## <u>COMMENTS OF SOUTHERN CALIFORNIA EDISON COMPANY ON THE</u> CALIFORNIA AIR RESOURCES BOARD'S CLIMATE CHANGE DRAFT SCOPING PLAN

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### TABLE OF CONTENTS

Section			Title	Page		
I.	EXEC	ECUTIVE SUMMARY				
II.	GENERAL PRINCIPLES FOR AB 32 IMPLEMENTATION					
	А.	CARB	Must Implement AB 32 In An Equitable Manner	4		
		1.	Equity Across Sectors	5		
		2.	Equity Across LSEs	7		
	B.	The Ca	ap-And-Trade Program Should Be As Broad-Based As Possible .	8		
		1.	CARB Should Allow Time For A Regional Or National Cap-Ar Trade Program To Develop			
		2.	All Major Emitting Sectors Should Be Included In The Cap-And Trade Program From The Outset			
	C. CARB Must Do More To Address Cost-Effectiveness And Cost Containment		Must Do More To Address Cost-Effectiveness And Cost nment	11		
		1.	CARB Must Demonstrate The Cost-Effectiveness Of Its Recommended GHG Reduction Measures	12		
		2.	CARB Should Focus More Attention On Cost Containment Measures	13		
		3.	CARB Should Include A Robust Offset Policy In Its Scoping Pl	an13		
		4.	CARB Should Also Include Other Cost Containment Measures Its Scoping Plan			
		5.	CARB Should Include A Process For Adjustments In Its Scopin Plan	•		
		6.	CARB Should Not Assume That Addressing Climate Change W Create A Net Economic Surplus			
III.	SPECIFIC GHG REDUCTION MEASURES IN THE DRAFT SCOPING PLAN					
	A.	33% R	PS	19		
		1.	Any RPS Should Apply Equally To All California LSEs	19		
		2.	CARB Must Consider The Challenges To Achieving A 33% RP	S19		

## COMMENTS OF SOUTHERN CALIFORNIA EDISON COMPANY ON THE CALIFORNIA AIR RESOURCES BOARD'S CLIMATE CHANGE DRAFT SCOPING PLAN

#### TABLE OF CONTENTS (CONTINUED)

<b>Section</b>		<u>Title</u>	Page
	3.	CARB's Rules Must Account For The GHG Implications Of Ou Of-State Renewable Energy Credits	
В.	Energ	y Efficiency	22
	1.	The Underlying Analysis That Formed The Basis For The Draft Scoping Plan's 32,000 GWh Statewide Energy Efficiency Goal Overestimated IOU Energy Savings By 2,000 GWh	22
	2.	The Energy Efficiency Requirements For All LSEs Should Be Equitable	23
	3.	Additional Energy Efficiency Savings Under Consideration Show Not Be Required From IOU Service Territories	
C.	CHP		24
	1.	CARB Should Adopt Performance Standards, Efficiency Requirements, And Minimum Emissions Standards For CHP	24
	2.	CARB Should Not Create Carve-Outs For CHP	25
D.	Cap-ar	nd-Trade Program	26
	1.	CARB Must Address Operational Issues In A Cap-and-Trade Program	26
	2.	CARB Must Establish The Manner In Which The Cap-and-Trad Program Will Coexist With Additional Programmatic Measures	
		a) CARB Should Not Adopt Additional GHG Reduction Measures If Forecasted Reductions Do Not Occur	27
		b) California Should Allocate Allowances In A Manner Tha Mitigates The Economic Burden Of Compliance With A 32	В
E.	Electri	fication of Transportation	
F.	Other	Measures	29
	1.	Coal Emissions Reduction Standard	29
	2.	Carbon Fees	

# COMMENTS OF SOUTHERN CALIFORNIA EDISON COMPANY ON THE CALIFORNIA AIR RESOURCES BOARD'S CLIMATE CHANGE DRAFT SCOPING PLAN

#### TABLE OF CONTENTS (CONTINUED)

Section 5 1	<u>Title</u>	Page
IV.	CONCLUSION	

#### I.

#### **EXECUTIVE SUMMARY**

Southern California Edison Company ("SCE") appreciates the opportunity to provide comments on the California Air Resources Board's ("CARB") Climate Change Drafting Scoping Plan, June 2008 discussion draft ("Draft Scoping Plan"). The Draft Scoping Plan demonstrates the considerable commitment that CARB has made toward implementing Assembly Bill ("AB") 32. SCE supports many of the greenhouse gas ("GHG") reduction measures and principles set forth in the Draft Scoping Plan and offers the following suggestions to ensure that CARB's strategy for meeting AB 32's goals fulfills the statutory mandate to achieve 1990 GHG emissions by 2020 equitably and at the lowest possible cost.

AB 32 directs CARB to design GHG reduction regulations "in a manner that is equitable."<sup>1</sup> Equitable implementation of AB 32 requires that the economic burden borne by obligated sectors under AB 32 regulations be proportional to those sectors' GHG emissions. In other words, all significant emitting sectors should be held responsible either to reduce the GHG emissions they emit to meet AB 32's targets or to pay for such emissions reductions if they can be done more cost-effectively by others. Achieving this principle will require compensation between sectors since different sectors of the economy have different options for cost-effective GHG abatement. The Draft Scoping Plan requires the electric sector to bear a disproportionately large share of the GHG reductions needed to reach the State's goals compared to the electric sector's contribution to the State's GHG emissions. Although SCE recognizes the role that electricity can play in reducing GHG emissions, CARB must ensure that electricity ratepayers are compensated for taking on this burden.

The same principle of equity should apply within sectors. In the electric sector, CARB must ensure that the burden of GHG regulation is distributed equitably across all load-serving entities ("LSEs") that deliver electricity to California consumers, including investor-owned

 $<sup>\</sup>frac{1}{2}$  AB 32, Cal. Health & Safety Code § 38562(b)(1).

utilities ("IOUs"), publicly-owned utilities ("POUs"), electric service providers ("ESPs"), community choice aggregators ("CCAs"), and the California Department of Water Resources. All California LSEs must be subject to the same performance standards and rules with respect to the Renewables Portfolio Standard ("RPS"), energy efficiency, and other regulatory requirements on the electric sector that CARB will use to attain AB 32 targets. CARB should also fully consider the challenges to achieving the 33% RPS recommended in the Draft Scoping Plan. Additionally, in applying the equity principle in the electric sector, CARB should ensure that the energy efficiency savings targets in the Draft Scoping Plan appropriately reflect the aggressive energy efficiency programs already implemented by the IOUs.

While SCE supports a comprehensive multi-sector cap-and-trade program as the least cost approach for achieving AB 32's GHG reduction objectives, SCE understands that CARB intends to utilize a mix of regulatory measures and market mechanisms. A broader-based capand-trade program – both geographically and in the number of capped sectors – will offer more opportunities for greater cost-effective GHG reductions. SCE therefore recommends that CARB pause the initiation of a California-only program to allow for the development of a Western Climate Initiative ("WCI") regional cap-and-trade program or a federal cap-and-trade system. It is likely that a regional or national program will be adopted in the next few years and a more expansive program will increase the benefits of a market system, while avoiding the disadvantages of potentially conflicting state, regional, and federal programs. If a broader regional or national program is implemented within the next few years, California should use such a program as part of its AB 32 GHG reduction strategy. If not, CARB should proceed with a California cap-and-trade program. Whatever the geographic scope of the cap-and-trade program, however, the program should be designed to include all the identified major emitting sectors (transportation, electricity, industry, and residential and commercial natural gas) at its initial implementation.

