

<b>DOCKETED</b>	
<b>Docket Number:</b>	18-IEPR-01
<b>Project Title:</b>	2018 Integrated Energy Policy Report Update
<b>TN #:</b>	224130
<b>Document Title:</b>	Pacific Gas and Electric_Green Book_Enclosure 1
<b>Description:</b>	N/A
<b>Filer:</b>	System
<b>Organization:</b>	Valerie Winn
<b>Submitter Role:</b>	Public
<b>Submission Date:</b>	7/12/2018 9:46:37 AM
<b>Docketed Date:</b>	7/12/2018

*Comment Received From: Valerie Winn*  
*Submitted On: 7/12/2018*  
*Docket Number: 18-IEPR-01*

**Pacific Gas and Electric\_Green Book\_Enclosure 1**

*Additional submitted attachment is included below.*

---

**PACIFIC GAS AND ELECTRIC COMPANY AND  
SAN DIEGO GAS & ELECTRIC COMPANY**

**JOINT IOU INFORMAL COMMENTS ON CPUC'S DRAFT GREEN BOOK**

**JUNE 11, 2018**

---

PACIFIC GAS AND ELECTRIC COMPANY AND  
SAN DIEGO GAS & ELECTRIC COMPANY  
JOINT IOU INFORMAL COMMENTS ON CPUC'S DRAFT GREEN BOOK

TABLE OF CONTENTS

I.	Introduction/Summary.....	1
II.	The Joint IOUs Generally Agree With the Draft Green Book's Overall Framing of Issues .....	3
	A. Core Principles: Affordability, Decarbonization, and Reliability .....	3
	B. Fragmentation .....	4
	1. Delivery Is Not Fragmented .....	4
	2. Fragmentation in Retail Service: Causes and Consequences .....	5
	3. Fragmentation: Opportunities and Challenges.....	6
III.	Context for the Green Book .....	7
	A. PCIA Proceeding.....	8
	B. RA Proceeding .....	8
IV.	Recommendations.....	9
	A. Foundational Recommendations.....	9
	B. Ratemaking Recommendations .....	10
	C. Grid Service Recommendation .....	13
	D. Energy Supply Recommendations .....	13
V.	Conclusion.....	16

# PACIFIC GAS AND ELECTRIC COMPANY AND SAN DIEGO GAS & ELECTRIC COMPANY JOINT IOU INFORMAL COMMENTS ON CPUC'S DRAFT GREEN BOOK

## I. Introduction/Summary

San Diego Gas & Electric Company and Pacific Gas and Electric Company (PG&E) (together, the Joint Investor-Owned Utilities (IOU)) appreciate the opportunity to provide comments on the Draft Green Book to the California Public Utilities Commission (CPUC or Commission) and look forward to collaborating with stakeholders across the state to address the critical issues outlined in the Draft Green Book.

The Draft Green Book provides a thoughtful evaluation of: (1) California's history of customer choice, an energy crisis, and current market transformations; (2) California's key policy goals and Core Principles; and (3) the risks of an increasingly fragmented regulatory and procurement landscape to California's ability to realize its goals and Core Principles absent a long-term vision and path forward. It also raises several cross-cutting questions and seeks stakeholder engagement in solving these questions. The Joint IOUs appreciate the opportunity to provide these initial comments. At this time, the Joint IOUs do not attempt to directly answer the specific questions raised in the Draft Green Book, as we expect they will be the topic of the CPUC's *en banc* and ongoing conversations.

The Joint IOUs agree with the overall framing of California's electric sector Core Principles and challenges explored in the Draft Green Book. In these comments, the Joint IOUs offer additional context and request the CPUC to include our perspectives and corresponding recommendations in the final Green Book. The Joint IOUs also articulate some foundational issues that must be resolved to help California move forward and avoid some of the dire outcomes that occurred during the California energy crisis of 2000-2001. The Joint IOU recommendations are summarized here:

### Foundational Recommendations

- 1) First and foremost, the Commission must resolve two key inequities that exist today to create a neutral starting point from which the Commission and stakeholders can envision the appropriate regulatory framework of tomorrow.
  - Eliminate Cost Shifts Caused by the PCIA: The mere exercise of customer choice should not create winners and losers. This is not only good policy—this is the law. Today, bundled customers are penalized by customer choice—an outdated Power Charge Indifference Adjustment (PCIA) mechanism causes them to pay a disproportionate share for reliability and renewables procurement made by the IOUs to achieve key state policy goals. This cost shift is not sustainable for the Joint IOUs bundled customer now, and increased load departure will only magnify the cost shifted to a decreasing number bundled service customers.

