To: **CARB Staff**
From: **Audrey Chang, Lara Ettenson, Kristin Grenfell, Nick Zigelbaum, and George Peridas, NRDC (achang@nrdc.org)**
Re: **Comments on Electricity and Natural Gas in Draft Scoping Plan**
Date: **August 11, 2008**
Via: **Electronic submission at** http://www.arb.ca.gov/cc/scopingplan/spcomment.htm

NRDC appreciates the opportunity to comment on the electricity and natural gas sectors of the Draft Scoping Plan and Appendices. Please also refer to our comments on Green Buildings, submitted August 7, for other comments relevant to the electricity and natural gas sectors. These comments are organized into three sections: (1) measures that apply to both electricity and natural gas, (2) electricity measures, and (3) natural gas measures.

I. Measures that Apply to Both Electricity and Natural Gas

A. Energy Efficiency

NRDC strongly supports the statewide goal of capturing all cost-effective energy efficiency (electricity and natural gas) through a combination of strengthened building codes and appliance standards and aggressive utility programs to meet the state's significant greenhouse gas reduction targets. Additional policies are also needed, as discussed below, to capture all cost-effective energy efficiency in the state.

We note that while the California Public Utilities Commission (CPUC) and the investor-owned utilities have a strong history, infrastructure, and clear oversight and enforcement structure in place to reach their aggressive energy savings goals, the publicly-owned utilities (POUs), for the most part, are just beginning to ramp up their energy efficiency efforts. Pursuant to Assembly Bill 2021 (AB 2021), the POUs have set targets that are much more aggressive than their historical level of savings. The POUs' March 2008 status report indicates that the POUs are beginning to ramp up their savings,

but that they are not yet on track to reach their AB 2021 energy saving goals.[1] NRDC recommends that CARB and the CEC work closely with the POUs to ensure that they meet the full potential for all cost-effective energy efficiency to help meet the state's 2020 GHG emissions limit. In order for the POUs to reach their goals, several other accompanying policies must first be put into place, such as independent evaluation, measurement, and verification of energy savings, as well as policies to break the link between the utilities' electricity sales and their financial health. NRDC recommends that CARB work closely with the CEC to provide additional guidance to the POUs, to track their progress closely, and to implement additional accountability measures for the POUs to reach their targets if necessary.

We also urge CARB to include a discussion of the California Long-term Energy Efficiency Strategic Plan in the Proposed Scoping Plan. The CPUC is currently leading a process to develop a statewide strategic plan out to 2020 to align with the AB 32 timeline. This process has been underway for almost an entire year and has incorporated the input of a diverse group of stakeholders across the state. The first edition of the California Strategic Plan is slated to be adopted by the CPUC in September 2008. This Strategic Plan will be very important in providing the *entire* state (including the CEC, POUs, developers, etc.) with a roadmap to achieve the aggressive energy savings goals that will be essential to meet our AB 32 goals.

In addition, as noted by the Draft Scoping Plan's Appendix C (p. C-61), AB 662 (Ruskin, 2007) calls for the CEC to establish water efficiency standards indoor and outdoor water use. Saving water will also reduce electricity and natural gas used to distribute, pump, and treat the water. However, the CEC has not yet initiated proceedings to develop these water efficiency standards. We urge CARB to work with the CEC to include a schedule for development of these standards in the Proposed Scoping Plan.

NRDC appreciates the ongoing coordination between CARB, CPUC, and CEC to ensure that the energy efficiency savings are not double counted elsewhere or in the 2020 business as usual forecast. (p. 22) We appreciate the upcoming August 12 CEC workshop on this matter, and continue to urge the agencies to work together to quickly to resolve

[1] CMUA, *Energy Efficiency in California's Public Power Sector: A Status Report.* March 2008. See also NRDC Letter to CMUA re: *Energy Efficiency in California's Public Power Sector*, June 18, 2008, attached.

the quantification of the amount of savings from the energy efficiency programs and standards that is embedded in the demand forecast, *before* the Scoping Plan is adopted.

We urge CARB to provide further details about the assumptions used to develop Table 12 of Appendix C, which provides a summary of the potential emissions reductions and net annualized costs of the electricity and natural gas energy efficiency measures under evaluation. The net annualized cost numbers for natural gas energy efficiency measures in particular do not seem to be consistent, so we urge CARB to clarify these numbers.

B. Energy Efficiency and Co-Benefits Audits for Large Industrial Sources

NRDC supports the measure for energy efficiency audits for large industrial sources (see also our Comments on Industry, submitted concurrently). (p.36) The Draft Scoping Plan notes that in the event that the audit results show that cost-effective improvements can be made, "rule provisions or permit conditions would be considered to ensure the best combination of pollution reduction." (p. 36) NRDC stresses that the actual implementation of cost-effective energy efficiency improvements is vital to ensure that this strategy will result in the GHG reductions that will help meet the AB 32 goals. We urge CARB to include additional requirements in the Proposed Scoping Plan to ensure that once cost-effective electricity and natural gas savings opportunities are identified through an audit, they are then actually captured.

C. Additional Policies Needed

Although NRDC supports the draft scoping plan's proposed strengthening of building and appliance standards and utility programs (p.38), NRDC recommends that the additional policy tools described below be pursued to meet the state's energy savings goals and achieve all cost-effective energy efficiency for both electricity and natural gas in California.

1. Time-of-Sale Energy Efficiency Requirements

As the Draft Scoping Plan acknowledges, there is tremendous energy saving potential in the state's existing building stock, and building owners that have not implemented energy and water saving retrofits could be required to do so at time of sale.

