

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA



**FILED**

08-15-07  
04:59 PM

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)

REPLY COMMENTS AND LEGAL ANALYSIS OF THE COMMUNITY  
ENVIRONMENTAL COUNCIL ON MARKET ADVISORY COMMITTEE  
REPORT AND THE FIRST SELLER APPROACH

Tamlyn Hunt  
Energy Program Director / Attorney  
Community Environmental Council  
26 W. Anapamu, 2<sup>nd</sup> Floor  
Santa Barbara, CA  
(805) 963-0583, ext. 122

August 15, 2007

REPLY COMMENTS AND LEGAL ANALYSIS OF THE COMMUNITY ENVIRONMENTAL COUNCIL ON MARKET ADVISORY COMMITTEE REPORT AND THE FIRST SELLER APPROACH

The Community Environmental Council (“Council”) respectfully submits these reply comments in accordance with the “Administrative Law Judges’ Ruling Requesting that Parties Address an Additional Legal Issue in their Reply Briefs” (“ALJR”), dated August 8, 2007.

The Council is a member-supported environmental non-profit organization formed in Santa Barbara in 1970 and is the leading environmental organization in our region.

In 2004, the Council shifted its primary focus to energy issues and we are spearheading a regional effort to wean our communities from fossil fuels entirely during the next two decades. We are almost unique in combining on the ground work on a number of energy and climate change-related issues with our work on state and federal policy issues. Our state policy work is directly informed by our experience with what has worked, or will work, at the local level. More information on the Council and our energy program may be found at [www.fossilfreeby33.org](http://www.fossilfreeby33.org).

The Council submits reply comments herein and also responds to the ALJR request for additional legal briefing on preemption issues. We conclude:

- There is likely no material difference between a first-seller approach and a load-based approach with respect to preemption analysis under the Federal Power Act.
- Congress clearly reserved significant authority for the states in the Federal Power Act, so there is no field preemption of the proposed first-seller

approach. Moreover, Congress has never regulated greenhouse gases, so this is a field where Congress has yet to act.

- There should be no finding of conflict preemption because the proposed first-seller approach to cap and trade should not harm the objective of the Federal Power Act to protect consumers from excessive prices. The Commission and Air Resources Board should sprinkle their decisions with discussion of the likely economic benefits of greenhouse gas regulation to counter future arguments that the Federal Power Act's purpose of protecting consumers from excessive prices is contravened. A review of recent economic analysis of AB 32 shows that consumers should in fact benefit financially from reducing greenhouse gas emissions due to increased energy efficiency, increasingly competitive renewable power costs, and downward pressure on fossil fuel prices from increased renewable energy development.
- The line of Supreme Court cases highlighted in the ALJR and decided under the Natural Gas Act may be distinguished on numerous grounds, not least of which is the fact that regulation of wholesale sellers and out-of-state generators is only incidental to a legitimate state interest in regulating greenhouse gas emissions, and based on the conclusion that there will likely be no "clear damage" to federal objectives under the FPA from the proposed first-seller approach.

## I. Legal Analysis of Specified Line of Cases from ALJR

The ALJR requests comments on how a particular line of Supreme Court cases impact a preemption analysis of a first-seller approach versus a load-based approach under the Federal Power Act (FPA). The Council wrote in opening comments that we didn't see any distinctions with a difference between a load-based approach and a first-seller approach with respect to preemption analysis. Southern California Edison echoes this statement in its opening comments: "To the extent that California's GHG regulation seeks to regulate imported energy, the Federal Power Act's preemption analysis will be the same under both approaches." Response of Southern California Edison Company (U 338-E) to Administrative Law Judge's Comments and Legal Briefs on Market Advisory Committee Report, August 6, 2007, at 46. And, in the Commerce Clause analysis: "The First Seller approach does not seem to raise any different dormant Commerce Clause issues than would be raised under a load-based approach." *Id.* at 47.

NRDC and Environmental Defense conclude, however, that a load-based approach is less vulnerable to preemption than a first-seller approach, stating in their joint opening comments, at page 3: "Because the first-seller approach would regulate wholesale sellers of power, it faces potential preemption by the FPA, which gives the Federal Energy Regulatory Commission (FERC) the authority to regulate wholesale power transactions. The load-based approach, which regulates only retail sellers, does not face the same potential preemption problem." However, a load-based approach would indirectly regulate wholesale sellers in addition to retail sellers because a load-based approach would necessarily have an impact on wholesale power marketers as well as producers contracting with retail sellers in California that are subject to the load-based cap and trade system. The MAC Report supports this view, stating at page 45:

Another potential legal challenge has to do with the Federal Power Act. Some have suggested that this Act may render substantive “first seller” obligations unenforceable by the state with respect to wholesale transactions. The load-based approach imposes obligations directly on the load serving entities, and indirectly on wholesale transactions.

Edison adds in its opening comments, at page 7: “under a load-based approach not all importers are treated the same, which amounts to discriminatory treatment. This discriminatory treatment for different importers may create additional legal issues for the load-based approach compared to the First Seller.” This point is not directly relevant to an FPA preemption analysis, but does go directly to a dormant Commerce Clause analysis and supports the view that a load-based approach is not necessarily less vulnerable to preemption than a first-seller approach.

For these reasons, the Council believes there is unlikely to be any difference in the outcome of a court’s FPA preemption analysis between a load-based and a first-seller approach.

Accordingly, we address the specified line of cases in terms of their impact on an FPA preemption analysis of a first-seller approach, keeping in mind that the same analysis should apply to a load-based approach because a load-based approach would indirectly regulate wholesale sellers and out-of-state producers, thus triggering an almost identical preemption analysis.

Preemption analysis under the Supremacy Clause of the Constitution requires considering express preemption and two types of implied preemption: field preemption and conflict preemption. We addressed express preemption and field preemption in our opening comments as well as conflict preemption.

However, the cases highlighted in the ALJR mostly concern conflict preemption, so we re-visit that analysis in light of the cases decided under the Natural Gas Act.

### **A. Broad Considerations Weigh Against a Finding of Conflict Preemption**

Implied preemption results where a state law conflicts with federal law such that compliance with both federal and state regulations is impossible. *Hillsborough Co. v. Automated Med. Labs., Inc.*, 471 U.S. 707, 710 (1985). This is known as “conflict preemption.” A second type of conflict preemption may result where the state law impedes the federal law’s objective. *Hill v. Florida*, 325 U.S. 538 (1945). However, if the state law serves a different purpose, and does not necessarily obstruct the federal purpose, the state law is not preempted. *See e.g., Huron Portland Cement Co. v. City of Detroit*, 362 U.S. 440 (1960).

Moreover, the U.S. Supreme Court has repeatedly recognized a presumption against preemption in cases concerning whether a state law conflicts with, and thus has been displaced by, the existence of Federal Government authority. *See, e.g., Hillsborough County v. Automated Medical Laboratories, Inc.*, 471 U.S. 707, 715 (1985) (citing cases); *see also Medtronic, Inc. v. Lohr*, 518 U.S. 470, 485 (1996). In such a situation, the Court starts with the assumption that the police powers of the States are not to be superseded. *Hillsborough County*, 471 U.S., at 715. As discussed in our opening comments, traditional state police powers have long included authority to regulate health and safety, including environmental health.<sup>1</sup>

---

<sup>1</sup> State regulation established under the historic police powers of the states is superseded by federal law only when preemption is the clear intent of Congress. *Cipollone v. Liggett Group, Inc.*, 505 U.S. 504 (1992).