SCE also calls upon CARB to conduct a cost-effectiveness analysis comparing the cost per metric ton of carbon dioxide equivalent reduced for all measures in the Draft Scoping Plan as

- 2 -

required by AB 32. The Legislature mandated such an analysis to allow CARB to rank the proposed GHG reduction measures in terms of this metric and focus on the lowest cost measures in order to meet AB 32's directive that CARB minimize the overall costs of the program.

Furthermore, CARB should focus more attention on cost containment measures. AB 32 directs CARB to design emissions reduction measures to meet the statewide emissions limits in a manner that "minimizes costs and maximizes benefits for California's economy."<sup>2</sup> SCE strongly supports a robust offset policy, as well as other cost containment measures, to help meet regulatory and market program requirements at the lowest overall cost to the State economy.

SCE is concerned that the Draft Scoping Plan's proposal to increase combined heat and power ("CHP") capacity by 4,000 MW does not include any discussion of performance standards, efficiency requirements, or minimum GHG emissions standards for CHP. The Draft Scoping Plan appears to make the assumption that all CHP makes efficient use of fuel. SCE's experience has been that only a minority of CHP applications reduce fuel use, and in some instances, CHP systems' fuel use has been extraordinarily wasteful. Without clear requirements to ensure that increased CHP actually reduces GHG emissions and does so in a cost-effective manner, the proposed measure could have the unintended effect of saddling electricity customers with very high prices for very little or no GHG reductions, and perhaps increased GHG emissions.

Finally, CARB should address electrification of transportation in more detail. Transportation electrification has great potential for cost-effective GHG reductions. CARB should more fully consider the potential for electrification to contribute to AB 32's goals and the policy and cost implications of GHG emissions moving from the transportation sector to the electric sector.

<sup>&</sup>lt;sup>2</sup> *Id.* § 38501(h).

II.

#### **GENERAL PRINCIPLES FOR AB 32 IMPLEMENTATION**

#### A. <u>CARB Must Implement AB 32 In An Equitable Manner</u>

Addressing the challenge of climate change will require a comprehensive effort to reduce GHG emissions across the California economy. As the Draft Scoping Plan recognizes, "[a]chieving these goals will involve every sector of the state's \$1.7 trillion economy and touch the lives of every Californian."<sup>3</sup> Reducing emissions to reach AB 32's GHG reduction goals will impose significant costs on regulated entities. The benefits of reducing GHG emissions and mitigating the risk of global warming will be shared by all, and CARB should likewise ensure that its regulations achieve equity in the distribution of costs. In AB 32, the Legislature directed that CARB implement its GHG reduction measures equitably by mandating that CARB "[d]esign the regulations, including distribution of emissions allowances where appropriate, *in a manner that is equitable.*"<sup>4</sup> The Draft Scoping Plan acknowledges this statutory requirement by stating that a "central tenant of the Draft Scoping Plan, and all of ARB's programs, is that emission reduction obligations should be distributed equitably across all sectors."<sup>5</sup>

In order for CARB's regulations to be designed in an equitable manner consistent with the Legislature's mandate, the economic burden borne by regulated sectors and entities under such regulations must be proportional to their GHG emissions. Entities with a greater share of emissions should bear a greater share of the total cost of GHG abatement. CARB should consider this proportionality in designing the structure of regulations and assigning reduction obligations to various sectors and entities.

SCE is committed to the AB 32 goal of achieving emissions reductions in the most costeffective manner possible. Some sectors offer greater opportunities for cost-effective emissions reductions than others. SCE supports attaining available cost-effective GHG reductions that may

 $<sup>\</sup>frac{3}{2}$  Draft Scoping Plan at 1.

<sup>4</sup> AB 32, Cal. Health & Safety Code § 38562(b)(1) (emphasis added).

 $<sup>\</sup>frac{5}{2}$  Draft Scoping Plan at 50.

be found within the electric sector. However, achieving the lowest-cost reductions should not conflict with achieving equity. CARB must implement regulatory solutions that allow for the equitable spread of the economic burden of regulation, particularly given that cost-effective GHG abatement opportunities are not distributed evenly across sectors.

In fulfilling its obligation to adopt equitable emissions reduction measures, CARB should consider two dimensions of equity as discussed below: (1) equity across sectors within the California economy and (2) equity across LSEs within the electric sector.

#### 1. <u>Equity Across Sectors</u>

Along with requiring CARB to design equitable regulations, AB 32 provides that CARB "shall take into account the relative contribution of each source or source category to statewide greenhouse gas emissions" in developing its scoping plan.<sup>6</sup>

Different sectors of the economy have different opportunities for cost-effective GHG mitigation, and efficient reductions are not necessarily distributed according to emissions output. The recommended GHG reduction measures in the Draft Scoping Plan assign the electric sector responsibility for a share of emissions reductions that is disproportionately large compared to the electric sector's forecasted share of 2020 business-as-usual ("BAU") emissions. According to CARB's forecast of 2020 BAU emissions, the electric sector is projected to contribute 23% of the State's 2020 emissions.<sup>2</sup> But the Draft Scoping Plan's recommended regulations of the electric sector are expected to achieve 27% of California's total 2020 emissions reductions, as well as a (potentially large) share of the 21% of emissions reductions to be attained through a cap-and-trade program.<sup>8</sup> Conversely, the industrial sector, which is responsible for 17% of 2020 BAU emissions, is not subject to any regulations except for a share of the reductions to be achieved through the cap-and-trade program.<sup>9</sup>

 $<sup>\</sup>stackrel{6}{=}$  AB 32, Cal. Health & Safety Code § 38561(e)

<sup>&</sup>lt;sup>7</sup> Draft Scoping Plan at 8.

<sup>&</sup>lt;u>8</u> *Id.* at 11.

<sup>&</sup>lt;sup>9</sup> *Id.* at 8, 11.

As explained below, CARB must assess the cost-effectiveness of all proposed GHG reduction measures and ensure that the regulations imposed on the electric sector are in fact the lowest cost ways to reduce emissions. Even if the electric sector has more cost-effective emissions reductions opportunities than other sectors, the electric sector should not be forced to bear a disproportionately large share of the total economic burden associated with the State's GHG reductions simply because more cost-effective reductions are available in the electric sector. Instead, to maintain equity, the economic burden of reducing emissions should be distributed in proportion to a sector's share of emissions even if the actual reduction of emissions is not proportional. Because the electric sector will likely achieve a disproportionately large share of reductions, other sectors should compensate the electric sector. This will achieve equity by requiring that all emitters of GHG be held responsible either to reduce their share of emissions or to pay for such reductions if they can be done more cost-effectively by others.

The cap-and-trade system could facilitate equity while simultaneously ensuring that the lowest-cost reductions happen first. The emissions trading mechanism could allow some sectors to be compensated by other sectors – but *only* if the initial allocation is made appropriately. In order to achieve equity across sectors, prior to allocating allowances to individual entities, a sector-level distribution should be determined. This sectoral allocation should be based on each sector's economic burden compared to its contribution to GHG emissions. Sectors whose share of the economic burden exceeds their share of projected BAU emissions should be allocated allowances as compensation. Such an allocation could ensure that the economic burden of AB 32 regulation is distributed equitably across sectors. Furthermore, even though a majority of *reductions* are to occur through direct regulatory measures under the Draft Scoping Plan, the allocation could still achieve complete equity across the capped sectors because 100% of *emissions* in those sectors will require allowances.

Achieving an equitable distribution of the costs of GHG emissions reductions will also ensure that the appropriate carbon price signals are sent through each sector. This will become critically important as plug-in hybrid electric vehicles become mass-produced and consumers

- 6 -

have a real choice between electricity and petroleum as fuel. An equitable distribution of the economic burden of regulation will ensure that consumers do not face perverse incentives to fuel their vehicles with petroleum fuels instead of electricity.