(pp. 38-39) NRDC strongly recommends that CARB work with the CEC to establish time-of-sale information disclosure requirements, followed by time-of-sale energy efficiency requirements. Alternatively the Legislature could authorize the CEC to implement such a requirement. For further details, please refer to NRDC's scoping plan submittal from October 1, 2007.[2]

Such time-of-sale requirements, as recommended by the CEC in its 2007 *Integrated Energy Policy Report*[3], can work in concert with the utilities' energy efficiency programs as well as the Title 24 standards for new buildings and Title 20 appliance standards. Time-of-sale energy and water efficiency requirements are an important policy tool to ensure the state is able to capture all cost-effective energy efficiency, and should be included in CARB's Proposed Scoping Plan.

2. Appliance Feebates

NRDC strongly recommends that CARB consider for inclusion in the Scoping Plan an additional energy efficiency policy measure for the electricity and natural gas sectors: "feebates" for appliances. Although utilities already offer rebates to customers for the purchase of appliances that use less energy, a feebate structure could help encourage greater appliance efficiency and achieve additional savings. Similar in concept to the transportation feebates under consideration, (p. 37) a fee would be assessed for appliances that use more energy than a benchmark level of performance, and a rebate would be given for appliances that use less energy than the benchmark.

3. Financing Options

NRDC supports CARB and other state agencies' exploration of "innovative financing options to help buildings owners spread the costs over the lifetime of the building and allow the measures to more than pay for themselves." (p. 39) A variety of financing approaches will be needed to help overcome the barriers to energy efficiency. Utilities in the state have already explored on-bill financing programs, and we encourage the expansion of these programs.

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[2] See NRDC Scoping Plan recommendation submitted to CARB, "Energy Efficiency Ratings and Standards for Buildings at Time-of-Sale," October 1, 2007. Available at http://www.arb.ca.gov/cc/scopingplan/submittals/electricity/nrdc_time_of_sale_ee_final.pdf.

[3] California Energy Commission 2007, *2007 Integrated Energy Policy Report*, CEC-100-2007-008-CMF, p.87.

II. Electricity Measures

A. 33% Renewables Portfolio Standard

NRDC strongly supports the Draft Scoping Plan's recommendation to pursue a 33% Renewables Portfolio Standard (RPS) by 2020 (p.24), and has joined other stakeholders in submitting separate comments in support of the 33% RPS, to be submitted to CARB. This more aggressive RPS will be a central component of achieving the state's GHG emission reduction goals and will provide other benefits for the state. We support codifying this more aggressive RPS into statute, and we support the state's efforts to remove the barriers to achieving increased penetration of renewables.

It is essential that all retail providers be held to the same RPS requirement. Appendix C states that the 33% RPS measure "would be designed to require that POUs meet an equivalent standard as required of the IOUs *or* to achieve GHG reductions of an equivalent amount through other measures" (p. C-77, emphasis in original). Requiring the POUs to meet an equivalent standard as required of the IOUs should *not* be combined with allowing the POUs to achieve GHG reductions through alternative measures. The 33% RPS is an important measure to help the state achieve *both* GHG reductions and co-benefits required by AB 32. The RPS *must* be applied and enforced evenly and equally for all retail providers across the state.

B. Million Solar Roofs Program

NRDC supports the state's Million Solar Roofs program. (pp.30-31) As the Draft Scoping Plan notes, it is essential that this program be well integrated with energy efficiency improvements (electricity and natural gas) to ensure that the most cost-effective package is implemented. Specifically, we support that the receipt of incentives is predicated on the fulfillment of energy efficiency requirements. (p. 31) Although new construction projects are required to exceed Title 24 building efficiency requirements, we recommend that existing buildings also be required to implement energy efficiency improvements, rather than simply undergo an efficiency audit. This could be helped by implementing the time of sale energy efficiency requirements we recommend below.

C. Reducing the Most GHG-Intensive Sources of Energy

The passage of SB 1368, AB 32's companion bill in 2006, is an essential part of the state's strategies to meet the 2020 GHG emissions limit. The Draft Scoping Plan notes SB 1368's important greenhouse gas performance standards (p. 2), but NRDC recommends that the Proposed Scoping Plan highlight even more the fact that this policy is a core part of the state's global warming package, in order to ensure that the Plan provides a complete model for other states and the nation.

In addition to preventing California from locking in to new long-term commitments to the dirtiest power sources, CARB should also explore ways to reduce the state's ongoing reliance on the most GHG-intensive power plants. The "Coal Emission Reduction Standard" under evaluation in the Draft Scoping Plan could work in concert with SB 1368 to reduce California's reliance on the dirtiest power plants, but further examination must first be made of the ways in which this measure could be implemented.

D. Carbon Capture and Sequestration

Part V of the Draft Scoping Plan (p. 73) identifies carbon capture and geologic sequestration (CCS) as a technology that might be able to contribute to emissions reductions post-2020. CCS is also mentioned as a potential strategy under the Coal Emission Reduction Standard (Appendix p. C-79) and Cement (Appendix p. C-105). CCS is neither the most cost-effective nor the most environmentally preferable CO_2 mitigation technology. A range of clean technologies hold a significant emission reduction potential. NRDC firmly believes that increasing energy efficiency and tapping our renewable energy potential should take precedence over technologies that rely on fossil fuels, such as CCS. However, CCS could safely and effectively contribute to reducing emissions, not just in the 2050 timeframe, but also by 2020. Deployment to date has been limited primarily due to adverse economics and the absence of CO_2 regulations or policies – not because of technological constraints. We expect industry to consider investment in such projects in a carbon-constrained environment well within the 2020 timeframe. Nonetheless, the task of reducing emissions in the state, nationally and internationally calls for the use of all available tools at our disposal. Having those tools available for the 2050 timeframe rests heavily on the preparatory work done in the 2020

timeframe even if we do not see substantial reductions before 2020. As such, we recommend that CARB:

- Consider CCS a possible CO_2 mitigation technology within the 2020 timeframe;
- Assess, in collaboration with the CPUC, CEC, and stakeholders, the potential for CCS deployment in California in the power generation sector, but also at other industrial facilities (such as ethanol, cement, steel and ammonia plants, refineries and other installations);
- In particular, assess the potential to retrofit existing facilities with CCS; and
- Considering existing or oncoming regulations (such as those recently proposed by USEPA for a new injection Class VI under the Underground Injection Control Program), collaborate with the appropriate State and/or Federal agencies to establish any necessary siting, monitoring, operating, decommissioning, accounting and other requirements to ensure safe and effective capture, transportation and geological sequestration of CO_2.

