Addendum A: Synapse Energy Economics Comments

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Establish Policies and Rules to Ensure Reliable, Long-Term Supplies of Natural Gas to California	**;**	**Rulemaking 04-01-025**

Comments of Synapse Energy Economics on the California Natural Gas Utilities' Phase 1 Proposals

Prepared for:
Ratepayers for Affordable Clean Energy

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Introduction

The Ratepayers for Affordable Clean Energy ("RACE") requested that Synapse Energy Economics, Inc. ("Synapse") review the California Public Utilities Commission's ("Commission") Order Instituting this proceeding and the proposals expected to be submitted by Pacific Gas and Electric Company ("PG&E"), Southern California Gas Company ("SoCalGas"), San Diego Gas and Electric Company ("SDG&E"), and Southwest Gas Corporation. (hereinafter "California's natural gas utilities") RACE also requested that Synapse evaluate whether the Commission should pre-approve full cost recovery of contracts between the natural gas utilities and liquid natural gas ("LNG") suppliers and the costs of interconnecting their systems with LNG facilities.

This report presents Synapse's comments on the Phase 1 Proposals submitted by the natural gas utilities and identifies a number of actions the Commission should initiate to assure that in coming years there will be adequate supplies of natural gas in California at reasonable rates and with the lowest possible environmental impact.

Synapse Energy Economics

Synapse Energy Economics, Inc. provides research, testimony, reports and regulatory support to consumer advocates, environmental organizations, regulatory commissions, state energy offices, and others. The company was founded in May 1996 to specialize in consulting on electric industry issues.

We assess the many public policy implications of electricity industry planning, regulation and restructuring, with an emphasis on consumer and environmental protection. Our work covers various inter-related issues pertaining to restructuring, such as market power, stranded costs, performance-based ratemaking, reliability, mergers and acquisitions, divestiture plans, energy efficiency, renewable resources, consumer aggregation, power plant economics, environmental disclosure, and regulation of distribution companies. Our research frequently incorporates economic analyses and computer modeling of electricity generation facilities.

Synapse works for a wide range of clients throughout the US, including Attorneys General, Offices of Consumer Advocates, Public Utility Commission staff, a variety of environmental groups, foundations, the Environmental Protection Agency, the Department of Energy, the Department of Justice, the Federal Trade Commission, the National Association of Regulatory Utility Commissioners, and others.

Additional information regarding Synapse Energy Economics, its qualifications, staff, clients, projects and reports are available on-line at www.synapse-energy.com.

Conclusion and Recommendations

The Commission should not adopt the fundamental changes in traditional gas ratemaking policy presented in the Phase 1 Proposals submitted by the natural gas utilities that would allow for pre-approval of cost recovery for capacity acquisitions involving supplies from proposed LNG facilities and for the costs of building interconnections with such

facilities. In general, there should be no guarantees of full rate recovery of gas utility capacity acquisitions or related interconnection investments in the absence of:

- a showing that the utility explored and considered all reasonable supply and demand side alternatives, including energy efficiency and the use of renewable energy sources;
- a showing that the utility used a methodology that recognizes both the economic and environmental benefits and costs of such alternatives; and
- a showing that the proposed new resources are absolutely essential for reliable service and are clearly and materially superior on a societal least cost basis.

These required evaluations should take into account the economic benefits that reduced consumption provides by reducing the market power of gas and electricity suppliers, tempering volatility of gas and electric market prices, and reducing clearing prices in gas and electric markets, especially at times of highest prices.

Therefore, in place of approving regulatory changes proposed by the natural gas utilities, the Commission should expeditiously initiate a gas integrated resource planning process that would include participation by a broad range of stakeholders. In addition, the Commission should work with the California Energy Commission ("CEC") (1) to ensure that comprehensive California-specific analyses of cost-effective gas energy efficiency measures are completed expeditiously and (2) to dramatically increase funding of gas energy efficiency programs and related efforts regarding improving building and appliance standards. The appropriate regulatory policies for addressing the issues raised by the Commission in the Order Instituting Rulemaking ("OIR") in this proceeding cannot be determined without considering the potential for such cost-effective gas energy efficiency measures and without resolving the related questions on energy efficiency being addressed in Rulemaking 01-08-028.

The Commission also should work with the CEC to ensure that California's aging power plants are either repowered or replaced by more efficient generating facilities.

Finally, the Commission should ensure that there are strong affiliate transaction rules in place to govern negotiations and interactions between the California natural gas utilities and any affiliates supplying LNG.

Summary of Comments

The above conclusion and recommendations are based on the following comments:

Comment No. 1 - California's natural gas utilities have requested substantial and significant changes in traditional ratemaking and regulatory oversight of capacity acquisition and investment decisions.

Comment No. 2 - The natural gas utilities have provided no evidence that the fundamental changes in regulatory policies and oversight that they have proposed are needed or will provide benefits for ratepayers.

Comment No. 3 - The gas utilities' proposals would allow for only minor stakeholder input or review of their gas capacity acquisition decisions.

Comment No. 4 - The Commission should not be rushed into approving by this summer the fundamental changes in natural gas regulation that have been proposed by the natural gas utilities.

