

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Examine the
Commission's post-2005 Energy Efficiency Policies,
Programs, Evaluation, Measurement and Verification,
and Related Issues

Rulemaking 06-04-010
(Filed April 13, 2006)

**COMMENTS OF THE NATURAL RESOURCES DEFENSE COUNCIL (NRDC)
ON THE PROPOSED "DECISION ADOPTING INTERIM ENERGY
EFFICIENCY SAVINGS GOALS FOR 2012 THROUGH 2020, AND DEFINING
ENERGY EFFICIENCY SAVINGS GOALS FOR 2009-2011"**

July 21, 2008

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1. Introduction and Summary

The Natural Resources Defense Council (NRDC) respectfully submits these comments in accordance with Rules 14.3, 1.9, and 1.10 of the California Public Utilities Commission's (CPUC or Commission) Rules of Practice and Procedure, on Administrative Law Judge (ALJ) Gamson's proposed "Decision Adopting Interim Energy Efficiency Savings Goals for 2012 Through 2020, and Defining Energy Efficiency Savings Goals for 2009-2011" (Proposed Decision or PD). NRDC is a non-profit membership organization with 124,000 members in California and a longstanding interest in minimizing the societal costs of the reliable energy services that Californians demand.

NRDC commends ALJ Gamson and Commission staff for their hard work developing this Proposed Decision. NRDC supports the PD and urges the Commission to adopt the PD with the clarifications discussed herein at its July 31, 2008 meeting. Our comments focus on recommendations for clarification or modification of the PD and are summarized below:

- NRDC supports establishing total market gross goals for 2012-2020 for the purposes of state-wide planning that will continue California's leadership in the aggressive pursuit of energy savings and align the state's energy efficiency targets with AB 32 goals. NRDC further supports subsequently setting net utility-specific goals with sufficient time to allow the investor-owned utilities (IOUs) to adequately plan for the following program cycle.

- NRDC supports defining the 2009-2011 goals as gross.
- NRDC recommends that the Commission continue to emphasize the need for California energy efficiency programs that target both peak and baseload savings.
- NRDC recommends that any re-examination of the risk/reward incentive mechanism be limited in scope.
- NRDC requests clarification for how to account for cumulative savings from 2004-2008 given that 2004-2005 savings were reported as *actuals-plus-committed* while 2006-2008 savings are reported as *actual*.
- The PD's proposed energy savings goals will save between 8.8 and 13.3 million tonnes of CO₂ each year, equivalent to taking approximately 2.8 million cars off the road for a year.

2. NRDC supports establishing total market gross goals for 2012-2020 for the purposes of state-wide planning that will continue California's leadership in the aggressive pursuit of energy savings and align the state's energy efficiency targets with AB 32 goals. NRDC further supports subsequently setting net utility-specific goals with sufficient time to allow the investor-owned utilities (IOUs) to adequately plan for the following program cycle.

NRDC supports adopting the interim total market gross goals as proposed by the PD for statewide planning. With 16,300 GWh of cumulative annual energy savings, over 4,500 MW of cumulative peak demand savings, and 616 million therms of cumulative natural gas savings from 2012-2020, these goals will continue California's leadership in the pursuit of significant energy savings (see Table 1 below). These ambitious energy savings goals are in line with the aggressive goals of AB 32, for which a significant contribution to the greenhouse gas reduction target will be accomplished through energy efficiency. We urge the Commission to include in the final decision a summary of the total savings goals across all the IOUs in the state, similar to the presentation in Table 1, so that these anticipated savings across all IOUs can be clearly identified and incorporated into the IOUs long-term procurement plans and the California Air Resources Board's (CARB) AB 32 scoping plan.

