Decision 08-07-047 July 31, 2008

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)

DECISION ADOPTING INTERIM ENERGY EFFICIENCY SAVINGS GOALS FOR 2012 THROUGH 2020, AND DEFINING ENERGY EFFICIENCY SAVINGS GOALS FOR 2009 THROUGH 2011

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DECISION ADOPTING INTERIM ENERGY EFFICIENCY SAVINGS GOALS FOR 2012 THROUGH 2020, AND DEFINING ENERGY EFFICIENCY SAVINGS GOALS FOR 2009 THROUGH 2011

1. Summary

Today's decision addresses two areas related to energy efficiency savings goals.

First, this decision sets interim energy efficiency savings goals for 2012 through 2020 for electricity and natural gas on a total market gross basis. For 2012 through 2020, total energy savings are expected to reach over 4,500 megawatts, the equivalent of nine major power plants. Further, we expect savings of over 16,000 gigawatt-hours of electricity and 620 million therms over that period. Our adopted goals for the first time include recognition of savings beyond investor-owned utility (IOU) programs from aggressive state building standards and expected federal appliance standards, our Big Bold Energy Efficiency Strategies, and Assembly Bill (AB) 1109 (Huffman)[1] (requiring improvement in general service lighting).

The interim goals we adopt today will be transmitted to the California Air Resources Board (CARB) for use in implementation of AB 32, California's landmark climate change statute.[2] We believe the goals are generally compatible with the energy efficiency goals in CARB's draft scoping plan, released June 26, 2008. The interim goals also will be used in the Commission's long-term procurement planning process. Energy savings goals will be updated in 2010 and include utility-specific goals as well as total market gross goals.

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[1] California Lighting Efficiency and Toxics Reduction Act. Statutes 2007, Ch. 534.

[2] The California Global Warming Solutions Act of 2006. Statutes 2006, Ch. 488.

Second, for 2009 through 2011, this decision clarifies that our currently adopted energy efficiency savings goals will be defined as "gross"-- inclusive of free riders -- in order to better reflect changes in underlying energy efficiency calculations since 2004 and to assist utilities in developing portfolios consistent with the upcoming long-term Energy Efficiency Strategic Plan and Decision (D.) 07-10-032. We plan to consider changes to the risk/reward incentive mechanism adopted in D.07-09-043 later this year, in order to mitigate any potential mismatch of risks and rewards to the utilities which may occur as a result of establishing energy savings goals on a gross basis for 2009 through 2011.

2. Background

2.1. D.04-09-060

In D.04-09-060, the Commission set annual and cumulative energy efficiency savings goals through 2013. The Energy Action Plan, adopted by this Commission, the California Energy Commission (CEC) and the California Consumer Power and Conservation Financing Authority, identified reduction of energy use per capita as one of six sets of actions that are of critical importance.[3] D.04-09-060 translated this mandate into explicit, numerical goals for electricity and natural gas savings for the four largest investor-owned utilities (IOUs): Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E), Southern California Edison Company (SCE) and Southern California Gas Company (SCG). Electric and natural gas savings from energy efficiency programs funded by ratepayers through the public goods charge (PGC) and

[3] A copy of the complete Energy Action Plan is available for downloading on the Commission website at www.cpuc.ca.gov.

procurement rates contribute to these goals, including those achieved through the low-income energy efficiency (LIEE) program.

For the three electric IOUs, D.04-09-060 adopted savings goals that reflect the expectation that energy efficiency efforts in their combined service territories should be able to capture about 70% of the economic potential and 90% of the maximum achievable potential for electric energy savings over the 10-year period, based on the most up to date study of that potential. These efforts were projected to meet 55% to 59% of the IOUs' incremental electric energy needs between 2004 and 2013.

For natural gas, the adopted savings goals were designed to capture approximately 40% of the maximum achievable potential identified in the most recent studies of that potential. This level of expectation recognized that natural gas program funding levels had dropped substantially over the previous five years, and that ramping up those efforts to meet the full savings potential might take more time than on the electric side. It also recognized some uncertainty over the level of achievable savings in the non-core sector. Nonetheless, the adopted natural gas savings goals reflected an increase in savings by 244 million therms (Mth) over the 210 Mth in savings that would be achieved if then-current funding levels and program effectiveness (therms per dollar) remained constant.

The following Table from D.04-09-060 (labeled Table 1E in that decision) summarizes the adopted total savings goals for 2004 through 2013 for all IOUs:

Table 1: Electricity and Natural Gas Savings Goals

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Total Annual Electricity Savings (GWh/year) (1)	1,838	1,838	2,032	2,275	2,505	2,538	2,465	2,513	2,547	2,631
Total Cumulative	1,838	3,677	5,709	7,984	10,489	13,027	15,492	18,005	20,552	23,183

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Electricity Savings(GWh/yr) Total Cumulative Peak Demand Savings (MW) (2)	379	757	1,199	1,677	2,205	2,740	3,259	3,789	4,328	4,885
Total Annual Gas Savings (MMTh/yr)	21	21	30	37	44	52	54	57	61	67
Total Cumulative Gas Savings (MMTh/yr)	21	42	72	110	154	206	260	316	377	444

Notes:
(1) Total annual energy savings = all savings from energy efficiency programs funded by public goods charge and Procurement funding. This total includes savings from baseline Energy efficiency program funding of $100 MM/yr accounted for in the CEC sales forecast. For incremental program savings above the levels included in the CEC forecast, see Attachment 9.
(2) Average peak MW estimated by multiplying GWh from utility by the ratio they used in 2004/5 filings ranges from .19 to .21. This is an estimate of average peak savings not coincident peak = GWh savings in peak period/ 560 hours in period.

2.2. D.07-10-032

D.04-09-060 anticipated adopted goals would be updated every three years, in concert with a three-year program planning and funding cycle for energy efficiency. While this three-year cycle would have resulted in new adopted goals in 2007, D.07-10-032 retained the goals adopted for 2009-2011 and declined to change adopted goals for 2012-2013.[4] Instead, our decision noted that there would be a study to guide future decisions regarding appropriate goals through 2020. This study was performed by Itron, as discussed below.

AB 2021 required the CEC to set a statewide energy efficiency target encompassing the service territories of all of CA's IOUs and Publicly Owned Utilities (POUs). The CEC adopted a target of 100% of economic potential as projected by the 2006 Itron Energy Efficiency Potential Study in the 2007 Integrated Energy Policy Report (IEPR). In D.07-10-032, the Commission

[4] D.07-10-032, p. 113.

supported this target, stating: "We commit to working with the Energy Commission on strategies to achieve all cost-effective and feasible energy efficiency."[5] The Commission reinforced this commitment by also requiring IOUs to pursue a set of "Big Bold Energy Efficiency Strategies (BBEES)" and other market transformation programs, as well as to create a statewide strategic planning framework for a sustainable energy efficiency approach "that transcends regulatory, programmatic and jurisdictional constraints, and emphasizes a broader view of the energy efficiency landscape."[6]

2.3. California Air Resources Board

CARB is responsible for implementing AB 32, California's landmark climate change statute. Within Rulemaking (R.) 06-04-009, this Commission and the CEC have jointly developed an energy sector model (E3 GHG Calculator) to analyze greenhouse gas (GHG) reduction scenarios for the energy sector out to 2020. The E3 GHG Calculator serves as an analytical tool providing the quantitative basis for the Joint Commissions' recommendation on the implementation of AB 32 within the electricity and natural gas sectors. This recommendation will be provided to CARB via a final decision in R.06-04-009, expected September 2008.

E3's GHG Calculator incorporates energy efficiency savings scenarios drawn from the Itron Goals Update Report presented within this proceeding. The Commission has made a concerted effort to ensure that the planning

[5] D.07-10-032, p. 9.

