



Agenda Report

November 8, 2010

TO: Honorable Mayor and City Council

THROUGH: Municipal Services Committee (October 26, 2010)

FROM: Water and Power Department

SUBJECT: AMEND THE LIGHT AND POWER RATE ORDINANCE TO ESTABLISH NET ENERGY METERING RATES IN ACCORDANCE WITH ASSEMBLY BILL 920; AND, TO ESTABLISH FIXED (FLAT) RATES FOR UNMETERED TELECOMMUNICATIONS DEVICES AND OTHER EQUIPMENT

RECOMMENDATION:

It is recommended that the City Council:

1. Find that the action taken herein is categorically exempt from the California Environmental Quality Act pursuant to state CEQA Guidelines Sections 15308 – Class 8; and
2. Direct the City Attorney to prepare amendments to the Light and Power Rate Ordinance to:
 - a. Establish Net Energy Metering Rates pursuant to the requirements of AB-920 by January 2011; and,
 - b. Establish Fixed (Flat) Rates for Unmetered Telecommunications Devices and Other Equipment.

ENVIRONMENTAL ADVISORY COMMISSION RECOMMENDATION:

The Environmental Advisory Commission supported staff's recommendation regarding Net Energy Metering (Recommendation 2.a.) at their October 19, 2010 meeting.

EXECUTIVE SUMMARY:

The Water and Power Department (PWP) is recommending two unrelated amendments to the Light and Power rate ordinance. The first amendment is to add new rates that provide compensation to net energy metering customers for energy delivered to PWP. The second amendment is to add a rate for unmetered telecommunications devices and other equipment.

Assembly Bill 920 (AB-920) requires California utilities to compensate customers with qualifying solar or wind generation systems that produce more electricity than is used on site. This is known as net energy metering. New compensation rates will provide customers with an option to be compensated annually or aligned with their regular billing cycle. The compensation rates will vary depending on the customer's preference.

The second recommended amendment to the rate ordinance will establish a fixed (flat) rate to be applied to telecommunication or other devices when it is impractical or impossible to attach an electric meter. The fixed rate will be based on estimated kilowatt hour (kWh) usage for each device as provided in the manufacturer's specification and will include all other charges and taxes. This rate amendment will convert the temporary contract rate that has been in place for nearly a year into a permanent rate schedule.

These two recommended rate amendments are not meant to replace a more comprehensive electric rate restructuring that staff anticipates bringing forward at a future date.

BACKGROUND:

Net Energy Metering

Net energy metering is an important element of the policy framework supporting direct customer investment in distributed renewable energy generation, including customer-sited solar PV systems. Under California law (Public Utilities Code 2827), customers who install qualifying solar and wind generation facilities (up to a combined maximum capacity of 1 MW) that are intended to serve all or a portion of onsite electricity needs are eligible for the state's net metering program. Net energy metering allows a customer to receive credit for power generated by their onsite system and fed back to the utility. Prior to the enactment of AB-920, excess energy generated during any given billing period offset net energy usage from any other billing period over a twelve month timeframe, but could not result in a net credit to the customer at the end of the period. Any credit or unused excess energy remaining at the end of the twelve month time frame simply expired.

AB-920 requires California utilities to compensate net energy metering customers with qualifying wind or solar generation systems for electricity produced in excess of on-site load over a twelve month period (Net Surplus Energy). AB-920 requires regulatory authorities, such as the Pasadena City Council, to set a "Net Surplus Compensation Rate" at a level that is just and reasonable for the customer generating Net Surplus Energy. The rate must be set so it does not shift costs to other electric customers.

Finally, AB-920 stipulates that the utilities will receive the renewable energy credits associated with those kilowatt hours for which they have provided customers compensation. Pasadena must adopt and implement a Net Surplus Compensation Rate by January 2011.

Net Surplus Compensation Rate for Annual Net Energy Metering

Staff recommends that Net Surplus Energy be credited at what will be designated as a Net Surplus Compensation Rate. This rate will be equal to the applicable energy component of the bill (Energy Services Charge) over the twelve month net metering contract term plus 2.5¢/kWh for the value of the renewable attributes associated with the energy being purchased by PWP. The energy component of the bill, which is set by formula and currently averages approximately 8.7¢/kWh, does not include transmission or distribution costs, but it does reflect PWP's average cost of power commodity and represents fair compensation for the Net Surplus Energy. The proposed value of 2.5¢/kWh for renewable attributes is in line with current market cost of qualifying renewable energy credits and is equal to the premium rate paid by PWP's Green Power customers. As more liquid and transparent renewable energy credit markets evolve, staff may recommend future changes to the renewable attribute compensation amount.

PWP estimates the Net Surplus Compensation Rate for residential customers will be approximately 11.2 ¢/kWh based on current energy charges. The compensation rates for commercial customers or time of use customers would be slightly different because the Energy Services Charge varies.

An estimated 12,000 - 15,000 kWh per year of Net Surplus Energy valued at \$1,300 - \$1,700 will be generated in the first year the rate is in effect (an amount equal to about 0.001% of PWP's retail sales). Over the next five to ten years, the quantity of energy produced could increase significantly, but would still represent an extremely small fraction of PWP's overall energy procurement and cost.