Table 1: Total Market Gross Goals (annual)¹

GWh	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
PG&E	978	867	793	765	787	797	814	816	817	7,434
SCE	973	861	784	750	778	789	802	805	808	7,350
SDGE	212	183	164	154	156	159	162	162	163	1,515
Total	2,163	1,911	1,741	1,669	1,721	1,745	1,778	1,783	1,788	16,299
MW	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
PG&E	253	237	228	241	257	258	270	270	269	2,283
SCE	215	199	189	193	213	215	222	222	223	1,891
SDGE	45	41	38	38	40	40	41	42	42	367
Total	513	477	455	472	510	513	533	534	534	4,541
MTherms	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
PG&E	20	32	31	32	32	31	32	32	33	275
SoCal Gas	18	34	34	35	34	33	34	34	34	290
SDGE	3	6	6	6	6	6	6	6	6	51
Total	41	72	71	73	72	70	72	72	73	616

The PD’s proposed energy savings goals will continue California’s aggressive energy efficiency tradition, as illustrated in Figures 1-3 below. We urge the Commission to include in the final decision similar graphs to quickly illustrate the PD’s proposed goals to state policymakers. It is important to note that the energy savings goals as proposed by the PD for 2009-2020 are expressed in gross terms, whereas the historical energy savings are expressed as net savings. Although the PD’s proposed future savings goals appear to show a slight dip in the savings targets in the outer years, most notably for the electricity savings, this is an expected outcome from potential studies that incorporate current information, and we expect that updated potential studies in the future will identify increased savings potential with technology advances over time. This underscores the importance of updating the energy efficiency goals on a regular interval based on the most accurate energy efficiency potential data available.

In addition, the savings goals for 2009-2011, which the Commission reaffirmed in D.07-10-032, were established in 2004 based on the best available data at that time and therefore are not fully in line with the updated potential study. While the graphs indicate that the IOUs generally increased their historical savings over the past few years, various accounting discrepancies can account for the variations seen in the graphs. For example,

¹ CPUC. Proposed “Decision Adopting Interim Energy Efficiency Savings Goals for 2012 Through 2020, and Defining Energy Efficiency Savings Goals for 2009-2011.” R.06-04-010, July 1, 2008, p. 22.

the Commission has changed savings accounting protocols, from actual *and* committed energy savings prior to 2006, to *only* actual savings from 2006 forward. In addition, the IOUs had a delayed start to their 2006 energy efficiency programs and therefore captured less energy efficiency savings than expected.