[6] D.07-10-032, p. 4.

assumptions utilized for current GHG and Energy Efficiency policymaking efforts are closely aligned.[7]

On June 26, 2008, CARB released an initial draft of its Scoping Plan for public comment, which included aggressive targets for energy efficiency. The final Plan will likely demand an aggressive level of energy efficiency improvements from all sectors within the state. The Commission expects that the goals adopted in this decision will form the basis for the IOU service territory portion of the goals articulated in the draft Scoping Plan. The Commission reaffirms its commitment to working with CARB on maximizing energy efficiency savings in order to achieve AB 32's targeted reductions in a cost-effective manner. The Commission expects to assist in achieving these goals, not only through compelling aggressive IOU program effort, but also through the statewide strategic planning process, which will help to identify new and innovative approaches to the delivery of energy efficiency in California.

2.4. Itron Goals Update Report and March 25 Ruling

The energy utilities contracted with Itron in late 2006 to produce a report (the Itron "Goals Update Report") to assist in developing energy savings goals for electricity and natural gas through 2020. As mentioned above, the currently adopted goals were developed with the policy intention of reducing per-capita

[7] In comments, SCE notes that 2020 GWh cumulative savings totals presented in the E3 calculator are lower than those presented in the proposed decision. This is a consequence of analytical adjustment made in the E3 GHG calculator and does not reflect a difference in the underlying data. The GHG Calculator cost and rate impacts are measured as the change from existing 2008 levels to 2020 levels and 2008 energy efficiency savings are assumed to be included in 2008 costs and rates. Accordingly, E3 subtracts 2008 values from its cumulative 2020 savings totals.

electricity and natural gas consumption in California. The development of goals in this proceeding is equally policy driven.

The Itron Goals Update Report used the results of the 2008 IOU Energy Efficiency Potential Study[8] (the "Potential Study") as its primary starting point for scenario analysis. The Potential Study was a ratepayer-funded study performed by Itron, with Energy Division input and oversight, in an effort to generate the most up-to-date estimate of end use energy efficiency savings potential in each service territory for 2007-2016 and for 2017-2026.

The Goals Update Report employs a new methodology for developing goal scenarios that departs from our current adopted structure of annual reductions in per-capita energy consumption. Our current structure only addresses savings directly generated by utility programs. The new methodology develops savings from utility and non-utility efforts. It includes two different definitions of energy efficiency goals: (1) a Total Market Gross (TMG) goal for each IOU service territory (which encompasses utility savings from programs, building codes, state and federal appliance standards, and market transformation programs such as the BBEES adopted in D.07-10-032), and (2) an updated IOU Program-Specific Goal for each IOU service territory.[9]

The Goals Update Report includes three scenarios (high-case, mid-case and low-case) which present a Total Market Gross goal developed by aggregating the achievable potential from traditional IOU program designs at

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[8] The 2008 IOU Potential Study was commissioned by the four largest California IOUs. The review committee included representatives of each IOU as well as the Commission's Energy Division. The Study can be found at: http://www.calmac.org/NewPubs.asp.

[9] *Ibid*, p. 78.

varying incentive levels with different degrees of energy efficiency achievements through other delivery mechanisms. The methodology initially was demonstrated through the presentation of energy (as measured by kilowatt-hours) goal scenarios. Demand (kW) and natural gas (therms) savings goals were presented in subsequent documents. The portion of the Goals Update Report describing this scenario tool methodology was released to the public on March 21, 2008. Itron released additional portions of its report concerning demand savings goals and natural gas savings on May 28, 2008. As the Goals Update Report states: "In the context of this study is the explicit treatment of uncertainty in that many of the key variables are treated as ranges." This allowed the study team and Energy Division staff to explore different combinations of uncertainty, in particular end uses, segments and savings mechanisms."[10]

Assigned Commissioner Grueneich and the Administrative Law Judge issued a Ruling[11] on March 25, 2008 seeking comments regarding the Itron Goals Update Report and energy savings goals through 2020. The Ruling stated that new energy efficiency goals through 2020 should appropriately challenge utilities to remain on the leading edge of energy efficiency in California. The Ruling identified the following primary purposes for a decision establishing energy savings goals through 2020:

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[10] Itron Goals Update Report, p. i.

[11] Revised Assigned Commissioner's and Administrative Law Judge's Ruling Regarding Energy Efficiency Savings Goals Through 2020. March 25, 2008: http://docs.cpuc.ca.gov/efile/RULINGS/80525.pdf.

1. The goals should further enable the bold steps taken by the utilities and outlined in the draft Statewide Energy Efficiency Strategic Plan to participate in innovative and cooperative efforts.
2. The goals should set appropriate expectations for the emissions to be reduced through energy efficiency for use in the California Air Resources Board's emerging regulatory framework for AB 32, the state's global warming law. The process for setting these expectations should use the best available information but acknowledge the many uncertainties created by changes in program focus and delivery.
3. The goals should more transparently address the interaction between procurement authorizations resulting from the Commission's long-term procurement proceeding (LTPP) process and cumulative energy savings achievements.[12] The goals should be consistent with the LTPP process, so that more costly supply side generation capacity is avoided as a result of increased energy efficiency activities.

2.5. Energy Division Recommendations

In the March 25 Ruling, parties were asked to comment on Energy Division's recommendations for adopting energy savings goals through 2020. The Energy Division recommended that goals be developed for the period of 2012 -2020, to begin with the 2012-2014 energy efficiency program cycle, and to be used for interagency emissions regulation and long term procurement planning.[13] Substantively, the Energy Division's recommendation embraced the influence energy efficiency achievements have gained beyond this proceeding in recent years and created a framework beyond simple annual and cumulative

[12] Section 3.2 of Appendix A in the originating OIR for R.08-02-007 describes the complexities associated with this issue.

[13] While D.07-10-032 declined to change goals for 2012-2013 as well as 2009-2011, Energy Division recommended a change for 2012-2013 for reasons explained below.

numerical targets. These recommendations prioritize the development of a goal structure in which successful achievement encourages continued evolution of all energy efficiency programs and strategies in the State, and is not limited to utility programs. The Energy Division recommendations in the March 25 Ruling were as follows:

1. The Commission should adopt, for each IOU service area, both a total market gross and utility-specific goal (*i.e.,* a "hybrid goal"). The total market gross goal for IOU service territories will be used for procurement planning and carbon emissions regulation as well as to identify the realistic savings potential available for utility programs to access. The total market gross goal would represent the level of cumulative energy efficiency potential (a) available between 2012 and 2020 within the IOU service territory, and (b) able to be achieved through all reasonably measurable delivery channels including improvements in state and federal codes and standards, state legislative mandates, naturally occurring efficiency, and IOU voluntary programs (both resource acquisition and market transformation).
2. The Commission should adopt a utility-specific goal against which to measure the net effects of utility programs toward meeting the total market gross goal.
3. The Commission should commit staff and contractor resources to develop any proper evaluation, measurement, and verification protocols not in existence today to attribute savings for additional program impacts each IOU generates through its innovative and expanding suite of delivery mechanisms.
4. The Commission should adopt Itron's Mid-Level Case (presented in Figure 6-10 of the Itron Goals Update Report, on page 98) as the total market gross goal.
5. The Commission should adopt the "IOU Gross" targets in Itron's Mid-Level Case (presented in Figure 6-10 of the Itron Goals Update Report, on page 98) as a proxy for the "IOU Net" goal, because precise attribution of additional potential savings to IOU programs (*e.g.,* Title 24 programs, federal Codes and Standards, Big Bold Strategies) is not possible to model at this time.

