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**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
(Filed April 13, 2006)

California Energy Commission Docket #07-OIIP-01**COMMENTS OF THE NATURAL RESOURCES DEFENSE COUNCIL (NRDC) AND
THE UNION OF CONCERNED SCIENTISTS (UCS) ON THE PROPOSED "INTERIM
OPINION ON GREENHOUSE GAS REGULATORY STRATEGIES"**

February 28, 2008

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1. INTRODUCTION AND SUMMARY

The Natural Resources Defense Council (NRDC) and the Union of Concerned Scientists (UCS) respectfully submit these comments, in accordance with Rules 14.3, 1.9, and 1.10 of the California Public Utilities Commission's (CPUC or Commission) Rules of Practice and Procedure, on the February 8, 2008 proposed decision of President Peevey and Chairman Pfannenstiel, "Interim Opinion on Greenhouse Gas Regulatory Strategies" (Proposed Decision or PD). NRDC/UCS also concurrently submit these comments to the California Energy Commission (CEC) in Docket #07-OIIP-01, the CEC's sister proceeding to this CPUC proceeding.

NRDC/UCS commend President Peevey, Chairman Pfannenstiel, and the Commissions for their continuing leadership on addressing global warming. The PD presents the Commissions' recommendations to the California Air Resources Board (CARB) for the greenhouse gas (GHG) emission regulatory strategies for the electricity and natural gas sectors under AB 32. While NRDC/UCS support many of the PD's recommendations for the electricity sector, however, we urge the Commissions to revise the PD to recommend that the natural gas sector be included in a multi-sector cap-and-trade system, *in addition to* the PD's current recommendations to expand regulatory programs. Specific proposed language changes are provided in an appendix to these comments. In summary:

Natural Gas Sector Comments

- The Commissions should recommend that the natural gas sector be included in a cap-and-trade program, in addition to their recommendation to expand regulatory programs.
- At a minimum, the Commissions should recommend that CARB include the natural gas sector in the cap-and-trade program in the future.
- The Commissions should develop a specific plan for expanding all programmatic measures in the natural gas sector.

Electricity Sector Comments

- NRDC/UCS strongly support the PD's recommendation that CARB adopt a complementary mix of programmatic strategies and a cap-and-trade system for the electricity sector.
- The PD should explicitly emphasize the need for complementary policies to promote long-term investments in emission reduction strategies.
- NRDC/UCS strongly support the PD's recommendation to auction at least some portion of the emission allowances and to primarily return auction revenues to retail providers to invest in emission reduction strategies and reduce costs to consumers. Under a deliverer point of regulation, we support 100% auctioning of allowances.
- A 33% Renewables Portfolio Standard is essential to meet the AB 32 emissions limit and other goals.
- Further consideration must be given to electricity used for transportation in a cap-and-trade program.

General Comments

- The PD should not be considered to represent the entire policy package for regulating GHGs in the electricity and natural gas sectors.
- The PD should not prejudge the use of offsets in a cap-and-trade system before an adequate record has been built on use of this and other flexible compliance mechanisms.
- The PD should be amended in various ways and corrected to accurately reflect NRDC/UCS' positions in this proceeding.

2. NATURAL GAS SECTOR COMMENTS

A. The Commissions should recommend that the natural gas sector be included in a cap-and-trade program, in addition to their recommendation to expand regulatory programs.

California should implement a cap-and-trade system *in addition* to programmatic measures in the natural gas sector. Programmatic approaches and a cap-and-trade system are not

mutually exclusive. These two approaches can and should be used in combination to guarantee the natural gas sector achieves the most reductions in the most cost-effective manner possible.

The PD presents a cap-and-trade system and programmatic measures as an either/or choice. This is a false dichotomy.¹ The PD exacerbates this false choice by initially presenting parties' positions as supporting *either* programmatic measures *or* a cap-and-trade system. For example, the PD does not mention NRDC and UCS in its list of parties supporting expanded programmatic measures,² even though in our comments, NRDC/UCS strongly supported *both* expanded measures and including the sector in a cap-and-trade program.

We must implement and expand programmatic measures where possible, and *also* utilize a cap-and-trade system to incentivize reductions beyond the programmatic measures. The PD recognizes the complementary roles of programmatic measures and cap-and-trade in the electricity sector when it states that “energy efficiency, renewables, and emissions performance standard policies are the foundation upon which our other additional AB 32 policies should be built,”³ and then concludes that a cap-and-trade system should serve as a “complement to existing policies and their expansion.”⁴ Similarly, in the natural gas sector, energy efficiency, solar water and space heating, biomethane, and combined heat and power should be the foundations of AB 32 policy, and a cap-and-trade program should complement these policies. A cap-and-trade system can incentivize reductions beyond what can be achieved through programmatic measures, and can act as a “backstop” to ensure a certain amount of reduction, among other benefits.

B. In order to achieve maximum reductions and cost-savings, the cap-and-trade system should regulate as many sectors as practicable.