Figure 1: Historical and Projected Annual Electric Peak Demand Savings²

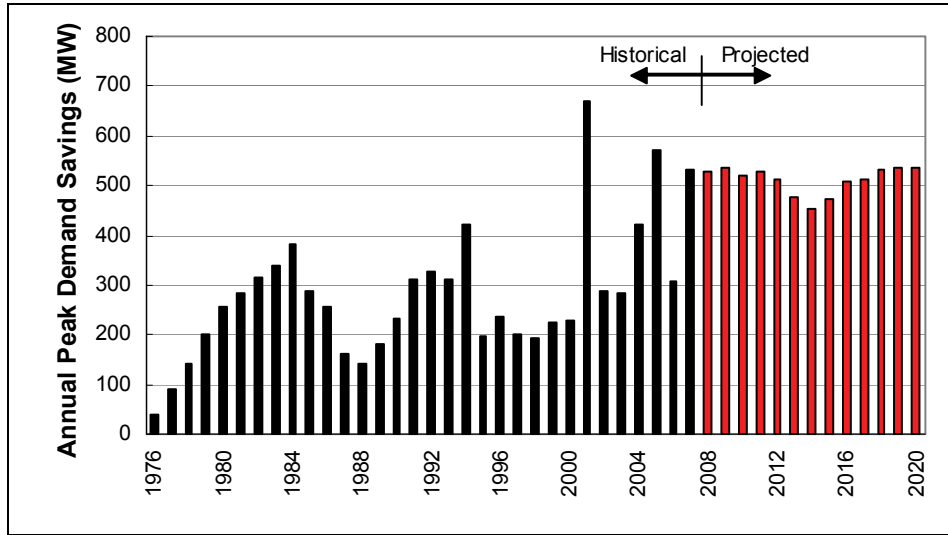
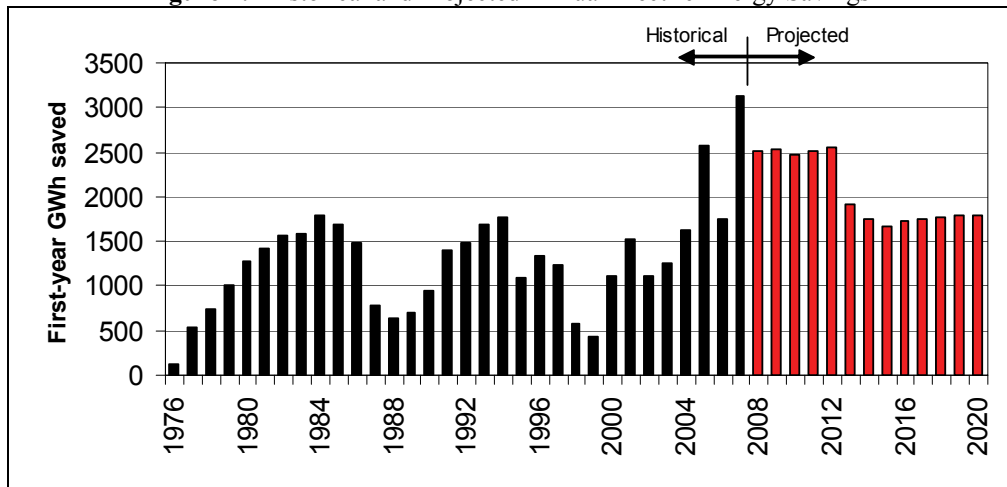


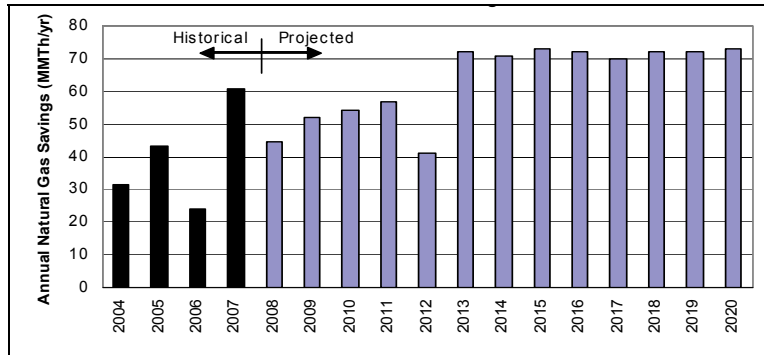
Figure 2: Historical and Projected Annual Electric Energy Savings³



² 2004-2005 data from AEAP IOU reports, 2006-2007 data from IOU annual reports (pre-EM&V), 2008 data from D. 04-09-060, 2009-2011 goals from p. 27 of Current Proposed Decision. R.06-04-010. July 1, 2008, 2012-2020 goals from p. 22 of Current Proposed Decision, R.06-04-010, July 1, 2008.

