BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Implement the Commission's Procurement Incentive Framework and to Examine the Integration of Greenhouse Gas Emissions Standards into Procurement Policies	Rulemaking 06-04-009

BEFORE THE CALIFORNIA ENERGY COMMISSION

Order Instituting Informational Proceeding AB-32 Implementation: Greenhouse Gases	Docket 07-OIIP-01

Reply Comments of San Diego Gas & Electric Company and Southern California Gas Company Addressing Allowance Allocation Policy, E3 Modeling Results, Programmatic Measures To Reduce Emissions In The Electricity And Natural Gas Sectors, The Joint CPUC/CEC Staff Paper on GHG Regulation for Combined Heat and Power, Flexible Compliance Mechanisms, and Emission Reduction Measures

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I.
INTRODUCTION AND BACKGROUND TO REPLY COMMENTS

Pursuant to the April 16th Ruling issued by ALJ TerKeurst and ALJ Lakritz, San Diego Gas & Electric Company ("SDG&E") and Southern California Gas Company ("SoCalGas") (collectively referred to hereafter as "Sempra Energy Utilities" or "SEU") herein provide their reply comments addressing allowance allocation policy, E3 modeling results, and the May 2, 2008 workshop on programmatic measures to reduce emissions in the electricity and natural gas sectors. Thirty five sets of opening comments were received, some over 100 pages long. Given the size of the opening comments and the short turn around time for replies, SEU's reply comments of necessity cannot respond to all points raised, and silence on any issue should not be interpreted as agreement. SEU's reply comments are organized in the same order as opening comment; thus issues raised in the original ruling and workshop are addressed in Section II, below. In response to the Joint ALJ ruling issued on May 1, 2008 asking that parties' comments on the joint staff paper regarding treatment of Combined Heat and Power ("CHP") facilities

under AB 32 be addressed in the comments due on May 27, 2008 SEU's reply comments on CHP issues are set forth in Section III of these comments. On May 6, 2008 ALJs TerKeurst and Lakritz issued a ruling on flexible compliance mechanisms; reply comments on these issues are in Section IV below. Finally, on May 13, 2008 ALJs TerKeurst and Lakritz issued a ruling on emission reduction measures, modeling, and other issues. SEU's reply comments on these issues are set forth in Section V below.

SEU appreciates the opportunity to submit Reply Comments. In essence, these Reply comments, as well as our initial comments, are intended to protect our ratepayers from unnecessary cost increases while promoting effective GHG reduction measures. As such, SEU believes that AB32 should be structured in a way that maximizes flexibility to utilize the most cost effective emission reduction measures available. This minimizes cost increases for our customers, and would minimize the strain on the California economy. In addition, allowances should also be allocated on a MW output basis rather on the basis of historical emissions. This is because emission-based allocation fails to recognize prior expenditures that have reduced emissions and, as such, would lead to a transfer of wealth from low emitters who have already expended significant funds in reducing their emissions to higher emitters that have not incurred these costs.

IOUs and their customers have expended significant sums of money over the past decade on programs and activities that have had the effect of reducing their emissions to levels far below those of many of the state's Publicly Owned Utilities (POUs). These efforts should be rewarded, and not punished under AB32. California's greenhouse gas legislation should be implemented in a manner that fully recognizes and accounts for these prior actions, makes the actual cost of emissions clear to emitters, maximizes incentives to enter the market with lower emissions and maximizes the savings that would be realized by high emitters through emission reducing activities. SEU's positions are summarized below for convenience:

Emission Allocation: SEU supports free allocation directly to Load Serving Entities ("LSEs") on an output basis, with appropriate measures to ensure that allowances are made available to the market on a non-discriminatory basis. The proposal is equivalent to an auction approach with Auction Revenue Rights ("ARRs") based on a sales basis (using the terminology of the Staff Paper on Options for Allocation of GHG Allowances in the Electric Sector) .

CHP Issues: SEU supports encouraging the increased efficiency that can occur with

appropriately placed and sized CHP applications. If there is increased efficiency, it translates directly into Greenhouse Gas ("GHG") reductions. SEU supports efficient CHP but does not support it being mandated. CHP by necessity must be split into an electricity component and a thermal component based on the California Air Resources Board ("ARB") mandatory reporting requirements in order to provide equal treatment to in-state and out-of-state CHP facilities. SEU supports the methodology for splitting GHG emissions set forth in the Air Resources Board mandatory reporting regulations. Given the split, the electricity portion should be part of the electricity sector and the thermal/mechanical component part of the appropriate sector (industrial or natural gas) depending on the size of the facility.

Flexible Compliance: Reducing GHGs is a long-term proposition; there are no "hot spot" impacts as with criteria pollutants, so flexibility causes no problems with attaining the long-term goals. Electricity is unique in that it cannot be cost effectively be stored and LSEs go to great lengths to ensure reliability of electricity delivery, so flexibility is essential. Therefore, flexible compliance mechanisms that avoid short-term price spikes and eliminate potential reliability problems with no long-term impact on GHG reduction should be encouraged.

Emission Reduction and Modeling: The E3 model is large and complex; therefore SEU believes that there needs to be adequate time allowed in which to verify the model and test sensitivities prior to relying on results of the model for purposes of determining the cost of GHG reductions on LSEs.