- Develop a Reliability Paradigm Compatible with Customer Choice: Over the last several years, the rapid expansion of Community Choice Aggregation (CCA) transformed the composition of state’s retail electric supplier. This transformation is expected to accelerate, with the Commission noting that up to 85 percent of the state’s load could be served by non-IOUs in the next decade. The state of the current Resource Adequacy (RA) Program—with increased out-of-market procurement by the California Independent System Operator (CAISO) (in the form of expanding Reliability Must Run (RMR) contracting, and procurement through its Capacity Procurement Mechanism (CPM)) and bundled customer disproportionately carrying the burden of reliability procurement addressed in part by Resolution 4907-E—illustrates that “fragmentation” in Load Serving Entities (LSE) challenges the achievement of the state’s reliability needs at a fair cost to all customers. The Joint IOUs anticipate that challenges can increase if reliability requirements are simply allocated to diffuse LSEs that individually may not be positioned to select or execute transactions in a size necessary for critical resources to operate. The Joint IOUs believe a re-articulation of the RA paradigm considering how the market today can achieve critical reliability goals at a fair cost to all customers is likewise a pre-requisite to market or regulatory restructuring. The Joint IOUs note that a central procurement entity for multi-year local reliability procurement, with oversight by this Commission, may be a transitional solution to a reliable and affordable electric system under customer choice.

The Commission is actively addressing these two issues in the PCIA and RA proceedings, and the Joint IOUs support equitable and efficient resolution. The foundation of any future regulatory or market structure must include appropriately allocated legacy and reliability costs.

2. The Green Book should include a specific plan regarding how the Commission moves forward in addressing the issues identified in the Draft Green Book.
3. The Green Book should provide a recommendation on how to mitigate the effects of the numerous “siloes” regulatory proceedings underway. This should include suspending regulatory proceedings that run the risk of undermining the Core Principles of Affordability, Decarbonization and Reliability.

#### Ratemaking Recommendations

4. The Green Book should emphasize that a modern electric retail rate architecture—designed to achieve access, equity, sustainability, and transparency—is a necessary foundation for any regulatory framework to be successful in California.
5. The Green Book should specify that a modern rate architecture include the following elements: (a) fair allocation of costs among customer groups; (b) pricing that matches the costs of the services offered; (c) broad-based collection of policy-related costs from all customers; and (d) a separate value-based means of compensating customers and third parties for services that they might provide to the electric grid or to the backstop procurement entity.

### Grid Service Recommendations

6. The Green Book should further emphasize that financially healthy IOUs are essential to continued availability of safe, reliable, and affordable grid services.

### Energy Supply Service and Infrastructure Recommendations

7. The CPUC should remain the regulator of long-term reliability of the electric distribution system.
8. The CAISO's role as backstop of reliability, both in Real-Time Markets (RTM) and through its RMRs and CPMs, should be clearly articulated in the Green Book, along with identifying any jurisdictional issues that may need to be addressed in developing a future regulatory or market structure.
9. The Green Book should consider the need for a central procurement approach for local reliability procurement or state policy goals that cannot be allocated equitably across all LSEs.
10. The Green Book should recognize that some entity must have the role of Provider of Last Resort (POLR).
11. The Green Book should consider the need for a robust natural gas infrastructure: even if natural gas throughput declines because of carbon reduction, under any reasonably foreseeable scenario, the need for natural gas resources *on peak*—will remain critical to ensure reliability in the face of more reliance on intermittent renewable resources. The Green Book should consider the role of investment in natural gas infrastructure as part of any comprehensive plan. Any decisions affecting utility investment in natural gas infrastructure should take the role of natural-gas fired electric power plants into account, and should not jeopardize safety and reliability of the electric power system by discounting the need for robust natural gas infrastructure.

## **II. The Joint IOUs Generally Agree With the Draft Green Book's Overall Framing of Issues**

The Joint IOUs agree with the overall framing of issues presented in the Draft Green Book. Three core principles (Affordability, Decarbonization, and Reliability, (Safety is included in Reliability.<sup>1</sup>) together, the "Core Principles") are identified as the "primary policy objectives"<sup>2</sup> to be achieved by California's electric sector. Fragmentation is identified as the challenge in obtaining the three Core Principles. Lack of a plan is identified as the problem.