Comment No. 5 - Portfolio Management is the appropriate approach for securing adequate supplies of natural gas at reasonable rates.

Comment No. 6 - Commission oversight is critical to achieving the goals of portfolio management.

Comment No. 7 - Conservation and renewable energy should be the cornerstone of California's plan for meeting future natural gas needs.

Comment No. 8 - The future demand for natural gas can be significantly reduced through the Implementation of more extensive electric energy efficiency programs and the Acceleration of the state's Renewable Portfolio Standard from 2017 to 2010.

Comment No. 9 – Future natural gas demand also can be reduced significantly by the repowering or retirement of California's aging power plants.

Comment No. 10 - There is a significant potential for reducing both core and non-core natural gas demand.

Comment No. 11 - PG&E's proposal that ratepayers continue to pay for existing facilities that are used less due to the addition of new supply sources or system capacity is contrary to established regulatory policy.

Methodology

Synapse has reviewed in detail the Commission's OIR and the proposals submitted by the natural gas utilities. Synapse also has reviewed the projections of future electricity and natural gas supplies and demands prepared by the natural gas utilities and the CEC. In addition, Synapse has reviewed the assessments, by the CEC and others, of the potential for electricity and gas demand reductions through increased funding of efficiency programs and acceleration of the state's Renewable Portfolio Standard.

This Report also relies on the results of earlier Synapse work including, most particularly, analyses of the benefits of repowering older, inefficient power plants[1]; reviews of electricity supplies and demands in the Desert Southwest and WECC[2]; modeling studies of the interconnected WECC system as part of the development of a plan for the implementation of energy efficiency and renewable resources in seven Interior West

[1] For example, see the testimony of David Schlissel in Cases 99-F-1627 and 00-F-1356 before the New York State Board on Electric Generation Siting and the Environment.

[2] For example, see the testimony of David Schlissel in Arizona Public Service Commission Dockets Nos. E-01345A-01-0822 and E-01345A-03-0437.

states[3]; and a study on the need for, the benefits of, and the development of portfolio management strategies for procuring electricity resources.[4]

Comment No. 1: California's natural gas utilities have requested substantial and significant changes in traditional ratemaking and regulatory oversight of capacity acquisition and investment decisions.

In their Phase 1 proposals the California Natural Gas Utilities have requested substantial changes in the Commission's established ratemaking practices and policies related to cost recovery and the oversight of the natural gas capacity acquisition and investment decisions.

PG&E

PG&E has proposed that all pipeline, storage and LNG contracts falling within a Commission-approved Capacity Commitment Range would be pre-approved for cost recovery.[5] PG&E proposes to hold firm annual interstate and intrastate transportation capacity between 1000 MDth/day and 1200 MDth/day.[6] During the summer months, PG&E would hold between 750 and 850 MDth/day of intrastate capacity. PG&E also would hold between 40 and 46 MMDth of storage capacity, which is higher than its current storage inventory holding of 33.5 MMDth.

PG&E emphasizes that all commitments within this pre-approved Capacity Range would be deemed reasonable and fully recoverable in rates for any of the following:

- Any existing interstate, intrastate, and storage capacity;
- Individual interstate, intrastate, storage capacity, and LNG supply contracts with terms of three years or less;
- Individual interstate, intrastate, storage capacity, and LNG supply contracts with terms of more than three years and quantities less than or equal to 100 MDth/day or 3 MMDth of storage; and
- Interstate, intrastate, storage capacity, and LNG supply maintained by the exercise of ROFR options (in response to other shippers' bids) or evergreen terms.[7]

For capacity commitments that fall outside of these terms, and for all capacity in excess of PG&E's current holdings that would be acquired initially to meet the standards

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3 *A Balanced Energy Plan for the Interior West*, forthcoming, prepared by Synapse, Western Resources Advocates and Tellus Institute for the Hewlett Foundation.

4 *Portfolio Management: How to Procure Electricity Resources to Provide Reliable, Low-Cost, and Efficient Electricity Services to All Retail Customers*," prepared for the Regulatory Assistance Project and the Energy Foundation, October 2003.

5 *Phase I Proposals and Data Response of Respondent Pacific Gas and Electric Company*, dated February 24, 2004, at page 10.

6 Ibid, at page 8.

7 Ibid,, at page 12.

established by the Commission, PG&E proposes to file an Expedited Capacity Advice Letter after consultation with the ORA, TURN, and the Energy Division.[8] PG&E's proposed Expedited Capacity Advice Letter procedure would allow ten days for protests and comments and three days for replies, and would seek Commission approval within 21 days of the filed date. However, PG&E does not specify the precise nature of this "consultation with the ORA, TURN and the Energy Division" and whether it would require approval from some or all of these organizations before it sought Commission approval.

PG&E also proposes that utilities be deemed in compliance with the pre-approved Capacity Range if the range is not exceeded for a cumulative period of six months in any 36-month period.[9] Consequently, under PG&E's proposal, it could exceed the pre-approved Capacity Range for 29 months of any 36-month period and still be deemed to be in compliance with the pre-approved Range.