## B. Supreme Court Jurisprudence under the Federal Power Act and the Natural Gas Act

The ALJR requests that parties discuss a particular line of Supreme Court cases regarding the Natural Gas Act (NGA), in line with jurisprudence suggesting that case law re the NGA and the Federal Power Act (FPA) can be used interchangeably where provisions are similar in the two acts. Footnote 8 of *California v. Dynegy, Inc.* (2003), a Ninth Circuit case, states:

The FPA and the Natural Gas Act (“NGA”) are similar statutory schemes, and that the Supreme Court has held that the applicable case law for the two Acts is often interchangeable. ... (“[T]he relevant provisions of the two statutes are in all material respects substantially identical. ... [W]e therefore follow our established practice of citing interchangeably decisions interpreting the pertinent sections of the two statutes.”).

*California v. Dynegy, Inc.* 375 F.3d 831 n. 8 (2003), (citations omitted) (emphasis added).

Section 717(b) of the NGA states:

The provisions of this chapter shall apply to the transportation of natural gas in interstate commerce, to the sale in interstate commerce of natural gas for resale for ultimate public consumption for domestic, commercial, industrial, or any other use, and to natural-gas companies engaged in such transportation or sale, and to the importation or exportation of natural gas in foreign commerce and to persons engaged in such importation or exportation, but shall not apply to any other transportation or sale of natural gas or to the local distribution of natural gas or to the facilities used for such distribution or to the production or gathering of natural gas.

15 U.S.C. s. 717(b) (emphasis added). Section 717(c) states:

The matters exempted from the provisions of this chapter by this subsection are declared to be matters primarily of local concern and subject to regulation by the several States. A certification from such State commission to the Federal Power Commission that such State commission has regulatory jurisdiction over rates and service of such person and facilities and is exercising such jurisdiction shall constitute conclusive evidence of such regulatory power or jurisdiction.

15 U.S.C. s. 717(c) (emphasis added).

As discussed in our opening comments, the FPA states:

It is declared that the business of transmitting and selling electric energy for ultimate distribution to the public is affected with a public interest, and that Federal regulation of matters relating to generation to the extent provided in this subchapter and subchapter III of this chapter and of that part of such business which consists of the transmission of electric energy in interstate commerce and the sale of such energy at wholesale in interstate commerce is necessary in the public interest, such Federal regulation, however, to extend only to those matters which are not subject to regulation by the States.

16 U.S.C. s. 824(a) (emphasis added).

Note that section 717 of the NGA does not contain language as sweeping as that contained in section 824(a) of the FPA re acknowledging state authority to regulate.<sup>2</sup> This is just one indication that analysis under the NGA may not be entirely applicable to analysis under the FPA. We discuss further below how the cases cited by the ALJR may be distinguished from the present case.

---

<sup>2</sup> The NGA also includes a very limited additional grant of state authority at 15 U.S.C. section 3432, which is not relevant to the current controversy:

(a) Authority to prescribe maximum lawful prices  
Nothing in this chapter shall affect the authority of any State to establish or enforce any maximum lawful price for the first sale of natural gas produced in such State.

### C. NGA Cases Finding Preemption of State Laws

The ALJR highlights three Supreme Court cases decided under the NGA, two of which find preemption of a state regulation and the other finding no preemption. In reviewing case law in this area, going back to the 1932 *Champlin* case, one scholar states<sup>3</sup>:

[S]tate orders are preempted where they purport to dictate directly to an interstate pipeline the amount of gas it may purchase from particular producers, but not where they do so only indirectly by regulating the pace of production in a manner reasonably calculated to advance the state's interest in assuring ratable production and avoiding waste.

(Emphasis added).

In *Transcontinental Gas Pipeline, Inc.*, one of a line of cases that the ALJR highlighted, the Court states:

To the extent that Congress denied FERC the power to regulate affirmatively particular aspects of the first sale of gas, it did so because it wanted to leave determination of supply and first-sale price to the market." [A] federal decision to forgo regulation in a given area may imply an authoritative federal determination that the area is best left *unregulated*, and in that event would have as much preemptive force as a decision *to regulate*"

*Transcontinental Gas Pipeline, Inc.*, at 422 (emphasis in original, cites omitted).

Parties may argue that this statement supports the view that Congress did not intend to allow states to regulate where the FPA did not explicitly carve out

---

<sup>3</sup> Frank Lindh, "Federal Preemption of State Regulation in the Field of Electricity and Natural Gas: A Supreme Court Chronicle," *Energy Law Journal* (1989), 10 *Energy L.J.* 277, 298 ("Lindh on Preemption").

regulatory authority for the federal government. However, this is clearly not the case when we consider section 824(a)'s admonition: "such Federal regulation [authorized by the FPA], however, to extend only to those matters which are not subject to regulation by the States." Moreover, the federal government has heretofore not chosen to regulate greenhouse gas emissions in the FPA or elsewhere – indeed, this is a very current controversy between the state of California and the federal government in that the US EPA is now considering a waiver request under the Clean Air Act that would allow California to regulate greenhouse gas emissions. The EPA had previously denied that it had authority to regulate such emissions, but this regulatory decision was overturned by *Massachusetts v. EPA* (2007), which found that the EPA did have authority under the Clean Air Act to regulate greenhouse gas emissions. The Clean Air Act is not at issue in this proceeding, however, but this discussion provides further context for the federal government's role (or lack thereof) in regulating greenhouse gases.

*Transcontinental* also states:

Mississippi's order also runs afoul of other concerns identified in *Northern Natural*. First, it disturbs the uniformity of the federal scheme, since interstate pipelines will be forced to comply with varied state regulations of their purchasing practices. In light of the NGPA's unification of the interstate and intrastate markets, the contention that Congress meant to permit the States to impose inconsistent regulations is especially unavailing. Second, Mississippi's order would have the effect of increasing the ultimate price to consumers.

*Id.* at 423 (emphasis added). Parties may also argue that the proposed first-seller cap and trade system would interfere with the "uniformity of the federal scheme" for electricity regulation under the FPA and other federal laws. However, this argument should also fail because there is no federal regulation of

greenhouse gases currently. We discuss below the possible cost increases from California's greenhouse gas regulation and its impact on a preemption analysis.

#### **D. Conflict Preemption Due to Possible Cost Increases from California GHG Regulation**

A state law is preempted if it “stands as an obstacle to the accomplishment and execution of congressional objectives.” *Northwest Central Pipeline, supra*, at 509 (citing *Hines v. Davidowitz*, 312 U.S. 52, 67 (1941)). This is the second type of “conflict preemption” discussed above. The Court ruled in *Northwest Central Pipeline* that the state regulation at issue “regulates in a field that Congress expressly left to the States; it does not conflict with the federal regulatory scheme; hence it is not pre-empted.” *Id.* Clearly, there is some analytical overlap between field preemption and conflict preemption, but both analyses lead to the conclusion that a court will likely find in favor of California's authority to regulate in this area.

Similar to the conclusion in *Northwest Central Pipeline*, **the first-seller cap and trade approach should not be preempted by the courts because regulating air emissions - a category that includes carbon dioxide emissions, per *Massachusetts v. EPA*, even though no states have yet regulated these emissions - is a traditional state police power left explicitly to the states in Section 824(a) of the FPA; moreover, a first-seller cap and trade system should not be found to conflict with federal regulation for the reasons discussed in detail below.**

The Court in *Northwest Central Pipeline* stated that in analyzing a state regulation for possible preemption “we must take seriously the lines Congress drew in

establishing a dual regulatory system ....” *Id.* at 512. With section 824(a)’s express carveout for state regulation, a court should find that California has a right to regulate carbon dioxide emissions under its traditional police powers, alongside comprehensive federal regulation of interstate transmission and sales of electricity.