### **A. Core Principles: Affordability, Decarbonization, and Reliability**

Regardless of the regulatory framework California ultimately ends up with, the Core Principles should serve as a barometer to assess the success of any regulatory framework. A delicate balancing of the Core Principles is required, and there is some tension among the Core Principles. Efforts to maintain

---

<sup>1</sup> Draft Green Book, p. 8 and p. 23.

<sup>2</sup> Draft Green Book, p. 23.

Reliability may or may not be aligned with Greenhouse Gas (GHG) emissions reductions targets. Incremental gains in Decarbonization or Reliability can pose costs that reduce Affordability. Careful management and oversight of the electric system is needed to attain all three Core Principles.

More work can be done to specify what success looks like to achieve these Core Principles, and the delicate balance of these three Core Principles should continue to be top of mind for California policymakers.

## **B. Fragmentation**

The Draft Green Book identifies “fragmentation” as a significant challenge in attaining the Core Principles. The Draft Green Book includes statements about “increasing fragmentation of suppliers and buyers”<sup>3</sup> and providers and “fragmented responsibility for resource procurement and resource adequacy.”<sup>4</sup> The Joint IOUs generally agree with the Draft Green Book’s framing of fragmentation as the challenge. This section elaborates the challenge of fragmentation.

### **1. Delivery Is Not Fragmented**

The Draft Green Book identifies fragmentation as occurring in the supply and retail service components of the electricity value chain. The delivery component of the electricity value chain is described as *not* fragmented. As stated in the Draft Green Book regarding delivering electricity safely, reliably, and affordably:

- “the IOUs will retain responsibility for essential safe and reliable grid operations”<sup>5</sup>
- “Under all visions of the future, the IOUs continue to provide transmission, distribution and other grid services”<sup>6</sup>
- “The IOUs are also responsible for grid safety and resilience, during normal operations and catastrophic events. As operators of the transmission and distribution grid, the IOUs will retain this obligation and liability.”<sup>7</sup>
- “Every outcome contemplated and analyzed by this assessment relies on the basic proposition that the utilities will continue to provide the fundamental backbone services of electric delivery to customers along with ensuring the safety and reliability of that delivery.”<sup>8</sup>

---

<sup>3</sup> Draft Green Book, p. iii.

<sup>4</sup> Draft Green Book, p. 4.

<sup>5</sup> Draft Green Book, p. 4.

<sup>6</sup> Draft Green Book, p. 6.

<sup>7</sup> Draft Green Book, p. 19.

<sup>8</sup> Draft Green Book, p. 25.



The Joint IOUs agree that the IOUs have, and will continue to have, a vital and central role in the delivery of electricity.

## **2. Fragmentation in Retail Service: Causes and Consequences**

The Draft Green Book identifies fragmentation as occurring in the supply and retail service components of the electricity value chain. Fragmentation is described as a consequence of policies that promote alternative retail electricity providers, such as CCAs and direct access providers, and policies that support technologies enabling customers to install behind-the-meter resources, such as rooftop solar and distributed energy storage.

The Green Book should also consider whether the PCIA mechanism was a primary contributor to fragmentation in retail electric supply. The Joint IOUs posit that the current PCIA mechanism fails to achieve bundled customer indifference, causing bundled customers to pay a disproportionate share of state policy and reliability costs. The Green Book should consider whether a PCIA charge which relieved departing load from their fair share of these costs incited load departure. Similarly, the Green Book should consider whether a PCIA mechanism meeting the legal standard of indifference will better inform a community's considerations in exercising customer choice.

The Green Book should also consider the economic consequences of any sustained cost shift to remaining bundled service customers. In PG&E's territory, CCAs serve customers in 13 of the top 15 wealthiest counties in the state.<sup>9</sup> Customers in these wealthy counties are subsidized by remaining bundled service customers through the outdated PCIA mechanism that fails to meet statutory requirements of indifference. In 2018, the bundled customer subsidy to CCA customers is estimated to be between \$186 million and \$254 million in PG&E's service territory alone.<sup>10</sup>

In addition, fragmentation has been catalyzed by policy mechanisms that promote preferred resources. The Draft Green Book describes Net Energy Metering (NEM), the Self-Generation Incentive Program (SGIP), energy efficiency programs, the California Solar Initiative (CSI), and other landmark policy mechanisms that form today's electricity landscape. The Draft Green Book places these policy mechanisms in a section on "Achieving Decarbonization."<sup>11</sup> While these policy mechanisms promote the development of preferred resources, they are also catalysts for fragmentation in supply and retail service. In some cases, policy

---

<sup>9</sup> See Chapter 1 of the Joint IOUs' PCIA OIR Opening Testimony (in that proceeding the Joint IOUs and Southern California Edison filed testimony as joint parties).