In addition, PG&E proposes a policy change in that currently, PG&E requires interstate pipelines and third-party storage providers to build their own facilities to PG&E's system and pay PG&E for its costs to build the interconnect and related system changes. This policy would be changed so that PG&E would build the facilities necessary to transport the gas from the LNG facility (or another utility's or pipeline's facilities interconnected to the LNG facility) to PG&E's existing gas transmission and distribution network.[10]

PG&E further proposes that if it needs to build new intrastate facilities to connect to a new supply source, such as an LNG terminal, the certificate approval process must guarantee recovery of all of its reasonable costs. This change would modify or eliminate the requirement in Public Utilities Code Section 1005.5 that, for projects expected to exceed $50 million in cost, the Commission must specify a maximum reasonable and prudent cost for the facility, subject to revision for reasonable additional costs.[11]

Finally, PG&E proposes that ratepayers continue to pay the costs of any existing PG&E transmission or storage facilities that are being used less due to the addition of new supply or capacity.[12]

SoCalGas/SDG&E

SoCalGas and SDG&E have submitted capacity acquisition pre-approval proposals that were in many ways similar to PG&E's proposals.

SoCalGas proposes hold firm interstate capacity within a Commission-approved Transportation Capacity Commitment Range that averages between 80 percent and 110 percent of the forecasted core procurement portfolio's average temperature year daily demand during non-winter months and averages an amount between 90 percent and 120

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8 Ibid, at page 12.

9 Ibid, at page 11.

10 Ibid, at page 15.

11 Ibid, at page 16.

12 Ibid, at page ES-2.

percent of this demand during the winter months.[13] After consultation with the ORA, TURN, and the Energy Division, and with ORA's approval, interstate capacity commitments within this Commitment Range would be deemed reasonable and fully recoverable in rates in the event that any one of the following criteria is satisfied:

- Interstate capacity contracts with terms of more than three years and quantities les than or equal to 100 MMcf/d; or
- Interstate capacity contracts acquired by the exercise of ROFR options in response to posted bids by other shippers.

Multiple contracts with substantially similar material terms (i.e., price, contract term, and receipt and delivery points) on one pipeline would be aggregated to determine compliance with the limits of the Authorized Capacity Commitment process.[14]

Like PG&E, SoCalGas proposes an expedited Capacity Advice Letter approval process for commitments outside the limits of the Authorized Capacity Commitment process.[15]

SDG&E's proposal is almost exactly the same as that of SoCalGas. The only difference is that SDG&E proposes that interstate capacity commitments be deemed reasonable and fully recoverable in rates if any one of the following criteria is satisfied:

- Interstate contracts with terms of three years or less;
- Interstate contracts with terms of more than three years and quantities less than or equal to 20 MMcf/d; or
- Interstate capacity contracts acquired by the exercise of ROFR options in response to posted bids by other shippers.[16]

As in SoCalGas' proposal, multiple contracts with substantially similar material terms (i.e., price, contract term, and receipt and delivery points) on one pipeline would be aggregated to determine compliance with the limits of the Authorized Capacity Commitment process.

In addition, SoCalGas and SDG&E also proposed that the Commission adopt a policy that to the extent that the benefits to all utility customers of access to new gas supplies are greater than the cost to utility customers, the costs of expanding utility backbone facilities necessary to accommodate new gas supplies should be rolled-in to the utilities' system wide transportation rate. Below a certain cost threshold, it would be presumed that benefits exceed costs.[17] SoCalGas and SDG&E then proposed to roll-in new or expanded

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13 *Proposals of San Diego Gas & Electric Company and Southern California Gas Company*, dated February 24, 2004, at page 30.

14 Ibid, at page 31.

15 Ibid, at page 31.

16 Ibid, at page 43.

17 Ibid, at page 70.

supply access infrastructure costs up to $100,000 per MMcf/d of added supply capacity, with a maximum cost for all projects of $200 million.[18]

SoCalGas and SDG&E also made a number of specific proposals concerning related to Otay Mesa access and integration of their transmission systems.[19]

Comment No. 2: The natural gas utilities have provided no evidence that the fundamental changes in regulatory policies and oversight that they have proposed are needed or will provide benefits for ratepayers.

Apart from some general, unsupported statements about the need to move quickly to secure access to new gas and a few comments about the short amounts of time that capacity release transactions are posted on a pipeline's Electronic Bulletin Board, the gas utilities' Phase 1 Proposals are devoid of any concrete evidence about why the significant changes they seek in Commission oversight of procurement decisions are needed or would be expected to produce benefits for ratepayers. There is no showing in any of the Proposals that the utilities' past gas capacity acquisition efforts were hampered in any way by the existing regulatory scheme. There also is no showing that future capacity acquisitions would be more difficult or expensive due to the absence of pre-approval for cost recovery or by a requirement to provide subsequent proof to the Commission that such acquisitions were prudent under the circumstances.

