

July 8, 2007

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Re: Development of mandatory reporting requirements under AB32

Dear Mr. Thompson and Mr. Bode,

On behalf of the Natural Resources Defense Council and Environmental Defense we would like to offer the following comments on the proposed AB32 mandatory reporting regulations currently under development by ARB staff. Mandatory reporting provides the critical foundation for understanding California's greenhouse gas emissions and for implementation of rules and regulations to meet the statutory emissions limit by 2020. We appreciate the opportunity to contribute to this effort.

ARB has made substantial progress in the development of proposed mandatory reporting requirements. In general, we support the proposals that staff has presented in technical team meetings and public workshops. Our comments focus on those areas and issues not yet addressed by the staff proposals or where we suggest improvements to the staff proposals. In particular, we believe it is essential that ARB adopt a reporting program that covers at least three-quarters of the state's emissions, including the major fossil fuel sectors. We also note, but do not reiterate, more detailed comments we have submitted on cement, refinery, and cogeneration reporting issues.

In summary, we support the reporting requirements under development and recommend that ARB should:

- ◆ require mandatory reporting of the carbon content of transportation fuels sold into California markets;
- ◆ require retail seller reporting of natural gas sold to small and medium end-use customers;
- ◆ utilize the "Efficiency Allocation Method" to allocate cogeneration emissions;
- ◆ consider a threshold for stationary source reporting of 18,000 metric tons of carbon dioxide (CO₂) per year, and analyze a threshold of 10,000 metric tons of CO₂ per year.
- ◆ require reporting of mobile emissions from fleets by entities subject to the stationary source reporting requirement;

- ◆ develop a strong enforcement program to verify and enforce the mandatory reporting system; and
- ◆ develop a schedule that describes how and when additional sectors will be incorporated into the mandatory reporting program.

Utility sector reporting

Our organizations are actively participating in the joint PUC/CEC proceeding to develop reporting requirements for electricity retail providers. We have attached to this letter our recent comments submitted in response to the joint PUC/CEC staff proposal. In this letter, we focus on a few key points that are directly relevant to the ARB staff proposal being developed.

Require retail seller reporting of natural gas sold to small and medium end-use customers.

Emissions from natural gas consumed by residential and small and medium commercial customers accounts for about 5 to 10% of total statewide emissions. While the PUC has issued an Order Instituting Rulemaking to address the natural gas sector, to date neither the PUC/CEC draft nor the ARB staff proposals have yet addressed reporting requirements for the significant emissions from this sector.

We urge ARB to require retail sellers of natural gas to report emissions from this sector based on the carbon content of fuel sold to customers. We do not believe that it would be feasible to require reporting of direct emissions from natural gas combustion by these relatively small customers. However, the ARB could get an aggregated report of these emissions by requiring retail providers of natural gas to report total sales to end use customers. This requirement would impose at most a modest incremental burden on retail providers because total natural gas sales is already collected and reported for a number of purposes. Double-counting of emissions from large stationary sources could be avoided by subtracting the emissions reported under the stationary source reporting requirement, or by translating the minimum threshold for stationary source reporting into a natural gas consumption threshold and requiring stationary source reporting for all entities above the threshold and retail seller reporting for sales to all entities below the threshold, as we discuss further below.

While the joint PUC/CEC proceeding may address this issue in later phases, we urge the ARB staff to include in the regulatory draft being developed a clear statement that reporting of emissions from the natural gas sector will be required. This will provide early guidance to covered entities and help to ensure that the proposal developed through the ARB and PUC/CEC process is thoroughly vetted.

Cogeneration emissions allocation methods

One of the issues raised in workshops is the best methodology to allocate emissions across electric and thermal outputs produced by cogeneration plants. As described in the attached memo, we believe that the “Efficiency Allocation Method” recommended by the CCAR offers a better approach that will encourage the most efficient use of resources. We urge the ARB staff to adopt this approach in the proposed reporting requirements.

Transportation sector reporting

Combustion of transportation fuels is the single largest source of statewide greenhouse gas emissions, and gasoline is the single largest component of transportation fuel use. ARB staff proposals address emissions from *production* of these fuels in refineries, but do not yet address the emissions associated with combustion of the actual fuels.

We strongly encourage ARB to require mandatory reporting of the carbon content of transportation fuels sold into California markets, including fuels that are not processed at California refineries. Data on transportation fuel production and sales is already reported under a variety of regulatory programs, and we encourage ARB to leverage that information where possible, but it is essential that ARB have consistent and comprehensive information on the single largest component of the State's emissions. Therefore, we urge ARB staff to include in the regulatory draft being prepared a proposal for reporting of the carbon content of transportation fuels.

Stationary source reporting

Reporting Threshold

Many large industrial consumers of natural gas would not be included in ARB's proposed mandatory reporting requirement for stationary sources with a threshold of 25,000 metric tons of carbon dioxide (CO₂) per year. These large users are manufacturers, food producers, and large commercial complexes that have the capacity to report their own emissions. It would be more efficient to place the responsibility of reporting and complying with reduction programs on the facilities themselves.

PG&E, whose customers account for nearly 40% of all natural gas use in California, includes consumers who use more than 3 million therms per year in a different price bracket because it considers them to be large users. Three million therms per year is roughly equivalent to 18,000 metric tons of CO₂ and appears to be a logical threshold.

We also urge ARB to analyze and ask parties for input on reducing its threshold for stationary source reporting to 10,000 metric tons CO₂ per year once it has the staff capacity to do so. This would capture all natural gas users above approximately 2 million therms per year, and our understanding is that there are relatively few natural gas consumers between 2 million and 3 million therms so including these consumers would not be a significant extra burden on ARB. These consumers should be identified and notified of future proceedings, so that ARB may initiate the process of including them in future reporting requirements. As we noted above, ARB should also require the retail sellers of natural gas to report the carbon content of fuel sold to all consumers below the threshold.

Mobile emissions

We support an approach that requires reporting of mobile emissions from fleets by entities subject to the stationary source reporting requirement, regardless of whether the emissions are later covered in a regulatory or market program.

Verification and enforcement

Verification is essential to the credibility of the mandatory reporting system and to regulatory programs, including market systems, that rely on the reported information to determine compliance. Therefore, ARB needs to ensure that entities complying with mandatory reporting are held to the highest standard so there is no question as to the validity of reported data.

We strongly support the ARB staff proposal to require 3rd party verification of reported data. Strong enforcement of the mandatory reporting system is also essential to ensure its credibility. We look forward to participating in the development of the enforcement approach for the mandatory reporting program.

Schedule creation

As noted earlier, we believe that ARB staff has made remarkable progress toward adoption of a set of mandatory reporting requirements in time for adoption by the statutory deadline of January 1, 2008. We believe that ARB staff will agree that the reporting requirements that will be adopted this year will be a good start, but still far from complete, and that development of additional mandatory reporting requirements will continue at least for the next year or two. In particular, the current efforts do not yet address emissions from some sectors, such as land use including forestry and agriculture, and refinements are needed for other sectors, such as landfills.

