

**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 SAN DIEGO GAS & ELECTRIC COMPANY (U902M)
ON RESIDENTIAL RATE DESIGN PROPOSALS SUBMITTED PURSUANT TO
RULING OF ADMINISTRATIVE LAW JUDGE ("ALJ") MCKINNEY AND SCOPING
MEMO AND RULING OF ASSIGNED COMMISSIONER**

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San Diego Gas & Electric Company ("SDG&E") respectfully submits its Comments on the Residential Rate Design Proposals that were filed on May 29, 2013 pursuant to the Ruling of Administrative Law Judge ("ALJ") McKinney and the November 26, 2012 Scoping Memo and Ruling of Assigned Commissioner ("Scoping Memo").

As is explained in greater detail below, SDG&E's Residential Rate Design Proposal is designed to focus on identifying the elements necessary to achieve a long-term optimal rate design that balances all of the ten Rate Design Principles set forth in this proceeding in a way that supports fulfillment of the state's long-term public policy and environmental goals. In addition, SDG&E's proposal aims to provide a smooth and long-term transition to optimal rates that minimizes bill impacts and ensures the ability to adequately inform customers regarding rate changes and the reasons for changes they will see in the future. Although well-intended, many of the proposals that have been submitted in this proceeding focus on achieving mid-term rather than long-term rate design goals and include an implicit or explicit preference for some, but not necessarily all, of the rate design principles set forth in this proceeding. The apparent preference

towards certain policy goals in many recommendations is not surprising; many of the rate design principles could appear, at face value, to be in tension with each other. This, however, is not the case.

SDG&E's Residential Rate Design Proposal is intended to present a long-term vision that will achieve all of the Rate Design Principles set forth in this proceeding while spurring innovation, empowering customers with accurate information and new choices, increasing economic efficiency, reducing costs, reducing emissions and ensuring the continued ability of the California Public Utilities Commission ("Commission") to pursue state policy objectives, but in a transparent and non-bypassable manner that does not unnecessarily obscure accurate price signals.

I. EXECUTIVE SUMMARY

At a high level, most of the proposals that have been submitted in this proceeding share common elements. Many parties, ranging from the state's investor-owned utilities ("IOUs"), to the Environmental Defense Fund ("EDF"), California Large Energy Consumers Association ("CLECA") Distributed Energy Consumer ("DECA"), and Division of Ratepayer Advocates ("DRA") recognize that significant deficiencies exist in the current residential rate designs for the state's IOUs. There is general support for accurate price signals (although the definition of what constitutes "accurate price signals" differs by party), as well as general support for well-targeted low income assistance (Principle 1), the need for a smooth transition towards optimal rates, and extensive customer outreach, communication and education (Principle 10). The majority of parties have pointed to various ways in which existing rate design is inconsistent with the Commission's policy objectives.

Several parties, such as the IOUs and the joint proposal of Center for Accessible Technology (“CforAT”) and the Greenlining Institute (collectively, “CforAt/Greenlining”) and The Utility Reform Network (“TURN”) agree on the need for more targeted use of California Alternate Rates for Energy (“CARE”) benefits to better ensure affordability. Others, such as EDF and CLECA point to the importance of accurate price signals; EDF, in particular, explains how accurate price signals and unbundled pricing for the services provided by and to customers will be necessary to achieve the state’s long-term environmental and policy goals.¹ Overall, there is a good deal of agreement that a change in existing residential rate design is necessary.

Unfortunately, many of the Residential Rate Design Proposals in this proceeding are not necessarily designed to achieve *all* of the Rate Design Principles in a balanced manner. Instead, many proposals appear to focus more on what is believed necessary to achieve a sub-set of those objectives, such as encouraging energy efficiency and conservation.

As is explained below, an optimal rate design should be structured to achieve *all* of the Rate Design Principles, specifically affordability (1), cost-based rates which means rates based on marginal cost (2) and cost-causation principles (3), energy efficiency and conservation (4), encouraging reduction of both coincident and non-coincident peak demand (5), generally avoiding cross-subsidies (unless the cross-subsidies appropriately support explicit state policy goals) (7), ensuring that incentives are explicit and transparent (8), and ensuring that rates encourage economically efficient decision-making (9). In addition, the Principles state that rates should be stable and understandable (6) and that the transition path should emphasize education and outreach as well as consideration of bill impacts along the path (10). SDG&E believes that accurate price signal will create greater stability across all residential customers as well as being more understandable with the transition path critical to achieving this objective. An Optimal

¹ EDF Rate Design Proposal, at p. 34.