<sup>10</sup> See Chapter 2 of the Joint IOUs PCIA OIR Rebuttal Testimony.

<sup>11</sup> Draft Green Book, pp. 9-15.

mechanisms can result in unintended consequences, such as the finding by Itron that SGIP resources were actually increasing GHG emissions.<sup>12</sup>

More generally, policies have benefits and costs, and how these benefits and costs are allocated among electric customers creates incentives and disincentives. Notably, the Draft Green Book identifies non-bypassable charges as a key feature of NEM 2.0 and SGIP.<sup>13</sup> The Draft Green Book states that, in implementing CSI, the CPUC allocated \$2.167 billion of IOU ratepayer funds.<sup>14</sup> Similarly, PG&E estimates that in its territory, the PCIA causes its bundled customers to pay hundreds of millions of dollars in reliability and state policy costs that departed load is responsible for. The essential point is that allocation of costs and benefits among customers—especially between the group of customers that exercise a choice and the remaining group of customers that do not or cannot—is a key factor determining the pace and consequences of fragmentation.

### **3. Fragmentation: Opportunities and Challenges**

Technological advances, alternative retail electricity providers, and policies promoting preferred resources have all enabled electricity products to be tailored to the needs and wants of many California homes and businesses. However, not all California homes and businesses have had the same opportunities and choices.

Fragmentation has created challenges for California electricity regulators. The Draft Green Book states,

the central decision making that we [the CPUC] use for keeping the grid reliable, safe and affordable is splintering, becoming the task of dozens of decision-makers.<sup>15</sup>

Fragmentation has created challenges for California's IOUs in their capacity as vehicles for California's energy policies. The Draft Green Book recognizes the role of the IOUs as LSEs is evolving in the space of supply and retail services, and that existing regulatory frameworks and policies are in tension with the trend of increasing fragmentation of suppliers and providers. The Draft Green Book states the following:

Even with demands for more competition, the IOUs are presumed to be the default providers of last resort, are expected to administer most of

---

<sup>12</sup> Itron study, 2016 SGIP Advanced Energy Storage Impact Evaluation: <http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0ahUKEwjB7LCttcLbAhWHhIQKHdiZAPkQFggtMAE&url=http%3A%2F%2Fwww.cpuc.ca.gov%2FWorkArea%2FDownloadAsset.aspx%3Fid%3D6442454964&usq=AOvVaw0cpz33iG9fDmx-44Wg4zAu>.

<sup>13</sup> Draft Green Book, pp. 12-13.

<sup>14</sup> Draft Green Book, p. 11.

<sup>15</sup> Draft Green Book, p. iii.

the public purpose programs, and are often pressured to procure resources that no other provider wants to buy.<sup>16</sup>

The Joint IOUs agree that fragmentation, if not proactively addressed, could jeopardize achievement of the Core Principles and result in undesirable outcomes for California's electric customers. The Joint IOUs believe that the presumption IOUs serve as providers of last resort, administrators of most of the public purpose programs, and procurer of resources that no other provider wants to buy should be re-examined in the Green Book given the declining load environment.

Additionally, the Draft Green Book recognizes the critical role the utilities play in supporting the path to a cleaner energy future. The Draft Green Book detailed the past actions taken by the IOUs to advance Renewable Portfolio Standard (RPS) and Distributed Energy Resource goals.<sup>17</sup> Indeed, the IOU role in achieving the state's aggressive RPS goals underscores the need for the Commission to resolve the cost shifts that bundled customers face today. IOUs bundled customers deserve fair cost allocation, and a declining load and declining RPS cost environment will make the financial harm resulting from the flawed PCIA mechanism more acute. Thus, durable and fair cost allocation must be prerequisite to any broader market or regulatory design resulting from fragmentation. The IOUs will also play a significant role in helping to decarbonize the transportation sector.

### **III. Context for the Green Book**

As the Draft Green Book has identified, maintaining effective regulation of the electric industry is challenging as fragmentation increases. California's IOUs have historically been the state's key instruments to advance reliability, affordability, and environmental goals. The Green Book presents an opportunity to thoughtfully examine how and why this role may change with increased fragmentation in the electric supply function.

An important framing element not clearly articulated in the Draft Green Book is that policymakers have been able to ensure the IOUs advance these Core Principles, primarily via CPUC regulation of four crucial mechanisms: (1) procurement, (2) public purpose programs, (3) rates and tariffs, and (4) grid investment and operation.