III. Natural Gas Measures

A. CARB should commit to pursue emissions reductions measures in the natural gas sector

The Draft Scoping Plan and appendices mention several potential emission reduction strategies for the natural gas sector. The Proposed Scoping Plan should commit to developing policies and regulations, in collaboration with the CPUC and CEC, in the following categories.

1. Loading Order for Natural Gas

We urge CARB to encourage the CPUC and the legislature to establish a "loading order" for the natural gas sector that is similar to the "loading order" that already exists for the electricity sector. The top two priorities in the loading order should be: 1) all cost-effective energy efficiency; and 2) renewable alternatives to natural gas, such as biomethane and solar hot water.

2. Solar Hot Water

We strongly support the Draft Scoping Plan's goal of utilizing solar hot water as an emission reduction measure. (p.38) We support the proposals in the appendix to fully implement AB 1470 and to install solar hot water systems on a total of 750,000 existing homes and businesses. (C-68 – C-70) However, any incentives for installing solar hot water systems should be tied to a requirement to achieve all cost-effective energy efficiency, similar to the requirements for the million solar roofs program.[4] (see p. 31) In addition, we urge CARB to include in the Proposed Scoping Plan some justification, based on an evaluation of potential, for the particular goal of 750,000 existing homes.

Instead of the Draft Plan's proposed prescriptive mandate requiring solar hot water on 5% of new homes in 2010 and 75% of new homes in 2020 (C-68 – C-70), we urge CARB to utilize a performance-based approach to encourage solar hot water system installations for new homes. We recommend that CARB work with the California Energy Commission (CEC) during the 2011 Title 24 Rulemaking to incorporate solar hot water into a voluntary "silver" standard level, such as that contemplated by the California Public Utility Commission sponsored Statewide Strategic Plan.[5] As suggested in the Strategic Plan, the silver standard would be a voluntary beyond-code standard that could be used as a reference point for local ordinances and for utility incentive programs, and would eventually be included as part of the mandatory code.

Incorporating the efficiency gains from solar hot water into Title 24's performance-based approach would create a mechanism for emissions reductions to be achieved in the most cost-effective way, whether that be by installing a solar hot water system, installing a more efficient water heater, or a more efficient clothes washer, or another option. It will also help to ensure emissions reductions because the Title 24 process includes modeling of a particular home to better predict how its design will impact its actual energy usage, whereas a prescriptive mandate would be satisfied by

[4] AB 1470 requires the commissions to establish "eligibility criteria" for solar hot water systems to receive incentives. CARB should work with the commissions to ensure that these criteria, and the criteria for an expanded program, include energy efficiency requirements. See CALIFORNIA PUBLIC UTILITIES CODE § 2864(a).

[5] California Long Term Energy Efficiency Strategic Plan (July 2008), section 2 – page 12, available at http://www.californiaenergyefficiency.com/docs/CA_longterm_EE_Strategic%20Plan.pdf

simple installation of a solar hot water system, even if it were installed on a home that did not have sufficient sunlight to allow the system to actually displace much natural gas use.

CARB and CEC should also increase the granularity and accuracy of the existing 16 climate zones under Title 24, to use actual weather data and microclimates throughout the state, and adjust the performance standard according to what can be achieved in that micro-climactic zone. In other words, a sunny area might be able to obtain more savings from solar hot water, so the standard for those houses should be adjusted accordingly. Requiring higher performance from those locations that can achieve higher performance through solar hot water would further encourage the use of solar hot water under Title 24. We urge CARB to commit to incorporating the efficiency gains from solar hot water into Title 24, first through the voluntary beyond-code silver standard noted above, and later incorporating it into the mandatory code. CARB should calculate the potential savings from this policy and include it as a recommended policy in the Proposed Scoping Plan.

One advantage that CARB may have seen in a prescriptive mandate is that it can send a clear market signal for the number of solar hot water installations that will be required in the next decade or so, to provide manufacturers and installers the certainty needed to increase their capacity. Incentivizing installation of solar hot water on existing homes, after energy efficiency requirements are met, will help send this market signal. In addition, CARB can help increase installation capacity by partnering with the California community college system and the Solar Rating and Certification Corporation (an independent, non-profit third-party certifier whose certifications are relied on in AB 1470), to create training programs for solar thermal installers in California. Working with the community colleges and the certification organization could help to spur an increase in skilled and certified installers.

3. Biomethane

We note that there is no reference in the Draft Scoping Plan or the appendices to using biomethane to replace natural gas as an emission reduction measure. This is an important emission reduction measure, and a renewable alternative to fossil-based natural gas. The Proposed Scoping Plan should include direction to develop policies and

regulations to achieve emissions reductions by using biomethane as a replacement for natural gas.[6] The agencies should evaluate potential policies including:

- Creating a "loading order," as discussed above;
- A Renewable Fuel Standard for end-use natural gas;
- Enabling and encouraging long-term, fixed-price contracts for biomethane;
- Enabling an encouraging interconnection of biomethane sources to natural gas pipelines;
- Developing an appropriate price to be paid for biomethane sold into the pipeline;[7]
- Expanding the Public Interest Energy Research program's focus on RD&D to advance biomethane.
- Partnering with Eurpoean countries with experience in biomethane to improve technologies.

