 3,700 kW, or a little more than 1% of PWP's peak electric demand.

PWP's regulations require that customers with Generation Facilities (such customers may be called "Customers," "Customer-Generators," or "Producers") enter into an Interconnection Agreement that requires signatures by the Customer/Producer, the City Manager or designee (the PWP General Manager), the City Attorney, and the City Clerk. The corresponding routing and review process through various City Departments typically takes two to three weeks and can take over 30 days in some instances. As the City currently processes 200-300 Interconnection Agreements a year, the recommended actions are intended to streamline the contracting process to reduce administrative burden and cost, improve the customer experience, and comply with state law (Senate Bill 489) requiring utilities to post interconnection and net metering agreements on the internet and to process requests for net metering service and interconnection agreements within 30 working days.

Generation Facilities interconnected with inverters rated up to 15 kW-AC have become common in the electric industry, require less technical review, and pose relatively little risk to the electric system. A simplified form of Interconnection Agreement is becoming more common place in the electric industry for small Generating Facilities, and some electric utilities have eliminated the Interconnection Agreement all together for small solar installations.

The recommended actions will introduce a simplified form of Interconnection Agreement (Attachment A) that will substantially reduce processing time and administrative burden associated with the contract review and approval process by eliminating the City signatory. Attachment A-1 is the form that will be used for customers installing only solar generators, and Attachment A-2 is a generic form that can be adapted for any type of Generation Facility up to 15kW. The simplified agreement includes only the critical provisions that the customer must be aware of and adhere to on an ongoing basis; however, the customer and their contractor must still comply with all applicable codes and regulations, thus they are incorporated by reference. PWP routinely provides additional information to customers and their contractors during the application process to help ensure they understand all of the requirements and set expectations.

Generation Facilities with inverters rated higher than 15 kW-AC, and all non-inverter based Generation Facilities, are more complex, require additional electrical technical review, and warrant a more extensive agreement with additional terms and conditions. A more extensive form of Interconnection Agreement, with appropriate review and approval by City staff, will continue to be required for these larger systems; however, by adopting the recommended forms of Interconnection Agreement (Attachments B and C) that have been in use by Pasadena for many years, this review and signature process will be expedited to the extent possible.

BACKGROUND:

Regulation 23

Regulation 23, adopted in 2003 and amended in 2011, sets forth the service requirements and conditions for distributed generation interconnection and metering, where such generation may be interconnected for parallel operation with PWP's electric system. These standards are required to ensure that safe and reliable parallel electric operation can be accomplished. Solar and other distributed generation contractors are generally aware of the applicable codes and requirements, and PWP staff works closely with contractors to make them aware of PWP's requirements. One such requirement (per section C.1) is that customers with Generation Facilities must "execute an interconnection agreement with PWP" prior to operating their Generation Facilities.

Resolution Number 8304, which adopted the original form of Regulation 23, authorized the City Manager, or designee, to enter into electric service interconnection agreements required under Regulation 23. The PWP General Manager has historically been designated to sign each interconnection agreement on behalf of the City.

Light and Power Rate Ordinance

The Light and Power Rate Ordinance includes electric rates for two general classes of Generating Facilities. PMC Section 13.04.177 (Net Energy Metering) includes terms of service for Generating Facilities that qualify for net energy metering, such as wind and solar photovoltaic system. PMC Section 13.04.178 Self-Generation Service (Schedule SG) defines the terms for all other types of Generating Facilities. Each of these rate schedules includes provisions that require the customer to sign an interconnection and metering agreement.

These rate schedules, which are amended from time to time by City Council action, set the charges for electrical service provided to the customer and the compensation to the customer for excess generation. As the role of distributed resources expands in the future, additional rate schedules or separate power purchase agreements may be authorized by the City Council to establish new pricing provisions.

