## DOCKET 07-0IIP-1 DATE JUN 0 2 2008 RECD. JUN 0 2 2008

## 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 THE CALIFORNIA WIND ENERGY ASSOCIATION AND THE LARGE-SCALE SOLAR ASSOCIATION ON GREENHOUSE GAS REGULATORY STRATEGIES FOR THE ELECTRICITY AND NATURAL GAS SECTORS

#### CALIFORNIA WIND ENERGY ASSOCIATION

Nancy Rader Executive Director

Telephone: 510-845-5077 Email: nrader@calwea.org

#### LARGE-SCALE SOLAR ASSOCIATION

Shannon Eddy Executive Director

Telephone: 916-731-8371

Email: shannon@consciousventuresgroup.com

Joseph M. Karp Karleen M. O'Connor Winston & Strawn LLP 101 California Street, 39th Floor San Francisco, California 94111-5894

Telephone: (415) 591-1000
Facsimile: (415) 591-1400
Email: jkarp@winston.com

Attorneys for the California Wind Energy Association

and the Large-scale Solar Association

June 2, 2008

## 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 THE CALIFORNIA WIND ENERGY ASSOCIATION AND THE LARGE-SCALE SOLAR ASSOCIATION ON GREENHOUSE GAS REGULATORY STRATEGIES FOR THE ELECTRICITY AND NATURAL GAS SECTORS

#### I. INTRODUCTION

Pursuant to the Administrative Law Judges' Rulings issued on April 16 and April 22, 2008, and consistent with the California Public Utilities Commission's Rules of Practice and Procedure 1.9 and 1.10, and with Resolution ALJ-188, the California Wind Energy Association ("CalWEA") and the Large-scale Solar Association ("LSA") respectfully submit these comments addressing greenhouse gas ("GHG") regulatory strategies for the electricity and natural gas sectors. CalWEA's and LSA's comments focus, in particular, on whether the Public Utilities Commission and the Energy Commission should recommend adopting a specific renewable energy requirement.

Increased renewable energy requirements would employ an already-established, readily implementable and verifiable means to achieve a substantial proportion of California's GHG goals. While reducing our carbon footprint, increased renewable energy requirements would simultaneously provide the energy needed to return our economy to vibrancy, produce sustainable jobs, and contribute to the tax base. In addition, renewable energy requirements offer important "co-benefits" in pollution reduction beyond their contributions to the fight against climate change.

As renewables provide a wide array of benefits, their costs must be considered in light of their overall value, and not simply on a carbon basis. Indeed, the established regulatory regime for renewables does exactly that; the Public Utilities Commission, as discussed below,

comprehensively oversees the reasonableness of all renewables costs by assessing their energy value, their GHG contribution, and their co-benefits. The cost of renewables as a carbon-reduction tool, after their energy and other co-benefits values are subtracted, could be minimal or even negative depending on events over the next decade; continuing regulatory cost-control oversight will ensure that it remains cost-effective as future conditions develop.

A comprehensive approach to renewables is fundamentally important if they are to play a significant part in GHG reduction. Renewables are a capital-intensive industry with long-term planning needs, both for the facilities themselves and the transmission infrastructure necessary to support them. It is unrealistic to expect the substantial investment needed for renewables to exceed the current 20% target based on a brand new pricing signal from a yet-to-be established cap-and-trade system, which, based on the experience of other markets, is certain to be somewhat volatile in its fledgling years. A strong commitment to a set renewables percentage is necessary to spur this investment, although, as is the case today, reasonable cost controls must be an integral part of that commitment. Continued RPS-specific cost-control measures, taking into consideration all of renewables' benefits, will not only ensure that costs are proportional to those overall benefits; they will also assure investors of the long-term stability and sustainability of the program. The Public Utilities Commission and the Energy Commission should therefore strongly recommend a specific renewable energy requirement as a swift, sure means of achieving carbon reductions with a highly favorable cost-benefit balance.

In these comments, CalWEA and LSA explain why establishing a 33%-by-2020 RPS as part of the ARB's Scoping Plan would (i) provide cost-controlled carbon reductions that convey benefits beyond those addressed through a carbon-only cap-and-trade program, and (ii) be reliably achieved through an established regulatory infrastructure while measures needed to support alternative carbon-reduction approaches are discussed, designed, approved and implemented. CalWEA and LSA also comment on how a portion of the proceeds from the auctioning of emission allowances could be used in conjunction with a 33%-by-2020 RPS.

#### II. DISCUSSION

## A. The Joint Decision & Contribution of Renewable Energy Requirements

In March, the Public Utilities Commission and the Energy Commission adopted a joint decision<sup>1</sup> ("Joint Decision") recommending that, in implementing AB 32, the Air Resources Board ("ARB") adopt a mix of mandatory regulatory requirements for the electricity and natural gas sectors together with a cap-and-trade system for the electricity sector with some auctioning of emission allowances. Since that time, a number of workshops were held to consider remaining policy issues for the electricity and natural gas sectors, including a May 2 workshop covering the topic of renewable energy and related transmission issues, among other issues.

In the Joint Decision, the two Commissions concluded that all retail electricity providers (including Investor-Owned Utilities ("IOUs"), Publicly-Owned Utilities ("POUs"), Electric Service Providers ("ESPs"), and Community Choice Aggregators ("CCAs")) should be required to go beyond the current 20% Renewables Portfolio Standard ("RPS") requirement, rejecting the suggestion of some parties that renewable energy requirements should be replaced by an AB 32 cap. The Commissions left the exact percentage requirements or deadlines open for consideration, however, pending further analysis. (Joint Decision at p. 4.)

The Joint Decision recommends that the Energy Commission, the Public Utilities Commission, and the ARB jointly seek legislation "that requires retail electricity providers to obtain a greater proportion of their power from renewables by a date certain, 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)." (Joint Decision at p. 35.)

The Joint Decision explained further that mandatory regulatory programs must be used *in tandem* with cap-and-trade, particularly in initial years as the cap-and-trade program is developed and tested in the complex, multi-sector environment:

While we fundamentally favor a certain minimum level of mandatory reductions from existing programs ...[such as the RPS], a cap-and-trade system in combination with these mandatory reductions should be able to produce the GHG emissions reductions required by AB 32 at a lower cost than sole reliance on additional mandatory reductions. ... The additional

<sup>&</sup>lt;sup>1</sup> Public Utilities Commission Decision D.08-03-018 (adopted March 13, 2008) and Energy Commission Interim Decision CEC-100-2008-002-F (adopted March 12, 2008), respectively.

reductions due to a cap-and-trade system from the electricity sector will likely be small beginning in 2012, but may expand as experience with the mechanism and compliance obligations increase over the AB 32 time period. ... This opportunity to gain experience with the cap-and-trade mechanism, in addition to finding real least-cost reductions, is a major reason for our recommendation to proceed now with cap-and-trade for the electricity sector. (Joint Decision at p. 39.)

The Commissions have thus clearly recognized the advantage for carbon reduction of pairing mandatory regulatory programs with market-based measures, particularly during the developmental stages of the market-based approaches. Renewables, with their significant long-term investment and planning needs, are best suited for the mandatory regulatory approaches, at least until such time as the market-based approaches have achieved a robust, steady state sufficient to foster infrastructure planning and development.

#### B. All Renewables Costs—Including Carbon Reduction Costs are Kept Reasonable by the Public Utilities Commission in a Comprehensive Fashion

Renewables, unlike many other carbon emission-reduction strategies, are engines for producing valuable products needed for a healthy economy—*i.e.*, the products collectively referred to as energy.<sup>2</sup> In addition, renewables produce other economic and environmental benefits. Renewables' carbon-reduction function is thus only one of many values that renewables provide; to isolate the cost of their carbon-reduction function, the value of those other benefits must first be subtracted from renewables' total costs. Under the current regulatory paradigm, the reasonableness of renewables' total costs is comprehensively assessed by the Public Utilities Commission through evaluation of three categories of "products": the reasonable cost for the greenhouse gas reduction function is modeled through a greenhouse gas ("GHG") "adder"; the reasonable cost for energy products is modeled by the Market Price Referent ("MPR"), less the greenhouse gas adder: and the reasonable cost for co-benefits is now

<sup>&</sup>lt;sup>2</sup> For purposes of this discussion, energy is treated as a single product, although in reality it consists of energy, capacity and ancillary services.

<sup>&</sup>lt;sup>3</sup> In Decision D.07-09-024, the Public Utilities Commission adopted the use of a temporary GHG adder in calculating the 2007 MPR, as a proxy for the cost of the GHG allowances that the MPR proxy gas plant would need to purchase under AB 32. The Commission directed further that consideration be given to the GHG adder in the 2008 MPR and later years; accordingly, the GHG adder component of the 2008 MPR is presently being evaluated in Rulemaking 06-02-012.

<sup>&</sup>lt;sup>4</sup> The MPR represents the market cost of energy, which the Commission has determined, at present, to be based on the costs of a proxy natural gas-fired combined-cycle turbine. Time of Delivery ("TOD") factors are applied to the MPR to produce a market price for different products including baseload, peaking, and as-available output.

addressed through the Above-Market Funds ("AMFs").<sup>5</sup> This regulatory paradigm, under existing Public Utilities Commission's jurisdiction, assures that the RPS will be both cost-effective and just and reasonable not only for carbon reduction, but as a means of producing energy and co-benefits.<sup>6</sup> To determine the reasonable cost of renewables as a carbon-reduction tool relative to other alternatives, only the greenhouse gas adder should be considered; the remainder of renewables' values should be viewed as bearing their own costs.

Since renewables will be subject to regulatory oversight to ensure that they remain cost-effective on an overall basis, the renewables target should be based on potential feasibility, rather than on a projection from models that cannot be relied upon to predict the overall future costs and values associated with renewables (indeed, as shown in the Section VI, the E3 model dramatically undervalues energy and thus overestimates the cost of renewables).

## C. Renewables Require Long-Term Investments, Planning & Stability, and Promise a Return of Expedited, Enhanced Carbon Reductions

The current 20% RPS target has created substantial new development activity – to wit, many national and international development companies that were not active in California prior to the passage of SB 1078 in 2002 are now actively developing projects in and around the state. The RPS program has produced contracts for thousands of megawatts of capacity from a diverse set of technologies with reputable developers, a substantial mark of success that promises more to come.

Some question the success of RPS, as relatively few projects have been built thus far. The most significant barriers to expedited construction, however, are transmission and land-use policies, which continue to be addressed through focused efforts such as the Renewable Energy Transmission Initiative. Developers have thus far been willing to undertake the difficulties and substantial costs associated with these transmission and land-use issues due to the strength of California's commitment to the 20% renewable energy goal. In other words, it has only been California's commitment to a set percentage of renewable energy that has provided developers

<sup>&</sup>lt;sup>5</sup> The AMFs supersede the "supplemental energy payments" that previously derived from the "Public Goods Charge" – a line-item charge on utility bills. The AMFs derive directly from utility consumers and are tracked by the IOUs and the Public Utilities Commission.

<sup>&</sup>lt;sup>6</sup> The Public Utilities Commission's ongoing jurisdiction provides assurance that reasonable renewables costs will keep pace—whether upwards or downwards—as the value of the products they provide change. Under the current paradigm, for example, the Public Utilities Commission revisits the MPR annually, adjusting its value in accordance with the market price of energy.

with confidence that a market will exist for their products at a price that will reward their investment and their efforts to overcome current obstacles.

As California's firm commitment is needed to spur renewables development, renewables should be thought of as a foundation to which other carbon-reduction strategies will be added, rather than as an element that should compete for revenues in a cap-and-trade paradigm. The pricing signals sent by cap-and-trade cannot be expected to incent developers to overcome the transmission and land use issues facing renewables today, let alone to drive the long-term capital investments required for significant energy production. Capital investments in energy production, especially after the boom-and-bust California has experienced the energy sector, presently require long-term commitments; although energy market pricing signals may someday provide sufficient stimulus for merchant investment, those market signals cannot be expected to drive capital-intensive investment until they are proven to be robust, stable and reasonably predictable.<sup>7</sup> It will take some time after cap-and-trade has been established before the market will venture to invest on its strength.

Due to the capital intensity and long-term planning needs of renewables, the theoretical contribution that renewables could provide over the current 20% requirement simply will not become a reality in time to contribute to the 2020 goal if cap-and-trade revenues are driver for renewables development, rather than a set renewables percentage. Renewables require considerable lead time, as does the associated transmission development needed to deliver renewable energy (as discussed in the next section). Under a scenario in which renewables development above 20% is dependent on cap-and-trade revenues, renewables development would not even begin to any significant degree until after a cap-and-trade program has become mature enough to support investment—likely years after the program has been designed, approved, and first implemented.

Recognizing the need to address renewables outside of the cap-and-trade framework, at least until cap-and-trade has reached maturity, will have an additional and substantial benefit: it will diversify the "portfolio" of carbon-reduction incentives, ensuring that fluctuations in carbon-trading pricing, which can be expected based on the experience of other such programs, do not

<sup>&</sup>lt;sup>7</sup> For detailed discussions of the limitations of short-term market pricing signals in stimulating new energy resource development and the long-term certainty needed for such investment, see "California Public Utilities Commission Staff Recommendations on Capacity Market Structure: A Report on the August 2007 Workshops in Collaboration with the CAISO,"(Jan. 2008)(issued in Public Utilities Commission Docket No. R.05-12-013), *available at* http://docs.cpuc.ca.gov/word\_pdf/REPORT/77949.pdf.

undermine the progress needed to achieve carbon-reduction goals. As discussed above, renewables would be assured to be cost-effective under a regulatory oversight program that comprehensively considers *all* of the products renewables provide-- energy, GHG and RPS cobenefits. To the extent that the achievable quantity of cost-effective renewables exceeds the amount that carbon-focused modeling would predict, the "extra" renewables would provide, at worst, a margin of error for other efforts intended to achieve AB 32 goals and, at best, would achieve earlier or greater carbon reductions over the targets, all at a price that is just and reasonable considering everything that the RPS provides to California. This would be an excellent outcome in the face of the threat of climate change, and would pave the way toward achieving the AB 32 goals for 2050. Therefore, the Commissions can confidently recommend to the ARB that it adopt a 33%-by-2020 RPS as one of the core measures of the AB 32 Scoping Plan.