II.
REPLY COMMENTS - EMISSION ALLOCATION METHODS AND POLICIES

The April 16, 2008 ruling asked parties to address the following specific questions[1] related to emission allocation methods and policies. SEU's reply comments on these issues are organized in the same order. SEU does not see any changes necessary in its proposal (repeated below for convenience of the reader) as a result of review of the comments filed June 2, 2008. The proposal for allocation is similar to NRDC/UCS proposal (excluding the

[1] For ease of reference, questions related to emission allowances have been assigned a prefix EA (example: EA-1); questions related to combined heat and power have been assigned a prefix CHP (example: CHP-1); questions related to flexible compliance mechanisms have been assigned a prefix FC (example: FC-1), and questions from the ruling on emission reduction measures, modeling and other issues have been assigned a prefix ER (example: ER-1).

use it or lose it aspect of the NRDC proposal)[2], though worded differently. Parties concerned about an unfair advantage for LSEs with generation fail to note the phrase, "with appropriate measures to ensure that allowances are made available to the market on a non-discriminatory basis."

SEU position: SEU supports free allocation directly to LSEs on an output basis, with appropriate measures to ensure that allowances are made available to the market on a non-discriminatory basis. This is equivalent to an auction approach with Auction Revenue Rights ("ARRs") based on a sales basis. The output (sales) would be updated at regular intervals such the beginning of each compliance period, and would be adjusted for cumulative Energy Efficiency ("EE") savings. SEU would support treating on-site use of CHP generation as an LSE in the electric sector, and would support LSEs making allowances available on an output basis to generators supplying the LSE on a fixed price basis under contracts signed prior to AB 32 that do not contemplate a GHG market.

SEU notes that proposals by other parties may have severe rate impacts; regulators need to pay close attention to such outcomes. Just as a single data point on this important issue, one alternative modeling scenario presented by NRDC ("Scenario NRDC/UCS 3i") would result in SDG&E's system average electric rates in 2020 increasing by over 4 cents/kwh. This is an unacceptable rate impact for greenhouse gas mitigation.[3] While NRDC does not have a single preferred approach and thus is not supporting this scenario above all others, it does illustrate that the CPUC must be mindful of rate and cost impacts when it makes recommendations to the ARB.

[2] SEU believes the NRDC/UCS proposal for "use it or lose it" is well intentioned but would be impractical to implement. It would be hampered by specific rules for carry-over spending of various programs, and arguments over how much of the capital dollars for ratebased investments in renewables, PV, DR, and CHP should be counted for GHG reduction versus electric supply. And questions about partial compensation for early action spending in 2007-2011. Further, would there be consideration for the higher costs electric ratepayers incur through mandates such as more stringent appliance standards that may be imposed under AB 32.

[3] "Scenario NRDC/UCS 3i"; see NRDC Comments, Attachment A, scenario 3i, p. 3.

EA-3. Does any of the allowance allocation options discussed in the staff paper, or in the articles attached to the staff paper, or in your opening comments, raise legal concerns about whether they involve the levying of a tax and, therefore, would require approval by a two-thirds vote of the Legislature? If so, please explain why that allocation option(s) is taxation, including citations to specific relevant legal authorities. Also, explain if and, if so, how, the allocation option(s) could be modified to avoid such legal concerns.

As noted in SEU's opening comments, the California Constitution, Article XIIIA currently requires a 2/3 vote of any changes in state taxes enacted for the purpose of increasing revenues, including by changes in methods of computation. Notably, the pure auction option with no revenue return could be challenged as a new tax, if it was adopted to implement AB 32, and if funds from the auction were placed in the State's General Fund.

NRDC's comments (at p. 20) agree on this point:

> "The Staff Report suggests that the "pure" auction option would mean none of the auction revenue would be returned to the electricity sector. Not only is this inconsistent with the Commissions' joint recommendations in D.08-03-018, as discussed above, but it could also raise concerns about the levying of a tax, which is not authorized by AB 32 and would require approval by a two-thirds vote of the Legislature. If auction funds are directed to the General Fund to be used for any purpose, then they would be considered a tax." (citations omitted)

SEU is in agreement with NRDC's next point, regarding the appropriate use of auction revenues:

> In order to avoid being considered a tax, revenue from fees must be used for purposes that are reasonably related to the purposes of the statute.[4] In this case, auction revenues must be used to further the goals of AB 32. The safest course would be to use all auction revenue to further the goals of AB 32, and, if there is a multi-sector cap and trade program, to use a majority of the auction revenues from the electricity sector to benefit electricity consumers and to spur changes in the electricity sector that further the goals of AB 32. Id at 20-21.

[4] *Sinclair Paint Co. v. State Bd. of Equalization* (1997) 15 Cal.4th 866, 881 (citing *San Diego Gas & Electric v. San Diego County Air Pollution Control District* (1988) 203 Cal.App.3d 1132, 1146).

EA-5. For reply comments: Do any of the allowance allocation options discussed in other parties' opening comments raise concerns under the Dormant Commerce Clause? If so, please explain why that option(s) may violate the Commerce Clause, including citations to specific relevant legal authorities. Also, explain if and, if so, how the allocation option(s) could be modified to avoid the Commerce Clause problem.