When the electricity industry was dominated by a few vertically integrated IOUs that were centrally regulated by the CPUC, and where little distinction was made among utility roles, these four mechanisms were appropriate and effective. Due to fragmentation of the retail service function, however, the four mechanisms are less effective in driving outcomes toward achieving the Core Principles, and can be prone to causing cost shift to the declining base of IOU bundled customers.

---

<sup>16</sup> Draft Green Book, p. 19.

<sup>17</sup> See Draft Green Book, pp. 9-15.

Two active regulatory proceedings not detailed in the Draft Green Book are the PCIA proceeding and the RA proceeding. Both regulatory proceedings are now grappling with issues associated with fragmentation.

### **A. PCIA Proceeding**

While CPUC staff were preparing the Draft Green Book, the PCIA proceeding was underway.<sup>18</sup> The PCIA proceeding is listed as a relevant regulatory proceeding in Appendix III of the Draft Green Book, but otherwise is not mentioned in the Draft Green Book.

The central issue in Track 2 of the PCIA proceeding is addressing the legacy portfolio and its associated costs to ensure customer indifference as required by law. The Commission is considering how the costs and benefits associated with IOU energy supply commitments made on behalf of departed load should be fairly allocated to all customers. Allocation is between bundled electric customers of the IOUs and those customers now receiving service from CCAs and other alternative service providers. Fair cost allocation is foundational, required by law, and must be addressed before the Commission can make progress on how the electricity landscape should evolve. As described at a high level in the Draft Green Book, before each of the regions benchmarked (New York, Illinois, Texas, and Great Britain) could pursue customer choice policies, that region's regulatory framework first had to determine how to fairly allocate the cost of legacy resources. While customer choice has begun in California, it is not too late to fix the current flawed cost allocation mechanism. In fact, reforming the PCIA so it meets its statutory objective a critical step to any future.

### **B. RA Proceeding**

Similar to the PCIA, the RA proceeding is underway.<sup>19</sup> The RA proceeding is listed as a relevant regulatory proceeding in Appendix III of the Draft Green Book. While RA issues are discussed throughout the Draft Green Book, the current RA proceeding is not specifically mentioned.

In recent years, the RA program has demonstrated signs that the current regulatory paradigm may be incompatible with fragmentation in the LSE space. The CPUC is taking steps in the right direction in the RA proceeding. The CPUC is looking at multi-year forward RA obligations and is also seeking proposals for a central buyer to make multi-year forward RA commitments for local capacity. A well-designed central buyer framework can mitigate the reliability cost allocation impacts posed by new CCA formations or expansions. Track 2 of the RA proceeding should identify a central procurement entity for certain capacity products, but that entity would not necessarily be the same procurer in the case that mandated policy procurement, such as technology carve-outs, could not be fairly allocated to all LSEs. The Green Book should address how procurement of policy products or other additional state mandates should be structured in the future.

---

<sup>18</sup> Rulemaking (R.) 17-06-026.

<sup>19</sup> R.17-09-020.

## IV. Recommendations

### A. Foundational Recommendations

1. The Commission must first resolve the inequities that exist today.

The Joint IOUs support a customer's right to choose the composition, methods, and buyers for the energy commodities that are purchased to meet their energy supply needs. We believe Californians can benefit from customer choice in energy supply because it affords them the ability to make decisions that are tailored to their environmental, municipal, or other goals, and the Joint IOUs bundled customers *should be* indifferent when customers make such choices. Today, however, regulatory mechanisms designed to implement a bundled customer's statutory right to indifference are broken, harming bundled customers. As previously stated, the Green Book must support fixing these broken mechanisms prior to the implementation of broader market or regulatory changes.

The Joint IOUs believe it is possible for a customer to make a choice without unfairly shifting costs onto bundled customers. Rules that currently distort cost responsibility when choice is exercised can and should be fixed. The Joint Utilities propose a path forward in the PCIA OIR so that PCIA design flaws that cause unfair subsidization of CCA customers are remedied. The Joint Utility Proposal achieves bundled customer indifference when load departs, at all levels of load departure, and can be implemented in 2019 to alleviate the harm currently being caused to bundled customers. Whatever path the Commission chooses in the PCIA OIR, cost shifts cannot be a feature. Resolving cost shifts resulting from customer choice must be achieved as required by law before market and regulatory design explored by the Commission in the Green Book can be adequately tested.