The cap-and-trade program should include as many sectors as possible that have adequate data and would be administratively feasible to include. The natural gas sector meets both of

¹ On page 88 the PD says there are two approaches to reducing GHG emissions in the natural gas sector: “reliance on direct emission reduction measures . . . *or* reliance on a market-based system.” (emphasis added). On page 99, the PD modifies the two choices slightly, stating that the two options are: “direct/mandatory emission reduction measures or programs and a market-based cap-and-trade system.” On page 104, the PD identifies four options for regulating GHG in natural gas, including “downstream emissions cap” and “additional direct mandatory/regulatory requirements.” On page 106 the PD compares a cap-and-trade system to programmatic approaches, and concludes that programmatic approaches have more advantages.

² PD at 99.

³ PD at 30.

⁴ PD at 33.

these criteria. The PD refers to the fact that CARB's inventory of emissions does not break out natural gas as a separate sector,⁵ apparently to demonstrate that other agencies do not consider the natural gas sector suitable for regulation as a separate sector. However, CARB's inventory includes the residential and commercial sectors, and since their emissions are almost exclusively derived from end-use combustion of natural gas, the strategies for reducing their emissions are the same as those being discussed in this proceeding. In addition, the current version of the Lieberman-Warner bill includes the natural gas sector in its proposed cap-and-trade system.⁶ The natural gas sector is one of the largest sources of emissions in California, and the Commissions should recommend that CARB include it in a cap-and-trade system in addition to expanding programmatic measures.

C. The PD does not offer any compelling reasons that California should not include the natural gas sector in a cap-and-trade program.

Given the compelling reasons outlined above for including the natural gas sector in a cap-and-trade program in addition to using programmatic measures, the PD's four reasons for arriving at its recommendation to exclude natural gas from a cap-and-trade system are unconvincing. The PD's reasons are listed below, followed by NRDC/UCS' responses:

- 1. There are significantly fewer options to reduce GHG emissions in the natural gas sector, compared to the electricity sector, especially because there is no low-carbon alternative to natural gas.⁷ Least-cost options for emissions reductions do not exist in the natural gas sector.⁸*

One purpose of a cap-and-trade system is to allow the market to find the lowest cost reductions. The market's ability to do this in a fluid and flexible manner is hampered if large sectors of the economy are excluded from the cap-and-trade market based on a pre-determination that low-cost reductions are not available there. There are many opportunities for GHG reductions, as well as low-carbon alternatives, in the natural gas sector, including improved energy efficiency, switching to solar water and space heating, switching to biomethane, and

⁵ PD at 96-97.

⁶ See <http://lieberman.senate.gov/documents/lwcsa.pdf>. Subtitle E, starting at page 324, governs natural gas. Part 11 of the Findings section, at page 223, states that "all, or virtually all, emissions of greenhouse gases from the combustion of natural gas use in the United States should be reduced through the inclusion in a cap-and-trade system of entities that sell natural gas in the United States."

⁷ PD at 107.

⁸ PD at 32, footnote 10.

utilizing combined heat and power. Many parties referenced these and other natural gas emissions reduction opportunities in their comments.⁹ Solar water and space heating and biogas are both low-carbon alternatives to natural gas, and are available now. PG&E is already moving forward with projects to produce biomethane at four dairies in California and use the biomethane to replace natural gas in their pipelines.¹⁰ The fact that these reduction opportunities and low-carbon alternatives are different from or less plentiful than those in other sectors is not sufficient reason to exclude the natural gas sector from a cap-and-trade system.

2. *Because energy efficiency programs are the primary means to reduce GHG emissions, the incremental benefits from including the sector in a cap-and-trade program are likely to be smaller than those for the electricity sector.*¹¹

Energy efficiency is also a foundational reduction strategy in the electricity sector.¹² Each sector will offer different opportunities for reductions, which is why as many sectors as practicable should be included in the cap-and-trade system. As the PD notes, a cap-and-trade system allows the state to achieve reductions at a lower cost by giving entities the flexibility to seek out the least-cost options across the entire economy, encourages investment in research and innovation, and allows market participants to manage risk.¹³ These benefits of a cap-and-trade system are just as true for the natural gas sector as for the electricity sector.

3. *Reporting protocols do not yet include provisions for reporting end user-related combustion emissions.*¹⁴

Utilities have available how much natural gas they sell to end-users, and a combustion conversion factor provides accurate data about the emission resulting from that end-use. CARB has indicated that it intends to develop natural gas reporting protocols as part of the next update to its mandatory reporting requirements. Rather than use these impending protocols as an excuse

⁹ See Southern California Generation Coalition Reply Comments (January 8, 2008), 7-8; PG&E Reply Comments (January 8, 2008), 3; Community Environmental Council Reply Comments (January 8, 2008), 5; PG&E Opening Comments (December 17, 2007), 3, 12-13; SDG&E Comments (December 17, 2007), 6; California Solar Energy Industries Association and the Solar Rating and Certification Corporation Comments (December 17, 2007), 3; California Manufacturers & Technology Association Comments (December 17, 2007), 3; Community Environmental Council Comments (December 17, 2007), 5-7.

¹⁰ See CPUC Resolutions E-4076 (May 24, 2007) and E-4083 (August 23, 2007) (approving PG&E's contracts for biomethane); See also http://www.pgecorp.com/corp_responsibility/reports/2006/poenv_planning.html.