The allowance allocation options addressed in opening comments, *as long as they are tied to a deliverer point of regulation* would only regulate electricity that is generated in, or delivered for consumption in, California. Such a regulatory scheme would not regulate any commerce that occurs totally outside of California, and would not regulate extraterritorially in violation of the Commerce Clause. SEU notes that some parties continue to raise what are now collateral challenges to the deliverer point of regulation; if any consideration is given to such notions it must be remembered that other approaches to the point of regulation could well raise challenges as being in violation of the Commerce Clause .

EA-6. For reply comments: Do any of the options discussed in other parties' opening comments raise legal concerns about whether they involve the levying of a tax and, therefore, would require approval by a two-thirds vote of the Legislature? If so, please explain why that allocation option(s) is taxation, including citations to specific relevant legal authorities. Also, explain if and, if so, how, the allocation option(s) could be modified to avoid such legal concerns.

As noted above, the collection of auction revenues by the State could be challenged as the levying of a tax if those funds were treated as general funds.

EA-7. For reply comments: Do any of the allowance allocation options discussed in other parties' opening comments raise any other legal concerns? If so, please explain in full with citations to specific relevant legal authorities. Also, explain if and, if so, how the allocation option could be modified to avoid such legal concerns.

See response to EA-5, above.

EA-9. Please address the effect that each of the allowance allocation options discussed in the staff paper, or in the articles attached to the staff paper, or in your own or other parties' opening comments, would have on economic efficiency in the economy, and the economic incentives that each option would create for market participants.

SEU's comments filed June 2, 2008 address other parties' proposals, as well as the Staff proposals, and are reiterated below in reply to other parties:

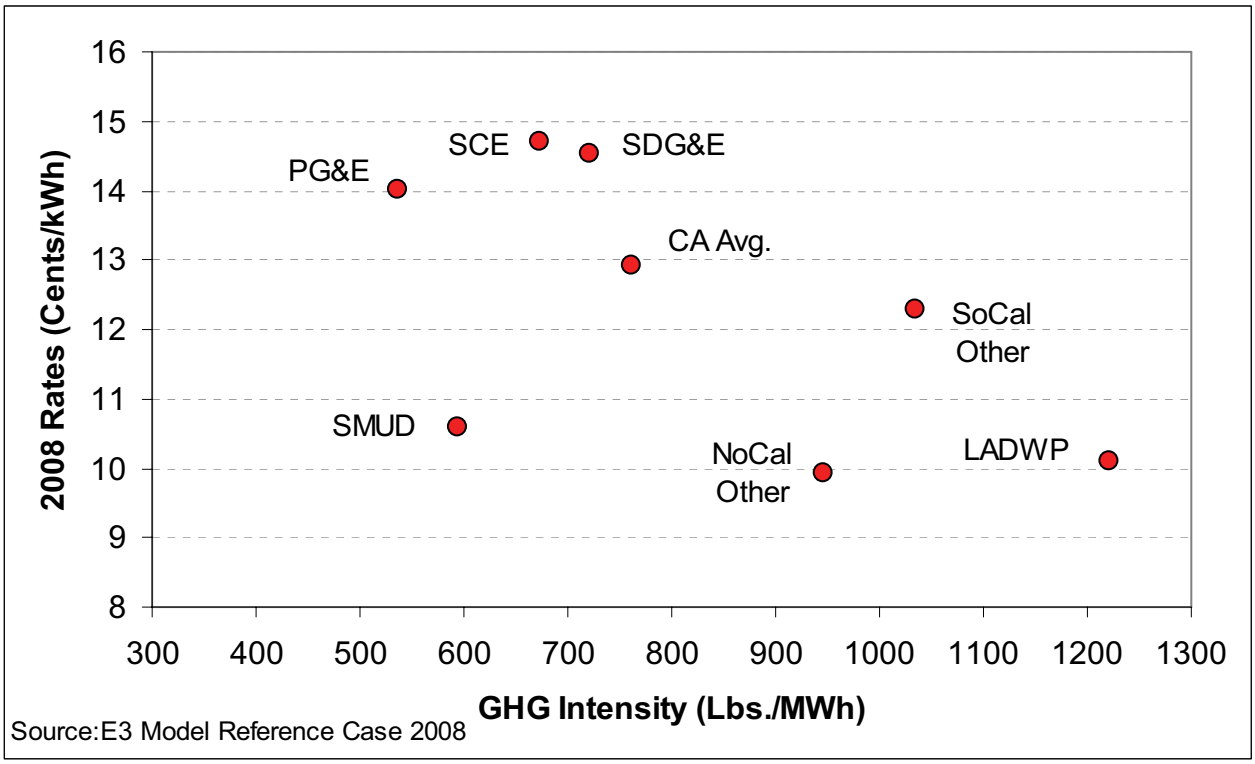
SEU's comments in reply to proposals by IEP, Calpine, Dynegy, Pacificorp and others to administratively allocate allowances to first delivers on a historical emission basis; and parties such as LADWP and SCAPPA that would allocate allowances to LSEs, but on an historical emission basis.

