

- BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH -

In the Matter of the Consideration of the)
Amendment of 16 U.S.C. § 2621 –) DOCKET NO. 06-999-03
Consideration and Determination Respecting) DETERMINATION CONCERNING THE
Certain Ratemaking Standards for Electric) PURPA TIME-BASED METERING AND
Utilities by the Energy Policy Act of 2005) COMMUNICATIONS STANDARD

ISSUED: February 14, 2007

SYNOPSIS

The Commission determines it is not appropriate to adopt the federal time-based metering and communications standard as written, directs the Company to file a decision summary report, and directs a review of this report by the PacifiCorp Demand-Side Management Advisory Group.

By The Commission:

REGULATORY HISTORY AND COMMISSION RESPONSIBILITY

The Commission has previously examined regulatory standards enacted by the Public Utilities Regulatory Policies Act (“PURPA”).¹ Title 1 Subtitle A of PURPA² requires the Commission, with respect to each utility for which it has ratemaking authority, to consider and make a determination whether the standards set forth in PURPA are appropriate to be implemented to carry out the purposes of PURPA, namely: 1) conservation of energy, 2) the efficient use of facilities and resources by electric utilities, and 3) equitable rates to electric consumers. The Commission’s consideration must be after public notice and hearing and the

¹See Dockets 80-999-09, 81-999-01, 81-999-02, 81-999-03, 81-999-04, 81-999-05, 93-999-03, and 93-999-04.

²PURPA § 101, 16 U.S.C. § 2611.

Commission's determination must be in writing, based upon findings included in the determination and evidence provided at hearing, and available to the public. The Commission may choose to implement a standard or adopt a different standard from those described in PURPA. While nothing prohibits the Commission from determining that it is not appropriate to implement a standard,³ if the Commission declines to adopt a standard it is required to state in writing the reason for its decision and make that statement available to the public.

The 2005 Energy Policy Act ("2005 EPAct"), signed into law on August 8, 2005 ("date of enactment"), amended PURPA by adding five new standards to Title 1 Subtitle B of PURPA⁴ regarding: 1) net metering, 2) fuel sources, 3) fossil fuel generation efficiency, 4) time-based metering and communications ("Smart Metering," "Smart Metering Standard," or "Standard"), and 5) interconnection. The 2005 EPAct requires the Commission to begin consideration and make a determination for each new standard according to specified dates. For the time-based metering and communications and interconnection standards, the consideration must begin by August 8, 2006, and the determination must be completed by August 8, 2007. For the net metering, fuel diversity, and fossil fuel generation efficiency standards, the consideration must begin by August 8, 2007, and the determination must be completed by August 8, 2008. Herein we address only the time-based metering and communications standard.

³PURPA § 111(a), 16 U.S.C. 2621(a).

⁴PURPA § 111(d), 16 U.S.C. § 2621(d).

PROCEDURAL HISTORY

On June 14, 2006, the Commission issued a Notice of Scheduling Conference to be held on June 26, 2006. On July 20, 2006, the Commission issued a Notice of Technical Conference to be held on August 30, 2006, with the purpose of discussing the five new standards applicable to electric utilities enacted by the 2005 EAct and the requirements for consideration and determination of these standards, identifying existing statutes and programs in place which may potentially address the standards, and setting a further procedural schedule.

On July 17, 2006, the Commission filed a letter with the U.S. Department of Energy indicating that PacifiCorp, doing business in Utah as Rocky Mountain Power (“the Company”), is the only PURPA-covered utility over which the Commission has ratemaking authority.

Informal work group meetings were then held on September 19, 2006, and October 6, 2006, to further determine the approach to evaluating the new PURPA standards. A Notice of Technical Conference was issued on October 10, 2006, announcing a technical conference addressing the fuel sources and fossil fuel generation efficiency standards scheduled for October 17, 2006, a Notice of Technical Conference was issued on October 30, 2006, announcing a technical conference addressing the Smart Metering Standard scheduled for November 9, 2006, and a Notice of Technical Conferences was issued on November 17, 2006, announcing a technical conference addressing the interconnection standard scheduled for December 18, 2006, and the net metering standard scheduled for January 10, 2007. During these technical conferences the Division of Public Utilities (“Division”) provided a working document

recommendation for each standard and requested informal comments. Based upon these comments and further research, on January 8, 2007, the Division submitted a recommendation to the Commission regarding the Smart Metering Standard. In response to this recommendation, on January 9, 2007, the Commission issued a Request for Comments with a filing deadline of January 24, 2007.