However, *Northwest Central Pipeline* also stated, in distinguishing *Transcontinental* and *Northern Natural Gas* (which both found the state regulations at issue to be preempted): “Interstate pipelines operate within the field reserved under the NGA for federal regulation, buying gas in one State and transporting it for resale in another, so inevitably the States are pre-empted from directly regulating these pipelines in such a way as to affect their cost structures.” *Id.* at 513-514 (citing *Transcontinental* and *Northern Natural Gas*). Parties opposed to the first-seller approach may argue similarly that the first-seller approach would impermissibly affect prices for interstate electricity sales.

However, *Northwest Central Pipeline* also states: “Unless clear damage to federal goals would result, FERC’s exercise of its authority must accommodate a State’s regulation of [natural gas] production.” *Id.* at 522. When we consider this rule in juxtaposition with the earlier statement from *Northwest Central Pipeline*: “If there is no analogous federal provision, so long as the purpose of a state law is plausibly related to matters of legitimate state concern, no conflict will be found” (*Id.* at 518), we can derive a rule that there must be “clear damage” to the FPA’s goals from the proposed first-seller system and the proposed system must be plausibly related to a State’s police power authority or some other legitimate authority or concern. **When we also consider the *Hillsborough* presumption against conflict preemption, it would appear that the Court has set a fairly high bar for a finding of conflict preemption.**

In the present case, there is no such clear damage and a court should find that any influence on interstate transmission and sales of electricity falls far below this threshold.

Southern California Edison, in its opening comments, relies on *Grand Council of the Crees (of Quebec) v. FERC*, 198 F. 3d 950, 956-57 (D.C. Cir. 2000) for the proposition that “FERC and a reviewing court have affirmatively forsworn any authority to consider environmental issues when reviewing wholesale rates.” Response of Southern California Edison to ALJ Request for Comments, at 45. However, *Grand Council* does not stand for the proposition that Edison cites it for. This case states:

Unsurprisingly, the Supreme Court has never indicated that the discretion of an agency setting “just and reasonable” rates for sale of a simple, fungible product or service should, or even could, encompass considerations of environmental impact (except, of course, as the need to meet environmental requirements may affect the firm's costs).

Following the judicial lead, the Commission has affirmatively forsworn environmental considerations. In [PSI Energy, Inc., 55 FERC ¶ 61,254 \(1991\)](#), it reviewed an interconnection agreement and rates to be charged thereunder. Certain petitioners raised various “siting, health, safety, environmental [and] archaeological problems” associated with the line through which the power would flow, but the Commission said that such factors were “beyond the Commission's authority to consider under sections 205 and 206 of the Federal Power Act.” *Id.* at 61,811. “In a case such as this one, the Commission's authority is limited to review of the rates, terms and conditions of jurisdictional agreements to ensure that they are just and reasonable and not unduly discriminatory or preferential.” *Id.*; see also [Monongahela Power Co., 39 FERC ¶ 61,350](#) at 62,096 (1987) (“Congress has not granted the Commission authority to reject rate filings on environmental grounds.”).

*Grand Council of Crees* at 958 (emphasis added). This passage makes it clear that FERC and the D.C. Circuit were “forswearing” environmental considerations in siting decisions only insofar as environmental considerations could not be raised as an obstacle to such siting. This is quite different than forswearing environmental considerations such as the cost of greenhouse gas emissions to regulated entities. Indeed, the D.C. Circuit states, in the passage above, its parenthetical caveat that environmental considerations should not be considered “except, of course, as the need to meet environmental requirements may affect the firm’s costs.” *Id.* Accordingly, it does not seem that the cited FERC decision or *Grand Council of Crees* should be relied upon as guidance re possible preemption of a first-seller cap and trade system. One could certainly argue that the above discussion suggests that FERC would consider greenhouse gas regulation entirely outside of its purview as an environmental consideration, but it would be unwise to rely entirely or primarily upon this guidance because it is so clearly aimed at a different category of “environmental consideration.”

*Grand Council of Crees* does, however, provide some guidance on a related preemption sub-analysis that will surely be relied upon by opponents to the proposed first-seller approach: is California’s proposed first-seller approach an impermissible infringement on federal authority to protect consumers from excessive prices? Section 824d(a) of the FPA states:

All rates and charges made, demanded, or received by any public utility for or in connection with the transmission or sale of electric energy subject to the jurisdiction of the Commission, and all rules and regulations affecting or pertaining to such rates or charges shall be just and reasonable, and any such rate or charge that is not just and reasonable is hereby declared to be unlawful.

The Supreme Court has affirmed that protecting consumers from high prices is one goal of the FPA: “A major purpose of the whole [Federal Power] Act is to

protect power consumers against excessive prices.” [\*Pa. Water & Power Co. v. Fed. Power Comm'n\*, 343 U.S. 414, 418 \(1952\)](#).

FERC has acknowledged, however, that where there is only the *potential* for conflict between a FERC order and a state regulation, it will respect the need to comply with both state and FERC regulation. 96 FERC ¶ 61,117 (2001).

With these considerations in mind, we now proceed to a conflict preemption analysis of the first-seller approach. We must address the likely economic impacts of greenhouse gas regulation on California and out-of-state consumers.

From a legal perspective, jurisprudence seems to be mixed on this issue, with *Transcontinental* stating, in the NGA context:

In any event, the federal scheme is disrupted if customers are forced to pay higher prices because of Mississippi's ratable-take requirement, then Mississippi's rule frustrates the federal goal of ensuring low prices most effectively; if FERC ultimately finds Transco's practices abusive and refuses to allow a passthrough, then FERC's and Mississippi's orders to Transco will be in direct conflict.

*Transcontinental* at 422-423. However, a more recent Supreme Court decision states:

To find field pre-emption merely because the regulation might affect gas purchasers' costs and hence interstate rates would be largely to nullify such state authority, for there can be little if any regulation of production that might not have at least an incremental effect on purchasers' costs in some market and contractual situations.

*Northwest Central Pipeline, supra*, at 494 (emphasis added). *Northwest Central* distinguishes *Transcontinental* and *Northern Natural Gas* because those cases dealt

with regulations that impacted wholesale operators directly, whereas the state regulations at issue in *Northwest Central Pipeline* regulated in-state producers, with only incidental effects on interstate commerce.

As stated in the Council's opening comments, the Commission should establish a strong record showing the likely economic benefits of complying with AB 32 as a preemptive rebuttal to claims that AB 32 will conflict with the FPA and NGA in terms of ensuring price protection for consumers. This is the case because even though a first-seller approach will have some impact on wholesale sellers, such effect should not be found to conflict with the FPA itself, nor with its objective of protecting consumers from excessive prices, if the case can be made that any cost impacts from regulating greenhouse gas emissions will not be excessive and/or that the overall economic impacts of greenhouse gas regulation will be beneficial for consumers.

As we stated in our opening comments:

First, there are many ways in which cost impacts to consumers could be minimized or eliminated. For example, if allowances are auctioned, revenues from the auction could be re-distributed to ratepayers to offset any electricity price increases. Alternatively, revenues could be used for rebates or tax credits for renewable energy technologies such as wind, geothermal or solar power – expanding existing state and federal programs. With expanded rebates and/or tax credits in place, the cost of low-carbon electricity generation could be mitigated partially or fully.