Rate Design should be sustainable, and create an opportunity for the state to achieve each of its long and near-term policy goals.

SDG&E responds to several of the issues that have been raised by the Residential Rate Design Proposals that have been submitted herein below.

II. RESPONSE TO RATE DESIGN PROPOSALS

The Residential Rate Design Proposals of the parties to this proceeding have raised various issues, including what actually constitutes an accurate price signal, the merits of tiered rate design and extent to which it fulfills the Rate Design Principles, and whether the state's policy and environmental goals can only be achieved in the long term with a residential rate design that is based on accurate price signals. These issues are discussed below.

A. Accurate Price Signals Must be Based on Marginal Cost and Cost-Causation Principles

SDG&E has identified four general cost categories:

1. Customer Costs – costs incurred by the utility to maintain a service connection with a utility customer which generally do not vary with a customer's size or usage.
2. Distribution Demand – costs incurred to ensure reliable service to meet local capacity needs.
3. System Demand – costs incurred to meet peak capacity needs which can consist of both transmission and generation resources.
4. Time of Use (“TOU”) Energy – costs incurred to provide energy services to customers which is differentiated by season and TOU period.

While parties in general agree at a high level with the principle of accurate price signals, the issue in dispute is what those accurate signals will look like. Many parties view this issue through the lens of the traditional utility business model and focus only on the commodity price

signal. An Optimal Rate Design, however, needs to support a long-term vision that considers the critical role the distribution system will play as the platform for new technologies and services beyond electric production. Below SDG&E addresses specifically Parties comments on: (1) tiered rates; (2) price signals reflecting costs of capacity needs; and (3) price signals reflecting fixed costs as they relate to accurate price signals.

1. Tiered Rates Do Not Reflect Accurate Price Signals, Induce Economically Efficient Decisions by Customers, or Maximize Incentives for Energy Efficiency

The current tiered rate structure builds on baseline which is intended to support the public policy of ensuring equal access to affordable electricity across climate zones (for SDG&E this is across four climate zones: Coastal, Inland, Mountain, Desert) and across service types (basic service (gas and electric) and all-electric service) and seasons (summer/winter). Several party proposals include a tiered rate structure under the theory that tiered rates:

- Support of conservation and energy efficiency; and,
- Are cost-based.

Several parties, including the Sierra Club, National Resources Defense Council (“NRDC”), TURN, and San Diego Consumers’ Action Network (“SDCAN”), contend that tiered rate designs encourage energy efficiency and conservation. However, they fail to consider the option of using transparent and explicit incentives together with accurate price signal to achieve the same objective. The reliance on price distortions to achieve this Principle creates additional unintended consequences and is contrary to other principles. This is discussed further below.

Sierra Club and SDGAN proposed tiered rates arguing that tiered rates are cost-based. As SDG&E pointed out in its Residential Rate Design Proposal, under the current tiered rate

structure, residential customers do not receive an accurate price signal.² For SDG&E, approximately two thirds of residential usage (Tier 1 and Tier 2) is priced at a discount below the cost to serve with the remaining one-third of usage (Tier 3 and Tier 4) being priced at levels substantially above cost. As a result, under existing tiered rate design, customers would not be willing to spend what it is actually worth to reduce usage for two thirds of SDG&E's residential electricity usage. For example, a SDG&E customer that pays the current 14.8 cent/kWh Tier 1 rate would be willing to spend up to the equivalent of 14.8 cents/kWh on equipment or upgrades to reduce their demand by one kWh, even though the value of a reduction of 1 kWh is actually worth the current average residential class electric rate of 18.3 cents/kWh.

The Sierra Club argues that tiered rates are cost-based because they incorporate risks associated with future procurement and impose an appropriate hierarchy of allocation of costs for resources and programs on high use customers.³ However this allocation of costs is arbitrary, and is not based on cost causation principles. SDCAN argues for an "optimal" rate design that is tiered, stating that its proposal "doesn't create cross-subsidies other than those that address the needs of low-income or medically vulnerable customers. They largely mirror existing rate structures. Those who claim that current rates are skewed by cross-subsidies have not put forth persuasive arguments that quantify such cross-subsidies."⁴

In fact, cost-causation principles stand for the proposition that costs be recovered on the same basis as that in which they are incurred. Utilities do not incur costs on a tiered basis; a rate design that recovers costs on a tiered basis, such as the tiered rate design cited by SDCAN and Sierra Club, cannot, by definition, be based on cost-causation principles.

