

**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.

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**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**

**1. Summary**

In 2009, the Legislature enacted Senate Bill 695 which allows the Commission to transition residential customers onto time variant rates as early as 2013. The Commission hereby institutes this rulemaking on its own motion to examine current residential electric rate design, including the tier structure in effect for residential customers, the state of time variant and dynamic pricing, potential pathways from tiers to time variant and dynamic pricing, and preferable residential rate design to be implemented when statutory restrictions are lifted.

The Commission, in opening this Rulemaking, intends to ensure for the foreseeable future that rates are both equitable and affordable while meeting the Commission's rate and policy objectives for the residential sector. This is especially true in terms of ensuring that low income customers have access to

enough electricity to meet their basic needs at an affordable cost. As set forth in Decision 08-07-045, residential rate design focuses on five guiding principles:

1. Rates should be based on marginal cost;
2. Rates should be based on cost-causation principles;
3. Rates should encourage conservation and reduce peak demand;
4. Rates should provide stability, simplicity and customer choice; and
5. Rates should encourage economically efficient decision-making.

The Commission seeks to explore if the current rate structure is meeting the stated objectives or whether alternative rate designs other than an inclining block rate can better achieve all of these objectives. Moreover, the Commission opens this rulemaking to examine whether the current tiered rate structure continues to support the underlying statewide-energy goals, facilitates the development of technologies that enable customers to better manage their usage and bills, and whether the rates result in inequitable treatment across customers and customer classes. The Commission seeks involvement in this proceeding from a variety of participants, including electric utilities, consumer advocates including advocates for low-income and disabled persons, environmental advocates, third party vendors and service providers, the California Independent System Operator, the California Energy Commission and other parties impacted by these policies.

## **2. The History of Residential Rate Design in California**

Several key statutes have guided the Commission in setting the current rate design policy for electricity customers.

## **2.1. The Warren-Miller Energy Lifeline Act of 1976**

The Warren-Miller Energy Lifeline Act of 1976 required the Commission to designate a baseline quantity of gas and electricity necessary to supply a significant portion of the reasonable energy needs of the average residential customer at rates below average cost.<sup>1</sup> In setting those quantities, the Commission was directed to take into account the difference in energy needs between all-electric residences and those with both gas and electric service and to take into account differences in energy use by climatic zone and season. Initial baseline quantities were set at 50 to 60 percent of the average residential customer's consumption in similar climatic zones. Additionally, the Commission was directed to provide higher energy allocations for residential customers with special medical needs (medical baseline) who are dependent upon life-support equipment. The goals of the Warren-Miller Act were two-fold: ensuring an equitable rate and encouraging electricity conservation. The result was a two or three-tier rate structure, with varying degrees of tier differentials that lasted until 2001.

## **2.2. Assembly Bill 1890 and Electricity Market Restructuring (1996)**

In 1996, the Legislature passed Assembly Bill (AB) 1890 which governed the process of California's establishment of competitive markets, electricity restructuring and the introduction of wholesale electricity markets in California. AB 1890 froze retail rates for each investor-owned utility's (IOU's) customers until the electric utility recovered its stranded costs associated with above

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<sup>1</sup> See P.U. Code 739, *et seq.*

market cost obligations incurred by the utility in prior years.<sup>2</sup> The legislation also allowed customers to take service from a third party Electric Service Provider, but required those customers to continue to pay their share of stranded costs. San Diego Gas & Electric (SDG&E) was the first utility to exit the rate freeze, which allowed SDG&E to pass through their electricity costs from the wholesale market. As the wholesale market prices spiked upwards during the electricity crisis, SDG&E's customers were the first to suffer high bills due to this pass-through. The Legislature subsequently re-imposed a rate cap for SDG&E's customers and AB 1890 was later suspended, in part, by AB 1X (AB1X) and Commission actions to stem the electricity crisis.

### **2.3. Electricity Crisis and Assembly Bill 1X**

After prices for electricity skyrocketed during 2000 and 2001, the Legislature enacted AB 1X. In response to the failing creditworthiness of Pacific Gas and Electric (PG&E) and Southern California Edison Company (SCE), AB 1X enabled the Department of Water Resources (DWR) to enter into long-term electricity contracts with generators to ensure that electrical service was maintained for PG&E and SCE customers. In addition, AB 1X directed that the Commission could not increase residential electricity rates on usage of up to 130 percent of baseline until DWR "has recovered the costs of power it has procured for" electricity customers.<sup>3</sup> In response to this directive, the Commission adopted a five-tiered, increasing block rate structure for residential

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<sup>2</sup> Decision (D.) 95-12-063 (as modified by D.96-01-009) required the IOUs to divest at least half of their fossil generation facilities. The IOUs retained their hydro and nuclear generation facilities.

<sup>3</sup> AB 1X Sec. 80110. AB 1X also suspended Direct Access.

customers, with rates for Tiers 1 and 2 capped at 2001 levels and three tiers for usage above 130 percent of baseline that were uncapped.