#### D. An Express 33% RPS Target is Necessary to Drive the Transmission Expansion California Needs to Achieve a 33% RPS Goal

As important as an express 33% RPS target is to renewable project development, it is perhaps even more so as a driver for the transmission planning and build-out needed to deliver of that renewable energy. Even with the 20% RPS goal having been established five years ago, the state is still substantially lagging in planning for—let alone building—the necessary transmission infrastructure for that smaller quantity of renewable energy. If an express 33% RPS target is not established, there is every reason to be pessimistic that the 33% RPS goal could be achieved, due to lack of supporting transmission—regardless of whether that much new renewable procurement is necessary to achieve AB 32 goals (as was indicated in the 2006 Climate Action Team Report to the Governor and Legislature).

Under the reformed generation interconnection and transmission planning process that the CAISO is now undertaking to design, developers will be required to post very substantial deposits to obtain transmission cost studies and upon signing an interconnection agreement to obtain the necessary transmission upgrades. Given the five to seven years' lead time that it takes to plan, permit and construct transmission, much of the planning and deposits must be accomplished within the next few years in order to achieve the 33% RPS target over the next

<sup>&</sup>lt;sup>8</sup> Available at http://www.climatechange.ca.gov/climate\_action\_team/index.html.

decade. Without signed long-term power purchase agreements or the strong prospect of such, developers will not make the quantity of investments needed to achieve a 33% goal, and the necessary transmission upgrades will not be made. Thus, to achieve the renewables level that will be required to attain the AB 32 goals, it will be necessary to establish a 33%-by-2020 RPS target as a "core measure" of the ARB Scoping Plan this year. Waiting for a cap-and-trade program to become sufficiently robust to support investment will push additional renewables investment and the transmission infrastructure needed to support it too far into the future to contribute to the 2020 AB 32 goals.

## E. The E3 Model Misstates Renewables' Value, Overstating the Cost of a 33% Target

CalWEA and LSA have conducted a detailed review of the E3 calculator used to model the 33% RPS scenario. The conclusions of the E3 calculator appear to be in error, in significant part due to faulty assumptions on the relative costs of gas-fired and renewable generation. CalWEA and LSA are confident that, far from the relatively high cost per metric ton ("tonne") predicted by the E3 model for a 33% RPS, the carbon reduction component of RPS costs may well approach zero— and could possibly even become negative; in other words, the carbon reduction may come at no additional cost, and may even save money relative to gas-fired generation.

The E3 model shows a large margin between renewable resource costs and the alternative costs of gas-fired generation. In the 33% RPS case, the incremental costs for renewable resources are \$135 per MWh. In comparison, the model assumes gas-fired power is available for about half that price, \$69 per MWh. Such a large difference in costs is not reasonable, and is the product of erroneous assumptions.

The 2007 CEC Intermittency Analysis Project ("IAP") report found that there is sufficient flexible capacity on the California grid to accommodate 33% renewables, but that this capability is not necessarily being used. Note that establishing an express 33% RPS target will put greater emphasis on the need to plan the rest of the system accordingly – e.g., deterring utility commitments to fossil fuel resources that will be unnecessary with 33% renewables, and optimizing the use of existing system resources (including hydro, pumped hydro storage, and dispatchable fossil fuel resources as well as some large loads), allowing for optimized renewable resource integration that can reduce both the carbon footprint and the cost of the energy system.

**Table 1:** E3 Model Assumed Renewable Costs in 2008 \$ (\$/MWh)

	Fixed Cost	Variable	Transmission	Total
Renewables	\$109	\$14	\$12	\$135
Gas-fired	\$15	\$54	\$0	\$69
Difference				\$66

CalWEA and LSA first note that, if the average price of a new renewable resource were equal to the cost of incremental gas-fired generation, as measured by the all-in costs of the combined-cycle gas turbine ("CCGT") plant that is the basis for the Public Utilities

Commission's MPR, there would be *no* additional costs for renewable resources, and the cost per tonne for GHG reductions from incremental renewables would thus equal zero (i.e., their energy products would be provided carbon-free, at no additional cost). CalWEA and LSA show below the adopted 2007 MPR for a 20-year contract starting in 2008, excluding the GHG adder, in comparison to the same renewable costs. All costs are in 2008 dollars. The difference is then \$44 per MWh, which is 33% lower than the E3 calculation. This comparison strongly suggests that the E3 calculator exaggerates the cost difference between renewable and gas-fired resources.

**Table 2:** E3 Model Assumed Renewable Costs vs. the 2007 MPR, in 2008 \$ (\$/MWh)

	Fixed Cost	Variable	Transmission	Total
Renewables	\$109	\$14	\$12	\$135
Gas-fired (2007 MPR)	\$27	\$65	\$0	\$91
Difference				\$44

CalWEA and LSA's review has identified the following problems with E3's calculator:

- Starting natural gas price. Natural gas prices today are above \$10 per MMBtu at the California border. E3 uses a gas price of \$7.85 per MMBtu for the cost of fuel. If the cost of gas is increased to \$10 per MMBtu, the cost of GHG reductions from a 33% RPS decreases from \$133 to \$106 per tonne.
- Constant real cost of fossil fuel. The E3 model uses a constant real cost of natural gas (\$7.85 per MMBtu) for the entire 2008 2020 period. The capital costs for new generation also are expressed in constant 2008 dollars. These assumptions do not consider the likelihood that natural gas prices and generation capital costs will escalate at

significantly different rates. In the 18 years since 1989, natural gas prices at the California border have escalated by 6.4% per year, while general inflation has averaged 2.9%. In the long-run, fossil fuel prices can be expected to exhibit a positive real escalation rate, as they become increasingly difficult to find and produce. In addition, the structure of the E3 model does not recognize the potential for renewable resource costs to decline over time, as renewable technologies improve. These differential escalation rates become particularly significant over the multi-decade timeframe in which the GHG reduction program will operate. *Indeed, one of the primary benefits of renewables is that they substitute capital costs for fuel costs, and are a long-term hedge against future fuel price escalation.* The E3 model's use of constant, 2008 dollar costs in all years ignores these significant benefits of renewables. CalWEA and LSA have re-run the E3 calculator, assuming that a natural gas price of \$10 per MMBtu in 2008 increases at the historical long-term real escalation rate of 3.5%; using this rate, the natural gas price would exceed \$15 per MMBtu in 2020. This change in the profile of natural gas prices used in the E3 calculator results in a GHG mitigation cost for a 33% RPS of \$43 per ton.

- Too-low market heat rates and electricity market prices that are inconsistent with the MPR methodology. The electricity market prices used in the model average \$54 per MWh. Assuming variable O&M of \$2.50 per MWh in the market price and dividing the remainder by the gas price results in a market heat rate of approximately 6,600 Btu/kWh. This is 5% below the "clean & new" heat rate of a new CCGT, and is inconsistent with typical market heat rates of 8,000 Btu per kWh observed in the California wholesale market in recent years— and thus with the assumptions underlying the Public Utilities Commission's MPR, which is based on a new CCGT. CalWEA and LSA used a market heat rate of 8,000 Btu per kWh to re-calculate electric market prices in the E3 calculator. This change, plus the gas price scenario described above (\$10 per MMBtu in 2008; \$15 per MMBtu in 2020), reduced the GHG mitigation cost for a 33% RPS to a negative \$11 per ton— i.e., renewables would provide carbon reductions at an overall cost savings, not at any additional expense.
- Avoided capacity costs fail to consider renewables longevity. The E3 model shows that a 33% RPS will not just avoid new CCGTs, but that the added renewable capacity also will displace existing CCGT capacity. The model thus limits the capacity costs that renewables avoid because 76% of the displaced CCGTs in 2020 are assumed to be existing units. However, the model ends in 2020, and the renewable capacity added between 2008 2020 will operate for 30 years. Even if new renewables initially displace existing generation, over time they will displace other new generation that would have been needed as loads grow. As a result, the E3 model's calculation of the capacity costs avoided by a 33% RPS is understated. This is a structural failure of the E3 calculator that cannot be remedied simply by changing input assumptions, but that artificially inflates the perceived cost of a 33% renewables scenario.

<sup>&</sup>lt;sup>6</sup> In 1989, southern California border natural gas prices averaged \$2.11 per MMBtu; in 2007 they averaged \$6.42 per MMBtu. General inflation is based on the GDP price deflator.

• Transmission cost estimates are too high and are not properly allocated. The assumed transmission cost difference between gas-fired and renewable resources is inappropriately inflated. While gas-fired resources may be located closer to load centers than some renewable resources, it is improper— and unfair— to look at transmission only on the renewable side. In addition, transmission built to bring renewable power to market will have network benefits as a result of eliminating existing and future congestion within California and increasing the state's capacity to import power. For example, the 4,500 MW Tehachapi transmission project will relieve north-south transmission constraints on Path 26. Thus, at a minimum, transmission cost adders should be net of system benefits and of transmission upgrades for gas-fired generation. Finally, the model allocates transmission costs to renewables only in the 33% RPS case; such costs also should be allocated to the reference case—it is improper to allocate the entire cost of transmission on renewables to the 33% case. These are again structural failures of the E3 calculator that cannot be remedied simply by changing input assumptions, but that artificially inflate the perceived cost of a 33% renewables scenario.

CalWEA and LSE appreciate E3's candid comment, on Slide 27 of its May 6 workshop presentation, that its GHG calculator "should not be used for resource planning decisions." The deficiencies noted above simply reinforce this point. Clearly, the Commissions should first recognize that re-running the E3 calculator with more appropriate assumptions results in a *negative* cost for the renewables' carbon-reduction function— *before* accounting for the other errors that would require reprogramming the model. The Commissions, following the E3 caveat and in light of these concerns, should not look to the E3 model in making a determination on the appropriate percentage of renewables, but should rather select the maximum feasible renewables contribution conditioned on the continued regulatory cost control measures that will ensure renewables remain cost-effective overall.

F. The Co-Benefits of Renewables Can Be Reflected in the "Above-Market Fund," Which Could be Supplied by a Portion of Auction Revenues [Responds to ALJ Questions 10 & 11]

AB 32 requires the ARB to adopt regulations "to achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions," and further requires the ARB to consider the "co-benefits" of regulation. These co-benefits include the "overall societal benefits including reductions in other air pollutants, diversification of energy sources and other economic, environmental and public health benefits."

Health and Safety Code § 38562(b)(6).

Renewables provide a variety of co-benefits, including, but not limited to, the avoided security and environmental risks of LNG shipment and import infrastructure; avoided environmental impacts and fossil fuel use associated with the extraction, production and transportation of fossil fuels; reduction in air, water, and solid waste emissions relative to fossil-fuel powered energy plants; health benefits, and rural economic development benefits. The cost of those benefits can be provided through AMFs, to the extent that they are paid for and not already incorporated, under the current regulatory paradigm, in the MPR. Presently, the AMF derives from ratepayers as the utilities pass along the above-market costs of RPS contracts. In the Joint Decision, one of the two methods for returning revenues from allowance auctions to benefit electricity consumers identified by the Commission was the augmentation of investments in energy efficiency and renewable power. Using auction revenues to either supply all or a portion of the AMFs would benefit ratepayers through offsetting the charges that they would otherwise pay for these valuable benefits.

### G. Establishing a 33%-by-2020 RPS Is Consistent with the ARB's Priorities

At the May 19, 2008, Scoping Plan Workshop, the ARB identified criteria for crafting a "preferred approach" to its Scoping Plan.<sup>13</sup> Establishing a 33% RPS will meet a number of these criteria:

#### • Meet the Key Scoping Plan Objectives:

o Achieve the target for 2020. Establishing a 33%-by-2020 express RPS target now will promote the development of whatever amount of renewables prove to be cost-effective, and the transmission needed to support it. Unlike cap-and-trade, the RPS program is already established and functioning smoothly (although additional work will be required to apply RPS equally to the POUs).

<sup>&</sup>lt;sup>11</sup> Although the MPR reflects the cost of a gas plant that uses SCR technology and purchases offsets for those air emissions for which offsets are available, it does not address environmental and/or health impacts from remaining emissions, including those not currently or fully regulated.

See n.11, supra. Note also that the MPR is time-differentiated to account for the value of power during peak periods. We believe that some of these factors are significantly under-valued in the current MPR, and that PG&E's TOD factors are too low. These factors should be fully valued in the MPR methodology rather than be accounted for through AMFs.

<sup>&</sup>lt;sup>3</sup> See <a href="http://www.arb.ca.gov/cc/scopingplan/meetings/051908/5">http://www.arb.ca.gov/cc/scopingplan/meetings/051908/5</a> 19 spwrkshop slides am.pdf.

- o Maximize economic benefits and minimize economic harm. Along with energy and capacity to support the state's economic activity, promoting renewables will bring jobs and tax base to the state and its rural communities.
- Maximize societal benefits, including environmental and public health cobenefits. Replacing fossil-fueled energy production with renewable generation will provide a wide array of environmental, public health and economic benefits, as discussed above.
- Assure that emissions reductions required of each sector are equitable.
   Establishing a 33% RPS will increase the likelihood that the electric sector is achieving its full, cost-effective potential for emissions reduction.
- o **Provide leadership and influence other Governments.** More than 20 other states have established RPS requirements, including most of the WECC states, as do many other countries. Raising the goal as part of achieving GHG targets will encourage these states, and the world, to follow California's lead and adopt yet another suite of California-developed technologies.

#### • Consider additional factors, such as:

- o **Ability to enforce reductions.** RPS compliance is readily verifiable and enforceable upon IOUs, ESPs and CCAs by the Public Utilities Commission. The Energy Commission must be given similar authority over the POUs.
- O Durability and flexibility in program implementation. The RPS contains established flexibility provisions both energy delivery and compliance timing flexibility— and is likely to be made more flexible through unbundled tradable Renewable Energy Credits ("RECs"). The combination of a firm target, qualified only by continued cost-effectiveness oversight, provides the strength of commitment needed for development while remaining sufficiently flexible to ensure costs remain manageable and appropriate to the benefits received.