¹¹ PD at 107.

¹² PD at 30.

¹³ PD at 32; See also PD at 18-19 (summarizing parties' view of the benefits of a cap-and-trade system).

¹⁴ Id.

to not include natural gas in a cap-and-trade system, the Commissions should work with CARB to develop the natural gas reporting requirements as soon as possible and to then move forward with all the policy tools available to reduce GHG emissions.

4. *Including the natural gas sector could expose small end users to greater price risk than small end users in the electricity sector because their utilities have fewer option to mitigate variations in allowance prices.¹⁵ Small end-users of natural gas are not able to mitigate variations in allowance price.¹⁶*

The PD's statement on page 32 suggests that small end-users of natural gas are unable to mitigate variations in price. In addition, the PD's statement on page 107 indicates that if allowance prices rise, then electricity utilities will be able to pursue low-cost reduction measures, thus protecting their customers from high allowance prices, while natural gas utilities would not have many reduction opportunities available and so would be forced to buy high-price allowances and pass that cost along to their customers. In reality, all participants in a cap-and-trade system would be exposed to the same allowance price. If the electricity sector has low-price reduction opportunities available, then it will undertake those, thus lowering the allowance price for all market participants. If the natural gas sector is included, it will find ways to reduce emissions and/or benefit from low-cost reductions in other sectors. Including the natural gas sector in the cap-and-trade system increases flexibility for all participants. Moreover, as the PD discusses for the electric sector, the value of allowances in the natural gas sector should be primarily returned to utilities to invest in long-term emission reductions measures and to reduce costs to consumers.

D. At a minimum, the Commissions should recommend that CARB include the natural gas sector in the cap-and-trade system in the future.

We strongly urge the Commissions to recommend that CARB both include the natural gas sector in the cap-and-trade system from the start, and expand regulatory programs. Failing that, the Commissions should proceed with the PD's recommendations to immediately expand regulatory programs and recommend that CARB integrate the natural gas sector into the cap-and-trade program in the future. The PD currently states that it is "premature to include the

¹⁵ Id.

¹⁶ PD at 32, footnote 11.

natural gas sector in a cap-and-trade system” but that the natural gas sector *could* be included in a multi-sector GHG cap-and-trade system in the future.¹⁷ NRDC/UCS urge the Commission to strengthen these statements, and we suggest the following language to accomplish this:

“The natural gas sector should be included in a cap-and-trade system in the future. ARB should include the sector in its modeling efforts in order to determine the price impacts and reduction potential from including the sector. ARB should also develop mandatory reporting requirements for the sector as soon as possible in order to ensure that there is adequate data to include the sector in a cap-and-trade system.”

E. The Commissions should develop a specific plan for expanding all programmatic measures for the natural gas sector.

The PD concludes that CARB should rely on programmatic measures alone for reductions in the natural gas sector without developing a specific plan. The Commissions should develop a roadmap for expanding these programmatic measures, and should identify in the PD the specific proceeding or forum and the timeline for addressing the recommendations to consider parties’ specific proposals to expand efforts to promote energy efficiency, solar water and space heating, biomethane, and combined heat and power.

3. ELECTRICITY SECTOR COMMENTS

A. NRDC/UCS strongly support the PD’s recommendation that CARB adopt a complementary mix of programmatic strategies and a cap-and-trade system for the electricity sector.

The PD states, “we recommend that ARB adopt a mix of direct mandatory/regulatory requirements and a cap-and-trade system for the electricity and natural gas sectors.”¹⁸

NRDC/UCS strongly support the complementary use of regulatory programmatic policies in combination with a cap-and-trade program for both the electricity and natural gas sectors to achieve the AB 32 statewide limit on GHG emissions. Any cap-and-trade program should be part of an integrated package of policies to meet the AB 32 goals. Furthermore, we support the PD’s recommendation that implementation of the entire package of policies to meet AB 32 should be regularly monitored and enforced.

¹⁷ PD at 107 and 108.

¹⁸ PD at 2.

Although this portion of the PD refers to both the electricity and natural gas sectors, the PD proceeds to recommend against including the natural gas sector in a cap-and-trade system. We strongly recommend the PD be modified to recommend inclusion of the same package of regulatory programs and a cap and trade program in the natural gas sector, as discussed above.

B. Certain elements of the deliverer approach still require clarification and refinement.

We note that the recommendation of the deliverer approach still leaves some questions unanswered. While the PD states that the deliverer point of regulation “removes the need for complete tracking from generation source to delivery to customers,” the deliverer approach does not eliminate tracking needs completely; for electricity imported into California, some sort of tracking will still be needed for those deliverers who are not themselves the generation source.¹⁹ In addition, the methods used to identify deliverers, particularly those importing entities have not traditionally been regulated, will need to be refined. As the PD notes with regards to imports without E-tags, “alternative documentation may need to be used to identify the owner of imports that do not have E-tags at the point of delivery to the California grid.”²⁰ Even for those deliverers identifiable by E-tags, we urge CARB to determine as soon as possible that it will be able to obtain access to the E-tag information from the Western Electricity Coordinating Council (WECC) in order to properly identify deliverers and enforce the system.