While completion of the initial set of mandatory reporting regulations is clearly a priority, we urge ARB to also look ahead and develop a schedule that provides a proposal for how and when these additional sectors will be addressed. This schedule will provide assurances that ARB is anticipating development of reporting requirements for these sectors, which will be necessary to enable the state to track statewide emissions and compliance with emission reduction programs, and will help affected entities to prepare for and participate in these proceedings.

In summary, we believe it is essential that ARB adopt a reporting program that covers at least three-quarters of the state's emissions, including the primary fossil fuel sectors, to enable improved tracking of the state's progress towards meeting the 2020 limit, and to enable effective monitoring of compliance with emission reduction programs. Thank you for considering our input as ARB develops the reporting requirements pursuant to AB 32.

Sincerely,

Peter Miller & Devra Wang
Natural Resources Defense Council

Tim O'Connor
Environmental Defense

**Attachment 1: Joint Comments of the Natural Resources Defense Council (NRDC and
Union of Concerned Scientists (UCS) on the PUC/CEC Joint Staff GHG Reporting
Proposal**

**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)

**JOINT COMMENTS OF
THE NATURAL RESOURCES DEFENSE COUNCIL (NRDC) AND UNION OF
CONCERNED SCIENTISTS (UCS)
ON JOINT STAFF GHG REPORTING PROPOSAL**

July 2, 2007

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THE NATURAL RESOURCES DEFENSE COUNCIL (NRDC) AND UNION OF
CONCERNED SCIENTISTS (UCS)
ON JOINT STAFF GHG REPORTING PROPOSAL**

I. Introduction and Summary

The Natural Resources Defense Council (NRDC) and Union of Concerned Scientists (UCS) respectfully submit these comments in accordance with the "Administrative Law Judges' Ruling Regarding Comments on Staff Reporting Proposal" (ALJ Ruling), dated June 12, 2007, and in accordance with Rules 1.9 and 1.10 of the California Public Utilities Commission's (CPUC) Rules of Practice and Procedure. We 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 is a non-profit membership organization with a long-standing interest in minimizing the societal costs of the reliable energy services that a healthy California economy needs. In this proceeding, we focus on representing our more than 124,000 California members' interest in receiving affordable energy services and reducing the environmental impact of California's energy consumption. UCS is a leading science-based non-profit working for a healthy environment and a safer world. Its Clean Energy Program examines the benefits and costs of the country's energy use and promotes energy solutions that are sustainable both environmentally and economically.

NRDC and UCS commend the two Commissions for their leadership in addressing global warming and reducing greenhouse gas (GHG) emissions through their decisions and actions over the past several years. The ALJ Ruling presented as Attachment A the "Joint California Public

Utilities Commission and California Energy Commission Staff Proposal for an Electricity Retail Provider GHG Reporting Protocol” (staff proposal) in preparation for the two Commissions to issue joint recommendations to the California Air Resources Board (CARB) in September 2007. NRDC/UCS appreciate the joint Commission staff’s hard work in developing a well-researched proposal for a near-term reporting protocol for retail providers. We first present some overarching comments, then comment on the list of issues posed by the ALJ Ruling, and finally offer additional comments organized using the same outline used in the staff proposal, as requested by the ALJ ruling. Our comments are summarized as follows:

- The staff proposal should expand upon the need to develop a more robust future reporting system, such as a regional tracking system, and provide suggestions for how such a system should be developed.
- The Protocol should establish conservative emission estimates to ensure reductions in actual emissions.
- Any emissions factors, whether done on an ex ante or ex post basis, should be updated annually.
- Because ex ante default emissions factors may fail to ensure sufficient accuracy or provide proper incentives, the protocol should assign ex post emissions factors for unspecified sources. If a greater degree of market certainty is desired, the protocol could incorporate a hybrid ex ante/ex post approach for reporting of emissions from unspecified sources.
- Staff’s proposed marginal analysis methodology for estimating default emission factors for unspecified imports will require modification in a multi-state reporting context, and NRDC/UCS urge staff to work more closely with all neighboring states to adopt mutually agreeable reporting and tracking methods.
- The proposal should standardize labeling metrics used for GHG emissions, rates and factors.
- The Commissions should pay particular attention to two criteria for assessing reporting options: criteria 2.3.5, “Minimization of Unintended Consequences,” and criteria 2.3.6, “Setting Appropriate Policy Signals.”
- Reporting requirements under the “first seller” approach would undoubtedly need to differ from the staff proposal for reporting under a load-based cap, but details of the first seller approach must first be better described.
- The Commissions should include recommendations for how the Department of Water Resources should be treated as part of their overall electricity sector reporting recommendations to CARB.
- Further exploration of how much energy the CAISO Integrated Forward Market may account for in the future, especially the percent of fossil-fueled power, would be useful to understand the implications of assigning emissions factors and determining what they should be.

- Enforcement, along with third-party verification, of reporting requirements is vital to ensure credibility of the system.

II. Overarching Comments

A. The staff proposal should expand upon the need to develop a more robust future reporting system, such as a regional tracking system, and provide suggestions for how such a system should be developed.

In its current form, the staff proposal's recommendations are limited to the type and amount of reporting information presently available. While the staff proposal identifies some of the significant knowledge gaps requiring further study, it does not provide a clear vision of how reporting and tracking might or should work in the future. The staff proposal simply acknowledges that future tracking can be refined, and notes that a comprehensive generation information system similar to the NEPOOL and PJM systems could be developed for the Western Electricity Coordinating Council (WECC) (p. 3). NRDC/UCS strongly recommend that these sections of the staff proposal be expanded.

Just as the two days of the April 12-13, 2007 workshop on reporting and tracking were divided into "current and near-term reporting options" and "regional tracking systems or other options for future reporting," the joint Commissions' reporting recommendations to CARB should also provide a reporting proposal for both the near-term and a roadmap to develop an improved future system. The staff proposal will more effectively inform CARB's decision-making process if it broadens its current focus on near-term reporting to include more discussion and analysis of the future reporting options which may be necessary for a well-functioning system for tracking and reporting electric sector emissions.

Although CARB is required by AB 32 to adopt mandatory reporting protocols by January 1, 2008, enforcement of GHG emissions limit on certain sectors under AB 32 will not begin until January 1, 2012. While it will be helpful to gain experience with GHG emissions reporting using near-term reporting options that depend upon existing sources of information, California should also use the interim period to begin developing a tracking system to overcome the deficiencies that exist in currently available information. In the four-plus years that remain until the AB 32 GHG emissions limits are enforced, it would be wise to think forward to a tracking and reporting

system that will prove robust and viable throughout the AB 32 timeline that extends to 2020. This future refined reporting and tracking system should be developed and implemented at least a year prior to the 2012 enforcement start date, to allow time to work out any kinks before the GHG emissions limit takes full effect.