A recent draft report from the California Energy Commission found that the actual cost of fossil fuel generation has risen in recent years such that a number of low-carbon renewable energy technologies are now cheaper than fossil fuel sources, including

wind, geothermal, and various forms of biomass (*see* Figure 1).<sup>4</sup> Energy efficiency will also be incentivized through a cap and trade system because regulated entities will do their best to reduce demand as a low-cost means of reducing emissions. Similarly, a report commissioned by the Council from Prof. Dan Kammen at UC Berkeley and Prof. Peter Schwartz at CalPoly, San Luis Obispo, found that shifting from fossil fuels and nuclear power in Santa Barbara County [to almost 100 percent] energy efficiency and renewable energy would result in over \$1.35 billion in savings for our county by 2030 (in constant 2007 dollars). Last, a report from UC Berkeley's David Roland-Holst, based on a detailed energy and economics model, found that California as a whole would save \$74 billion by 2020 by reducing greenhouse gas emissions back to 1990 levels, as required by AB 32.

Accordingly, there should not be any negative economic impact from GHG regulation on ratepayers in California. To the contrary, such regulation will speed the rate at which utilities develop renewable energy portfolios – on top of the RPS 20% by 2010 mandate and 33% by 2020 goal – thus bringing fossil fuel generation costs down further while also reducing the volatility in the natural gas market.

Comments and Legal Analysis of the Community Environmental Council on Market Advisory Committee Report and the First Seller Approach, at 12.

Of course, more detailed discussions of the likely economic impacts from meeting AB 32's goal will have to await the results of this proceeding and ARB's process more generally – at which time we will likely have sectoral caps for electricity, natural gas and possibly transportation. It is likely the cost per ton of carbon dioxide will be around \$10/ton, which equals approximately 0.3 cents/kWh for electricity and about 10 cents/gallon for gasoline. These figures are relatively insignificant for consumers and will be far outweighed by long-term cost savings from the increased investment in the renewable energy sector and low-polluting sectors that such regulations will engender. As carbon

---

<sup>4</sup> California Energy Commission, 2007 Integrated Energy Policy Report levelized cost analysis, p. 7, CEC-200-2007-011-SD (“CEC Levelized Cost Analysis”). We show only the investor-owned utility cost; merchant-owned generation and publicly-owned generation costs are slightly different.

emissions prices rise, all energy sectors will continue to shift to non-polluting or low-polluting energy sources, further mitigating the cost impact to consumers. For example, a 2005 study from the Lawrence Berkeley National Laboratory found that renewable energy exerted a strong downward pressure on natural gas prices:

**Previous modeling studies consistently find that increased levels of RE and EE will put downward pressure on natural gas prices.** We review five studies by the Energy Information Administration (EIA), six by the Union of Concerned Scientists (UCS), one by the Tellus Institute, and one by the American Council for an Energy-Efficient Economy (ACEEE). Several of these studies conduct multiple analyses, and all except the ACEEE study use the EIA's National Energy Modeling System (NEMS). The ACEEE study uses a model developed by Energy and Environmental Analysis, Inc., and – unlike the other studies reviewed here – focuses on the ability of RE and EE investments to reduce gas prices in the *short* term.<sup>2</sup> Most of the studies that we review evaluate national renewable portfolio standard (RPS) proposals, though some evaluate state RPS policies and others also include EE. These studies consistently find that RE and EE deployment will reduce natural gas demand, thereby putting downward pressure on gas prices

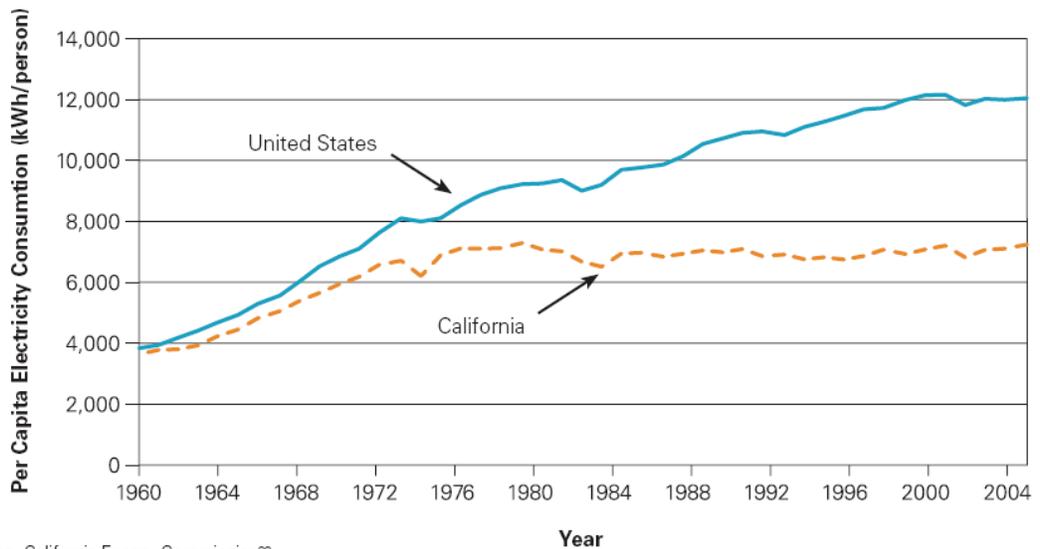
LBNL, *Easing the Natural Gas Crisis: Reducing Natural Gas Prices through Increased Deployment of Renewable Energy and Energy Efficiency* (2005), at viii. Accordingly, as renewables and energy efficiency are further developed, in line with the existing Renewable Portfolio Standard mandate of 20% by 2010 and the goal of 33% by 2020, on top of AB 32's likely cap and trade programs, natural gas prices will very likely moderate substantially – all else being equal. With almost 50% of California's electricity produced from natural gas, this will likely have a strong impact on reducing electricity rates (again, all else being equal). Similarly, costs to consumers of natural gas for non-electricity generation purposes will likely moderate.

With energy efficiency likely to be in the lead in achieving AB 32's required reductions, it is important that the Commission include discussion of the favorable economics for energy efficiency in its decision(s). We include below the discussion of energy efficiency in all sectors from our regional energy blueprint, available at [www.fossilfreeby33.org](http://www.fossilfreeby33.org).

### *Costs of Energy Efficiency*

[A]s a result of California's sustained commitment to building energy efficiency, per capita electricity consumption has remained essentially the same since the early 1970s (see Figure 8-2). In fact, in 2007 California tied for the top spot (with Vermont and Connecticut) in the annual American Council for an Energy-Efficient Economy national survey of state energy efficiency programs.<sup>5</sup>

Fig. 8-2. *Per capita electricity consumption in the U.S. and California.*<sup>6</sup>



