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

Order Instituting Rulemaking to Address	)	R.11-03-012
Utility Cost and Revenue Issues Associated	)	
with Greenhouse Gas Emissions.	)	(Filed March 24, 2011)
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**JOINT PROPOSAL OF PACIFIC GAS AND ELECTRIC COMPANY (U 39 E),  
SOUTHERN CALIFORNIA EDISON COMPANY (U 338 E), AND SAN DIEGO GAS &  
ELECTRIC COMPANY (U 902 M) ON THE APPROPRIATE USE OF ALLOWANCE  
AUCTION REVENUES**

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Pursuant to Ordering Paragraph 5 of Assigned Commissioner and Administrative Law Judges’ Joint Scoping Memo and Ruling in this *Order Instituting Rulemaking to Address Utility Cost and Revenue Issues Associated with Greenhouse Gas Emissions* (“GHG OIR”), dated September 1, 2011 (the “Ruling”), Pacific Gas and Electric Company (“PG&E”), Southern California Edison Company (“SCE”), and San Diego Gas & Electric Company (“SDG&E”) (jointly, the “Joint IOUs”) respectfully submit this proposal (the “Joint IOU Proposal”).<sup>1</sup> As discussed in more detail, the proposal submitted by the Joint IOUs earlier in this proceeding to return 100 percent of Assembly Bill (“AB”) 32 allowance revenues directly to utility customers is the most equitable and cost-effective method for ensuring that utility customers receive the full benefits of the allowances allocated to utilities as intended by the California Air Resources Board (“ARB”) in its AB 32 rulemaking.

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<sup>1</sup> Pursuant to Rule 1.8(d) of the Commission’s Rules of Practice and Procedure, counsel for PG&E and SDG&E authorize counsel for SCE to file this pleading on their behalf.

## I.

### **INTRODUCTION AND EXECUTIVE SUMMARY**

In this proceeding, the California Public Utilities Commission (the “Commission”) must determine how to direct utilities to use the revenues received from sale of AB 32 (“AB 32”) greenhouse gas (“GHG”) emissions allowances under the cap-and-trade program for the exclusive benefit of utility customers. This use must be consistent with the intent of the ARB in its cap-and-trade rulemaking and the authority of the Commission to establish fair and reasonable electricity rates. The allocation of the significant sum generated from the sale of cap-and-trade allowances is of vital importance to the IOUs, as it enables the IOUs to address the significant costs borne by electricity customers that arise from all AB 32 measures (including cap-and-trade as well as investments in renewable energy, energy efficiency and combined heat and power resources). In this proceeding, the Commission has the opportunity to support the goals of AB 32 and ensure that overall costs to customers associated with AB 32 are mitigated, by directing the Joint IOUs to return these allowance revenues directly back to utility customers in an equitable and cost-effective manner.

The Ruling invites interested stakeholders to propose methodologies for the appropriate use of the allowance revenues. The Ruling sets forth seven key policy objectives against which the various stakeholder proposals may be evaluated. Those policy objectives include:

- 1) Preserve the Carbon Price Signal;
- 2) Prevent Economic Leakage;
- 3) Distribute Revenues Equitably Recognizing the Public Asset Nature of the Atmospheric Carbon Sink;
- 4) Reduce Adverse Impacts on Low-Income Households;

- 5) Correct for Market Failures that Lead to Underinvestment in Carbon Mitigation Activities and Technologies;
- 6) Maintain Competitive Neutrality Across Load Serving Entities; and
- 7) Achieve Administrative Simplicity and Understandability.

The Ruling also invites stakeholders to recommend additional policy objectives and rank all of the policy objectives – both the Ruling objectives and the additional objectives – in order of importance.

The Joint IOUs propose two additional policy objectives:

- 1) Mitigate cost increases due to the cap-and-trade program and other AB 32 related programs (such as the 33% Renewable Portfolio Standard (“RPS”), Customer Energy Efficiency (“CEE”), the California Solar Initiative (“CSI”) and Combined Heat and Power (“CHP”)) for all customers, including direct access (“DA”), community choice aggregator (“CCA”) and low-income customers; and
- 2) Ensure fundamental fairness by returning the allowance revenues to customers in a manner that reflects the AB 32 costs borne by each customer.

As detailed below, the Joint IOUs have ranked these two new objectives as “Critical” because these objectives are not addressed by other elements of the AB 32 program, are expressly included in the AB 32 legislation, and are critical to public acceptance of the cap-and-trade program.

In addition, the Joint IOUs place great weight on the objectives of competitive neutrality across load-serving entities and mitigating economic leakage, because these objectives are explicitly promoted in the California Air Resources Board (“ARB”) regulations. They are also important in ensuring that the two critical objectives – cost mitigation and fairness – are achieved. Similarly, administrative simplicity is important for keeping customer costs low as well as improving public

perception of the cap-and-trade program. The Joint IOUs rank these policy objectives as “Very Important.”

The Joint IOUs rank the other three objectives as “Not Necessary” because these policy objectives are already met by other elements of the cap-and-trade program or the Commission rate structure. For example, the cap-and-trade program already provides direct and effective price signals at the wholesale level, while the Commission’s current rate design provides a more than sufficient retail-level price signal in customer rates. Any approach used to achieve a price signal at the total retail rate level on top of the wholesale price signal would only send a duplicative, burdensome, and arbitrary price signal.

In this Joint IOU Proposal, similar to the proposal contained in the Joint IOUs’ Interim Motion<sup>2</sup> previously filed in this proceeding, the Joint IOUs propose that 100 percent of the AB 32 cap-and-trade allowance revenues be credited directly to retail electricity and gas customers approximately in proportion to the costs incurred by each customer related to various AB 32 programs. The Joint IOUs’ approach will mitigate rate increases that California customers experience. It will also ensure that those customers who bear the costs of AB 32 receive a comparable share of the allowance revenues, thereby ensuring that the allowance values are distributed equitably. This approach meets the additional objectives of being administratively simple to implement, promoting competitive neutrality across all load-serving entities and minimizing leakage. Thus, the Joint IOU Proposal ensures that the policy objectives most critical to the success of the cap-and-trade program will be fully realized.