Any allocation of allowances based on historical emissions fails to reflect the costs imposed on society by first deliverers that have higher GHG emissions and fails to allocate the actual market value associated with lower emissions to first deliverers that have lower emission profiles. This runs counter to the public policies embraced in AB32 and the statutory directives noted in response to SEU's initial comments in response to Question EA- 3 to recognize early action.

On the other hand, auctions and output based allocation methods both recognize and reflect the full economic cost/value associated with GHG emissions. From that perspective, they both make economic sense. An auction tends to have the highest upward impact on electricity rates, and as such would only be of value to LSE customers to the extent auction revenues are allocated to LSEs. To the extent these revenues are not on a fuel neutral basis, however, such an allocation methodology would fail to impose on LSEs that have high procurement-related emissions, the actual costs associated with their emissions while failing to compensate customers of lower emitting utilities for the costs they have previously incurred, and will continue incurring, to maintain their lower emission levels. To the extent that auction revenues are not allocated to LSEs on a fuel neutral sales basis, they should be directed to research and development activities that are likely to result in future reductions in electricity-related emissions and costs.

Any allocation of auction revenues based on historical emissions would have the effect of rewarding LSEs who delayed reducing their GHG emissions and punishing customers of LSEs that have already incurred significant costs implementing programs and strategies that reduced their emissions. The inequity would result from the fact that, in general, low-emitting LSE rates are higher than those of the higher emitting LSEs, in part as a result of these early actions. Thus, it is clear that the higher emitting LSEs have the "headroom" in rates necessary to incur costs

similar to those that have already been realized by the lower emitting LSEs in reducing their emissions. This current disparity in rates and emissions is graphically illustrated below[5]:



It is also the case that emission reductions become more expensive to attain after lower cost opportunities have been fulfilled. For example, the Investor-owned Utilities ("IOUs") have extensive records of energy efficiency achievements that vastly exceed those of the state's POUs. The challenge is that energy efficiency gains become incrementally more expensive after earlier "lower hanging fruit" has been achieved. As a result, it is reasonable to expect that the GHG reducing strategies (such as energy efficiency) currently available to POUs are, in large part, less expensive to achieve than opportunities currently available to IOUs.

For the forgoing reasons, any allocation of auction revenues should be done in a fuel neutral sales basis, without consideration of historical emissions to most accurately reflect the costs of GHG emissions by LSEs, reward early actions, and to ensure that decisions on behalf of

[5] Graph is based on E3 model data except to correct SDG&E's rates. SDG&E did not make corrections to other parties' rates or emissions. The emissions are for 2008 and are based on generator assignments that are assumed to be correct but which other parties have not yet verified.

all emitters are made on the basis of the actual costs associated with their emissions.

Finally, annual updates of output may introduce some inefficiency by creating incentives to increase sales. In the SEU proposal, sales are adjusted at set intervals and with adjustment for energy efficiency; these two factors reduce any potential inefficiency while adjusting to account for higher growth in some areas as opposed to other areas.

SEU's reply to allocation of allowances to deliverers on an on a fuel-specific basis such as the proposals of SCE and SMUD.

Allocation on a fuel-specific basis fails to impose on first deliverers the actual costs associated with the emission attributes of the sources for the energy they are delivering while minimizing incentives for them to deliver lower emitting resources. In effect, this kind of mechanism would eliminate any near-term incentive for deliverers from lower than average emitting coal resources to change to a lower emitting resource. In comparison, an allocation based on fuel neutral MW output would maximize incentives for first deliverers of ALL high emitting resources to reduce their emissions. It makes no sense, when the overall goal is to minimize carbon emissions, to adopt a cap and trade program that would impose greater costs on lower emitting resources than higher emitting resources. This clearly fails to accurately allocate the costs attributable to GHG emissions to first deliverers and leads to perverse incentives, counter to the overall GHG emission reduction goals behind AB32.

Consider a hypothetical situation involving a first deliverer delivering a higher than average emitting natural gas combined cycle facility with emissions of 1100 lbs/MWh and another first deliverer transporting the output of a lower than average coal-fired generation facility with emissions of 1500 lbs/MWh. Under a fuel-specific allowance allocation market design, the costs imposed on the first deliverer transporting the dirtier generation source would be less than the costs imposed on the first deliverer transporting the lower emitting resource. This is contrary to the intent and directives of AB32. At the same time, deliverers of zero emitting resources that might have a higher capital cost and for which incentives should be maximized would be deprived of part of the value associated with the lower emissions attributable to the energy it delivers. If GHG emissions impose a cost on society, the actual costs of GHG emissions should be imposed on market participants in a way that accurately reflects these costs. The costs of GHG emissions do not depend on what fuel formed the source for the

emissions. As a result GHG regulation should not distinguish cost or value on this basis. Any GHG regulation that fails to accurately allocate the costs of GHG emissions on market participants will lead to economically inefficient decisions by market participants.

California now has an opportunity to reward those that enter the market with zero emissions, or extremely low emissions. To fail to take advantage of these kinds of opportunities would be a mistake, and minimize incentives to enter the market with low emissions and/or to reduce high emission profiles that may already exist.

SEU's reply to proposals of NCPA, NRDC/UCS and others to auction allowances and return the revenue to LSEs for GHG reduction efforts.