Just as critical, as more LSEs enter the market, RA rules must not only ensure that grid reliability is maintained, but that reliability costs are paid for equally by all customers that benefit. California customers should not have to compromise choice and cost-effective reliability. The RA proceeding,<sup>20</sup> is directly addressing this issue, and its schedule allows for a Commission decision with the potential to sustainably address reliability challenges resulting from fragmentation as early as this winter.

It is important that the Commission decide these two matters expeditiously and fairly, because serious cost misallocations have a direct impact on bundled customers, and substantial resulting cost shifts will intensify if the status quo is not remedied. The Green Book should unequivocally state that the Commission must stop the harm to bundled customers and address challenges to the state's reliability program prior to testing with any new design.

---

<sup>20</sup> A.17-06-026 and R.17-09-020.

2. The Green Book should include a specific plan.

As the Draft Green Book lists in Appendix III, there are many proceedings relevant to the topic of customer choice. The Joint IOUs request that the CPUC put forth a plan that identifies milestones for a path forward that considers and coordinates results from other regulatory proceedings (e.g., RA and PCIA). This plan should carefully consider the pace at which the electric industry is changing and ensure that critical decisions are being made at the right time, with the right information, and with input from the right set of stakeholders so that the decisions are both effective and durable. Steps toward designing and implementing a modern rate architecture, as described in Recommendations #4-5, should be included in the plan.

3. The Green Book should identify and provide a recommendation on how to mitigate the effects of the numerous “siloe” proceedings underway.

Somewhat related to Recommendation #2, the Joint IOUs request that the CPUC holistically examine all open proceedings, as well as those on the horizon, to ensure consistent decision making. Siloe proceedings have the potential to exacerbate some of the challenges noted in the Draft Green Book. Consequently, the state may be moving further away from achieving the Core Principles of Affordability, Reliability and Decarbonization as some of these proceedings move forward without the benefit of a more holistic view of where they might lead.

As an example, the CPUC is pursuing the advancement of the Locational Net Benefits Analysis in the Distribution Resources Plan /Integrated Distributed Energy Resources, all while beginning to queue up the discussion of a Common Resource Valuation Methodology in the Integrated Resource Plan (IRP) proceeding. The Joint IOUs suggest that the Commission refrain from further rulings on this issue until the issue is included in the Commission’s roadmap for the Green Book.

## **B. Ratemaking Recommendations**

4. The Green Book should emphasize that a modern rate architecture—designed to achieve transparency, equity, sustainability, and access—is a necessary foundation for any regulatory framework to be implemented in California.

The current electric rate structure is growing increasingly outdated; it was designed during a time in which vertically integrated utilities were, for the most part, solely responsible for providing energy services and when decarbonization was not the priority it is now.

A key concern with the existing IOU rate structure is that it was engineered to meet one set of conditions and altered reactively when it encountered others. Policy goals, customer engagement, and technology trends have also encouraged fragmentation of the electricity value chain. As a result, end-use electricity customers engage with the electricity system in increasingly different ways, expect different levels of service, and make decisions based on perceived value in distinct products and services which may benefit a few, but can result in increased bills for many.

IOU rates and incentives—and the approach to IOU rate architecture—need to be reformed to keep pace with the fundamental changes seen by this industry. Antiquated rate design practices still dominate management and design of IOU electric rates. Piecemeal efforts have been expended to improve the existing rate architecture through proceedings that address time-of-use rate adoption and residential rate reform. However, the slow and somewhat ad hoc nature of these efforts have enabled alternative providers of energy services to develop business models that allow certain customers to take advantage of energy pricing disparities.

To address this inequitable result, a modern rate architecture is essential to the continued evolution of the electricity landscape in California. A modern rate architecture is a necessary foundation for any regulatory framework to be implemented in California, and is founded on the principles of access, equity, sustainability and transparency.

a. Access

- A modern rate architecture should enable choices for all customers and customer groups, not just for particular customers or customer groups with financial wherewithal or favorably situated circumstances.

b. Equity

- Equity means customer electric rates that are fair, just, and reasonable to *all* customers and *all* customer groups (equity does not mean that all customers and customer groups are offered the same services at the same prices).
- Equitable rates are necessary to achieve affordability.
  - Without equitable rates, affordability may be obtained by some customer groups but not others.
  - As the Draft Green Book gleans from analyzing customer participation in retail service plans in New York, Illinois, Texas, and Great Britain:

[as a consequence of] rate structures that result in cross-subsidization among rate classes, customers who are not realizing the benefits of a particular choice can be subject to its impacts without actually making a choice.<sup>21</sup>

c. Sustainability

- The modern rate architecture should be designed to accommodate new technologies, customer choices, and other changes as the electricity landscape evolves.
- The modern rate architecture should be durable so that as the electric sector evolves, new market entrants are unable to arbitrage elements of the rate architecture to benefit themselves and their customers, at the expense of other customers.