4. Natural gas should be included in the cap-and-trade program as soon as possible

NRDC supports the Draft Scoping Plan's recommendation to include natural gas in the cap-and-trade program by 2020, (p.17) in addition to implementing other regulatory policies to reduce the emissions of the natural gas sector as discussed above. We urge CARB to include natural gas in the cap-and-trade program from the start of the program. CARB should adopt mandatory reporting protocols for the natural gas sector as soon as possible, and include the natural gas sector in any cap-and-trade program from the start in 2012, along with the electricity sector and large industrial sources. Please also see our comments submitted on August 4, 2008 with several other environmental and public health groups on cap-and-trade program design, as well as including natural gas in the cap.[8]

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[6] See NRDC's Scoping Plan Submission on October 1, 2007 for further detail on the potential for emissions reductions from biomethane and the policies needed to encourage biomethane.
[7] *See* California Energy Commission, *2007 Integrated Energy Policy Report*, November 2007, p.225; available at http://www.energy.ca.gov/2007publications/CEC-100-2007-008/CEC-100-2007-008-CTF.PDF
[8] See http://www.arb.ca.gov/lists/sp-design-ws/97-scoping_plan_cap_and_trade_design_comments.pdf and http://www.arb.ca.gov/lists/sp-design-ws/98-natural_gas_in_the_cap.pdf.

NATURAL RESOURCES DEFENSE COUNCIL

June 18, 2008

Jerry Jordan
Executive Director
California Municipal Utilities Association
915 L Street, Suite 1460
Sacramento, CA 95814

RE: *Energy Efficiency in California's Public Power Sector*

Dear Mr. Jordan,

On behalf of the Natural Resources Defense Council (NRDC), I commend the California Municipal Utilities Association (CMUA) and the publicly-owned utilities (POU) that cooperated to produce *Energy Efficiency in California's Public Power Sector: A Status Report*, March 2008 ("CMUA Report"). This report, submitted pursuant to Senate Bill 1037 (Kehoe, 2005) and Assembly Bill 2021 (Levine, 2006), provides valuable information about the POUs' progress towards capturing all cost-effective energy efficiency opportunities, as required under SB 1037.

NRDC is encouraged to see that the POUs expect to reach savings for Fiscal Year (FY) 2007-2008 that are on average double the reported savings in FY 2006-2007. Achievement of these goals will save 541 GWh and 118 MW over the course of just the first year and produce more than an estimated $250 million in net benefits for customers. While we are also heartened that many of the POUs' actual energy efficiency program savings in FY 2006-2007 exceeded the savings estimated in the 2006 report, some did not meet their targets (see Figure 1 in Attachment A[1]) and much work remains to help all POUs achieve their ambitious targets. This year's progress is a crucial first step as the POUs ramp up energy efficiency programs to get on a path to meet their ten-year energy saving targets pursuant to AB 2021 (see Figure 2 in Attachment A).

[1] Sixteen POUs reported savings less than 90% of their targets, including: Anaheim, Azusa, Biggs, Hercules, LADWP, Lassen, Lodi, Lompoc, Needles, Pasadena, Rancho Cucamonga, Redding, Roseville, Shasta Lake, Silicon Valley, and Ukiah. Pittsburgh/Island Energy did not provide data pursuant to SB 1037 requirements.

The CMUA Report improves on the report submitted last year in several important respects. In particular, NRDC commends the POUs for including detailed information on the Total Resource Cost (TRC) cost-effectiveness methodology as well as including a range of reasonable discount rates used in the analysis. We are encouraged to see that the weighted average TRC is 3, which indicates not only that the energy efficiency programs yield significant benefits for customers, but also that there is a great opportunity to increase energy efficiency activities while remaining cost-effective. As the law requires, each POU should maximize the net benefits achievable through energy efficiency programs in order to capture all cost-effective savings, while maintaining a program portfolio TRC above 1.

We also commend the POUs for including transmission and distribution (T&D) costs and the cost of greenhouse gas emissions in the avoided costs methodology. (p.4) However, it remains unclear as to which POUs actually included T&D in their analysis of avoided costs since a significant number of utilities did not provide T&D information for the report. In addition, NRDC appreciates the additional data included throughout the report, such as comparison data by program sector and by utility as well as a comparison of the 2007 projected, actual, and 2008 forecasted energy efficiency savings.

NRDC also appreciates the discussion of the utilities' plans to carry out independent evaluations of program savings. This marks the beginning of a crucial effort, and we look forward to working with the POUs and the California Energy Commission (CEC) to develop an approach to independent evaluation that is appropriate for the publicly-owned utilities.

The March 2008 report is the second report that CMUA has submitted pursuant to SB 1037, and it provides an excellent foundation for future reports. We offer the following suggestions for discussion on further improvements to the POUs' efficiency programs and to next year's report.

Energy efficiency must be treated as a procurement resource

The law specifically requires that POUs "treat investments made to achieve energy efficiency savings and demand reduction targets as procurement investments," (Public Utilities Code Section 9615(b)) and that POUs "in procuring energy to serve the load of its retail end-use customers, shall first acquire all available energy efficiency and demand reduction resources that are cost effective, reliable, and feasible." (Public Utilities Code Section 9615(a)) Further, the POUs' annual report to the CEC must include "the sources of funding for its investments in energy efficiency and demand reduction program investments." (Public Utilities Code Section 9615 (e)(1))

The CMUA Report indicates that the POUs are not meeting these requirements to treat energy efficiency as a procurement resource. For example, the CMUA Report states that "POU 'procurement' efforts focus on generation, transmission, and distribution improvements," (p. 2) and goes on to state that "for purposes of this report, all procurement dollars are considered a component of operational improvements, as it relates to generation, transmission, and distribution upgrades." (p. 23) The statute is clear

that energy efficiency must be treated as a procurement resource – as the *top priority* procurement resource – that should be approached using the same multi-year planning and investment approach as the supply-side investments discussed by the CMUA Report.

