

**CENTRAL ELECTRIC COOPERATIVE, INC.  
WRITTEN DETERMINATION WITH RESPECT TO PURPA STANDARDS**

**Background:**

This document by Central Electric Cooperative, Inc. (“CEC”) constitutes the written, determination of CEC with respect to each of the five new standards that CEC is required to consider pursuant to the Electricity Modernization Act of 2005 (the “EMAct”) which amended the Public Utility Regulatory Policies Act of 1978 (“PURPA”).

The Board began consideration of each of the five standards set forth in the EMAct (the “Standards”) on August 17, 2006. Subsequently, the CEC staff conferred with consultants on each of the Standards, and conducted a written Public Hearing to jointly develop testimony relating to each Standard for the purposes of guiding and informing the Board in its final determination with respect to, each Standard. To solicit and encourage participation in the Hearing, public notice was provided by the following means:

1. Notice of PURPA consideration and implementation process to all interested persons was issued on May 8, 2007 on CEC’s website at [www.cec.coop](http://www.cec.coop).
2. Abbreviated Notice was included in all CEC members’ May 2007 electric bills. Members not able to access the CEC website but desired a copy of the legislative language were directed to contact CEC. Members were provided until June 30, 2007 to submit written comments.

The Board has now completed its consideration of whether the adoption of each of the Standards will serve the three purposes of PURPA. The three purposes of PURPA are: (i) to encourage the conservation of energy; (ii) to optimize the efficient use of energy facilities and resources; and (iii) to encourage equitable consumer rates (16 U.S.C. § 2611). In reliance upon the facts, opinions, conclusions and other information derived from a careful review of staff and consultants, and the written testimony of the Hearing, and after giving due and thoughtful consideration to federal and state law, applicable to CEC, the Board makes the determinations set forth below:

## **I. The Net Metering Standard.**

The Net Metering Standard provides as follows:

Each electric utility shall make available upon request net metering service to any electric consumer that the electric utility serves. For purposes of this paragraph, the term “net metering service” means service to an electric consumer under which electric energy generated by that electric consumer from an eligible on-site generating facility and delivered to the local distribution facilities may be used to offset electric energy provided by the electric utility to the electric consumer during the applicable billing period.

16 U.S.C. § 2621(d)(11).

### **Outline of Rationale.**

The Board finds that currently CEC meets the net metering standard of PURPA. CEC offers net metering service pursuant to ORS 757.262 as amended by House Bill 3219, dated July 8, 1999. CEC’s net metering policy is available to all CEC members, within the following guidelines:

- (a) Name-plate generating capacity shall not exceed 25 kW.
- (b) This provision shall be available until the time that the total rated generating capacity used by the eligible customer-generators equals 0.5% of CEC’s prior years’ (October 1 through September 30) system coincident peak demand as measured in kW.
- (c) Member generation is intended primarily to offset part or all of the member’s own electrical requirements at the service.
- (d) Use of a bi-directional meter that can measure both the electric power used by Member-generator and any excess energy generated by a net metering facility.
- (e) Charges for energy delivered by CEC in excess of the energy produced by the member’s generator shall be billed monthly at the applicable rate schedule. Net metering members will be subject to all other terms of the applicable rate schedule including payment of monthly basic charges even if no energy is billed.

Based upon the foregoing, the Board makes and adopts the following determination in regards to the Net Metering Standard:

### **Determination:**

The Board adopts the Net Metering Standard as set forth in 16 U.S.C. §

2621(d)(11) for those consumers served by CEC who qualify under CEC's net metering policy and corresponding rates as they may be modified by CEC at its sole discretion.

## **II. Fuel Source Diversity.**

The Fuel Source Diversity Standard provides as follows:

Each electric utility shall develop a plan to minimize dependence on one fuel source and to ensure that the electric energy it sells to consumers is generated using a diverse range of fuels and technologies, including renewable technologies.

16 U.S.C. § 2621(d)(12).

### **Outline of Rationale.**

The Board notes that CEC is an electric distribution utility that purchases power under an all-requirements contract with Pacific Northwest Generating Cooperative (PNGC Power). CEC is obligated to that contract through September 30, 2011.

PNGC Power purchases the wholesale power that it transmits to CEC from the Bonneville Power Administration (BPA) and the market. BPA markets power from federally-owned hydroelectric projects, Energy Northwest's Columbia Generating Station and various energy transfers, imports and market activities. BPA's fuel sources are approximately 79 percent hydro, 10 percent nuclear and 11 percent other contracts and resources, including renewable resources.