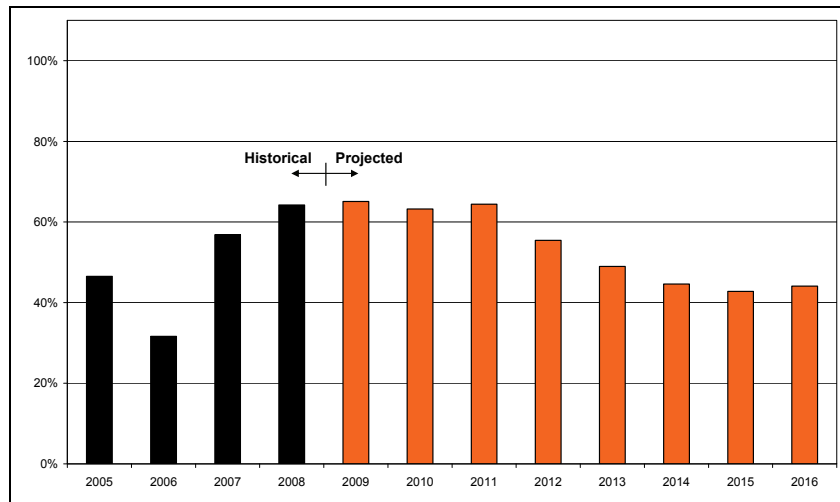
³ 2004-2005 data from AEAP IOU reports, 2006-2007 data from IOU annual reports (pre-EM&V), 2008 data from D. 04-09-060, 2009-2011 goals from p. 27 of Current Proposed Decision. R.06-04-010. July 1, 2008, 2012-2020 goals from p. 22 of Current Proposed Decision, R.06-04-010, July 1, 2008.

Figure 3: Historical and Projected Annual Natural Gas Savings Goals⁴



Energy efficiency has historically met, and will continue to meet, a significant portion of the state’s growth electricity consumption as indicated below in Figure 4. The continuing aggressive energy savings goals, as proposed by the PD, will continue to represent a sizeable portion of forecast demand growth. NRDC recognizes that the CEC, CPUC, and CARB are currently working to determine the exact amount of energy efficiency programs already incorporated in the demand forecast and therefore did not adjust the demand forecast data used in Figure 4 for embedded energy efficiency.

Figure 4: Percentage of Demand Growth Met by Energy Efficiency Goals⁵



⁴ 2004-2005 data from AEAP IOU reports, 2006-2007 data from IOU annual reports (pre-EM&V), 2008 data from D. 04-09-060, 2009-2011 goals from p. 27 of Current Proposed Decision. R.06-04-010. July 1, 2008, 2012-2020 goals from p. 22 of Current Proposed Decision, R.06-04-010, July 1, 2008.

⁵2004-2005 data from AEAP IOU reports, 2006-2007 data from IOU annual reports (pre-EM&V), 2008 data from D. 04-09-060, 2009-2011 goals from p. 27 of Current Proposed Decision. R.06-04-010. July 1, 2008, 2012-2020 goals from p. 22 of Current Proposed Decision, R.06-04-010 July 1, 2008; Demand forecast data: CEC, *California Energy Demand 2008-2018 Staff Revised Forecast*, November 2007. Note: Data does not adjust for current embedded energy efficiency in the CEC demand forecast

Furthermore, we support adopting the interim total market gross goals as soon as possible as these goals will be used for the upcoming planning purposes associated with greenhouse gas emissions reductions in the AB 32 scoping plan process and in the IOUs' Long-Term Procurement Plans (LTPP) process for the 2010 plans. We support the PD's statement that the total market gross goals will for the first time recognize the savings contributions beyond the investor-owned utilities' programs (p. 2), all of which will be needed to meet the statewide goal of capturing all cost-effective energy efficiency.

We also support updating the interim total market gross goals and setting the 2012-2020 utility-specific goals at a later date. However, as noted in our June 11, 2008 opening comments on energy savings goals through 2020,⁶ we urge the Commission to ensure that the update is completed sufficiently in advance of the start of the 2012-2014 program cycle to allow the utilities adequate time to plan their program portfolios.

We therefore urge the Commission to initiate the update of the total market gross goals and development of the new utility-specific goals *prior* to the final DEER updates that are scheduled for March 2010 to allow for sufficient initial portfolio planning. (p.32). We further urge the Commission to complete the goals update and new utility-specific goals as much in advance of the PD's October 2010 target date as possible, and indicate that the goals should be established *no later* than the stated target date to ensure a timely start date for the 2012-2014 program portfolio.(p.32). Below are recommended changes to the PD:

Conclusions of Law

6. The 2012-2020 update of Total Market Gross goals and establishment of utility-specific portfolio goals must be completed as early in 2010 as possible, and no later than October, 2010 to allow for adequate portfolio planning.