#### III. CONCLUSION

The renewables contribution needed to attain the AB32 2020 goals can only be obtained through a firm, 33% RPS-by-2020 commitment. The ongoing regulatory oversight to ensure that renewables are cost-effective, considering all of the products and benefits they convey, is the appropriate counterbalance to that firm commitment. The combination of a set percentage and regulatory cost oversight is a far better fit to the long-term capital-intensive investment needed for renewable development than a fledgling cap-and-trade program, which simply cannot be expected to provide the necessary incentives for renewable development. By building on the

increasing success of the RPS program to date, a 33% RPS-by-2020 commitment will provide a firm cornerstone of California's carbon reduction program, allowing for a greater degree of flexibility and experimentation in the cap-and-trade component and ultimately a stronger and more reliable carbon reduction program overall.

Respectfully submitted,

#### CALIFORNIA WIND ENERGY ASSOCIATION

Nancy Rader Executive Director

Telephone: 510-845-5077 Email: <u>nrader@calwea.org</u>

#### LARGE-SCALE SOLAR ASSOCIATION

Shannon Eddy Executive Director

Telephone: 916-731-8371

Email: shannon@consciousventuresgroup.com

Joseph M. Karp Karleen M. O'Connor Winston & Strawn LLP 101 California Street, 39th Floor San Francisco, California 94111-5894 Telephone: (415) 591-1000

Facsimile: (415) 591-1400
Email: jkarp@winston.com

Attorneys for the California Wind Energy Association and Large-Scale Solar Association

#### Certificate of Service

I hereby certify that I have this day served a copy of the

## COMMENTS OF THE CALIFORNIA WIND ENERGY ASSOCIATION AND THE LARGE-SCALE SOLAR ASSOCIATION ON GREENHOUSE GAS REGULATORY STRATEGIES FOR THE ELECTRICITY AND NATURAL GAS SECTORS

on all known parties to R.06-04-009 (as well as by email under CEC Docket No. 07-OIIP-01 to <a href="mailto:docket@energy.state.ca.us">docket@energy.state.ca.us</a> and <a href="mailto:kgriffin@energy.state.ca.us">kgriffin@energy.state.ca.us</a>) by sending a copy via electronic mail and by mailing a properly addressed copy by first-class mail with postage prepaid to each party named in the official service list without an electronic mail address.

Executed on June 2, 2008, at San Francisco, California.

Marcus Russo



#### CALIFORNIA PUBLIC UTILITIES COMMISSION **Service Lists**

PROCEEDING: R0604009 - CPUC - PG&E, SDG&E, FILER: CPUC - PG&E, SDG&E, SOCALGAS, EDISON

LIST NAME: LIST

LAST CHANGED: MAY 28, 2008

#### DOWNLOAD THE COMMA-DELIMITED FILE ABOUT COMMA-DELIMITED FILES

**Back to Service Lists Index** 

#### **Parties**

DAN HECHT SEMPRA ENERGY 58 COMMERCE ROAD STANFORD, CT 06902 CINDY ADAMS COVANTA ENERGY CORPORATION 40 LANE ROAD FAIRFIELD, NJ 07004 FOR: COVANTA ENERGY CORPORATION

STEVEN S. SCHLEIMER DIRECTOR, COMPLIANCE & REGULATORY AFFAIRS MORGAN STANLEY CAPITAL GROUP INC. BARCLAYS BANK, PLC 200 PARK AVENUE, FIFTH FLOOR NEW YORK, NY 10166 FOR: BARCLAYS CAPITAL

STEVEN HUHMAN 2000 WESTCHESTER AVENUE PURCHASE, NY 10577

RICK C. NOGER PRAXAIR PLAINFIELD, INC. 2711 CENTERVILLE ROAD, SUITE 400 WILMINGTON, DE 19808 FOR: PRAXAIR PLAINFIELD, INC.

KEITH R. MCCREA ATTORNEY AT LAW SUTHERLAND, ASBILL & BRENNAN, LLP 1275 PENNSYLVANIA AVE., N.W. WASHINGTON, DC 20004-2415 FOR: CALIFORNIA MANUFACTURERS & TECHNOLOGY ASSN.

KYLE D. BOUDREAUX FPL GROUP 700 UNIVERSE BLVD., JES/JB JUNO BEACH, FL 33408 FOR: FPL ENERGY PROJECT MANAGEMENT CATHY S. WOOLLUMS MIDAMERICAN ENERGY HOLDINGS COMPANY 106 EAST SECOND STREET DAVENPORT, IA 52801 FOR: KERN RIVER GAS TRANSMISSION

CYNTHIA A. FONNER SENIOR COUNSEL CONSTELLATION ENERGY GROUP INC 500 WEST WASHINGTON ST, STE 300 THOMAS DILL PRESIDENT LODI GAS STORAGE, L.L.C. 1021 MAIN ST STE 1500

CHICAGO, IL 60661

FOR: CONSTELLATION ENERGY GROUP INC

HOUSTON, TX 77002-6509

E.J. WRIGHT

OCCIDENTAL POWER SERVICES, INC.

5 GREENWAY PLAZA, SUITE 110

HOUSTON, TX 77046

TIMOTHY R. ODIL MCKENNA LONG & ALDRIDGE LLP

1875 LAWRENCE STREET, SUITE 200

DENVER, CO 80202

FOR: CENTER FOR ENERGY AND ECONOMIC

DEVELOPMENT

STEPHEN G. KOERNER, ESQ.

EL PASO CORPORATION

WESTERN PIPELINES

2 NORTH NEVADA AVENUE

COLORADO SPRINGS, CO 80903

FOR: EL PASO NATURAL GAS COMPANY/MOJAVE

PIPELINE COMPANY

JENINE SCHENK

APS ENERGY SERVICES

400 E. VAN BUREN STREET, SUITE 750

PHOENIX, AZ 85004

FOR: APS ENERGY SERVICES COMPANY

JOHN B. WELDON, JR.

SALMON, LEWIS & WELDON, P.L.C.

2850 EAST CAMELBACK ROAD, SUITE 200

PHOENIX, AZ 85016

FOR: SALT RIVER PROJECT AGRICULTURAL

IMPROVEMENT AND POWER DISTRICT

KELLY BARR

MANAGER, REGULATORY AFFAIRS & CONTRACTS

SALT RIVER PROJECT

PO BOX 52025, PAB 221

PHOENIX, AZ 85072-2025 FOR: SALT RIVER PROJECT AGRICULTURAL

IMPROVEMENT AND POWER DISTRICT

ROBERT R. TAYLOR

1600 NORTH PRIEST DRIVE, PAB221

TEMPE, AZ 85281

STEVEN S. MICHEL

AGRICULTURAL IMPROVEMENT AND POWER DIST. WESTERN RESOURCE ADVOCATES

2025 SENDA DE ANDRES

SANTA FE, NM 87501 FOR: WESTERN RESOURCE ADVOCATES

ROGER C. MONTGOMERY

VICE PRESIDENT, PRICING

SOUTHWEST GAS CORPORATION PO BOX 98510

LAS VEGAS, NV 89193-8510

JOSEPH GRECO

TERRA-GEN POWER LLC

9590 PROTOTYPE COURT, SUITE 200

RENO, NV 89521

FOR: TERRA-GEN POWER LLC

LORRAINE PASKETT

DIRECTOR, LEGISLATIVE AND REG. AFFAIRS LOS ANGELES DEPARTMENT OF WATER & POWER

LA DEPT. OF WATER & POWER

111 N. HOWARD ST., ROOM 1536

LOS ANGELES, CA 90012 FOR: LOS ANGELES DEPT OF WATER AND POWER AND POWER

RONALD F. DEATON

111 NORTH HOPE STREET, ROOM 1550

LOS ANGELES, CA 90012

FOR: LOS ANGELES DEPARTMENT OF WATER

SID NEWSOM

TARIFF MANAGER

SOUTHERN CALIFORNIA GAS COMPANY

555 WEST 5TH STREET GT 14 D6

LOS ANGELES, CA 90051

DAVID L. HUARD ATTORNEY AT LAW

MANATT, PHELPS & PHILLIPS, LLP

11355 WEST OLYMPIC BOULEVARD

LOS ANGELES, CA 90064 FOR: LOS ANGELES COUNTY/TRANS CANADA

PIPELINES

CURTIS L. KEBLER

J. ARON & COMPANY

SUITE 2600

2121 AVENUE OF THE STARS

LOS ANGELES, CA 90067

FOR: J. ARON

LOS ANGELES, CA 90067

NORMAN A. PEDERSEN

ATTORNEY AT LAW

HANNA AND MORTON. LLP 444 SOUTH FLOWER STREET, NO. 1500

LOS ANGELES, CA 90071

FOR: SOUTHERN CALIFORNIA GENERATION

DENNIS M.P. EHLING ATTORNEY AT LAW

KIRKPATRICK & LOCKHART NICHOLSON GRAHAM 10100 SANTA MONICA BLVD., 7TH FLOOR

FOR: CITY OF VERNON

MICHAEL MAZUR 3 PHASES RENEWABLES, LLC

2100 SEPULVEDA BLVD. STE 37

MANHATTAN BEACH, CA 90266

FOR: 3 PHASES ENERGY SERVICES

COALITION/SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY

VITALY LEE
AES ALAMITOS, LLC
690 N. STUDEBAKER ROAD
LONG BEACH, CA 90803
FOR: AES SOUTHLAND LLC

GREGORY KLATT
ATTORNEY AT LAW
DOUGLASS & LIDDELL
411 E. HUNTINGTON DRIVE, STE. 107-356
ARCADIA, CA 91006
FOR: ALLIANCE FOR RETAIL ENERGY MARKETS

DANIEL W. DOUGLASS
ATTORNEY AT LAW
DOUGLASS & LIDDELL
21700 OXNARD STREET, SUITE 1030
WOODLAND HILLS, CA 91367
FOR: WESTERN POWER TRADING FORUM

BARRY R. WALLERSTEIN
EXECUTIVE OFFICER
SOUTH COAST AQMD
21865 COPLEY DRIVE
DIAMOND BAR, CA 91765-4182
FOR: SOUTH COAST AIR QUALITY MANAGEMENT
DISTRICT

CATHY A. KARLSTAD
SOUTHERN CALIFORNIA EDISON COMPANY
2244 WALNUT GROVE AVE.
ROSEMEAD, CA 91770
FOR: SOUTHERN CALIFORNIA EDISON COMPANY

RONALD MOORE
GOLDEN STATE WATER/BEAR VALLEY ELECTRIC
630 EAST FOOTHILL BOULEVARD
SAN DIMAS, CA 91773
FOR: GOLDEN STATE WATER/BEAR VALLEY
ELECTRIC

ALLEN K. TRIAL SAN DIEGO GAS & ELECTRIC COMPANY 101 ASH STREET, HQ-12 SAN DIEGO, CA 92101

DANIEL A. KING SEMPRA ENERGY 101 ASH STREET, HQ 12 SAN DIEGO, CA 92101

THEODORE ROBERTS
SEMPRA ENERGY SOLUTIONS
101 ASH STREET, HQ 13D
SAN DIEGO, CA 92101-3017
FOR: SEMPRA GLOBAL/SEMPRA ENERGY
SOLUTIONS

TIFFANY RAU
POLICY AND COMMUNICATIONS MANAGER
CARSON HYDROGEN POWER PROJECT LLC
ONE WORLD TRADE CENTER, SUITE 1600
LONG BEACH, CA 90831-1600
FOR: CARSON HYDROGEN POWER PROJECT LLC

RICHARD HELGESON
SOUTHERN CALIFORNIA PUBLIC POWER AUTHORI
225 S. LAKE AVE., SUITE 1250
PASADENA, CA 91101
FOR: SOUTHERN CALIFORNIA PUBLIC POWER
AUTHORITY

PAUL DELANEY
AMERICAN UTILITY NETWORK (A.U.N.)
10705 DEER CANYON DRIVE
ALTA LOMA, CA 91737
FOR: AMERICAN UTILITY NETWORK

AKBAR JAZAYEIRI
DIR. REVENUE & TARIFFS, RM 390
SOUTHERN CALIFORNIA EDISON COMPANY
PO BOX 800, 2241WALNUT GROVE AVE
ROSEMEAD, CA 91770
FOR: SOUTHERN CALIFORNIA EDISON COMPANY

LAURA I. GENAO SOUTHERN CALIFORNIA EDISON PO BOX 800, 2244 WALNUT GROVE AVENUE ROSEMEAD, CA 91770 FOR: SOUTHERN CALIFORNIA EDISON

DON WOOD PACIFIC ENERGY POLICY CENTER 4539 LEE AVENUE LA MESA, CA 91941

ALVIN PAK SEMPRA GLOBAL ENTERPRISES 101 ASH STREET SAN DIEGO, CA 92101 FOR: SEMPRA GLOBAL ENTERPRISES

SYMONE VONGDEUANE SEMPRA ENERGY SOLUTIONS 101 ASH STREET, HQ09 SAN DIEGO, CA 92101-3017 FOR: SEMPRA ENERGY SOLUTIONS

DONALD C. LIDDELL
DOUGLASS & LIDDELL
2928 2ND AVENUE
SAN DIEGO, CA 92103
FOR: CALIFORNIA NATURAL GAS VEHICLE
ASSOCIATION/ CLEAN ENERGY FUELS
CORPORATION

MARCIE MILNER DIRECTOR - REGULATORY AFFAIRS SHELL TRADING GAS & POWER COMPANY 4445 EASTGATE MALL, SUITE 100 SAN DIEGO, CA 92121

REID A. WINTHROP PILOT POWER GROUP, INC. 8910 UNIVERSITY CENTER LANE, SUITE 520 SAN DIEGO, CA 92122

THOMAS DARTON PILOT POWER GROUP, INC. 8910 UNIVERSITY CENTER LANE, STE 520 SAN DIEGO, CA 92122 FOR: PILOT POWER GROUP

STEVE RAHON DIRECTOR, TARIFF & REGULATORY ACCOUNTS SAN DIEGO GAS & ELECTRIC COMPANY 8330 CENTURY PARK COURT, CP32C SAN DIEGO, CA 92123-1548 FOR: SAN DIEGO GAS & ELECTRIC COMPANY

GLORIA BRITTON ANZA ELECTRIC COOPERATIVE, INC. 58470 HWY 371 PO BOX 391909 ANZA, CA 92539 FOR: ANZA ELECTRIC COOPERATIVE INC. LYNELLE LUND COMMERCE ENERGY, INC. 600 ANTON BLVD., SUITE 2000 COSTA MESA, CA 92626 FOR: COMMERCE ENERGY, INC.