Below, the Joint IOUs describe each specific issue raised in the Ruling. Section II describes the Joint IOUs’ additional policy objectives and discusses why and how each proposal submitted to the Commission should be evaluated against them. Section III provides a ranking of all of the

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<sup>2</sup> Joint Motion of PG&E, SCE, and SDG&E for Interim Decision to Authorize Use of Greenhouse Gas Allowance Revenues for 2012 Electricity Rates, R.11-03-012 (filed May 11, 2011).

policy objectives and includes an explanation of the Joint IOUs' ranking order. Section IV presents the Joint IOU Proposal. Section V discusses how the Joint IOU Proposal meets the various policy objectives. Finally, Section VI discusses jurisdictional issues and how the Joint IOU Proposal incorporates previous guidance from the Commission and the ARB.

## II.

### **DESCRIPTION OF ADDITIONAL POLICY OBJECTIVES AND DISCUSSION OF HOW PROPOSALS SHOULD BE EVALUATED AGAINST THEM**

The Ruling requests that interested stakeholders in this GHG OIR file proposals describing how GHG allowance revenues should be used. It establishes seven policy objectives against which these proposals may be evaluated. The Ruling invites stakeholders to provide a description of any additional policy objectives beyond the seven it has set forth that the Commission should consider when evaluating each stakeholder proposal. The Ruling also asks parties to discuss how proposals should be evaluated against these proposed new policy objectives.<sup>3</sup>

As a threshold matter, the Joint IOUs recommend that two additional policy objectives be added to the list. First, it is essential that in evaluating the various proposals the Commission consider the extent to which each proposal mitigates costs and equitably distributes the benefits of allowances to all customers, including DA and CCA customers. Likewise, the Commission should evaluate if, and to what extent, each proposal returns the allowance revenues to customers equitably – in a manner that benefits customers commensurate with the AB 32 costs they bear.

Both of these policy objectives are found in the express language and intent of AB 32 and are critical to ensuring the success of the cap-and-trade program. Below, the Joint IOUs describe

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<sup>3</sup> Ruling at 12.

these additional policy objectives and discuss how the proposals submitted by various stakeholders in this proceeding should be measured against these objectives.

**A. Additional Policy Objective #1: Provide Benefits and Mitigate Costs for All Customers and Ensure Cost-Effectiveness of Emissions Reductions Measures**

The Commission must consider whether and to what extent each proposal mitigates costs borne by customers. Additionally, the parties should be required to demonstrate that their proposals to fund any new or existing AB 32-related programs support the most cost-effective method of achieving emissions reductions. The Commission must also consider the extent to which each proposal mitigates sudden rate increases, including rate increases that may not be offset due to delays in the return of allowance revenues to customers. To implement this objective, the Commission must not only consider the extent to which each proposal affects average rates, but also whether certain classes of customers, or even individual customers, experience bill increases.

**B. Additional Policy Objective #2: Return Allowance Revenues to All Customers in Proportion to Costs In Order to Ensure An Equitable Outcome**

Another policy objective that the Commission should take into account is whether each proposal is equitable. The Joint IOUs recognize that AB 32 programs impose significant costs on all customers, but that these costs are not distributed evenly across all customers or customer classes. An “equitable” proposal, as the Joint IOUs define it, must mitigate this by returning allowance value to customers in a way that mirrors this distribution of costs. This emphasis on equity is inherent in ARB’s directive to IOUs to provide “equal treatment of their own customers and customers of electricity service providers and community choice aggregators.”<sup>4</sup> This policy

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<sup>4</sup> Executive Order S-21-09, ¶ 2.

objective focuses on analyzing the fundamental fairness of the various proposals and emphasizes avoiding a revenue allocation method that is arbitrary.

Specifically, when considering how to apportion the allowance revenues to customers, it is critical to consider how the costs and benefits of the AB 32 program (including but not limited to cap-and-trade, RPS, CSI, CHP and CEE) are apportioned among customers. Additionally, parties' proposals and the Commission should take into account statutory mandates regarding cost allocation and rate structure that would result in differences in rate increases among customer tiers and classes.

### III.

#### **RANKING OF POLICY OBJECTIVES AND EXPLANATION OF RANKING**

##### **A. Ranking of Policy Objectives**

The Joint IOUs rank the policy objectives (including the seven<sup>5</sup> Commission policy objectives and two additional policy objectives described in Section II) in the table below:

<b>Rank</b>	<b>Policy Objective</b>
Critical	<ul style="list-style-type: none"><li>➤ Mitigate cost increases for all customers and ensure cost-effectiveness of emissions reduction measures / Reduce adverse impacts on low income households</li><li>➤ Return revenues to customers in proportion to costs incurred in order to achieve the fairest outcome</li></ul>
Very Important	<ul style="list-style-type: none"><li>➤ Achieve administrative simplicity and understandability</li><li>➤ Maintain competitive neutrality across load serving entities</li><li>➤ Prevent economic leakage</li></ul>
Not Necessary (or Already Addressed in Other Objectives)	<ul style="list-style-type: none"><li>➤ Preserve the carbon price signal</li><li>➤ Distribute revenues equitably recognizing the “public asset” nature of the atmospheric carbon sink</li><li>➤ Correct for market failures that lead to ongoing underinvestment in GHG-reducing technologies</li></ul>

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<sup>5</sup> As mentioned above, the Joint IOUs have included the “reduce adverse impacts on low-income households” policy objective in the new, more broadly-focused “mitigate cost increases for all customers” objective.

**B. Explanation of Joint IOUs' Ranking of Policy Objectives**

**1. Critical: Mitigate cost increases for all customers and ensure cost-effectiveness of emissions reduction measures/Reduce adverse impacts on low income households**

One of the most important policy objectives is to ensure that the cap-and-trade program is implemented in a way that is cost-effective and does not result in sudden rate increases to any class of customers. This objective includes the Commission policy objective of reducing adverse outcomes for low-income customers and also fulfills the objective of mitigating economic leakage, as it is critical to ensure that all customers are protected against significant and sudden rate increases resulting from the cap-and-trade program.