C. The PD should explicitly emphasize the need for complementary policies to promote long-term investments in emission reduction strategies.

As NRDC/UCS have previously stated in our comments, we support using a load-based, first seller, or “hybrid” point of regulation for a cap-and-trade program in the electricity sector, although each approach has certain advantages over the others depending on the prioritization of high-level policy criteria. As the PD notes, “none of the options meets all criteria fully.”²¹ The PD recommends the “deliverer” approach, a variation of the first seller approach.

As we commented in this proceeding, the “deliverer” approach provides weaker incentives for long-term investments in emission reduction strategies. Given the PD’s recommended adoption of a deliverer point of regulation for the electricity sector, the PD should

¹⁹ PD at 60.

²⁰ PD at 67.

²¹ PD at 54.

pay particular attention to the design of other aspects of the GHG regulatory strategy package for the electricity sector.

The deliverer point of regulation places compliance responsibility on some entities that have a shorter-term focus on emissions costs associated with short-term dispatch. But as the PD incisively notes, “in order to meet not only the 2020 goals under AB 32, but also the more aggressive 2050 goal of reducing GHG emissions 80% below 1990 levels...we will need to focus much more on the kind of electricity infrastructure built to serve California consumers, and not simply the type of generation dispatched in the wholesale markets.”²² Indeed, a sustained focus on complementary policies that will encourage long-term investments to transform the state’s electricity infrastructure is essential to accomplishing the state’s GHG reduction goals.

In California and much of the west, retail providers are the key decision-makers (together with their public governing boards and/or the CPUC) for demand-side investments and new long-term supply side investments, as new generation investments continue to be primarily driven by long-term commitments from retail providers. Long-term investment decisions made by retail providers will be the key determinant of whether the sector meets its GHG emission reduction goals and whether sufficient allowances are available at a reasonable cost to cover emissions, both for 2020 and for 2050. Thus, we strongly recommend the PD reinforce the need for complementary strategies that will further encourage these long-term investments required to fundamentally alter the emissions profile of the electricity sector. For example, a true integrated resource planning process should be utilized in the utilities’ future long-term procurement plans. It is also imperative that a 33% Renewable Portfolio Standard be implemented statewide, as discussed below.

D. NRDC/UCS strongly support the PD’s recommendation to auction at least some portion of the emission allowances, and to primarily return auction revenues to retail providers to invest in emission reduction strategies and reduce costs to consumers. Under a deliverer point of regulation, we support auctioning 100% of allowances.

The PD recommends that “at least some portion of the emission allowances available to the electricity sector should be auctioned... An integral part of this auction recommendation is

²² PD at 61.

that at least a portion of the proceeds from the auctioning of allowances for the electricity sector should be used in ways that benefit electricity consumers in California, such as to augment investments in energy efficiency and renewable energy...”²³

NRDC/UCS strongly support auctions with revenues primarily returned to retail providers to invest in emission reduction strategies and reduce costs to consumers. As the PD notes, auctions under a deliverer point of regulation are necessary to avoid windfall profits at the expense of consumers, which would occur if some privately-owned deliverers received allowances for free.²⁴ However, Finding of Fact 26 fails to include this important cost-minimization benefit of auctions and should be amended.

Establishing auctions with the revenues used to provide consumer benefits is essential to avoid windfall profits, regardless of the level of the cap. The PD implies incorrectly that windfall profits result primarily from the “over-allocation” of allowances (i.e. setting the cap too high).²⁵ While the program must have a tight declining cap, it is important to note that *any* free allocation of allowances will result in windfall profits, since many deliverers are private companies that would raise their prices to reflect the “opportunity cost” of allowances, passing these costs onto consumers. We are encouraged that the PD leaves open the possibility that the Commissions may recommend “that allowances should be distributed entirely by auctions.”²⁶ As NRDC/UCS previously noted, a full auction is preferable especially under a deliverer point of regulation to ensure that windfall profits are avoided.²⁷ In order to maximize benefits to consumers, auction revenues should be used for public purposes and to further the goals of AB 32. We urge the Commissions to strengthen the PD to state that auctions are the preferred method of allowance distribution to reduce costs to consumers, and that auction revenues should be used in the public interest and to invest in long-term emission reductions.

We also support further development of the record surrounding allowance distribution issues in this proceeding subsequent to this decision. We urge the Commissions and parties to think creatively to address the various concerns parties have raised with different allowance distribution and/or auction distribution methods, so that the ultimate design of the program meets the multiple goals of AB 32.

²³ PD at 6.

²⁴ Id.

²⁵ PD at 83.

²⁶ PD at 7.

²⁷ See NRDC/UCS Opening Comments on Allowance Allocation Issues, October 31, 2007, p. 5.