Energy Division's recommendations were made in reference to the Mid Case Scenario in the Itron Goals Update Report (see Figure 1 below) which represents gigawatt hour energy savings goals:

Figure 1: Mid Case Scenario Hybrid Goal Structure and Levels

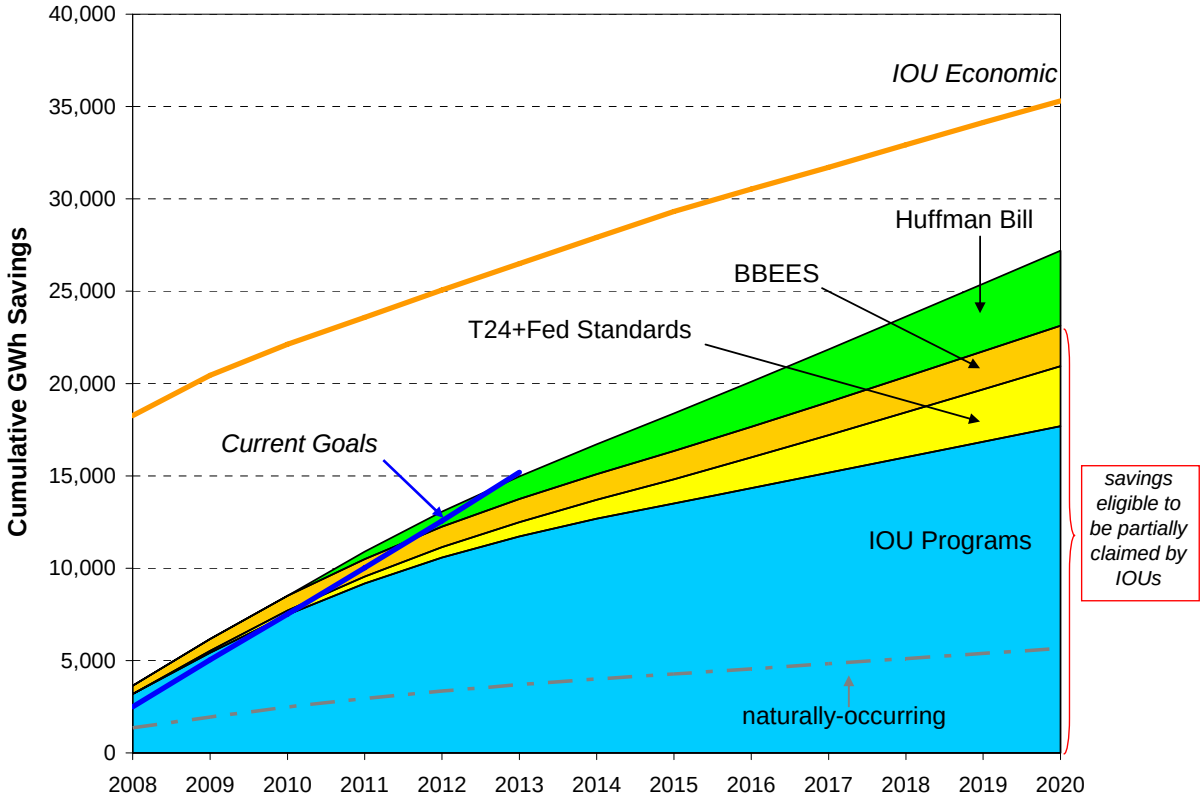

Figure 1 presents the savings expected from 2008 through 2020 from four major sources of energy efficiency across IOU service territories.[14] Savings from IOU programs are anticipated to be funded through IOU program applications, such as those for 2009-2011 filed on July 21, 2008 (including naturally-occurring energy efficiency savings). Savings from Title 24 state building codes and federal

[14] These sources are the IOU programs savings (including naturally-occurring savings), Title 24 and Federal Building Appliance Standards, the Commission's Big, Bold Energy

Footnote continued on next page

and state appliance standards are based on anticipated improvements in these standards over time. BBEES were described in D.07-10-032. The Huffman Bill (AB 1109) requires a 50% improvement in general service lighting by 2018. Beyond these known or expected savings lies potential savings from market transformation, in addition to the market transformation built in the BBEES.

Energy Division believes a hybrid goal structure (which incorporates both a total market gross goals and a utility program–specific goal) which measures all savings achievements within IOU service territories begins to solve the crucial interagency need for a metric appropriate to load forecasts, associated emission reduction baselines, and economically efficient procurement plans. Energy Division recommends use of the concept of "expansive net" to identify a utility-specific goal. As defined, expansive net represents the following:

> Expansive Net = Current Net Program Savings + Utility Program Induced Market Effects
>
> Where Utility Program Induced Market Effects =
>
> Utility share of the savings from new Codes and Standards
>
> + Utility share of the savings from new Compliance Enhancement Programs
>
> + Utility share of the savings from Market Transformation Programs such as the Big Bold Energy Efficiency Strategies

Energy Division believes the definition of "expansive net" (provided to parties in the Staff Paper dated May 12, 2008) appropriately encourages IOUs to affect and amplify the savings within all reasonably measurable channels, and is

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Efficiency Strategies (BBEES), and AB 1109 (also known as the Huffman Bill) regarding general purpose lighting standards.

consistent with objectives for the California Energy Efficiency Strategic Plan as per D.07-10-032. Such a definition must be accompanied by a Commission commitment to develop any significant missing evaluation, measurement & verification (EM&V) protocols for attributing savings to utility programs.

Energy Division believes a hybrid goal structure employing "expansive net" as the metric for which IOU program efficacy is measured also encourages utilities to innovate their program delivery through non-traditional channels. The EM&V profession refers to these additional EE effects variously as "participant spillover," "market effects," "naturally occurring" savings.

Energy Division's recommendations would result in total energy savings of over 4,500 megawatts from 2012 to 2020. Further, there would be expected savings of over 16,000 gigawatt-hours of electricity and 620 million therms over that period.

Energy Division's recommendations take into account savings from the entire energy efficiency sector, including state and federal codes and standards, BBEES and AB 1109. Further, in addition to continuing the upward trajectory of energy savings through 2020, Energy Division's recommendations would increase savings from longer-term measures, such as air conditioning and solar thermal hot water.

2.6. Goals for 2009 Through 2011

In D.04-09-060, the Commission set annual and cumulative[15] energy efficiency savings goals through 2013. One of the issues in the proceeding was whether the savings goals should be set on a gross basis, or should be net of free

[15] The definition of cumulative energy savings with regard to Net Goals was clarified by D.07-10-032.

riders[16] (*i.e.,* whether savings from free riders should be subtracted from the gross savings). The decision stated: "It is our understanding that the savings modeled in the potentials studies are net of free riders in the near-term, but that they become equivalent to gross savings as the net-to-gross ratio approaches 1.0 over the longer term. Hence, we clarify that the savings goals we establish today through 2008 are net of free riders. We will revisit the issue of whether the savings goals for the outer years (2009-2013) truly reflect gross savings potential when we next update our savings potential studies." (D.04-09-060, p. 33.)

In D.07-10-032, the Commission declared its intent not to change adopted energy efficiency savings goals for 2009 through 2011 in order to more immediately focus on the preparation of the comprehensive energy efficiency strategic plan and its initial implementation via the 2009-2011 program portfolios. In that decision, the Commission did not address the definition of adopted goals as net or gross for 2009-2013.

2.7. PHC and Comments

Initial comments were received on April 25, 2008, with reply comments on May 5, 2008. On May 14, 2008, a prehearing conference (PHC) and concurrent workshop was held to consider parties' comments on the March 25 Ruling, and to provide further clarification on the Itron Goals Update Report and Energy Division recommendations. Another workshop was held June 2, 2008. At the May 14, 2008 PHC, the ALJ established June 11, 2008 as the date for comments on

[16] "Free riders" are defined as program participants who take advantage of a utility energy efficiency service or incentive, but would have implemented the program measure or practice even in the absence of the program.

the Itron Gas Goals Scenarios, the 2008 California IOU Energy Efficiency Potential Study and other topics discussed at the PHC.

According to the ALJ's direction at the May 14 PHC, Itron publicly released the 2008 California IOU Potential Study on May 29, 2008.[17] With this Potential Study now available, a Ruling on June 2, 2008[18] sought comments from parties on the question of whether the goals for 2009 through 2011 should be gross or net of free riders.

3. Positions of Parties

Comments and reply comments were received from the following parties:

- SDG&E jointly with SCG
- PG&E
- SCE
- Division of Ratepayer Advocates (DRA)
- Community Environmental Council (CE Council)
- Women Energy Matters (WEM)
- Natural Resources Defense Council (NRDC)
- Insulation Contractors Association (ICA)
- Proctor Engineering (Proctor)
- American Council for an Energy Efficient Economy (ACEEE)
- EPI Freus Air Conditioning (EPI)
- City and County of San Francisco (CCSF)

Table 1 summarizes the key points discussed by the parties in their opening comments filed April 25, 2008, regarding Energy Division's recommendations and related issues.