For the reasons identified above, any cap and trade program should be implemented on a fuel neutral basis. An auction could have many of the beneficial features of a fuel-neutral allowance allocation regime in terms of maximizing incentives for high emitters to reduce their emissions, but allocating the majority of revenues to LSEs on the basis of historical emissions would eliminate these benefits, and maximize adverse rate impacts for customers of low emitting LSEs. This would be inequitable and make little economic sense in light of the state's policy objectives. For these reasons a cap and trade program with fuel neutral MW output-based allowance allocation to LSEs would maximize incentives to reduce emissions while minimizing adverse rate impacts to electricity consumers.

Use Of Auction Revenues

EA-10. Describe in detail the method you prefer for returning auction revenues to benefit electricity consumers in California. In addition to your recommendation, comment on the pros and cons of each method listed above, especially regarding the benefit to electricity consumers, impact on GHG emissions, and impact on consumption of electricity by consumers.

SEU's proposal for use of the revenues to offset LSE existing and future GHG spending is a close variation of the NRDC/UCS proposal and also TURN's proposal. All or almost all auction revenues should be allocated to LSEs on a fuel-neutral MW output basis to maximize incentives to reduce emissions, and avoid punishing early actions. Auction revenues that are not allocated to LSEs in this manner should be allocated to research and development activities that

demonstrate substantial promise as potential opportunities to reduce future emissions and costs associated with meeting electricity needs in the future.

EA-11. If auction revenues are used to augment investments in energy efficiency and renewable power, how much of the auction proceeds should be dedicated to this purpose?

Assuming allowances are allocated to LSEs on a fuel-neutral MW output basis, then 100 percent of the revenue that would be coming to LSEs could pay for existing EE programs and renewables procurement already contained within rates and any new mandated ARB emission reduction measures. EE spending or renewables procurement should not be tied to auction proceeds; decisions should be independently made based on regulatory approvals and the market price of carbon.

EA-12. If auction revenues are used to maintain affordable rates, should the revenues be used to lower retail providers' overall revenue requirements, returned to electricity consumers directly through a refund, used to provide targeted rate relief to low-income consumers, or used in some other manner? Describe your preferred option in detail. In addition to your recommendation, comment on the pros and cons of each method identified for maintaining reasonable rates.

Auction revenues returned to utilities should be used to reduce overall revenue requirements. This is preferred as compared to a refund (as supported by comments by WPTF) or a program designed to provide low income ratepayer relief. Refunds are expensive to administer and unnecessarily complex for this purpose. In SEU's case, all ratepayers paid for early GHG reduction measures and all ratepayers will participate in paying for currently mandated GHG reduction measures, so all ratepayers should share in the benefit of the allowances allocated to the LSEs (or any auction revenues rights that come back). By reducing overall revenue requirements, flexibility to allocate allowance sale revenues (or ARRs) to pay for existing GHG measures, or to benefit one rate classification or another can be maintained. There is no need to resolve detailed cost allocation issues immediately, and the proper resolution may vary depending on the LSE in question.

EA-13. If you prefer a combination of methods for returning auction revenues, describe your preferred combination in detail.

All or at least a vast majority of revenues from allowances allocated to LSEs on a fuel-neutral MW output basis (or funds from auction revenue rights) should be used to fund

GHG reductions of mandatory measures and to off-set rate impacts. The remainder of the allowances or ARRs should be allocated to research and development activities related to low emitting technologies that would help to off-set the cost, reliability, and other impacts to electric customers of GHG regulation.

III.
REPLY COMMENTS ON CHP ISSUES

SEU has not revised its position on CHP based on the June 2 comments. Most parties were in agreement that efficient CHP should be encouraged. However, SEU notes that several parties advocated the elimination of standby charges, nonbypassable charges, and departing load charges for CHP. The CPUC does not lightly establish nonbypassable charges; nor should it lightly eliminate them. SEU believes that these charges were implemented reasonably and in order to effectuate necessary cost causation principles, and accordingly they should not be eliminated without case-by-case consideration of the resulting cost outcomes in light of the benefits sought, as well as other related issues. SEU disagrees that actual costs imposed on the system by the CHP unit, such as standby charges, are a "market barrier."

Summary of SEU's positions on CHP issues[6]

How CHP should be treated under the AB 32 framework: SEU fully supports encouraging the increased efficiency that can occur with appropriately placed and sized CHP applications. If there is increased efficiency, it translates directly into GHG reductions. Efficient CHP should be encouraged – but not mandated as an emission reduction measure. CHP by necessity must be split into an electricity component and a thermal component based on the ARB mandatory reporting requirements in order to provide equal treatment to in-state and out-of-state CHP facilities. Out-of-state CHP (such as Yuma Cogeneration which supplies energy to SDG&E) will only be impacted by AB 32 for the electric portion of its output. Separating the electric and thermal/mechanical components will allow for equal treatment of the electricity produced. Given the split of these components, the electricity portion should be part of the electricity sector and the thermal/mechanical component should be part of the appropriate sector (industrial

[6] For detailed positions and responses to questions posed in various rulings, SEU refers the reader to its initial comment.

or natural gas) depending on the size of the facility. Under the AB 32 framework, it is important to treat on-site use of electricity equally with electricity purchased from the grid so as to not create artificial disincentives to the development of CHP.