#### **2.4. Senate Bill 695**

In 2009, the Legislature passed Senate Bill (SB) 695 which set the terms for future adjustments to the baseline calculation, the ability of the Commission to increase rates for Tiers 1 and 2, and the timeline for the ability of the Commission to order IOUs to transition residential customers onto time-variant rate designs.<sup>4,5</sup> SB 695 allowed the Commission to increase rates for Tiers 1 and 2 “by the annual percentage change in the Consumer Price Index from the prior year plus 1 percent, but not less than 3 percent and not more than 5 percent per year.”<sup>6</sup> In addition, SB 695 set a schedule for when the Commission can default residential customers onto time-variant rates. Specifically, residential customers may, “in a manner consistent with the other provisions of this part,”<sup>7</sup> be transitioned to:

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<sup>4</sup> SB 695 also revised the manner in which rates for the California Alternate Rates for Energy (CARE) program are determined, and allowed a small percentage of industrial and commercial customers to take service from an Electricity Service Provider.

<sup>5</sup> SB 695, codified at Pub. Util. Code § 745(a)(2), defines a time-variant rate as including “time-of-use rates, critical peak pricing, and real-time pricing, but does not include programs that provide customers with discounts from standard tariff rates as an incentive to reduce consumption at certain times, including peak time rebates.” Generally, time-variant rates refer to Time of Use (TOU) rates, due to their predictability of price and timing; whereas rates, such as Critical Peak Pricing (CPP) and Real Time Pricing (RTP), that may change on short notice are referred to as “dynamic” rates.

<sup>6</sup> Pub. Util. Code § 739.9.

<sup>7</sup> Pub. Util. Code § 745(d).

- default time-variant pricing, with 1 year of bill protection, beginning in 2013;
- default time-variant pricing without bill protection, beginning in 2014; and
- Default real-time pricing in 2020.<sup>8</sup>

Finally, SB 695 preserves the ability of a customer to opt-out of a default time-variant rate upon expiration of their bill protection period.

## **2.5. Commission Policies Impacting Rate Design**

In addition to the policies and actions noted above on rate design, for the past decade the Commission and the State have developed policies with a focus towards two goals: 1) enable conservation and efficiency on the customer side and 2) increase the reliance on non-fossil based generation to reduce overall Greenhouse Gas Emissions.

The Commission has long supported utility investment to support energy efficiency and demand response programs to help reduce overall consumption, reduce or shift peak consumption, and help customers reduce total bills. Since 2001, the Commission, both on its own motion and at the direction of the Legislature, reinstated a series of policies designed to promote energy efficiency and conservation that had been allowed to lapse under AB 1890. In the early 2000s, the Commission authorized utilities to greatly expand development and implementation of programs to encourage energy efficiency. In 2002, the Commission began authorizing utilities to develop demand response programs to curtail peak consumption. Also in 2002, the Commission began to

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<sup>8</sup> The bill protection schedule is based on the customer having at least one year of advanced meter data.

develop policies that resulted in the deployment of Advanced Metering Infrastructure (AMI) throughout the service territories of PG&E, SCE and SDG&E. Fundamentally, these programs were predicated on reducing customer consumption in total and during peak hours. More recently, with the installation of AMI and availability of hourly usage data, the Commission directed the utilities to provide customers with greater access to their usage information, and allow customers to share their information with third parties who may offer services to reduce their overall bills.<sup>9</sup>

In addition to these customer demand-side policies, the Legislature passed SB 1078 and SB 107, which set a requirement for the utilities to procure 20 percent of their generation from renewable resources by 2010. The Legislature later expanded this requirement to 33 percent by 2020. These requirements resulted in a move away from traditional sources of electricity generation to more renewable sources, such as wind and solar. Additionally, the Commission and the Legislature have supported the increased usage of distributed solar by end-use customers through the California Solar Initiative and the development of Net Energy Metering (NEM) policies.

The state has made it a policy for utilities to have 33 percent of their generation mix come from renewable sources of electricity by 2020. Indeed, as part of this move to 33 percent, Governor Brown earlier this year called for 12,000 megawatts (MW) of distributed generation to be developed by 2020. Additionally, AB 32 provided that California must reduce greenhouse gas emissions to 1990 levels by 2020. All of these environmental goals have an

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<sup>9</sup> See D.11-07-056 (issued July 28, 2011).

impact on utility operations, utility costs, how the utility recovers those costs, and, ultimately, the rate itself. As the state moves to a cleaner resource mix, rates must be established that allow the utility to recover the costs related to these programs in an equitable manner.

Underpinning this increased investment in distributed generation, utilities are also beginning to invest in and install technologies to modernize the distribution grid. Pursuant to SB 17, the Commission was directed to set requirements for utility Smart Grid Deployment Plans by July 1, 2010.<sup>10</sup> These “Smart Grid” investments will support the growth in distributed generation technologies, increased penetration of electric vehicles, and growth in third party offerings for demand response, energy efficiency and other energy management services by providing the utility with greater visibility into the distribution grid in real-time and near-real-time. These technologies will allow the utility to both better plan for future customer needs and what impacts are occurring on the distribution grid from customer investments in advanced technologies.