SoCalGas and SDG&E did present the results of an analysis by the Cambridge Energy Resource Associates ("CERA") that they claim shows the potential magnitude of commodity price reductions that are expected to result from access to LNG supplies.[20] At Synapse's request, RACE requested a copy of the CERA analysis, and the related workpapers, in order to evaluate the study's methodology, assumptions and conclusions. Unfortunately, SoCalGas and SDG&E refused to provide copies of either the requested analysis or the related workpapers without a non-disclosure agreement.[21] Because such an agreement could not be negotiated in the short time frame allowed for the preparation of these comments, Synapse has not had any opportunity to assess the reasonableness of the claims made by the companies concerning the CERA report.[22]

It is easy to see why the gas utilities favor their proposals: apart from some unspecified "consultation" by TURN, there would not be any meaningful opportunity for stakeholders other than the ORA and Commission staff to question the reasonableness of their capacity acquisition decisions. At the same time, the gas utilities would not face

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18 Ibid, at page 70.

19 Ibid, at pages 82 and following.

20 *Proposals of San Diego Gas & Electric Company and Southern California Gas Company*, dated February 24, 2004, at page 9.

21 Responses of SoCalGas and SDG&E to Questions Nos. 4 and 11 of RACE's First Data Request.

22 SoCalGas and SDG&E also objected to another seven of the other fifteen questions contained in RACE's First Data Request to the companies. PG&E has to date failed to provide answers to any of the questions submitted by RACE to that company.

Commission review of the prudence of capacity acquisition related costs or the prospect of having some of those costs disallowed.

Some limited flexibility may be necessary to allow the gas utilities to react quickly to opportunities in the short term gas markets. However, the number and scope of such opportunities will be limited by the utilities' medium and long-term contracts.

Moreover, there will be many instances in which the utilities would not have to move quickly to secure the new supplies or pipeline capacity, such as in the decisions to renew existing contracts or to exercise RFOR or evergreen options. There is no need for the utilities' proposed pre-approval in such instances.

The Commission should not adopt the pre-approved process presented in the utilities' Phase 1 Proposals unless the utilities can offer specific evidence that without the requested pre-approval of capacity acquisitions they would be unable to secure adequate gas supplies from existing and new sources. Even then, the Commission should limit the pre-approval process to only those classes of capacity acquisitions or instances where there is a demonstrated need for the gas utilities to take actions quickly and ratepayers can be expected to benefit from the change.

The gas utilities need not fear subsequent Commission review of the prudence of their capacity acquisition decisions if they are able to fully document the bases of those decisions and can show that they were reasonable under the circumstances that existed at the time they were entered into and that the company fully considered all reasonable demand and supply options.

Comment No. 3: The gas utilities' proposals would allow for only minor stakeholder input or review of their gas capacity acquisition decisions.

The SoCalGas and PG&E Phase 1 Proposals commit the companies to "consult" with TURN as part of their authorized capacity commitment processes.[23] However, the exact nature of this consultation is unspecified. Moreover, there is no commitment by the utilities to follow or even fully consider any of the concerns raised by or the recommendations made by TURN. No other representatives of stakeholders, other than the Commission's Energy Division and ORA, would be consulted before the Companies entered into the categories of commitments specified in each company's proposal. The SDG&E Phase 1 Proposal does not even include a commitment to consult with TURN or any other stakeholder other than the ORA and the Energy Division.

The utilities' also propose an Expedited Capacity Advice Letter process in which the acquisition of capacity outside of their pre-approved ranges would be reviewed by the Commission. Although the specifics differ between the utility proposals, these Expedited Capacity Advice Letters would be used in situations where the utilities were seeking to

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[23] *Phase I Proposals and Data Response of Respondent Pacific Gas and Electric Company*, dated February 24, 2004, at page 11 and *Proposals of San Diego Gas & Electric Company and Southern California Gas Company*, dated February 24, 2004, at page 26.

obtain new capacity for terms of longer than three years or beyond pre-approved quantities.

As proposed, the Expedited Capacity Advice Letter process would allow interested parties ten days to submit protests and comments and three days for replies, and would seek Commission approval within 21 days of the filed date. Consequently, there would be no opportunity before filing their protests and comments for interested stakeholders to do any discovery to elicit information from the utility about the other supply and demand alternatives that were available and considered. Nor would there be any hearings or opportunity to cross-examine the utility's claims. In this system, in order to provide meaningful comments on proposed capacity acquisitions, interested stakeholders would need significant budgets sufficient to maintain full-time monitoring of the gas supply and demand situations and alternatives.

Comment No. 4: The Commission should not be rushed into approving by this summer the fundamental changes in natural gas regulation that have been proposed by the natural gas utilities.

The Commission's Order instituting this ratemaking expressed concern that the Phase 1 issues had to be resolved by this summer. Not surprisingly, the Phase 1 Proposals submitted by the natural gas utilities echoed the sentiment that the Commission needed to approve the requested changes in traditional ratemaking and oversight by this summer. However, the proposals submitted by the utilities were devoid of any concrete evidence showing that the Commission needed to decide these issues that quickly. Indeed, the utilities' Phase 1 proposals contained evidence which shows that the Commission need not rush to judgment in this proceeding.