E. A 33% Renewables Portfolio Standard is essential to meeting the AB 32 emissions limit and other goals.

The Proposed Decision appropriately recognizes that in order to meet AB 32 goals, retail providers “should be required to go beyond a 20% level of renewable electricity delivered.”²⁸ The Proposed Decision also notes that the Energy Action Plans jointly adopted by the CPUC and the CEC include a 33% by 2020 Renewables Portfolio Standard (“RPS”).²⁹ However, the Proposed Decision falls short of recommending that the CPUC, CEC, and ARB seek legislation adopting a 33% RPS, opting instead to “leave open consideration of the appropriate statutory percentage requirements and deadlines, pending further analysis.”³⁰

The Proposed Decision must go further in recommending that the state’s RPS program be strengthened. Given the extensive analysis already performed on the feasibility of a 33% RPS, the recommendation to defer the appropriate percentage requirement, “pending further analysis,” is questionable. In the past three years, the CEC has invested significant analytical and financial resources to scoping the 33% RPS, and recently devoted a 77-page chapter on the subject in the 2007 Integrated Energy Policy Report (“IEPR”). The 2007 IEPR states that increasing renewable energy to “33 percent by 2020 is an essential part of reducing California’s greenhouse gas emissions.” The report also states that “meeting the 33 percent goal in 2020 *is* feasible (emphasis in original)” with significant changes to infrastructure and to the structure of the RPS program.³¹

There exists little doubt that attaining renewable energy levels of at least 33% by 2020 is critical to achieving the state’s greenhouse gas reduction goals. The 33% RPS is one of the central electricity sector policies identified by California Climate Action Team to obtain the emissions reductions required by AB 32. The preliminary GHG modeling work by E3 suggests that renewable energy levels of at least 33% will be required in 2020 to enable the electricity sector to return to 1990 emissions levels, which is the same mitigation standard required by AB 32 for the state as a whole.

²⁸ PD at 30.

²⁹ Ibid.

³⁰ Ibid.

³¹ California Energy Commission. *2007 Integrated Energy Policy Report*, p. 117.

The Commissions should therefore recognize that a 33% RPS is an essential complementary policy to a GHG cap-and-trade program. While a GHG cap-and-trade program may drive some additional investment in renewable resources, a 33% RPS is still necessary to provide a clear and long-term signal to the renewable industry that California will continue to support infrastructure investments and policy measures to support significantly higher levels of renewable development. This market certainty is required to ensure that the state continues to address the transmission and siting barriers to renewable expansion that will not likely be addressed by a cap-and-trade system alone. Successfully resolving these challenges will require the long-term, sustained focus of government, utilities, and industry – a focus that only a 33% RPS, in conjunction with a GHG cap-and-trade program, can provide. The European Union has recognized that its GHG cap-and-trade program alone is insufficient to drive substantially higher levels of renewable development, and has significantly strengthened its renewable energy mandates to complement its emissions trading program.³² As noted previously, adopting a 33% RPS is especially important to ensure that retail providers significantly expand their long-term clean energy investments under a deliverer point of regulation.

Furthermore, the RPS provides substantial economic development, fuel diversity, rate stability, and public health and air quality benefits, which the legislature expressly recognized in passing the RPS statute.³³ A 33% RPS would enhance these important benefits that renewables provide to the California, in addition to enhancing the state's ability to meet its AB 32 emissions reduction targets. These benefits are entirely consistent with the intent of AB 32, which specifically calls on CARB to design emissions reduction measures in a way that “maximizes additional environmental and economic co-benefits for California, and complements the state's efforts to improve air quality.”³⁴

A 33% RPS is both achievable and completely consistent with the Proposed Decision's recommendation that the cap-and-trade program be designed to complement the continuation and expansion of existing emissions reduction measures. Accordingly, the Commissions should

³² See: European Commission, *Proposal for a Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable resources*, January 2008. Page 4 of the report reads: “The interlinkages between setting greenhouse gas reduction targets, the emissions trading scheme and renewable energy targets are clear. The Commission sees the various elements as complementary: EU ETS will facilitate growth in renewable energy, the renewable energy Directive will create conditions enabling renewable energy to play a key role in reaching the greenhouse gas reduction targets.”

³³ California Public Utilities Code Sec. 399.11.

³⁴ California Health and Safety Code Sec. 35801(h).

recommend that the state adopt a 33% RPS that is effectively enforced for all retail sellers, either through legislation or CARB regulations under AB 32.

4. GENERAL COMMENTS

A. The PD should not be considered to represent the entire policy package for regulating GHGs in the electricity and natural gas sectors.

Although it is described as an “Interim Opinion on Greenhouse Gas Regulatory Strategies,” the PD should not be considered to represent the entire package of policies for regulating and reducing GHGs in the electricity and natural gas sectors. The PD correctly emphasizes, particularly for the electricity sector, the mix of policies that will be required to reduce GHG emissions. However, additional discussion is still needed for other policies in the electricity and natural gas sectors that can play a role in achieving the AB 32 limit, including both existing policies that are not mentioned in the PD (e.g., the California Solar Initiative, AB 1470’s solar thermal program) and ideas for new policies (e.g., time-of-sale energy efficiency requirements and policies to encourage biomethane). NRDC/UCS recommend that the Commissions make clear that this PD does not recommend the *entire* package of policies that CARB should include in the scoping plan, and provide additional opportunity for comment later in this proceeding and at CARB on additional policies to reduce GHG emissions in the electricity and natural gas sectors.