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[17] The 2008 California IOU Potential Study is available at http://www.calmac.org/NewPubs.asp.

[18] Assigned Commissioner and Administrative Law Judge's Ruling Seeking Comment on Definition of Energy Savings Goals for 2009 through 2011, June 2, 2008. http://docs.cpuc.ca.gov/efile/RULINGS/83642.pdf.

Table 1

	Supports	Does Not Support
ED Recommendation: A total market gross goal for IOU service territories for procurement planning, carbon emissions regulation, and to identify the realistic savings potential.	DRA, CE Council, WEM, NRDC, ACEEE	
ED Recommendation: An Expansive Net goal for IOU service territories for measuring achievement toward the TMG.	CE Council, NRDC	DRA, WEM, ACEEE
ED Recommendation: Commit staff and contractor resources to develop any proper evaluation, measurement, and verification protocols not in existence today to attribute savings for additional program impacts.	NRDC	ACEEE
ED Recommendation: Adopt Mid-Level Scenario as Total Market Gross	NRDC	WEM
ED Recommendation: Adopt Mid-Level Scenario IOU Gross as a proxy for Expansive Net that should serve as basis for a reauthorized risk/reward mechanism.	NRDC	DRA, WEM
Request update with current Avoided Costs and DEER Updates:	SCE, PG&E, SDG&E, SCG, CE Council, ACEEE	
Need clarification of the purpose of TMG goal:	SCE, PG&E, SDG&E, SCG, DRA	
Need clarification of the purpose of Expanded net goal:	SCE, PG&E, SDG&E, SCG, DRA	

Parties in their opening comments expressed various concerns about lack of full understanding of methodological elements of the Itron Goals Update Report and/or Energy Division recommendations. Largely, this was the result of Energy Division's recommendation of a complex new goal structure whose attribution protocols would be developed in the interim period before 2012 (see Energy Division Recommendation 3, above). Parties presented mixed levels of comfort with a hybrid structure that would rely on these undeveloped protocols.

In parallel to the 2020 goals update element of this proceeding, an April 21, 2008 Ruling[19] for the 2009-2011 energy efficiency program portfolios applications required the utilities to use updated 2007 generation cost values, carbon reduction value, and 2008 Database for Energy Efficient Resources (DEER) values. This Ruling updated the underlying baseline inputs for calculations of economic potential and avoided costs soon after Energy Division's goals recommendations were made. For this reason many parties expressed concerns about a lack of consistency between updated values to be used in the 2009-2011 utility portfolio filings, and the earlier era data that supported the Itron Goals Update Report. While these issues were subsequently discussed in workshops, parties generally agreed that the numerical targets from the Itron Goals Update Report and Energy Division recommendations should not be adopted at this time on a final basis, nor used to set goals for individual utility portfolios.

In comments, parties to a large extent coalesced around a single recommendation: The Commission should adopt a Total Market Gross (TMG) goal at this time from the scenarios within the Itron Goals Update Report, but not utility portfolio-specific goals, and should update both the TMG goal and establish utility portfolio-specific goals with new data before 2011. Parties reiterated their views on this topic at the May 14 PHC, and in subsequent comments dated June 11, 2008.[20]

Parties also agreed that an update of the goals must occur in a timely manner to be useful for planning purposes for 2012-2014 energy efficiency

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[19] This Ruling can be found at http://docs.cpuc.ca.gov/efile/RULINGS/81727.pdf.

[20] See comments from SCE, PG&E, SDG&E, SCG, NRDC, DRA, and CE Council dated June 11, 2008.

programs. However, parties differed on when the update should occur. We discuss these issues below in Section 6.

4. Discussion

4.1. Total Market Gross Goals for 2012 through 2020

Parties agree that now is the appropriate time to adopt TMG electricity and natural gas energy savings and demand savings goals for the IOU territories for 2012 through 2020, at least on an interim basis. There is consensus among parties and Commission staff that while the general purpose for annual and cumulative goal levels adopted in D.04-09-060 remains of critical importance, the levels adopted are no longer suitable for utility-run programs. This is because the basis and process from which these goals were created in 2004 is not representative of the current trends and interest in energy efficiency savings within a carbon-restricted regulatory regime. Current goals, which were anticipated to be revised every three years, are based on a Potential Study from 2002 which did not consider aggressive action through state building codes and states and federal appliance standards. In fact, since 2002, there have been two significant building code revisions and state appliance standards have been updated nearly annually.

We understand Energy Division's recommendation of a hybrid goal structure as an effort to bring energy efficiency's goal structure into line with our current policy rationale to recognize that energy efficiency occurs beyond IOU programs alone, and to motivate collaboration among regulatory agencies, IOUs, local governments, municipal utilities and private entities. Parties generally support the need to align numerical goals with this policy rationale. They also generally support the Itron Goals Update Report and Appendices, acknowledging that it presents a set of scenarios that model the reality of energy

efficiency savings within utility service territories more closely than the past goal setting procedure.

Parties view the proposed hybrid goal structure presented in the Itron Goals Update Report with both agreement and uncertainty. Parties generally agree that it is appropriate to track all savings mechanisms operating within a utility service territory to capture the entire picture of energy efficiency achievements for CARB and for long-term procurement planning. Most agree that gross savings is most relevant for planning purposes and should be measured across the entire economy. The main critique is that proposing a new definition of utility net savings without forecasted estimates of its size, or a perfected ability to measure it, introduces significant uncertainty into the internal business structure of the utilities.

Parties dispute that the Report and its Appendices represent the most recent data. A combination of changing schedules in the release of the Itron Goals Update Report, the Itron California 2008 Potential Study, and the 2008 DEER Update has led to publication dates that suggest each was produced independently and without the benefit of the other. Logically, one should feed into the other starting with the 2008 DEER Update influencing the 2008 Itron Potential Study, and that leading to the Goals Update Report. With Itron as the principal contractor to both the 2008 Potential Study and the Goals Update Report, as well as a major contributor to the DEER Update, we are confident that significant melding of the most recent data occurred.[21] The 2008 IOU Potential

[21] A technical discussion of this point can be found in "Energy Division Staff Paper 2012-2020 Energy Efficiency Goal Setting: Technical and Policy Issues" dated May 12, 2008, as referenced by SDG&E and SCG in their June 11 comments.

Study is already consistent with major updates to Energy Division regarding DEER values (including compact fluorescent lighting effective useful life and hours of operation), encompassing the majority of the expected impact on the IOU portfolio plans.

The imperfect ability to use the most recent vintage of data in all cases can be a limitation to goal setting. However, in this process, the construction of a framework for goal setting can be done with good, if not perfect, data. For example, parties reached near-consensus that goals at the TMG and IOU-program specific level are needed and that interim TMG goals can be adopted immediately. Parties also agree that the Commission should adopt a revision of the TMG goals with clear data sources and develop IOU-program specific goals for 2012-2014 energy efficiency program planning. Parties are aware that goals for overall savings within IOU territories are necessary for transmittal to CARB for AB 32 implementation purposes at this time.

We will adopt the 2012 through 2020 TMG goals presented as the mid case scenario in the Itron Goals Update Report on an interim basis. Our adopted goals are shown in Table 2 below. These goals are consistent with our intention in D.07-10-032 to establish an energy efficiency regulatory regime, "that transcends regulatory, programmatic and jurisdictional constraints, and emphasizes a broader view of the energy efficiency landscape."[22]

By adopting the goals shown in Table 2 below, total energy efficiency savings in the IOU territories are expected to reach over 4,500 megawatts from 2012 to 2020, the equivalent of nine major power plants. Further, we expect

[22] D.07-10-032, p. 4.

savings of over 16,000 gigawatt-hours of electricity and 620 million therms over that period. As shown by Figure 1, these savings are a continuation of the high level of savings achieved and expected to be achieved in 2004 through 2011 through a combination of aggressive Commission action and other market and regulatory factors.

