

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking on the
Commission's Own Motion to Conduct a
Comprehensive Examination of Investor Owned
Electric Utilities' Residential Rate Structures,
the Transition to Time Varying and Dynamic
Rates, and Other Statutory Obligations

Rulemaking 12-06-013
(Filed June 21, 2012)

**COMMENTS OF
THE CALIFORNIA LARGE ENERGY CONSUMERS ASSOCIATION**

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The California Large Energy Consumers Association (CLECA)¹ submits these comments in response to the Administrative Law Judges' January 31, 2013 Ruling on Workshops.

I. INTRODUCTION

The ALJs requested comments on a set of proposed definitions of terms relevant to the residential rate design issues that are the subject of this proceeding. The definitions were attached to the ruling. CLECA provides its edits to some of the definitions in two forms, with additional comments herein. The blackline or clean version is included as Attachment A. The redline version, included as Attachment B, shows the additions in *red italic bold font* with deletions ~~stricken through~~. Those definitions for which no changes are needed are not included. The final definition list should be alphabetized for ease of use.

¹ The California Large Energy Consumers Association is an *ad hoc* organization of large, high load factor industrial electric customers of Southern California Edison Company and Pacific Gas and Electric Company. CLECA has been an active participant in Commission regulatory proceedings since 1987.

II. COMMENTS ON AND RECOMMENDED REVISIONS TO DEFINITIONS

A. List of Definitions Addressed

CLECA comments on or suggests edits to the following definitions:

- cost causation,
- marginal cost,
- embedded cost,
- rate cost components,
- distribution costs,
- public purpose program charge,
- DWR charge,
- competition transition charge (CTC),
- non-bypassable charge,
- peak demand,
- public goods charge (PGC),
- fixed credit,
- flat rate,
- demand charge,
- dynamic rate,
- critical peak pricing (CPP),
- real time pricing (RTP),
- peak-time rebate (PTR),
- equal percent marginal cost (EPMC), and
- conservation incentive adjustment (CIA).

Several of CLECA's proposed edits to the above definitions are self-explanatory and should not require any additional discussion upon review of the proposed edits themselves in the Attachments. Accordingly, these definitions are only addressed in the Attachments. In addition, CLECA recommends inclusion in the

defined terms “marginal cost revenues” and “elasticity of substitution”, which is relevant for dynamic pricing.

B. Comments

The two new terms proposed by CLECA are defined below; CLECA also offers additional commentary for certain definitions and CLECA’s proposed edits.

1. Marginal Cost Revenues [proposed new definition]

CLECA recommends the following definition for marginal cost revenues be included in the list of standard definitions. The concept of marginal cost revenues is intertwined with the concept of marginal cost and used generally in Phase 2s of General Rate Cases. CLECA proposes the following definition:

“Marginal Cost Revenues: These are the revenues that the utility would collect if all of its customers were charged rates that equal marginal costs.”

2. Elasticity of Substitution [proposed new definition]

CLECA recommends including a definition for elasticity of substitution.

Generally, it explains how a consumer’s relative choices over consumption levels change as their relative prices change and is relevant for dynamic pricing.

“Elasticity of Substitution: Elasticity of substitution is the elasticity of the ratio of two inputs to a production function with respect to the ratio of their marginal products. This concept explains how a consumer’s relative choices over consumption levels change as their relative prices change and is relevant for dynamic pricing.”

3. Marginal Cost

The ruling notes the difference between long run and short run marginal costs.

In CLECA’s experience, rate design generally involves the use of intermediate to long run marginal costs. Accordingly, CLECA recommends including this in the

definition.

Marginal Cost: The cost of providing one additional unit of a good or service. In the electric utility context there are several types of marginal costs – energy, generation capacity, transmission capacity, and distribution capacity. The Commission uses marginal costs in allocating the utility’s revenue requirement to customer classes, and as reference points in rate design. *In general, rate design involves the use of intermediate to long run marginal costs.*

4. Public Purpose Program Charge

As the PPP does not include costs of Demand Response, SGIP or CSI,² the definition should be revised to read:

Public Purpose Program Charge: *Includes costs associated with Electric Program Investment Charge, CARE and energy efficiency. ~~with state-mandated public purpose programs, including energy efficiency, demand response, solar and distributed generation, low-income and medical needs.~~*

5. Embedded Cost

This definition should reflect the fact that the embedded cost method can be used to allocate future costs as well as historic and already incurred costs. It should also recognize that the costs are functionalized.

Embedded Cost: Method of allocating *functionalized costs; this method can be used to allocate* historic and already incurred costs *or future costs* starting with the utility revenue requirement and assigning these costs based on cost-causation principles (e.g., meter costs for residential class assigned to residential class).