First, the only SDG&E pipeline contract that has an upcoming termination notice date before the end of May 2005 is the relatively small Canadian Path contract with Trans-Canada Nova Gas Limited which has a notice date of October 31, 2004. This contract provides for 17,375 Mcf/day of capacity.[24]

Second, SoCalGas has two substantial contracts with Transwestern which have RFOR dates of November 1, 2004.[25] However, SoCalGas already has stated its intention to terminate or to negotiate reduced amounts of capacity on its contracts with Transwestern or El Paso. Consequently, it is inconceivable that SoCalGas has not already been evaluating possible alternative sources and developing plans to replace part or all of the two contracts which have November 1, 2004 RFOR dates.

Similarly, PG&E has three contracts with GTNC, TransCanada BC and TransCanada NOVA which expire in late 2005 and have notice dates of October 31 and December 31, 2004. However, PG&E has expressed satisfaction with its existing natural gas supply sources and pipeline contracts:

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[24] Table Q4 of SDG&E's Responses to CPUC Data Requests (R.04-01-025).

[25] Table Q4 of SoCalGas's Responses to CPUC Data Requests (R.04-01-025).

> One of the issues the Commission has asked the parties to address is supply diversity. PG&E is currently exceptionally well-situated to purchase natural gas from a variety of competing sources in Canada and the U.S. Southwest. PG&E's pipeline capacity contracts are structured to afford PG&E the opportunity to purchase gas from these competing sources. PG&E's comments herein are intended to preserve and expand upon this existing level of supply diversity.[26]

As with SoCalGas, it is inconceivable that PG&E has not already been evaluating possible alternative sources and deciding whether to terminate or replace some of the pipeline capacity provided by these three contracts.

Consequently, the Commission certainly does not need to make any decision in the Phase I proceeding before late October 2004, if not later. Moreover, the Commission can use the intervening seven months to examine the reasonableness of the plans that these three companies have for renewing, replacing or terminating their pipeline contracts within the context of a proceeding allowing for hearings and public participation.

Comment No. 5: Portfolio Management is the appropriate approach for securing adequate supplies of natural gas at reasonable rates.

The gas utilities say in their Phase 1 Proposals that it is important for them to obtain natural gas from a variety of supply sources and under a blend of short, medium and long-term contracts. We agree. Developing an optimal resource mix is essential for ensuring that there will be adequate supplies of natural gas to meet the demands of core and non-core customers and electric generators at reasonable rates and with minimal environmental impact.

Such an optimal mix should include demand side options and obtaining gas from diversified supply sources, under contracts of varying lengths and with some reliance on spot markets. Indeed, as California's Energy Action Plan recognizes, the implementation of cost-effective energy efficiency measures must be the first step in developing the optimal mix of resources. An optimal resource mix also can include financial and physical hedges.

However, the gas utilities have provided no evidence that they have carried out an integrated resource process to determine the appropriate mix of supply sources and contract terms. Until they provide such evidence, the Commission should withhold pre-adoption of any process that provides for any pre-approval of any resource acquisitions. Pre-approval of resources with some assurance of cost recovery should be used with great caution, and only if certain critical conditions are met. It is essential that pre-approval only be applied to resource portfolios that were developed with proper portfolio management techniques, with meaningful and substantial input from key stakeholders, and with proper oversight from regulators.

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[26] *Phase I Proposals and Data Response of Respondent Pacific Gas and Electric Company*, dated February 24, 2004, at page 5.

Moreover, there should be no guarantees of full rate recovery of gas utility capacity acquisitions or related investments in the absence of a showing that the utility explored and considered all reasonable supply and demand side alternatives, including energy efficiency and the use of renewable energy sources, a showing that the utility used a methodology that recognizes both the economic and environmental benefits and costs of such alternatives, and a showing that the proposed new resources are absolutely essential for reliable service and clearly and materially superior on a societal least cost basis. Such evaluation and comparison should take into account the economic benefit reduced consumption provides by reducing the market power of gas and electricity suppliers, tempering volatility of gas and electric market prices, and reducing clearing prices in gas and electric markets, especially at times of highest prices.

Comment No. 6: Commission oversight is critical to achieving the goals of portfolio management

The Commission must maintain an active oversight role if it is to be assured that the natural gas utilities are pursuing an optimal mix of both supply and demand resources. The Commission cannot merely adopt a pre-approval process that, in essence, delegates both the oversight role and the determination of the appropriate resource mix to be pursued to the gas utilities themselves, with some involvement by the ORA, the Energy Division, and, in some instances, TURN.

Instead, the Commission must be actively involved in the development and implementation of the resource mix to be pursued by the utility:

- To ensure that there gas utilities have adequate funding for energy efficiency activities and that those activities are prudently designed and implemented.
- To assure that there is broad stakeholder input in the process. One of the more challenging aspects of portfolio management is in the balancing of the many different criteria for selecting the optimal resource portfolio. This balancing often involves trade-offs that affect different stakeholders differently. In order to ensure proper balancing of different interests, it is essential to allow the various stakeholders to provide input into the portfolio management process.