NRDC/UCS urge the two Commissions to include a more detailed recommendation for future reporting and tracking. Although it is probably not possible for a full proposal to be developed before the joint CPUC/CEC near-term reporting recommendations are submitted to CARB, the two Commissions should provide a clear vision of, and initiate a process to develop, a reporting and tracking system that will resolve many of the gaps identified in the staff proposal. At minimum, the staff proposal should provide preliminary procedural recommendations for the design and implementation of a tracking system for the six western states participating in the Western Regional Climate Action Initiative (WRCIA). This is important both to develop a more accurate reporting system and to provide a clear understanding for the entities that will be responsible for reporting of how the requirements will be updated over time.

B. The Protocol should establish conservative emission estimates to ensure reductions in actual emissions.

NRDC/UCS strongly agree with criterion 2.3.6 of the protocol: “Where estimation is needed, care should be taken that the Protocol provides incentives that tend to reduce overall GHG emissions.” The design of the protocol should recognize that some retail providers could rely on emissions estimates as “cover” for purchases whose actual emissions exceed the assigned estimates. To lessen the incentive for retail providers to engage in such practices, the protocol should incorporate conservative assumptions for calculating emissions estimates, particularly when the source of the emissions is less known or documented. The long-term integrity of a potential statewide greenhouse gas emissions market demands that every sector’s reporting protocol encourage more, rather than less, specific reporting of GHG emissions.

C. Any emissions factors, whether done on an ex ante or ex post basis, should be updated annually.

To enable sufficient accuracy, emissions estimates should at the very least be frequently updated, whether done on an ex ante or ex post basis. The staff proposal contemplates periodic updates of default emission factors, “possibly every three years.” (section 7.2.1, p. 29) NRDC/UCS recommend that these factors be updated annually, to account for potentially significant inter-annual changes such as new plant additions or retirements and hydro variability. More frequent updates will ensure that retail providers see the consequences of the investments they make. Infrequent updating could encourage gaming, for example, it would be possible for a retail provider to sell their conventional coal assets but still import them from the import mix and get assigned a lower emissions factor. Annual updating of default emission factors could possibly be done in conjunction with the CEC’s annual publication of the Net System Power Report.

D. Because ex ante default emissions factors may fail to ensure sufficient accuracy or provide proper incentives, the protocol should assign ex post emissions factors for unspecified sources. If a greater degree of market certainty is desired, the protocol could incorporate a hybrid ex ante/ex post approach for reporting of emissions from unspecified sources.

Staff proposes that default emission factors be calculated on an ex ante basis, to provide market certainty, and solicits feedback on the trade-off between the certainty of ex ante reporting and the greater accuracy of ex post reporting. (section 5.7, pp.22-23) NRDC/UCS submit that, in certain instances, ex ante emission factors may fail to satisfy some of the key Protocol criteria, including accuracy and setting appropriate policy signals. Though it may be true that ex ante emission factor “overestimates in one year compensate for underestimates in another” (5.5, p. 21) over a multi-year period, a higher level of precision is desirable and may be required for the proper functioning of a greenhouse gas emissions market where large sums of money are potentially at stake. In addition, it is desirable for the reporting system to provide prompt “feedback” to retail providers so that they immediately see the consequences of the investments they make.

The draft staff recommendation values the certainty that ex ante estimates can provide. However, if emissions factors are assigned ex post on an annual basis, retail providers will know

the emissions factor determined ex post for the previous year and can use that emissions factor for planning purposes, since the emissions factor in the following year is unlikely to substantially deviate from that of the prior year in most circumstances. In addition, the use of ex post emissions factors will incentivize entities to err on the safe side, which is consistent with criterion 2.3.6.

The disadvantages of ex ante reporting are particularly evident in the context of the CAISO Integrated Forward Market (IFM), which will be served by a mix of resources that is currently unknown and could fluctuate substantially due to volatile natural gas prices. Assigning default emission factors to IFM purchases through an ex ante process imputes artificial certainty to the highly uncertain emissions characteristics of these spot market purchases. Furthermore, because retail providers are likely to rely on IFM purchases to supply only 10-20 percent of their load,¹ retail providers' exposure to "market uncertainty" due to spot market purchases could be rather limited. Therefore, the staff proposal should adopt ex post reporting for spot market purchases, based on analysis of the specific resources serving the CAISO IFM.

The use of ex post reporting may require some lag time between the adoption of "trued up" default emissions factors and the end of an emissions compliance period. This would provide entities with the flexibility to obtain any allowances they require for compliance (or sell any excess allowances). State-provided quarterly estimates of ex post default emissions factors and the use of flexible compliance mechanisms may also allow retail providers to better manage their emissions compliance responsibility.

If the use of annually updated ex post emission factors fails to satisfy the two Commissions' desire to provide more market certainty for retail providers, NRDC/UCS suggest a possible hybrid process that would establish, ex ante, a range of emission factors for each region, which would bound the specific emissions factor that would be determined ex post on an annual basis. Under this proposal, the state could establish emission factor ranges for each region based on a confidence interval or the annual high or low calculated emissions factors from a historic five-year interval. For instance, the ex ante range of emission factors for Southwest unspecified generation for 2008 could be 950 to 1,200 lbs CO₂e/MWh (these numbers are

¹ R.06-04-009 and D. 07-OIIP-01, ALJ Ruling Attachment A, "Joint California Public Utilities Commission and California Energy Commission Staff Proposal for an Electricity Retail Provider GHG Reporting Protocol," p. 2.

provided purely for illustrative purposes), rather than the 1,075 lbs/MWh proposed by staff. If subsequent analysis determines that the ex post 2008 emissions factor falls within the pre-determined range, that ex post figure will simply be used for reporting of the applicable purchases. If the ex post emissions factor falls outside of the range, retail providers will report their emissions using the maximum or minimum emissions factor of the range, depending on whether the ex post factor is above or below the end points of the range. The ex ante range would then be updated for the following year. This hybrid approach for reporting unspecified emissions provides greater accuracy through ex post analysis of actual market operations, but retains a significant market certainty for retail providers by bounding the degree to which the default emissions factors may fluctuate. As mentioned previously, NRDC/UCS recommend that ex post emissions factors be used for unspecified sources, but present this hybrid approach as a potential compromise between the competing interests of accuracy and market certainty.

E. Staff’s proposed marginal analysis methodology for estimating default emission factors for unspecified imports will require modification in a multi-state reporting context, and NRDC/UCS urge staff to work more closely with all neighboring states to adopt mutually agreeable reporting and tracking methods.

Staff’s proposed default emission factors for Southwest unspecified purchases are estimated using a marginal resource analysis. Staff’s proposed default emission factors for Northwest unspecified purchases are estimated using a hybrid approach that includes marginal resource analysis. While these estimation methodologies may represent the best practice given the information currently available, future changes in policy and market conditions will likely require a significantly different approach. In particular, the creation of the Western Regional Climate Action Initiative (WRCAI), which includes several of California’s neighboring states, provides new incentives for retail providers in the west to make reporting claims (through formal tracking systems) on their cleaner generating resources. One can envision disputes between retail providers in different states over different reporting methods. In fact, the concerns of other states over inconsistent methodologies for reporting emissions from unspecified Northwest purchases were raised at the April 12 and 13 workshops.