TAMLYN M. HUNT ENERGY PROGRAM DIRECTOR COMMUNITY ENVIRONMENTAL COUNCIL 26 W. ANAPAMU ST., 2ND FLOOR SANTA BARBARA, CA 93101 FOR: COMMUNITY ENVIRONMENTAL COUNCIL MARC D. JOSEPH ATTORNEY AT LAW ADAMS BRADWELL JOSEPH & CARDOZO 601 GATEWAY BLVD. STE 1000 SOUTH SAN FRANCISCO, CA 94080 FOR: COALITION OF CALIFORNIA UTILITY EMPLOYEES

JEANNE M. SOLE DEPUTY CITY ATTORNEY CITY AND COUNTY OF SAN FRANCISCO 1 DR. CARLTON B. GOODLETT PLACE, RM. 234 601 VAN NESS AVENUE, STE. 2040 SAN FRANCISCO, CA 94102 FOR: CITY AND COUNTY OF SAN FRANCISCO

JOHN P. HUGHES MANAGER, REGULATORY AFFAIRS SOUTHERN CALIFORNIA EDISON COMPANY SAN FRANCISCO, CA 94102

LAD LORENZ V.P. REGULATORY AFFAIRS SEMPRA UTILITIES 601 VAN NESS AVENUE, SUITE 2060 SAN FRANCISCO, CA 94102

MARCEL HAWIGER THE UTILITY REFORM NETWORK 711 VAN NESS AVENUE, SUITE 350 SAN FRANCISCO, CA 94102

NINA SUETAKE ATTORNEY AT LAW THE UTILITY REFORM NETWORK 711 VAN NESS AVE., STE. 350 SAN FRANCISCO, CA 94102

DIANA L. LEE CALIF PUBLIC UTILITIES COMMISSION LEGAL DIVISION ROOM 4107 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

F. JACKSON STODDARD CALIF PUBLIC UTILITIES COMMISSION EXECUTIVE DIVISION ROOM 5125 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

AUDREY CHANG STAFF SCIENTIST NATURAL RESOURCES DEFENSE COUNCIL 111 SUTTER STREET, 20TH FLOOR SAN FRANCISCO, CA 94104 FOR: NATURAL RESOURCES DEFENSE COUNCIL

DONALD BROOKHYSER ATTORNEY AT LAW ALCANTAR & KAHL 120 MONTGOMERY STREET SAN FRANCISCO, CA 94104 FOR: COGENERATION ASSOCIATION OF CALIFORNIA/ENERGY PRODUCERS AND USERS COALITION

EVELYN KAHL ATTORNEY AT LAW ALCANTAR & KAHL, LLP 120 MONTGOMERY STREET, SUITE 2200 SAN FRANCISCO, CA 94104 FOR: ENERGY PRODUCERS & USERS COALITION

KRISTIN GRENFELL

MICHAEL P. ALCANTAR

PROJECT ATTORNEY, CALIF. ENERGY PROGRAM
NATURAL RESOURCES DEFENSE COUNCIL
111 SUTTER STREET, 20TH FLOOR
SAN FRANCISCO, CA 94104

ATTORNEY AT LAW
ALCANTAR & KAHL, LLP
120 MONTGOMERY STREET, SUITE 2200
SAN FRANCISCO, CA 94104
FOR: COGENERATION ASSOCIATION OF
CALIFORNIA/ENERGY PRODUCERS AND USERS
COALITION

SEEMA SRINIVASAN ATTORNEY AT LAW ALCANTAR & KAHL, LLP 120 MONTGOMERY STREET, SUITE 2200 SAN FRANCISCO, CA 94104 FOR: ENERGY PRODUCERS & USERS COALITION WILLIAM H. CHEN
DIR. ENERGY POLICY WEST REGION
CONSTELLATION NEW ENERGY, INC.
ONE MARKET ST., SPEAR TOWER, 36TH FL.
SAN FRANCISCO, CA 94105
FOR: UNION OF CONCERNED SCIENTISTS

EDWARD G POOLE
ANDERSON DONOVAN & POOLE
601 CALIFORNIA STREET SUITE 1300
SAN FRANCISCO, CA 94108
FOR: SAN FRANCISCO COMMUNITY POWER

ANN G. GRIMALDI
MCKENNA LONG & ALDRIDGE LLP
101 CALIFORNIA STREET, 41ST FLOOR
SAN FRANCISCO, CA 94111
FOR: CENTER FOR ENERGY AND ECONOMIC
DEVELOPMENT

BRIAN T. CRAGG
GOODIN, MACBRIDE, SQUERI, DAY & LAMPREY
505 SANSOME STREET, SUITE 900
SAN FRANCISCO, CA 94111
FOR: INDEPENDENT ENERGY PRODUCERS
ASSOCIATION

JAMES D. SQUERI ATTORNEY AT LAW GOODIN MACBRIDE SQUERI RITCHIE & DAY LLP 505 SANSOME STREET, STE 900 SAN FRANCISCO, CA 94111 FOR: POWEREX CORP.

JEANNE B. ARMSTRONG ATTORNEY AT LAW GOODIN MACBRIDE SQUERI DAY & LAMPREY 505 SANSOME STREET, SUITE 900 SAN FRANCISCO, CA 94111 FOR: WILD GOOSE STORAGE LLC KAREN BOWEN
ATTORNEY AT LAW
WINSTON & STRAWN LLP
101 CALIFORNIA STREET
SAN FRANCISCO, CA 94111
FOR: MIRANT CALIFORNIA, LLCMIRANT
DELTA, LLC, AND MIRANT POTRERO, LLC

LISA A. COTTLE
ATTORNEY AT LAW
WINSTON & STRAWN LLP
101 CALIFORNIA STREET, 39TH FLOOR
SAN FRANCISCO, CA 94111
FOR: MIRANT CALIFORNIA, LLC, MIRANT
DELTA, LLC, AND MIRANT POTRERO, LLC

MICHAEL B. DAY
ATTORNEY AT LAW
GOODIN MACBRIDE SQUERI DAY & LAMPREY LLP
505 SANSOME STREET, SUITE 900
SAN FRANCISCO, CA 94111
FOR: SOLAR ALLIANCE

SEAN P. BEATTY ATTORNEY AT LAW COOPER, WHITE & COOPER, LLP 201 CALIFORNIA ST., 17TH FLOOR SAN FRANCISCO, CA 94111 VIDHYA PRABHAKARAN GOODIN, MACBRIDE, SQUERI, DAY, LAMPREY 505 SANSOME STREET, SUITE 900 SAN FRANCISCO, CA 94111 FOR: INDEPENDENT ENERGY PRODUCERS ASSOCIATION

JOSEPH M. KARP ATTORNEY AT LAW WINSTON & STRAWN LLP 101 CALIFORNIA STREET, 39TH FLOOR SAN FRANCISCO, CA 94111-5894 FOR: CALIFORNIA COGENERATION COUNCIL EDWARD W. O'NEILL
ATTORNEY AT LAW
DAVIS WRIGHT TREMAINE LLP
505 MONTGOMERY STREET, SUITE 800
SAN FRANCISCO, CA 94111-6533
FOR: CALIFORNIA LARGE ENERGY CONSUMERS
ASSOCIATION

JEFFREY P. GRAY DAVIS WRIGHT TREMAINE, LLP 505 MONTGOMERY STREET, SUITE 800 SAN FRANCISCO, CA 94111-6533 FOR: CALPINE CORPORATION CHRISTOPHER J. WARNER
PACIFIC GAS AND ELECTRIC COMPANY
77 BEALE STREET, RM 3145; PO BOX 7442
SAN FRANCISCO, CA 94120-7442
FOR: PACIFIC GAS AND ELECTRIC

SARA STECK MYERS ATTORNEY AT LAW 122 28TH AVENUE SAN FRANCISCO, CA 94121 FOR: CENTER FOR ENERGY EFFICIENCY AND RENEWABLE TECHNOLOGIES

ANDREW L. HARRIS PACIFIC GAS & ELECTRIC COMPANY PO BOX 770000 MAIL CODE B9A SAN FRANCISCO, CA 94177

ANDREA WELLER STRATEGIC ENERGY 3130 D BALFOUR RD., SUITE 290 BRENTWOOD, CA 94513 FOR: STRATEGIC ENERGY

BETH VAUGHAN CALIFORNIA COGENERATION COUNCIL 4391 N. MARSH ELDER COURT CONCORD, CA 94521

KEVIN BOUDREAUX CALPINE POWER AMERICA-CA, LLC 4160 DUBLIN BLVD. DUBLIN, CA 94568 FOR: CALPINE POWER AMERICA

J. ANDREW HOERNER REDEFINING PROGRESS 1904 FRANKLIN STREET OAKLAND, CA 94612

GREGG MORRIS DIRECTOR GREEN POWER INSTITUTE 2039 SHATTUCK AVENUE, STE 402 BERKELEY, CA 94704 FOR: GREEN POWER INSTITUTE

R. THOMAS BEACH CROSSBORDER ENERGY 2560 NINTH STREET, SUITE 213A BERKELEY, CA 94710-2557 FOR: THE CALIFORNIA COGENERATION COUNCIL FOR: KENNETH CARLISLE JOHNSON

BARRY F. MCCARTHY ATTORNEY AT LAW MCCARTHY & BERLIN, LLP 100 PARK CENTER PLAZA, SUITE 501 SAN JOSE, CA 95113 FOR: NORTHERN CALIFORNIA GENERATION COALITION

MIKE LAMOND ALPINE NATURAL GAS OPERATING CO. #1 LLC PO BOX 550

VALLEY SPRINGS, CA 95252

LARS KVALE CENTER FOR RESOURCE SOLUTIONS PRESIDIO BUILDIING 97 PO BOX 39512 SAN FRANCISCO, CA 94129 FOR: CENTER FOR RESOURCE SOLUTION

BRIAN K. CHERRY VP, REGULATORY RELATIONS PACIFIC GAS AND ELECTRIC COMPANY PO BOX 770000, MAIL CODE: B10C SAN FRANCISCO, CA 94177 FOR: PACIFIC GAS AND ELECTRIC COMPANY

JENNIFER CHAMBERLIN MGR. OF REG. AND GOV. AFFAIRS STRATEGIC ENERGY, LLC 2633 WELLINGTON CT. CLYDE, CA 94520 FOR: STRATEGIC ENERGY, LLC

KERRY HATTEVIK DIRECTOR OF REG. AND MARKET AFFAIRS NRG ENERGY 829 ARLINGTON BLVD. EL CERRITO, CA 94530 FOR: MIRANT CORPORATION

AVIS KOWALEWSKI CALPINE CORPORATION 3875 HOPYARD ROAD, SUITE 345 PLEASANTON, CA 94588

JANILL RICHARDS DEPUTY ATTORNEY GENERAL CALIFORNIA ATTORNEY GENERAL'S OFFICE 1515 CLAY STREET, 20TH FLOOR OAKLAND, CA 94702 FOR: PEOPLE OF THE STATE OF CALIFORNIA

CLIFF CHEN UNION OF CONCERNED SCIENTISTS 2397 SHATTUCK AVENUE, STE 203 BERKELEY, CA 94708 FOR: UNION OF CONCERNED SCIENTISTS

KENNETH C. JOHNSON KENNETH CARLISLE JOHNSON 2502 ROBERTSON RD SANTA CLARA, CA 95051

C. SUSIE BERLIN ATTORNEY AT LAW MC CARTHY & BERLIN, LLP 100 PARK CENTER PLAZA, SUITE 501 SAN JOSE, CA 95113 FOR: NORTHERN CALIFORNIA POWER AGENCY

JOY A. WARREN REGULATORY ADMINISTRATOR MODESTO IRRIGATION DISTRICT 1231 11TH STREET

MODESTO, CA 95354

BALDASSARO DI CAPO
151 BLUE RAVINE ROAD
FOLSOM, CA 95630
FOR: CALIFORNIA INDEPENDENT SYSTEM
OPERATOR

WAYNE AMER
PRESIDENT
MOUNTAIN UTILITIES
PO BOX 205
KIRKWOOD, CA 95646
FOR: MOUNTAIN UTILITIES

STEPHEN E. DOYLE
EXECUTIVE VICE PRESIDENT
CLEAN ENERGY SYSTEMS, INC.
3035 PROSPECT PARK DRIVE, STE 150
RANCHO CORDOVA, CA 95670-6071
FOR: CLEAN ENERGY SYSTEMS, INC.

GREGGORY L. WHEATLAND ATTORNEY AT LAW ELLISON, SCHNEIDER & HARRIS, LLP 2015 H STREET SACRAMENTO, CA 95811-3109 FOR: LS POWER, INC.