Our adopted goals for 2012-2020 take into account savings from the entire energy efficiency sector. Beyond savings from IOU programs, our adopted goals for the first time include recognition of state building standards and expected federal appliance standards, our BBEES and AB 1109 (requiring improvement in general service lighting). Recognizing the comprehensive nature of energy savings in California provides better information to procurement planners to delay or reduce the future need for supply-side resources, which will result in reduction of GHG emissions.

Table 2: Adopted Total Market Gross Goals[23] (annual)

		2012	2013	2014	2015	2016	2017	2018	2019	2020
GWH	PG&E	978	867	793	765	787	797	814	816	817
	SCE	973	861	784	750	778	789	802	805	808
	SDGE	212	183	164	154	156	159	162	162	163
	Total	2,164	1,911	1,741	1,669	1,720	1,745	1,778	1,783	1,788
MW	PG&E	253	237	228	241	257	258	270	270	269
	SCE	215	199	189	193	213	215	222	222	223
	SDGE	45	41	38	38	40	40	41	42	42
	Total	513	477	455	472	510	514	533	533	534

[23] Table 2 is derived from the data presented in the Appendix tables of the Itron Goals Update Report. For a further breakdown of the savings associated with each delivery mechanism see the Mid-Case scenario rows for the years 2012-2020 in the following tables: C1-18, C2-18, and C3-18 for GWH savings; E2-18, E3-18, E4-18 for MW savings; and G1-18, G2-18, G3-18 for gas savings. This data is presented together in Appendix 1.

		2012	2013	2014	2015	2016	2017	2018	2019	2020
MTherms	PG&E	20	32	31	32	32	31	32	32	33
	SoCal Gas	18	34	34	35	34	33	34	34	34
	SDGE	3	6	6	6	6	6	6	6	6
	Total	42	72	71	73	73	70	72	73	73

We will not adopt the "expansive net" recommendation of Energy Division at this time because there is an insufficient record to do so. However, we believe this concept has merit. As discussed above, the energy landscape in California is changing. Energy efficiency will be a central strategy for reducing carbon emissions, and beyond regulation, rising generation costs are driving an awareness and desire for more efficient use of energy. Together these forces are creating a positive environment for rapid efficiency improvements in key end uses and entire systems. As discussed in Section 6 below, we will update and adopt new goals in 2010. At that time, we intend to consider "expansive net" goals as part of adopting IOU portfolio specific goals.

D.07-10-032 directed the four IOUs to produce a single statewide energy efficiency strategic plan to identify opportunities for "innovation, integration, and collaboration" in efficiency statewide. We plan to adopt a strategic plan later this year. Adopting a goal structure for IOU program-specific achievements that recognizes IOU programs are not the only source or driver for efficiency gains and rewards IOUs for their constructive, collaborative efforts is important to keep policy in line with actual market conditions.

Our adopted goals for 2012 through 2020 will bring about 16,000 gigawatt hours of energy savings over that period. When energy savings from 2008 through 2011 (from Figure 1) are included, total energy savings add up to

approximately 26,000 gigawatt hours from 2008 through 2020.[24] This savings will serve as a foundational contribution to CARB's overall goal (which includes energy savings from municipal utilities) for statewide energy savings (leading to emissions reductions) for approximately the same timeframe.

4.2. Use of Total Market Gross Goals in Procurement Planning

In D.04-09-060, Ordering Paragraphs (OPs) 6 and 7 both indicate that the achievement of energy efficiency goals produces the greatest value when savings offset supply side resources. OP 6 directs the utilities in the 2006 Long-Term Procurement Plan (LTPP) and all subsequent LTPP filings to incorporate the most recently adopted energy efficiency savings goals in order to ensure that ratepayers do not procure redundant supply side resources over the short or long term. Parties voiced concern in this proceeding that there is some risk that 100% or more of the TMG goals may not be met. We recognize that in the event of a savings shortfall, adequate supply side procurement of capacity could be put at some risk. The LTTPs of each IOU must take this potential shortfall into consideration and weigh the level of uncertainty in full TMG goal attainment with the added cost to ratepayers for either over-procurement or emergency just in time procurement of capacity.[25] Future LTPP plans are likely to consider the

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[24] The Itron Goals Update Report incorrectly used the figure of 28,000 gigawatt hours for this period. PG&E and SCE pointed out in comments to the Proposed Decision that this figure was incorrect because it included 2007 lighting savings. We have reviewed the Itron Report and use the correct figure here.

[25] The most current LTPP Order Instituting Rulemaking discusses this issue specifically. See R.08-02-007 OIR, p. 21 Appendix A: "In general, the trade-off continuum before us is between overprocuring resources (in a conservative view of firm capacity) at risk of crowding out preferred resources that have shorter development timelines (or causing excess ratepayer costs due to excess resources), or underprocuring

Footnote continued on next page

optimal procurement of resources to demonstrate a roadmap to compliance with CARB's final implementation plans. Here, we consider with what level of confidence the Commission and IOUs should treat actual achievement of TMG energy efficiency goals.

A ruling dated March 21, 2008 accompanied the public release of the Itron Goals Update report. This ruling offered a set of questions to consider with the Itron Goals Update report and presented the Staff Recommendations for Goals 2012-2020. A specific question regarding future goal achievements was how to consider the level of certainty necessary for Commission procurement planning decisions. The first recommendation staff made was that the Commission should adopt a TMG goal for each utility service territory and that goal should be used for procurement planning. Parties were asked to comment on the Staff Recommendation as well as other questions.

In its initial comments, SDG&E cites OP 6 & 7 of D. 04-09-060 and states that because the Commission already requires that energy efficiency goals be reflected in IOU procurement plans, the goals should be "achievable and realistic."[26] SCE commented that "[s]ince it includes all savings, total market gross potential has great appeal as the theoretically correct value that should be used for procurement planning and carbon emissions regulation."[27] However, SCE went on to say it was unclear how the individual components of a TMG

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resources at the risk of poorer environmental performance from more aging plant generation, higher costs and poorer environmental performance from "just-in-time" procurement resources, or reliability problems."

[26] SDG&E Comments, April 25, 2008, p. 5.

[27] SCE Comments April 25, 2008, p. 7.

would be measured, and therefore questioned the usefulness of setting a TMG goal at this time. WEM commented that "[t]he Commission needs to know that the EE goals will be attained to the same extent that it needs to know that power plants of a certain rating will be online and delivering power." CE Council stated: "The Commission should not be particularly concerned from a long-term procurement perspective regarding setting the IOU EE Savings goals too high because the IOUs currently have a significant amount of spare capacity…" NRDC stated: "It is absolutely necessary that the Commission work with the utilities and others to make sure the goals are attained."

Throughout their comments, parties were generally supportive of the concept of TMG goals being used both for CARB GHG regulatory purposes as well as for procurement planning. Only SDG&E in its June 11, 2008 comments stated that "[g]iven the Joint Utilities (SDG&E and SCG) concern regarding the accountability and potential reliability of realizing the service territory goals, the Joint Utilities recommend that only the utility specific goals be used…"

Because the thrust of this goal structure is to recognize that energy efficiency does not occur solely by utility programs, it is consistent to use TMG as the appropriate goal level for LTPP. We will require that 100% of the interim TMG goals adopted in this decision shall be used in future LTPP proceedings, unless superseded by subsequent goals.

4.3. Gross Goals for 2009 through 2011

In their June 11 comments, parties did not reach consensus on the question of whether to shift to gross goals for 2009-2011. The four utilities and NRDC support use of gross goals, while DRA, CE Council, CCSF and WEM support continued use of net goals.