Source: California Energy Commission<sup>33</sup>

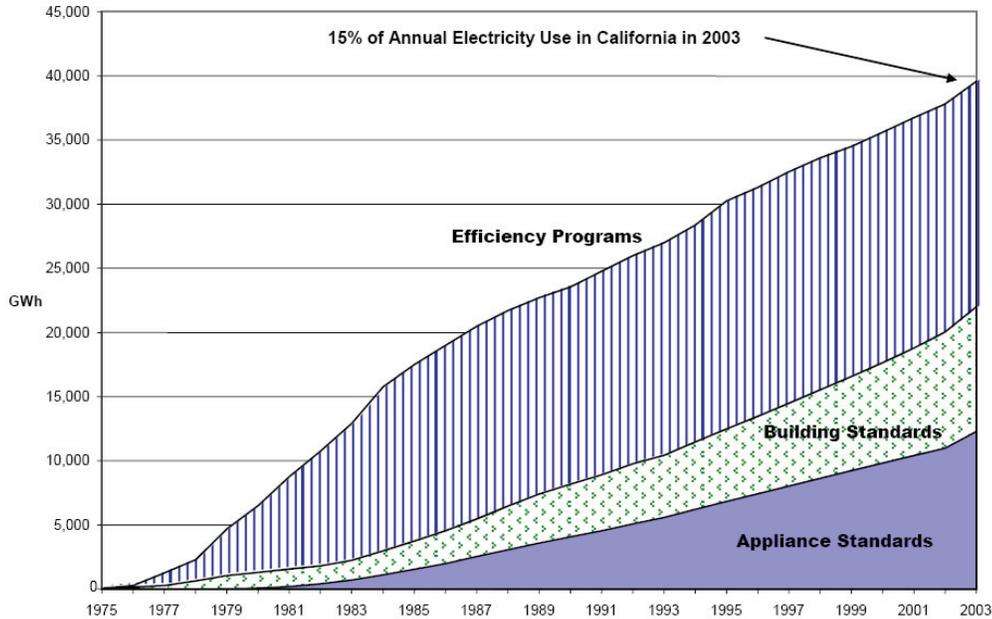
Much of the credit for this success can be given to good state policies, which are responsible for about 40,000 gigawatt hours

<sup>5</sup> American Council for an Energy-Efficient Economy, The State Energy Efficiency Scorecard for 2006 (2007), online at: <http://aceee.org/pubs/e075.pdf?CFID=3075610&CFTOKEN=15250704>.

<sup>6</sup> California Public Utilities Commission, Energy Efficiency: California's Highest-Priority Resource (2006), online at: [http://www.electricitydeliveryforum.org/pdfs/CPUC\\_calif\\_cleanenergy508.pdf](http://www.electricitydeliveryforum.org/pdfs/CPUC_calif_cleanenergy508.pdf).

(GWh) of savings per year, from robust energy efficiency programs administered by the Public Utilities Commission as well as building and appliance standards administered by the Energy Commission and the federal Department of Energy's Energy Star program (Figure 8-3).

Fig. 8-3. *Cumulative energy savings from California's energy efficiency programs since the 1970s.*<sup>7</sup>



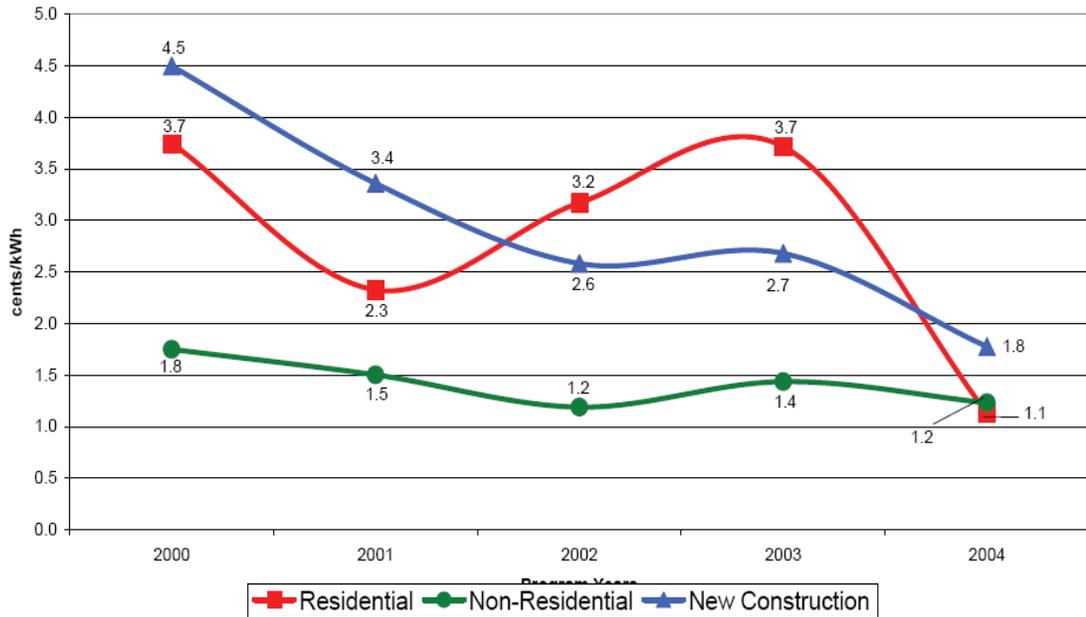
In 2004, the costs of electricity energy efficiency measures in California averaged 1.4 cents per kW – about one-sixth the wholesale cost of new generation (see Figure 8-3).<sup>8</sup> Accordingly, achieving further reductions in electricity use through energy efficiency and conservation shouldn't be hindered by economic concerns for the foreseeable future; it's clear that such measures would save significant amounts of energy and money in the future.

Fig. 8-4. *Cost-effectiveness of California utility energy efficiency measures (cents per kWh).*<sup>9</sup>

<sup>7</sup> California Energy Commission, Options for Energy Efficiency in Existing Buildings, CEC-400-2005-039-CMF, p.

<sup>8</sup> The California Public Utilities Commission recently found that the average cost of new natural gas-fired generation in 2007 would be about 9 cents/kWh (D.06-06-063, June 29, 2006).

<sup>9</sup> California Energy Commission, Funding and Energy Savings From Investor-Owned Utility Energy Efficiency Programs in California for Program years 2000 Through 2004, CEC-400-2005-0042-REV, p. 9.



For this reason, energy efficiency is the state’s foundation for achieving greenhouse gas reductions pursuant to the 2006 Global Warming Solutions Act (AB 32). But increased penetration of energy efficiency measures will require alerting the public, businesses and agencies to the potential savings by increased energy efficiency. Our action plan for seizing those opportunities in the building sector is described in Chapter 2.

Similarly, the costs of increased energy efficiency measures in the transportation sector have been very competitive. An extensive review by the Union of Concerned Scientists (UCS) found that an increase in the federal corporate average fuel economy (CAFE) standards from 13.1 miles per gallon (mpg) in 1975 to 20.6 mpg in 2000 *saved consumers \$92 billion in 2000*.<sup>10</sup> Amazingly, the prevailing cost of gasoline at the time of this study in 2000 was \$1.54 per gallon. With national prices in mid-2007 at \$3.11, savings literally double -- to about \$180 billion each year. When we factor in the 23 percent additional savings from improvements in the average mpg from 2000 to 2005, consumers currently enjoy about \$221 billion savings each year due to the existing CAFE standard.

<sup>10</sup> Union of Concerned Scientists, *Drilling in Detroit* (2000), p. 8, online at: [http://www.ucsusa.org/assets/documents/clean\\_vehicles/drill\\_detroit.pdf](http://www.ucsusa.org/assets/documents/clean_vehicles/drill_detroit.pdf).

There are numerous bills pending in Congress that would raise the standard significantly by 2020, with most calling for 35 to 40 mpg, up from today's 27.5. Based on the record, such a change would lead to large additional savings for consumers, all else being equal.