Interconnection Agreements

Interconnection Agreements cover technical requirements, liability provisions, and other terms and conditions related to the physical connection and operation of distributed resources that connect to PWP's electrical grid. There is no purchase or sale of goods or services under such interconnection agreements, and they do not provide for delivery of electricity to or from the interconnected resource or customer. The terms and charges associated with delivery of electricity to or from the interconnected resource ("pricing provisions") are defined in the applicable section of the Light and Power Rate Ordinance described above. It is common practice in the utility industry to incorporate rate schedules, service regulations similar to PWP's Regulation 23, national standards, and local code provisions into Interconnection Agreements by reference.

To help streamline the application and installation process, while ensuring grid safety and reliability, staff recommends the City Council adopt three standard forms of Interconnection Agreement:

- A. *Small Generator Interconnection Agreement* (Attachment A) for inverter based Generation Facilities with rated capacity up to 15 kW-AC;
- B. *Qualifying Facility Interconnection and Metering Agreement* (Attachment B) for any other Generation Facility that is eligible for Net Energy Metering pursuant to Section 13.04 of the Pasadena Municipal Code ("Light and Power Rate Ordinance"); and,
- C. *Generating Facility Interconnection Agreement* (Attachment C) for all other Generation Facilities not eligible for Net Energy Metering pursuant to Section 13.04 of the Pasadena Municipal Code ("Light and Power Rate Ordinance").

The Interconnection Agreements for larger systems (B and C) will continue to require the City approval process.

Interconnection Agreement Process

There are two different processes for the execution of the interconnection forms.

1. Customers submitting the *Small Generator Interconnection Agreement* (Attachment A) would be required to download and sign the form acknowledging the requirements and no signatory on behalf of the City would be required. The customer would receive acknowledgement that the City has received and accepted the agreement as part of "Permission to Operate" letter sent by PWP following final inspection of the Generation Facility.
2. Customers submitting the *Qualifying Facility Interconnection and Metering Agreement* (Attachment B) or *Generating Facility Interconnection Agreement* (Attachment C) would be required to download and sign two copies of the form acknowledging the requirements. After the form is submitted with the application and PWP staff has verified agreement for accuracy and validity of wet signatures, both agreements are routed for review and signature to City Clerk, Liability and Claims, Purchasing, City Attorney, City Manager or PWP General Manager, and then back again to the City Clerk's office. One copy of the agreement is maintained by the City Clerk's office as a permanent record and the second copy is sent to the customer.

CITY COUNCIL POLICY CONSIDERATION:

The recommended actions to facilitate distributed generation and storage resources are consistent with City Council Policy to maintain fiscal responsibility and stability, City Council Policy to increase conservation and sustainability, the 2015 Power Integrated Resource Plan; the sustainable environment goals of the General Plan, and, the Urban Environmental Accords goals to increase renewable energy, reduce peak demand, and reduce greenhouse gas emissions.

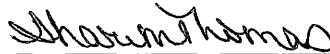
ENVIRONMENTAL ANALYSIS:

The action proposed herein is not subject to "CEQA" in accordance with Section 21065 of CEQA and State CEQA Guidelines Sections 15060 (c)(2), 15060 (c)(3), and 15378. The adoption Interconnection Agreement forms is an organizational and administrative action that would not cause either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment. Therefore, the proposed action is not a "project" subject to CEQA, as defined in Section 21065 of CEQA and Section 15378 of the State CEQA Guidelines. Since the action is not a project subject to CEQA, no environmental document is required.

FISCAL IMPACT:

There is no fiscal impact as a result of this action and it will not have any indirect or support cost requirements. The proposed action will streamline the application and installation process and will result in administrative efficiencies by reducing the number of contracts that must be prepared, reviewed, and approved.

Respectfully Submitted,



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Approved by:



STEVE MERMELL
Interim City Manager

Attachments:

- Attachment A - Small Generator Interconnection Agreement
- Attachment B - Qualifying Facility Interconnection and Metering Agreement
- Attachment C - Generating Facility Interconnection Agreement