Order

5. The 2012 through 2020 interim goals shall be updated and utility portfolio goals shall be established after the 2006-2008 Impact Evaluation studies are completed (expected to be March 2010) and the inquiry shall be completed as early as possible following the completion

⁶ "Comments of the Natural Resources Defense Council on the 2012-2020 Energy Efficiency Savings Goals and the Definition of Energy Savings Goals for 2009-2011" June 11, 2008. p.4

of the studies and no later than October of 2010. The assigned Commissioner and/or Administrative Law Judge may adjust the schedule for updating and establishing new energy savings goals for 2012 through 2020.

3. NRDC supports defining the 2009-2011 goals as gross.

As noted in our opening comments on energy savings goals through 2020, NRDC supports the Energy Division (ED) staff recommendation that the 2009-2011 goals adopted by D.07-10-032 be defined as representing gross utility savings goals.⁷ As the staff analysis shows,⁸ and the PD reaffirms, the currently-adopted numeric goals for 2009-2011 are consistent with, and in most cases higher than, recent analysis of maximum achievable utility gross savings potential during these years. (p.27, Table 3) Therefore, defining these utility-specific goals for 2009-2011 as gross will continue to represent stretch goals that are aggressive yet achievable and will continue California's history of pursuing aggressive energy efficiency savings targets..

4. NRDC recommends that the Commission continue to emphasize energy efficiency programs that target both peak and baseload savings.

NRDC agrees that the use of gross goals will allow the IOUs to “focus less on the attribution of savings and more on maximizing the energy savings potential of energy efficiency programs.” (p.27) NRDC further agrees that every effort should be made to capture the most cost-effective energy efficiency savings in HVAC and other on-peak savings as noted in the PD. However, California has a clear need for *both* baseload and peak savings, wherever such savings can be captured, including lighting. As the Commission has previously emphasized in D.05-09-043:

“Energy efficiency should continue to target both baseload and peak loads, within the context of our overriding goal to pursue all cost-effective energy efficiency opportunities over both the short- and long-term.”⁹

⁷ “Comments of the Natural Resources Defense Council on the 2012-2020 Energy Efficiency Savings Goals and the Definition of Energy Savings Goals for 2009-2011” June 11, 2008. p.2-3

⁸ CPUC Draft “Energy Division Staff Recommendation: “09-11 Gross Goals Staff Paper.” Distributed over the service list on June 6, 2008. p.1, Table 1.

⁹ CPUC. D. 05-09-043 “Interim Opinion: Energy Efficiency Plans and Program Funding Levels for 2006-2008 – Phase I Issues.” September 22, 2005. FOF 15

Therefore, while we strongly support the Commission's vision to encourage comprehensive and long term savings, we also reiterate our support for efforts to capture all cost-effective energy savings wherever possible. Rather than arbitrarily directing the utilities to incorporate greater emphasis on programs with on-peak savings, (p. 27) the appropriate balancing of baseload and peak savings within the utilities' portfolios should be determined through the Commission's avoided costs, which are used to calculate the benefits that the efficiency programs provide, are time-differentiated and place a higher value on saving energy on peak.

5. NRDC recommends that any reexamination of the risk/reward incentive mechanism be limited in scope.

NRDC understands the need to re-evaluate the risk/reward mechanism given the change in the definition of the 2009-2011 energy goals to gross, as noted in the proposed decision (p.28). However, NRDC recommends that any re-evaluation of the risk/reward incentive mechanism should be limited, as the PD recognizes, and should be adjusted only to address any unintended consequences of using gross energy savings goals for 2009 through 2011. We urge the Commission to stress that the reconsideration of certain aspects of the incentive mechanism will be extremely limited in scope to "reconcile changes in goal measurement with the way incentives are calculated." (p. 29) The PD expects that a decision will be issued to address these changes early in 2009. We urge the Commission to move as quickly as possible to make these limited adjustments to the incentive mechanism, such that the structure can be determined as early in the utilities' 2009-11 program cycles as possible in order to be as effective as possible in encouraging excellent performance by the utilities in 2009-11.