NRDC/UCS have concerns about the long-term viability of relying on marginal resource analysis for estimating the emission factors of unspecified purchases, particularly in the context of an eventual transition from a California-specific reporting protocol to a multi-state protocol. Staff should continue to work with Washington and Oregon to ensure that reporting and tracking is done consistently in all three states, and should adjust the method for estimating emissions from Northwest unspecified purchases as appropriate. Although staff indicates that Arizona and New Mexico have so far not identified any problems with staff's proposed methodology for tracking Southwest unspecified imports (5.3.3, p.20), retail providers in those states are almost certain to support an inconsistent methodology if they are required to begin formally reporting the emissions associated with their load. Considering the likelihood that retail providers in other states will make claims on the emissions from their resources that are inconsistent with the claims contemplated in the staff proposal, it is possible that a residual emissions analysis approach which subtracts out claimed resources from unspecified imports would prove more tractable than the marginal and hybrid approaches that staff proposes. NRDC/UCS urge staff to work more closely with other states, including California's southwestern neighbors, to adopt mutually agreeable reporting and tracking methods that will facilitate expandability in the multi-state system envisioned in WRCAI.

F. The proposal should standardize labeling metrics used for GHG emissions, rates and factors.

The staff proposal uses varying metrics and descriptors for GHG emissions, rates, and factors: lbs CO₂ /MWh, lbs CO₂ /kWh, lbs CO₂e /MWh, or sometimes no labeling metric at all. For consistency and clarity, NRDC/UCS recommend that the labeling metrics for all GHG emission rates and factors be standardized throughout the proposal. In particular, the proposal should clarify whether the staff-recommended emissions factors are CO₂-only emissions or CO₂-equivalent (CO₂e) GHG emissions. Since AB 32 defines greenhouse gases as including “all of the following gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride,” the metrics used in the proposal should include CO₂e of all these greenhouse gases regulated by AB 32.²

² Health and Safety Code Division 25.5, Part 1, Chapter 3, Section 38505(g).

III. Comments on Issues Raised in ALJ Ruling

A. Whether the criteria for assessing reporting protocols identified in Section 2.3 of the report are appropriate, and whether the Staff proposal adequately complies with what you view as appropriate criteria

NRDC/UCS generally agree with the seven criteria offered by the staff proposal in section 2.3. However, we do not believe that these criteria should be equally weighted when evaluating different reporting options. In order to achieve AB 32's primary requirement of GHG emissions reductions, we urge the Commissions to pay particular attention to criterion 2.3.5, "Minimization of Unintended Consequences" and criterion 2.3.6, "Setting Appropriate Policy Signals." It is essential that the reporting protocols avoid perverse incentives, and ensure that the retail providers get the correct signals to reduce greenhouse gas emissions. Ex post true-up of default emissions values is highly consistent with these criteria, because it enables retail providers to see the consequences of the long-term financial commitments that they make, which will determine the overall success of California in reaching its 2020 GHG emissions target. The concerns of NRDC/UCS about how the staff proposal may not meet these criteria are noted elsewhere in these comments.

B. Whether the intent should be to design a reporting protocol that could be adopted directly by other states in the region and, if so, whether modifications to the Staff proposal would be needed for this purpose

The reporting and tracking protocol that California adopts should be mutually agreeable to the other states in the region, and we urge staff to coordinate closely with staff in neighboring states. See our comments in Section II.E above.

C. How the proposed reporting requirements including, in particular, the use of estimates, could affect the integrity of greenhouse gas (GHG) emission allowances

and whether the requirements may have implications on the ability to trade GHG emission allowances with other regimes

Estimates of GHG emissions used for reporting inherently lack accuracy, and lack of accuracy will certainly affect the integrity of GHG emissions allowances. See our comments in section II.B. Environmental integrity and the accuracy of reporting and tracking systems are critical for the ability to link with other jurisdictions.

D. In addition to any technical, policy, or other concerns, whether the Staff proposal raises any legal issues

NRDC/UCS have identified technical and policy concerns in other sections of these comments. At this time, NRDC/UCS have not evaluated the staff proposal for any legal issues.

E. Whether modifications to the Staff proposal would be needed to support implementation of the recommendations in the Market Advisory Committee's draft report, in particular, the "first seller" structure.

Modifications to the staff proposal would certainly be necessary to support implementation of the Market Advisory Committee's (MAC) recommendation for a "first seller" approach to capping emissions in the electric sector. The MAC issued its final report of recommendations, including its recommendation for the first seller approach, to CARB on June 29, 2007. NRDC/UCS have not yet had the opportunity to review in detail the final MAC report, and therefore offer these comments on the first seller approach based on the draft report.

The first seller approach is an intriguing concept, and NRDC/UCS appreciate the MAC report's initial analysis of how the state might make the "first sellers" of electricity into California's power market the point of regulation. However, the draft MAC report left many questions unanswered that must be addressed before the state determines whether a "load-based" approach or a first seller approach to the point of regulation will best meet California's goals.³

³ These concerns were presented in NRDC's June 11, 2007 letter to the MAC on its draft report (p. 3-4), which can be downloaded at www.climatechange.ca.gov/events/2007-06-12_mac_meeting/public_comments/.

Among these key questions are how the first seller approach would actually work in practice, and who exactly the first sellers in California would be. NRDC/UCS are encouraged by the announcement at the June 22, 2007 workshop in this proceeding that the Commissions plan to convene a workshop on August 21, 2007 to address the many questions that parties have about the first seller approach. NRDC/UCS hope that this workshop will be open to all parties, and will examine the pros and cons of both the load-based and first seller approaches in order to inform the Commissions' joint recommendations to CARB for the structure of the electric sector cap.

As noted in the ALJ ruling, the Commissions plan to issue a proposed decision on reporting requirements in mid-August 2007, which will likely come before the August 21 planned workshop on the first-seller approach. However, the technical, regulatory, and legal implications of the first seller approach must be more carefully analyzed and vetted before possible reporting options under this approach can be explored. Because it appears that advocates of the first-seller approach propose to rely on E-Tags for identifying the first seller into the state, further exploration of E-Tags would be beneficial to inform the viability of the first seller approach, and would also serve to inform the development of a future tracking system under the load-based approach.

IV. Additional Comments Organized Using the Same Outline Used in the Staff Proposal

As requested by the ALJ Ruling, NRDC/UCS provide additional comments that follow the organization of the staff proposal. Some of these points complement or overlap the comments already stated above, while others provide additional comment.