CEC is a member of Power Resources Cooperative (PRC), which owns an undivided 10 percent interest in the Number One Boardman Project (Boardman), a 585 MW coal-fired generation plant, along with Portland General Electric (PGE) (65 percent), Idaho Power (10 percent) and GE Capital (15 percent). PGE operates and maintains the project. PRC is entitled to receive up to 10 percent of the actual project output (0 MW to 58.5 MW). CEC and 11 other electric distribution cooperatives that are PRC members each contracted with PRC for shares of the capacity available after PRC makes sales (if any) of Boardman output to third parties. CEC's share of that capacity available is 10.2 percent. PRC's entire 10 percent share of Boardman's output has been sold to the Turlock Irrigation District through December 31, 2018. CEC does not have any ability to direct or control the operations or fuel supply decisions associated with the Number One Boardman Project.

CEC recognizes that having diverse fuel sources is an important element in maintaining stable rates. CEC is committed to encouraging both PNGC Power and BPA to be diligent in their planning processes for future generation and wholesale power purchases, to reflect activities which are consistent with the implementation of the Standard.

Based upon the foregoing, the Board makes the following determination in regards to the Fuel Source Diversity Standard:

**Determination:**

The Board finds that CEC should not adopt the Fuel Sources Standard in EPAct 2005 as it has no direct control in implementing the Standard. CEC is not a generating utility and purchases power under an all-requirements obligation with PNGC Power. PNGC Power purchases the wholesale power that it transmits to CEC from the BPA and the market. However, to the extent reasonably appropriate, CEC should encourage and support the examination and use of diverse fuel sources by PNGC Power and BPA.

**III. Fossil Fuel Generation Efficiency.**

The Fossil Fuel Generation Efficiency Standard provides as follows:

Each electric utility shall develop and implement a 10-year Plan to increase the efficiency of its fossil fuel generation.

16 U.S.C. § 2621(d)(13).

**Outline of Rationale.**

The Board notes that CEC is an electric distribution cooperative that purchases power under an all-requirements contract with PNGC Power. CEC is obligated to that contract through September 30, 2011.

PNGC Power purchases power supplies from the BPA and market sources. Neither BPA nor PNGC Power has any fossil fueled generation or direct control over fossil fueled generation. Therefore, CEC is precluded under the terms and conditions of its current supply contracts in having any direct effect on the efficiency of any fossil-fueled generation through implementation of the Fossil Fuel Generation Efficiency Standard.

CEC is a member of PRC, which owns an undivided 10 percent interest in the Number One Boardman Project (Boardman), a 585 MW coal-fired generation plant, along with PGE (65 percent), Idaho Power (10 percent) and GE Capital (15 percent). PGE operates and maintains the project. PRC is entitled to receive up

to 10 percent of the actual project output (0 MW to 58.5 MW). CEC and 11 other electric distribution cooperatives that are PRC members each contracted with PRC for shares of the capacity available after PRC makes sales (if any) of Boardman output to third parties. CEC's share of that capacity available is 10.2 percent. PRC's entire 10 percent share of Boardman's output has been sold to the Turlock Irrigation District through December 31, 2018. CEC does not have any ability to direct or control the operations or fuel supply decisions associated with the Number One Boardman Project.

CEC recognizes the importance of the Fossil Fuel Generation Efficiency Standard and its economic and environmental impact. CEC and the eleven other subscribers that act collectively through PRC will continue to encourage and support Portland General Electric's efforts to promote efficiencies in the production of electric energy at Boardman.

Based upon the foregoing, the Board makes the following determination in regards to the Fossil Fuel Generation Efficiency Standard:

**Determination:**

The Board finds that CEC should not adopt the Fossil Fuel Generation Efficiency Standard in EPCRA 2005 as it has no direct control in implementing the Standard. CEC is not a generating utility and purchases its current power supply under an all- requirements contract with PGC Power. CEC's contracted share of Boardman does not provide it with any capability since PRC's share of the resource is currently sold long term and CEC does not have operating control over that resource. CEC through PRC should encourage PGE to employ efficient practices in the production of electric power at the Boardman facility.

**IV. Time Based Metering and Communication Standard.**

The Time Based Metering and Communications Standard provides as follows:

- (A) Not later than 18 months after the date of enactment of this paragraph, 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 costs 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 in subparagraph

(A) 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.