B. The PD should not prejudice the use of offsets in a cap-and-trade system before an adequate record has been built on use of this and other flexible compliance mechanisms.

The PD’s Finding of Fact 19 states, “the deliverer would later have to surrender GHG allowances (or secure adequate offsets) based on the amount of GHG emissions associated with that electricity.” Since flexible compliance mechanisms, including offsets, have not been fully discussed in this proceeding and are reserved for a later portion of this proceeding, the PD should not prejudice the use of offsets in a cap-and-trade system. In reference to flexible compliance mechanisms (including offsets), the PD itself states: “We will continue to explore these options and plan to address them in a later decision in this proceeding.”³⁵ Therefore, the reference to

³⁵ PD at 7.

offsets in Finding of Fact 19 should be removed; to contemplate their use at this juncture would prejudge their acceptance as an alternative compliance option.

C. Special consideration must be given to electricity used for transportation in a cap-and-trade program.

The PD states that emissions from natural gas vehicles should be excluded from the natural gas sector and would be more appropriately treated as transportation sector emissions.³⁶ Similarly, further consideration should be given to electricity-fueled vehicles and their relationship to the electricity sector cap.

Vehicles fueled by grid-supplied electricity can reduce greenhouse gas emissions in the transportation sector relative to petroleum-fueled vehicles. NRDC/UCS support a cap-and-trade program that, at a minimum, eventually includes all the main sectors that burn fossil fuels, including electricity, natural gas, other large source emitters, and transportation fuels. At this time, CARB has not yet decided if it will adopt a cap-and-trade program, and if so, what the scope of coverage will be for the program. If CARB includes all of the sectors we recommend within the scope of the cap, then it creates a “level playing field” for transportation fuels, and no special treatment is needed for electricity-fueled vehicles. In the event that CARB adopts a program that excludes petroleum-based transportation fuels from the cap, then we believe it would be important to not disadvantage electricity used for transportation relative to petroleum. This could be done either by excluding electricity used for transportation from the cap or by adopting other policies to compensate. If transportation fuels are excluded from the cap, it will be important to properly account for the portion of electricity that is used for transportation. A reporting protocol for transportation-related electricity use, subject to CARB oversight and public verification, would need to be developed and implemented.

D. The PD should be amended in various ways and corrected to accurately reflect NRDC/UCS’ positions in this proceeding.

The PD does not accurately reflect NRDC/UCS’ positions in this proceeding in the following instances:

³⁶ PD at 98.

- NRDC and UCS have jointly filed all comments submitted thus far in this phase of the proceeding. In numerous instances, the PD erroneously refers solely to NRDC when describing parties' positions, when all comments submitted in this phase of the proceeding have been the result of a joint NRDC/UCS effort. The Commission should revise the PD to ensure that all mentions of NRDC in the final decision are corrected to accurately refer to both NRDC and UCS.
- Page 81 of the PD mistakenly lists NRDC as a party that supports transitioning from primarily free allocations to auctions. On the contrary, NRDC and UCS have consistently expressed a preference for auctions, while noting that regardless of the method of allowance distribution, the *value* of allowances should be distributed in a manner that furthers the goals of AB 32, including reducing emissions and consumer costs.³⁷ The final Decision should remove the reference to NRDC and UCS from this paragraph.
- Page 82 of the PD mischaracterizes NRDC/UCS' position on the use of auction proceeds. Rather than returning proceeds directly to customers, NRDC/UCS' comments generally supported the return of most auction revenues to the sector that obtained the allowances and recommended that revenues be used in the public interest and to further the goals of AB 32 and lower customer costs. We presented several options for distributing the value of allowances that would meet the principles in AB 32. The PD should be corrected in this regard, and we look forward to exploring these options further in the next phase of this proceeding.

A full list of suggested language changes and corrections to the PD are provided in an appendix to these comments in strikethrough and underline format.

5. CONCLUSION

NRDC/UCS appreciate the opportunity to submit these comments on the Proposed Decision. We urge the Commissions to modify the PD to recommend that CARB include the natural gas sector as part of a cap-and-trade program, in addition to implementing programmatic strategies within the sector, to meet the AB 32 goals. We urge the Commissions to adopt the PD with the modifications discussed herein, at their upcoming meetings on March 12 and 13, 2008 and then proceed to expand the programmatic strategies and to develop the more important components of the cap and trade program – including establishing a tight cap that achieves real emission reductions, distributing allowances in the public interest, and providing strong enforcement.

³⁷ See NRDC/UCS/GPI Reply Comments on Allowance Allocation Issues, November 14, 2007, p. 5, footnote 3.