Comments on the Division's time-based metering and communications recommendation were filed by the Company, the Committee of Consumer Services ("Committee"), Utah Clean Energy ("UCE"), the Utah Industrial Energy Consumers ("UIEC"), the Utah Rural Electric Association, the Utah Association of Energy Users ("UAE"), Dixie Escalante Electric ("Dixie Escalante"), and Moon Lake Electric ("Moon Lake").

TIME-BASED METERING AND COMMUNICATIONS STANDARD

Section 1252 of the 2005 EAct amends Section 111(d) of PURPA and U.S.C. § 2621(d) by adding the following standard:

(14) Time-Based Metering and Communications

(A) Not later than 18 months after the date of enactment each electric utility shall offer each of its customer classes, and provide individual customers upon customer request, a time-based rate schedule under which the rate charged by the electric utility varies during different time periods and reflects the variance, if any, in the utility's cost of generating and purchasing electricity at the wholesale level. The time-based rate schedule shall enable the electric consumer to manage energy use and cost through advanced metering and communications technology.

(B) The types of time-based rate schedules that may be offered under the schedule referred to above include, among others –

(i) time-of-use pricing whereby electricity prices are set for a specific time period on an advance or forward basis, typically not changing more often than twice a year, based on the utility's cost of generating and/or purchasing such electricity at the wholesale level for the benefit of the consumer. Prices paid for energy consumed during these periods shall be pre-established and known to consumers in advance of such consumption, allowing them to vary their demand and usage in

response to such prices and manage their energy costs by shifting usage to a lower cost period or reducing their consumption overall;

(ii) critical peak pricing whereby time-of-use prices are in effect except for certain peak days, when prices may reflect the costs of generating and/or purchasing electricity at the wholesale level and when consumers may receive additional discounts for reducing peak period energy consumption;

(iii) real-time pricing whereby electricity prices are set for a specific time period on an advanced or forward basis, reflecting the utility's cost of generating and/or purchasing electricity at the wholesale level, and may change as often as hourly; and

(iv) credits for consumers with large loads who enter into pre-established peak load reduction agreements that reduce a utility's planned capacity obligations.

(C) Each Electric utility subject to subparagraph (A) shall provide each customer requesting a time-based rate with time-based meter capable of enabling the utility and customer to offer and receive such rate, respectively.

(D) For purposes of implementing this paragraph, any reference contained in this section to the date of enactment of the Public Utility Regulatory Policies Act of 1978 shall be deemed to be a reference to the date of enactment of this paragraph.

(E) In a State that permits third-party marketers to sell electric energy to retail electric consumers, such consumers shall be entitled to receive the same time-based metering and communications device and service as a retail electric consumer of the electric utility.

(F) Notwithstanding subsections (b) and (c) of section 112, each State regulatory authority shall, not later than 18 months after the date of enactment of this paragraph conduct an investigation in accordance with section 115(i) and issue a decision whether it is appropriate to implement the standards set out in subparagraphs (A) and (C).

The 2005 EPAct Smart Metering Standard must be evaluated not only in terms of the standard itself and the PURPA general requirements, but also with respect to new Section 112(e) and amended Sections 115(b) and (i). PURPA Section 112(e) Prior State Actions applicable to the Smart Metering Standard provides that the consideration and determination requirements are satisfied under the following scenarios: 1) The Standard or comparable standard has been implemented before the date of enactment; 2) The Commission has conducted a proceeding to consider implementation of the Standard or comparable standard within the previous three years from the date of enactment; or 3) The State Legislature has voted on

implementation of the Standard or a comparable standard within the previous three years from the date of enactment. Amended Section 115(b) indicates that in considering the Smart Metering Standard, any time-of-day rates offered to classes of electric consumers shall be considered cost effective if the long-run benefits of the rates are likely to exceed the metering and communications costs and other related costs. Finally, Section 115(i) specifies that the Commission shall conduct an investigation and issue a decision whether or not it is appropriate for electric utilities to provide and install time-based meters and communications devices for each of their customers which enable such customers to participate in time-based rate schedules and other demand-response programs.