Further, while we are pleased that the report states that the POUs are not reducing their other public benefit programs in order to expand efficiency programs (p.1), the report does not provide any data to support the statement. We suggest that future reports include the information recommended in Attachment B to demonstrate that the POUs are meeting the law's requirements to treat efficiency as a procurement resource.

Provide additional metrics to compare utility progress

NRDC appreciates the inclusion of comparison data in the 2008 report. However, as noted in our letter dated February 7, 2007, we recommend including the following additional metrics that are useful tools for benchmarking and are commonly used in the energy efficiency industry.[2] Specifically, we urge you to include these metrics for each POU in the next status report: (1) total net benefits, (2) annual energy savings as a percent of target, (3) annual energy savings as a percent of sales, (4) annual investments as a percent of revenue, (5) savings as compared to the POUs' AB 2021 targets, and (6) the portfolio average cost per kWh which can be compared to supply-side procurement costs. These metrics can yield valuable insights. For example, Figure 3 in Attachment A illustrates the wide range of POU annual energy savings as a percent of sales, and shows that on average the POUs are expecting to achieve annual savings of 0.8% of sales in 2008 while the state's investor-owned utilities expect to achieve annual savings of 1.1% of sales.

Increase energy efficiency investments

NRDC is pleased to see that the aggregate POU energy efficiency programs provide more than three dollars of societal benefits for every dollar invested. Since this indicates that there is still a significant amount of cost-effective energy efficiency that remains to be captured, NRDC recommends that the POUs with the largest TRCs increase energy efficiency investments to capture all cost-effective energy efficiency as required by SB 1037. Moreover, the POUs set ten-year energy saving targets pursuant to AB 2021 that require a very significant ramp-up in energy savings over the next few years. However, a number of utilities increased their energy efficiency targets significantly without a comparable increase in investments (see Figure 4 in Attachment A), which may jeopardize achievement of their targets.[3] Furthermore, while a number of POUs increased their targets for 2008 as compared to their reported 2007 savings, the total 2008 targets reported in the CMUA Report represent a 50% reduction compared to the AB 2021 targets reported in October 2007. We urge CMUA to work with each POU to ensure that it is ramping up investments and expanding its efficiency portfolio to enable successful achievement of its targets and to capture all cost-effective energy efficiency.

[2] Letter from NRDC to CMUA regarding *Energy Efficiency in California's Public Sector*, dated February 7, 2007.

[3] Three POUs reduced *both* their targets and investments (Gridley, Merced, and Vernon), which is a significant concern as it will not enable them to meet SB 1037's requirement to achieve all cost-effective efficiency savings.

Provide more details on assumptions

NRDC appreciates the explanation provided in the CMUA Report that the majority of the publicly-owned utilities use the net-to-gross (NTG) ratio and avoided costs of their neighboring investor-owned utilities. However, we urge you to clearly indicate the instances when an individual POU uses different assumptions and include the actual assumptions used in the analysis.

In addition, it is unclear whether energy generated by solar projects is being counted towards energy efficiency savings. While the tables and data in the body of the report refer only to energy efficiency data, there are numerous references to solar programs as part of the individual POU descriptions of current customer energy efficiency programs.[4] If these projects are generating rather than saving electricity, they need to be accounted for as part of the California Solar Initiative pursuant to Senate Bill 1 (Murray, 2006) and should not be included in the SB 1037 reports.

In sum, the March 2008 report provides a significant amount of information on the POUs' energy efficiency achievements. Furthermore, NRDC appreciates the improvements on CMUA's first report with the inclusion of additional information, and we commend CMUA and the participating POUs for compiling this useful report. We look forward to collaborating with the POUs and CEC to continue and expand upon this progress and to make California's POUs leaders on energy efficiency by saving customers money, improving air quality, and helping California meet its global warming pollution limit.

