




PASADENA WATER AND POWER

MEMORANDUM

October 27, 2009

To: Environmental Advisory Commission
From: Eric R. Klinkner, Assistant General Manager 
Subject: Overview Of Applicable Regulatory Standards For Consideration In The Energy Independence and Security Act of 2007 Standard (2): Rate Design Modifications to Promote Energy Efficiency Investments

EXECUTIVE SUMMARY:

This report is being provided to the Environmental Advisory Commission (“EAC”) to provide background information on the requirements of the Energy Independence and Security Act of 2007 (“the Act”) and to seek feedback regarding Pasadena’s consideration of the second standard, which involves potential rate design modifications that would provide additional incentives, or reduce disincentives to promote energy efficiency programs. No action is requested at this time

The Act amends the Public Utility Regulatory Policies Act of 1978 (“PURPA”) to require state regulatory commissions and unregulated utilities with annual retail sales in excess of 500 million kilowatt-hours (“kWh”), such as Pasadena Water and Power (“PWP”), to conduct assessments and consider whether to adopt four new federal standards (“Standards”) established under the Act: (1) Integrated Resource Planning, (2) Rate Design Modifications to Promote Energy Efficiency Investments, (3) Consideration of Smart Grid Investments, and (4) Smart Grid Information. Pasadena must consider these Standards by December 19, 2009 and determine whether to adopt each as drafted, with modifications, or decline to adopt. Staff has been assessing the Standards and developing recommendations over the last two years.

In compliance with the procedural requirements in PURPA:

- A public hearing will be held to consider whether to adopt the Standards;
- The hearing will be scheduled and publicly noticed at least ten days in advance;
- Staff will present proposed findings and determinations in the form of a resolution for the City Council to consider and adopt.

Staff anticipates requesting that the City Council set the public hearing date for November 23, 2009 during the November 2 Council meeting.

Standard 2: Rate Design Modifications to Promote Energy Efficiency Investments

Objective: This Standard states that the rates charged by any electric utility shall align utility incentives with the delivery of cost-effective energy efficiency and promote energy efficiency investments. This Standard has six policy options intended to guide states and nonregulated utilities when considering the standard

Policy Option 1: Remove Throughput Incentives and Other Regulatory and Management Disincentives to Energy Efficiency

This option refers to the link between a utility's sales volume (in kWh) and its earnings or net operating margin. Generally, an increase (decrease) in sales volume means an increase (decrease) in earnings as well because fixed costs and profits or margins are typically recovered in the per-unit segment of the rate. Therefore, a decrease in utility sales that results from an energy efficiency program could also mean a decrease in earnings and even the inability to recover some portion of the utility's fixed costs for providing service – damping the incentive a utility may have to offer or encourage customer participation in such measures to decrease electricity or natural gas use. If the goal is to expand the use and effectiveness of energy efficiency programs, then this goal could be at odds with the utility's throughput incentive under traditional cost-based regulation. This throughput incentive is discussed in more detail below.

PWP's Status: Current policy and practices are substantially consistent with Policy Option 1 of Standard 2. A substantial portion of PWP's revenue requirements are recovered either through fixed charges or formula-based rates that are designed to increase or decrease as necessary to balance revenues with costs in order to maintain stable net operating margins. Options to further enhance the decoupling of PWP's electric rates to fully recover distribution costs will be considered as part of the forthcoming electric cost of service and rate proposal study.

Policy Option 2: Provide Incentives for the Successful Management of Energy Efficiency Programs

This policy option is aimed at utilities to provide a financial incentive to customers for implementing their energy efficiency programs. If energy efficiency programs have a negative effect on utility earnings, then any program the utility is required to provide could be undermined by financial disincentives that negate the incentive to fully pursue implementation of the programs. Therefore, some regulatory authorities have adopted rate designs that provide for financial rewards if utilities meet energy efficiency goals.

PWP's Status: Current policy and practices are consistent with Policy Option 2 of Standard 2. While PWP does not provide management bonuses or have shareholders to be rewarded for effective implementation of its energy efficiency programs, the City Council has: directed that cost effective energy efficiency be the first priority resource used to meet energy demand load; established specific load reduction targets for its energy efficiency programs; and, has authorized staff positions and financial resources to implement these goals. As these programs are funded from a dedicated formula-

based rate, the utility is provided with the necessary financial resources to invest in energy efficiency without tapping revenues for system maintenance and operations.