Executive Summary

- Consistent with the recommendations that NRDC/UCS provide above, the executive summary should also provide a clear vision of an improved future tracking system that California should be working towards, and recommendations for how such a system should be developed. For instance, the word “can” in the sentence on p. vi, “future tracking *can* be refined to collect additional information” (emphasis added), should be changed to “should,” to reflect that future tracking *should* be refined as other states

increase their level of participation in WRCAI and as additional information becomes available.

1.3 In-state Unspecified Purchases

- The staff proposal quotes the MAC report on estimates of how much of total energy consumption will be handled by the CAISO IFM. Further exploration of how much energy the IFM may account for, especially what percent of fossil-fueled power, would be useful (also mentioned in Section 4.2.3).

1.4 Lack of a Comprehensive “Source to Sink” Reporting System

- The mention (p. 3) of a possible Western Electricity Coordinating Council (WECC)-wide tracking system should be further expanded with more recommendations or suggestions on how it would work, what it would take to get it up and running, and whether California and the western states should be working toward it.

2.1.1 Retail Provider

- In the definition of “retail provider,” the Department of Water Resources (DWR) is not included. DWR is a large consumer of electricity in California, and contracts directly with marketers, generators, and retail providers to meet a portion of its load. Because it is likely that some DWR purchases will not be captured under large stationary source reporting or retail provider reporting as currently described, NRDC/UCS recommend that the Commissions examine how DWR should be treated as part of its overall electricity sector recommendation to CARB.

3.1 Regional Averages for Imports

- Page 8 mentions the 2005 net system power report. This could be updated with the more recent 2006 net system power report.

4.1.4 Facility-Specific Contracts

- NRDC/UCS generally agree with these recommendations to avoid contract shuffling with existing facilities.

4.2.3 CAISO Markets

- The staff proposal quotes the MAC report on estimates of how much of total energy consumption will be handled by the CAISO IFM. Further exploration of how much energy the IFM may account for, especially what percent of fossil-fueled power, would be useful. (Also mentioned in Section 1.3)

5.2.2 Control Area (Balancing Authority)

- The staff proposal begins a discussion of NERC E-Tags and acknowledges that they “provide a potential starting point for developing a larger system.” (p. 16) E-Tags are a possible starting point for improvements to the current tracking capabilities. NRDC/UCS recommend the proposal describe a plan to pursue this larger tracking system.

5.2.4 Default Only

- The staff proposal recommends against using high default rates for unspecified purchases. NRDC/UCS understand that high default rates would need to be phased in over time to allow retail providers time to adjust to the rules and to avoid the problems with accuracy the staff report notes, but we recommend further analysis of the value of high default values to avoid perverse incentives and to meet criterion 2.3.5.

5.3.3 Marginal Emissions Factors for Residual Unspecified Power

- Representatives from Oregon and Washington, including Phil Carver from Oregon at the April 12 workshop, have significant disagreements with the assumptions about the Northwest resource split in the CEC staff report, “Revised Methodology to Estimate the Generation Resource Mix of California’s Electricity Imports.” The CEC staff report’s methodology assumes the Northwest retains its coal resources for local load and exports any excess hydro to California, whereas others claim the Northwest first uses its hydro, and exports any excess coal to California. The competing claims over the emissions attributes of Northwest resources emphasize the importance of coordinating with other states to develop reporting and tracking methodologies that are consistent across the region.

5.3.4 Unspecified Purchases within California

- The staff proposal's assumption that the real-time market's resource mix is comprised of only hydropower and fast-ramping natural gas units presumes that the real-time market is only used as a balancing market. In order for the real-time market to truly serve as a balancing market, retail providers must be restricted as to how much they can rely on it. Our understanding is that the 5 percent restriction on retail providers' reliance on the real-time market will be applied on a forward basis. Clear rules and monitoring of the real-time market will be necessary to make sure retail providers are not deliberately over-relying on it in real time.
- In this section, as well as others, the staff proposal recommends using a 1000 lbs CO₂/MWh emission rate for natural gas plants. As the emission rates given on pages 24-25 show, 1000 lbs CO₂/MWh is closer to the low point of the range of emissions for all natural gas plants. NRDC/UCS recommend that the default rate for natural gas plants to be used in calculating emissions factors should be the least efficient natural gas plant (1640 lbs CO₂/MWh, according to the numbers provided by the staff proposal), to avoid perverse incentives. Otherwise, the use of ex post emission factors seems more appropriate.

5.6 Evaluation of Data Sources

- The staff proposal states that "staff has not explored the regulatory feasibility of using E-Tags." (p. 22) NRDC/UCS recommend that the proposal describe a plan to further explore E-Tags as well as a regional tracking system that might be able to use the structure in place with WREGIS.

5.7 Recommendation on Unspecified Sources

- As described earlier in these comments, NRDC/UCS recommend that the staff-recommended emission factors be continually updated ex post, so that it would be difficult to hide high-emitting resources in an unspecified pool.

7.2.1 State Calculated Ex Ante Annual Regional Default Factors

- NRDC/UCS remain particularly concerned with the use of ex ante values if they are only updated every three years. A three-year update cycle would produce a significant lag in the system and would fail to reflect any inter-annual variation in actual emissions due to changing market conditions. Whether they are determined ex ante or ex post, default emission factors should be updated annually to ensure greater accuracy and to improve the integrity of any emissions allowances that are used to account for unspecified resource purchases.

8. Submission Process

- Along with third-party verification of reporting, enforcement is also vital to ensure credibility of the tracking system. NRDC/UCS recommend the addition of a subsection on enforcement for reporting.

9. Techniques for Addressing the Potential for Contract Shuffling and Leakage

- Again, NRDC/UCS recommend that the mention of a multi-state generation information system on page 35 be supplemented with additional discussion of the improved tracking system the state should be working towards in the future.

V. Conclusion

NRDC/UCS commend the joint staff for their hard work in developing the draft reporting proposal, and urge the Commissions to adopt the recommended modifications described herein. NRDC/UCS look forward to continuing to work with the Commissions and other parties to refine and further develop the electricity sector reporting proposal.

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Dated: July 2, 2007

Respectfully submitted,



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**Attachment 2: Comments of the Environmental Defense on the PUC/CEC Joint Staff
GHG Reporting Proposal**

**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)

COMMENTS OF ENVIRONMENTAL DEFENSE

July 2, 2007

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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)

COMMENTS OF ENVIRONMENTAL DEFENSE

Introduction and Summary

Environmental Defense respectfully submits these comments in accordance with the "Joint Administrative Law Judges' Ruling Regarding Comments on Staff Reporting Proposal" (ALJ Ruling), dated June 12, 2007.

Environmental Defense is a leading national nonprofit organization representing more than 500,000 members. Since 1967, we have linked science, economics and law to create innovative, equitable and cost-effective solutions to society's most urgent environmental problems.

We commend the Commissions for their leadership in addressing the threats to California associated with global warming through its decisions over the past several years. With the passage and signing of Assembly Bill (AB) 32, the Legislature and Governor strongly reaffirmed the Commissions' leadership in addressing global warming.