Sincerely,

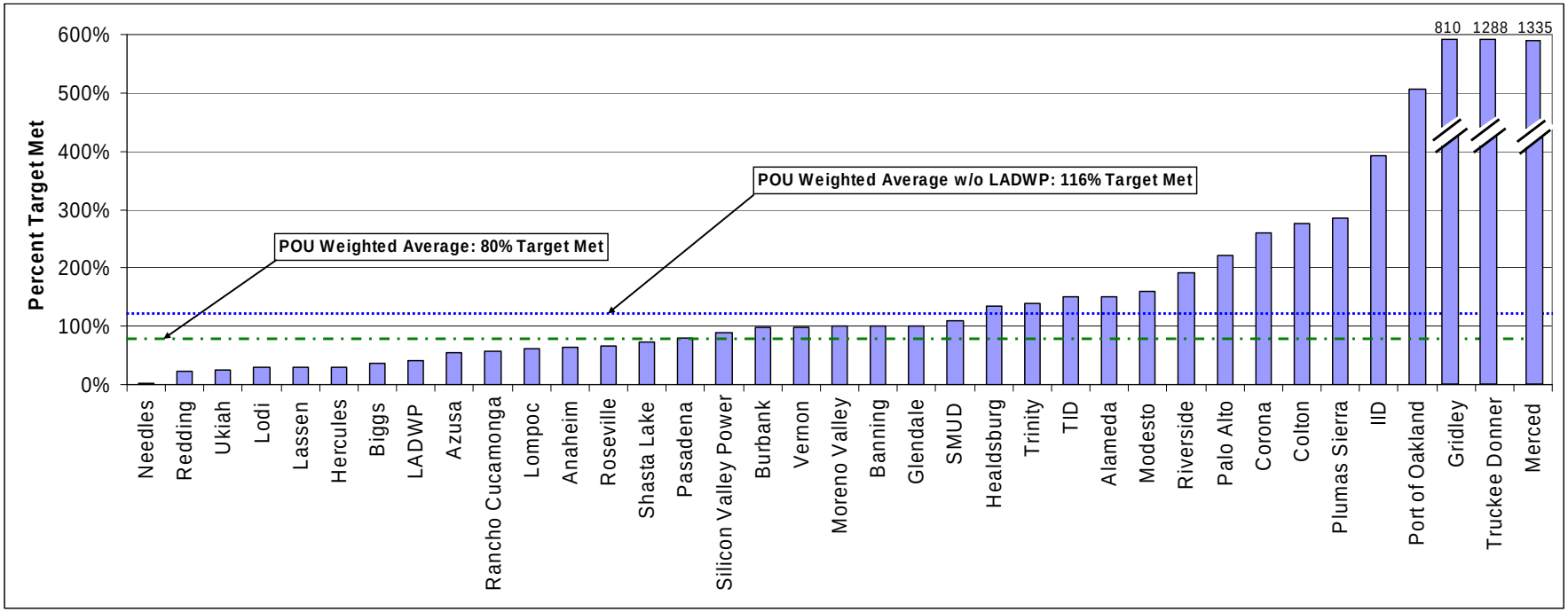
Lara Ettenson
Energy Policy Analyst

cc: Jackalyne Pfannensteil, Chair, California Energy Commission
James Boyd, Commissioner, California Energy Commission
Jeffrey Byron, Commissioner, California Energy Commission
Karen Douglas, Commissioner, California Energy Commission
Arthur Rosenfeld, Commissioner, California Energy Commission
Melissa Jones, Executive Director, California Energy Commission
Senator Christine Kehoe
Assembly Member Lloyd Levine

[4] Examples: Anaheim p.34; Banning p.41; Biggs p. 45; Corona p.55; Hercules, p.68; Island p.73; IID p.76; Lodi p.83

Attachment A

Figure 1: POU Percent of Target Met for 2007



Notes:

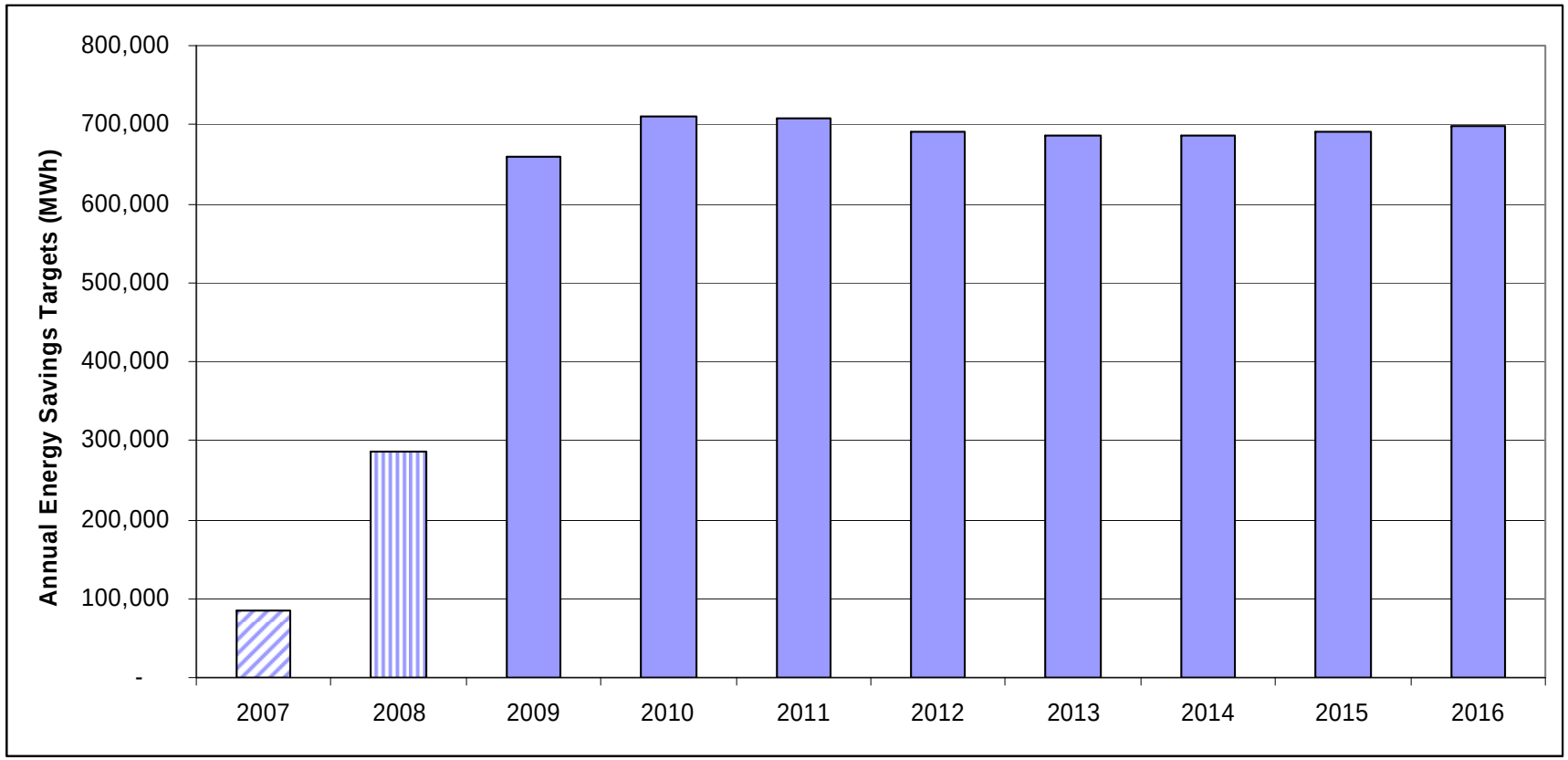
- Calendar Year 2007 = Fiscal Year 2006-2007 as indicated in CMUA, *Energy Efficiency in California's Public Power Sector: A Status Report*. March 2008.