#### **E. Some Final Comments on Field Preemption Issues**

Another case mentioned in the ALJR, *Northern Gas Co. v. Kansas Commission* 472 U.S. 84 (1963), focuses on field preemption issues. The case may readily be distinguished from the present situation because it is clear from a review of the Federal Power Act and its associated jurisprudence that Congress did not intend to occupy the field of electricity regulation. Again, section 824(a) provides an explicit reservation of state authority to regulate the electricity sector where the FPA did not carve out federal authority over interstate transmission, etc.

In *Northern Natural Gas Co.*, the Court states at the end of its opinion: "The question is whether the state orders may stand in the face of the pervasive scope of federal occupation of the field." *Id.* at 98. While *Dynegy* found that NGA and FPA jurisprudence may be mutually informative, it also included the caveat, quoting *Ark. La. Gas Co. v. Hall*, 453 U.S. 571, 578 n.8: "[T]he relevant provisions of the two statutes are in all material respects substantially identical ... [W]e therefore follow our established practice of citing interchangeably decisions interpreting the pertinent sections of the two statutes." (Emphasis added). Accordingly, **jurisprudence is mutually informative only for relevant provisions in the two laws**. As discussed above, the FPA includes an explicit reservation for traditional state authority over the electricity sector, whereas the NGA's grant to state authority is far less sweeping.

Respectfully submitted,

TAM HUNT

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

Energy Program Director  
Community Environmental  
Council

26 W. Anapamu, 2<sup>nd</sup> Floor  
Santa Barbara CA 93101  
(805) 963-0583, ext. 122

Dated: August 15, 2007

CERTIFICATE OF SERVICE

I hereby certify that I have served by electronic service a copy of the foregoing REPLY COMMENTS OF THE COMMUNITY ENVIRONMENTAL COUNCIL ON MARKET ADVISORY COMMITTEE REPORT on all known interested parties of record in R.06-04-009 included on the service list appended to the original document filed with this Commission. Service by first class U.S. mail has also been provided to those who have not provided an email address.

Dated at Santa Barbara, California, August 15, 2007.



---

Tam Hunt

*Appearance*

ADRIAN PYE  
ENERGY AMERICA, LLC  
ONE STAMFORD PLAZA, EIGHTH FLOOR  
263 TRESSER BLVD.  
STAMFORD, CT 06901

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

KEITH R. MCCREA  
ATTORNEY AT LAW  
SUTHERLAND, ASBILL & BRENNAN, LLP  
1275 PENNSYLVANIA AVE., N.W. STE. 800  
WASHINGTON, DC 20004-2415

KEVIN BOUDREAUX  
CALPINE POWER AMERICA-CA, LLC  
717 TEXAS AVENUE, SUITE 1000  
HOUSTON, TX 77002

E.J. WRIGHT  
OCCIDENTAL POWER SERVICES, INC.  
5 GREENWAY PLAZA, SUITE 110  
HOUSTON, TX 77046

ERIC GUIDRY  
WESTERN RESOURCE ADVOCATES  
2260 BASELINE ROAD, SUITE 200  
BOULDER, CO 80304

LARRY BARRETT  
BARRETT CONSULTING ASSOCIATES, INC.  
PO BOX 60429  
COLORADO SPRINGS, CO 80960

JENINE SCHENK  
APS ENERGY SERVICES  
400 E. VAN BUREN STREET, SUITE 750  
PHOENIX, AZ 85004

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

DENNIS M.P. EHLING  
ATTORNEY AT LAW  
KIRKPATRICK & LOCKHART NICHOLSON GRAHAM  
10100 SANTA MONICA BLVD., 7TH FLOOR  
LOS ANGELES, CA 90067

GREGORY KOISER  
CONSTELLATION NEW ENERGY, INC.  
350 SOUTH GRAND AVENUE, SUITE 3800  
LOS ANGELES, CA 90071

MICHAEL MAZUR  
3 PHASES ENERGY SERVICES  
2100 SEPULVEDA BLVD., SUITE 37  
MANHATTAN BEACH, CA 90266

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

GREGORY S.G. KLATT  
DOUGLASS & LIDDELL  
411 E. HUNTINGTON DRIVE, STE. 107-356  
ARCADIA, CA 91006

RICHARD HELGESON DANIEL W. DOUGLASS  
SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY ATTORNEY AT LAW  
225 S. LAKE AVE., SUITE 1250 DOUGLASS & LIDDELL  
PASADENA, CA 91101 21700 OXNARD STREET, SUITE 1030  
WOODLAND HILLS, CA 91367

PAUL DELANEY AKBAR JAZAYEIRI  
AMERICAN UTILITY NETWORK (A.U.N.) DIRECTOR OF REVENUE & TARRIFFS  
10705 DEER CANYON DRIVE SOUTHERN CALIFORNIA EDISON COMPANY  
ALTA LOMA, CA 91737 2244 WALNUT GROVE AVE. ROOM 390  
ROSEMEAD, CA 91770

ANNETTE GILLIAM RONALD MOORE  
ATTORNEY AT LAW GOLDEN STATE WATER/BEAR VALLEY ELECTRIC  
SOUTHERN CALIFORNIA EDISON COMPANY 630 EAST FOOTHILL BOULEVARD  
2244 WALNUT GROVE AVENUE SAN DIMAS, CA 91773  
ROSEMEAD, CA 91770

SYMONE VONGDEUANE THEODORE ROBERTS  
SEMPRA ENERGY SOLUTIONS ATTORNEY AT LAW  
101 ASH STREET, HQ09 SEMPRA GLOBAL  
SAN DIEGO, CA 92101-3017 101 ASH STREET, HQ 13D  
SAN DIEGO, CA 92101-3017

BILL LYONS THOMAS DARTON  
CORAL POWER, LLC PILOT POWER GROUP, INC.  
4445 EASTGATE MALL, SUITE 100 9320 CHESAPEAKE DRIVE, SUITE 112  
SAN DIEGO, CA 92121 SAN DIEGO, CA 92123

STEVE RAHON GLORIA BRITTON  
DIRECTOR, TARIFF & REGULATORY ACCOUNTS ANZA ELECTRIC COOPERATIVE, INC.  
SAN DIEGO GAS & ELECTRIC COMPANY 58470 HWY 371  
8330 CENTURY PARK COURT, CP32C PO BOX 391909  
SAN DIEGO, CA 92123-1548 ANZA, CA 92539

LYNELLE LUND GEORGE HANSON  
COMMERCE ENERGY, INC. DEPARTMENT OF WATER AND POWER  
600 ANTON BLVD., SUITE 2000 CITY OF CORONA  
COSTA MESA, CA 92626 730 CORPORATION YARD WAY  
CORONA, CA 92880

TAMLYN M. HUNT                      LAD LORENZ  
ENERGY PROGRAM DIRECTOR              V.P. REGULATORY AFFAIRS  
COMMUNITY ENVIRONMENTAL COUNCIL      SOUTHERN CALIFORNIA GAS COMPANY  
26 W. ANAPAMU ST., 2/F              601 VAN NESS AVENUE, SUITE 2060  
SANTA BARBARA, CA 93101              SAN FRANCISCO, CA 94102

DIANA L. LEE                      F. JACKSON STODDARD  
CALIF PUBLIC UTILITIES COMMISSION      CALIF PUBLIC UTILITIES COMMISSION  
LEGAL DIVISION                      LEGAL DIVISION  
ROOM 4300                      ROOM 5040  
505 VAN NESS AVENUE              505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3214      SAN FRANCISCO, CA 94102-3214