In addition, there must be periodic regulatory review of the portfolio management process. Successful portfolio management requires regulatory guidance and oversight on an on-going basis. This requires that regulators periodically review and assess the decisions and the actions of the portfolio managers. The utilities should have no reason to fear such periodic ex post reviews if they have adequately documented their capacity acquisition and investment decisions and the utilities' actions can be shown to have provided benefits to ratepayers and society that exceed their costs. Even in pre-approval regimes, the implementation of the process must still be monitored by the Commission, if only to identify needed changes in policy.

Consequently, the Commission should implement a periodic gas integrated resource process with the goal of assisting the utilities in developing optimal mixes of supply and demand resources, instead of adopting the pre-approval processes proposed by the gas utilities. The utilities would have some flexibility in implementing the resulting resources

plans and there could, in certain circumstances, be limited pre-approval of a range of short-term capacity acquisitions. This could encourage the gas utilities to take advantage of acquiring capacity resources in those situations in which quick action is required.

This periodic gas integrated resource process could be coordinated with the Gas Reports filed by the utilities every few years and the periodic gas infrastructure reviews.

Comment No. 7: Conservation and renewable energy should be the cornerstone of California's plan for meeting future natural gas needs.

The State's Energy Action Plan was adopted last May by the CPUC, the California Energy Commission and the California Power Authority with the overall goal of ensuring that adequate, reliable, and reasonably priced electricity and natural gas supplies are achieved and provided through policies, strategies and actions that are cost-effective and environmentally sound for California's consumers and taxpayers.[27]

The Energy Action Plan envisions a loading order of resources in which the first priority is given to optimizing strategies for energy conservation and efficiency. However, the OIR and Phase 1 proposals focus exclusively on actions to increase supplies rather than incorporating those actions into an integrated plan that first reduces the state's demand for natural gas. This emphasis on supply side solutions is significant because it could cause the Commission to lose sight of the ways in which the demand for natural gas, and, hence, the supplies that are needed in future years, can be dramatically reduced.

Assessments by the California Energy Commission and other responsible organizations have identified a number of policies, strategies and actions that the Commission should require be implemented before it grants the fundamental changes in traditional regulatory oversight of natural gas capacity acquisition and investments decisions that the natural gas utilities are requesting in their Phase 1 Proposals. These policies, strategies and actions are discussed in the various assessments cited in Comment Number 8 and Comment Number 10 in this Report.

Comment No. 8: The demand for natural gas can be significantly reduced through the implementation of more extensive electric energy efficiency programs and the acceleration of the state's Renewable Portfolio Standard from 2017 to 2010.

Electric generation currently represents about 37 percent of the natural gas consumed in California each year. The Staff of the California Energy Commission has estimated that the gas demand for electricity will grow from 0.80 Tcf in 2003 to 0.93 Tcf in 2013, an annual growth of 1.5 percent per year.[28] However, analyses by the Energy Commission Staff show that this growth can be reduced or even reversed if achievable electric energy efficiency goals are adopted and met and the achievement of the 20 percent goal for the

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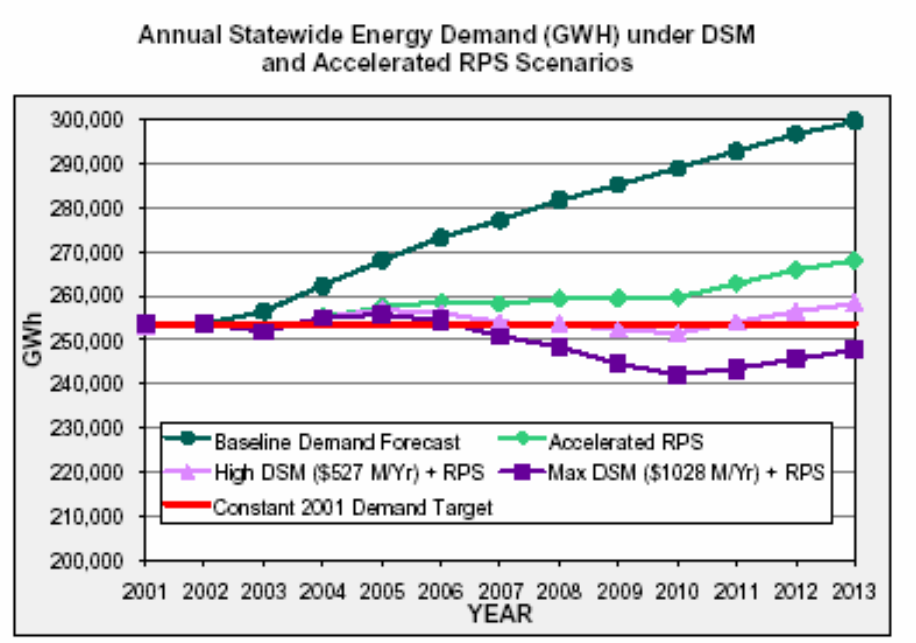
27 *Energy Action Plan Legislative Report*, dated January 5, 2004.

28 *Natural Gas Market Assessment,* California Energy Commission Staff Paper, August, 2003, at page 14.

state's renewable energy portfolio standard is accelerated to 2010 from the current goal of 2017.