#### 2. <u>Equity Across LSEs</u>

In the electric sector, CARB must also ensure that the burden of GHG regulation is distributed equitably across LSEs. Historically, IOUs have had higher RPS performance standards than POUs. IOUs have also been required to meet California Public Utilities Commission ("CPUC") performance standards in connection with energy efficiency. To ensure equitable distribution of the costs of GHG regulation, new regulations must apply equitable performance standards to all LSEs.

IOUs have established goals to increase the share of renewables in their electricity portfolios to 20%, while POUs are encouraged but not required to meet the same RPS.<sup>10</sup> Any new RPS goals must apply the same performance standards to all of California's LSEs, including IOUs, POUs, ESPs, CCAs, and the California Department of Water Resources (i.e., the same definition of renewable resources, procurement rules, reporting obligations, etc.).

POUs have also not been subject to the same energy efficiency goals as IOUs. The Draft Scoping Plan indicates that POUs account for 25% of the electricity provided in California, but only 5% of the utility energy efficiency savings total.<sup>11</sup> Energy efficiency goals for all LSEs should be equitable. New energy efficiency goals should also recognize the energy efficiency programs currently implemented by IOUs and that IOUs are already required to do everything within their control to meet the CPUC goals for reliable, achievable, and cost effective energy efficiency.

Furthermore, CARB's final recommendations in its scoping plan should address how to enforce POU compliance with CARB GHG reduction measures such as the RPS and energy efficiency goals. While the CPUC has a clear enforcement authority over IOUs with respect to

 $<sup>\</sup>frac{10}{10}$  Id. at 24.

<sup>11</sup> Id. Appendices at C-63.

the RPS and energy efficiency, POUs do not have a comparable agency overseeing their compliance. If the GHG reduction measures adopted by CARB are to achieve their targeted emissions reductions, they must be enforced equally for all California LSEs.

#### B. <u>The Cap-And-Trade Program Should Be As Broad-Based As Possible</u>

The Draft Scoping Plan recommends the development of a California cap-and-trade program that links with other WCI partner programs to create a regional cap-and-trade system.<sup>12</sup> Capped sectors would include electricity and large industrial sources from the outset, and transportation fuels and natural gas by 2020.<sup>13</sup>

SCE supports a comprehensive multi-sector cap-and-trade program. The broader the scope of such a program – both geographically and sector wise – the greater the opportunities are for cost-effective GHG emissions reductions. As discussed below, given the progress towards regional and national cap-and-trade programs and the advantages of such expanded program over a California-only system, SCE recommends that CARB pause the initiation of a California-only market to allow time for the implementation of a WCI regional or federal system. If a regional or federal program is not adopted within the next few years, CARB should proceed with a California cap-and-trade program. In any event, whether a California, regional, or national cap-and-trade program is put in place, the program should include all major emitting sectors, including transportation and natural gas, from the outset.

# CARB Should Allow Time For A Regional Or National Cap-And-Trade Program To Develop

The benefits of increasing the scope of the cap-and-trade system from a California-only program to a more far-reaching program are discussed in the Draft Scoping Plan. A more comprehensive program creates an opportunity for substantially greater GHG emissions reductions, expands the market for clean technologies, helps avoid leakage (i.e., shifting of emissions from California to other states), and may reduce the possibility that local businesses

<sup>&</sup>lt;u>12</u> *Id.* at 15-20.

 $<sup>\</sup>underline{13}$  Id. at 17, Appendices at C-16.

will shift production out-of-state.<sup>14</sup> The Draft Scoping Plan identifies these benefits of a regional WCI program. A national program would have even greater advantages. AB 32 recognizes the benefits of broad-based approaches to climate change by requiring CARB to consult with other states, the federal government, and other nations "to identify the most effective strategies and methods to reduce greenhouse gases" and "facilitate the development of integrated and cost-effective regional, national, and international greenhouse gas reduction programs."<sup>15</sup>

Given that the WCI is making progress towards the development of a regional cap-andtrade program and it is also likely that a federal cap-and-trade program will be adopted in the next few years, CARB's plans for a cap-and-trade program should allow time for these programs to develop before adopting a California-only program. As acknowledged in the Draft Scoping Plan, a broader program will have more benefits – including more GHG reductions – than a program limited to California. Implementing a California-only cap-and-trade program along side regional and national programs may lead to complicated and potentially contradictory state, regional, and federal regulations that will seriously complicate compliance for regulated entities, increase compliance costs, and potentially undermine the ability of the market to achieve the lowest cost emissions reductions, even if California attempts to coordinate with other programs.

CARB should set a timeline to allow for a regional or national program to be implemented. If a regional or national system that meets California's AB 32 goals is developed during the next few years, California should use such a system to meet part of its obligation to reduce GHG under AB 32. This would avoid the unnecessary complications and expense of coordinating potentially conflicting programs. If no regional or national program is developed in the near future, CARB could proceed with a California-only program.

This proposal is consistent with AB 32. CARB can proceed with regulations for a California cap-and-trade system that recognize that the system is a back-stop if no acceptable regional or federal system is implemented. Moreover, AB 32 provides that "[a]fter January 1,

<sup>&</sup>lt;u>14</u> *Id.* at ES-3-4, 19.

 $<sup>\</sup>underline{15}$  AB 32, Cal. Health & Safety Code § 38564.

2011, the state board may revise regulations adopted pursuant to this section and adopt additional regulations to further the provisions of this division."<sup>16</sup> As such, CARB can delay the adoption of a California-only cap-and-trade system.

# 2. <u>All Major Emitting Sectors Should Be Included In The Cap-And-Trade</u> Program From The Outset

The Draft Scoping Plan proposes that the capped sectors in the California cap-and-trade program would include electricity, large industrial sources, transportation fuels, and natural gas (commercial and residential) by 2020; but suggests that transportation fuels and natural gas may be phased in after the start of the program.<sup>17</sup> Regardless of whether a federal, regional, or California-only cap-and-trade program is eventually developed, the program should include all major emitting sectors (including transportation fuels and natural gas) from the outset.

The transportation and natural gas sectors together account for approximately 47% of California's 2002-2004 average GHG emissions and are expected to contribute about 46% of BAU 2020 emissions.<sup>18</sup> Representing nearly half of the State's GHG emissions when combined, these two sectors must be included in the cap-and-trade program from day one to maximize benefits to California and ensure equity across sectors.

Including the transportation and natural gas sectors in the cap-and-trade program from the outset will reduce the cost of GHG regulation to consumers. By creating a program that includes a large and diverse group of sectors, regulated entities will have more low cost GHG abatement options. This flexibility will reduce overall program cost, with the majority of such cost savings being transferred to consumers. If the transportation and natural gas sectors are not part of the cap-and-trade program, regulated entities will have a smaller pool of options for cost-effective GHG reductions, ultimately increasing costs to regulated entities and consumers. Given the uncertainty around future costs and development of new technology, regulated entities should

<sup>&</sup>lt;u>16</u> *Id.* § 38562(g).

<sup>17</sup> Draft Scoping Plan at 17, Appendices at C-16.

 $<sup>\</sup>frac{18}{10}$  Id. at 7-8.

have access to as many cost-effective abatement options as possible. Even if it turns out that few cost-effective GHG reduction options evolve from the transportation and natural gas sectors, their inclusion in the cap-and-trade program from day one can ensure that the financial burden of achieving the State's GHG reduction targets is equitably distributed across sectors.