## **2.6. Existing Commission Positions on Residential Rate Design**

For more than two decades, the Commission’s two low income assistance programs, the Energy Savings Assistance Program (formerly known as Low Income Energy Efficiency or LIEE) and the CARE Program, provided and continue to provide significant electricity bill relief that go toward reducing the financial hardships of low income families across California. Additionally, as affirmed in the Public Utilities Code (Pub. Util. Code § 382(b)), this Commission is fully committed to ensuring that low-income customers are not jeopardized or

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<sup>10</sup> D.10-06-047.

overburdened by monthly energy expenditures. The examination as a result of this rulemaking will not change course from Pub. Util. Code § 382(b), but rather intends to ensure for the foreseeable future that rates are both equitable and affordable while meeting the Commission's rates objectives for the residential sector and more specifically for the low-income customer base.

In addition to our commitment to protect low-income customers, this Commission, beginning with the Energy Action Plan (EAP) in 2003,<sup>11</sup> has increased its effort to transition customers onto time-variant and dynamic rates in an effort to reduce peak demand. The Energy Action Plan II (EAP II), adopted in October 2005, went further, noting that “[w]ith the implementation of well-designed dynamic pricing tariffs and demand response programs for all customer classes, California can lower consumer costs and increase electricity system reliability” and called for making “dynamic pricing tariffs available for all customers.”<sup>12</sup> Additionally, the EAP II identified the need to “[e]ducate Californians about the time sensitivity of energy use and the ways to take advantage of dynamic pricing tariffs and other demand response programs,” as well as to “create more transparency in consumer electricity rates, adopt rates based on clear cost-causation principles, and identify steps to reduce electricity costs.”<sup>13</sup> Finally, in 2008, the Commission approved an update to the EAP II, which noted “most consumers are currently on tariffs that bear no resemblance

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<sup>11</sup> See Energy Action Plan, adopted May 8, 2003. The Energy Action Plan was approved by the Commission, the California Energy Commission and the Consumer Power and Conservation Financing Authority.

<sup>12</sup> EAP II at 6-7.

<sup>13</sup> EAP II at 7, 12. The EAP II was approved by the Commission and the California Energy Commission.

to the actual cost of providing their electricity” and that the existing tiered rate structure has “no time dimension to their prices that would help encourage reducing usage at peak times when electricity is the most expensive.”<sup>14</sup>

In response to these policy directions, the Commission issued D.08-07-045 in 2008.<sup>15</sup> D.08-07-045 adopted a Rate Design Guidance framework, as well as a timetable for offering time-variant and dynamic pricing rates to all customer classes in PG&E’s service territory. The end result of this decision was the implementation of default CPP rates for PG&E’s large and medium commercial and industrial customers, as well as a timetable for moving to RTP rates. The transition to time-variant rates for small commercial and residential customers was delayed pending additional investigation and, for residential customers, then-existing AB 1X statutory provisions. Importantly, D.08-07-045 adopted a set of guiding principles for the Commission and utilities to utilize in designing dynamic rates.<sup>16</sup> These principles are:<sup>17</sup>

1. Rates should be based on marginal cost;
2. Rates should be based on cost-causation principles;
3. Rates should encourage conservation and reduce peak demand;
4. Rates should provide stability, simplicity and customer choice; and

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<sup>14</sup> Energy Action Plan, 2008 Update at 11. The 2008 Update also noted that existing procurement and resource adequacy policies may be keeping wholesale peak prices artificially low and limiting price volatility which would encourage reducing peak consumption.

<sup>15</sup> Application of PG&E Company To Revise Its Electric Marginal Costs, Revenue Allocation, and Rate Design, D.08-07-045 (issued July 31, 2008).

<sup>16</sup> See D.08-07-045, Attachment A.

<sup>17</sup> D.08-07-045 at 41 and 42.

5. Rates should encourage economically efficient decision-making.

Even though the decision did not explicitly state that equity is a guiding principle, the decision did note “that rates based on marginal cost will simultaneously achieve economic efficiency and equity by ensuring that customers’ rates are commensurate with the costs they cause. Marginal cost-based rates should effectively eliminate cross subsidies between customers since a customer who is less expensive to serve would pay less, and vice-versa for a customer who is expensive to serve.”<sup>18</sup>

Since the adoption of D.08-07-045, all three electric utilities in California have transitioned large and medium commercial and industrial customers onto default CPP rates, with an opt-out to TOU available. The move to dynamic or time-variant rates for small commercial and residential customers, however, has taken a much slower path. The Commission approved a Peak Time Rebate (PTR) program for SCE and SDG&E as consistent with AB 1X and SB 695 limitations, since PTR does not raise electricity costs, but, rather, provides customers with a rebate for reducing load during “peak events.” However, the Commission has not yet approved PTR as a default rate for PG&E. In addition, all three IOUs have voluntary TOU and CPP residential rates. The IOU CPP programs provide participating customers with an incentive to shift usage to non-peak hours, and charge higher rates during peak hours on a CPP event day. CPP event days are called 24 hours in advance, with customer notification provided through several communication channels. Customers can save money if they reduce consumption during peak hours on event days or shift consumption to lower

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<sup>18</sup> D.08-07-045 at 46.

priced hours of the day. Customers enrolled in CPP could also see their bills increase if they do not reduce consumption during the higher priced CPP hours.