NRDC argues 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. Therefore, NRDC believes gross goals will continue to represent stretch goals that are aggressive, achievable, and exceed historical levels of savings.[28] SDG&E and SCG state their intention to file proposed program portfolios for 2009-2011 that meet or exceed the adopted gross annual goals.[29] SCE claims the establishment of gross goals for 2009-2011 reflects the latest information on energy efficiency potential in California, and these gross goals exceed the updated estimated savings potential from the most recent Itron energy efficiency potential study.[30] PG&E believes the current net savings goals adopted in 2004 are unrealistic and adopting gross goals makes them less unrealistic. PG&E also calls for the Commission to modify the risk/reward incentive mechanism (RRIM) to account for the change to gross goals.[31]

DRA does not support changing to gross goals for 2009-2011 because DRA believes this modification will result in a change to the RRIM and a corresponding impact on ratepayers by making it easier for utilities to meet the requirements to earn incentives.[32] WEM and CE Council support DRA's views.

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[28] NRDC June 11, 2008 Comments, p. 3.

[29] SDG&E/SCG June 11, 2008 Comments, p. 7.

[30] SCE June 11, 2008 Comments, pp. 3-4.

[31] PG&E June 11, 2008 Comments, p. 8.

[32] DRA June 11, 2008 Comments, pp. 7-8. DRA also proposes an alternative of using the 2008 Potential Study High Case savings scenario for 2009-2011 savings goals and regarding those goals as net. However, this proposal is beyond the scope of this decision because we are only considering here whether already adopted savings goals should be gross or net of free riders. (*Ibid*, pp. 10-11.)

CE Council calls for a full discussion of the impact on ratepayers before changing from net to gross.[33] WEM states that net savings should be used because this historical standard should not be changed midstream.[34] CCSF opposes using gross goals because of its concern that this will serve as an incentive for the utility to focus on easy-to-achieve short term annual savings to the detriment of more complex and long-lived savings.[35]

We will adopt the use of gross goals for 2009-2011.[36] While we declined to modify these goals in D.07-10-032, no party disputes that the 2004 (net) goals are now out of date. Key assumptions embedded in the current goals do not resemble trends visible in the overall energy efficiency market today. For example, the net-to-gross and expected useful life assumptions in the 2009-2011 goals are about ten years old. Further, the model for current goals assumed there would be no further improvements in Title 24 or state and federal appliance standards.

As noted above, D.04-09-060 called for review of whether the energy savings goals should be gross or net after the next potential study. Upon review of the 2008 IOU Potential Study, the gross potential savings for 2009-2011 in that study more closely align with the currently adopted 2009-2011 goals than do net

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[33] CE Council June 11, 2008 Comments, p. 13.

[34] WEM June 11, 2008 Comments, p. 9.

[35] CCSF June 11, 2008 Comments, p. 2.

[36] The change from net to gross goals only affects the calculation of the minimum performance standard of the Risk/Reward Incentive Mechanism adopted in D.07-09-043 and does not impact the calculation of the performance earnings basis also adopted in that decision. The performance earnings basis remains calculated using net benefits.

potential savings. Table 3, derived from D.04-09-060 and the 2008 IOU Potential Study,[37] shows that 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.

Table 3: 2008 Gross IOU Potential Savings vs. Adopted Goals

		2009	2010	2011	Cumulative 2009-11	Goals as % of Potential
Currently Adopted Goals (annual savings)	GWh	2,538	2,465	2,513	7,516	112%
	MW	535	519	530	1,584	109%
	Therms	52	54	57	163	97%
Gross Annual Savings Potential (full incentives)	GWh	2,496	2,227	1,993	6,716	NA
	MW	510	486	462	1,458	NA
	Therms	55	56	57	168	NA

We find that a shift from net to gross savings goals should bring the currently adopted goals in line with the range of efficiency potential identified by the 2008 IOU Potential Study, reflecting market conditions for 2009-2011. The shift from net to gross goals requires that we adjust our definition of cumulative savings so as to include this change. All that changes is that, unlike savings from program years 2004-2008 (which are measured as ex-post net cumulative savings),[38] 2009–2011 savings will be measured as ex-post gross and layered on top of 2004-2008 savings to measure cumulative savings for the purpose of calculating the Minimum Performance Standard (MPS) for the final true-up payment.

[37] Data used in Table 3 can be found in Section 4.2, and Tables 4.2, 4.3, and 4.8 in the 2008 IOU Potential Study.

[38] For 2004-2005, the utility-reported format of "actuals-plus-committed" savings will be *ex post* verified by 2009, and become compatible with utility-reported "actual" savings for 2006-2008 for the purposes of cumulative savings.

In its comments on the Proposed Decision, DRA expresses concern that shifting from net to gross goals will only bring current goals into alignment with existing market potential if the full incremental cost of energy efficiency measures are funded by utility ratepayers (expressed as "full incentives" in Table 3 above). However, the Goals Update Study does not assume the adoption of full incentives. The Study describes the full incentive scenario as maximizing the level of cost-effective savings achieved in the short to medium term and suggests that such levels could also be achieved through a combination of highly effective program efforts without full incentives.[39]

The opportunity for portfolio benefits is greater as utilities find it easier to support more strategic long-term energy efficiency programs – a major goal for our future activities - using gross energy savings goals for 2009-2011. SCE comments that utilizing gross goals for the 2009-2011 period may open up the opportunity for more program options which support the long-term goals for energy efficiency than the use of net goals, because the use of gross goals should allow for parties to focus more on maximizing the energy savings potential of energy efficiency programs. We agree, and therefore we expect to allocate funds reflecting, for example, less reliance on upstream compact fluorescent lighting programs, and greater emphasis on heating, ventilating and air conditioning (HVAC) and other programs with on-peak savings, in the 2009-2011 utility portfolios as compared to their current portfolios. Most importantly, we anticipate approving an expanded set of integrated, long-term activities reflecting the forthcoming long-term California Energy Efficiency Strategic Plan

[39] Itron Goals Update Study, pp. 83 - 84.

currently being considered in R.08-07-011 and Application 08-06-004. We give notice that continued IOU program administration and funding is contingent upon the IOUs implementing expanded, integrated long-term energy efficiency activities as a key focus of their 2009-2011 program portfolios.

At the same time, the concern of DRA and others about ratepayer impacts of changing to gross goals on the RRIM may be legitimate. We appreciate the comments of several parties that the relationship between the RRIM and changing the measurement of goals needs to be considered. It is possible that the change from net to gross energy savings goals for 2009-2011, while necessary to reflect realistic changes in the measurement of energy efficiency potential, may result in an imbalance of risks and rewards for utilities if other corresponding adjustments are not made, so that earnings are too easily achieved.[40] While some parties call for waiting to consider the net versus gross issue until the RRIM is reconsidered, we believe it is important to act on the goals issue now so that the utilities can have clarity in their 2009-2011 portfolios.

There is sufficient time to make necessary changes to the RRIM (and other aspects of the energy efficiency regulatory structure, if necessary) before any potential unreasonable earnings outcome would occur, since earnings for 2009 (and later) programs will not be calculated until after 2010. We intend to reconsider aspects of the RRIM far sooner, starting with an Energy Division study later this year, with the formal portion of the inquiry beginning later this year leading to a decision early in 2009. This limited RRIM relook will reconcile

[40] It is also possible that the utilities would have been unreasonably at risk to not achieve earnings or to incur penalties had we not changed the energy savings goals from net to gross.

changes in goal measurement with the way incentives are calculated, so as to ensure both ratepayer and utility administrator interests are fairly met. We direct staff to analyze, at minimum, the impact of lowering the $450 million earnings cap in the RRIM and the impact of lowering the 9% and 12% incentive earnings rate as methods for mitigating potential unfair earnings outcomes.[41] We may also consider – and we direct staff to analyze – the possibility of changing the way certain energy efficiency activities should be counted toward satisfying 2009–2011 portfolio goals ("counting rules") if such changes are needed to mitigate any unreasonable outcome.[42]

5. SDG&E Energy Savings Goals

SDG&E points out that its energy savings goals are currently set at 118% of cumulative maximum energy savings, when the same goals are set at approximately 88% for the other utilities.[43] This point was acknowledged in D.07-10-032, Section 7.1: "We hereby commit to revisiting SDG&E's energy savings goals, as SDG&E proposes, or addressing the matter in the budget process as TURN and DRA propose." SDG&E believes that since the Commission at this time is revisiting the 2009-2011 goals that this is an appropriate forum to consider SDG&E's proposed modifications to its goals. We will consider this issue in SDG&E's budget process, which is the 2009-2011 portfolio application.