In summary, our comments elaborate on the following points parties were asked to address:

- *Whether the criteria for assessing reporting protocols identified in the report are appropriate, and whether the staff report adequately complies with what you view as appropriate criteria.*

The criteria staff has identified for assessing the protocols are appropriate. These criteria and any others used should be aimed at enhancing the overall environmental integrity of the system.

- *Whether the intent should be to design a reporting protocol that could be adopted directly by other states in the region and, if so, whether modifications would be needed for this purpose.*

The protocol should be designed in a manner that facilitates integration or expansion into a regional system.

- *How the proposed reporting requirements including, in particular, the use of estimates, could affect the integrity of greenhouse gas emission allowances and whether the requirements may have implications on the ability to trade GHG emission allowances with other regimes.*

It is possible that the use of estimates could compromise the integrity of emission allowances. This could have implications for California's ability to trade with other systems.

- *Whether modifications to the Staff proposal would be needed to support implementation of the recommendations in the Market Advisory Committee's draft report, in particular the "first seller" structure.*
- The staff proposal may need modification in order to be compatible with the "first seller" approach outlined in the Market Advisory Committee draft report.

I. Environmental Defense believes the criteria staff has identified for assessing the protocols are appropriate. However, tradeoffs among these criteria will be necessary and when they do occur they should point in the direction of increasing the overall environmental integrity of the system.

The staff proposal identifies seven criteria to be considered in evaluating the reporting protocol. They are accuracy, consistency, simplicity, transparency, minimization of unintended consequences, setting appropriate policy signals, and expandability. In general, we believe these criteria are appropriate. We further believe that because the goal of AB 32 is to significantly reduce greenhouse gas emissions in California, these criteria and any others used to develop and assess the protocols should have the effect of enhancing the overall "environmental integrity" of a program designed for this purpose.

As the staff proposal notes, tradeoffs between the identified criteria will occur. For instance, while simplicity is a desirable aspect of the protocol, it should not come at the expense of overall environmental integrity. Overall, we believe that the protocol should be designed to yield “source to sink” emission data that is as precise as possible, and where exact values are impossible or prohibitively difficult to obtain, errs on the side of the environment.

II. The protocol should be designed in a manner that facilitates integration or expansion into a regional system.

As noted above, we believe that a comprehensive “source to sink” generation attribute tracking system similar to those operational in the northeastern states will ultimately be the best approach. Such a system will eliminate or minimize the need to rely on estimates for emissions from electricity generated outside of California. A regional system will also help reduce the potential for contract shuffling or leakage. We appreciate the efforts that the Energy Commission and the Public Utilities Commission have already devoted to exploring such a system and urge these efforts to proceed in coordination with the Air Resources Board, the Independent System Operator, and other interested entities. At the same time, until such a system is operational, we believe it is important that reporting protocol currently under consideration be designed in a manner that at the very least does not make it incompatible with the eventual adoption of a regional tracking system and preferably lays the groundwork for the emergence of one. We appreciate and support the recognition of this in the staff proposal.

III. It is possible that the use of estimates could compromise the integrity of emission allowances. This could have implications for California’s ability to trade with other systems.

The staff proposal recommends the use of emissions estimates for generation outside the state serving California load. We fully understand that current realities necessitate such an approach. Where estimation of emissions data is required, the estimation methods

should be designed first and foremost to provide the most accurate information possible. We also believe that in accord with the assessment criteria laid out in the staff proposal, the protocol should “set appropriate policy signals” by using conservative emission estimates to incentivize the generation or importation of electricity with low or zero emissions. In instances where producers can adequately verify the power they are providing has lower emissions than the estimate, they should be allowed to do so.

In order to minimize the need for estimating emissions data, we believe that when feasible, power purchase agreements should be required to reflect the emissions factors associated with the power being transacted. Especially under a load-based approach, this will provide greater certainty for load serving entities about the emissions attributes of the power they are receiving.

Further, as the staff proposal notes, there are basically two approaches to determining *when* emission factors will be calculated – ex post and ex ante. While the ex ante approach provides parties greater certainty in terms of total power costs, it is not as accurate as the ex post approach in assessing emissions. While we agree that the need for greater price certainty may justify the ex ante approach, we believe it is worth considering whether setting the emissions factors at a date as close as possible to the beginning of each reporting period may increase the accuracy of the emissions estimate.

Environmental Defense believes that a cap and trade system will be a key component of AB 32 implementation. For both in-state trading and trading with other regimes, it is crucial that emissions data be accurate. This is a fundamental feature that will directly impact the overall environmental integrity of the program.

IV. The staff proposal may need modification in order to be compatible with the “first seller” approach outlined in the Market Advisory Committee draft report.

The Market Advisory Committee to the California Air Resources Board recommended in its June 1, 2007 draft report that California pursue a “first seller” approach to regulating

emissions associated with all electricity delivered in the state. Up to this point, the CPUC and the CEC have been proceeding with design issues focused on a load-based approach.

The Market Advisory Committee report posits a load-based approach and first seller approach are roughly equivalent in regard to their ability to facilitate accurate tracking and reporting of emissions from imported electricity. However, the Market Advisory Committee points out that a first seller approach is likely to result in greater accuracy (and thus enhance overall environmental integrity) for tracking and reporting emissions generated from electricity within California. In light of our belief that precise emissions data is a crucial component to an effective reporting protocol, we are currently reviewing whether a first seller approach could better facilitate this goal. We further note that it is worth considering whether a first seller approach could more effectively facilitate any future integration of a California-based reporting system into a regional or national system.

V. The protocol should contain a strong compliance mechanism.

Environmental Defense believes that a strong compliance mechanism is crucial to the success of a greenhouse gas emission reporting protocol. We support the Air Resources Board proposal to develop and use a training and certification program for third-party auditors which would also be used for electric sector compliance purposes.

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Dated: July 2, 2007

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'V. Welch', with a long horizontal stroke extending to the right.

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**Attachment 3: Joint Reply Comments of the Natural Resources Defense Council (NRDC
and Union of Concerned Scientists (UCS) on the PUC/CEC Joint Staff GHG Reporting
Proposal**

**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

**JOINT REPLY COMMENTS OF
THE NATURAL RESOURCES DEFENSE COUNCIL (NRDC) AND UNION OF
CONCERNED SCIENTISTS (UCS)
ON JOINT STAFF GHG REPORTING PROPOSAL**

July 10, 2007

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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)

**JOINT REPLY COMMENTS OF
THE NATURAL RESOURCES DEFENSE COUNCIL (NRDC) AND UNION OF
CONCERNED SCIENTISTS (UCS)
ON JOINT STAFF GHG REPORTING PROPOSAL**

I. Introduction and Summary

The Natural Resources Defense Council (NRDC) and Union of Concerned Scientists (UCS) respectfully submit these reply comments in accordance with the "Administrative Law Judges' Ruling Regarding Comments on Staff Reporting Proposal" (ALJ Ruling), dated June 12, 2007, and in accordance with Rules 1.9 and 1.10 of the California Public Utilities Commission's (CPUC) Rules of Practice and Procedure. We 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 is a non-profit membership organization with a long-standing interest in minimizing the societal costs of the reliable energy services that a healthy California economy needs. In this proceeding, we focus on representing our more than 124,000 California members' interest in receiving affordable energy services and reducing the environmental impact of California's energy consumption. UCS is a leading science-based non-profit working for a healthy environment and a safer world. Its Clean Energy Program examines the benefits and costs of the country's energy use and promotes energy solutions that are sustainable both environmentally and economically.