With respect to the Smart Metering Standard we address the following issues: 1) Whether a prior state action exists, 2) whether the Smart Metering Standard should be adopted as written, and 3) whether additional studies and analyses should be conducted, and if so, in what forum.

PRIOR STATE ACTIONS

A. Positions of the Parties

In the determination of whether to adopt a standard, the provisions of PURPA enable prior state actions to be taken into consideration. Based upon these provisions, the Division maintains an equivalent standard does not exist and therefore recommends the Commission consider whether to adopt the Standard. The Company states that currently, time-based rates are available to all of its customers. Rates differ by season for all customers. In addition, time-of-day rates are mandatory for all customers using more than 1 MW and are

optional for all other applicable schedules. The Company offers a peak load reduction program under Schedule 71, Energy Exchange Program, which reflects price discounts or billing credits for pre-established peak load reduction as well as a real-time pricing option under certain conditions. The Company states that while it complies with the time-based provision of the PURPA Standard, the Company does not currently have the metering and communications systems that “enable the electric consumer to manage energy use and cost through advanced metering and communications technology” as specified in subparagraph (A) of the Standard.⁵ UIEC comments the Company already provides and installs time-based meters and communications devices for each of their customers who want to participate in time-based rate schedules, and arguably, the Company already meets the standards set out in subparagraphs (A) and (C) of the Standard.⁶ UIEC further contends that the only question of whether the Company already meets this standard lies in the vagueness of the statement that “The time-based rate schedule shall enable the electric consumer to manage energy use and costs through advanced metering and communications technology.” UIEC asserts that, arguably, it does.

B. Discussion, Findings and Conclusions

There is no question the Company offers rate schedules which allow customers to participate in time-based rates and demand reduction programs at the present time and meters exist within its systems which do, or could be construed to, “. . . enable the customer to manage energy use and cost through advanced metering and communications technology.” Here

⁵PURPA § 111(d)(14)(A), 16 U.S.C. § 2621(d)(14)(A).

⁶PURPA § 111(d)(14)(A) and (C), 16 U.S.C. § 2621(d)(14)(A) and (C).

we take note not only of the Company's existing time-of-day rate schedules, also known as time-of-use rate schedules, but also of the Company's Cool Keeper and Power Forward Programs. On the other hand, one could argue that the existing time-of-use meters for residential and some commercial customers are not equipped with advanced metering and communications technology as envisioned by the Standard. We acknowledge the Company's current time-based rate schedule options are designed to address the same PURPA goals as the Standard in question. We also observe advanced metering and communications technology is not a prerequisite for a customer to manage energy use for the time-of-use program identified in Section B (i) of the Standard,⁷ rather a customer must only be aware of the requirements of the time-of-use pricing and the actual time of day. In recognizing that the newly-enacted Smart Metering Standard is an enhancement to the Time-of-Use standard enacted by PURPA in 1978,⁸ we determine that an existing or comparable Smart Metering Standard does not currently exist.

THE SMART METERING STANDARD AS WRITTEN

A. Positions of the Parties

The parties agree the Smart Metering Standard should not be adopted as written. The parties put forth three main reasons why the Standard should not be adopted: 1) the unrealistic time frame for consideration and implementation; 2) the absence of supporting analysis, and 3) the conclusion that the Standard is not necessary. The Division recommends the Smart Metering Standard not be adopted as the costs and benefits for various customer classes

⁷PURPA § 111(d)(14)(B)(i), 16 U.S.C. § 2621(d)(14)(B)(i) .

⁸PURPA § 111(d)(3), 16 U.S.C. § 2621(d)(3).

are not known at this time. Further the language of the Standard as written implies the Standard must be implemented by February 8, 2007, too soon to provide sufficient time for consideration of the best way to implement the Standard. The Committee agrees with the Division's recommendation that the Standard not be adopted prior to performing a cost-benefit analysis. UCE supports the Division's recommendation on the condition that a study be immediately conducted to decide if an equivalent standard should be adopted. UAE recommends the Commission adopt the Smart Metering Standard in concept, but not the timing to the extent implementation is required by February 8, 2007. Utah Rural Electric Association concurs with the recommendation of the Division.