6. NRDC requests clarification for how to account for cumulative savings from 2004-2008 given that 2004-2005 savings were reported as *actual-plus-committed* while 2006-2008 savings were reported as *actual*.

NRDC appreciates that the PD confirms the *definition* of cumulative was addressed in D. 07-10-032 (p.14, footnote 12). However, the Commission's direction in D.07-10-032 to evaluate the utilities' performance in 2006-08 based on cumulative

savings since 2004 continues to raise uncertainty as to how to count savings. Since 2004-05 program results include *committed* savings, but 2006-08 programs include only *actual* savings, a counting disparity arises if the savings are to be combined. NRDC recommends that the Commission clarify this discrepancy as soon as possible to allow for accurate and timely measurement of energy savings.

7. The PD’s proposed energy savings goals will save between 8.8 and 13.3 million tonnes of CO₂ each year, equivalent to taking as many as 2.8 million cars off the road for a year.

NRDC recommends that the Commission include in the final decision greenhouse gas reduction estimates from energy savings in addition to energy reduction goals, in order to better contextualize the decision for state policymakers. The 28,000 GWh of savings from 2008 to 2020 equates to between 8.8 and 13.3 MMTCO₂—the equivalent of taking as many as 2.8 million cars off the road for a year. Having greenhouse gas reduction values that are a result of energy savings will help CARB establish the most accurate GHG reduction targets under AB 32. According to the Climate Action Team,¹⁰ each GWh saved translates to a reduction of 313 metric tonnes of carbon dioxide (MTCO₂). CARB’s Draft Scoping Plan presents a slightly higher ratio of 475 MTCO₂ per GWh.¹¹ The Commission’s expected savings of over 16,000 GWh from 2012 through 2020 equates to between 5.0 and 7.6 million metric tonnes of carbon dioxide (MMTCO₂). NRDC urges the Commission to include these values in the PD to help inform CARB’s AB 32 process.

8. Suggestions for Specific Modifications to the Proposed Decision

a. Revision to p. 24:

NRDC recommends the following revision to page 24:

“NRDC argues ~~out~~ that if the 2009-2011 goals are defined as net, the goals would be set at such a high level that the utilities would not realistically be able to meet them.”

¹⁰ Climate Action Team, *Updated Macroeconomic Analysis of Climate Strategies Presented in the March 2006 Climate Action Team Report*, October 2007, p. 13, available at http://www.climatechange.ca.gov/events/2007-09-14_workshop/final_report/2007-10-15_MACROECONOMIC_ANALYSIS.PDF.

¹¹ CARB, *Draft Scoping Plan*, June 2006, p. 23.

b. Modifications to “Findings of Fact”

NRDC recommends two minor revisions to “Finding of Fact 10” to reduce confusion. First, the term “offsets” has developed a specialized meaning in the energy and climate industry and we suggest the following alternative phrase. Second, we suggest replacing “the full effect” with “from all delivery channels” to explain more precisely how energy efficiency impacts Long Term Procurement Planning.

10. Energy efficiency ~~offsets~~ reduces the need for supply side resources and not all energy efficiency occurs through utilities. In future Long Term Procurement Planning proceedings, the full effect from all delivery channels of energy efficiency will impact how much supply side resources need to be procured.

NRDC recommends the following change to FOF 8:

8. It is possible that the shift to use of gross energy savings goals for 2009 – 2011 may result in a mismatch of risks and rewards for utilities if limited changes are not made to the risk/reward incentive mechanism and other aspects of the energy efficiency regulatory structure.