The reasons the Joint IOUs rank this policy objective as “Critical” are threefold. First, it is clear that this is what the Legislature and ARB intended. The text of AB 32 repeatedly calls for implementation of the cap-and-trade program in an efficient and cost-effective manner.<sup>6</sup> The statute references cost-effectiveness no less than ten times, mandating the adoption of rules and regulations that achieve cost-effective GHG emissions reductions,<sup>7</sup> requiring the ARB to consider cost-effectiveness of the regulations,<sup>8</sup> and requiring the ARB to meet with other state agencies, including the Commission, to ensure that GHG emissions-reduction activities can be implemented in an efficient and cost-effective manner.<sup>9</sup> Accordingly, to ignore cost-effectiveness in allocating allowance revenues to customers would undermine this fundamental purpose of the cap-and-trade program.

Similarly, it was the express intent of the Legislature in drafting AB 32 that ARB design emission-reduction measures in a manner that “minimizes costs and maximizes benefits for

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<sup>6</sup> See Cal. Health and Safety Code § 38560 *et seq.*

<sup>7</sup> Cal. Health and Safety Code § 38560.

<sup>8</sup> Cal. Health and Safety Code § 38562.

<sup>9</sup> Cal. Health and Safety Code § 38561(a).

California's economy.”<sup>10</sup> The stated purpose of the allowance allocation to utilities is “[t]o ensure that electricity ratepayers do not experience sudden increases in their electricity bills associated with the cap-and-trade regulation.”<sup>11</sup> In fact, in the latest 15-day Modifications to the cap-and-trade regulation, the ARB states that “[a] central principle of the allowance allocation to the electricity sector is the incorporation of customer cost burden.”<sup>12</sup> ARB goes on to say that “[a]s a matter of policy the approach to allocating allowances to the electric sector has been to ensure that each utility’s allocation is at least equal to their customers’ total expected cost burden in each year.”<sup>13</sup> Accordingly, the mitigation of costs to all customers is an essential addition to the current list of policy objectives.

Second, ARB has repeatedly recognized that the cap-and-trade mechanism was selected over other command-and-control approaches because the cap-and-trade program is market-oriented, thereby allowing the State to utilize the lowest-cost methods for emissions reductions. For example, ARB’s Initial Statement of Reason (“ISOR”) states that cap-and-trade “affords covered entities flexibility to seek out and implement the lowest-cost options to reduce emissions.”<sup>14</sup> The ARB continues to defend the cap-and-trade program against challenges on these grounds.<sup>15</sup>

Third, public acceptability of the cap-and-trade program will hinge on how it mitigates those customer costs associated with achieving AB 32’s GHG emissions reduction goals. Given the

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<sup>10</sup> See Cal. Health and Safety Code § 38501(h).

<sup>11</sup> See ARB Proposed Regulation to Implement the California Cap-and-Trade Program, Part I, Volume I, Staff Report: Initial Statement of Reasons (“ISOR”), at II – 28. See also, Appendix J, p. J16 (“[ARB] staff is mindful of the need to protect ratepayers from increased expenditures on electricity. Therefore, distribution utilities will receive free allowances, and the value of the allowances must be used to mitigate the bill impacts of AB 32 programs on their distribution customers.”).

<sup>12</sup> See ARB Cap-and-Trade Regulation, July 2011 Draft Discussion: Appendix A; Staff Proposal for Allocating Allowances to Electricity Distribution Utilities, at 5, available at: <http://www.arb.ca.gov/cc/capandtrade/meetings/072011/electricity-allocation.pdf>.

<sup>13</sup> *Id.* at 6.

<sup>14</sup> ISOR at ES-1.

<sup>15</sup> See Supplement to the AB 32 Scoping Plan Functional Equivalent Document, p. 37 (dated June 13, 2011), available at: [http://www.arb.ca.gov/cc/scopingplan/document/Supplement\\_to\\_SP\\_FED.pdf](http://www.arb.ca.gov/cc/scopingplan/document/Supplement_to_SP_FED.pdf) (“The intended advantage of a cap-and-trade program is that total GHG emissions decrease in compliance with a cap (i.e., allowable emission limit) that declines over time, while covered entities are afforded flexibility to pursue the most cost-effective actions to reduce emissions.”)

current state of California’s economy, customers simply will not stand for significant rate increases. At the same time, customer rates already reflect significant GHG “premiums” as the result of other AB 32 programs, such as the RPS, existing CEE and conservation programs and CHP measures, as well as necessary transmission and distribution infrastructure programs to accommodate intermittent renewable generation. There is a real risk that, upon seeing costs in excess of the significant GHG premium already included in rates for existing programs, the public may perceive the program as a failure, leading to resistance to future cap-and-trade programs or GHG-reduction programs, generally, in other jurisdictions even before those programs begin. On the other hand, if no customers experience extreme or sudden rate increases, this program can build broad public support for cap-and-trade programs in general and maintain support for California’s AB 32-related programs in particular.

**2. Critical: Return of allowance revenues to customers in proportion to costs incurred and overall benefits in order to achieve the fairest outcome**

Another critically important policy objective and a clear requirement of AB 32 is the equitable implementation of the cap-and-trade program. Specifically, Section 38562(b)(1) of Health and Safety Code requires the ARB to design cap-and-trade regulations in a manner that is equitable.<sup>16</sup> While the seven Commission objectives proposed by Staff focus on certain aspects of equity, such as the impacts of rate increases on low-income customers, the Commission must also consider the disparate impacts that a given allocation of value may have on each customer.

For example, given the current tiered rate structure for residential customers in California and statutes that cap the amount by which the lower tiers’ rates may increase, high-usage residential customers bear all the costs of the AB 32 program associated with the residential rate class. Senate

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<sup>16</sup> See Cal. Health and Safety Code § 38562(b)(1).

Bill (“SB”) 695, which essentially caps the rates of customers in the first two tiers,<sup>17</sup> has resulted in upper tier rates that are more than double Tier 1 rates. Likewise, an SCE customer consuming 2,000 kWh will pay 50% more per kWh than a Burbank Water and Power customer<sup>18</sup> and over 100 percent more than a Pasadena Water and Power customer.<sup>19</sup> A fixed rebate allocation of allowance revenues would exacerbate these existing disparities. ARB’s explicit guidance regarding IOUs’ “equal treatment of their own customers and customers of electricity service providers and community choice aggregators” confirms that the application of fairness should be based on the concept of returning allowance value in proportion to costs. California cannot expect to garner broad public support for the cap-and-trade program if the program creates or exacerbates inequities in current mandated electric rate designs. Given the importance of this policy objective to the success of the cap-and-trade program, the IOUs rank it as “Critical.”