### **3. Current Rate Design**

#### **3.1. Does Current Rate Design Support State Policies?**

In meeting its requirement to ensure that electricity rates remain just and reasonable, and to consider the options provided for in SB 695, the Commission is opening this rulemaking to examine whether the current residential rate structure continues to support the overall goals of the state's electricity policies, whether and how rates should be modified to better support existing and future customer needs, whether the rates are equitable, and whether changes to the current statutes are needed to implement preferable rate structures.

California's rate design is complex, and the move to time-variant and dynamic rates brings additional complexity. For example, as a baseline is paired with a time-variant rate, a separate rate must be determined for each time period of the day and for each tier, which increases the number of rates that must be calculated by the utility. This also impacts any advanced energy management technologies that must be able to calculate and respond to that rate. Additionally, this increases the difficulty in educating customers about potential bill impacts, and may limit the effectiveness of these rates in encouraging customers to respond to them. Fundamentally, as explained below, the changing nature of the grid, the scope and breadth of state energy goals, and the increasing participation of consumers in electricity markets calls for a review of existing rate design policies to ensure the alignment between rate design and the complex, and sometimes competing, state policy goals.

For example, tiered rates based on monthly consumption provide customers with little incentive to shift usage from peak hours, when electricity generation is typically more expensive, less efficient to produce and more polluting, to off-peak hours when generation is typically less expensive, more efficient and cleaner. Another example is the California Air Resources Board's adoption of a cap and trade program that would impose a price on greenhouse gas emissions. The Commission is currently considering, in Rulemaking (R.) 11-03-012, whether to reflect that cost in electricity rates. Should the Commission decide to pass this cost onto customers in rates, it would be limited in its ability to do so for rates in Tiers 1 and 2, due to current limits on Tiers 1 and 2 rate increases.

### **3.2. Equitable Rate Treatment**

Developing equitable rates based on the principle of cost causation is one of the underlying goals of the Commission's rate making process.<sup>19</sup> Cost causation means that costs should be borne by those customers who cause the utility to incur the expense. However, current residential rate design averages many costs across the customer class, potentially resulting in cross-subsidies. By definition, cross-subsidies result in cost-shifting between customers and customer classes. Inequitable rates and cross-subsidies are of particular concern for residential customers in Tiers 3 and 4 of the current rate structure, since most increases in utility costs can only be recovered by increasing rates in those tiers.

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<sup>19</sup> See 26 CPUC 2d 392, D.87-12-066 (1987). The Commission noted that avoiding cross-subsidies and supporting cost-causation principles "achieves equity in rates by relating the costs imposed on the utility system to the customer responsible for those costs."

There are arguably many subsidies embedded in current residential rates. Some are clear and intended to achieve explicit goals of the Legislature and Commission, such as the discounts included in CARE and medical baseline rates. Others are less direct, such as customers with flatter load profiles paying the same bill as customers with peakier load profiles but similar levels of total consumption. Under the existing tier structure, customers can avoid paying a larger share of system costs by reducing their usage through conservation, solar generation or other means.

Other cross-subsidies result from the differentiation of baseline quantities by climate zone. For example, in SCE's service territory, 66 percent of residential sales are in Tiers 1 and 2.<sup>20</sup> As a result, the remaining revenue requirement is borne by the remaining 34 percent of their sales. However, currently 51 percent of their non-CARE, non-coastal customers end up in Tier 4 or above, compared to 37 percent of their non-CARE, coastal customers.<sup>21</sup> The end-result is that non-coastal customers are responsible for a greater portion of the residential revenue requirement not recovered from Tiers 1 and 2 than coastal customers, although adjustments to the baseline quantities for the various climate zones could alter this relationship. The utilities have recently argued that these customers are also more likely to invest in solar as a means to offset their higher electricity bills. These customers are then allowed to avoid paying transmission, distribution and generation costs, putting increased cost pressure on all

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<sup>20</sup> SCE data response dated May 9, 2010.

<sup>21</sup> This breakdown for CARE customers is even more dramatic as 54 percent of non-coastal CARE customers end up in Tier 4 and above, whereas 32 percent of coastal CARE customers end up in Tier 4 and above.

non-solar customers whose usage extends into Tiers 3 and 4. Without being able to exceed the statutory limits on the rates in Tiers 1 and 2, a greater percentage of a utility's revenue requirement must be borne by customers in Tiers 3 and 4, especially those that do not participate in NEM. This results in a subsidy as customers in Tiers 3 and 4 pay a higher average price for the same kilowatt-hour of electricity than Tiers 1 and 2, regardless of when or where that kWh is consumed.

At the same time, lowering Tier 3 and Tier 4 rates will lengthen the payback period for these customers' investments in energy efficiency and distributed generation, potentially reducing the demand for those programs or requiring higher incentives (and revenue requirements) to achieve the same level of penetration.