Expanding the scope of the cap-and-trade program will also create a deep and liquid market for allowance trading. Increasing the depth and liquidity of the allowance trading market will result in greater market efficiencies, lower overall transaction costs, fewer opportunities for market power, as well as more stable allowance prices and reduced volatility. Furthermore, including the transportation and natural gas sectors in the cap-and-trade program from the beginning will encourage GHG mitigation solutions beyond what is required by direct regulations in those sectors.

Delaying the inclusion of the transportation and natural gas sectors in the cap-and-trade program will hold up critical investments that are needed to reach AB 32's long-term GHG reduction goals. Making the transportation and natural gas sectors part of the cap-and-trade program from the outset provides regulatory certainty to industry and consumers who must make investments to reduce their emissions. Without regulatory certainty, investments will be unnecessarily delayed.

#### C. <u>CARB Must Do More To Address Cost-Effectiveness And Cost Containment</u>

Cost-effectiveness and cost containment are critical element of CARB's effort to implement AB 32. The Legislature expressly stated that: "It is the intent of the Legislature that the State Air Resources Board design emissions reduction measures to meet the statewide emissions limits for greenhouse gases established pursuant to this division in a manner that *minimizes costs and maximizes benefits for California's economy*...."<sup>19</sup> Moreover, AB 32 requires CARB to adopt a scoping plan and rules and regulations to achieve "the maximum technologically feasible and *cost-effective* reductions in greenhouse gas emissions from sources

<sup>&</sup>lt;sup>19</sup> AB 32, Cal. Health & Safety Code § 38501(h) (emphasis added).

or categories of sources of greenhouse gases by 2020."<sup>20</sup> Cost-effectiveness and cost minimization are also mentioned in several other parts of the legislation.<sup>21</sup> Additionally, the long-term success of any emission reduction program relies on the public acceptance of such efforts. Implementing such program at the lowest possible cost is a critical part of this acceptance.

As detailed below, CARB must demonstrate the cost-effectiveness of the GHG reduction measures proposed in the Draft Scoping Plan. CARB should also focus more attention on cost containment, including offsets and other cost containment measures.

# 1. <u>CARB Must Demonstrate The Cost-Effectiveness Of Its Recommended GHG</u> <u>Reduction Measures</u>

The Draft Scoping Plan does not adequately address the cost-effectiveness of CARB's recommended regulatory measures. The Draft Scoping Plan indicates that CARB has developed preliminary estimates of the costs and savings of the various measures considered and found as a whole that the savings will outweigh the costs of the recommended measures.<sup>22</sup> SCE recognizes that these are preliminary estimates and that more detail is provided in the appendices and will be provided in the economic modeling evaluation. However, SCE believes that CARB must go further in demonstrating the cost-effectiveness of CARB's GHG reduction plan by adhering to statutory definition of cost-effectiveness. AB 32 defines "cost-effective" or "cost-effectiveness" to mean "the cost per unit of reduced emissions of greenhouse gases adjusted for its global warming potential."<sup>23</sup> In other words, cost-effective is defined as dollars per unit of carbon dioxide equivalent reduced. CARB should perform the required cost-effectiveness calculations

<sup>&</sup>lt;sup>20</sup> *Id.* § 38561(a) (emphasis added); *See also id.* §§ 38560, 38561(b), 38562(a).

<sup>21</sup> See id. §§ 38562(b)(1) (stating that CARB shall design the regulations, including distribution of allowances where appropriate, in a manner that "seeks to minimize costs"); 38562(b)(5) (requiring that CARB "[c]onsider [the] cost-effectiveness of these regulations"); 38562(c) (providing that CARB may establish a system of market-based declining annual aggregate emission limits that CARB determines "will achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions"); 38564 (requiring CARB to consult with other states, the federal government, and other nations "to facilitate the development of integrated and cost-effective regional, national, and international greenhouse gas reduction programs").

<sup>&</sup>lt;sup>22</sup> Draft Scoping Plan at ES-4.

<sup>&</sup>lt;sup>23</sup> AB 32, Cal. Health & Safety Code § 38505(d).

on all proposed measures as required by AB 32 and rank each measure in terms of this metric to focus on the lowest cost measures. Furthermore, as noted above, CARB must demonstrate that the emission reduction measures designed by CARB minimize costs and maximize benefits to California's economy.<sup>24</sup>

#### 2. <u>CARB Should Focus More Attention On Cost Containment Measures</u>

SCE believes that there need to be flexible means of compliance in the event that costs are higher than projected for the various measures or the projected emission reductions from these measures do not materialize. Flexible compliance and other cost containment measures are especially important when the majority of the reductions are intended to be met by regulatory measures instead of a cap-and-trade program. In SCE's view, this is likely to lead to higher costs than if the vast majority of GHG reductions were to be attained under a cap-and-trade program. Therefore, cost containment is particularly crucial.

AB 32 requires CARB to identify and make recommendations on alternative compliance mechanisms necessary or desirable to facilitate the achievement of the maximum feasible and cost-effective reductions of GHG by 2020.<sup>25</sup> The Draft Scoping Plan does not address alternative compliance mechanisms and only briefly addresses offsets, a critical cost containment measure. As discussed below, SCE supports the use of offsets as a cost containment measure, including as an alternative compliance mechanism to direct regulatory measures. Cost containment measures such as offsets will allow California to achieve its emission reduction goals while minimizing costs to the economy as required by AB 32.

#### 3. CARB Should Include A Robust Offset Policy In Its Scoping Plan

SCE agrees with the Draft Scoping Plan's conclusions that offsets can help meet the AB 32 emissions reduction target sooner and at a lower cost, spur innovation and reductions in non-regulated sectors, reduce regulated entities' compliance costs, and encourage the spread of clean,

<sup>&</sup>lt;u>24</u> *Id.* § 38501(h).

<sup>&</sup>lt;u>25</u> *Id.* § 38561(b).

efficient technology outside California.<sup>26</sup> Because of the myriad benefits of offsets, SCE strongly supports the inclusion of a sound and robust offset policy in the CARB scoping plan. SCE also supports the Draft Scoping Plan's statements that offsets must be validated in a rigorous manner with specific CARB rules to determine that offsets are real, permanent, quantifiable, verifiable, enforceable, and additional.<sup>27</sup> With clear rules establishing the validity of offsets, the State can assure that real progress is being made toward meeting AB 32 requirements.

SCE urges CARB to allow the use of validated offsets for purposes of compliance with both the limited cap-and-trade segment of the proposed GHG reduction measures and other regulations that may apply to regulated entities. As the Draft Scoping Plan suggests, specific measures can be drafted in a manner that provides for the use of offsets when compliance with the measure is not possible (e.g., as when control technology or process changes are not available or when permits to effect the desired change cannot be obtained) or when compliance is unreasonably costly.<sup>28</sup>

The Draft Scoping Plan correctly recognizes that "[h]igh quality offset projects located outside of California can help lower compliance costs in California while reducing GHG emissions in areas that would otherwise lack the resources needed to do so."<sup>29</sup> The purpose of AB 32 is to achieve GHG reductions to obtain a beneficial reduction in the risk of climate change worldwide. Without substantial reductions in GHG emissions in the rest of the United States and other nations – especially in developing countries that are currently resisting committing to reductions – California's efforts will not significantly affect the worldwide risk of global warming. Implementation of an offset program without geographic restrictions will best serve the ultimate goal of AB 32 of reducing the risk of global warming.

 $<sup>\</sup>frac{26}{26}$  Draft Scoping Plan at 44.

<sup>&</sup>lt;sup>27</sup> *Id.* at 43-44.

<sup>&</sup>lt;u>28</u> *Id.* at 44.