BRUCE MCLAUGHLIN
BRAUN & BLAISING, P.C.
915 L STREET, SUITE 1270
SACRAMENTO, CA 95814
FOR: CALIFORNIA MUNICIPAL UTILITIES
ASSOCIATION

JANE E. LUCKHARDT
ATTORNEY AT LAW
DOWNEY BRAND LLP
555 CAPITOL MALL, 10TH FLOOR
SACRAMENTO, CA 95814
FOR: SACRAMENTO MUNICIPAL UTILITY
DISTRICT

DOWNEY BRAND
DOWNEY BRAND
555 CAPITOL MALL, 10TH FLOOR
SACRAMENTO, CA 95814-4686
FOR: SACRAMENTO MUNICIPAL

STEVEN M. COHN
ASSISTANT GENERAL COUNSEL
SACRAMENTO MUNICIPAL UTILITY DISTRICT
PO BOX 15830
SACRAMENTO, CA 95852-1830
FOR: SACRAMENTO MUNICIPAL UTILITY
DISTRICT

DAN SILVERIA SURPRISE VALLEY ELECTRIC CORPORATION PO BOX 691 ALTURAS, CA 96101 FOR: SURPRISE VALLEY ELECTRIC UDI HELMAN
CALIFORNIA INDEPENDENT SYS. OPER. CORP
151 BLUE RAVINE ROAD
FOLSOM, CA 95630
FOR: CALIFORNIA INDEPENDENT SYSTEM
OPERATOR CORPORATION

MARY LYNCH

VP - REGULATORY AND LEGISLATIVE AFFAIRS

CONSTELLATION ENERGY COMMODITIES GROUP

2377 GOLD MEDAL WAY, SUITE 100

GOLD RIVER, CA 95670

ANDREW BROWN
ATTORNEY AT LAW
ELLISON SCHNEIDER & HARRIS LLP
2015 H STREET
SACRAMENTO, CA 95811
FOR: CONSTELLATION NEW ENERGY,
INC., CONSTELLATION ENERGY COMMODITIES
GROUP, INC.CONSTELLATION GENRATION

JEFFERY D. HARRIS
ATTORNEY AT LAW
ELLISON, SCHNEIDER & HARRIS LLP
2015 H STREET
SACRAMENTO, CA 95811-3109
FOR: DYNEGY

DOUGLAS K. KERNER
ATTORNEY AT LAW
ELLISON, SCHNEIDER & HARRIS, LLP
2015 H STREET
SACRAMENTO, CA 95814
FOR: SIERRA PACIFIC POWER COMPANY

VIRGIL WELCH STAFF ATTORNEY ENVIRONMENTAL DEFENSE 1107 9TH STREET, SUITE 540 SACRAMENTO, CA 95814

RAYMOND J. CZAHAR, C.P.A. CHIEF FINANCIAL OFFICER WEST COAST GAS COMPANY 9203 BEATTY DRIVE SACRAMENTO, CA 95826

ANN L. TROWBRIDGE
ATTORNEY AT LAW
DAY CARTER & MURPHY, LLP
3620 AMERICAN RIVER DRIVE, SUITE 205
SACRAMENTO, CA 95864
FOR: CALIFORNIA CLEAN DG
COALITION/NORTHWEST NATURAL GAS

JESSICA NELSON
PLUMAS-SIERRA RURAL ELECTRIC CO-OP
73233 STATE ROUTE 70, STE A
PORTOLA, CA 96122-7064
FOR: PLUMAS-SIERRA RURAL ELECTRIC COOP

COOPERATIVE

CYNTHIA SCHULTZ
REGULATORY FILING COORDINATOR
PACIFIC POWER AND LIGHT COMPANY
825 N.E. MULTNOMAH
PORTLAND, OR 97232

RYAN FLYNN
PACIFICORP
825 NE MULTNOMAH STREET, 18TH FLOOR
PORTLAND, OR 97232

JASON A. DUBCHAK
VICE PRESIDENT/GENERAL COUNSEL
WILD GOOSE STORAGE LLC
C/O NISKA GAS STORAGE, SUITE 400
607 8TH AVENUE S.W.
CALGARY, AB T2P OA7
CANADA
FOR: WILD GOOSE STORAGE LLC

KYLE L. DAVIS
PACIFICORP
825 NE MULTNOMAH ST., 20TH FLOOR
PORTLAND, OR 97232
FOR: PACIFICORP

IAN CARTER
INTERNATIONAL EMISSIONS TRADING ASSN.
350 SPARKS STREET, STE. 809
OTTAWA, ON KIR 7S8
CANADA
FOR: INTERNATIONAL EMISSIONS TRADING
ASSOCIATION

#### **Information Only**

BRIAN M. JONES
M. J. BRADLEY & ASSOCIATES, INC.
47 JUNCTION SQUARE DRIVE
CONCORD, MA 01742

KENNETH A. COLBURN SYMBILTIC STRATEGIES, LLC 26 WINTON ROAD MEREDITH, NH 03253

KATHRYN WIG
PARALEGAL
NRG ENERGY, INC.
211 CARNEGIE CENTER
PRINCETON, NY 08540

GEORGE HOPLEY
BARCLAYS CAPITAL
200 PARK AVENUE
NEW YORK, NY 10166

MICHAEL A. YUFFEE
MCDERMOTT WILL & EMERY LLP
600 THIRTEENTH STREET, N.W.
WASHINGTON, DC 20005-3096

VERONIQUE BUGNION POINT CARBON 205 SEVERN RIVER RD SEVERNA PARK, MD 21146

GARY BARCH
FELLON-MCCORD & ASSOCIATES, INC.
SUITE 2000
9960 CORPORATE CAMPUS DRIVE

MATTHEW MOST EDISON MISSION MARKETING & TRADING, INC. 160 FEDERAL STREET BOSTON, MA 02110-1776

RICHARD COWART
REGULATORY ASSISTANCE PROJECT
50 STATE STREET, SUITE 3
MONTPELIER, VT 05602

SAKIS ASTERIADIS APX INC 1270 FIFTH AVE., SUITE 15R NEW YORK, NY 10029

MELISSA DORN
MCDERMOTT, WILL & EMERY LLP
600 13TH ST. NW
WASHINGTON, DC 20005

DALLAS BURTRAW
1616 P STREET, NW
WASHINGTON, DC 20036

GARSON KNAPP

FPL ENERGY, LLC

770 UNIVERSE BLVD.

JUNO BEACH, FL 33408

SAMARA MINDEL
REGULATORY AFFAIRS ANALYST
FELLON-MCCORD & ASSOCIATES
9960 CORPORATE CAMPUS DRIVE, SUITE 2000

LOUISVILLE, KY 40223

BARRY RABE 1427 ROSS STREET PLYMOUTH, MI 48170

JAMES W. KEATING BP AMERICA, INC. MAIL CODE 603-1E 150 W. WARRENVILLE RD. NAPERVILLE, IL 60563

ANNE HENDRICKSON
DIRECTOR, REGULATORY AFFAIRS
COMMERCE ENERGY INC
222 W. LAS COLINAS BLVD., STE. 950-E
IRVING, TX 75039
FOR: COMMERCE ENERGY INC

TRENT A. CARLSON RELIANT ENERGY 1000 MAIN STREET HOUSTON, TX 77001

JEANNE ZAIONTZ BP ENERGY COMPANY 501 WESTLAKE PARK BLVD, RM. 4328 HOUSTON, TX 77079

FIJI GEORGE
EL PASO CORPORATION
EL PASO BUILDING
PO BOX 2511
HOUSTON, TX 77252

FRANK STERN
SUMMIT BLUE CONSULTING
1722 14TH STREET, SUITE 230
BOULDER, CO 80302
FOR: SUMMIT BLUE CONSULTING

NICHOLAS LENSSEN ENERGY INSIGHTS 1750 14TH STREET, SUITE 200 BOULDER, CO 80302

W. WAYNE TOMLINSON
EL PASO CORPORATION- WESTERN PIPELINES
2 NORTH NEVADA AVENUE
COLORADO SPRINGS, CO 80903

JAMES A. HOLTKAMP HOLLAND & HART, LLP 60 EAST SOUTH TEMPLE, STE. 2000 SALT LAKE CITY, UT 84111

BRIAN MCQUOWN
RELIANT ENERGY
7251 AMIGO ST., SUITE 120
LAS VEGAS, NV 89119

LOUISVILLE, KY 40223

BRIAN POTTS
FOLEY & LARDNER
PO BOX 1497
150 EAST GILMAN STREET
MADISON, WI 53701-1497

JAMES ROSS RCS, INC. 500 CHESTERFIELD CENTER, SUITE 320 CHESTERFIELD, MO 63017

COURTNEY WEDDINGTON
COMPLIANCE ANALYST
COMMERCE ENERGY INC
222 W. LAS COLINAS BLVD., STE. 950-E
IRVING, TX 75039

GARY HINNERS
RELIANT ENERGY, INC.
PO BOX 148
HOUSTON, TX 77001-0148

JULIE L. MARTIN
NORTH AMERICA GAS AND POWER
BP ENERGY COMPANY
501 WESTLAKE PARK BLVD.
HOUSTON, TX 77079

ED CHIANG
ELEMENT MARKETS, LLC
ONE SUGAR CREEK CENTER BLVD., SUITE 250
SUGAR LAND, TX 77478

NADAV ENBAR ENERGY INSIGHTS 1750 14TH STREET, SUITE 200 BOULDER, CO 80302

ELIZABETH BAKER SUMMIT BLUE CONSULTING 1722 14TH STREET, SUITE 230 BOULDER, CO 80304

KEVIN J. SIMONSEN ENERGY MANAGEMENT SERVICES 646 EAST THIRD AVENUE DURANGO, CO 81301

SANDRA ELY
NEW MEXICO ENVIRONMENT DEPARTMENT
1190 ST FRANCIS DRIVE
SANTA FE, NM 87501

DOUGLAS BROOKS
NEVADA POWER COMPANY
SIERRA PACIFIC POWER COMPANY
6226 WEST SAHARA AVENUE
LAS VEGAS, NV 89151

ANITA HART SENIOR SPECIALIST/STATE REGULATORYAFFAIR SOUTHWEST GAS CORPORATION SOUTHWEST GAS CORPORATION 5241 SPRING MOUNTAIN ROAD LAS VEGAS, NV 89193

MAILSTOP: LVB-105 5241 SPRING MOUNTAIN ROAD LAS VEGAS, NV 89193

RANDY SABLE

BILL SCHRAND SOUTHWEST GAS CORPORATON PO BOX 98510 LAS VEGAS, NV 89193-8510

JJ PRUCNAL SOUTHWEST GAS CORPORATION PO BOX 98510 LAS VEGAS, NV 89193-8510

SANDRA CAROLINA SOUTHWEST GAS CORPORATION PO BOX 98510 LAS VEGAS, NV 89193-8510

CYNTHIA MITCHELL ENERGY ECONOMICS, INC. 530 COLGATE COURT RENO, NV 89503

CHRISTOPHER A. HILEN ASSISTANT GENERAL COUNSEL SIERRA PACIFIC POWER COMPANY 6100 NEIL ROAD RENO, NV 89511

ELENA MELLO SIERRA PACIFIC POWER COMPANY 6100 NEIL ROAD RENO, NV 89520

DARRELL SOYARS MANAGER-RESOURCE PERMITTING&STRATEGIC SIERRA PACIFIC RESOURCES 6100 NEIL ROAD RENO, NV 89520-0024 FOR: SIERRA PACIFIC RESOURCES

TREVOR DILLARD SIERRA PACIFIC POWER COMPANY PO BOX 10100 6100 NEIL ROAD, MS S4A50 RENO, NV 89520-0024

LEILANI JOHNSON KOWAL LOS ANGELES DEPT. OF WATER AND POWER 111 N. HOPE STREET, ROOM 1050 LOS ANGELES, CA 90012 FOR: LOS ANGELES DEPT. OF WATER AND POWER

RANDY S. HOWARD LOS ANGELES DEPT. OF WATER AND POWER 111 NORTH HOPE STREET, ROOM 921 LOS ANGELES, CA 90012

ROBERT K. ROZANSKI LOS ANGELES DEPT OF WATER AND POWER 111 NORTH HOPE STREET, ROOM 1520 LOS ANGELES, CA 90012

ROBERT L. PETTINATO LOS ANGELES DEPARTMENT OF WATER & POWER 111 NORTH HOPE STREET, SUITE 1151 LOS ANGELES, CA 90012

HUGH YAO SOUTHERN CALIFORNIA GAS COMPANY 555 W. 5TH ST, GT22G2 LOS ANGELES, CA 90013

RASHA PRINCE SOUTHERN CALIFORNIA GAS COMPANY 555 WEST 5TH STREET, GT14D6 LOS ANGELES, CA 90013

LEE WALLACH SOLEL, INC 3424 MOTOR AVE., STE. 100 LOS ANGELES, CA 90034

RANDALL W. KEEN ATTORNEY AT LAW MANATT PHELPS & PHILLIPS, LLP 11355 WEST OLYMPIC BLVD. LOS ANGELES, CA 90064 FOR: LOS ANGELES COUNTY

S. NANCY WHANG ATTORNEY AT LAW MANATT, PHELPS & PHILLIPS, LLP 11355 WEST OLYMPIC BLVD. LOS ANGELES, CA 90064

DEREK MARKOLF CALIFORNIA CLIMATE ACTION REGISTRY 515 S. FLOWER STREET, SUITE 1640 LOS ANGELES, CA 90071

DAVID NEMTZOW 1254 9TH STREET, NO. 6 SANTA MONICA, CA 90401 HARVEY EDER PUBLIC SOLAR POWER COALITION 1218 12TH ST., 25 SANTA MONICA, CA 90401

STEVEN G. LINS GENERAL COUNSEL GLENDALE WATER AND POWER 613 EAST BROADWAY, SUITE 220 GLENDALE, CA 91206-4394

BRUNO JEIDER BURBANK WATER & POWER 164 WEST MAGNOLIA BLVD. BURBANK, CA 91502

AIMEE BARNES MANAGER REGULATORY AFFAIRS ECOSECURITIES HARVARD SQUARE 206 W. BONITA AVENUE CLAREMONT, CA 91711

JAIRAM GOPAL SOUTHERN CALIFORNIA EDISON 2244 WALNUT GROVE, GO1-C ROSEMEAD, CA 91770

YVONNE GROSS REGULATORY POLICY MANAGER SEMPRA ENERGY 101 ASH STREET, HQ08C SAN DIEGO, CA 92103

KIM KIENER 504 CATALINA BLVD. SAN DIEGO, CA 92106

JOSEPH R. KLOBERDANZ SAN DIEGO GAS & ELECTRIC PO BOX 1831 SAN DIEGO, CA 92112

JENNIFER PORTER POLICY ANALYST CALIFORNIA CENTER FOR SUSTAINABLE ENERGY CALIFORNIA CENTER FOR SUSTAINABLE ENERGY 8690 BALBOA AVENUE, SUITE 100 SAN DIEGO, CA 92123