Policy Option 3: Include the Impact of Energy Efficiency as a Goal of Retail Rate Design

State commissions and utilities may consider energy efficiency as a goal of retail rate design, while balancing that goal with other objectives. Most states have general regulatory goals or objectives that they consider during the ratemaking process. These include quality of utility service, public safety, reliability, just and reasonable rates, efficient utility operation, and economical and fair regulation. State commissions may consider adding the encouragement of cost-effective energy efficiency programs as a regulatory goal, if it has not already been considered or adopted. Nonregulated utilities could consider making energy efficiency a goal as well.

PWP's Status: Current policy and practices are consistent with Policy Option 3 of Standard 2. The City Council has established a clear policy goal that cost effective energy efficiency be the first priority resource used to meet energy demand load, and has established specific load reduction targets for PWP's energy efficiency programs. As these programs are funded from a dedicated formula-based rate, the utility is provided with the necessary financial resources to invest in energy efficiency without tapping revenues for system maintenance and operations. New ten-year energy efficiency targets will be proposed for adoption by early 2010 based on a forthcoming energy efficiency potential study.

Policy Option 4: Adopt Rate Designs That Encourage Energy Efficiency for Each Customer Class

Considering each customer class and the impact that rate design has on encouraging energy efficiency is the goal of this policy option. Not all customer classes may respond in the same manner to energy efficiency programs, so different programs may have to be developed for each customer class. Also, there may be opportunities to obtain cost-effective energy efficiency from programs aimed at previously overlooked customer classes.

PWP's Status: Current policy and practices are generally consistent with Policy Option 4 of Standard 2. PWP's existing rates were designed to balance many considerations, including establishing fair and non-discriminatory rates, minimizing the impact of rates on consumers, providing a proper pricing signal through rates, and adopting understandable rates that encourage proper usage of electricity. These cost-of-service based rates do not have any disincentives to energy efficiency, such as declining block rates for any of its rate customer classes. Nor do they include increasing tiered rates to provide additional incentives for high-use customers. Rate designs options, such as inclining block rates, that encourage customers to use energy efficiently will be considered as part of the forthcoming electric cost of service and rate proposal study.

Policy Option 5: Allow For the Timely Recovery of Energy Efficiency Related Costs

This policy option is aimed at ensuring that energy efficiency program costs are fully recovered from electric rates to encourage utility participation, cooperation, and support of energy efficiency programs. Conversely, untimely or uncertain cost recovery may discourage a regulated utility's cooperation. Regulatory authorities may want to consider conditioning cost recovery on economical and verifiable implementation of energy efficiency programs, to encourage cost minimization and program results.

PWP's Status: Current policy and practices are consistent with Policy Option 5 of Standard 2. PWP uses a formula-based Public Benefit Charge ("PBC") rate to provide full and direct funding for current energy efficiency programs. The PBC rate is charged to all customers, regardless of whether they are full-service or direct-access customers. Funds collected through the PBC charge are accounted for in a separate fund that is limited to customer programs such as solar and energy efficiency incentives, low income assistance, and may be used for research and development projects. These funds are not mingled with or transferred to other operating budget funds for other purposes.

Policy Option 6: Offer Home Energy Audits, Demand Response and Other Programs

This standard discusses specific types or categories of demand-side management programs that are intended to educate or inform customers of program opportunities or about their own energy use. These include home energy audits and publicizing the financial and environmental benefits of and educating customers about incentives and loans for energy efficiency improvements. Demand response programs can include both energy efficiency and load control programs that reduce peak system demand.

PWP's Status: Current policy and practices are generally consistent with Policy Option 6 of Standard 2. PWP has and will continue its current policy of offering these types of programs to its customers. PWP anticipates establishing appropriate price signals or values for demand reduction as part of the forthcoming electric cost of service and rate proposal study. PWP intends to design and develop cost effective demand response programs as part of its smart grid implementation program.