Figure 1[29]



For example, the Energy Commission staff has recommended that the CPUC and the CEC set energy efficiency savings goals for the efficiency programs funded by the public goods charges and supplemental procurement programs. These goals are 7,000 GWh per year of savings from all energy efficiency programs by 2006, 13,000 GWh by 2008, and 30,000 GWh by 2013.[30]

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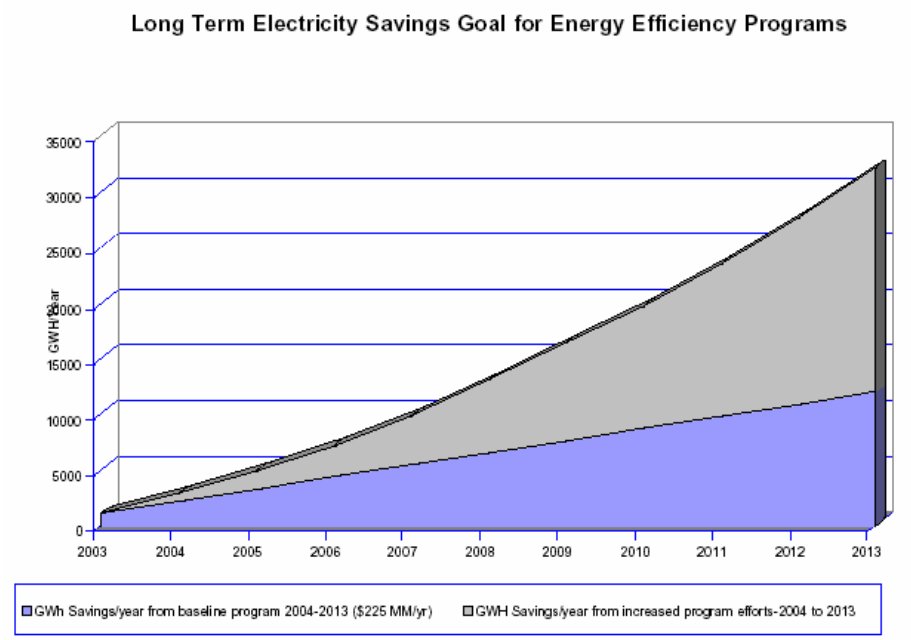
29 *Public Interest Energy Strategies Report,* California Energy Commission Report, December 2003, at page 11.

30 *Proposed Energy Savings Goals for Energy Efficiency Programs in California*, California Energy Commission Staff Report, dated October 27, 2003, at page 1.

Figure 2[31]



Meeting these goals would provide an additional 20,000 GWh of savings by 2013 (over the Energy Commission's base case forecasts) and would be equivalent to roughly 50 percent of the projected increase in electricity usage in the state over the next decade.[32]

A 2002 study on "California's Secret Energy Surplus, the Potential for Energy Efficiency," similarly concluded that over the next decade there is a significant remaining achievable and cost-effective potential for energy-efficiency savings in California, beyond the Business-as-Usual savings that are likely to occur under continuation of current public goods funding levels.[33] However, this study found that even higher levels of potential savings from energy efficiency than the CEC staff has recommended. In fact, Xenergy concluded that 40,146 GWh of electricity could be saved each year by 2011 through the implementation technically achievable and economic measures.[34] This would be more than 10,000 GWh above the goals proposed by the Energy Commission Staff.

Additional energy also will be saved over the next decade as a result of the recently adopted 2005 building standards. These standards provide a 10 percent improvement over the 2001 standard and include efficiency requirements for outdoor lighting, a first in the nation according to the January 2004 Energy Action Plan Legislative Report. These standards apply to all new construction and some commercial and residential remodels.

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31 Figure 7 in *Proposed Energy Savings Goals for Energy Efficiency Programs in California*, California Energy Commission Staff Report, dated October 27, 2003, at page 27.

32 The Energy Commission staff also found that additional savings could be achieved through improved building and appliance standards. Ibid, at footnote no. 1 on page 1.

33 *California's Secret Energy Surplus, the Potential for Energy Efficiency*, Xenergy, Inc., September 2002, at page 4-1.