### **3. Very Important: Achieve administrative simplicity and understandability**

Administrative simplicity directly translates into lower costs for customers. The IOUs will be responsible for ensuring that the allowance revenues are returned to customers in accordance with the rules established in this proceeding. The costs associated with implementing these rules will ultimately be borne by customers. Because administrative simplicity can reduce the overall costs that customers will bear, the IOUs have ranked this objective as “Very Important.”

The return of allowance revenues to customers should be structured in a way that minimizes the costs of ensuring that those customers allocated funds under the Commission’s final decision will actually receive them. This process becomes more challenging if the return of allowance

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<sup>17</sup> California Public Utilities Code §§ 739.1, 739.2 and 739.9.

<sup>18</sup> Available at: <http://www.burbankwaterandpower.com>.

<sup>19</sup> Available at: <http://www.ci.pasadena.ca.us/waterandpower>.

revenues occurs much later than when the costs are incurred, as tracking down customers who have moved or gone out of business can be difficult and costly.

Likewise, further complicating already complicated rate design structures can easily result in customer confusion and frustration. For example, rate increases that are not immediately and clearly offset by the return of allowance revenues create a risk that customers will not associate any GHG allowance value received with the associated costs. There may be substantial customer backlash if customers see the costs of implementation of the AB 32 program before receiving the offsetting revenues. Accordingly, simplicity is important to ensuring customer comprehension, thus avoiding extensive and costly public outreach, explanation or bill disputes.

#### **4. Very Important: Maintain competitive neutrality across load serving entities**

The IOUs support maintaining competitive neutrality across all load-serving entities (“LSEs”). The purpose of AB 32 was not to alter the relative competitive positions of the various LSEs and the Commission should seek to avoid such an unintended consequence. As explained above, ARB explicitly states that there should be equal treatment of IOU customers and customers of other LSEs. Accordingly, the IOUs rank this objective highly.

#### **5. Very Important: Prevent economic leakage**

In order to ensure the ultimate success of the cap-and-trade program in achieving GHG reductions, economic leakage should be mitigated. Specifically, proposals should be evaluated with a view toward mitigating the impact that the cap-and-trade program will have on emission intensive, trade exposed (“EITE”) industries. The Joint IOUs recognize that if EITE customers move out of state due to increased costs, there will be no real global GHG reductions. In addition, any exodus is likely to put increased pressure on the rates of customers that remain in the State. Furthermore, given the state of the California economy, it is important to the success of the cap-and-trade

program to avoid hindering economic growth or job creation. Accordingly, the Joint IOUs rank this policy objective highly.

**6. Not Necessary: Preserve the carbon price signal**

Sending an additional price signal through the return of allowance values is not a necessary objective of the cap-and-trade program for four basic reasons: first, an adequate price signal already exists at the wholesale level; second, a more than adequate price signal already exists at the retail level by way of California's tiered rate structure and the impact of other AB32 related programs on rates; third, any additional retail price signal would not be seen by all customers; and fourth, an additional retail-level price signal is not a cost-effective way to achieve emissions reductions.

**a) The Cap-and-Trade Program Will Create a Direct Price Signal at the Wholesale Level, in Addition to Already Existing Commission GHG Policies that Create an Effective Carbon Price Signal**

The most significant impact of the cap-and-trade program on the electricity sector will be an accurate wholesale (or supplier) level price signal. For instance, under cap-and-trade, owners of conventional, GHG-emitting generation will incorporate the cost of procuring allowances into their electricity costs, making this generation more expensive and less competitive in the market. In other words, the price of electricity will now include GHG costs, thereby sending a price signal to electricity buyers to purchase cleaner electricity and to sellers to reduce their emissions, if possible. It is at this wholesale level where electricity market participants make important short- and long-term decisions about what resources are most economical to dispatch. The GHG price signal will, in many cases, affect these dispatch decisions, leading electricity deliverers to choose to use cleaner generation sources. The GHG price signal is preserved in the most important segment of the electricity market.

Additionally, the Commission and the IOUs already directly incorporate an effective carbon price signal into IOUs' wholesale procurement through the "carbon adder" that the IOUs use in resource planning under their Long Term Procurement Plans. This signal is also supported through the SB 1368 GHG "emissions performance standard" which prohibits the wholesale procurement of electricity from facilities with GHG emissions above a certain level.

**b) There is Already A More Than Sufficient Retail-Level Price Signal Embedded In California IOU Retail Electricity Rates**

The Commission and the IOUs currently include the significant costs of AB 32 programs (such as CEE, CSI, RPS and CHP), amounting to billions of dollars per year, in the rates of all customers except low usage and low-income customers. The costs of these programs, which directly reduce GHG emissions and are a significant part of the ARB's AB 32 emissions reduction plan, represent an already-existing "GHG price signal" that utility customers see every month in their current electric and gas bills.

Furthermore, for reasons unrelated to GHG emissions, the IOUs are mandated to charge high-usage residential electricity customers at prices that far exceed the marginal cost of serving those customers. Pursuant to the Public Utilities Code, there essentially is a cap on the annual increase in the first two Tiers' rates.<sup>20</sup> Because of this structure, customers with usage strictly in Tier 1 and Tier 2 likely experience no rate increase as the result of the AB 32 programs. Instead, customers with usage in Tiers 3 and above bear all the costs associated with these programs. This means that high-usage customer rates already far exceed the marginal cost of providing service to those customers and include a significant and similarly excessive GHG-related price signal.

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<sup>20</sup> Cal. Public Utilities Code §§ 739.1, 739.2 and 739.9.

A similar rate impact due to the costs of energy efficiency and renewable energy programs, though smaller in magnitude, applies to commercial and industrial customers through the current rate structure that requires IOUs to collect usage rates from these customers to pay for these programs regardless of whether they receive any direct benefits from the programs. Thus, commercial and industrial customers already see a price signal for these AB 32-endorsed programs that exceeds their actual GHG costs. Thus, the IOUs' existing rates and revenue requirements already include a strong and robust retail price signal, which in many cases exceeds the wholesale price signal for GHG that the AB 32 cap and trade program will create in wholesale electricity markets.