NRDC and UCS commend the two Commissions for their leadership in addressing global warming and reducing greenhouse gas (GHG) emissions through their decisions and actions over the past several years. In these comments, NRDC and UCS

respond to the comments submitted by various parties on July 2, 2007 on the “Joint California Public Utilities Commission and California Energy Commission Staff Proposal for an Electricity Retail Provider GHG Reporting Protocol” (staff proposal). NRDC/UCS appreciate the joint Commission staff’s hard work in developing a well-researched proposal for a near-term reporting protocol for retail providers. These reply comments are summarized as follows:

- NRDC/UCS agree with numerous parties’ recommendations that Joint Staff should work toward a west-wide tracking system to aid future reporting.
- The design and implementation of GHG reporting should be driven primarily by long-term emissions reductions rather than short-term dispatch considerations.
- The potential benefits and drawbacks of the “first seller” approach are beyond the scope of the reporting protocol and should be considered at a later point in this proceeding.
- Contrary to PG&E’s claims, retail providers must report their emissions under a load-based cap. AB 32 also requires retail providers to report emissions, without reference to the point of regulation.
- The concerns of possible gaming of default emission factors raised by multiple parties reinforce the importance of using ex post, rather than ex ante, emissions factors. NRDC/UCS suggest that Joint Staff catalogue examples of possible gaming and explain how their proposal would minimize “unintended consequences.”
- NRDC/UCS support the recommendations of CRS and SMUD to avoid double-counting of the greenhouse gas emission attributes of renewable energy.
- NRDC/UCS agree with Calpine on the need for high default emissions factors.
- NRDC/UCS disagree with CMUA’s assertion that CARB and the Joint Staff should not address contract shuffling through the reporting protocols.

II. NRDC/UCS agree with numerous parties' recommendations that Joint Staff should work toward a west-wide tracking system to aid future reporting.

Several parties (including AReM, DRA, GPI, and SDG&E/SCG)⁴ joined NRDC/UCS in commenting on the need for the Joint Staff to be working toward a west-wide tracking system for future reporting. As SDG&E/SCG note, the staff proposal “may satisfy reporting necessary during the interim period prior to the implementation of AB 32,” but “should provide more discussion of the path to a comprehensive measurement system required under AB 32.” (p. 3) NRDC/UCS support DRA’s recommendation that “Joint Staff and ARB continue to work with other states within the Western Electricity Coordinating Council (WECC) region to promote the need and pursue the development of a regional GHG tracking system for all electricity generation resources.” (p. 7) The staff proposal should include significantly more discussion about the process for developing a more robust future reporting system to use in the long-term.

NRDC/UCS support PG&E’s recommendation for Joint Staff to coordinate their near-term reporting proposal for regional emissions factors with other states “to ensure consistency and equity with reporting proposals in other Western states.” (p. 5) DRA astutely observes that “establishing mandatory compliance with a regional emissions reporting system...may be the largest obstacle to overcome in the deployment of a complete regional emissions tracking and reporting system.” (p. 7) NRDC/UCS agree, and anticipate the diplomatic and political exercise of engaging with other states to develop a regionally consistent reporting protocol will prove much more challenging than developing the tracking system itself. Accordingly, the staff proposal should suggest a public process for regional coordination and participation to begin as soon as possible to develop a set of multi-state GHG reporting guidelines for the electric sector.

III. The design and implementation of GHG reporting should be driven primarily by long-term emissions reductions rather than short-term dispatch considerations.

Some parties, such as Southern California Edison Company (SCE) contend that the staff proposal would interfere with the efficient dispatch and operation of the

⁴ Alliance for Retail Energy Markets (AReM), Division of Ratepayer Advocates (DRA), Green Power Institute (GPI), and San Diego Gas and Electric Company/Southern California Gas Company (SDG&E/SCG)

California Independent System Operator (CAISO) Market Redesign and Technology Upgrade (MRTU) market. Other parties (Western Power Trading Forum, Morgan Stanley, SCE) also assert that GHG costs should be reflected in dispatch decisions. NRDC/UCS agree that the reporting protocol should carefully account for potential impacts on dispatch and on the overall functioning of the MRTU market.

However, the design of the reporting protocol, and of GHG regulation more broadly, should not be predicated on day-to-day dispatch considerations and compatibility with MRTU. While AB 32 regulations should be designed to incorporate GHG reduction principles into short-term electricity markets, the larger and overriding policy goal of the State should be to fundamentally affect *long-term* investments and resource allocation decisions in the electricity sector. The policy-making presumption should be that GHG regulations will significantly influence the nature of the market, rather than merely fitting in with an existing structure that may not be conducive to achieving cost-effective GHG emissions reductions. NRDC/UCS strongly agree with the Green Power Institute's (GPI) comment that the "core purpose of AB 32 is to change electricity and energy markets generally in fundamental ways that transition the mix of energy sources used by society to lower-carbon resources, and to more efficient energy use." (GPI, p. 5) A myopic focus on how GHG emissions reporting might affect short-term dispatch decisions without serious consideration of the core investment changes that are needed to achieve significant and sustained long-term emissions reductions would undermine the fundamental purpose of AB 32. The reductions demanded by AB 32 will require long-term investments in emission reduction strategies; changes in short-term dispatch will not achieve the AB 32 goals. Achieving appropriate long-term policy signals should be the top priority and optimizing short-term dispatch should be a lower priority.

Rather than heed SCE and other parties' comments that the staff proposal is inherently incompatible with the proper functioning of the short-term CAISO market and thus should be overhauled, the Commissions should, jointly with the Air Resources Board (ARB) and CAISO, explore potential changes to the CAISO Integrated Forward Market that may be necessary under MRTU to facilitate accurate GHG emissions reporting and to provide proper market signals. NRDC/UCS agree with the Division of

Ratepayer Advocates' recommendation that the Commissions and the ARB "continue to work closely with the CAISO" to "incorporate some form of GHG emissions tracking and/or optimization in the IFM in a subsequent release of MRTU." (DRA p.12)

IV. The potential benefits and drawbacks of the "first seller" approach are beyond the scope of the reporting protocol and should be considered at a later point in this proceeding.