As authorized under state law, the net energy metering rates will be available to customers on a first-come, first served basis until total generating capacity used by eligible-customer generators exceeds 2.5% of PWP's aggregate customer peak demand (approximately 8 MW). If this cap is approached at a later date, the City Council could act to increase PWP's net energy metering program cap. Staff will monitor this and return to Council if we approach this program cap.

Monthly or Bi-monthly Net Surplus Compensation Rate

Like most other small utilities, PWP must manually process the monthly (or bimonthly) billing statements and annual bill for net energy metering customers. The complex functions cannot be cost-effectively incorporated into the billing system. If additional solar customers choose annual net metering, PWP anticipates that one full-time equivalent staff position will be dedicated to processing net metering payments at an annual cost of approximately \$75,000.

In order to dramatically reduce administrative costs and provide a more cost effective solution for both participating and non-participating customers, PWP proposes that customers have the option to be credited for any excess generation on each regular monthly or bi-monthly utility bill (in lieu of annual net energy metering). This option could be implemented without any modification to the billing system.

To encourage customers to select this option, the monthly net surplus compensation rate would need to be higher than the full retail rate for electricity, plus taxes (this is the value customers would otherwise receive by carrying forward surplus energy from one billing period to the next within the twelve month net energy metering period). The proposed compensation rate for customers choosing this option is the sum of the applicable Energy Services Charge for the billing period, plus 6.6¢/kWh to reflect non-energy charges (transmission, distribution, customer charges and taxes), and 2.5¢/kWh for the value of the renewable attributes. The resulting total compensation rate for residential customers would be approximately 17.8¢/kWh.

Staff estimates the additional net compensation associated with the monthly/bi-monthly option will be less than \$1,000 annually in the near term, but could exceed \$25,000 as PWP achieves its solar program goals. This is substantially less than the administrative costs incurred to manually process annual net metering billing or to upgrade the billing system to automate the process.

Because of the relatively low dollar amounts involved for compensation and the high cost of administering net metering, staff believes the proposed Net Surplus Compensation Rate and monthly compensation option provide a reasonable balance of compensation for net metering customers without shifting cost burden to non-participating customers.

Staff further proposes that the monthly compensation option either be terminated or closed to new applicants at such time that it becomes cost effective for PWP to administer annual net energy metering within the billing system. This would be accomplished by a future action to amend the electric rate ordinance.

Fixed (Flat) Unmetered Rate

PWP is proposing that the Light and Power rate ordinance be amended to provide a permanent classification for fixed (flat) rates for devices in those cases where it is impractical or impossible to attach an electric meter to a device. This rate amendment will convert the temporary contract rate that has been in place for nearly a year into a permanent rate schedule.

As permitted under the rate ordinance, PWP developed a temporary fixed (flat) rate to be applied to telecommunication devices to which electric meters could not be attached. This rate was developed in response to a stipulated judgment specifically addressing the installation of telecommunication equipment within the City without the requirement for an electric meter. The judgment determined that the requirement for an electric meter could not prevent the location of telecommunication equipment, primarily, but not limited to, cell phone antennae or receivers within the City. The technology does not

currently exist to locate electric meters underground so they would not be placed on or near the device in a highly visible location.

The temporary flat rate that was developed is based on total actual electric service costs to operate the telecommunications device. The rate is based on estimated kilowatt hour (kWh) usage for each specific device based on manufacturer's specifications. The rate also includes the distribution and customer charge and transmission charge based on the rate schedule for small or medium commercial customer classifications. All applicable taxes are also included in the rate. The ordinance amendment also provides for periodic audits by PWP to determine whether the flat rate is adequately recovering the actual cost to provide electric service.

Section 13.04.071 of the Pasadena Municipal Code provides that temporary rate agreements shall not exceed twelve months duration and are currently applicable to commercial customers only. After twelve months, the temporary rate will either become part of the permanent rate structure through amendment of the Light and Power rate ordinance or allowed to expire. The unmetered rate was first applied to a telecommunications device in November 2009, and therefore must either be incorporated into the Light and Power rate ordinance or allowed to expire. The temporary unmetered rate is working effectively and no viable metered rate alternatives have been identified.

PWP has received a number of additional applications for telecommunications devices to be located within the City and more applications are expected. Each of these devices will require an unmetered rate since electric meters will not be attached. Each device will be assigned a fixed rate that reflects the actual cost to provide electric service, including the total energy cost per kWh and the applicable distribution and customer charge and transmission charge based on the relevant Rate Schedule S-1, M-2 or L-2 for small, medium or large customer classifications. All applicable taxes and other charges will also apply.

FISCAL IMPACT:

The net amount of distributed generation fed back to PWP's power system would slightly reduce sales and revenues. The net energy metering rates may increase costs by \$1,300 to \$1,700 annually at the current level of generation by retail customers, but this cost will increase as more customers install onsite solar or other generation. The cost to administer the net energy metering program will vary based on the number of customers who choose the monthly or annual compensation program. The fixed rates for telecommunications or other equipment is intended to recover the full cost of power for the devices. The ability to periodically audit the devices will ensure that the fixed rates remain adequate to ensure full cost recovery.

Respectfully submitted,

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