**c) Any Additional Retail Price Signal Would Not Be Accurate**

It is important that any price signal used at the retail level be an accurate price signal; however, this is not possible due to the IOUs' current residential rate structure. As explained above, because of the tiered rate structure in California, customers with usage strictly in Tier 1 and Tier 2 will experience no rate increase as the result of the cap-and-trade program, while customers with usage in Tiers 3 and above will bear all the costs associated with this program, further distorting rates. Although the IOUs are elsewhere advocating for reforming the distortions in residential tiered rates, those tiered rates are likely to be in effect during the initial implementation of AB 32. Thus, adding a further "GHG premium" on top of these residential customers' existing above-cost rates would only distort their price signals further. In fact, the fixed rebate, which some argue creates or preserves a price signal, might actually send a negative price signal: residential customers with usage in lower tiers will see an overall bill *decrease* due to the cap-and-trade program and so may have an incentive to *increase* energy consumption. Arguments for the use of a fixed rebate over a cost-based return of allowance revenues on grounds that a fixed rebate would avoid

suppressing or dampening the price signal should not be made in the abstract, but should take into account the context of California's existing rate structure.

**d) Any Additional Retail Price Signal Would Not Be Cost-effective**

The use of such a price signal is not a cost-effective method of reducing emissions relative to other emissions reductions options. The cap-and-trade program establishes a cap on total GHG emission levels and allows regulated entities to select, through a market for emissions, among various approaches in order to operate below that cap.

Under this program, the marginal cost of emissions reduction will be established by the market-clearing price of allowances, but is generally expected by ARB to be around \$20 per ton.<sup>21</sup> This means that reducing each additional ton of emissions will cost around \$20. Assuming electricity rates of 15 cents per kWh and marginal emissions rates of 0.5 tons per MWh, then the price elasticity of demand – the percentage change in energy consumption caused by a percentage increase in price – would have to be -15<sup>22</sup> in order for a retail price signal approach to be cost-competitive with other emissions reduction options (*see Appendix A* for a more detailed explanation of elasticity of demand). In reality, price elasticity of demand runs from -0.1 to, at the very most, -0.8 for electricity,<sup>23</sup> meaning that retail consumers are much less responsive to marginal price increases than they would need to be for a retail price increase to be a cost-effective means of reducing GHG emissions.

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<sup>21</sup> ARB ISOR at V.1.

<sup>22</sup> An elasticity of -1 means that a 1% increase in price will result in a 1% decrease in demand, thus an elasticity of -15 means that a 1% increase in price would result in a 15% decrease in demand. *See Appendix A* for a more detailed explanation of elasticity of demand.

<sup>23</sup> *See Azevedo et al, "Residential and Regional Electricity Consumption in the U.S. and EU: How Much Will Higher Prices Reduce CO2 Emissions?" Electricity Journal Volume 24, Issue 1, Jan/Feb 2011 at 29 (estimating that "a 10 percent price increase in residential electricity price in the U.S. could be expected to result in a 2.5 percent reduction in CO<sub>2</sub> emissions from residential electricity consumption.")*.

Appendix B illustrates the significant and sizable disparity between actual price elasticities and those that would be necessary to achieve cost-effective emissions reductions. This analysis conclusively shows that a retail price signal approach would be an extremely costly method to reduce GHG emissions. Given actual price elasticity of demand for electricity, attempting to reduce GHG emissions through a retail-level price signal would cost between \$375 to \$3,000 per metric ton (in contrast to the projected \$20 per metric ton allowance price that reflects the market cost of alternative emissions reductions options under the cap-and-trade regime).

Furthermore, because total GHG emission levels are capped under the cap-and-trade structure, the levels of emissions reductions to be achieved under the program are already set. Therefore, if emissions reductions are made by way of rate increases that cause customers to use less electricity, there will be fewer emissions reductions made through other measures, such as switching to more efficient and clean generation. Thus, as Appendix B clearly demonstrates, if a price signal is used as a way to reduce GHG, it will take the place of other, more cost-effective methods of achieving emissions reductions. One of the reasons the cap-and-trade program was selected instead of other regulatory options was because it allowed flexibility for market participants to choose the most cost-effective approach to achieve collectively the cap among a range of options, thus spurring investment in these approaches.

**7. Not Necessary: Distribute revenues equitably recognizing the “public asset” nature of the atmospheric carbon sink**

The Joint IOUs have a “customer-centric” rather than “public asset” view as to what it means to distribute revenues equitably. This is because, from a practical standpoint, the principle underlying this objective – that everyone owns an equal share of the atmosphere and is therefore entitled to an equal share of the total “rent” that the allowance revenues – is impossible to advance

equitably under electricity ratemaking principles. A good example of the inequity that would result from equating a per household distribution of revenues with *per capita* distribution of revenues is that renters served through master meters would not necessarily receive a portion of allowance revenues, while owners of multifamily residences would receive multiple allowance revenue allocations. Because the Joint IOUs have, through the introduction of an additional policy objective, more appropriately defined equity in the context of the current electricity rate structure in California, the Joint IOUs rank this policy objective as “Not Necessary.”

**8. Not Necessary: Correct for market failures that lead to ongoing underinvestment in GHG mitigation activities and technologies**

As stated above, a cap-and-trade program achieves emissions reductions through creating a wholesale market price signal that encourages investment in GHG mitigation activities and technologies. Providing direct incentives to certain technologies duplicates the effects of the cap-and-trade program itself. Accordingly, this is not an appropriate policy for the use of allowance revenues, as it will be sufficiently achieved as soon as the cap goes into effect.

**IV.**

**JOINT IOU PROPOSAL FOR USE OF ALLOWANCE REVENUES**

**A. Explanation of Proposal**

In this Joint IOU Proposal, the IOUs recommend allocating 100 percent of AB 32 allowance revenues in each IOU’s Energy Resource Recovery Account (“ERRA”) forecast proceeding. This allocated revenue to each customer class will be used to directly reduce a delivery rate component

(e.g., distribution) that all customers, including DA and CCA customers, pay.<sup>24</sup> The AB 32 allowance revenues will be allocated to rate groups based on Commission-approved generation cost allocators and returned to customers in proportion to the AB 32 costs included in generation rates. Both costs and revenues will be included in rates based on an ERRRA forecast approved by the Commission, which will be adjusted based on the actual amount of costs incurred and allowance values returned, through the use of balancing accounts. Using this methodology, customers receive the benefit of the allocated allowance revenues in proportion to and at the same time as they incur AB 32 costs, beginning January 1, 2013.