DESPINA NIEHAUS SAN DIEGO GAS AND ELECTRIC COMPANY 8330 CENTURY PARK COURT, CP32H SAN DIEGO, CA 92123-1530 FOR: SAN DIEGO GAS AND ELECTRIC COMPANY

ELSTON K. GRUBAUGH IMPERIAL IRRIGATION DISTRICT 333 EAST BARIONI BLVD. IMPERIAL, CA 92251

MONA TIERNEY-LLOYD LANDSITE, INC PO BOX 378 CAYUCOS, CA 93430

TOM HAMILTON MANAGING PARTNER ENERGY CONCIERGE SERVICES 321 MESA LILA RD GLENDALE, CA 91208

RICHARD J. MORILLO ASSISTANT CITY ATTORNEY CITY OF BURBANK 215 E. OLIVE AVENUE BURBANK, CA 91502

CASE ADMINISTRATION SOUTHERN CALIFORNIA EDISON COMPANY 2244 WALNUT GROVE AVE., RM. 370 ROSEMEAD, CA 91770

TIM HEMIG NRG ENERGY, INC. 1817 ASTON AVENUE, SUITE 104 CARLSBAD, CA 92008

JOHN LAUN APOGEE INTERACTIVE, INC. 1220 ROSECRANS ST., SUITE 308 SAN DIEGO, CA 92106

SCOTT J. ANDERS RESEARCH/ADMINISTRATIVE DIRECTOR UNIVERSITY OF SAN DIEGO SCHOOL OF LAW 5998 ALCALA PARK SAN DIEGO, CA 92110

ANDREW MCALLISTER DIRECTOR OF OPERATIONS CALIFORNIA CENTER FOR SUSTAINABLE ENERGY 8690 BALBOA AVE., SUITE 100 SAN DIEGO, CA 92123

SEPHRA A. NINOW POLICY ANALYST 8690 BALBOA AVENUE, SUITE 100 SAN DIEGO, CA 92123

JOHN W. LESLIE ATTORNEY AT LAW LUCE, FORWARD, HAMILTON & SCRIPPS, LLP 11988 EL CAMINO REAL, SUITE 200 SAN DIEGO, CA 92130

THOMAS MCCABE EDISON MISSION ENERGY 18101 VON KARMAN AVE., SUITE 1700 IRVINE, CA 92612

JAN PEPPER CLEAN POWER MARKETS, INC. PO BOX 3206 418 BENVENUE AVENUE

FOR: LANDSITE, INC

GLORIA D. SMITH
ADAMS, BROADWELL, JOSEPH & CARDOZO
601 GATEWAY BLVD., SUITE 1000
SOUTH SAN FRANCISCO, CA 94080

DIANE I. FELLMAN
DIRECTOR, REGULATORY AFFAIRS
FPL ENERGY PROJECT MANAGEMENT, INC.
234 VAN NESS AVENUE
SAN FRANCISCO, CA 94102
FOR: FPL ENERGY PROJECT MANAGEMENT INC

MICHEL FLORIO ATTORNEYS AT LAW 711 VAN NESS AVE., STE. 350 SAN FRANCISCO, CA 94102

MICHAEL A. HYAMS
POWER ENTERPRISE-REGULATORY AFFAIRS
SAN FRANCISCO PUBLIC UTILITIES COMM
1155 MARKET ST., 4TH FLOOR
SAN FRANCISCO, CA 94103

NORMAN J. FURUTA ATTORNEY AT LAW FEDERAL EXECUTIVE AGENCIES 1455 MARKET ST., SUITE 1744 SAN FRANCISCO, CA 94103-1399

ANNABELLE MALINS
CONSUL-SCIENCE AND TECHNOLOGY
BRITISH CONSULATE-GENERAL
ONE SANSOME STREET, SUITE 850
SAN FRANCISCO, CA 94104

LEAH FLETCHER
NATURAL RESOURCES DEFENSE COUNCIL
111 SUTTER STREET 20TH FLR
SAN FRANCISCO, CA 94104
FOR: NATURAL RESOURCES DEFENSE COUNCIL

OLOF BYSTROM
DIRECTOR, WESTERN ENERGY
CAMBRIDGE ENERGY RESEARCH ASSOCIATES
555 CALIFORNIA STREET, 3RD FLOOR
SAN FRANCISCO, CA 94104

SHERYL CARTER
NATURAL RESOURCES DEFENSE COUNCIL
111 SUTTER STREET, 20TH FLOOR
SAN FRANCISCO, CA 94104

BIANCA BOWMAN
CASE COORDINATOR
PACIFIC GAS AND ELECTRIC COMPANY
77 BEALE STREET, MAIL CODE B9A
SAN FRANCISCO, CA 94105

LOS ALTOS, CA 94024

LOULENA A. MILES
ADAMS BROADWELL JOSEPH & CARDOZO
601 GATEWAY BLVD., SUITE 1000
SOUTH SAN FRANCISCO, CA 94080

HAYLEY GOODSON ATTORNEY AT LAW THE UTILITY REFORM NETWORK 711 VAN NESS AVENUE, SUITE 350 SAN FRANCISCO, CA 94102

DAN ADLER
DIRECTOR, TECH AND POLICY DEVELOPMENT
CALIFORNIA CLEAN ENERGY FUND
5 THIRD STREET, SUITE 1125
SAN FRANCISCO, CA 94103

THERESA BURKE
REGULATORY ANALYST
SAN FRANCISCO PUC
1155 MARKET STREET, 4TH FLOOR
SAN FRANCISO, CA 94103

AMBER MAHONE
ENERGY & ENVIRONMENTAL ECONOMICS, INC.
101 MONTGOMERY STREET, SUITE 1600
SAN FRANCISCO, CA 94104

KAREN TERRANOVA
ALCANTAR & KAHL, LLP
120 MONTGOMERY STREET, STE 2200
SAN FRANCISCO, CA 94104

NORA SHERIFF
ATTORNEY AT LAW
ALCANTAR & KAHL, LLP
120 MONTGOMERY STREET, SUITE 2200
SAN FRANCISCO, CA 94104

SETH HILTON ATTORNEY AT LAW STOEL RIVES 111 SUTTER ST., SUITE 700 SAN FRANCISCO, CA 94104 FOR: EL PASO NATURAL GAS

ASHLEE M. BONDS
THELEN REID BROWN RAYSMAN&STEINER LLP
SUITE 1800
101 SECOND STREET
SAN FRANCISCO, CA 94105

CARMEN E. BASKETTE SENIOR MGR MARKET DEVELOPMENT ENERNOC 594 HOWARD ST., SUITE 400 SAN FRANCISCO, CA 94105 FOR: ENERNOC, INC. FRED WELLINGTON NAVIGANT CONSULTING, INC. 1 MARKET ST., SPEAR ST. TOWER, STE 1200 SAN FRANCISCO, CA 94105

JAMES W. TARNAGHAN DUANE MORRIS LLP SUITE 2000 ONE MARKET, SPEAR TOWER SAN FRANCISCO, CA 94105 FOR: LODI GAS STORAGE

KEVIN FOX WILSON SONSINI GOODRICH & ROSATI ONE MARKET STREET, SPEAR TOWER, 3300 SAN FRANCISCO, CA 94105

KHURSHID KHOJA ASSOCIATE THELEN REID BROWN RAYSMAN & STEINER 101 SECOND STREET, SUITE 1800 SAN FRANCISCO, CA 94105

RAY WELCH ASSOCIATE DIRECTOR NAVIGANT CONSULTING, INC. ONE MARKET PLAZA, SUITE 1200 SAN FRANCISCO, CA 94105

SHERIDAN J. PAUKER WILSON SONSINI GOODRICH & ROSATI SPEAR TOWER, SUITE 3300 ONE MARKET ST SAN FRANCISCO, CA 94105

JAMES W. MCTARNAGHAN ATTORNEY AT LAW DUANE MORRIS LLP ONE MARKET, SPEAR TOWER 2000 SAN FRANCISCO, CA 94105-1104

ROBERT J. REINHARD MORRISON AND FOERSTER 425 MARKET STREET SAN FRANCISCO, CA 94105-2482

PETER V. ALLEN THELEN REID BROWN RAYSMAN & STEINER 101 SECOND STREET, SUITE 1800 SAN FRANCISCO, CA 94105-3606

STEVEN MOSS SAN FRANCISCO COMMUNITY POWER COOP 673 KANSAS STREET SAN FRANCISCO, CA 94107

ARNO HARRIS RECURRENT ENERGY, INC. 1700 MONTGOMERY ST., SUITE 251 SAN FRANCISCO, CA 94111

HOWARD V. GOLUB NIXON PEABODY LLP 2 EMBARCADERO CENTER, STE. 2700 SAN FRANCISCO, CA 94111

JAMES B. WOODRUFF VICE PRESIDENT REGULATORY AND GOVT AFFAI ATTORNEY AT LAW NEXTLIGHT RENEWABLE POWER, LLC FOLGER, LEVIN & KAHN, LLP 101 CALIFORNIA STREET, STE 2450 SAN FRANCISCO, CA 94111

JANINE L. SCANCARELLI 275 BATTERY STREET, 23RD FLOOR SAN FRANCISCO, CA 94111

JOSEPH F. WIEDMAN ATTORNEY AT LAW GOODIN MACBRIDE SQUERI DAY & LAMPREY LLP 101 CALIFORNIA STREET 39TH FLR 505 SANSOME STREET, SUITE 900 SAN FRANCISCO, CA 94111

KARLEEN O'CONNOR WINSTON & STRAWN LLP SAN FRANCISCO, CA 94111

MARTIN A. MATTES NOSSAMAN, GUTHNER, KNOX & ELLIOTT, LLP 236 HARTFORD STREET 50 CALIFORNIA STREET, SUITE 3400 SAN FRANCISCO, CA 94111

BRAD WETSTONE SAN FRANCISCO, CA 94114

JEN MCGRAW CENTER FOR NEIGHBORHOOD TECHNOLOGY PO BOX 14322 SAN FRANCISCO, CA 94114

CALIFORNIA ENERGY MARKETS 425 DIVISADERO ST. SAN FRANCISCO, CA 94117

LISA WEINZIMER ASSOCIATE EDITOR PLATTS MCGRAW-HILL 695 NINTH AVENUE, NO. 2 SAN FRANCISCO, CA 94118 SHAUN ELLIS 2183 UNION STREET SAN FRANCISCO, CA 94123

ED LUCHA GRACE LIVINGSTON-NUNLEY CASE COORDINATOR
PACIFIC GAS AND ELECTRIC COMPANY
PO BOX 770000, MAIL CODE B9A
SAN FRANCISCO, CA 94177

JASMIN ANSAR
PG&E
MAIL CODE B24A
PO BOX 770000
SAN FRANCISCO, CA 94177

KATE BEARDSLEY
PG&E
MAILCODE B9A
PO BOX 770000
SAN FRANCISCO, CA 94177

SHAUN HALVERSON
PACIFIC GAS AND ELECTRIC COMPANY
PG&E MAIL CODE B9A
PO BOX 770000
SAN FRANCISCO, CA 94177
FOR: PACIFIC GAS AND ELECTRIC COMPANY

STEPHANIE LA SHAWN PACIFIC GAS AND ELECTRIC COMPANY PO BOX 770000, MAIL CODE B9A SAN FRANCISCO, CA 94177

KARLA DAILEY CITY OF PALO ALTO UTILITIES DEPARTMENT BOX 10250 PALO ALTO, CA 94303

DEAN R. TIBBS
PRESIDENT
ADVANCED ENERGY STRATEGIES, INC.
1390 WILLOW PASS ROAD, SUITE 610
CONCORD, CA 94520

JEFFREY L. HAHN
COVANTA ENERGY CORPORATION
876 MT. VIEW DRIVE
LAFAYETTE, CA 94549

ANDREW J. VAN HORN VAN HORN CONSULTING 12 LIND COURT ORINDA, CA 94563

SUE KATELEY
EXECUTIVE DIRECTOR
CALIFORNIA SOLAR ENERGY INDUSTRIES ASSN
PO BOX 782
RIO VISTA, CA 94571

SARAH BESERRA
CALIFORNIA REPORTS.COM
39 CASTLE HILL COURT
VALLEJO, CA 94591
FOR: CALIFORNIA REPORTS

ASSISTANT PROJECT MANAGER
PACIFIC GAS AND ELECTRIC COMPANY
PO BOX 770000 MAIL CODE B9A
SAN FRANCISCO, CA 94177

JONATHAN FORRESTER
PG&E
MAIL CODE N13C
PO BOX 770000
SAN FRANCISCO, CA 94177

SEBASTIEN CSAPO
PG&E PROJECT MGR.
MAIL CODE B9A
PO BOX 770000
SAN FRANCISCO, CA 94177

SOUMYA SASTRY PACIFIC GAS AND ELECTRIC COMPANY MAIL CODE B9A PO BOX 770000 SAN FRANCISCO, CA 94177

VALERIE J. WINN PACIFIC GAS AND ELECTRIC COMPANY PO BOX 770000, B9A SAN FRANCISCO, CA 94177-0001

BRAD WETSTONE
ALAMEDA POWER AND TELECOM
2000 GRANT STREET, PO BOX H
ALAMEDA, CA 94501-0263
FOR: ALAMEDA POWER AND TELECOM