6. Dynamic Rate

This definition should reflect the fact that “day ahead” is not real-time.

² See PG&E AL 4096-E-A, at 15 (“total PPP rates include: procurement EE; the amortization of the PEERAM balancing account; the CARE rate which funds the CARE distribution discount; the CAREA balancing account under and over-collections, and CARE administration expenses. Pursuant to the 2011 GRC Phase 2 Settlement, PPP rates are developed as the sum of three pieces: (i) CARE discount, (ii) Electric Savings Assistance Program (ESA) and Procurement Energy Efficiency (PEE), and (iii) Public Goods Charge Energy Efficiency and Electric Program Investment Charge (EPIC)”)

Dynamic Rate: A rate in which prices can be adjusted on short notice (typically an hour or day ahead) as a function of system conditions. A dynamic rate cannot be fully predetermined at the time the tariff goes into effect; either the price or the timing is unknown until *closer* to real-time system conditions warrant a price adjustment *to the rate*. Examples include: real-time pricing (RTP), critical peak pricing (CPP).

III. CONCLUSION

CLECA requests that its comments be considered and its recommended revisions to the definitions as well as its proposed new definitions be accepted in the final list of definitions.

Respectfully submitted,

A handwritten signature in cursive script that reads "Nora Sheriff".

Nora Sheriff

Counsel to the California Large Energy
Consumers Association

February 14, 2013

ATTACHMENT A

Defined Terms (CLECA Blackline Version)

Cost-Causation: Principle used in determining marginal costs and for allocating costs (e.g., generation, transmission, distribution) and designing rates to assign costs to the customers who cause the costs to be incurred.

Marginal Cost: The cost of providing one additional unit of a good or service. In the electric utility context there are several types of marginal costs – energy, generation capacity, transmission capacity, and distribution capacity. The Commission uses marginal costs in allocating the utility’s revenue requirement to customer classes, and as reference points in rate design. In general, rate design involves the use of intermediate to long run marginal costs.

Marginal Cost Revenues: These are the revenues that the utility would collect if all of its customers were charged rates that equal marginal costs.

Embedded Cost: Method of allocating functionalized costs; this method can be used to allocate historic and already incurred costs or future costs starting with the utility revenue requirement and assigning these costs based on cost-causation principles (e.g., meter costs for residential class assigned to residential class).

Rate Cost Components: In California, rates are functionally unbundled into generation (both capacity and energy), distribution (including customer access), and transmission components based on key cost-drivers for each component. Rates also include Public Purpose Program (PPP) charges and several additional types of charges.

Distribution Costs: Costs associated with distributing power to customers (e.g., substations, poles and wires, meters, customer billing and information). Typically defined in terms of distribution capacity costs (\$/kW) and customer costs (\$ per customer).

Public Purpose Program Charge: Includes costs associated with Electric Program Investment Charge, CARE and energy efficiency.

DWR Bond Charge: Charge payable to the Department of Water Resources (DWR) for bonds issued by DWR to cover costs of power purchased during the energy crisis.

Competition Transition Charge (CTC): The charge for the cost of electricity that is in excess of the market price, as determined by the Commission, pursuant to Sec. 367 of the PU Code.

Nonbypassable Charge: A charge that all customers must pay whether they are bundled or unbundled customers of the utility.

Peak Demand: The maximum amount of energy delivered by the utility system during a specific time period (e.g., a year, season, month, or day) within a specific system area (e.g. customer, substation, service territory, or balancing authority area), also referred to as peak load. Peak demand has historically determined the required system capacity.

Public Goods Charge (PGC): A nonbypassable surcharge previously imposed on all retail sales to fund public goods research, development and demonstration, energy efficiency activities, and low income assistance programs. This charge no longer exists per state law.

Elasticity of Substitution: Elasticity of substitution is the elasticity of the ratio of two inputs to a production function with respect to the ratio of their marginal products. This concept explains how a consumer's relative choices over consumption levels change as their relative prices change and is relevant for dynamic pricing.

Fixed Credit: An alternative to volumetric rate discounts is a fixed credit. In lieu of rate discounts, an eligible low-income or medical customer would receive a fixed payment or fixed credit to subsidize its electricity usage.

Flat Rate: A rate charged volumetrically in cents per kWh that would be applicable for all usage for a given rate schedule, perhaps excluding a fixed charge.

Demand Charge: A charge calculated on a per-kilowatt (kW) basis for a customer's monthly maximum demand during a 15-minute period (e.g., \$5/kW). Such charges may also be based on the maximum 15-minute demand during a time-of-use period. Demand charges reflect the cost of transmission and distribution facilities built to meet customers' maximum power demands and may also reflect the cost of generation capacity to meet such needs. Demand charges are applied in addition to volumetric energy charges (per kWh), but the volumetric energy charges are lower than those on rate schedules without demand charges since they must recover these costs in a volumetric basis.