---

<sup>21</sup> Draft Green Book, p. 50.

- d. Transparency
- Transparency of price, and associated terms and conditions.
  - Transparency to regulators, customers and potential customers (but maintaining confidentiality rules needed to create a more competitive marketplace).
  - As the Draft Green Book states, “customer engagement and price transparency are critical to keep rates low in competitive markets.”<sup>22</sup>
5. The Green Book should specify that a modern rate architecture include the following elements: (a) fair allocation of costs among customer groups; (b) pricing that matches the costs of the services offered; (c) broad-based collection of policy-related costs from all customers; and (d) a separate value-based means of compensating customers and third parties for services that they might provide to the electric grid or to the backstop procurement entity.
- a. Fair allocation of costs among customer groups
- Customer differentiation and product segmentation are two essential characteristics of a regime with customer choice.
  - Allocation of costs according to the services that each customer group is offered.
- b. Pricing that matches the costs of the services offered
- Clearly identify the products related to utility services and the costs of these products and services.
  - Establish pricing of utility services and policy mandates based on the costs of those products and appropriately charge all customers for the services they use and the policies from which they benefit as required by law.
- c. Broad-based collection of policy-related costs from all customers
- The cost to implement state policy should be broadly and transparently shared, even as fragmentation continues.
- d. A separate value-based means of compensating customers and third parties for services that they might provide to the electric grid or to the backstop procurement entity.
- Create transparent credits for customers or third parties to compensate for benefits they provide, or behaviors they adopt.

A utility rate structure with these elements is an essential enabling device for resolving the tension between fostering customer choice and achieving the Core Principles identified in the Draft Green Book.

---

<sup>22</sup> Draft Green Book, p. 55.



### C. Grid Service Recommendation

6. The Green Book should further emphasize that financially healthy IOUs are essential to continued availability of safe, reliable, and affordable grid services.

As the Draft Green Book recognizes, regardless of how the electric landscape evolves in California, the IOUs, as Transmission and Distribution owners, will continue to have the vital role of delivering electricity safely, reliably, and affordably. That is to say, the electric grid is—and will continue to be—a critical foundation for any regulatory framework and market design. The financial health of the grid owner and operator is vital for the viability of every other element of the electricity landscape.

To create a durable paradigm in which the IOUs are financial healthy enough to build and maintain grid infrastructure, it is imperative to minimize cost distortions among customers paying for the grid. The CPUC should ensure that all users of the grid pay for the grid. As the Draft Green Book states,

Choice policies can cause customers to be unwitting participants. By either creating default enrollment in new programs or designing rate structures that result in cross-subsidization among rate classes, customers who are not realizing the benefits of a particular choice can be subject to its impacts without actually making a choice.<sup>23</sup>

This is not durable for customers, and may ultimately result in the IOUs becoming less financially healthy as more costs are borne by a smaller customer base.

The Green Book should ensure that the grid-related questions it has characterized as “fundamental questions” include an underlying assumption that the IOUs need to be financially healthy. The following questions about the electric grid and the IOUs should be amended (recommendations are underlined) to make this point more explicit:

- “Under all visions of the future, the IOUs continue to provide transmission, distribution and other grid services, what are the requirements to maintain these systems and ensure a financially healthy IOU?”<sup>24</sup>
- “How will these utilities be compensated for building the necessary infrastructure and operating the grid and how will the state ensure all users of the grid are paying for the grid?”<sup>25</sup>

### D. Energy Supply Recommendations

7. The CPUC should continue to be the regulator of long-term reliability planning of the electric system.

---

<sup>23</sup> Draft Green Book, p. 59.

<sup>24</sup> Draft Green Book, p. 6.

<sup>25</sup> Draft Green Book, p. 6.

The CPUC, with clearly defined roles and relationships between the CPUC and the CAISO, should continue to be the regulator of long-term reliability of the electric distribution system. The CPUC has a proven track record of fulfilling its duties via regulatory proceedings, including the Long-term Procurement Plan proceeding, RA proceeding, the IRP proceeding, and other means.

One of the lessons that may be gleaned from examination of California history, and the experiences in New York, Illinois, Texas, and Great Britain, as described and discussed in the Draft Green Book, is the essential role of a well-identified regulator of long-term reliability of the electric system.

8. The CAISO's reliability role in RTMs, as well as through RMR and CPM mechanisms, should be clearly articulated in the Green Book, along with any jurisdictional issues that may need to be addressed.