JOHN DUTCHER
VICE PRESIDENT - REGULATORY AFFAIRS
MOUNTAIN UTILITIES
3210 CORTE VALENCIA
FAIRFIELD, CA 94534-7875
FOR: MOUNTAIN UTILITIES

TOM DELFINO GEOMATRIX CONSULTANTS, INC. 359 BIRCHWOOD DRIVE MORAGA, CA 94556-2304

JOSEPH PAUL SENIOR CORPORATE COUNSEL DYNEGY, INC. 4140 DUBLIN BLVD., STE. 100 DUBLIN, CA 94568

GREG BLUE
ENXCO DEVELOPMENT CORP
5000 EXECUTIVE PARKWAY, STE.140
SAN RAMON, CA 94583

MONICA A. SCHWEBS, ESQ. BINGHAM MCCUTCHEN LLP PO BOX V 1333 N. CALIFORNIA BLVD., SUITE 210 WALNUT CREEK, CA 94596 PETER W. HANSCHEN
ATTORNEY AT LAW
MORRISON & FOERSTER, LLP
101 YGNACIO VALLEY ROAD, SUITE 450
WALNUT CREEK, CA 94596

JOSEPH HENRI 31 MIRAMONTE ROAD WALNUT CREEK, CA 94597

WILLIAM F. DIETRICH ATTORNEY AT LAW DIETRICH CONSULTING 2977 YGNACIO VALLEY ROAD, NO. 613 WALNUT CREEK, CA 94598-3535

BETTY SETO
POLICY ANALYST
KEMA, INC.
492 NINTH STREET, SUITE 220
OAKLAND, CA 94607

JODY S. LONDON
JODY LONDON CONSULTING
PO BOX 3629
OAKLAND, CA 94609

MRW & ASSOCIATES, INC. 1814 FRANKLIN STREET, SUITE 720 OAKLAND, CA 94612

ADAM BRIONES
THE GREENLINING INSTITUTE
1918 UNIVERSITY AVENUE, 2ND FLOOR
BERKELEY, CA 94704

STEVE KROMER 3110 COLLEGE AVENUE, APT 12 BERKELEY, CA 94705 FOR: STEVE KROMER

BRENDA LEMAY
DIRECTOR OF PROJECT DEVELOPMENT
HORIZON WIND ENERGY
1600 SHATTUCK, SUITE 222
BERKELEY, CA 94709

CARLA PETERMAN UCEI 2547 CHANNING WAY BERKELEY, CA 94720

RYAN WISER BERKELEY LAB 1 CYCLOTRON ROAD, MS-90-4000 BERKELEY, CA 94720 WILLIAM H. BOOTH
ATTORNEY AT LAW
LAW OFFICES OF WILLIAM H. BOOTH
67 CARR DRIVE
MORAGA, CA 94596
FOR: CALIFORNIA LARGE ENERGY CONSUMERS
ASSOCIATION

PATRICIA THOMPSON SUMMIT BLUE CONSULTING 2920 CAMINO DIABLO, SUITE 210 WALNUT CREEK, CA 94597

ALEX KANG ITRON, INC. 1111 BROADWAY, STE. 1800 OAKLAND, CA 94607

GERALD L. LAHR
ABAG POWER
101 EIGHTH STREET
OAKLAND, CA 94607
FOR: ASSOCIATION OF BAY AREA GOVERNMENTS

STEVEN SCHILLER SCHILLER CONSULTING, INC. 111 HILLSIDE AVENUE PIEDMONT, CA 94611

REED V. SCHMIDT
VICE PRESIDENT
BARTLE WELLS ASSOCIATES
1889 ALCATRAZ AVENUE
BERKELEY, CA 94703
FOR: CALIFORNIA CITY-COUNTY STREET
LIGHT ASSOCIATION

TANDY MCMANNES
ABENGOA SOLAR, INC.
2030 ADDISON STREET, STE 420
BERKELEY, CA 94704

CLYDE MURLEY
CONSULTANT TO NRDC
1031 ORDWAY STREET
ALBANY, CA 94706

NANCY RADER
CALIFORNIA WIND ENERGY ASSOCIATION
2560 NINTH STREET, SUITE 213A
BERKELEY, CA 94710

EDWARD VINE LAWRENCE BERKELEY NATIONAL LABORATORY BUILDING 90R4000 BERKELEY, CA 94720

CHRIS MARNAY
BERKELEY LAB
1 CYCLOTRON RD MS 90R4000
BERKELEY, CA 94720-8136

EMMA POELSTERL SUNPOWER 1414 HARBOUR WAY SOUTH RICHMOND, CA 94804

PHILLIP J. MULLER
SCD ENERGY SOLUTIONS
436 NOVA ALBION WAY
SAN RAFAEL, CA 94903

CARL PECHMAN
POWER ECONOMICS
901 CENTER STREET
SANTA CRUZ, CA 95060

RICHARD SMITH
MODESTO IRRIGATION DISTRICT
1231 11TH STREET
MODESTO, CA 95352-4060

THOMAS S. KIMBALL
MODESTO IRRIGATION DISTRICT
1231 11TH STREET
MODESTO, CA 95354

BARBARA R. BARKOVICH BARKOVICH & YAP, INC. 44810 ROSEWOOD TERRACE MENDOCINO, CA 95460

CLARK BERNIER RLW ANALYTICS 1055 BROADWAY, SUITE G SONOMA, CA 95476

GRANT ROSENBLUM, ESQ.
CALIFORNIA ISO
LEGAL AND REGULATORY DEPARTMENT
151 BLUE RAVINE ROAD
FOLSOM, CA 95630

ROBIN SMUTNY-JONES CALIFORNIA ISO 151 BLUE RAVINE ROAD FOLSOM, CA 95630

CALIFORNIA ISO LEGAL AND REGULATORY DEPARTMENT 151 BLUE RAVINE ROAD FOLSOM, CA 95630

KENNY SWAIN
NAVIGANT CONSULTING
3100 ZINFANDEL DRIVE, SUITE 600
RANCHO CORDOVA, CA 95670

GORDON PICKERING
PRINCIPAL
NAVIGANT CONSULTING, INC.
3100 ZINFANDEL DRIVE, SUITE 600
RANCHO CORDOVA, CA 95670-6078

KARI SMITH SUNPOWER 1414 HARBOUR WAY SOUTH RICHMOND, CA 94804

RITA NORTON
RITA NORTON AND ASSOCIATES, LLC
18700 BLYTHSWOOD DRIVE,
LOS GATOS, CA 95030

MAHLON ALDRIDGE ECOLOGY ACTION PO BOX 1188 SANTA CRUZ, CA 95060

ROGER VAN HOY MODESTO IRRIGATION DISTRICT 1231 11TH STREET MODESTO, CA 95354

WES MONIER
STRATEGIC ISSUES AND PLANNING MANAGER
TURLOCK IRRIGATION DISTRICT
333 EAST CANAL DRIVE, PO BOX 949
TURLOCK, CA 95381-0949

JOHN R. REDDING
ARCTURUS ENERGY CONSULTING
44810 ROSEWOOD TERRACE
MENDOCINO, CA 95460

RICHARD MCCANN, PH.D M. CUBED 2655 PORTAGE BAY, SUITE 3 DAVIS, CA 95616

MELANIE GILLETTE SR MGR WESTERN REG. AFFAIRS ENERNOC, INC. 115 HAZELMERE DRIVE FOLSOM, CA 95630

SAEED FARROKHPAY FEDERAL ENERGY REGULATORY COMMISSION 110 BLUE RAVINE RD., SUITE 107 FOLSOM, CA 95630

DAVID BRANCHCOMB BRANCHCOMB ASSOCIATES, LLC 9360 OAKTREE LANE ORANGEVILLE, CA 95662

KIRBY DUSEL
NAVIGANT CONSULTING, INC.
3100 ZINFANDEL DRIVE, SUITE 600
RANCHO CORDOVA, CA 95670

LAURIE PARK
NAVIGANT CONSULTING, INC.
3100 ZINFANDEL DRIVE, SUITE 600
RANCHO CORDOVA, CA 95670-6078

PAUL D. MAXWELL NAVIGANT CONSULTING, INC. 3100 ZINFANDEL DRIVE, SUITE 600 RANCHO CORDOVA, CA 95670-6078

SCOTT TOMASHEFSKY NORTHERN CALIFORNIA POWER AGENCY 180 CIRBY WAY ROSEVILLE, CA 95678-6420

CAROLYN M. KEHREIN ENERGY MANAGEMENT SERVICES 2602 CELEBRATION WAY WOODLAND, CA 95776

BOB LUCAS LUCAS ADVOCATES 1121 L STREET, SUITE 407 SACRAMENTO, CA 95814

DANIELLE MATTHEWS SEPERAS
CALPINE CORPORATION
1127 11TH STREET, SUITE 242
SACRAMENTO, CA 95814
FOR: CALPINE CORPORATION

DIANA SCHWYZER
CALIFORNIA ENERGY COMMISSION
1516 9TH STREET, MS 31
SACRAMENTO, CA 95814

JUSTIN C. WYNNE ATTORNEY AT LAW BRAU & BLAISING, P.C. 915 L STREET, SUITE 1270 SACRAMENTO, CA 95814

KELLIE SMITH
SENATE ENERGY/UTILITIES & COMMUNICATION
STATE CAPITOL, ROOM 4038
SACRAMENTO, CA 95814

PANAMA BARTHOLOMY
ADVISOR TO CHAIR PFANNENSTIEL
CALIFORNIA ENERGY COMMISSION
1516 9TH STREET
SACRAMENTO, CA 95814

RACHEL MCMAHON
DIR. OF REG. AFFAIRS
CEERT
1100 11TH STREET, SUITE 311
SACRAMENTO, CA 95814

STEVEN A. LIPMAN
STEVEN LIPMAN CONSULTING
500 N. STREET 1108
SACRAMENTO, CA 95814
FOR: LIPMAN CONSULTING

DAVID REYNOLDS
MEMBER SERVICES MANAGER
NORTHERN CALIFORNIA POWER AGENCY
180 CIRBY WAY
ROSEVILLE, CA 95678-6420

ELLEN WOLFE RESERO CONSULTING 9289 SHADOW BROOK PL. GRANITE BAY, CA 95746

AUDRA HARTMANN DYNEGY INC. 980 NINTH STREET, SUITE 2130 SACRAMENTO, CA 95814

CURT BARRY 717 K STREET, SUITE 503 SACRAMENTO, CA 95814

DAVID L. MODISETTE
EXECUTIVE DIRECTOR
CALIFORNIA ELECTRIC TRANSP. COALITION
1015 K STREET, SUITE 200
SACRAMENTO, CA 95814

JOSE CARMONA
DIRECTOR OF ADVOCACY
CEERT
1100 11TH STREET, STE 311
SACRAMENTO, CA 95814
FOR: CENTER FOR ENERGY EFFICIENCY AND
RENEWABLE TECHNOLOGIES (CEERT)

KASSANDRA GOUGH
CALPINE CORPORATION
1127 11TH STREET, SUITE 242
SACRAMENTO, CA 95814
FOR: CALPINE CORPORATION

KEVIN WOODRUFF WOODRUFF EXPERT SERVICES 1100 K STREET, SUITE 204 SACRAMENTO, CA 95814

PATRICK STONER
PROGRAM DIRECTOR
LOCAL GOVERNMENT COMMISSION
1303 J STREET, SUITE 250
SACRAMENTO, CA 95814

RYAN BERNARDO
BRAUN BLAISING MCLAUGHLIN, P.C.
915 L STREET, SUITE 1270
SACRAMENTO, CA 95814

STEVEN KELLY
POLICY DIR., INDEPENDENT ENERGY PRODUCERS
1215 K STREET, SUITE 900
SACRAMENTO, CA 95814

WEBSTER TASAT AIR RESOURCES BOARD 1001 I STREET SACRAMENTO, CA 95814

LYNN HAUG
ELLISON, SCHNEIDER & HARRIS, LLP
2015 H STREET
SACRAMENTO, CA 95814-3109

EDWARD J. TIEDEMANN
ATTORNEY AT LAW
KRONICK, MOSKOVITZ, TIEDEMANN & GIRARD
400 CAPITOL MALL, 27TH FLOOR
SACRAMENTO, CA 95814-4416
FOR: PLACER COUNTY WATER AGENCY & KINGS
RIVER CONSERVATION DISTRICT

LAURIE TEN HOPE
ADVISOR TO COMMISSIONER BYRON
CALIFORNIA ENERGY COMMISSION
1516 9TH STREET, MS-32
SACRAMENTO, CA 95814-5512

JOSHUA BUSHINSKY
WESTERN POLICY COORDINATOR
PEW CENTER ON GLOBAL CLIMATE CHANGE
2101 WILSON BLVD., SUITE 550
ARLINGTON, VA 95816

OBADIAH BARTHOLOMY
MECHANICAL ENGINEER
SACRAMENTO MUNICIPAL UTILITY DISTRICT
M.S. B257
6201 S. STREET
SACRAMENTO, CA 95817

WILLIAM W. WESTERFIELD III
SR. ATTORNEY
SACRAMENTO MUNICIPAL UTILITY DISTRICT
6201 S STREET
SACRAMENTO, CA 95817
FOR: SACRAMENTO MUNICIPAL UTILITY
DISTRICT

BUD BEEBE SACRAMENTO MUNICIPAL UTIL DIST MS B257 6201 S STREET SACRAMENTO, CA 95817-1899

BALWANT S. PUREWAL DEPARTMENT OF WATER RESOURCES 3310 EL CAMINO AVE., LL-90 SACRAMENTO, CA 95821 DOUGLAS MACMULLLEN
CHIEF, POWER PLANNING SECTION
CA DEPARTMENT OF WATER RESOURCES
3310 EL CAMINO AVE., ROOM 356
SACRAMENTO, CA 95821

KAREN NORENE MILLS ATTORNEY AT LAW CALIFORNIA FARM BUREAU FEDERATION 2300 RIVER PLAZA DRIVE SACRAMENTO, CA 95833 KAREN LINDH
CALIFORNIA ONSITE GENERATION
7909 WALERGA ROAD, NO. 112, PMB 119
ANTELOPE, CA 95843