<sup>&</sup>lt;u>29</u> Id.

SCE disagrees with the implications in the Draft Scoping Plan that offsets should be limited to California (or the WCI region) to maintain local economic, environmental, and public health co-benefits.<sup>30</sup> The location of an offset project should have no bearing on its validity as long as the criteria for a valid offset can be met. In order to be used for AB 32 compliance, offsets should be required to be validated to ensure that they are real, permanent, quantifiable, verifiable, enforceable, and additional. The practicalities of finding valid offset projects that meet these criteria will tend to advantage projects that are easier to monitor and enforce, most likely leading to a preference for projects within the United States and its neighbors. However, offsets outside those jurisdictions should not be ruled out. Restricting offsets to inside California to achieve co-benefits is not good policy because it weakens the primary objective of AB 32 to return GHG emissions to 1990 levels by 2020 to address the clear and present danger of global warming.<sup>31</sup>

CARB should also refrain from placing limitations on the quantity of offsets that can be used to meet a regulated entity's compliance obligations. The Draft Scoping Plan asserts that a limitation on the use of offsets to 10% of a regulated entity's compliance would allow testing of the system so that risk of "unconstrained offsets" weakening the stringency of the cap-and-trade system would be lessened.<sup>32</sup> To address the apparent concern about a flood of offsets, SCE suggests that CARB adopt offset rules that include a clear indication that CARB will review experience gained in the first five years of the program and determine if amendments to the measure are needed to regulate future applications for offsets. The Draft Scoping Plan has few provisions designed to contain the costs of the program other than offsets. Offsets that comply with specific criteria adopted by CARB offer a clear mechanism to contain potentially higher than anticipated costs without a significant risk of lack of progress toward the reduction goal. Limiting the application of offsets to 10% of a regulated entity's reduction obligation reduces

 $<sup>\</sup>frac{30}{1}$  Id.

<sup>31</sup> Although co-benefits are potential additional benefits of reducing GHG, they should not take precedence over AB 32's overall goal of reducing GHG to reduce the risk of global warming.

<sup>32</sup> Draft Scoping Plan at 19.

significantly the ability of the State to minimize the cost of the implementation program as required by AB 32. By indicating its intent to gain experience with offsets before unduly limiting them, CARB can fulfill the intent of the law by minimizing costs while assuring the public that only valid offsets will be accepted and that other desirable aims of reducing GHG will be achieved.

Offsets provide an important cost containment mechanism because they give obligated entities the incentive to seek out the lowest cost emissions reduction opportunities, both within and outside California. Inclusion by CARB of a strong offset program gives CARB the opportunity to:

- Achieve significant cost savings for obligated entities and the California economy;
- In conjunction with the cost savings from offsets, reduce the potential for emissions and economic leakage when enterprises move from within California to areas lacking GHG caps;
- Encourage early reductions in GHG, which are ton-for-ton more valuable than later reductions, from a global warming perspective; and
- Encourage innovative GHG reduction technology and practice and transfer these to areas of the globe that have not yet embraced such technology and practice.

Accordingly, SCE strongly recommends that CARB include a robust offset policy in its final scoping plan.

# 4. <u>CARB Should Also Include Other Cost Containment Measures In Its</u> <u>Scoping Plan</u>

In order to meet its AB 32 obligations to contain costs, CARB should also include other cost containment measures in its scoping plan including:

• Banking and Limited Borrowing. Regulated entities should be allowed to manage their compliance across compliance periods in a way that minimizes the economic impact of compliance over the long-term while allowing California to achieve its emissions reduction goals. Technology and offset projects often require several years to come on-line. The ability to bank forward or to borrow forward on a limited basis would give obligated entities the flexibility needed to meet long-term emission reduction goals at the lowest possible cost.

- Multi-Year Compliance Periods. The electric sector is characterized by dynamic changes in weather patterns, leading to both changes in electricity demand and available generation. Multi-year compliance periods will help minimize such variability and reduce the volatility of the compliance burden. Furthermore, staggering the compliance end date for all obligated entities will mitigate the tendency for price spikes in allowance costs at the end of a compliance period.
- Safety Valve. Emissions allowance and electricity markets can interact in unforeseen ways. To mitigate the consequences of such interactions, CARB should retain the option of offering additional allowances at a predetermined price in the event that these markets demonstrate economically burdensome price swings. Such additional allowances could be offered in addition to any limited borrowing allowed under adopted cost containment rules. CARB should also consider an alternative compliance payment system in the event that allowances are either unavailable or overpriced.

#### 5. <u>CARB Should Include A Process For Adjustments In Its Scoping Plan</u>

AB32 allows the Governor to adjust the deadlines for individual AB 32 regulations or for the State in the aggregate due to the threat of significant economic harm.<sup>33</sup> SCE suggests that CARB include a process in the final scoping plan for making adjustments to the plan if the measures appear to be too expensive or likely not result in the projected emission reductions. This process would help support the State in meeting its GHG goals while minimizing costs and reducing the threat of economic harm that would necessitate the Governor's intervention.

<sup>&</sup>lt;sup>33</sup> AB 32, Cal. Health & Safety Code § 38599(a).

# 6. <u>CARB Should Not Assume That Addressing Climate Change Will Create A</u> <u>Net Economic Surplus</u>

The Draft Scoping Plan suggests that GHG emissions abatement can provide California with a net economic surplus. The Climate Action Team ("CAT") report indicated that the measures needed would result in an increase of 83,000 jobs and \$4 billion in additional income by 2020, beyond the forecast BAU values.<sup>34</sup> However, the Draft Scoping Plan does not reference other reports that indicate that reducing emissions will come at a net economic cost. For example, McKinsey & Company released a report in 2007 that indicated that reducing emissions will impose a cost on the United States equivalent to a fall in GDP between 1.4% and 1.8%. In particular, while the report indicated the need for an additional net new investment of approximately 1.5%, this is a minimum value which could increase further if emissions reductions are achieved by mandating higher cost options.<sup>35</sup> The recently released McKinsey Global Institute report indicated international economic costs equivalent to .6% to 1.4% of global product.<sup>36</sup> The Stern Review, which the Draft Scoping Plan selectively cites, found a total international loss in economic value equivalent to 1% of GNP.<sup>37</sup>

SCE recognizes the critical importance of reaching the emissions reduction goals under AB 32 and is eager to be a willing partner with the CARB, CPUC, California Energy Commission ("CEC"), and other stakeholders to reach these goals. CARB should recognize the significant economic cost of reaching the emissions reductions required by AB 32 and not focus on the net economic benefit argument championed in the CAT report. It is precisely because achieving AB 32's goals will impose a significant burden on the California economy that CARB should look toward achieving the reduction goals at the lowest possible cost.

<sup>34</sup> Climate Action Team Report to Governor Schwarzenegger and the California Legislature, Executive Summary at iii (March 2006).

<sup>35</sup> McKinsey & Company, Reducing U.S. Greenhouse Gas Emissions: How Much at What Cost? at xiii (December 2007).

<sup>&</sup>lt;u>36</u> McKinsey Global Institute, The Carbon Productivity Challenge: Curbing Climate Change and Sustaining Economic Growth at 9 (June 2008).

<sup>37</sup> The Stern Review, The Economics of Climate Change, Summary of Conclusions at vi (October 2006).

# A. <u>33% RPS</u>

#### 1. Any RPS Should Apply Equally To All California LSEs

The Draft Scoping Plan recommends a 33% RPS for both IOUs and POUs.<sup>38</sup> POUs are not currently required to meet the same RPS goals as IOUs. As the Draft Scoping Plan states, IOUs currently have established goals of meeting a 20% RPS which is overseen by the CPUC, while POUs are encouraged but not required to meet the same RPS.<sup>39</sup> Any statewide renewables goal must apply equally to all of California's LSEs, including IOUs, POUs, ESPs, CCAs, and the California Department of Water Resources.