The use of baselines and climate zones may also lead to unintended consequences. Numerous variables, including climate, income, occupancy patterns, number of occupants, square footage per occupant, building shell efficiency, equipment efficiency, and building type, influence electricity consumption. Because the correlation between income and consumption, even within climate zones, is not perfect, there are likely cases of middle- and upper-income households with low consumption paying bills that do not cover the full cost to serve them. Similarly, lower-income households, particularly households that do not qualify for CARE, may consume relatively large quantities of electricity and consequently pay bills that are greater than the cost to serve.

The use of climate zones, while generally intended to avoid undue cross-subsidies among regions, may also lead to inequities at the customer level. For example, the summer baseline quantity for a 30-day billing period in PG&E's

baseline territory T is 225 kWh. The summer baseline quantity for baseline territory X, which is adjacent to territory T, is 329 kWh, or 46 percent greater than the baseline quantity in territory T. Thus, a lower-income customer residing on the territory T side of a street that divides the two territories and who does not qualify for CARE, will have a much larger bill than a middle- or upper-income customer on the other side of the street who consumes the same amount of electricity.

Furthermore, with state and Commission policies to encourage the adoption of conservation, distributed generation, electric vehicles, smart grid and demand response technologies it may become more difficult for the utility to recover the necessary revenue requirement even from Tiers 3 and 4 customers, especially if customers install distributed generation and avoid distribution costs, or invest in other advanced technologies provided by a third party. For example, current Commission policy on electric vehicles (EV) socializes the cost of any distribution network upgrades triggered by the adoption of EV. Therefore, added costs to integrate EV adoption are spread across the customer base. This increased cost may be avoided by customers with consumption limited to Tiers 1 and 2, including NEM customers whose on-site generation is sufficient to eliminate all usage in Tiers 3 and 4. One potential solution to easing these problems could be a transition away from volumetric charges to a demand or customer charge approach, whereby the utility recovers a larger portion of their fixed costs through fixed charges based on a customer's peak demand or some other determinant. However, reducing volumetric rates in favor of demand charges may run counter to the Commission's goals of promoting conservation and self-generation.

Baselines, based on average consumption in a climate zone, are supposed to balance the different amount of consumption across a service territory so that a customer in a warmer area of the service territory is not penalized for using more electricity simply due to climate. As evidenced by SCE's experience, it appears that customers living away from the coast who tend to use more electricity have borne the brunt of rate increases to meet utilities' revenue requirements, even accounting for the use of baselines.<sup>22</sup> In 2001, the Commission initiated an investigation to revise then-existing baselines, noting, "With our recent rate design relying so heavily on baseline quantities to determine which residential customers are affected and to what degree, it becomes more important than ever to ensure the baseline program is up to date."<sup>23</sup> Clearly, ensuring that the baseline methodology accurately reflects system and customer usage profiles is necessary for the development of a just and reasonable rate design.

As noted above, SB 695 attempted to correct for some of this inequitable treatment by allowing Tier 1 and 2 rates to increase by a small amount

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<sup>22</sup> SCE Data Request, dated May 9, 2010.

<sup>23</sup> R.01-05-047 at 6 (issued May 29, 2001). Indeed, even in 2001, the Commission noted "we are limited in our review by the statutes setting baseline quantities well below average usage of customers. Because of this, even with revised and updated baseline quantities, the average customer may still find it difficult to reduce usage to baseline levels." Additionally, The Utility Reform Network counsel in 2001 noted: "We have recently been hearing more from our members and from other interested members of the public on that subject. And it's causing us to realize that there does need to be some sort of a reevaluation of how the baseline allowances are established; whether or not the seasonal and climate-zone differences that were adopted in years past are still appropriate; whether or not they need to be somehow modified to be more precise."

annually.<sup>24</sup> Even with this legislative change, customer usage under Tiers 1 and 2 does not, and cannot, reflect the hour-by-hour changes in electricity costs, fuel mix or emission levels; instead, the rates remain flat inside each Tier, regardless of when and where the electricity is consumed and the actual cost of electricity at that time.

A potential benefit of establishing a different rate design could be a smoother transition for NEM customers. Each IOU has requested changes to the rates structures to accommodate the increasing amount of electricity generated by such customers. The current policy for NEM customers offers a bill credit to offset the customer's electricity bill at fully bundled residential rates. NEM customers avoid paying all charges that comprise the bundled rate for the amount of generation they produce. Some of these costs are then borne by non-participating customers who fall into Tiers 3 and 4, which have raised equity concerns about cost-shifting. Additionally, this may also allow NEM customers to avoid paying for distribution grid upgrades needed to integrate their generation. A more efficient and equitable rate structure could address these "cost causation" issues in a fairer manner, and in a way that does not harm solar investments.<sup>25</sup>

Similar issues around subsidies appear with wealth transfers between climate zones and income levels. For example, customers with higher incomes

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<sup>24</sup> SB 695 was deemed an "urgency statute necessary for the immediate preservation of the public peace, health and safety" and was passed "to avert a rate crisis involving unfair and unreasonable rates." See SB 695, Sec. 11.

<sup>25</sup> This Rulemaking will not investigate the merits or the policies currently in place for the NEM cap and how the cap is calculated; rather, this Rulemaking will focus on the rate designs currently in place for all residential customers.

who live on the coast but remain under the Tier 2 rate cap are subsidized by middle income customers who live in non-coastal regions and exceed Tier 2 usage levels.