The ALJ Ruling on June 12, 2007, which sought comments on the staff proposal, asked parties to address whether "modifications to the Staff proposal would be needed to support implementation of...the 'first seller' structure." (June 12, 2007 ALJ Ruling p.2) Several parties interpreted this as an opportunity to advance their arguments in support of the first seller (or a generic source-based) approach, and both Southern California Edison (SCE) and Pacific Gas & Electric (PG&E) devoted the majority of their comments to touting the advantages of the first seller approach over the load-based approach that the Public Utilities Commission has favored to date.

The comments of these parties clearly stray beyond the issues presented in the both the June 12 ALJ Ruling and the staff proposal. The staff proposal clearly stated that "the issue of whether a load-based cap is the appropriate approach will be addressed elsewhere in this proceeding." (Staff proposal p.1) Accordingly, the Commissions should not consider the arguments in favor of either the first seller or load-based approach at this time, but should defer any issues that are not specifically related to reporting for subsequent discussion in this proceeding. This will allow all parties to address the complete universe of issues that arise from the different points of regulation that are contemplated by the first seller and load-based approaches. NRDC/UCS welcome the opportunity to engage in an informed discussion on the relative advantages and disadvantages of the first seller and load-based structures at that later point in time.

NRDC/UCS recognize that some changes to the staff proposal will be necessary in the event that the State chooses to adopt the first seller approach. At the same time, NRDC/UCS also emphasize that regardless of whether the first seller or load-based approach is ultimately selected, the State still faces immensely challenging and highly complex issues related to reporting and tracking of GHG emissions. NRDC/UCS are not

persuaded by parties' arguments that the use of the first seller approach would inherently resolve the majority of these reporting and tracking issues. NRDC/UCS continue to urge the Commissions and their staff to work with their counterparts in other states in the west to develop and implement a robust reporting and tracking system that is accurate and consistent across all states in the region. Such a system is critically necessary, independent of whether the State regulates electric sector emissions at the first seller or retail provider level.

V. Contrary to PG&E's claims, retail providers must report their emissions under a load-based cap. AB 32 also requires retail providers to report emissions, without reference to the point of regulation.

PG&E states that a first seller "direct reporting approach should apply regardless of whether the ultimate point of regulation under AB 32 is chosen to be the retail provider under a 'load-based cap' or the 'first seller' under the approach recommended by the Market Advisory Committee." (p. 4) In so stating, PG&E implies that even under a load-based cap, the retail providers would not be required to report their emissions. The Commissions should reject this proposal. Under a load-based cap, the retail providers are the regulated entities, and therefore must report their emissions. The regulatory principle that applies in this instance is incontrovertible: the entity that is the point of regulation and is responsible for its emissions *must* report those emissions *on which its compliance depends*.

PG&E also claims that holding retail providers responsible for reporting "may be inconsistent with the statutory requirements of AB 32, which apply to 'sources' of emissions, not to third parties who are not the sources of emissions." (p. 11) On the contrary, reporting by retail providers is entirely consistent with statute; AB 32 states that "This [reporting] requirement [accounting for greenhouse gas emissions from all electricity consumed in the state] *applies to all retail sellers of electricity*, including load-serving entities...and local publicly owned electric utilities."⁵ (emphasis added)

⁵ Health and Safety Code, Section 38530(b)(2).

VI. The concerns of possible gaming of default emission factors raised by multiple parties reinforce the importance of using ex post, rather than ex ante, emissions factors. NRDC/UCS suggest that Joint Staff catalogue examples of possible gaming and explain how their proposal would minimize “unintended consequences.”

SCE states that “under the Staff Proposal there are many options (and large economic incentives) to disguise the true GHG emissions of the California generator,” and provides several examples of the potential gaming that might occur under the staff proposal. (p. 8) In addition, the California Independent System Operator (CAISO), along with other parties, comments on the need for consistency between the default emission rates for the real-time market (RTM) and the integrated forward market (IFM), since “assigning different values for the two markets may create an incentive for parties to select one market over the other.” (p. 4) NRDC/UCS remain seriously concerned about the possibilities for gaming, as these practices could undermine the key reporting protocol criteria “minimization of unintended consequences” and “setting appropriate policy signals.” NRDC/UCS believe that ex post emissions factors will help shed light on some of these gaming activities and result in better reporting accuracy.

NRDC/UCS support DRA’s recommendation to expand the staff proposal’s “minimization of unintended consequences” criterion to “cast a wider net by addressing other risks and consequences.” (p. 5) Unintended consequences could encompass a far broader set of events than the market distortions that are described in the staff proposal, including the various examples of gaming identified by several parties. NRDC/UCS strongly recommend that Joint Staff catalogue examples of possible gaming, make appropriate changes to the proposal, and explain how the reporting proposal would minimize unintended consequences.

VII. NRDC/UCS support the recommendations of CRS and SMUD to avoid double-counting of the greenhouse gas emission attributes of renewable energy.

Several parties note that the staff proposal fails to address how the emissions of null power should be reported. NRDC/UCS agree with the Center for Resource Solution (CRS) and the Sacramento Municipal Utility District’s (SMUD) comments that the

emission benefits of renewable energy resources should not be double counted.

NRDC/UCS support CRS' recommendation to only allow reporting entities (or sellers) to report (or claim) the "net-zero emissions from the renewable energy facility if the RECs associated with the electricity generation are owned by the reporting entity [or seller] and have been retired in their appropriate WREGIS account." (p. 3-4) Null power whose RECs have been sold separately to another buyer should be attributed a non-zero GHG emissions value. NRDC/UCS believe that SMUD's proposal to assign null power with the "emission attribution of the region from which the renewable energy was generated" (SMUD, p. 8) represents a good starting point for further discussion.

VIII. NRDC/UCS agree with Calpine on the need for high default emissions factors.

NRDC/UCS agree with Calpine that default emissions factors should be set high; otherwise, "the default emissions factors that would be adopted in the Staff Proposal...would encourage high emitting sources, such as [conventional] coal fired generation, to market themselves as unspecified sources." (p. 4) Emissions proxies that are set too low will provide perverse incentives for high-emitting resources to mask themselves as unspecified sources, thereby inaccurately representing actual emissions and compromising the integrity of any GHG emissions market.

IX. NRDC/UCS disagree with CMUA's assertion that CARB and the Joint Staff should not address contract shuffling through the reporting protocols.

The California Municipal Utilities Association (CMUA) and other municipal utility representatives assert that the staff proposal's discussion and proposal to address contract shuffling concerns are excessive and unwarranted. (CMUA, pp. 3, 5-6, 8) However, as CMUA itself notes, AB 32 requires that CARB ensure that emission reductions are real. (p. 8) The Joint Staff's proposal to address contract shuffling concerns is entirely consistent with CARB's obligation to ensure the integrity of emission reductions.

X. Conclusion

NRDC/UCS commend the Joint Staff for their hard work in developing the draft reporting proposal, and urge the Commissions to adopt the recommendations described herein. NRDC/UCS look forward to continuing to work with the Commissions and other parties to refine and further develop the electricity sector reporting proposal.

Dated: July 10, 2007

Respectfully submitted,



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