Because AB 32's goals are statewide goals, GHG emissions reduction obligations resulting from the use of increase renewable resources must be borne by all LSEs. Adoption of prescriptive renewables policies only for the IOUs places an inequitable financial burden and unfair constraint on IOU retail customers.

As discussed above, equitable implementation of AB 32 requires that performance standards and rules such as the RPS apply equitably across all LSEs in the electric sector. This means that all LSEs should be subject to the same definition of renewable resources, the same RPS procurement goals, the same RPS reporting obligations, the same flexible compliance options, and the same enforcement authority to comply with the RPS, among other things.

#### 2. <u>CARB Must Consider The Challenges To Achieving A 33% RPS</u>

CARB should acknowledge current challenges to achieving emissions reductions through a RPS. As the CPUC has recognized, the obstacle to meeting California's current renewable objective of 20% is not lack of supply in the market or competitive participation.<sup>40</sup>

<sup>38</sup> Draft Scoping Plan at 24.

 $<sup>\</sup>frac{39}{Id}$ .

<sup>40</sup> CPUC Presentation, Status of California's Renewables Portfolio Standard at 2 (June 30, 2008) (A copy of this presentation can be found at http://www.energy.ca.gov/portfolio/documents/2008-06-30\_workshop/Status\_of\_California\_RPS\_CPUC.pdf).

Instead, the major challenges to achieving currently established renewables goals are lack of transmission in renewable rich areas, the prolonged process (7 to 10 years) for permitting and constructing new transmission systems, and uncertainty around the extension of federal production and investment tax credits.<sup>41</sup> These issues need to be addressed before increases to the State's renewable goals are considered, and ultimately before reductions in GHG emissions from increased renewable energy procurement can be realized.<sup>42</sup> Additionally, issues related to increased renewables and grid operability are in the process of being evaluated. When large amounts of intermittent renewable resources are integrated into the system there are challenges with grid stability and operations. Stabilizing renewable resources often means backing up the system with natural gas resources. The effect of such additional resources in an increased RPS system needs to be considered in any GHG reduction analysis.

# 3. <u>CARB's Rules Must Account For The GHG Implications Of Out-Of-State</u> Renewable Energy Credits

One key to a successful 33% RPS for California is expanding the supply of renewables through the use of unbundled and tradable renewable energy credits ("RECs") from outside of California. The requirement for physical delivery of renewable power to California could be expanded to anywhere in the western states, thus reducing the transmission constraints that are a major barrier to meeting the current RPS. The resolution of this issue is likely to occur in future legislation adopting a 33% RPS. If out-of-state RECs are allowed for RPS compliance, CARB must adjust its rules to account for the GHG implications of such out-of-state RECs.

The acquisition of a REC outside California from the development of a new renewable resource reduces GHG through the displacement of the marginal generation from the market in which the new renewable power will be delivered. The current reporting of emissions to CARB, which should form the basis for determining compliance with AB 32, would not capture the

<sup>41</sup> See, e.g., id. at 8.

<sup>42</sup> Recognition of these challenges to RPS goals is made more important by the CPUC's recent recognition that IOUs are unlikely to meet the current 20% goal by 2010. CPUC, Renewables Portfolio Standard Quarterly Report at 6 (July 2008).

impact of these GHG reductions from out-of-state renewable additions. CARB's GHG accounting protocols will need to be modified to credit California's GHG emissions footprint with the GHG reductions that result from new out-of-state renewable development associated with RECs used for California RPS compliance.

SCE recommends that just as default emission rates have been established for counting out-of-state emissions for power imported into California, default emission rates should be established for application to out-of-state RECs used to satisfy California's RPS. Then the REC acquiring LSE can include the GHG emissions credit that is created though the addition of the out-of-state renewable as the product of the produced renewable energy and the default marginal emission rate for the area/market in which the renewable energy is delivered. This will allow the accounting of emissions for which California is responsible under AB 32 to accurately reflect the reduction in emissions due to actions taken by California LSEs in response to the 33% RPS described in the Draft Scoping Plan.

Even in the current RPS environment, some renewal power is delivered from out-of-state renewables by effectively swapping the renewable power acquired by California LSEs to meet their RPS requirements with firm power that was otherwise being delivered to California, effectively "tagging" the firm delivery from these other source with the RPS and GHG reducing attributes. Such structures have already been undertaken and approved for RPS compliance by the CEC and CPUC. CARB's rules associated with reporting emissions from imported power must be clarified to ensure that the renewable power delivered to California through these swaps or tags is identified as non-GHG emitting power so that California will recognize the benefits of its renewable procurement as reducing California's GHG footprint, otherwise the RPS measures assumed in the Draft Scoping Plan will not achieve their assumed GHG reductions.

#### **B.** <u>Energy Efficiency</u>

# The Underlying Analysis That Formed The Basis For The Draft Scoping Plan's 32,000 GWh Statewide Energy Efficiency Goal Overestimated IOU Energy Savings By 2,000 GWh

SCE supports CARB's proposal to maximize energy efficiency as first in the "loading order" to achieve the target GHG reductions in a cost-effective way. The Draft Scoping Plan sets a target for statewide energy demand reduction of 32,000 GWh for 2020.<sup>43</sup> While the Draft Scoping Plan does not give further details on this target, it indicates that the target was based on the energy efficiency assessment and targets being considered by the CPUC for IOU energy efficiency targets.<sup>44</sup> The CPUC recommendation is based on the analysis of Itron, Inc. ("Itron").<sup>45</sup> According to this analysis, the CPUC initially proposed that IOU total market gross goals would yield approximately 28,000 GWh of energy savings during the period 2008-2020 that would contribute to CARB's overall goal of 32,000 GWh of statewide energy efficiency savings.<sup>46</sup> However, this 28,000 GWh of energy savings was based on a mistake in the Itron analysis that overestimated savings from IOU total market gross goals by 2,000 GWh. The CPUC corrected the mistake in its final decision and concluded that IOU total market gross goals would yield approximately 26,000 GWh of energy savings during the period 2008-2020 that would contribute to CARB's overall goal of 32,000 GWh of statewide energy efficiency savings.<sup>47</sup>

The IOUs' responsibility toward achieving the 32,000 GWh energy efficiency measure in the Draft Scoping Plan should also reflect this correction. This revision will require the CPUC to

 $<sup>\</sup>underline{43}$  Draft Scoping Plan at 23.

<sup>44</sup> *Id.* at 21.

<sup>45</sup> Assistance in Updating the Energy Efficiency Savings Goals for 2012 and Beyond, Itron, Inc., March 2008 and subsequent appendices.

<sup>46</sup> CPUC Proposed Decision Adopting Interim Energy Efficiency Savings Goals For 2012 Through 2020, And Defining Energy Efficiency Savings Goals For 2009 Through 2011, issued July 1, 2008 in CPUC Rulemaking 06-04-010 at 23.

<sup>&</sup>lt;sup>47</sup> CPUC Decision 08-07-047 at 23-24 (July 31, 2008).

work with CARB to determine if the Draft Scoping Plan should be revised to target statewide energy demand reductions of 30,000 GWh instead of 32,000 GWh, or if additional savings will be allocated to POUs to maintain the 32,000 GWh level of savings.