In addition, NRDC recommends including a Finding of Fact that refers to updating the energy savings goals on a regular basis. In order to continue the regular updating of the long-term goals established in D. 04-09-060 Finding of Fact 28, NRDC recommends including the following in the Proposed Decision:

A three-year period provides a reasonable timeframe for updating energy savings potential studies and goals, and for preparing and planning for each subsequent energy efficiency funding cycle.

Finally, NRDC recommends the following addition to Finding of Fact to reflect the statement on p. 12 of the PD:

Incorporation of both a total market gross goal and a utility-specific goal, which measures all savings achievements within IOU service territories begins to solve the crucial interagency need for a metric appropriate to load forecast, associated emission reduction baselines, and economically efficiency procurement plans.

c. Modifications to “Conclusions of Law”

NRDC recommends the following modifications to Conclusions of Law 5 and 6:

5. The interaction between the shift to use of gross energy savings goals for 2009 through 2011 and the risk/reward incentive mechanism may require limited revisions of the risk/reward incentive mechanism and/or other aspects of the energy efficiency regulatory structure in order to maintain reasonable ~~rates~~ balance of ratepayer and utility administrator interests.
6. The 2012-2020 update of Total Market Gross goals and establishment of utility-specific portfolio goals must be completed as early in 2010 as possible, and no later than October, 2010 to allow for adequate portfolio planning.

d. Modifications to Ordering Paragraphs

NRDC recommends the following modifications to the current Orders 5 and 6:

5. The 2012 through 2020 interim goals shall be updated and utility portfolio goals shall be established after the 2006-2008 Impact Evaluation studies are completed (expected to be March 2010) and the inquiry shall be completed as early as possible following the completion of the studies and no later than October of 2010. The assigned Commissioner and/or Administrative Law Judge may adjust the schedule for updating and establishing new energy savings goals for 2012 through 2020.
6. Commencing in late 2008, the Energy Division shall study the interaction of using gross energy savings goals for 2009 through 2011 and the risk/reward incentive mechanism, leading to a limited review of the risk/reward incentive mechanism and/or other aspects of the energy efficiency regulatory structure related to the use of gross goals in a Commission proceeding.

NRDC also recommends the following additional Ordering Paragraphs:

After updating the Total Market Gross goals and establishing the utility-specific portfolio goals no later than October, 2010, the energy savings goals shall then be updated every three years for use in subsequent program cycles.

In any application or other filing in which PG&E, SCE, SDG&E or SoCalGas present projections of supply-side resource needs, pipeline or transmission needs, propose new facilities or otherwise utilize projections of energy demand, they shall demonstrate that such filings are fully consistent with and reflect today's adopted energy savings goals, or updates to these goals as adopted by the Commission.

9. Conclusion

NRDC supports the Proposed Decision and strongly urges the Commission to adopt it with the clarifications discussed herein, at the July 31, 2008 meeting. NRDC applauds the Commission for developing a comprehensive vision for continuing California's energy efficiency leadership.

Dated: July 21, 2008



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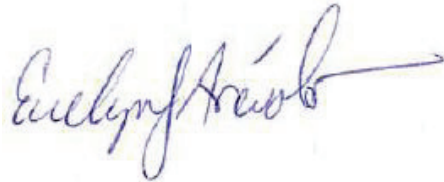


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CERTIFICATE OF SERVICE

I hereby certify that I have this day served a copy of the **“Comments of the Natural Resources Defense Council (NRDC) on the Proposed ‘Decision Adopting Interim Energy Efficiency Savings Goals for 2012 Through 2020, and Defining Energy Efficiency Savings Goals for 2009-2011 Interim Order on Issues Relating to Future Savings Goals and Program Planning for 2009-2011’”** in the matter of R. 06-04-010 to all known parties of record in this proceeding by delivering a copy via email or by mailing a copy properly addressed with first class postage prepaid.

Executed on July 21, 2008 at San Francisco, California.



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