16 U.S.C. § 2621(d)(14).

### **Outline of Rationale.**

The Board notes that CEC currently does not have time-based options for its residential, commercial/industrial (C/I) or irrigation customers; however there is seasonal pricing already in place for residential and domestic irrigation service. Moreover, it appears that CEC's existing wholesale rate structure does not have enough differentiation across the months or diurnally to provide economic savings

to the customer. In addition, CEC's existing wholesale rate structure does not provide the pricing signals necessary to implement effective time-based rates, because critical generation peak time is not known in advance, but is determined after the fact. In order to implement time-based rates for all customer classes, it appears CEC would incur significant expenses, including rate design, smart metering equipment, metering and data collection/maintenance costs, software system upgrades and billing and operational procedure changes. Implementation at this time would require a significant increase in costs and resulting customer rates, including non-participating customers, in order to recover costs within a reasonable time period. The increase in customer rates would be necessitated because of CEC's lack of differentiation in the wholesale rate structure, primary residential customer demographic mix, and the difficulty in changing customer behavior to respond to notification of higher time-based rates.<sup>1</sup> Given the expenses of implementing time-based metering, the lack of differentiation in the wholesale rate structure and low projected interest among CEC members, such implementation would not likely be cost effective.

Based upon the foregoing, the Board makes the following determination in regards to the Time Based Metering and Communication Standard:

**Determination:**

The Board finds that CEC should not adopt the Time Based Metering and Communications Standard at this time because CEC's wholesale rate contracts do not vary during different time periods in a manner that would enable effective time-based pricing as contemplated by PURPA. Moreover, the Board finds that presently, implementation of time-based rates would not be cost effective because of CEC's primary residential customer demographic mix, the difficulty in changing customer behavior to respond to higher time-based rates, and the significant expense of implementing a program. Further, it is not apparent that there are a substantial number of members that would participate in such a program. However, the Board directs that CEC reserves the right to evaluate the feasibility and cost-effectiveness in conjunction with its next cost of service study and rate design project.

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<sup>1</sup> The Staff notes that it is often impractical or difficult for residential customers to adjust demand because residential customers' consumption often cannot be shifted to off-peak time (e.g., refrigerators and freezers). Moreover, without significant financial incentives, residential customers often will simply not bother to make significant lifestyle changes in order to benefit from time-based rates.

## **V. Interconnection Standard.**

The Interconnection Standard provides as follows:

Each electric utility shall make available, upon request, interconnection service to any electric consumer that the electric utility serves. For purposes of this paragraph, the term ‘interconnection service’ means service to an electric consumer under which an on-site generating facility on the consumer’s premises shall be connected to the local distribution facilities. Interconnection services shall be offered based upon the standards developed by the Institute of Electrical and Electronics Engineers: IEEE Standard 1547 for Interconnecting Distributed Resources with Electric Power Systems, as they may be amended from time to time. In addition, agreements and procedures shall be established whereby the services are offered shall promote current best practices of interconnection for distributed generation, including but not limited to practices stipulated in model codes adopted by association of state regulatory agencies. All such agreements and procedures shall be just and reasonable, and not unduly discriminatory or preferential.

16 U.S.C. § 2621(d)(15).

### **Outline of Rationale.**

The Board notes that CEC currently has in place standards for interconnection of cogeneration and small power production facilities. CEC has an interconnection policy (Schedule N) relating to its current net metering program pursuant to ORS 757.262 as amended by HB 3219. The existing policy cites the relevant codes and regulations for interconnection of net metering generating facilities rated 25 kW or less.

The primary focus of CEC’s interconnection guidelines is to protect all parties connected to the grid. This includes utility workers conducting routine maintenance, consumers’ homes in the event of a power surge, and the grid as a whole to prevent overloading. The guideline uses IEEE Standard for Interconnecting Distributed Resources with Electric Power Systems, IEEE 1547-2003 as a model and incorporates best practices, guidelines of state and federal agencies as well as industry standards. In addition, ORS 758.505 requires electric utilities to make a good faith effort to transmit energy from a qualifying facility.

Based upon the foregoing, the Board makes and adopts the following determination in regards to the Interconnection Standard:

**Determination:**

The Board adopts the Interconnection Standard as set forth in 16 U.S.C. § 2621(d)(15) to any of CEC's electric members and modeled on the IEEE Standard 1547-2003 and ORS 758.505 as adopted, guidelines of state and federal agencies and other industry standards and best practices.

The Board, having considered the written testimony and recommendation of consultants and staff, the purposes of PURPA, and both Federal and State law, adopted the determinations in this document by unanimous vote of the Board on the July 19, 2007.

Central Electric Cooperative, Inc.

A handwritten signature in cursive script that reads "David C. Clemens". The signature is written in black ink and is positioned above a horizontal line.

David C. Clemens, Chairman