AUDREY CHANG                      EVELYN KAHL  
NATURAL RESOURCES DEFENSE COUNCIL      ATTORNEY AT LAW  
111 SUTTER STREET, 20TH FLOOR      ALCANTAR & KAHL, LLP  
SAN FRANCISCO, CA 94104              120 MONTGOMERY STREET, SUITE 2200  
SAN FRANCISCO, CA 94104

MICHAEL P. ALCANTAR              SEEMA SRINIVASAN  
ATTORNEY AT LAW                      ATTORNEY AT LAW  
ALCANTAR & KAHL, LLP              ALCANTAR & KAHL, LLP  
120 MONTGOMERY STREET, SUITE 2200      120 MONTGOMERY STREET, SUITE 2200  
SAN FRANCISCO, CA 94104              SAN FRANCISCO, CA 94104

CHRISTOPHER J. WARNER              EDWARD G POOLE  
PACIFIC GAS AND ELECTRIC COMPANY      ANDERSON DONOVAN & POOLE  
77 BEALE STREET                      601 CALIFORNIA STREET SUITE 1300  
SAN FRANCISCO, CA 94105              SAN FRANCISCO, CA 94108

BRIAN T. CRAGG                      JAMES D. SQUERI  
ATTORNEY AT LAW                      ATTORNEY AT LAW  
GOODIN, MACBRIDE, SQUERI, RITCHIE & DAY      GOODIN MACBRIDE SQUERI RITCHIE &  
DAY LLP  
505 SANSOME STREET, SUITE 900              505 SANSOME STREET, STE 900  
SAN FRANCISCO, CA 94111              SAN FRANCISCO, CA 94111

JOSEPH M. KARP                      KAREN BOWEN  
ATTORNEY AT LAW                      ATTORNEY AT LAW  
WINSTON & STRAWN LLP              WINSTON & STRAWN LLP  
101 CALIFORNIA STREET              101 CALIFORNIA STREET  
SAN FRANCISCO, CA 94111              SAN FRANCISCO, CA 94111

LISA A. COTTLE  
ATTORNEY AT LAW  
WINSTON & STRAWN LLP  
101 CALIFORNIA STREET, 39TH FLOOR  
SAN FRANCISCO, CA 94111

JEFFREY P. GRAY  
DAVIS WRIGHT TREMAINE, LLP  
505 MONTGOMERY STREET, SUITE 800  
SAN FRANCISCO, CA 94111-6533

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

BRIAN K. CHERRY  
DIRECTOR REGULATORY RELATIONS  
PACIFIC GAS AND ELECTRIC COMPANY  
PO BOX 770000 MC B10C  
SAN FRANCISCO, CA 94177-0001

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

JENNIFER CHAMBERLIN  
STRATEGIC ENERGY, LLC  
3130 D BALFOUR ROAD, STE 290  
BRENTWOOD, CA 94513

KERRY HATTEVIK  
MIRANT CORPORATION  
696 WEST 10TH STREET  
PITTSBURG, CA 94565

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

WILLIAM H. CHEN  
CONSTELLATION NEW ENERGY, INC.  
2175 N. CALIFORNIA BLVD., SUITE 300  
WALNUT CREEK, CA 94596

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

JANILL RICHARDS  
DEPUTY ATTORNEY GENERAL  
CALIFORNIA ATTORNEY GENERAL'S OFFICE  
1515 CLAY STREET, 20TH FLOOR  
OAKLAND, CA 94702

CLIFF CHEN  
UNION OF CONCERNED SCIENTIST  
2397 SHATTUCK AVENUE, STE 203  
BERKELEY, CA 94704

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

R. THOMAS BEACH  
CROSSBORDER ENERGY  
2560 NINTH STREET, SUITE 213A  
BERKELEY, CA 94710

BARRY F. MCCARTHY

C. SUSIE BERLIN

ATTORNEY AT LAW  
MCCARTHY & BERLIN, LLP  
100 PARK CENTER PLAZA, SUITE 501  
SAN JOSE, CA 95113

ATTORNEY AT LAW  
MC CARTHY & BERLIN, LLP  
100 PARK CENTER PLAZA, SUITE 501  
SAN JOSE, CA 95113

JOHN JENSEN  
PRESIDENT  
MOUNTAIN UTILITIES  
PO BOX 205  
KIRKWOOD, CA 95646

MARY LYNCH  
CONSTELLATION ENERGY COMMODITIES GROUP  
2377 GOLD MEADOW WAY, STE. 100  
GOLD RIVER, CA 95670

ANDREW BROWN  
ATTORNEY AT LAW  
ELLISON, SCHNEIDER & HARRIS, LLP  
2015 H STREET  
SACRAMENTO, CA 95814

BRUCE MCLAUGHLIN  
BRAUN & BLAISING, P.C.  
915 L STREET, SUITE 1420  
SACRAMENTO, CA 95814

GREGGORY L. WHEATLAND  
ATTORNEY AT LAW  
ELLISON, SCHNEIDER & HARRIS, LLP  
2015 H STREET  
SACRAMENTO, CA 95814

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

JEDEDIAH J. GIBSON  
ATTORNEY AT LAW  
ELLISON, SCHNEIDER & HARRIS LLP  
2015 H STREET  
SACRAMENTO, CA 95814

WILLIAM W. WESTERFIELD, III  
ATTORNEY AT LAW  
ELLISON, SCHNEIDER & HARRIS L.L.P.  
2015 H STREET  
SACRAMENTO, CA 95814

DAN SILVERIA  
SURPRISE VALLEY ELECTRIC COOPERATIVE  
PO BOX 691  
ALTURAS, CA 96101

ROBERT W. MARSHALL  
GENERAL MANAGER  
PLUMAS-SIERRA RURAL ELECTRIC CO-OP  
73233 STATE ROUTE 70, STE A  
PORTOLA, CA 96122-7064

DONALD BROOKHYSER  
ALCANTAR & KAHL  
1300 SW FIFTH AVE., SUITE 1750  
PORTLAND, OR 97210

KYLE L. DAVIS  
PACIFICORP  
825 NE MULTNOMAH,  
PORTLAND, OR 97232

NATALIE HOCKEN, ESQ.  
PACIFICORP

SHAY LABRAY  
MANAGER, REGULATORY

LLOYD CENTER TOWER  
825 NE MULTNOMAH  
PORTLAND, OR 97232

PACIFICORP  
825 NE MULTNOMAH, SUITE 2000  
PORTLAND, OR 97232

KELLY NORWOOD  
RATES AND REGULATION DEPARTMENT  
AVISTA UTILITIES  
PO BOX 3727, MSC-29  
SPOKANE, WA 99220-3727

IAN CARTER  
POLICY COORDINATOR-NORTH AMERICA  
INTERNATIONAL EMISSIONS TRADING ASSN.  
350 SPARKS STREET, STE. 809  
OTTAWA, ON K1R 7S8  
CANADA