### **3.3. The Transition to Dynamic Pricing**

As noted above, the Commission has stated on numerous occasions that dynamic pricing “can lower costs, improve system reliability, cut greenhouse gas emissions, and support modernization of the electric grid.”<sup>26</sup> Additionally, with the completion of AMI expected by the end of 2012, the foundational technology to support dynamic pricing as well as providing customers with price, cost and usage information is nearly complete. However, to a great extent, coordinating the move toward time-variant and dynamic pricing has resulted in a series of inconsistent schedules across the three IOUs. Creating consistent policies across the IOUs, developing a schedule for the IOUs, and addressing other over-arching policies, including a consistent educational program, appear to be needed to support a move to time-variant and dynamic pricing, whether voluntary or default. Additionally, creating a forum in which utilities, consumer advocates, market participants and the Commission can engage in sharing information across utilities should support this effort.

Existing law allows the Commission to begin transitioning residential customers onto time-variant rates beginning in 2013. With the current number of pending proceedings before the Commission addressing time-variant and dynamic pricing, it appears that any move to time-variant and/or dynamic pricing will occur after 2013. Developing an inventory of existing proceedings,

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<sup>26</sup> D.08-07-045 at 2.

the time-frame for those proceedings, the proposed schedule for transitioning to time-variant and/or dynamic pricing and developing a common agreement or understanding on a realistic time-frame for any move to time-variant and dynamic pricing could be an outcome of this proceeding.

#### **4. Beginning the Examination**

To begin its examination, the Commission invites discussion on the following themes surrounding rate design. The Commission will hold a workshop in advance of comments to discuss and refine these preliminary questions and will thereafter, by Assigned Commissioner's Ruling, file and serve a list of questions for comment. The preliminary set of questions is as follows:

- 1) As described in Section 2.6, the Commission defines an optimal rate design as encompassing several guiding principles. Are these the right goals to develop an optimal rate design? Are there other goals that should guide residential rate design? Please describe an optimal residential rate design structure based on those goals. For purposes of this exercise, assume that there are no legislative restrictions. Explain how your proposed rate design meets each goal and compare the performance of your rate in meeting each goal to current rate design. If your proposed rate does not rely on baselines and tiers, explain how low-income customers and customers with medical needs requiring a certain amount of electricity consumption would continue to have their basic needs met at an affordable cost. What barriers, legal or legislative, are in place that would hinder the implementation of the rate design?
- 2) Would your proposed rate structure produce any cross-subsidies between coastal and inland customers? How do you define cross-subsidies in this context?
- 3) Do existing CARE methodologies provide for an optimal rate protection or are there more efficient and equitable means to protect low income customers?

- 4) Can baselines and tiers be made compatible with a time-variant or dynamic rate structure, or are revisions to existing legislation necessary?
- 5) Are current rate structures compatible with innovative technologies that can help customers reduce consumption or shift consumption to a lower cost time period as compared to time varying rates; and
- 6) Are there other issues not raised by the preceding list that should be considered in this rulemaking?

Finally, there are many Commission proceedings currently examining the transition to time-variant and dynamic rates for residential customers and the dynamic rates themselves. In light of this, the Commission seeks comment on the following:

- 7) Is there a need to better coordinate between the dynamic pricing proceedings;
- 8) What needs to be harmonized between the proceedings;
- 9) Should any of these proceedings be suspended, consolidated, or dismissed pending the resolution of this rulemaking?
- 10) What policies would help ensure that successful strategies will be shared between utilities; and
- 11) Is there a need to better coordinate and advance the role of third party vendors and service providers to bring value to enhancing customers' ability to maximize energy savings under time-variant and dynamic rates?

The issues identified above are best resolved by a formal rulemaking. The results of this Order Instituting Rulemaking (OIR) may have important effects on California IOU customers. Accordingly, we desire that this order be distributed to a wide range of potentially interested parties. We will seek workshop participation, and subsequently, comments from all parties to this rulemaking.

After initial service of this order, interested persons and entities shall advise the Commission's Process Office of their interest in participating, as described in Section 6, so a new service list can be developed for this rulemaking. The assigned Commissioner, and the assigned Administrative Law Judge (ALJ) acting with the assigned Commissioner's concurrence, will have ongoing oversight of the service list and may institute changes to the service list or the procedures governing it as necessary.

## **5. Preliminary Scoping Memo**

This rulemaking will be conducted in accordance with Article 6 of the Commission's Rules of Practice and Procedure. As required by Rule 7.3, this order includes a preliminary scoping memo as set forth below.

### **5.1. Issues**

The issues to be considered in this proceeding are largely described earlier in this OIR. Notably, do existing rate design structures and statutory requirements support the ability of the Commission and electric utilities to enact electricity policies; would implementing time varying rates instead of or in combination with the existing tier structure allow for the creation of a more equitable rate structure and better meet the Commission's rate objectives; and are changes to existing statutes needed to implement a preferable rate structure?