Whether CHP should be considered a potential emission reduction measure: It is not clear what being designated an "emission reduction measures" would mean for efficient CHP. "Emission reduction measures" are defined in AB 32 and have generally been discussed as mandatory measures adopted by the ARB in regulations. See Health & Safety Code section 38562(a). Our comments below, with respect to CHP, are predicated on the interpretation that "emission reduction measures" is synonymous with mandated measures. It will be difficult to consider CHP as a potential emission reduction measure under this definition. Further, CHP applications vary greatly as to size, technology, fuel, efficiency and location. Given the unique characteristics of CHP applications, an across-the-board determination cannot be made concerning emission reductions. However, SEU does recognize CHP as a very useful efficiency measure that deserves encouragement in most cases. Emission reductions from CHP installation should be treated the same as any other emission reduction that may be recognized under AB32. An appropriately designed carbon market should provide the appropriate price signals to encourage the future development of efficient CHP. Since carbon price will be contained in purchased energy price, and installation of efficient CHP should provide a net reduction in carbon costs, there will be an additional income stream for the owner of the CHP facility to encourage development of CHP. For these reasons, SEU does not support defining CHP as an emission reduction measure under AB32, but does support policies designed to encourage efficient, GHG-reducing CHP.

IV.
REPLY COMMENTS ON FLEXIBLE COMPLIANCE MECHANISMS

In the past, California's environmental regulatory schemes have been supported with proven technology or alternative procedures to reduce the emissions air pollutants. Although some greenhouse emissions can be reduced or eliminated through maintenance, recycling, fuel substitution or other management methods, no technologies exist to control combustion-related carbon dioxide emissions. Accompanying the lack of emission control technical solutions, are

limited short-term options available to meet the challenge of an annual AB 32 emission cap. Since the greenhouse gas emission reduction requirements are long-term goals driven by the cumulative GHG in the atmosphere and there are few short-term control measures, the more flexibility the regulations allow, the greater the opportunity to achieve long-term reductions in the most cost-effective manner possible without creating short-term electricity reliability issues.

It is important that the regulations contain flexible compliance mechanisms to avoid short-term electricity market price volatility and a repeat of the energy crisis. The characteristics of the electricity sector are unique, making the carbon market susceptible to price spikes. Since the demand for allowances by electric generators is highly inelastic (since electric generators can pass on the cost in the market price) and the supply of allowances in the electric sector is also highly inelastic in the short-term (most supply increases will come from long-term investment decisions to increase efficiency or new lower GHG emitting electric generation resources), prices will be volatile without flexible compliance.

Flexible compliance mechanisms for consideration should include a safety-valve mechanism (e.g. allowance price trigger or price ceiling, offramps, etc), sufficient offsets to meet market demand, multi-year compliance periods, banking excess allowances, and limited borrowing against future allocations.

A multi-sector cap and trade program with the use of offsets will allow resources to capture opportunities realized by others at an efficient and requisite cost. Likewise an efficient cap and trade system which controls costs of energy will benefit low income communities that spend a disproportional amount of resources on energy and fuel. Hence any recommendation proffered by the California Public Utilities Commission to the California Air Resources Board should be for a multi-sector program including transportation and industrial sources and should allow for the use of offsets.

Issues like resource availability (e.g. transmission constraint and hydrologic and renewable status) and weather can cause unpredictable fluctuations in short-term emission characteristics of the electric energy system. A multi-year compliance period and banking will help smooth out short-term fluctuations and most parties are supportive of these measures.

The use of offsets will be important to smoothing price volatility while insuring energy demands are met with adequate resource availability. SEU is aware of the issues of verification of GHG reductions with some offset types, but given the State's preference for trading with other

cap-and-trade systems, the use of verifiable offsets approved by other major cap and trade programs, such as the EU ETS or RGGI, should be allowed.

SEU supports limited borrowing by credit-worthy parties or parties who have made GHG reduction investments that are going to come on line in the near future.

Flexible compliance options should 1) smooth the market price fluctuations that will result because most of the large GHG reductions require replacing equipment, a long-term investment, and 2) integrate the California carbon price with worldwide markets to achieve GHG reductions at the lowest cost.

FC-31. For reply comments: do any of the flexible compliance options identified by other parties in their comments raise legal concerns? If so, please explain the legal concern(s), including citations to specific relevant legal authorities. Also, explain if and, if so, how the flexible compliance option(s) could be modified to avoid the legal concern(s).

Comments of CCUE at pp. 7-8 argue that linkage is "illegal" under AB32 because AB32 requires the state board to enforce rules and market-based compliance mechanisms. This argument bootstraps its way around the important details – such as why CCUE believes that linkage makes it impossible to enforce rules that have not even been written yet. The code section cited by CCUE[7] is a general enabling provision; nothing cited by CCUE even remotely suggests that the Legislature wanted to prohibit linkages to other systems, although it clearly could have so stated, if that was its intent.