Dated: February 28, 2008

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APPENDIX

Suggested language changes to PD

PD Text

NRDC/UCS stresses, however, that it would reduce emissions lower than could be achieved through existing regulatory programs alone. (p. 20)

Several parties, including Calpine, IEP, EPUC/CAC, WPTF, DRA, Environmental Defense, and NRDC/UCS, urge California to move forward without waiting for a resolution of GHG issues at the regional or federal level. (p. 21)

NRDC/UCS states that the longer a cap-and-trade system is in operation, the longer it has to reap benefits. It submits that California has an opportunity for leadership to influence regional and federal systems, whereas waiting would relegate California to being “one voice among many at the table.” NRDC/UCS stresses that, if California adopts a cap-and-trade program with an allowance distribution scheme that does not reward dirty polluters, it would advantage California, as a relatively clean state, if a similar system were adopted nationally. (p. 21)

NRDC/UCS asserts that, “a cap-and-trade system provides only a generic innovation signal, and targeted policies are more useful for spurring innovation for specific technologies, and overcoming market barriers.” NRDC/UCS argues further that both a cap-and-trade system and increased regulatory measures are necessary because, “regulatory policies in the absence of a cap on absolute emissions would not guarantee that the electric sector will meet the GHG reductions goals of the state for this sector.” (p. 25)

In determining our recommendation for how to regulate the electricity sector in California under AB 32, there are essentially four options that could be adopted individually or in combination: 1) a carbon tax, 2) upstream regulation of emissions from fossil fuel combustion, 3) a downstream emissions cap (with or without trading), and 4) additional direct mandatory/regulatory requirements. (p. 26)

We did not seriously consider the carbon tax option in the course of this proceeding, due to the fact that, ~~if a tax such a policy were implemented, it would most likely be~~ could not be imposed on the economy as a whole by ARB, and would have to be adopted by the Legislature or voters. (p. 26)

In the case of energy efficiency building and appliance codes and standards, the Energy Commission updates these approximately every three years and is continuously including more requirements that reduce electricity use and therefore GHG emissions. (p. 27)

In addition, no statutory requirements currently exist for Energy Service Providers (ESPs) or Community Choice Aggregators (CCAs) to invest in energy efficiency for their Customers, but ESP customers are eligible to participate in IOU-administered energy efficiency programs. (p. 28)

Therefore, we recommend that the Energy Commission, Public Utilities Commission, and ARB jointly seek legislation that requires retail electricity providers to obtain ~~a greater proportion~~ 33 percent of their power from renewables by ~~a date certain~~ 2020, with flexibility to allow the Public Utilities Commission and/or ARB to require exceeding that level under certain conditions (subject to a cost-effectiveness evaluation, for example). The Energy Action Plans jointly adopted by the Public Utilities Commission and the Energy Commission contain a target of 33% energy delivered from renewable sources. This target was adopted prior to the passage of AB 32, and it is all the more important that it be mandated given the aggressive emissions reduction requirements established by AB 32. ~~We leave open consideration of the appropriate statutory percentage requirements and deadlines, pending further analysis.~~ (p. 30).

We also agree with several parties, including NRDC/UCS, that the cap-and-trade system need only produce a relatively small portion of the overall emissions reductions in the short term. (p. 33)

NRDC/UCS state that marketers and brokers, assuming they fall under the definition of first sellers, should be treated as first sellers, ~~even though they usually do not take title to the power.~~ (p. 47)

As a potential benefit, ~~NRDC and~~ Calpine suggests that having more actors in the market may help to increase liquidity and reduce the risk of market power. (p. 50)

Thus, an entity with compliance obligations (including an out-of-state generator) would have an opportunity, if it did not already possess enough allowances, to acquire allowances on the market or to show compliance using ~~offsets or other~~ flexible compliance mechanisms. (p. 74)

Most parties that support auctions recommend some form of transition from predominantly free allocations to greater reliance on auctions as California gains experience with an auction methodology. In their view, such a transition over a period of time would better allow entities to deal with legacy contracts, recover existing investments, and determine their best emission reduction options (AES, IEP, DRA, WPTF, AREM, ~~NRDC~~). (p. 81)

NRDC/UCS states that auction proceeds should be returned to the ratepayers sector that bore the costs of obtaining the credits obtained the allowances and used in the public interest and to further the goals of AB 32. (p. 82)

Many parties favor increased reliance on direct emission reduction measures to achieve GHG reductions for smaller end-users including PG&E, SDG&E, NRDC/UCS, Kern Southwest, El Paso, GPI, Wild Goose, and CMTA. (p. 99)

Other parties, including NRDC/UCS, Environmental Council, and SCE, advocate including the natural gas sector in a multi-sector cap-and-trade system. (p. 106)

~~While we recommend that the natural gas sector not now be included in a multi-sector GHG emissions cap and trade system at this time, we do not reject~~ We agree with GPI's and

NRDC/UCS's argument that eventual inclusion of all fossil fuels in a multi-sector cap-and-trade system could maximize its benefits. (p. 108)

Findings of Fact

2. Energy efficiency building and appliance codes and appliance efficiency standards promulgated by the Energy Commission provide a base for energy and GHG emissions reductions.

8-13: . . . for the electricity and natural gas sectors. . .

17. An entity with compliance obligations under a deliverer form of regulation, if it does not already possess enough allowances, would have an opportunity after delivery of the energy to acquire allowances on the market or to show compliance using ~~offsets or other~~ flexible compliance mechanisms.

19. A deliverer point of regulation would treat all electricity delivered to the California grid the same, whether that electricity is generated in California or elsewhere. In either case, the deliverer would later have to surrender GHG allowances (~~or secure adequate offsets~~) based on the amount of GHG emissions associated with that electricity.