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[41] A broader review of the RRIM is set to occur in 2010.

[42] For a discussion of the current counting rules, see Section 7.3 of D.07-10-032.

[43] *Ibid*, pp. 9-10.

6. Updating Goals for 2012 Through 2020

In today's decision, we establish interim TMG goals for each IOU service territory for the years 2012 through 2020. These TMG goals will be transmitted to CARB for AB 32 purposes, and will be used by IOUs for procurement planning in the 2010 LTPP. TMG goals also represent and support the direction given to the California Energy Efficiency Strategic Plan of innovation, integration, and collaboration by illustrating the savings in addition to traditional IOU programs that is reasonable to anticipate with the current growing market interest. We adopt these goals with the understanding that the underlying data is imperfect, but are sufficiently robust for use at this time. We recognize the need to update TMG goals and to establish IOU program-specific expansive net goals. At the PHC and in their June 11, 2008 comments, parties suggested different methods, inputs, and timetables for goal updates and new IOU-specific goals. All parties agree that this effort must be completed before 2011 in order to allow the IOUs to incorporate the new goals into their energy efficiency portfolio planning process for 2012 through 2014.

The differences in the positions of parties lie in the valuation of priorities. Quickly updating the underlying data to rerun the TMG and establishing IOU program specific goals provides the longest amount of time for IOU program managers to get familiar with this new structure. A quick update would also provide the least amount of additional information, likely no more than the final 2008 DEER update numbers and possibly the updated 2008 Market Price Referent (MPR) used to establish avoided costs. The key data not included in a quick update schedule would be any evaluation, measurement and verification (EM&V) results from 2006-2008, subsequent DEER updates, or any information from the 2010 evaluation of the RRIM. Completion of a TMG 2012-2020 energy

saving goals update and establishment of 2012-2020 IOU program-specific energy savings goals closer to 2011 would produce a more robust and representative set of goals, but would leave the least amount of time for utilities to plan their 2012-2014 energy efficiency portfolios.

In the June 11, 2008 comments, the majority of parties favored a TMG update and establishment of IOU program-specific goals that would benefit from the input of the 2006 -2008 Impact Evaluation studies, scheduled to be completed in March, 2010.[44] DRA believes the update should wait until the Commission's evaluation of the utility risk/reward incentive mechanism is complete[45] and the 2011 minimum performance standard (MPS) is established[46] both in February, 2011. In response, NRDC suggests that DRA's recommendation to move the update after February, 2011 would not provide adequate time for IOU program planning to occur.[47]

We agree with DRA that the schedule for updating the 2012-2020 goals should incorporate information from the 2006-2008 Impact Evaluation studies and resulting DEER updates. However, waiting until early 2011 to begin the goals update and establish utility-specific goals would necessarily delay planning and implementation of 2012-2014 energy efficiency portfolios. Since the Impact Evaluation studies and DEER updates are scheduled for March 2010, we expect the 2012-2020 goals update and new utility-specific goal process to

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[44] Parties commenting in favor of this portion of the schedule included PG&E, SDG&E, SCG, and DRA.

[45] DRA Reply Comments, p. 7.

[46] DRA June 11, 2008 Comments, p. 6.

[47] NRDC reply Comments, p. 4.

begin soon after that. We also agree with NRDC and the IOUs that the establishment of final goals for 2012-2020 must be completed with adequate time for 2012-2014 portfolio planning to occur. We find that the update must be completed by October, 2010 for adequate portfolio planning lead time. We direct Energy Division to manage the scheduling details of this update including the review of market effects protocols, and the vintage of data used. In addition, we direct that the update process must include at a minimum a rerun of the ASSET model[48] with 2006-2008 ex-post DEER numbers, and the 2009 adopted market price referent.

7. Comments on Proposed Decision

The proposed decision of the ALJ in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed on July 21, 2008 by DRA, CCSF, CE Council, NRDC, SCE and PG&E, and reply comments were filed on July 28, 2008 by DRA, SCE, PG&E, NRDC and SDG&E/SCG. We have corrected errors in Figure 1, added an Appendix showing Individual Service Territory Goals for 2012-2020 for each utility, and made necessary clarifications based on comments.

8. Assignment of Proceeding and Other Procedural Matters

Dian M. Grueneich is the assigned Commissioner in these proceedings and David M. Gamson is the assigned ALJ for this portion of this proceeding.

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[48] The 2008 IOU Potential Study output data was developed with the ASSET model by Itron.

Findings of Fact

1. Energy savings goals established in D.04-09-060 through 2013 were to be updated in 2007. However, D.07-10-032 deferred consideration of new goals for 2009 and beyond.

2. The Itron Goals Update Study and Appendices is based upon the 2008 IOU Energy Efficiency Potential Study, and while imperfect, includes useful and valuable information which can be used to appropriately update energy savings goals for 2012 through 2020 on an interim basis.

3. Total market gross goals encompass both utility savings and savings expected through building codes, state and federal appliance standards, and market transformation programs such as the BBEES described in D.07-10-032.

4. The California Air Resources Board needs the Commission to transmit total market gross energy savings goals for use in AB 32 planning.

5. D.04-09-060 deferred consideration of whether adopted energy savings goals beyond 2008 represent gross savings or savings net of free riders.

6. Energy savings goals calculated for 2009 through 2011 do not reflect changes in underlying factors since the establishment of these goals in 2004.

7. Upon review of the 2008 IOU Potential Study, the gross potential savings for 2009-2011 in that study more closely align with the currently adopted 2009-2011 goals than do net potential savings.

8. There is an interaction between the shift to use of gross energy savings goals for 2009 through 2011 and the risk/reward incentive mechanism adopted in D.07-09-043, as well as potentially other aspects of the energy efficiency regulatory structure.

9. It is possible that the shift to use of gross energy savings goals for 2009 through 2011 may result in a mismatch of risks and rewards for utilities if

changes are not made to the risk/reward incentive mechanism and other aspects of the energy efficiency regulatory structure.

10. Waiting until early 2011 to begin the 2012-2020 goals update and establish energy savings goals for utility portfolios would necessarily delay planning and implementation of 2012-2014 energy efficiency portfolios. Establishment of final goals for 2012-2020 must be completed with adequate time for portfolio planning to occur.

11. Energy efficiency 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.

12. 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.

13. Incorporation of both a total market gross goal and a utility program-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 reduction baselines, and economically efficient procurement plans.

Conclusions of Law

1. The Itron Study and Appendices provide a reasonable set of figures to update total market gross energy savings goals for 2012 through 2020 on an interim basis.

2. Total market gross energy savings goals on a utility service territory basis, as shown in Table 2, should be adopted on an interim basis and transmitted to

the California Air Resources Board as the Commission's interim goals for 2012 through 2020.

3. The interim total market gross energy savings goals established herein should be used in future long-term procurement planning proceedings, until superseded by permanent goals.

4. Energy savings goals for 2009 through 2011 should be gross goals, not net of free riders, to better reflect the 2008 IOU Potential Study and changes in underlying factors since the establishment of these goals in 2004, as discussed herein.

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 revisions of the risk/reward incentive mechanism and/or other aspects of the energy efficiency regulatory structure in order to maintain reasonable rates.

6. The 2012-2020 update of Total Market Gross goals and establishment of utility-specific portfolio goals must be completed by October, 2010 to allow for adequate portfolio planning.

7. One hundred percent of the interim Total Market Gross energy savings goals for 2012 through 2020 should be used in future Long-Term Procurement Planning proceedings, until superseded by permanent goals.

O R D E R

IT IS ORDERED that:

1. The total market gross energy savings goals for 2012 through 2020 in Table 2 of Section 4.1 of this decision are adopted on an interim basis. These interim goals are adopted for use by the California Air Resources Board in its

Assembly Bill 32 planning process and in the Commission's long-term procurement planning process.