² SDG&E Rate Design Proposal, at p. 5.

³ Sierra Club Rate Design Proposal (prepared by EcoShift), at p.11.

⁴ SDCAN Rate Design Proposal, at p. 16.

It cannot be reasonably concluded that costs that are allocated to rates in a manner that is different from how they were incurred reflects cost-causation principles, consistent with Rate Design Principle 3.

2. Optimal Rate Design Should Reflect the Fact that Capacity Costs are Incurred to Meet Two Dimensions of Customer Capacity Needs: Demand at Times of System Peak Capacity Need and a Customer's Individual Peak Capacity Need

Many Rate Design Proposals fail to recognize the unique cost drivers associated with Distribution Demand Capacity because they propose to recover these fixed costs through variable rate design, under tiered rates, and/or on the basis of a customer's demand during times of system peak capacity need rather than the individual customer's peak capacity need ("non-coincident demand"), whenever it occurs. Proposals that fail to accurately reflect these cost drivers cannot fully satisfy Rate Design Principle 3 ("Rates should be based on cost-causation principles"), Principle 5 ("Rates should encourage reduction of both coincident and non-coincident peak demand"), Principle 7 ("Rates should generally avoid cross-subsidies, unless the cross-subsidies appropriately support explicit state policy goals"), Principle 8 ("Incentives should be explicit and transparent"), or Principle 9 ("Rates should encourage economically efficient decision-making").

The Proposals of some parties, such as CLECA and DECA, recognize the need for price signals that reflect a utilities' incurrence of capacity costs to serve a customer, but fail to fully recognize the impact of a customer's non-coincident demand on the utility's incurrence of distribution demand capacity costs.⁵ NRDC, on the other hand, wisely recognizes the potential need to charge for a customer's use of distribution grid services for all purposes, including support of customer-owned generation. However, NRDC proposes to do this on the basis of

⁵ CLECA Rate Design Proposal, at pp. 10-11; DECA Proposal, at pp. 10-13.

volumetric rates, which fails to account for all of the capacity costs that utilities incur to provide reliability services to these customers.⁶

In fact, the costs that are incurred by utilities to provide distribution demand capacity are based on localized capacity needs at the circuit and substation level, rather than system level. Rates that recognize the impact of a customer's individual peak demand as well as TOU would create accurate price signals for customers and, by doing so, would promote energy use and management decisions that create incentives for customers to: create a flatter load profile; maximize economic efficiency and minimize overall costs; create incentives to pursue energy efficiency and conservation efforts for 100% rather than only one-third of SDG&E's residential electricity demand (Tier 3 and Tier 4 residential demand); and reduce the need for future expansion of both transmission and distribution infrastructure as well related monetary and environmental costs.

In its proposal, TURN opposes assigning distribution demand costs within the residential class based on \$/non-coincident kW demand, arguing that there is little relationship between a customers' or even classes' peak demand and the sizing and operation of the system due to demand diversity.⁷ "In the case of SDG&E, the dollars per kW of residential non-coincident demand was calculated as an afterthought. For SDG&E, the allocation of substation and feeder costs were based on the loads on individual substations and circuits at the time of the station or circuit peak – again a concept unrelated to individual customer non-coincident peak loads."⁸

However, as was pointed out in SDG&E's Residential Rate Design Proposal, "planning criteria for the distribution infrastructure is based on local load at the circuit and substation level. In other words, in order to provide reliable service to a range of distribution circuits, each of

⁶ NRDC Rate Design Proposal, at pp. 22-27.

⁷ TURN Rate Design Proposal, at pp. 73-77.

⁸ Id., at p. 74.

which has different levels of peak demand, the distribution system is designed to have adequate capacity to serve the combined peak demand of all customers served off of a distribution circuit, without regard to when that demand occurs (“non-coincident peak”).”⁹ SDG&E included a chart (Chart 5 on page 25) in its proposal, which illustrated that distribution circuits peak over a wide range of time, demonstrating that this does not necessarily coincide with times of system peak capacity need.¹⁰ Contrary to the contention of TURN, this demonstrates that distribution capacity cost incurrence is directly related to individual customer non-coincident peak loads and is not based on system peak demand or other cost drivers.