**B. Anticipated Rate Impacts of Joint IOU Proposal**

One of the main advantages of a volumetric return of allowance revenues to customers is that it prevents any customer from seeing sudden or significant rate increase from the implementation of the cap-and-trade program. Through this approach, AB 32 allowance revenues would be used to mitigate a portion of the AB 32 costs, covering a portion of the costs of existing programs to promote the goals of AB 32 (that is, CEE, RPS, CSI and CHP, among others). Because each customer will receive allowance revenues in proportion to the costs that customer incurs, this method is the most equitable approach and minimizes rate increases for all customers more than any other allocation. While this approach will not mitigate the substantial differentials in rates imposed on residential customers by California's steeply tiered rate structure, it is the best way to avoid further exacerbating these differentials. This proposal will reinforce the importance of electricity price signals sent to the utilities and other participants by the wholesale power markets, which will fully include the "price" of GHG in electricity costs.

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<sup>24</sup> See Joint Exhibit of Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company Pursuant to June 2, 2011 Administrative Law Judge's Ruling.

**C. Coordination Across Other Proceedings**

Because the Joint IOU Proposal advocates for directly returning 100 percent of the allocated revenues to customers through rates, there is little coordination with other proceedings required. As stated, the AB 32 allowance revenues forecast will be incorporated into each utility's ERRA proceeding for 2013 and beyond. It should be noted that the lack of need for regulatory coordination as well as the simple calculations necessary to implement the Joint IOU Proposal will greatly assist in fulfilling the administrative-ease policy objective.

Rate design issues such as equity among customer classes are debated in the Phase 2 of each utility's General Rate Case ("GRC") where the Commission makes its determination on how rates should be set across all customer classes. The GHG OIR should not be used to change these Commission determinations. By returning the allowance value to customers in proportion to GHG costs incurred, the rate design developed in the GRC will be maintained.

Furthermore, the levels of funding of each of the AB 32 programs, e.g., CEE, RPS, CSI and CHP, should be determined in proceedings where spending proposals are judged on their merits, independent of the amount of incremental funding available from allowance revenues. Funding for those programs should be determined in their respective proceedings to ensure the adequacy of aggregate funding levels and that the appropriate stakeholders are involved in the decision-making process.

**D. The Need for Commission-Approved Accounts to Facilitate the Accrual of Revenues, if Necessary**

The Joint IOU Proposal does not require the creation of any new Commission-approved accounts to facilitate the accrual of revenues. This approach is administratively simple and can be implemented by the utilities at no additional cost.

**E. Existing Statutory or Commission Mandates That May Affect or Limit the Implementation of the Joint IOU Proposal**

No existing statutory or Commission mandates impact the implementation of the Joint IOU Proposal.

**V.**

**DISCUSSION OF HOW THE JOINT IOU PROPOSAL DOES OR DOES NOT ADVANCE THE POLICY OBJECTIVES**

The Joint IOU Proposal will achieve critical policy objectives by containing customer costs and allowing members of the electricity sector to select GHG reduction measures that are the most cost-effective. The proposal ensures an equitable apportionment, with customers receiving allowance values that mirror the GHG costs they bear. It also provides a level playing field for all LSEs, maximizes administrative ease and mitigates leakage. The Joint IOUs have presented the main arguments behind the relative importance of each of these policy objectives above, and briefly summarize how each policy objective is advanced by the Joint IOU Proposal below.

**A. The Joint IOU Proposal Mitigates Costs for All Customers and Ensures Cost-effectiveness of Emissions Reductions Measures**

One of the main advantages of a return of allowance values in proportion to customer costs through rates is that it prevents any electricity user from seeing sudden or significant rate increases. Through this approach, AB 32 allowance revenues would be used to compensate those electricity users, who are actually paying the AB 32 costs. Because each customer will receive allowances on the same basis as costs incurred, this program protects all customers against significant rate increases more than any other method.

In contrast, and as detailed above, any other proposal could result in significant customer rate increases for at least some customers, potentially by allowing some other customers to inequitably experience bill decreases.

**B. The Joint IOU Proposal Ensures an Equitable Return of Allowance Revenues to All Customers, in that the Allowance Value Received is Proportionate to the AB 32 Cost Burden Imposed on Customers**

Another significant advantage of the Joint IOU proposal is that it is equitable, in that it ensures that every electricity user receives an allowance value return in proportion to AB 32 costs borne by such customer. This is consistent with the ARB's calls for equal treatment of all customers. In contrast, another proposal may result in certain electricity users – residential upper tier customers, utility industrial and commercial customers, and CCA and DA customers – bearing a disproportionate share of AB 32 costs. Additionally, the use of revenues to fund other programs will impose a greater cost on upper tier customers.

**C. The Joint IOU Proposal Maintains Competitive Neutrality Across Load-Serving Entities**

The Joint IOU Proposal would put the IOUs on par with other LSEs with respect to the use of allowance values. Revenues would be returned to DA and CCA customers on the same basis as IOU bundled customers through distribution rates.

The Joint IOU proposal also maintains neutrality between IOUs and publicly-owned utilities (“POUs”). POUs will also receive an allocation of allowances from ARB but, unlike the IOUs, the POUs are not required to consign these allowances to auction; the POU allowances can be used for direct compliance or to offset costs to their customers. Without the ability to use these allowances

in the same manner as the POUs, the IOUs will be at a disadvantage in that IOU customers could experience rate increases as a result of cap-and-trade, whereas POU customers will not.

Furthermore, requiring IOUs to use allowance values to fund energy efficiency or renewable generation programs, rather than provide direct bill relief, will have the effect of placing a disproportionate share of the costs of GHG compliance on DA, bundled and CCA customers. POU ratepayers will be able to avoid contributing allowance values to these programs while still reaping the benefits of them. All California electricity customers should bear the cost burden associated with these programs. Accordingly, allowing the IOUs to pass allowance revenues along to their customers is the only approach that ensures equal treatment among the various LSEs.