2. The Executive Director is directed to transmit the adopted interim goals for 2012 through 2020 to the California Air Resources Board.

3. Energy utilities shall use one hundred percent of the interim Total Market Gross energy savings goals for 2012 through 2020 in future Long-Term Procurement Planning proceedings, until superseded by permanent goals.

4. Energy savings goals for 2009 through 2011 shall be gross goals, not net of free riders.

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 by 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, 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 in a Commission proceeding.

7. Energy Division shall manage the scheduling details of the 2012-2020 Total Market Gross update and establishment of utility portfolio goals, including the review of market effects protocols, and the vintage of data used. In addition, the update process must include at a minimum a rerun of the Itron ASSET model with 2006-2008 ex-post DEER numbers, and the 2009 adopted market price referent.

This order is effective today.

Dated July 31, 2008, at San Francisco, California.

MICHAEL R. PEEVEY
President
DIAN M. GRUENEICH
JOHN A. BOHN
RACHELLE B. CHONG
TIMOTHY ALAN SIMON
Commissioners

APPENDIX:
IOU Individual Service Territory Goals for 2012-2020

In a hybrid goal structure, goals are established for all energy efficiency actions taken across the market within a utility service territory, referred to as Total Market Gross (TMG), and for the savings associated specifically with each utility energy efficiency portfolio (utility program-specific). Each utility service territory will have an annual and cumulative TMG goal for MW, GWH, and million therms. These goals presented below include the savings from future utility programs, new state and federal building codes, appliance standards, market transformational efforts, and currently mandated efficiency regulations initiated by the Legislature.

Only the TMG goals presented in Table A-1 are adopted by the Commission in this Order. Utility program-specific goals will be adopted in a future Commission Order, as set forth herein. For a further breakdown of the savings associated with each delivery mechanism described above, see the Itron Goals Update Report, Mid-Case scenario rows for the years 2012-2020 in the following tables: C1-18, C2-18, and C3-18 for GWH savings; E2-18, E3-18, E4-18 for MW savings; and G1-18, G2-18, G3-18 for gas savings.

The following tables are a presentation of the breakdown of savings expected in each service territory which make up the TMG goals. Each IOU is represented with its individual GWH, MW, and million therms goals and the portions expected by each delivery mechanism.

Table A-2: Total Market Gross Goals: IOU Total (annual)

GWh	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total Market Gross Energy Savings Goals (cumulative)	2,164	4,075	5,816	7,484	9,205	10,950	12,727	14,510	16,298
Total Market Gross Energy Savings Goals (annual)	2,164	1,911	1,741	1,669	1,720	1,745	1,778	1,783	1,788
IOU "Expansive Net" Goal (cumulative)	1,396	2,544	3,502	4,326	5,151	5,988	6,830	7,670	8,508
IOU "Expansive Net" Goal (annual)	1,396	1,148	959	824	825	838	842	840	838
IOU % TMG Responsibility (cumulative)	65%	62%	60%	58%	56%	55%	54%	53%	52%
IOU % TMG Responsibility (annual)	65%	60%	55%	49%	48%	48%	47%	47%	47%
MW	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Total Market Gross Energy Savings Goals (cumulative)	513	991	1,445	1,918	2,428	2,942	3,474	4,008	4,542
Total Market Gross Energy Savings Goals (annual)	513	477	455	472	510	514	533	533	534
IOU "Expansive Net" Goal (cumulative)	277	521	738	938	1,137	1,338	1,541	1,742	1,943
IOU "Expansive Net" Goal (annual)	277	243	217	200	200	201	202	202	201
IOU % TMG Responsibility (cumulative)	54%	53%	51%	49%	47%	45%	44%	43%	43%
IOU % TMG Responsibility (annual)	54%	51%	48%	42%	39%	39%	38%	38%	38%
Million Therms	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Total Market Gross Energy Savings Goals (cumulative)	42	114	185	258	330	400	473	545	619
Total Market Gross Energy Savings Goals (annual)	42	72	71	73	73	70	72	73	73
IOU "Expansive Net" Goal (cumulative)	24	48	71	94	116	138	160	181	203
IOU "Expansive Net" Goal (annual)	24	24	23	23	22	21	22	22	22
IOU % TMG Responsibility (cumulative)	58%	42%	39%	37%	35%	34%	34%	33%	33%
IOU % TMG Responsibility (annual)	58%	34%	33%	31%	30%	31%	30%	30%	30%

Table A-3: PG&E (cumulative)

GWH	2012	2013	2014	2015	2016	2017	2018	2019	2020
Huffman Bill	216	432	649	865	1,081	1,297	1,513	1,730	1,946
T24+Federal Standards	97	199	317	458	632	812	999	1,191	1,390
BBEES	83	157	225	300	364	426	498	565	629
IOU Programs	582	1,057	1,448	1,780	2,113	2,451	2,791	3,131	3,469
Total Market Gross	978	1,845	2,638	3,404	4,190	4,987	5,801	6,617	7,434
MW									
Huffman Bill	28	57	85	113	142	170	199	227	255
T24+Federal Standards	47	96	151	217	305	396	489	586	686
BBEES	58	112	161	220	274	325	384	441	494
IOU Programs	120	225	320	407	494	582	671	759	847
Total Market Gross	253	490	717	958	1,215	1,473	1,743	2,013	2,282
Million Therms									
Huffman Bill	3	7	10	15	20	26	32	39	46
T24+Federal Standards	0	7	15	22	30	37	45	52	60
BBEES	5	14	23	32	41	48	56	64	72
IOU Programs	12	23	35	46	57	67	78	88	99
Total Market Gross	20	52	83	115	148	178	211	243	276

Table A-4: SCE (cumulative)

GWH	2012	2013	2014	2015	2016	2017	2018	2019	2020
Huffman Bill	151	302	453	604	755	906	1,057	1,207	1,358
T24+Federal Standards	83	170	270	390	546	708	874	1,046	1,223
BBEES	66	127	183	245	299	353	413	471	528
IOU Programs	673	1,236	1,713	2,129	2,546	2,969	3,394	3,818	4,241
Total Market Gross	973	1,834	2,618	3,368	4,146	4,935	5,737	6,543	7,350
MW									
Huffman Bill	20	40	61	81	101	121	142	162	182
T24+Federal Standards	29	60	94	136	199	265	332	402	473
BBEES	37	71	104	143	178	214	253	292	329
IOU Programs	129	243	345	438	531	625	720	814	908
Total Market Gross	215	415	604	797	1,010	1,225	1,447	1,670	1,892

Table A-5: SoCal Gas

Million Therms	2012	2013	2014	2015	2016	2017	2018	2019	2020
Federal Standards	3	5	8	12	16	20	25	30	35
T24	0	11	23	34	46	57	69	80	92
BBEES	6	15	25	35	45	53	61	70	78
IOU Programs	10	20	30	40	49	58	67	76	86
Total Market Gross	18	52	86	121	155	188	222	256	291

Table A-6: SDG&E

GWH	2012	2013	2014	2015	2016	2017	2018	2019	2020
Huffman Bill	39	79	118	157	196	236	275	314	354
T24+Federal Standards	19	39	63	91	124	158	193	229	267
BBEES	14	25	36	48	57	66	76	86	95
IOU Programs	140	252	342	417	492	568	645	721	798
Total Market Gross	212	395	559	713	869	1,027	1,189	1,351	1,514
MW									
Huffman Bill	6	11	17	23	28	34	40	45	51
T24+Federal Standards	6	11	18	26	37	47	59	70	82
BBEES	6	11	16	21	26	31	36	41	46
IOU Programs	28	53	74	93	112	131	150	169	188
Total Market Gross	45	86	125	163	202	243	284	326	367
Million Therms									
Federal Standards	0	1	1	2	2	3	3	4	5
T24	0	2	4	6	8	10	12	14	15
BBEES	1	2	4	6	7	9	10	11	13
IOU Programs	2	5	7	9	11	13	15	17	19
Total Market Gross	3	10	16	22	28	34	40	46	52

(END OF APPENDIX)