### **5.2. Category of Proceeding and Need for Hearing**

Pursuant to Rule 7.1(d), we preliminarily determine the category of this rulemaking to be quasi-legislative as the term is defined in Rule 1.3(d), as this proceeding is considering the general topic of rate design. The Commission will monitor the categorization and may recategorize the proceeding as ratesetting, or open a future ratesetting phase should it prove necessary for efficient handling of this proceeding.

We must preliminarily address the need for hearing. (Rule 7.1(d).) Although we expect that many of the issues may be resolved through the formal filing of comments and replies, we preliminarily determine that hearings may be needed, at least on some issues. Additionally, we anticipate that public participation hearings may also be needed.

**5.3. Schedule**

For purposes of meeting the scoping memo requirements and to expedite the proceeding, we establish the following preliminary schedule:

DATE	EVENT
June 21, 2012	OIR issued
July 2012 (30 days from mailing of this OIR)	Deadline for requests to be on service list
August 2012	Workshop on preliminary list of questions
August 2012	Assigned Commissioner’s Ruling with specific questions for comment
September 2012	Initial Comments filed and served
October 2012	Reply Comments filed and served
October/November 2012	Prehearing Conference
November 2012	Scoping Memo

**5.4. Modification Process**

Any person filing comments on this OIR shall state any objections to the preliminary scoping memo regarding the category, need for hearing, issues to be considered or schedule. (Rule 6.2.)

The assigned Commissioner through his/her ruling on the scoping memo and subsequent rulings, and the assigned ALJ by ruling with the assigned Commissioner’s concurrence, may modify the schedule as necessary during the

course of the proceeding. We anticipate this proceeding will be resolved within 18 months from the issuance of the scoping memo.

## **6. Parties, Service List, and Subscription Service**

PG&E, SDG&E, SCE, and all other jurisdictional electrical utilities set forth in Appendix A are named respondents to this rulemaking. DRA is also named a party to this rulemaking.

Entities on the service list for R.10-05-004, Application (A.) 10-03-014, the following consolidated applications (A.11-05-017, A.11-05-018, A.11-05-019, and A.11-05-020), A.11-06-007, and A.11-10-002, and other interested persons are invited to participate in this rulemaking. The outcome of this rulemaking will be applicable to all IOUs that are required to obtain Commission approval for residential rates, even if they do not participate.

Within 30 days of the date of mailing of this order, each respondent and the DRA shall inform the Commission's Process Office of the contact information for a single representative for party status, although other representatives and persons affiliated with the parties may be placed on the Information Only service list.

Within 30 days of the date of mailing of this order, any person or representative of an entity other than named respondents or parties seeking to become a party to this rulemaking (i.e., actively participate in the proceeding by filing comments or appearing at workshops) should send a request to the Commission's Process Office, 505 Van Ness Avenue, San Francisco, California 94102 (or [Process\\_Office@cpuc.ca.gov](mailto:Process_Office@cpuc.ca.gov)) to be placed on the official service list. Individuals seeking only to monitor the proceeding (i.e., but not participate as an active party) may request to be added to the service list as "Information Only." Include the following information:

- Docket Number of the OIR;
- Name and party represented, if applicable;
- Postal Address;
- Telephone Number;
- E-mail Address; and
- Desired Status (Party or Information Only).

The service list will be posted on the Commission's website, [www.cpuc.ca.gov](http://www.cpuc.ca.gov) soon thereafter.

The Commission has adopted rules for the electronic service of documents related to its proceedings, Commission Rule 1.10, available on our website at [http://www.cpuc.ca.gov/PUBLISHED/RULES\\_PRAC\\_PROC/44887.htm](http://www.cpuc.ca.gov/PUBLISHED/RULES_PRAC_PROC/44887.htm). We will follow the electronic service protocols adopted by the Commission in Rule 1.10 for all documents, whether formally filed or just served.

This Rule provides for electronic service of documents, in a searchable format, unless the appearance or state service list member did not provide an e-mail address. If no e-mail address was provided, service should be made by United States mail. In this proceeding, concurrent e-mail service to all persons on the service list for whom an e-mail address is available will be required, including those listed under "Information Only." Parties are expected to provide paper copies of served documents upon request.

E-mail communication about this OIR proceeding should include, at a minimum, the following information on the subject line of the e-mail:

*R. [xx-xx-xxx] – OIR on Residential Rate Structure and Related Issues.* In addition, the party sending the e-mail should briefly describe the attached communication; for example, "Comments." Paper format copies, in addition to electronic copies, shall be served on the assigned Commissioner and the ALJ.

This rulemaking can also be monitored through the Commission's document subscription service; subscribers will receive electronic copies of documents in this rulemaking that are published on the Commission's website. There is no need to be on the service list in order to use the subscription service. Instructions for enrolling in the subscription service are available on the Commission's website at <http://subscribecpuc.cpuc.ca.gov/>.