The Company and UIEC agree with the Division's recommendation to the extent that the Standard not be adopted as written but disagree with the Division's reasoning. The Company contends time-based rates are available to all customers at this time and UIEC maintains that the existing rate schedules of the Company satisfy the requirements of subsections (A) and (C) of the Standard.

While not under the jurisdiction of the Commission for consideration of this Standard, Moon Lake and Dixie Escalante comment they have considered the Standard and determined it is not in the best interest of their consumers to adopt the Standard. Both companies state their current power purchase contracts provide no energy price differentiation based upon the time of purchase thereby negating the possible benefits attributed to lower purchase power costs that might be expected from a Smart Metering program. Both companies maintain that their consumer-education programs support the conservation and cost reductions objectives of PURPA.

B. Discussion, Findings and Conclusions

The Commission welcomes the opportunity to evaluate the new PURPA standards not only in the context of the requirements of the 2005 EAct and the purposes of PURPA, but also as they may address other issues specific to Utah such as mitigation of the growth of both peak and average energy demand and conservation of energy. The information provided and the studies reviewed during the Smart Metering Standard investigation indicate that the extent to which Smart Metering provides benefits to customers is dependent upon a variety of factors. For example, the type of retail regulation, existing rates and rates structures (i.e., block rates, real-time pricing, critical peak pricing), the current level of customer service complaints, company business strategies, and demand growth, are parameters which influence the level of potential benefits. In essence, there is no silver bullet or one-size-fits-all approach with respect to the evaluation and implementation of Smart Metering.

Parties have discussed the value in customers having the ability to shift electricity usage to time periods when the cost of power is priced at a lower rate, that time-based metering is a valuable tool for reducing peak load and increasing energy efficiency, and that a flat-rate tariff can send less accurate price signals to the customer. We agree with these statements but also observe the Company's existing time-of-day rate schedules and demand reduction programs address these issues without the expense of advanced metering and communications technology. We do not doubt there may be ways to increase participation in the existing time-of-day rate schedules but we find demand reduction programs do exist at the present time.

It is clear from the comments that parties recommend the Smart Metering Standard as written not be adopted due to its unrealistic time frame for implementation, the absence of supporting analysis, or with the conclusion that it is not necessary. We concur with the parties with respect to the narrow question of whether the standard should be adopted as written. We suggest, however, there is a larger issue which will not be addressed by a cost-benefit analysis of smart metering. The larger issue is whether adoption of a Smart Metering Standard is more effective in addressing PURPA goals than, say, the development of new or the expansion of existing demand management programs or modifications to the existing time-of-day rate schedules. As the Standard does not address this comprehensive approach, the Commission concludes it is not appropriate to adopt the PURPA Smart Metering Standard as written at the present time.

ADDITIONAL STUDIES AND ANALYSES

A. Positions of the Parties

Several parties agree additional studies or analyses should be conducted in order to conclude whether Smart Metering should be adopted, but they offer varying ideas regarding the subject, scope, and timing of the study. Because there are several possible benefits that may accrue from effective use of advanced metering, the Division recommends a cost-benefit study be conducted for those classes of customers for which a business case has not already been made in terms of time-of-use pricing, critical peak pricing, and real-time pricing. In addition, a study may find ways to make existing programs more effective. Finally, the Division contends analysis is needed to determine what type of demand-response program will be most effective for each customer class, whether the benefits outweigh costs, whether other methods of meeting

PURPA goals will be lower cost, and if an equivalent Standard is desirable in Utah. The Committee agrees with the Division that no Standard should be adopted prior to performing a cost-benefit study and also recommends current time-of-day rate schedules for residential and small commercial customers be reviewed to determine whether modifications to those existing schedules may encourage additional customer participation. UCE proposes a study addressing the rate structure of the time-of-use schedule and examining the need to adjust time-of-use rates to increase residential and small commercial customer participation be conducted immediately to decide if an equivalent Standard should be adopted. UAE recommends the Commission direct PacifiCorp not only to complete a cost-benefit analysis as soon as practicable for residential, commercial and industrial customers for time-of-use pricing, critical peak pricing, and real-time pricing, but also to separately study cost effectiveness for current customers and new customers, including consideration of requiring new customers to pay some of the incremental cost of any necessary new metering equipment.