3. Optimal Rate Design Would Recover Fixed Costs on a Fixed Cost Basis

CforAt/Greenlining departs from principles of cost-causation by arguing that customer charges are inconsistent with Principles 1 (low-income customers should have access to basic energy at affordable levels), 3 (rates should be based on cost-causation principles), 5 (rates should encourage conservation and energy efficiency), and 6 (rates should be stable and understandable and provide customer choice).¹¹ Similarly, Sierra Club contends that “a well-designed regulated monopoly utility should accurately emulate both the risk and reward of a commodity or service being offered in a highly competitive market. Essentially, every commodity and service on offer in competitive markets includes a fixed cost component, which is recovered over time in sales of that commodity or service. There is no compelling reason why a public service utility should be permitted to extort a fixed fee for access to that commodity or service. Oil companies do not charge customers a monthly refinery access fee to be able to buy gasoline. Hotels do not generally charge guests a fixed monthly building access fee if they ever

⁹ SDG&E Rate Design Proposal, at p. 24.

¹⁰ *Id.*, at p.25

¹¹ CforAt/Greenlining Rate Design Proposal, at pp. 32-35.

want to reserve a room. In the case of a critical commodity such as electricity, universal access is a right, which should not be compromised by fixed monthly charges.”¹²

Sierra Club’s example is illustrative, but flawed. It is true that oil companies charge a variable rate for gasoline, but it is not true that customers do not incur a fixed cost for the ability to utilize that gasoline in a useful manner. In fact, customers incur fixed costs associated with their investment in the automobile so that they have the capacity to provide themselves with transportation, and pay variable costs based on the amount of fuel that they use, as well as when they procure that fuel. The case of housing presents a similar example – people pay rent or mortgage for the living capacity provided by the home that they rent or own, and pay variable costs for the food, utilities and other things they consume as they utilize that capacity.

As is explained in greater detail in Section B below, CforAt/Greenlining’s concerns over the impacts of a fixed charge to recover fixed costs due to affordability and conservation impacts are misplaced; affordability and conservation/energy efficiency issues can be accommodated more effectively and directly through accurate price signals combined with transparent subsidies when deemed necessary to fulfill state policy objectives. Similarly, it is self-evident that CforAt/Greenlining’s concerns over whether a fixed charge to recover costs that are incurred on a fixed cost basis reflect cost-causation principles are misplaced – an accurate price signal would recover a cost that is incurred on a fixed basis through a fixed charge.

While CforAt/Greenlining states that it would not oppose increases to minimum charges to collect enough revenues to cover fixed costs as long as this does not affect the affordability for low-income customers,¹³ a minimum bill fails to create accurate price signals by providing for the recovery of fixed costs in the same manner as that in which they were incurred. DRA states

¹² Sierra Club Rate Design Proposal (prepared by EcoShift), at p.10.

¹³ CforAt/Greenlining Rate Design Proposal, at pp. 32-35.

that a \$5 minimum bill is sufficient to cover the costs of billing and payment services.¹⁴ This however fails to address the cost-causation principles advocated in Principle 3. A minimum bill is not a price signal. The minimum bill mechanism is to ensure a minimum level of revenue recovery. Once that threshold amount is reached the “price signal” goes away, while fixed costs do not. An accurate price signal would continue to reflect the price signal associated with fixed costs.

B. Policy and Environmental Goals Can Be Achieved With A Residential Rate Design That Is Based On Accurate Price Signals with Transparent and Explicit Incentives

A number of parties advocate Residential Rate Design Proposals, at least in part, based on their ability to achieve various public policy objectives such as encouraging conservation and promoting affordability that prioritize some of the Principles above others. However, distorted price signals are not necessary to pursue the state’s policy goals and a rate design that is based on accurate price signals with transparent and explicit incentives can meet all of the Rate Design Principles set forth in this proceeding.

CLECA points out that subsidies can and should be provided in transparent ways that do not obscure accurate price signals.¹⁵ In fact, as SDG&E pointed out in its Proposal, this is the only way in which all of the Commission’s Rate Design Principles as well as both California’s long and short-term policy goals can be achieved.¹⁶ While subsidies that are hidden in the obscurity of utility rate design may be effective in supporting short-term policy objectives, the cross-subsidies and misinformation that result would thwart achievement of the state’s longer-term policy objectives. Similarly, while accurate, unbundled price signals without any subsidies

¹⁴ DRA Rate Design Proposal, at p. A-6.