## **7. Public Advisor**

Any person or entity interested in participating in this OIR who is unfamiliar with the Commission's procedures should contact the Commission's Public Advisor in San Francisco at (415) 703-2074 or (866) 849-8390 or e-mail [public.advisor@cpuc.ca.gov](mailto:public.advisor@cpuc.ca.gov); or in Los Angeles at (213) 576-7055 or (866) 849-8391, or e-mail [public.advisor.la@cpuc.ca.gov](mailto:public.advisor.la@cpuc.ca.gov). The TTY number is (866) 836-7825.

## **8. Intervenor Compensation**

Any party that expects to request intervenor compensation for its participation in this OIR shall file its notice of intent to claim intervenor compensation in accordance with Rule 17.1 of the Commission's Rules of Practice and Procedure within 30 days of the filing of reply comments or of the prehearing conference, whichever is later.

## **9. Ex Parte Communications**

*Ex parte* communications in this proceeding are subject to Article 8 of the Commission's Rules of Practice and Procedure.

Therefore **IT IS ORDERED** that:

1. An Order Instituting Rulemaking is instituted on the Commission's own motion for the purpose of examining current residential electric rate design, including the tier structure in effect for residential customers, the state of

dynamic pricing, potential pathways from tiers to time-variant and dynamic pricing, and optimal residential rate design to be implemented when statutory restrictions are lifted.

2. This Order Instituting Rulemaking will investigate whether the current tier structure continues to support the underlying statewide-energy goals, facilitates the development of customer-friendly technologies, and whether the rates result in inequitable treatment across customers and customer classes.

3. Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southern California Edison Company, PacifiCorp, and other jurisdictional electric utilities set forth in Appendix A are named respondents to this Order Instituting Rulemaking. The outcome of this rulemaking will be applicable to all investor-owned utilities that are required to obtain Commission approval for residential rates, even if they do not participate.

4. The Division of Ratepayer Advocates is named a party to this Order Instituting Rulemaking.

5. Named respondents and the Division of Ratepayer Advocates are required, and all other interested persons are invited, to participate in a workshop to discuss and refine the preliminary questions set forth in this Order Instituting Rulemaking, and to file comments and reply comments to the subsequent, specific questions which will be filed and served by Assigned Commissioner's Ruling.

6. The outcome of this Order Instituting Rulemaking shall be applicable to all investor owned electric utilities and their retail customers.

7. The Executive Director shall cause copies of this order to be served on named respondents to this Order Instituting Rulemaking, the Division of Ratepayer Advocates, and the service lists for Rulemaking 10-05-004,

Application (A.) 10-03-014, the following consolidated applications (A.11-05-017, A.11-05-018, A.11-05-019, and A.11-05-020), A.11-06-007, and A.11-10-002.

8. The category of this Order Instituting Rulemaking is preliminarily determined to be quasi-legislative, as that term is defined in the Commission's Rules of Practice and Procedure, Rule 1.3(d).

9. This proceeding is preliminarily determined to require evidentiary hearings.

10. The preliminary schedule for this proceeding is as set forth in the body of this Order Instituting Rulemaking. The assigned Commissioner through his/her scoping memo and subsequent rulings, and the assigned Administrative Law Judge by ruling with the assigned Commissioner's concurrence, may modify the schedule as necessary.

11. The issues to be considered in this Order Instituting Rulemaking (OIR) are those set forth in the body of this OIR.

12. Comments and reply comments shall conform to the requirements of the Commission's Rules of Practice and Procedure.

13. Any persons objecting to the preliminary categorization of this Order Instituting Rulemaking (OIR) as "quasi-legislative" or to the preliminary determination on the need for hearings, issues to be considered, or schedule shall state their objections in their opening comments of this OIR.

14. Within 30 days of the date of issuance of this order, any person or representative of an entity seeking to become a party to this Order Instituting Rulemaking must send a request to the Commission's Process Office, 505 Van Ness Avenue, San Francisco, California 94102 (or [Process\\_Office@cpuc.ca.gov](mailto:Process_Office@cpuc.ca.gov)) to be placed on the official service list for this proceeding. Individuals seeking only to monitor the proceeding, but not

participate as an active party may request to be added to the service list as “Information Only.”

15. After initial service of this order, a new service list for the proceeding shall be established following procedures set forth in this order. The Commission’s Process Office will publish the official service list on the Commission’s website ([www.cpuc.ca.gov](http://www.cpuc.ca.gov)) as soon as practical. The assigned Commissioner, and the assigned Administrative Law Judge acting with the assigned Commissioner’s concurrence, shall have ongoing oversight of the service list and may institute changes to the list or the procedures governing it as necessary.

16. Any party that expects to claim intervenor compensation for its participation in this Order Instituting Rulemaking shall file its notice of intent to claim intervenor compensation in accordance with Rule 17.1 of the Commission’s Rules of Practice and Procedure, within 30 days of the filing of reply comments or of the prehearing conference, whichever is later.

This order is effective today.

Dated June 21, 2012, at San Francisco, California.

MICHAEL R. PEEVEY  
President  
TIMOTHY ALAN SIMON  
MICHEL PETER FLORIO  
CATHERINE J.K. SANDOVAL  
MARK J. FERRON  
Commissioners

# **APPENDIX A**

R.12-06-013 PPD/sbf

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R.12-06-013 PPD/sbf

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**(END OF APPENDIX A)**