#### 2. The Energy Efficiency Requirements For All LSEs Should Be Equitable

California leads the nation and perhaps the world in developing and implementing successful energy efficiency efforts. SCE has a long track record of effectively managing energy efficiency programs to produce cost-effective results. All California LSE – including POUs – should pursue cost-effective energy efficiency in the same manner as IOUs have been for some time. The Draft Scoping Plan indicates that POUs account for 25% of the electricity provided in California, but only 5% of the utility energy efficiency savings.<sup>48</sup> Going forward, energy efficiency requirements should be applied equally to all LSEs. The GHG reduction benefits resulting from energy efficiency across all of California are too great to limit the focus of energy efficiency. Furthermore, while the CPUC has a clear enforcement authority over IOUs with respect to energy efficiency, POUs do not have a comparable agency overseeing their compliance. If the energy efficiency measures adopted by CARB are to achieve their targeted emissions reductions, they must be enforced equally for all California LSEs.

Even after the CPUC's reduction of the total market gross goal to 26,000 GWh to correct the error described earlier, IOU customers will still be responsible for 81% of the State's energy efficiency savings targeted in the Draft Scoping Plan. Based on 2006 data from the CEC, IOUs represent approximately 72% of retail electricity sales in California.<sup>49</sup> Assigning a disproportionately high share of the energy savings to IOU customers would unfairly burden IOU customers to the benefit of POU customers, especially since the previous energy efficiency efforts by the IOUs in comparison to the POUs makes it likely that some cost-effective measures in IOU service territories have already been achieved and are not available going forward, while

 $<sup>\</sup>frac{48}{2}$  Draft Scoping Plan Appendices at C-63.

<sup>49</sup> California Energy Demand 2008-2018 Staff Revised Forecast, CEC-200-2007-015-SF2, Form 1.1c (November 2007).

these same measures may not have been achieved in POU service territories. If energy efficiency goals were set in proportion to sales, the amount of energy savings to be delivered through the IOU service territories would be about 23,000 GWh of the 32,000 GWh in the Draft Scoping Plan. CARB should modify the Draft Scoping Plan to ensure that there are equitable energy efficiency goals for all California LSEs and that all LSEs are equally responsible for contributing to the State's GHG reductions resulting from energy efficiency savings.

# 3. <u>Additional Energy Efficiency Savings Under Consideration Should Not Be</u> Required From IOU Service Territories

The Draft Scoping Plan states that in addition to the 32,000 GWh energy efficiency recommendation, CARB is evaluating the possible inclusion of an additional 8,000 GWh energy efficiency goal.<sup>50</sup> As described above, IOUs are already required to do everything within their control to maximize the reliable, achievable, and cost-effective energy efficiency potential. While IOUs are committed to live up to this requirement, it is important to recognize that these IOU programs are voluntary programs and their success depends on customer acceptance. The recommended goals from the CPUC are based upon the estimated potential of energy efficiency in California. Such goals are already extremely aggressive and further goals should be approached with caution.

#### **C.** <u>CHP</u>

# CARB Should Adopt Performance Standards, Efficiency Requirements, And Minimum Emissions Standards For CHP

The Draft Scoping Plan recommends increasing CHP capacity by 4,000 MW and suggests that this increased CHP use will result in GHG emissions reductions.<sup>51</sup> Any discussion of CHP and its impacts must recognize that not all CHP is created equal and that differences in CHP resources' characteristics mean that likely GHG reductions must be carefully assessed in order to actually garner GHG reductions from CHP resources.

<sup>50</sup> Draft Scoping Plan at 38.

<sup>&</sup>lt;sup>51</sup> *Id.* at 11, 23, Appendices at C-73.

As the CPUC and CEC have noted, "[w]hile often characterized under the single heading of CHP, there are multiple types of technologies and fuel sources that are considered to be part of this broad category."<sup>52</sup> SCE's experience with CHP has been that a minority of existing CHP applications actually reduce fuel use, while some applications are extraordinarily wasteful of fuel. The differences in CHP technologies must be recognized within the scoping plan so that the goal of increased CHP does not allow for the proliferation of inefficient fossil fuel-fired CHP units. One manner in which accounting for the differences in types of CHP can be accomplished is through recognition of specific parameters which recognize the benefits and GHG reductions of different types of CHP resources. Accordingly, CARB should adopt performance standards, efficiency requirements, and minimum emissions standards for CHP users. Adoption of such standards will ensure that incremental CHP usage is in fact contributing to the reduction of GHG emissions in a manner that is more environmentally friendly, more cost-effective, and more efficient than the alternative.<sup>53</sup>

#### 2. <u>CARB Should Not Create Carve-Outs For CHP</u>

The Draft Scoping Plan notes that there are "institutional barriers to installing combined heat and power systems."<sup>54</sup> The Draft Scoping Plan neither specifically identifies these alleged institutional barriers nor addresses how they are impediments to current market opportunities for CHP resources. For example, the Draft Scoping Plan fails to note current efforts to integrate CHP into California's electricity market while also ensuring that CHP is the most cost-effective resource. Under current structures, CHP units can compete in any of the IOUs' or POUs' requests for offers, or approach any of the IOUs, POUs, ESPs, CCAs, financial intermediaries, or out-of-state buyers directly for bilateral negotiations regarding potential projects. These options are explored by every other generator in the market today and are also available to CHP owners.

<sup>52</sup> Joint California Public Utilities Commission and California Energy Commission Staff Paper on GHG Regulation for Combined Heat and Power ("Joint CHP Report") at 2 (May 1, 2008).

<sup>53</sup> The Joint CHP report also recognizes that an efficiency threshold for CHP installations would be one way of ensuring that a CHP installation actually causes a net reduction in GHG relative to power delivered from the grid. Joint CHP Report at 10.

<sup>54</sup> Draft Scoping Plan at 21-22.

The Draft Scoping Plan does not address these options as a means of ensuring the cost-effective integration of efficient CHP resources into California's electricity market and instead offers blanket statements about "institutional barriers" to all CHP.

In addition to recognizing that not all CHP is created equal, and not all CHP will contribute to GHG emissions reductions, CARB must recognize that CHP systems are part of a mature industry with no need for special treatment or carve-outs for units that are not as clean or efficient as other resources within the electricity market. Accordingly, CARB's final scoping plan should more fully acknowledge that the State's GHG emissions reduction goals will not be met by 4,000 MW of additional fossil fuel-based CHP, but rather that the incremental reductions must be met by efficient CHP systems that meet performance and efficiency standards. Encouragement of efficient CHP will meet the State's objectives of GHG emissions reductions, as well as allow LSEs to design portfolio mixes that best achieve GHG reduction goals while also protecting customers' financial interests.

Finally, electric utility customers should not be required to subsidize fossil fuel-fired CHP systems, either through direct incentives, or indirectly via waivers in other system or wire charges which reflect the costs necessary to integrate the CHP systems. This is particularly true given that presently, the industrial sector is not subject to any regulations (other than the potential for having to participate in the cap-and-trade) under the Draft Scoping Plan, despite contributing 17% of the State's GHG emissions.

#### D. <u>Cap-and-Trade Program</u>

#### 1. <u>CARB Must Address Operational Issues In A Cap-and-Trade Program</u>

The Draft Scoping Plan recommends a set of direct, programmatic measures to achieve a large share of emissions reductions, coupled with a multi-sector cap-and-trade program to facilitate approximately one-fifth of the needed GHG reductions under AB 32. However, the Draft Scoping Plan does not address important details regarding the characteristics of the cap-and-trade program.