ELIZABETH W. HADLEY CITY OF REDDING 777 CYPRESS AVENUE REDDING, CA 96001 ANNIE STANGE
ALCANTAR & KAHL
1300 SW FIFTH AVE., SUITE 1750
PORTLAND, OR 97201

ELIZABETH WESTBY
ALCANTAR & KAHL, LLP
1300 SW FIFTH AVENUE, SUITE 1750
PORTLAND, OR 97201

ALEXIA C. KELLY THE CLIMATE TRUST 65 SW YAMHILL STREET, SUITE 400 PORTLAND, OR 97204

ALAN COMNES
NRG ENERGY
3934 SE ASH STREET
PORTLAND, OR 97214

KYLE SILON ECOSECURITIES CONSULTING LIMITED 529 SE GRAND AVENUE PORTLAND, OR 97214

CATHIE ALLEN
CA STATE MGR.
PACIFICORP
825 NE MULTNOMAH STREET, SUITE 2000
PORTLAND, OR 97232

PHIL CARVER
OREGON DEPARTMENT OF ENERGY
625 MARION ST., NE
SALEM, OR 97301-3737

SAM SADLER OREGON DEPARTMENT OF ENERGY 625 NE MARION STREET LISA SCHWARTZ SENIOR ANALYST ORGEON PUBLIC UTILITY COMMISSION SALEM, OR 97301-3737

CLARE BREIDENICH
WESTERN POWER TRADING FORUM
224 1/2 24TH AVENUE EAST
SEATTLE, WA 98112
FOR: WESTERN POWER TRADING FORUM

JESUS ARREDONDO NRG ENERGY INC. 4600 CARLSBAD BLVD. CARLSBAD, CA 99208

THOMAS ELGIE
POWEREX CORPORATION
1400, 666 BURRAND ST
VANCOUVER, BC V6C 2X8
CANADA

PO BOX 2148 SALEM, OR 97308-2148

DONALD SCHOENBECK RCS, INC. 900 WASHINGTON STREET, SUITE 780 VANCOUVER, WA 98660

CHARLIE BLAIR
DELTA ENERGY & ENVIRONMENT
15 GREAT STUART STREET
EDINBURGH, UK EH2 7TP
UNITED KINGDOM

#### **State Service**

CLARENCE BINNINGER
DEPUTY ATTORNEY GENERAL
DEPARTMENT OF JUSTICE
455 GOLDEN GATE AVENUE, SUITE 11000
SAN FRANICSCO, CA 94102

ADAM LANGTON
CALIF PUBLIC UTILITIES COMMISSION
ENERGY DIVISION
AREA 4-A
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214

ANDREW CAMPBELL
CALIF PUBLIC UTILITIES COMMISSION
EXECUTIVE DIVISION
ROOM 5203
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214

BETH MOORE
CALIF PUBLIC UTILITIES COMMISSION
ELECTRICITY PLANNING & POLICY BRANCH
ROOM 4103
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214
FOR: DRA

CATHLEEN A. FOGEL
CALIF PUBLIC UTILITIES COMMISSION
ENERGY DIVISION
AREA 4-A
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214

CHRISTINE S. TAM

CALIF PUBLIC UTILITIES COMMISSION

ELECTRICITY PLANNING & POLICY BRANCH

ROOM 4209

505 VAN NESS AVENUE

DAVID ZONANA
DEPUTY ATTORNEY GENERAL
CALIFORNIA ATTORNEY GENERAL'S OFFICE
455 GOLDEN GATE AVENUE, SUITE 11000
SAN FRANCISCO, CA 94102

AMY C. YIP-KIKUGAWA
CALIF PUBLIC UTILITIES COMMISSION
DIVISION OF ADMINISTRATIVE LAW JUDGES
ROOM 2106
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214

ANNE GILLETTE
CALIF PUBLIC UTILITIES COMMISSION
ENERGY DIVISION
AREA 4-A
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214

BISHU CHATTERJEE
CALIF PUBLIC UTILITIES COMMISSION
ENERGY DIVISION
AREA 4-A
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214

CHARLOTTE TERKEURST
CALIF PUBLIC UTILITIES COMMISSION
DIVISION OF ADMINISTRATIVE LAW JUDGES
ROOM 5117
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214

DONALD R. SMITH
CALIF PUBLIC UTILITIES COMMISSION
ELECTRICITY PLANNING & POLICY BRANCH
ROOM 4209
505 VAN NESS AVENUE

SAN FRANCISCO, CA 94102-3214

ED MOLDAVSKY
CALIF PUBLIC UTILITIES COMMISSION
LEGAL DIVISION
ROOM 5037
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214

EUGENE CADENASSO
CALIF PUBLIC UTILITIES COMMISSION
ENERGY DIVISION
AREA 4-A
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214

JACLYN MARKS
CALIF PUBLIC UTILITIES COMMISSION
ENERGY DIVISION
AREA 4-A
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214

JAMIE FORDYCE
CALIF PUBLIC UTILITIES COMMISSION
POLICY & PLANNING DIVISION
AREA 5-B
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214

JEORGE S. TAGNIPES
CALIF PUBLIC UTILITIES COMMISSION
ENERGY DIVISION
AREA 4-A
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214

JONATHAN J. REIGER
CALIF PUBLIC UTILITIES COMMISSION
LEGAL DIVISION
ROOM 5035
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214

JUDITH IKLE
CALIF PUBLIC UTILITIES COMMISSION
ENERGY DIVISION
ROOM 4012
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214
FOR: ENERGY RESOURCES BRANCH

KRISTIN RALFF DOUGLAS
CALIF PUBLIC UTILITIES COMMISSION
POLICY & PLANNING DIVISION
ROOM 5119
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214

LANA TRAN
CALIF PUBLIC UTILITIES COMMISSION
ELECTRIC GENERATION PERFORMANCE BRANCH
AREA 2-D
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214

SAN FRANCISCO, CA 94102-3214

ELIZABETH STOLTZFUS
CALIF PUBLIC UTILITIES COMMISSION
ENERGY DIVISION
AREA 4-A
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214

HARVEY Y. MORRIS
CALIF PUBLIC UTILITIES COMMISSION
LEGAL DIVISION
ROOM 5036
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214

JACQUELINE GREIG
CALIF PUBLIC UTILITIES COMMISSION
ENERGY COST OF SERVICE & NATURAL GAS BRA
ROOM 4102
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214

JASON R. SALMI KLOTZ
CALIF PUBLIC UTILITIES COMMISSION
ENERGY DIVISION
AREA 4-A
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214

JOEL T. PERLSTEIN
CALIF PUBLIC UTILITIES COMMISSION
LEGAL DIVISION
ROOM 5133
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214

JONATHAN LAKRITZ
CALIF PUBLIC UTILITIES COMMISSION
DIVISION OF ADMINISTRATIVE LAW JUDGES
ROOM 5020
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214

JULIE A. FITCH
CALIF PUBLIC UTILITIES COMMISSION
POLICY & PLANNING DIVISION
ROOM 5119
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214

LAINIE MOTAMEDI
CALIF PUBLIC UTILITIES COMMISSION
POLICY & PLANNING DIVISION
ROOM 5119
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214

MATTHEW DEAL
CALIF PUBLIC UTILITIES COMMISSION
EXECUTIVE DIVISION
ROOM 5215
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214

MICHAEL COLVIN CALIF PUBLIC UTILITIES COMMISSION POLICY & PLANNING DIVISION ROOM 5119 505 VAN NESS AVENUE

SAN FRANCISCO, CA 94102-3214

SAN FRANCISCO, CA 94102-3214

PAMELA WELLNER CALIF PUBLIC UTILITIES COMMISSION ENERGY DIVISION AREA 4-A 505 VAN NESS AVENUE

PEARLIE SABINO CALIF PUBLIC UTILITIES COMMISSION ENERGY COST OF SERVICE & NATURAL GAS BRA ELECTRICITY PLANNING & POLICY BRANCH ROOM 4209 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

RICHARD A. MYERS CALIF PUBLIC UTILITIES COMMISSION ENERGY DIVISION AREA 4-A 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

SCOTT MURTISHAW CALIF PUBLIC UTILITIES COMMISSION ENERGY DIVISION AREA 4-A 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

STEVE ROSCOW CALIF PUBLIC UTILITIES COMMISSION ENERGY DIVISION AREA 4-A 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

ZACH CHURCH CALIF PUBLIC UTILITIES COMMISSION EXECUTIVE DIVISION **ROOM 2252** 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

KEN ALEX PO BOX 944255 1300 I STREET, SUITE 125 SACRAMENTO, CA 94244-2550 FOR: PEOPLE OF THE STATE OF CALIFORNIA

MARY MCDONALD DIRECTOR OF STATE AFFAIRS CALIFORNIA INDEPENDENT SYSTEM OPERATOR 151 BLUE RAVINE ROAD FOLSOM, CA 95630 FOR: CAISO

MICHAEL SCHEIBLE DEPUTY EXECUTIVE OFFICER NANCY RYAN CALIF PUBLIC UTILITIES COMMISSION EXECUTIVE DIVISION ROOM 5217 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

PAUL S. PHILLIPS CALIF PUBLIC UTILITIES COMMISSION ELECTRICITY PLANNING & POLICY BRANCH ROOM 4101 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

RAHMON MOMOH CALIF PUBLIC UTILITIES COMMISSION ROOM 4205 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

SARA M. KAMINS CALIF PUBLIC UTILITIES COMMISSION ENERGY DIVISION AREA 4-A 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

SEAN A. SIMON CALIF PUBLIC UTILITIES COMMISSION ENERGY DIVISION AREA 4-A 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

THERESA CHO CALIF PUBLIC UTILITIES COMMISSION EXECUTIVE DIVISION ROOM 5207 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

BILL LOCKYER STATE ATTORNEY GENERAL STATE OF CALIFORNIA, DEPT OF JUSTICE PO BOX 944255 SACRAMENTO, CA 94244-2550

JUDITH B. SANDERS ATTORNEY AT LAW CALIFORNIA INDEPENDENT SYSTEM OPERATOR 151 BLUE RAVINE ROAD FOLSOM, CA 95630 FOR: CAISO

PHILIP D. PETTINGILL LEGAL & REG. DEPT. CALIFORNIA INDEPENDENT SYSTEM OPERATOR 151 BLUE RAVINE ROAD FOLSOM, CA 95630 FOR: CAISO

GARY COLLORD STATIONARY SOURCE DIVISION

CALIFORNIA AIR RESOURCES BOARD 1001 T STREET SACRAMENTO, CA 95677

FOR: CALIFORNIA AIR RESOURCES BOARD

AIR RESOURCES BOARD 1001 I STREET, PO BOX 2815 SACRAMENTO, CA 95812

PAM BURMICH

AIR RESOURCES BOAD 1001 I STREET, BOX 2815

SACRAMENTO, CA 95812

JEFFREY DOLL CALIFORNIA AIR RESOURCES BOARD PO BOX 2815 1001 I STREET SACRAMENTO, CA 95812

DARYL METZ CALIFORNIA ENERGY COMMISSION 1516 9TH ST., MS-20 SACRAMENTO, CA 95814

DEBORAH SLON DEPUTY ATTORNEY GENERAL, ENVIRONMENT OFFICE OF THE ATTORNEY GENERAL 1300 I STREET, 15TH FLOOR SACRAMENTO, CA 95814

DON SCHULTZ CALIF PUBLIC UTILITIES COMMISSION ENERGY PRICING AND CUSTOMER PROGRAMS BRA CALIFORNIA ENERGY COMMISSION 770 L STREET, SUITE 1050 SACRAMENTO, CA 95814

LISA DECARLO STAFF COUNSEL

CALIFORNIA ENERGY COMMISSION 1516 9TH STREET MS-14 SACRAMENTO, CA 95814

MELISSA JONES EXECUTIVE DIRECTOR CALIFORNIA ENERGY COMMISSION 1516 9TH STREET, MS-39 SACRAMENTO, CA 95814 FOR: CALIFORNIA ENERGY COMMISSION

PIERRE H. DUVAIR CALIFORNIA ENERGY COMMISSION 1516 NINTH STREET, MS-41 SACRAMENTO, CA 95814

NANCY TRONAAS CALIFORNIA ENERGY COMMISSION 1516 9TH ST. MS-20 SACRAMENTO, CA 95814-5512

CAROL J. HURLOCK CALIFORNIA DEPT. OF WATER RESOURCES JOINT OPERATIONS CENTER 3310 EL CAMINO AVE. RM 300 SACRAMENTO, CA 95821

ROSS A. MILLER ELECTRICITY ANALYSIS OFFICE CALIFORNIA ENERGY COMMISSION 1516 9TH STREET MS 20 SACRAMENTO, CA 96814-5512 FOR: CALIFORNIA ENERGY COMMISSION

KAREN GRIFFIN EXECUTIVE OFFICE 1516 9TH STREET, MS 39 SACRAMENTO, CA 95814

MARC PRYOR CALIFORNIA ENERGY COMMISSION 1516 9TH ST., MS-20 SACRAMENTO, CA 95814

PAT PEREZ ASST. DIRECTOR CALIFORNIA ENERGY COMMISSION 1516 NINTH STREET, MS 39 SACRAMENTO, CA 95814 FOR: CALIFORNIA ENERGY COMMISSION

WADE MCCARTNEY CALIF PUBLIC UTILITIES COMMISSION POLICY & PLANNING DIVISION 770 L STREET, SUITE 1050 SACRAMENTO, CA 95814

HEATHER LOUIE CALIFORNIA ENERGY COMMISSION 1516 9TH STREET, MS-45 SACRAMENTO, CA 95818

HOLLY B. CRONIN STATE WATER PROJECT OPERATIONS DIV CALIFORNIA DEPARTMENT OF WATER RESOURCES 3310 EL CAMINO AVE., LL-90 SACRAMENTO, CA 95821

#### **TOP OF PAGE**

#### **BACK TO INDEX OF SERVICE LISTS**