*Information Only*

CAROL JOLLY  
PO BOX 585  
CHESTERFIELD, MA 01012

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

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

DALLAS BURTRAW  
1616 P STREET, NW  
WASHINGTON, DC 20036

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

LISA DECKER  
COUNSEL  
CONSTELLATION ENERGY GROUP, INC.  
111 MARKET PLACE, SUITE 500  
BALTIMORE, MD 21202

CATHY S. WOOLLUMS  
MIDAMERICAN ENERGY HOLDINGS COMPANY  
106 EAST SECOND STREET  
DAVENPORT, IA 52801

BRIAN POTTS  
SUITE 700  
ONE SOUTH PINCKNEY STREET  
MADISON, WI 53703

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

PAUL M. SEBY  
MCKENNA LONG & ALDRIDGE LLP  
1875 LAWRENCE STREET, SUITE 200  
DENVER, CO 80202

TIMOTHY R. ODIL

KEVIN J. SIMONSEN



POWAY, CA 92064

REGULATORY LAW DEPARTMENT  
101 ASH STREET, HQ13D  
SAN DIEGO, CA 92101

DONALD C. LIDDELL, P.C.  
DOUGLASS & LIDDELL  
2928 2ND AVENUE  
SAN DIEGO, CA 92103

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

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

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

JAN PEPPER  
CLEAN POWER MARKETS, INC.  
PO BOX 3206  
418 BENVENUE AVENUE  
LOS ALTOS, CA 94024

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

MARC D. JOSEPH  
ADAMS BRADWELL JOSEPH & CARDOZO  
601 GATEWAY BLVD. STE 1000  
SOUTH SAN FRANCISCO, CA 94080

DIANE I. FELLMAN  
ATTORNEY AT LAW  
LAW OFFICES OF DIANE I. FELLMAN  
234 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102

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

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

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

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

NINA SUETAKE  
ATTORNEY AT LAW  
THE UTILITY REFORM NETWORK

DAN ADLER  
DIRECTOR, TECH AND POLICY DEVELOPMENT  
CALIFORNIA CLEAN ENERGY FUND





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

JOSEPH M. PAUL  
SENIOR CORPORATE COUNSEL  
DYNEGY, INC.  
2420 CAMINO RAMON, SUITE 215  
SAN RAMON, CA 94583

STEVEN S. SCHLEIMER  
CALPINE CORPORATION  
3875 HOPYARD ROAD, SUITE 345  
PLEASANTON, CA 94588

MONICA A. SCHWEBS, ESQ.  
BINGHAM MCCUTCHEM LLP  
SUITE 210  
1333 N. CALIFORNIA BLVD.  
WALNUT CREEK, CA 94596

CARLA PETERMAN  
MRW & ASSOCIATES, INC.  
1999 HARRISON STREET, SUITE 1440  
OAKLAND, CA 94612

1815 BLAKE ST., APT. A  
BERKELEY, CA 94703

REED V. SCHMIDT  
VICE PRESIDENT  
BARTLE WELLS ASSOCIATES  
1889 ALCATRAZ AVENUE  
BERKELEY, CA 94703

JOHN GALLOWAY  
UNION OF CONCERNED SCIENTISTS  
2397 SHATTUCK AVENUE, SUITE 203  
BERKELEY, CA 94704

CLYDE MURLEY  
CONSULTANT  
600 SAN CARLOS AVENUE  
ALBANY, CA 94706

EDWARD VINE  
LAWRENCE BERKELEY NATIONAL LABORATORY  
BUILDING 90-4000  
BERKELEY, CA 94720

RYAN WISER  
BERKELEY LAB  
MS-90-4000  
ONE CYCLOTRON ROAD  
BERKELEY, CA 94720

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

KENNY SWAIN  
POWER ECONOMICS  
901 CENTER STREET  
SANTA CRUZ, CA 95060

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

ERIC WANLESS  
NATURAL RESOURCES DEFENSE COUNCIL  
111 SUTTER STREET, 20TH FLOOR  
SAN FRANCISCO, CA 95104

JOY A. WARREN  
ATTORNEY AT LAW  
MODESTO IRRIGATION DISTRICT  
PO BOX 4060  
MODESTO, CA 95352

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

CHRISTOPHER J. MAYER  
MODESTO IRRIGATION DISTRICT  
1231 11TH STREET  
MODESTO, CA 95354

ROGER VANHOY  
MODESTO IRRIGATION DISTRICT  
1231 11TH STREET  
MODESTO, CA 95354

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

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

CAROLYN M. KEHREIN  
ENERGY MANAGEMENT SERVICES  
1505 DUNLAP COURT  
DIXON, CA 95620-4208

CALIFORNIA ISO  
LEGAL AND REGULATORY DEPARTMENT  
151 BLUE RAVINE ROAD  
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

SCOTT TOMASHEFSKY  
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  
LS POWER GENERATION  
980 NINTH STREET, SUITE 1420  
SACRAMENTO, CA 95814

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

STEVEN KELLY  
INDEPENDENT ENERGY PRODUCERS ASSN  
1215 K STREET, SUITE 900  
SACRAMENTO, CA 95814-3947

EDWARD J. TIEDEMANN  
ATTORNEY AT LAW  
KRONICK, MOSKOVITZ, TIEDEMANN & GIRARD  
400 CAPITOL MALL, 27TH FLOOR  
SACRAMENTO, CA 95814-4416

BALWANT S. PUREWAL  
DEPARTMENT OF WATER RESOURCES  
3310 EL CAMINO AVE., LL-90  
SACRAMENTO, CA 95821

KAREN NORENE MILLS  
ATTORNEY AT LAW  
CALIFORNIA FARM BUREAU FEDERATION  
2300 RIVER PLAZA DRIVE  
SACRAMENTO, CA 95833

KAREN LINDH  
LINDH & ASSOCIATES  
7909 WALERGA ROAD, NO. 112, PMB119  
ANTELOPE, CA 95843

DENISE HILL  
DIRECTOR  
4004 KRUSE WAY PLACE, SUITE 150  
LAKE OSWEGO, OR 97035

KEVIN FOX  
STOEL RIVES LLP  
900 SW FIFTH AVENUE, SUITE 2600  
PORTLAND, OR 97204

ANNIE STANGE  
ALCANTAR & KAHL  
1300 SW FIFTH AVE., SUITE 1750  
PORTLAND, OR 97210

ALAN COMNES  
WEST COAST POWER  
3934 SE ASH STREET  
PORTLAND, OR 97214

MARK C. TREXLER  
TREXLER CLIMATE+ENERGY SERVICES, INC.  
529 SE GRAND AVE, M SUITE 300  
PORTLAND, OR 97214-2232

SAM SADLER  
OREGON DEPARTMENT OF ENERGY  
625 NE MARION STREET  
SALEM, OR 97301-3737

LISA SCHWARTZ  
SENIOR ANALYST  
OREGON PUBLIC UTILITY COMMISSION  
PO BOX 2148  
SALEM, OR 97308-2148

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

TIM HEMIG  
DIRECTOR  
NRG ENERGY  
4600 CARLSBAD BLVD.  
CARLSBAD, CA 99208

KAREN MCDONALD  
POWEREX CORPORATION  
1400,  
666 BURRAND STREET  
VANCOUVER, BC V6C 2X8  
CANADA

*State Service*

JAMES LOEWEN  
CALIF PUBLIC UTILITIES COMMISSION  
RATEMAKING BRANCH  
320 WEST 4TH STREET SUITE 500  
LOS ANGELES, CA 90013

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

CHRISTINE S. TAM  
CALIF PUBLIC UTILITIES COMMISSION  
ELECTRICITY RESOURCES & PRICING BRANCH  
ROOM 4209  
505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3214

DONALD R. SMITH  
CALIF PUBLIC UTILITIES COMMISSION  
ELECTRICITY RESOURCES & PRICING  
BRANCH  
ROOM 4209  
505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3214

JACLYN MARKS  
CALIF PUBLIC UTILITIES COMMISSION  
DIVISION OF STRATEGIC PLANNING  
ROOM 5119  
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

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

JULIE A. FITCH  
CALIF PUBLIC UTILITIES COMMISSION  
DIVISION OF STRATEGIC PLANNING  
ROOM 5203  
505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3214

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

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



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