Dynamic Rate: A rate in which prices can be adjusted on short notice (typically an hour or day ahead) as a function of system conditions. A dynamic rate cannot be fully predetermined at the time the tariff goes into effect; either the price or the timing is unknown until closer to real-time system conditions warrant a price adjustment to the rate. Examples include: real-time pricing (RTP), critical peak pricing (CPP).

Critical Peak Pricing (CPP): A dynamic rate that allows a short-term price increase to a predetermined level (or levels) to reflect a set of forecast real-time system conditions that define a CPP event. In a fixed-period CPP, the time and duration of the price increase are predetermined, but the days in which it is changed are not predetermined. In a variable-period CPP, the time, duration and

day of the price increase are not predetermined. The California investor-owned utility CPP programs provide participating customers an incentive to shift usage to non-event hours, and charge higher rates during event hours on a CPP event day. CPP event days are called 24 hours in advance, with customer notification provided through several communication channels.

Real-Time Pricing (RTP) Rate: A dynamic rate that allows prices to be adjusted frequently, typically on an hourly basis, to reflect forecast real-time system conditions.

Peak-Time Rebate (PTR): A program that offers a bill credit for customers who reduce their energy use when requested by the utility during a specific event time. Typically, event hours occur during peak demand periods and events are called with day-ahead notice in response to system conditions. PTR offers a payment per kWh reduced during event periods, but does not assess any penalties for households that do not achieve measurable reduction of electricity usage. To encourage customers to embrace automated enabling demand response technologies, PTR often pays a premium incentive per kWh reduced for customers enrolled in an automatic enabling technology program. Bill credits for each unit of electricity reduced are calculated based on event day reduction in electric usage below an established customer-specific reference level (CRL) or baseline for that day based on usage during a prior period.

Equal Percent Marginal Cost (EPMC): EPMC is a marginal cost-based revenue allocation method whereby all classes and rate schedules receive revenue requirement allocations by function that are the same percentage above or below their marginal cost revenues by function. EPMC by function is generally considered in developing an allocation of revenues in a Phase 2 general rate case proceeding.

Conservation Incentive Adjustment (CIA): A residential rate component that is used to apply the tiering structure outside of generation and distribution-related volumetric charges. PG&E's new rate structure converts generation and distribution into flat rates and adds a new set of tiered rates called the Conservation Incentive Adjustment (CIA). The purpose of the CIA rates is to allow the generation and distribution rate components to be flat (prior to July 1, 2012 both were tiered), while leaving the total rates tiered at their same levels.

ATTACHMENT B

Defined Terms (CLECA Redline Version-additions in *bold, red italics*; deletions *italicized and strickenthrough*)

Cost-Causation: *Principle used in determining* marginal costs and for ~~Method~~ of allocating costs (e.g., generation, transmission, distribution) and designing rates to assign costs to the customers who cause the costs to be incurred.

Marginal Cost: The cost of providing one additional unit of a good or service. In the electric utility context there are several types of marginal costs – energy, generation capacity, transmission capacity, and distribution capacity. The Commission uses marginal costs in allocating the utility’s revenue requirement to customer classes, and as reference points in rate design. *In general, rate design involves the use of intermediate to long run marginal costs.*

Marginal Cost Revenues: *These are the revenues that the utility would collect if all of its customers were charged rates that equal marginal costs.*

Embedded Cost: Method of allocating *functionalized costs; this method can be used to allocate* historic and already incurred costs *or future costs* starting with the utility revenue requirement and assigning these costs based on cost-causation principles (e.g., meter costs for residential class assigned to residential class).

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Flat Rate: ~~An average~~ rate charged volumetrically in cents per kWh that would be applicable for all usage for a given customer class *rate schedule, perhaps excluding a fixed charge.*

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system conditions *that define a CPP event*. In a fixed-period CPP, the time and duration of the price increase are predetermined, but the days in which it is changed are not predetermined. In a variable-period CPP, the time, duration and day of the price increase are not predetermined. The California investor-owned utility CPP programs provide participating customers an incentive to shift usage to non-~~event peak~~ hours, and charge higher rates during ~~event peak~~ hours on a CPP event day. CPP event days are called 24 hours in advance, with customer notification provided through several communication channels.

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Conservation Incentive Adjustment (CIA): *A residential rate component that is used to apply the tiering structure outside of generation and distribution-related volumetric charges.* PG&E's new rate structure converts generation and distribution into flat rates and adds a new set of tiered rates called the Conservation Incentive Adjustment (CIA). The purpose of the CIA rates is to allow the generation and distribution rate components to be flat (prior to July 1, 2012 both were tiered), while leaving the total rates tiered at their same levels.