Sources:

(1) Target 2007 Data from: CMUA, *Energy Efficiency in California's Public Power Sector: A Status Report*. December 2006.
(2) Reported 2007 Data from: CMUA, *Energy Efficiency in California's Public Power Sector: A Status Report*. March 2008.

Attachment A

Figure 2: Total POU Energy Efficiency Reported Savings and Targets



Notes:

- Diagonal Striped Bar = 2007 SB 1037 Reported savings; Vertical Striped Bar = 2008 SB 1037 forecasted savings targets; Solid bars = AB 2021 forecasted savings targets.
- Calendar Year (CY) 2007 = Fiscal Year (FY) 2006-2007; CY 2008 = FY 2007-2008 as indicated in CMUA, *Energy Efficiency in California's Public Power Sector: A Status Report*. March 2008.

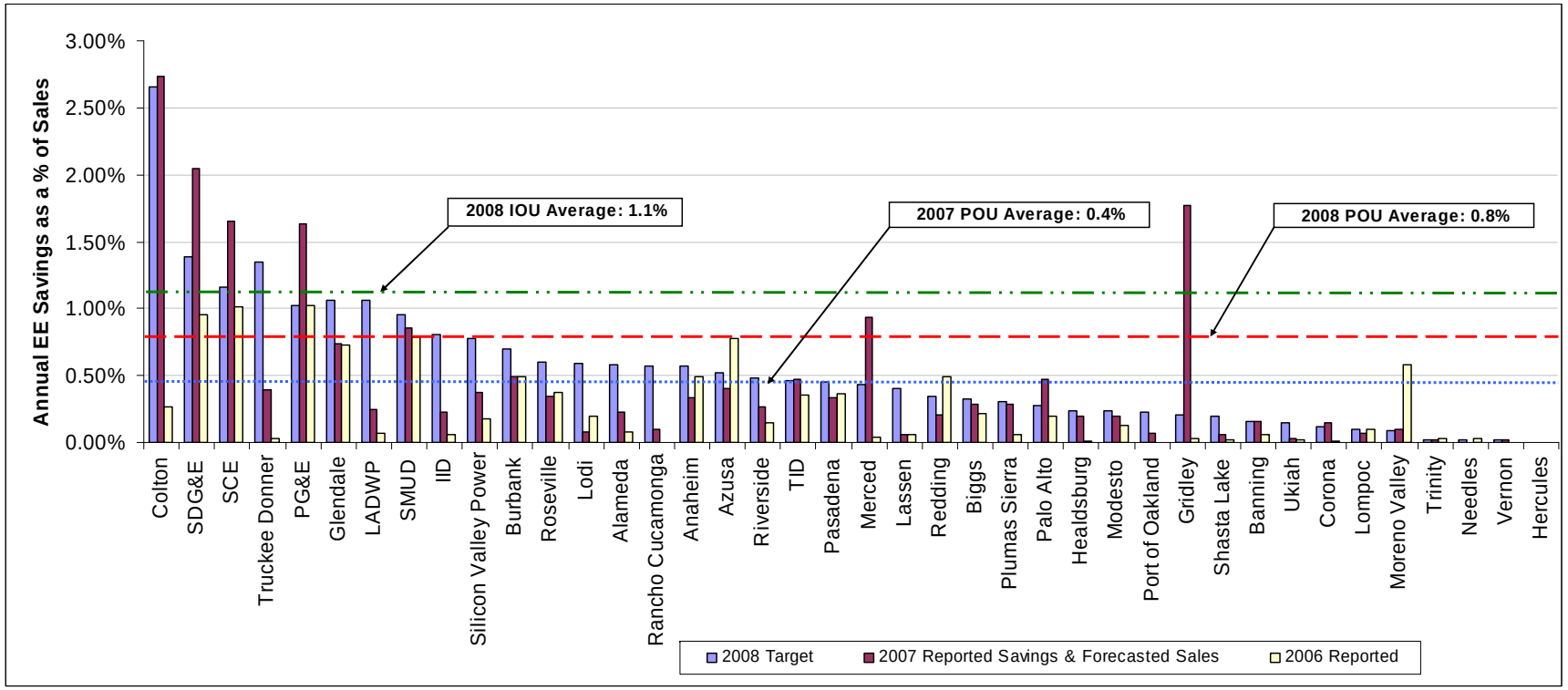
Sources:

(1) Reported data for 2007 and target data for 2008 from: CMUA, *Energy Efficiency in California's Public Power Sector: A Status Report*. March 2008.

(2) Target data for 2009-2016 from: CMUA, *Establishing Energy Efficiency Targets: A Public Power Response to AB 2021 Final Update*. October 2007.

Attachment A

Figure 3: Annual Energy Efficiency Savings as a Percent of Sales



Notes:

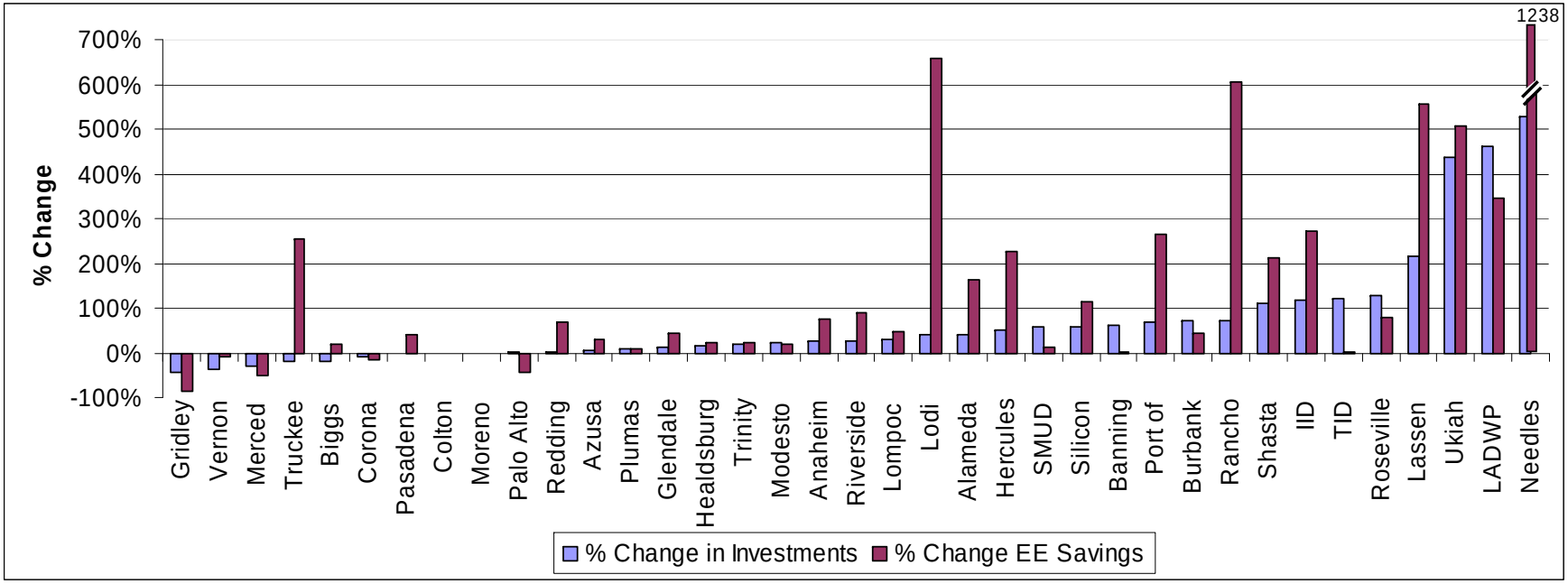
- All data is as reported by the POUs. Colton's reported and targeted energy savings are significantly higher than other POUs of similar size. NRDC did not verify the reported savings.
- IOU and POU averages are weighted averages
- Calendar Year (CY) 2007 = Fiscal Year (FY) 06-07 ; CY 2008 = FY 07-08 as indicated in CMUA, *Energy Efficiency in California's Public Power Sector: A Status Report*. March 2008.

Sources:

(1) IOU Sales (2006 - Reported): Energy Information Administration (EIA) accessed June 2008; <http://www.eia.doe.gov/neic/rankings/sales.htm>
(2) IOU Savings (2006 - Reported): IOU Annual Reports accessed on the Energy Efficiency Groupware Application (EEGA) website <http://eega2006.cpuc.ca.gov/DisplayAnnualReport.aspx>
(3) IOU Sales (2007 & 2008 - Forecast): CEC, *2008-2018 Demand Forecast Staff Final 2ndEd CEC-200-2007-015-SF2*, November 2007.
(4) IOU Savings (2007 - Reported):IOU December 2007 Monthly reports accessed on the EEGA website <http://eega2006.cpuc.ca.gov/DisplayMonthlyReport.aspx>
(5) IOU Savings (2008 - Targeted): CPUC Goals as defined in Decision 04-09-060, September 23, 2004 under Rulemaking 01-08-028.
(6) POU Sales (2006- Reported): CEC spreadsheet sent to NRDC from Irene Salazar of the CEC on May 2, 2008.
(7) POU Savings (2006 - Reported): CMUA, *Energy Efficiency in California's Public Power Sector: A Status Report*. March 2008.
(8) POU Sales (2007 & 2008 - Forecast): CMUA, *Establishing Energy Efficiency Targets: A Public Power Response to AB 2021 Final Update*. October 2007.
(9) POU Savings (2007 – Reported): CMUA, *Energy Efficiency in California's Public Power Sector: A Status Report*. March 2008.
(10) POU Savings (2008 – Targeted): CMUA, *Energy Efficiency in California's Public Power Sector: A Status Report*. March 2008

Attachment A

Figure 4: POU Change in Investments and EE Savings from 2007 to 2008



Notes:

- As reported, Colton and Moreno Valley have 0% change for both targets and investments
- Fiscal Year (FY) 06-07 = Calendar Year (CY) 2007; FY 07-08 = CY 2008, as indicated in *CMUA, Energy Efficiency in California's Public Power Sector: A Status Report.* March 2008.

Sources:

(1) Reported 2007 savings and investment data from: CMUA, *Energy Efficiency in California's Public Power Sector: A Status Report.* March 2008.
(2) Target 2008 savings and investments data from: CMUA, *Energy Efficiency in California's Public Power Sector: A Status Report.* March 2008.

Attachment B
Recommendations to Illustrate Energy Efficiency as Procurement Investment

NRDC recommends that each POU respond to the following questions in future annual reports to **determine whether the POUs are treating investments in efficiency as procurement investments** as required by AB 2021[5]:

- How is energy efficiency accounted for in long-term procurement plans or integrated resource plans?
- How is energy efficiency accounted for in decisions to make new long-term commitments to supply-side resources?
- What mechanisms are used to recover the costs of the energy efficiency programs?
- What percent of total utility revenues, and what total amount in dollars, is invested in "public benefits programs" pursuant to Public Utilities Code section 399.8(b)(2)?
- What portion of the public benefits fund is invested in: energy efficiency, low-income assistance, renewable energy, and RD&D?
- What percent of efficiency program funding comes from procurement budgets?
- What percent of energy efficiency funding is from the public benefits fund and what percent is from other sources?
- Are investments in efficiency recovered in the same manner as procurement investments?

[5] Natural Resources Defense Council (NRDC) *"Analysis of California's Publicly-Owned Utilities' Ten Year Energy Efficiency Targets."* January 9, 2008.