Similarly, CCUE claims that offsets are prohibited by AB32: "As with linkage, CARB cannot oversee and enforce offsets outside of California. AB 32 requires all measures to be enforceable by CARB. CCUE comments, p. 10. AB 32 simply requires CARB to enforce its own rules. This requirement does not, in and of itself, preclude those rules from allowing offsets outside the State or linkage to other GHG regulatory systems. Such integration is clearly contemplated by AB 32. Section 38564 states: "The state board shall consult with other states, and the federal government, and other nations to identify the most effective strategies and methods to reduce greenhouse gases, manage greenhouse gas control programs, and to facilitate the development of

[7] AB 32 states: "The state board shall monitor compliance with and enforce any rule, regulation, order, emission limitation, emissions reduction measure, or market-based compliance mechanism adopted by the state board pursuant to this division." *Cal. Health and Safety Code § 38580(a).*

integrated and cost-effective regional, national, and international greenhouse gas reduction programs."

V.
REPLY COMMENTS ON EMISSION REDUCTION MEASURES

Nothing in the June 2 opening comments has fundamentally changed SEU's position on emission reduction measures. SEU refers the reader to our opening comments for detailed responses to questions posed in the ALJ Rulings. Energy efficiency would be particularly effective for point sources that are not of sufficient size to warrant inclusion in an emissions cap and trade program. For these market segments, programmatic measures are likely to be the most cost effective. The electric sector can reach the 1990 levels of GHG emissions with current policies and expanding energy efficiency. The E3 modeling shows that the reference case with mid-EE goals (instead of the reference case EE) will achieve the 1990 level of emissions. SEU also supports efforts to increase CHP penetration, to increase the supply of renewables as well as low-carbon non-renewable resources, and to promote biomethane use. It is very important to note, however, that the more mandatory measures adopted, the less benefit there is from a cap-and-trade system. Market trading with broad participation and transparency is the most efficient means of achieving low GHG operations/dispatch on a state, regional and federal level. Cap and trade provides visible price signals that entity's need for procurement and policy decisions. These price signals, in turn, provide a transparent means for identifying and implementing the most cost-effective emission reduction strategies based upon alternatives that are available at any given time, some of which cannot be identified today (because the technologies have yet to be developed). As such, cap and trade regimes maximize economic incentives for development of new and lower cost means of reducing emissions. It simply does not make sense to lock in today a command and control regime, based upon an assessment only of alternatives that are currently available, because this reduces future opportunities to utilize new technologies that might be developed in the future and as such reduces economic incentives to develop such new technologies. This would not be in the interests of the state's economy or GHG reduction objectives. We would also note that, where a majority of GHG reductions for the electric sector are adopted as mandatory, it will be difficult to implement an effective and liquid cap-and-

trade market without including additional market sectors in such a market.

If the overwhelming majority of reductions are mandated, the Commissions should recommend to ARB that any electric sector cap-and-trade program also include other industry sectors to ensure the existence of a liquid and well-functioning market that can lead to lower cost emission reductions A cap and trade market that is too small also is more likely to exhibit price volatility and raise questions of market power.

ER-7. For reply comments: do any of the emission reduction measures identified by other parties in their comments raise legal concerns? If so, please explain the legal concern(s), including citations to specific relevant legal authorities. Also, explain if and, if so, how the emission reduction measure(s) could be modified to avoid the legal concern(s).

No legal concerns have been identified at this time.

VI.
REPLY COMMENTS ON MODELING

The May 13th ruling asked that interested parties address the following questions as part of their comments on modeling issues:

ER-8. Address the performance and usefulness of the E3 model. Is it sufficiently reliable to be useful as the Commissions develop recommendations to ARB? How could it be improved?

As noted in opening comments, SEU cannot yet comment on the reliability of the E3 model. Other parties have indicated concerns in their comments regarding the model's reliability; see for example NRDC comments regarding the model's reliability with regard to cost estimates (at p. 39). WPTF also found significant errors.

ER-9. Address the validity of the input assumptions in E3's reference case and the other cases for which E3 has presented model results. If you disagree with the input assumptions used by E3, provide your recommended input assumptions.

The model's beginning rate assumptions for SDG&E are incorrect. The updated GHG Calculator continues to overstate SDG&E's current system average rates as 18 cents per kWh. The correct system average rates for SDG&E based on rates effective May 1, 2008 (AL 1978-E) is 14.528 cents per kWh. This error has an impact in comparing percentage increases in rates,

since the same increase in cost will appear to be smaller for LSEs with higher rates. For example, a 3 cent/kWh increase will be a 20 percent increase for an LSE with a 15 cent/kWh average rate in 2008, but a 30 percent increase for an LSE with a 10 cent/kWh rate.

ER-11. Address any interactions among issues that you believe the Commissions should take into account in developing recommendations to ARB.

The Commissions should take into account the interaction of mandatory regulations and a cap-and trade program. ARB has indicated its scoping plan will likely rely on a large amount of mandatory measures. Market trading with broad participation and transparency is the most efficient means of achieving low GHG operations/dispatch on a state, regional and federal level. Cap and trade provides visible price signals that entity's need for procurement and policy decisions. These price signals, in turn, provide a transparent means for identifying and implementing the most cost-effective emission reduction strategies based upon alternatives that are available at any given time, some of which cannot be identified today (because the technologies have yet to be developed). As such, cap and trade regimes maximize economic incentives for development of new and lower cost means of reducing emissions. It simply does not make sense to lock in today a command and control regime, based upon an assessment only of alternatives that are currently available, because this reduces future opportunities to utilize new technologies that might be developed in the future and as such reduces economic incentives to develop such new technologies. This would not be in the interests of the state's economy or GHG reduction objectives. We would also note that, where a majority of GHG reductions for the electricity sector are adopted as mandatory, it will be difficult to implement an effective and liquid cap-and-trade market without including additional market sectors in such a market - - a cap and trade market will produce the best results if it is broad, liquid, and as such maximizes opportunities and incentives for new technology development, while minimizing the costs to California's economy and citizens from AB32 implementation.