**D. The Joint IOU Proposal Provides the Most Administratively Simple and Understandable Approach**

The proportionate approach has the added benefit of administrative ease. Each IOU will be able to allocate revenues in proportion to costs seamlessly by reducing the delivery rate component of each customer's energy bill. The administration of a fixed rebate is more complicated, would require costly adjustments to the Joint IOUs' current billing systems,<sup>25</sup> and would require significant customer outreach and communications. Additionally, fixed rebates lead to complicated temporal issues, because they usually occur as a one-time lump-sum payment. For example, if a residential customer incurs monthly costs associated with GHG compliance and then moves before receiving the associated rebate, the IOUs must take measures to find this customer at his or her new residence in order to ensure that the fixed rebate is properly paid. This process is neither efficient

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<sup>25</sup> See, e.g., PG&E's Response to DRA Data Request (estimating that PG&E's costs of implementing an annual or semi-annual rebate check would range from approximately \$3 million to \$6 million annually), SCE's Response to DRA Data Request (estimating that SCE's costs of implementing an annual or semi-annual rebate check would range from approximately \$5.5 million to \$8.5 million annually); SDG&E's Response to DRA Data Request (estimating that SDG&E's costs of implementing an annual or semi-annual rebate check would include an initial \$85,000 to establish and \$225,000 of on-going incremental costs per occurrence).

nor inexpensive.<sup>26</sup> Accordingly, the proportionate approach is the preferred approach from an administrative standpoint.

**E. The Joint IOU Proposal Protects All Customers Including Low Income Customers Against Rate Increases**

The Joint IOU Proposal advances the objective of reducing adverse effects on low-income households by ensuring that no customer experiences sudden or significant rate increases as a result of the cap-and-trade program. While the Joint IOU Proposal does not provide funds for low-income customers in excess of their costs, this is because there are already programs in place to ensure that these customers are fully protected, including, for example, the California Alternate Rates for Energy (“CARE”) program.<sup>27</sup>

While some parties may advocate for a fixed rebate approach on grounds that this approach provides additional benefits to low income customers, a fixed rebate is neither an accurate nor an effective means of wealth redistribution. This is because, for non-CARE customers, there is not a strong correlation between energy usage and income.<sup>28</sup> For example, a disadvantaged customer living in the high desert may be paying Tier 4 rates, whereas a wealthy resident on the coast could be paying Tier 1 rates. Under a fixed rebate approach, some low-income non-CARE customers who use high volumes of energy could be subject to a disproportionately high electricity rate increases, while other high-income, low-usage customers would receive a bill reduction. Because the tiered rate structure is based on energy usage rather than customer ability to pay, and given that low-income customers are already protected by statute and Commission regulations, there is not a strong equity argument for returning allowance value through a fixed rebate.

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<sup>26</sup> *Id.*

<sup>27</sup> The CARE program is set forth in Public Utilities Code § 739.1.

<sup>28</sup> See Borenstein, Severin, Presentation Slides from 2008 POWER conference, “How Much Does Increasing-Block Electricity Help Low-Income Customers?” available at <http://www.ucei.berkeley.edu/POWER-08/Files/02borensteinslides.pdf>.

The Joint IOUs recognize that low-income customers may also be impacted by the indirect costs of cap-and-trade, namely, an increase in the price of all goods and services. However, a cost-based return of allowances would lower the costs borne by commercial and industrial customers, thereby mitigating this result. To the extent that the legislature determines that low-income customers require additional assistance as a result of economic pressures resulting from the cap-and-trade program or from climate change, generally, such assistance is more effectively administered directly under the programs for low-income customers already in place.

**F. The Joint IOU Proposal Mitigates Against Economic Leakage**

The Joint IOU Proposal will mitigate the costs borne by energy intensive trade exposed (“EITE”) customers, thereby avoiding economic leakage. As the California Large Energy Consumers Association (“CLECA”) stated in its prehearing conference statement, “[i]f the Commission were to direct that 100 percent of the allowance auction revenues should be returned to ratepayers in general proportion to their usage of electricity, it would go a very long way to solving the question of ‘leakage’ with respect to the cost of indirect emission costs for these firms.”<sup>29</sup> It is the Joint IOUs’ position that a 100 percent return of allowance values to customers (including DA and CCA customers) based on their AB 32-associated costs would sufficiently mitigate economic leakage.

**G. The Joint IOU Proposal Preserves Carbon Price Signals at the Wholesale and Retail Levels**

As already explained, the Joint IOU Proposal preserves the GHG price signal at the wholesale level, which is the point of regulation in any cap-and-trade program and the level where

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<sup>29</sup> See Pre-hearing Conference Statement of the California Large Energy Consumers Association, at p. 9 (filed April 21, 2011).

the most effective price signal in the cap-and trade market will be had. The current tiered rate structure in California and existence of AB 32 programs that are lowering emissions in California, have already established a more than sufficient retail-level price signal. The Joint IOU Proposal does not attempt to change the already existing price signals at the retail level. Any approach used to achieve an additional retail-level price signal would send a duplicative, inequitable and less accurate price signal at best.

**H. No Proposal Could Distribute Revenues In a Manner that Equitably Recognizes the “Public Asset” Nature of the Atmospheric Carbon Sink**

Given the practical limitations on achieving this objective, no proposal should attempt to distribute revenues in a way that achieves this policy objective.

**I. No Additional Funds are Needed to Account for Market Failures that Lead to Ongoing Underinvestment in Carbon Mitigation Activities and Technologies**

The cap-and-trade program is structured in order to promote investment in the most cost-effective and successful GHG mitigation activities and technologies. The use of allowance revenues to fund additional investment in such programs would have a distortionary effect and should therefore be avoided.

**VI.**

**DISCUSSION OF HOW THE JOINT IOU PROPOSAL INCORPORATES PREVIOUS ARB AND COMMISSION GUIDANCE AND THE JURISDICTIONAL LIMITATIONS OF EITHER AGENCY THAT MAY AFFECT IMPLEMENTATION OF THE PROPOSAL**

At the time the Ruling was issued, the ARB draft regulations included language directing the utilities to use a fixed rebate or bill credit to allocate revenues back to ratepayers. The Joint IOUs

challenged this language in the ARB draft regulation on the grounds that such a determination – which involves issues of ratesetting and rate design – falls squarely within the plenary jurisdiction of the Commission.<sup>30</sup> The IOUs also made the point at the ARB, on the same policy grounds asserted in this Joint IOU Proposal, that an approach of returning value in proportion to costs would lead to a more cost-effective, equitable and administratively efficient outcome than a fixed rebate. On September 12, 2011, ARB issued a revised version of the cap-and-trade regulation, striking the fixed rebate language from the draft regulation.<sup>31</sup> Accordingly, the jurisdictional issue related to the fixed rebate language has been resolved. There are no jurisdictional issues that would affect the implementation of the Joint IOU Proposal.