24. The proposed GHG regulations are intended to change the way that electricity is generated and consumed and are expected to increase the use of (i) renewable resources to generate electricity, (ii) low-emitting sources of generation, and (iii) more efficient methods of using electricity. Complementary policies and integrated resource planning are needed to encourage these long-term investments.

26. The auctioning of at least some portion of the emission allowances available to the electricity sector would avoid windfall profits at consumer expense, promote liquidity in the emission allowance market, improve the accuracy of emission allowance prices as a reflection of marginal emission reduction costs, and allow new market entrants access to allowances on an equal basis with other parties.

27. It is reasonable to require that at least some portion of the GHG emissions allowances for the electricity sector be auctioned in a GHG emissions cap-and-trade system in which deliverers are the point of regulation for the electricity sector. As part of this approach, all-most of the proceeds from the auctioning of allowances for the electricity sector would be used in ways that benefit electricity consumers in California and to invest in long-term emissions reductions.

~~31. Key differences between electricity and natural gas sectors make it reasonable to recommend that ARB proceed to design a multi-sector GHG emissions cap-and-trade system for California but to not include the natural gas sector at this time.~~

32. Entities in the natural gas sector have ~~fewer options to reduce~~ many options for reducing GHG emissions ~~than entities in the electricity sector.~~ These include enhanced energy efficiency,

switching to solar water and solar space heating, switching to biogas, and expanding the use of combined heat and power.

33. There are limited commercially available lower carbon alternative sources of natural gas. Solar water heating, solar space heating, and biogas are all lower carbon alternatives to natural gas.

34. The only reliable near-term options for reducing GHG emission in the natural gas sector are energy efficiency programs.

35. The incremental benefits from including the natural gas sector in a multi-sector GHG emissions cap and trade system are likely to be less than those from including the electricity sector.

36. Reporting protocols for GHG emissions arising from the storage, transportation, distribution, and end-use of natural gas to end-users are under development and do not yet include provisions for reporting end-user combustion related to GHG emissions.

37. Implementing a multi-sector GHG emissions cap and trade system that includes small end-users of natural gas now may expose those customers to greater price risk than small end-users in the electricity sector.

39. Taking a programmatic approach to the natural gas sector now does not preclude future inclusion in a multi-sector GHG emissions cap and trade system. For the natural gas sector, similar to the electricity sector (see number 7 above), a cap-and-trade system, in conjunction with the continuation and expansion of existing programmatic measures including energy efficiency building codes and appliance efficiency standards, retail provider energy efficiency programs, incentives for solar water and space heating, as well as development of new programmatic measures such as policies to encourage the use of biomethane, is likely to be the most effective means of complying with AB 32 GHG emissions reduction requirements at the lowest cost and greatest benefit to consumers.

40. It is reasonable for ARB to not include the natural gas sector when designing proceed to design a multi-sector GHG emissions cap-and-trade system for California that includes the natural gas sector, for implementation in 2012, as described in this decision.

Conclusions of Law

2. SB 10678 as amended by SB 107 requires that IOUs, CCAs, and ESPs, ~~and~~ POU's obtain at least 20% of delivered electricity from renewable sources by 2010.

5. . . . This broad savings clause supports the conclusion that because air pollution is environmental issues are subject to regulation by the States, and not by FPA or the FERC, state regulation of GHG emissions caused by the generation and consumption of electricity is not preempted by the FPA, and may be regulated by the States.

Ordering Paragraphs

2. We recommend that ARB require POUs to deliver at least 20 percent renewable electricity to their customers by a ~~date certain, perhaps no later than 2015 or 2017.~~
3. We recommend that ARB work with the Public Utilities Commission, ~~and the Energy Commission, and the Legislature~~ to set requirements that all retail providers of electricity must deliver ~~2033~~ percent of their power from renewable resources ~~in the future by 2020, at levels and dates to be determined.~~
5. We recommend that ARB design a multi-sector cap-and-trade system for greenhouse gas (GHG) emissions in California, to be implemented in 2012. This GHG emissions cap-and-trade system should include the electricity and natural gas sectors.
8. We recommend that at least some portion of the GHG emission allowances available to the electricity sector be auctioned, with at least some portion of the proceeds from the auctioning of allowances for the electricity sector being used in ways that benefit electricity consumers in California and to invest in long-term emissions reductions.
9. We recommend that, for the electricity and natural gas sectors, ARB ~~rely on expand existing programmatic measures and develop new programmatic measures to complement the cap-and-trade system.~~ to achieve emission reductions and not include the natural gas sector in a multi-sector GHG emissions cap-and-trade system at this time. It may be appropriate to include the ~~natural gas sector in a cap-and-trade program at a later date.~~

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a copy of the **“Comments of the Natural Resources Defense Council (NRDC) and the Union of Concerned Scientists (UCS) on the Proposed ‘Interim Opinion on Greenhouse Gas Regulatory Strategies’”** in the matter of **R.06-04-009** to all known parties of record in this proceeding by delivering a copy via email or by mailing a copy properly addressed with first class postage prepaid.

Executed on February 28, 2008 at San Francisco, California.



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