SCE has provided written comments to CARB, the CPUC, CEC, and WCI on important elements of a cap-and-trade program, addressing issues such as allowance allocation, point of regulation, and the importance of cost containment measures to protect utility ratepayers and the California economy. The WCI recently released its draft design of a regional cap-and-trade program. In its proposal, a first jurisdictional deliverer point of regulation was suggested. Additionally, the WCI stated its intent to allocate allowances directly to WCI partners. Each WCI partner would then, subject to some WCI restrictions, determine its allocation methodology. CARB should establish its recommended allocation and cost containment provisions in the final scoping plan. To that end, SCE offers the following suggestions regarding these issues.

# 2. <u>CARB Must Establish The Manner In Which The Cap-and-Trade Program</u> Will Coexist With Additional Programmatic Measures

# a) <u>CARB Should Not Adopt Additional GHG Reduction Measures If</u> Forecasted Reductions Do Not Occur

The Draft Scoping Plan identifies various programmatic measures to reduce GHG, along with emission reduction expected from each measure. However, the State's ability to achieve the direct measures is uncertain. Additionally, it is unclear that the forecast emissions reductions will result even when regulated entities comply with the additional regulations.

If a specific measure does not provide its forecast reductions, a greater burden of abatement will fall to the other measures. SCE suggests that a regional or national cap-and-trade program is precisely the measure that CARB should look to for any shortfalls from the established measures. A well-designed cap-and-trade program can facilitate emissions reductions at the lowest possible cost, and while doing so, will create the necessary incentives to develop new technology and institutional systems needed to achieve the needed emissions abatement.

# b) <u>California Should Allocate Allowances In A Manner That Mitigates</u> The Economic Burden Of Compliance With AB 32

SCE has proposed an allowance allocation mechanism that minimizes the economic burden of compliance with AB 32 in various forums. SCE reiterates its concerns here and suggests that given the recent WCI draft design recommendations, CARB should evaluate the method for allocating allowances within California. One of the key benefits of a cap-and-trade program is that it allows for the lowest cost reduction measures to be achieved, and via the allowance allocation and trading process, equity can be achieved within and across sectors. By allocating so that economic burden is mitigated, CARB can allow for the lowest cost abatement opportunities to be achieved while maintaining the economic equity needed to implement a fair system.

#### E. <u>Electrification of Transportation</u>

The transportation sector is the largest contributor of the State's total GHG emissions.<sup>55</sup> While the Draft Scoping Plan includes measures to reduce consumption of petroleum fuels (e.g., the Low Carbon Fuel Standard and Pavley I and II performance standards), it contains only one concrete recommendation for fuel switching from petroleum to electricity – ship electrification at ports.<sup>56</sup> Many other electrification measures also offer great potential for cost-effective GHG reductions, including plug-in hybrid electric vehicles, truck stop electrification, electric transportation refrigeration units, electric forklifts, and electric railroads, among others. While the Draft Scoping Plan briefly refers to the zero-emission vehicle ("ZEV") program,<sup>52</sup> it does not adequately consider transportation electrification. CARB should discuss these opportunities, including (1) their potential to contribute to AB 32 goals, (2) the policy and cost implications of GHG emissions moving from the transportation fuels sector to the electric sector due to electrification of transportation, and (3) a comprehensive discussion of its ZEV program as well

<sup>55</sup> *Id.* at 7-8.

<sup>56</sup> Id. at 13-15.

<sup>57</sup> *Id.* at 14.

as other electrification opportunities within the transportation sector. In addition, CARB should play an active role and accelerate deployment of these technologies by setting goals, providing a forum to address issues, and laying down ground rules for stakeholders.

CARB should address fundamental considerations, such as the emission and cost consequences of fuel switching, in its scoping plan. Both transportation-related GHG emissions and overall statewide emissions will decrease with electrification of the transportation sector. However, the electric sector will need more generation resources to meet the increased electricity demand, which will result in higher costs and possibly some increased emissions in the electric sector. CARB should develop rules which will recognize these consequences, take into consideration the potential emissions increase in the electric sector that will result from the overall reduction in emissions from fuel switching, and develop a mechanism to make the electric sector whole for this increased cost, at a minimum, and ideally compensated so as to have incentive to encourage and expand electrification, to ensure equitable distribution of the economic burden associated with fuel switching efforts.

#### F. <u>Other Measures</u>

#### 1. <u>Coal Emissions Reduction Standard</u>

In the section on other measures under evaluation, the Draft Scoping Plan states that CARB is evaluating approaches to reduce the GHG associated with coal-based electricity sales, including "requiring electric service providers to divest or otherwise mitigate portions of existing investments in coal-based generation."<sup>58</sup> CARB should not pursue requiring LSEs to divest or otherwise mitigate existing investments in coal-based electricity.

As detailed above, the Draft Scoping Plan already recommends that a disproportionate share of the GHG reductions required by AB 32 be achieved through regulations on the electric sector. In addition, the electric sector is going to be capped under the proposed cap-and-trade program. If it is cost-effective for LSEs to divest their existing coal generation they will do so

<sup>58</sup> *Id.* at 39.

through the incentives provided in the cap-and-trade market. CARB should not mandate coal divestiture that is not a cost-effective method for reducing GHG and will impose significant costs on ratepayers.

Finally, Senate Bill ("SB") 1368, signed into law on September 29, 2006, already provides that "[n]o load-serving entity or local publicly owned electric utility may enter into a long-term financial commitment unless any baseload generation supplied under the long-term financial commitment complies with the greenhouse gases emission performance standard established by the commission."<sup>59</sup> The CPUC proceeding to implement SB 1368 resulted in the establishment of a GHG emissions performance standard for any long-term financial commitment for baseload generation that will be supplying power to California ratepayers. The GHG emissions rates for these facilities must be no higher than the GHG emissions rate of a combined-cycle gas turbine powerplant (or 1,100 pounds of carbon dioxide per MWh).<sup>60</sup> There are potential legal concerns with CARB imposing a mandatory coal divestiture or mitigation requirement beyond that which is authorized by SB 1368.

#### 2. <u>Carbon Fees</u>

The Draft Scoping Plan also states that CARB is considering carbon fees at levels anywhere from sufficient to pay for administration of the AB 32 program to as much as \$10 to \$50 per metric ton carbon dioxide equivalent.<sup>61</sup> AB 32 provides that CARB may adopt "a schedule of fees to be paid by the sources of greenhouse gas emissions" and that the revenues collected "are available upon appropriation, by the Legislature, for purposes of carrying out this division."<sup>62</sup> The are legal questions regarding CARB's authority to impose carbon fees beyond what is necessary to pay for the administration of the AB 32 program. As the Draft Scoping Plan acknowledges, CARB is considering fees well beyond those levels with a fee of \$10 per ton

<sup>59</sup> SB 1368, Cal. Pub. Util. Code § 8341(a).

<sup>&</sup>lt;u>60</u> CPUC Decision 07-01-039 at 8 (January 25, 2007).

<sup>61</sup> Draft Scoping Plan at 41.

<sup>62</sup> AB 32, Cal. Health & Safety Code § 38597.

resulting in more than \$4 billion per year.<sup>63</sup> There are also significant questions whether a carbon fee would be a cost-effective method to reduce GHG given that most emitting entities will already be covered by a cap-and-trade program. SCE urges CARB to limit its consideration of carbon fees to fees needed to cover the costs of administering AB 32 GHG reduction programs.

<sup>63</sup> Draft Scoping Plan at 41.

#### IV.

#### **CONCLUSION**

SCE appreciates the considerable work done by CARB staff to develop the Draft Scoping Plan. SCE looks forward to working with the CARB, CPUC, CEC, WCI, and other stakeholders on the implementation of AB 32 and the consideration of SCE's concerns as discussed above.

Respectfully submitted,

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