Second, the Commissions should consider the interactions of the co-benefits issue with a cap-and-trade. In the extreme case, co-benefits are identified with criteria pollutants which are highly location specific. Then offsets and even trading could be determined to be precluded by AB 32. Using the NRDC/UCS example (p. 26), an electric generator could purchase allowances or offsets rather than switching out the equipment. Because GHG does not have a local impact, GHG trading in this case has no impact, the GHG reduction occurs elsewhere and an overall

reduction in GHG occurs. However, the co-benefit does not occur at that location. If GHG reductions are required at specific locations, a trading system does not work.

There are many options to address criteria and toxic pollutant problems, many of which are being concurrently pursued by ARB, under existing law. Therefore, the focus of AB 32 implementation should be on GHG reductions without attempting to load onto implementation of the program perhaps deserving but nevertheless ancillary objectives. To do so, will dilute the effectiveness of AB32 and may as noted regarding CHP produce unintended consequences.

Third, the Commissions should evaluate the interaction with other sectors. If the scope of the multi-sector cap-and-trade (assuming it is proposed in the ARB Draft Scoping Plan) is narrow, there may be more problems created by a cap-and-trade than solved. The electric sector will be interacting with the other sectors in a multi-sector cap-and-trade mechanism, and if the cap-and-trade program is not broad and liquid enough, it could lead to substantial price volatility and market manipulation. Similarly, if the cap-and-trade is restricted by substantial limitations on offsets and lack of flexible compliance, the State is inviting a meltdown and a repeat of the 2000-2001 Energy Crisis. In the June 2 comments, generators have already laid out their argument for withholding electric supply if they are not provided with free allowances. Given the Commissions' responsibility for assuring a reliable electric supply, the Commission must ensure the cap-and-trade scope and flexibility are sufficient to avoid sky-rocketing prices for power.

The fourth main interaction the Commissions need to consider is the interaction of regulations and electrification in other sectors of the multi-sector cap-and-trade. Regulations should encourage GHG reducing activities, but an important element that has not yet been discussed in detail is how to not overcompensate electrification activities. A industrial firm that is part of the cap-and-trade that replaces a piece of equipment using natural gas with an electric piece of equipment will receive a payment equal to the gross GHG reduction, while society only receives the benefit of the net reduction. For businesses who are customers of high emitting LSEs, the net reduction may even be negative; society may have increased GHG emissions as the power plant emissions are higher than the emissions reduced onsite. The same is true if small natural gas customers are part of the cap-and-trade. Policies to discourage installation or encourage replacement of natural gas appliances such as clothes dryers in order to minimize GHG compliance costs will lead customers to choose the electric equivalent. The natural gas sector would get credit for the gross reduction, while the net reduction may be zero or an

increase in GHG, depending on relative GHG emissions of replaced gas and additional electricity. Depending on these factors, the further consequence of electrification is to add to the inventory of the electricity sector.

ER-12. In establishing policies regarding allowance allocation, flexible compliance, CHP, and emission reduction policies, what should California keep in mind regarding the potential transition to regional and/or national cap-and-trade programs in the future? Are there policies or methods that California should avoid or embrace in order to maximize potential compatibility with other cap-and-trade systems?

If the Commissions, and subsequently ARB, take the position of parties such as CCUE and NRDC/UCS that co-benefits preclude the use of offsets outside California, then California cannot transition to or be part of a regional or national cap-and-trade system. A regional or national cap-and-trade program by construction would allow trading of allowances between entities in the region. If the lack of co-benefits precludes obtaining offsets from outside California, it will preclude purchasing an allowance which represents a GHG reduction outside the state.

Respectfully submitted,

SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY

June 16, 2008

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CERTIFICATE OF SERVICE

I hereby certify that pursuant to the Commission's Rules of Practice and Procedure, I have this day served a true and correct copy of **Reply Comments of San Diego Gas & Electric Company and Southern California Gas Company Addressing Allowance Allocation Policy, E3 Modeling Results, Programmatic Measures To Reduce Emissions In The Electricity And Natural Gas Sectors, The Joint CPUC/CEC Staff Paper on GHG Regulation for Combined Heat and Power, Flexible Compliance Mechanisms, and Emission Reduction Measures** on each party named in the official service list in R.06-04-009 and Docket 07-OIIP-01 by electronic service. Those parties who have not provided an electronic address have been served by U.S. Mail, including the State of California, cities and counties in its service territory, by placing copies properly addressed and sealed envelopes and depositing such envelopes in the United States Mail with first-class postage pre-paid.

Executed this 16th day of June, 2008, at San Diego, California.

/s/ *LISA FUCCI-ORTIZ*_____

Lisa Fucci-Ortiz