Reliability procurement by the CAISO, and its relationship to CPUC reliability planning, should also be fully addressed in the Green Book. In a world with more fragmentation and increasing market complexity, and increased out of market procurement by the CAISO to meet reliability needs that individual LSEs failed to procure, the CPUC must carefully consider whether it has (or needs) the jurisdictional ability to regulate these or other backstop procurement mechanisms to meet the Core Principles.

9. The Green Book should consider the need for a central procurement approach for purposes of reliability (particularly in local areas) or state policy goals that cannot be allocated across all LSEs (i.e., mandates).

In addition, the Draft Green Book states that the electric industry is being transformed to have "increasing fragmented responsibility for resource procurement and resource adequacy." We agree. Responsibility for RA procurement under fragmented supply is a critical question that must be answered to ensure that customer choice can co-exist with reliability planning and procurement. The Joint IOUs note that, Track 2 of the RA OIR will consider a centralized procurement entity to be solely responsible for local RA on a multi-year forward basis, but this consideration may just be a transitional solution.

Fragmentation of LSEs can cause similar challenges to meeting state policy goals or procurement targets. For example, in a declining load environment the Joint IOUs may not have a need for procurement products. Moreover, cost recovery mechanisms may not be robust enough to fairly allocate and recover procurement costs from mandates. Similarly, small LSEs may not be well-positioned to procure specific mandates. The Green Book should entertain whether or not the state needs to assign an entity or entities to fulfill any state mandates/goals that cannot be broadly allocated.

10. The Green Book should recognize that some entity must have the role of POLR.

Customer choice in energy supply does not necessarily need to hinder achievement of the state's clean energy policy. Looking forward, equal treatment among energy supply providers and the establishment of a central entity to act as a "backstop" for reliability and/or other needs can

contribute to decentralization success. Historically, the IOUs have served as California's default provider and procurement "backstop" to ensure that energy supply policy objectives not met by the market are fulfilled. As the Draft Green Book points out:

[e]ven with demands for more competition, the IOUs are presumed to be the default provider of last resort, are expected to administer most of the public purpose programs, and are often pressured to procure resources that no other provider wants to buy.<sup>26</sup>

We agree with this characterization of the IOUs' traditional role, but submit that continuation of the status quo may need review, especially in an environment where IOUs may be providing a minority of electricity to end-users.

The Draft Green Book offers support for centralized planning and acknowledges) that:

[a]s customer load becomes increasingly disaggregated, designated entities must be ready to provide electricity as a last resort if the market does not meet customer demand.<sup>27</sup>

No entity can be successful without the appropriate incentives, rules, oversight and accountability structures that encompass all market participants. We believe any central procurement approach must consider:

- An entity with the administrative capacity and financial standing to absorb an uncertain number of customers and uncertain electric load;
- CPUC pre-approval of procurement needs and transactions;
- Durable cost recovery with statutory protections;
- Equitable cost allocation mechanism with statutory protections; and
- Appropriate compensation.

11. The Green Book should consider the need for a robust natural gas infrastructure.

Even if natural gas throughput declines because of carbon reduction, under any reasonably foreseeable scenario, the need for natural gas resources *on peak*—will remain critical to ensure reliability in the face of more reliance on intermittent renewable resources. The Green Book should consider the role of investment in natural gas infrastructure as part of any comprehensive plan. Any decisions affecting utility investment in natural gas infrastructure should take the role of natural gas-fired electric power plants into account, and should not jeopardize safety and reliability of the electric power system by discounting the need for robust natural gas infrastructure.

---

<sup>26</sup> Draft Green Book, p. 19.

<sup>27</sup> Draft Green Book, p. 23.

## **V. Conclusion**

The Joint IOUs appreciate the Commission's desire to examine the important issues included in the Draft Green Book. We recognize that studying past successes and failures in California and other markets provides valuable lessons learned in shaping the future of California's electricity market; we also believe there will not be a 'plug and play' solution for California's future. The California market and the manner in which it has transformed over the past decade offers more complexities than the previous one. There is no pre-existing model in use elsewhere that can swiftly apply here. The Joint IOUs believe that solving key foundational issues—fair and equitable cost allocation and a strong reliability paradigm compatible with customer choice—are foundational to any new model.

The Joint IOUs look forward to working with the CPUC and other stakeholders to advance this work. Important early steps are for the CPUC to resolve the PCIA OIR and RA OIR proceedings, and to establish a modern Rate Architecture.