In 2008, the Commission provided recommendations in Ordering Paragraph 15 and 16 of D.08-10-037:

15. We recommend that ARB require that all allowance auction revenues be used for purposes related to Assembly Bill (AB) 32, and that ARB require all auction revenues from allowances allocated to the electricity sector be used to finance investments in energy efficiency and renewable energy or for bill relief, especially for low income customers.

16. We recommend that ARB allow the Public Utilities Commission for load serving entities and the governing boards for publicly-owned utilities to determine the appropriate use of retail providers' auction revenues consistent with the purposes of AB 32 and the restrictions recommended in Ordering Paragraph 15.<sup>32</sup>

The Joint IOU Proposal is entirely consistent with the Commission guidance in that it provides bill relief to all affected customers to mitigate the costs of the cap-and-trade program as well as the costs of other AB 32-related programs, such as energy efficiency and renewable energy.

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<sup>30</sup> See Comments of Southern California Edison Company to the California Air Resources Board on its Proposed 15-Day Modifications to the Cap-and-Trade Regulation, Released July 25, 2011, at 8-9 (filed August 11, 2011); SDG&E's Draft Final Comments on ARB's Proposed 15-Day Modifications to the Cap-and-Trade Regulation, at 16 (filed August 11, 2011); PG&E's Comments on the Air Resources Board's July 25, 2011 Proposed Modifications to the AB 32 Cap-And-Trade Regulation, at 17 (filed August 11, 2011).

<sup>31</sup> Second 15-Day Cap-and-Trade Regulatory Text (filed September 12, 2011). Available at: <http://www.arb.ca.gov/regact/2010/capandtrade10/2ndmodreg.pdf>.

<sup>32</sup> It should be noted that this Decision occurred before the State adopted the 33 percent RPS and SB 695 protections for low income and low usage customers.

In the same Decision, the Commission has also stated that “any mechanism implemented to provide bill relief be designed so as not to dampen the price signal resulting from the cap-and-trade program.”<sup>33</sup> In this Joint IOU Proposal, the IOUs have repeatedly argued that the Joint IOU Proposal would not affect the wholesale price signal. Additionally, the costs for AB 32 programs embedded in rates and the current rate structure already provide a sufficient retail-level price signal. Indeed, in the case of the tiered residential rate structure, a much stronger price signal exists than that which would result from the cap-and-trade program. Moreover, prior Commission and ARB guidance has called for programs that limit rate increases to customers, a goal that is consistent with the Joint IOU Proposal. Accordingly, the Joint IOU Proposal is consistent with previous guidance developed by the Commission and ARB with respect to this issue.

## **VII.**

### **CONCLUSION**

For all of the reasons discussed herein, the Commission should adopt the Joint IOU Proposal.

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<sup>33</sup> D.08-10-037 at 225.

Respectfully submitted on behalf of the Joint IOUs,

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VIII.  
APPENDIX A

**Price Elasticity of Demand: The Basics**

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**Definition**

Price elasticity of demand is a metric by which you can measure a consumer's responsiveness to changes in product price

**Calculation**

Price elasticity of demand is simply calculated by computing the ratio of an increase in price of a product compared to the resulting decrease in demand for that product:

$$E = \frac{\% \text{ change in product demand}}{\% \text{ change in product price}}$$

**High vs. Low Elasticity**

- High elasticity of demand is observed when a small increase in a product's price spurs a very large decrease in demand for that product
- Low elasticity of demand is just the opposite, when even a large increase in the price of a product does very little to change demand
- Luxury goods tend to have higher price elasticities of demand ( $E > 1$ ), while necessities have much lower elasticities ( $E < 1$ )

**Examples\***

Low Elasticity	
Salt	0.1
Electricity**	0.1
Gasoline	0.2
Physician services	0.6

High Elasticity	
Restaurant meals	2.3
Airline travel	2.4

\*Source: *Economics: Private and Public Choice*, James D. Gwartney and Richard L. Stroup, 4th edition 1997. Site: <http://www.mackinnac.org/article.aspx?ID=1247>, accessed September, 2011.

\*\* Source: See above in this filing, page 17

## IX.

### APPENDIX B

Under the cap-and-trade program, the marginal cost of emissions reduction will be established by the market-clearing price of allowances, and is expected by ARB to be between \$15 and \$30 per ton. Using \$20 as a representative value, reducing each additional ton of emissions will cost around \$20 per metric ton. Assuming electricity rates of 15 cents per kWh and marginal emissions rates of 0.5 metric tons per MWh, then the price elasticity of demand – the percentage change in energy consumption caused by a percentage increase in price – would have to be -15 in order for a retail price signal approach to be cost-competitive with other emissions reduction options. In reality, price elasticity of demand runs from -0.1 to -0.8, meaning that retail consumers are much less responsive to marginal price increases than they would need to be for retail price increases to be a cost-effective means of reducing GHG emissions.

The analysis below illustrates the significant and sizable disparity between actual price elasticities and those that would be necessary to achieve cost-effective emissions reductions based on ARB expected prices. Assuming an elasticity of -0.8, the cost of reducing GHG emissions levels would be \$375 per metric ton compared to the expected market price of \$15-\$30 per metric ton. At a short-run elasticity of -0.1, the cost of reductions is an order of magnitude higher at \$3,000 per metric ton. Therefore, raising retail electricity prices is less cost-effective than potential measures other participants in the cap-and-trade program may undertake to reach the emissions cap. One of the reasons the cap-and-trade program was selected instead of other regulatory options was because it allows flexibility for market participants to choose the most cost-effective approach to collectively achieve the cap among a range of options, thus spurring investment in these approaches. Accordingly, emphasis on raising retail-level rates is not necessary, since expected reductions likely will be achieved at far less cost elsewhere in the California economy.

**GHG Reduction Costs of a Retail Price Signal\***  
 \$ / metric ton