¹⁵ CLECA Rate Design Proposal, at p. 35.

¹⁶ SDG&E Rate Design Proposal, at pp.1-2.

or incentives might be effective in creating the foundation necessary to achieve the state’s long-term policy goals, they could unintentionally thwart achievement of short-term goals.

Several parties continue to support a tiered rate structure arguing that this promotes conservation and energy efficiency. For instance, NRDC states that “[v]olumetric rates, in the form of inclining block rates, produce the most overall reduction in energy usage because incremental usage is the most discretionary. Our proposed rate design has as its foundation a simple concept –the more you use, the more you pay.”¹⁷

However, by continuing to embed these incentives in a rate design that artificially inflates rates through a tiered structure, other Principles are compromised such as cost-based rates (2), cost causation principles (3) generally avoiding cross-subsidies (7), ensuring the incentives are explicit and transparent (8), and ensuring that rates encourage economically efficient decision-making (9). DRA seems to understand the flawed price signal that tiered rates provided when it states that “[w]hile tiered rates generally cause high use customers to conserve in all hours, TOU rates send this price signal to all customers during the hours when those savings are associated with the highest marginal costs.”¹⁸

Also, TURN proposes to continue the tiered rate structure because it states that “[t]his rate structure was designed to promote affordable prices for a certain basic amount of electricity (the baseline allowance) while at the same time encouraging conservation.”¹⁹ TURN goes on to state that, “[t]he fact that tiers 1 and 2 are discounted below the actual cost of service does not represent a failure of economic efficiency that results in “excess consumption.” The creation of below-cost Tier 1 and 2 rates was intended to provide basic quantities of electricity at an

¹⁷ NRDC Rate Design Proposal, at p. 53.

¹⁸ DRA Rate Design Proposal, at p. 24.

¹⁹ TURN Rate Design Proposal, at p. 1.

affordable rate.”²⁰ TURN fails to note, however, that these protections could be provided more effectively and without violating other principles, as a direct transparent and explicit incentive, rather than by being embedded in a distorted rate design.

However, for the reasons explained herein and in the Residential Rate Design Proposal of SDG&E, tiered rates do not reflect cost-causation principles, fail to achieve the majority of the Rate Design Principles, and do not create a foundation for achievement of the state’s long-term policy goals, such as those embodied on Senate Bill (“SB”) 17.²¹ By adopting rates that reflect accurate price signals along the lines SDG&E has outlined herein, together with transparent subsidies or incentives when deemed necessary to fulfill the state’s policy goals, residential rate design can be designed to support both short and long-term policy goals while achieving all of the Commissions rate design principles.

III. CONCLUSION

SDG&E respectfully submits that an Optimal Rate Design is one under which:

- Utilities charge for the services they provide;
- Utilities recover costs on the same basis in which they have been incurred; and,
- Incentives or subsidies that have been deemed necessary to further public policy objectives are separately and transparently identified.

²⁰ Id., at p. 41.

²¹ At p.13 of its Proposal, SDCAN makes the rather unusual contention that tiered rates actually *promote* rather than discourage new technologies, essentially under the theory that new technologies can help customers better manage their energy use to better manage and minimize their bills under a rate design that is difficult to understand or track for billing purposes throughout the course of a month. Contrary to SDCAN’s argument, rather than being a reason for maintenance of a flawed status quo, new technologies actually create the opportunity for a smooth transition towards Optimal Rate Design that includes accurate price signals. Such a rate design would empower customers to better manage their energy use to minimize bills by taking actions that reduce overall demand, demand during times of system peak demand, and their own individual peak demand, resulting in greater economic efficiency, reduced costs and rates that promote customer choice. At the same time, accurate price signals for all of the services that utilities provide to their customers would create new opportunities for innovation in technologies that could allow customers to self-provide any of those services, thereby avoiding the otherwise applicable utility rate.

A rate design based on the Optimal Rate Design Proposal outlined by SDG&E herein would accomplish and balance each of the Rate Design Principles, accurately inform customers, stimulate innovation, and provide a platform for long-term growth in the policy objectives of the state and this Commission.

DATED at San Diego, California, on this 12th day of July, 2013.

Respectfully submitted,

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