UIEC states the Division's proposal is too broad and lacks specific well-defined questions to be investigated. UIEC offers the suggestion that a useful analysis would be to evaluate how the Company's current cost of service methodology could be changed to accommodate more advanced metering and communications technologies, and in turn how that information can be structured to result in meaningful rates. UIEC does not disagree that some types of investigations may be beneficial but maintains the scope should be well defined and narrowly drawn and the costs of such investigations are borne by the utility or by the classes which are the subject of such investigations.

Finally, the Company asserts conducting additional studies is not a useful endeavor at this time. It claims little will be gained from the cost and effort of an additional residential study addressing the optional residential time-of-day rate. The Company filed a time-of-day study in December 2005 which showed customers obtained very small savings through the program and that only .05% of eligible participants enrolled. In addition, the Company states it has reviewed the smart metering experience of other regional utilities, most notably Idaho Power and Puget Sound, and has found no measurable benefit for advanced metering systems that justify the increased cost over mobile automated meter reading systems.

With respect to the forum for conducting additional studies, both the Division and the Company support the concept that if additional studies are required by the Commission, they should be incorporated into the discussion arising from the Stipulation on Rate Design for Schedules 6, 6A, and 6B arising from Docket 06-035-21-In the Matter of the Application of PacifiCorp for Approval of its Proposed Electric Service Schedules and Electric Service Regulations. UIEC, however, argues that this approach cannot be undertaken as the referenced Stipulation was entered into by several parties, most of which have not been a part of the discussion in this docket. In addition, the scope and timing of those studies have already been agreed to by those parties and approved by the Commission.

B. Discussion, Findings and Conclusions

The majority of parties agree some type of study should be conducted in order to fully evaluate Smart Metering. The details and magnitude of the study vary greatly from a cost-benefit analysis to an investigation of rate structure and incentive pricing to how the company's cost of service methodology may be changed to accommodate more advanced metering and

communications technologies. The Commission notes that various reports referenced in this investigation, including the Federal Energy Regulatory Commission's "Demand Response and Advanced Metering Report," the Charles River Associates' "Impact Evaluation of the Statewide Pricing Pilot," and the Company's "Optional Experimental Residential Time-of-Day Tariff Analysis Report," provide extensive information regarding industry experience with Smart Metering and factors contributing to the successes and failures of specific programs. As with other programs for demand reduction, energy efficiency and load shifting, we agree Smart Metering must be evaluated in terms of costs and benefits specific to the Company.

The Company indicates that it has surveyed and reviewed the experiences of other utilities and contends that it finds advanced metering systems do not provide measurable benefits justifying the increased cost over mobile automated meter reading systems. The Company, however, has not provided the underlying data supporting this position. We direct the Company to prepare a decision summary report which provides: a description of the survey it conducted and the selection of applicable literature or studies on which it based its conclusion; a review and comparison of the cost and benefit information from these reports as compared with that used in the Company's evaluation; and the reasons supporting the Company's conclusion that Smart Metering, as envisioned by the Standard, is not cost effective for its applicable circumstances. Our intent is not for the Company to conduct an original study but rather to formally report to the regulatory community the Company's awareness of and assessment of the value of the Standard. This report must be filed with the Commission and provided to the Company's Demand-Side Management Advisory Group by no later than June 30, 2007. We also direct the Demand-Side Management Advisory Group to review and discuss the results of this report during its first

meeting subsequent to the filing date with the goal of determining if Smart Metering could support the development of new, or the modification/ expansion of existing, demand-side management programs.

DETERMINATION

NOW, THEREFORE, IT IS HEREBY determined it is not appropriate to adopt the federal time-based metering and communications standard as written and that the Company's decision summary report be filed and reviewed as described herein.

DATED at Salt Lake City, Utah, this 14th day of February, 2007.

/s/ Ric Campbell, Chairman

/s/ Ted Boyer, Commissioner

/s/ Ron Allen, Commissioner

Attest:

/s/ Julie Orchard
Commission Secretary
G#52431