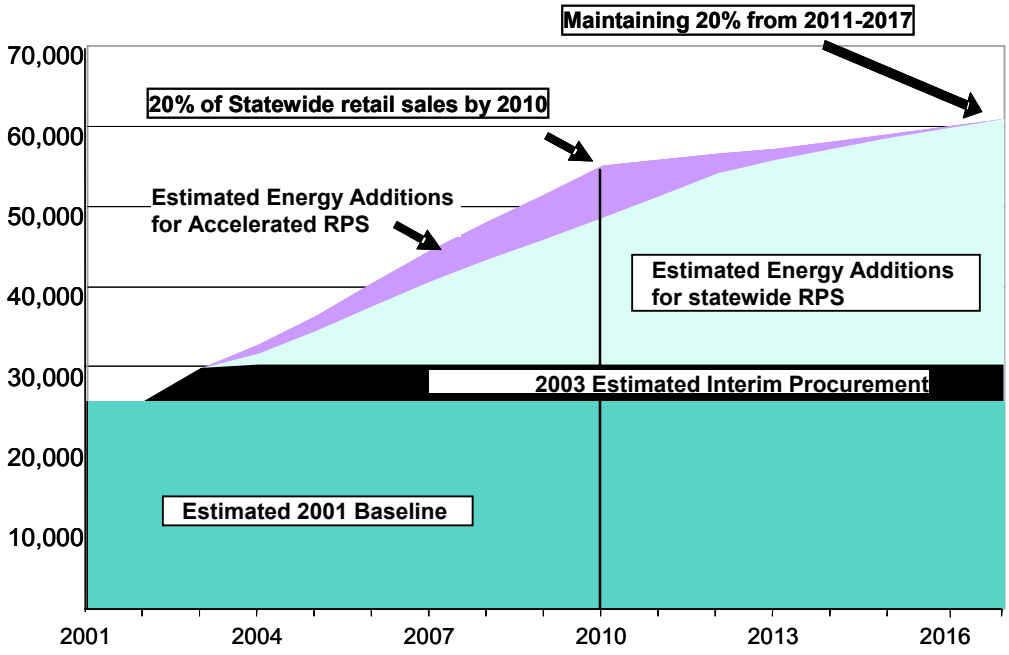
34 Ibid, at page 3-3.

They are expected to produce annual electricity savings of 1,800 MW and 4,750 GWh by 2016.[35]

Improved appliance standards also are expected to provide significant savings but these savings have not been quantified.

The Energy Commission Staff also has concluded that the remaining incremental system GWh needs in 2013, over the base demand in 2003, could be met through aggressive pursuit of the states Renewable Portfolio Standard for renewable generation plants.[36] For example, a Renewable Resources Development Report prepared by the CEC Staff found that accelerating the state's RPS to 20% by 2010 could produce 55,170 GWh of electricity from renewable energy sources by 2010.[37]

Figure 3[38]
Accelerating the Renewable Portfolio Standard to 2010



The Renewable Resources Development Report found that there are plenty of renewable energy resources in California to meet the current Renewable Portfolio Standard and the

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35 *Energy Action Plan Legislative Report*, dated January 5, 2004, at page 1.

36 *Proposed Energy Savings Goals for Energy Efficiency Programs in California*, California Energy Commission Staff Report, dated October 27, 2003,at page 32.

37 *Renewable Resources Development Report*, , a Presentation by Ann Peterson, Project Manager, at the California Energy Commission Business Meeting, November 19, 2003.

38 *Renewable Resources Development Report*, a Presentation by Ann Peterson, Project Manager, at the California Energy Commission Business Meeting, November 19, 2003.

accelerated Renewable Portfolio Standard.[39] It also found that there are significant untapped renewable resources both in California and the other WECC states.

The November 2003 CEC Renewable Resources Development Report also emphasized that accelerating California's RPS was part of the integrated strategy identified in the state's Energy Action Plan to maintain fuel diversity in electric generation by:

- Reducing demand for electricity, especially during peak hours
- Accelerating development of renewable energy
- Replacing/repowering inefficient gas-fired generation.

Achieving the energy efficiency goals recommended by the Energy Commission staff and accelerating the RPS to 2010 could reduce electric energy usage in California in 2013 by an additional 25,000 GWh over base case Energy Commission Staff forecasts. This would reflect an additional 20,000 GWh of savings from increased energy efficiency program expenditures,[40] 3,000 to 4,000 GWh of additional savings from the 2005 building standards, and 1,000 to 2,000 GWh from the acceleration of the state's Renewable Portfolio Standard to 2010. Achieving these goals also would reduce the amount of natural gas used to generate electricity by approximately 155 Bcf per year.[41]

Some of this reduced gas usage would occur at power plants outside California, but it is not possible to determine how much without running a simulation of the integrated WECC system. But if even only half of the savings were to be from the displacement of generation at plants in California, the achievement of these savings would offset a significant portion of the 130 Bcf that the Energy Commission Staff has assumed the annual natural gas demand for electric generation will grow between 2003 and 2013. In addition, reduced natural gas use at power plants in other WECC states, due to energy efficiency programs in California and in-state generation by renewable sources, also would free up additional natural gas supplies that could be available for other uses in California.

Comment No. 9: Future natural gas demand also can be reduced significantly by the repowering or retirement of California's aging power plants.

There are approximately 16,600 MW of generating capacity at older natural-gas fired steam generating plants in California.[42] These units are generally more than 30 to 40

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39 Ibid.

40 *Proposed Energy Savings Goals for Energy Efficiency Programs in California*, California Energy Commission Staff Report, dated October 27, 2003,at page 35.

41 This estimate makes the conservative assumption that only 90 percent of the electricity that would be displaced by the increased energy efficiency and renewable energy output would have been generated at natural gas-fired plants. Synapse modeling and estimates from the California Energy Commission suggest that this figure might be between 95 and 100 percent.

42 *Aging Natural Gas Power Plants in California*, California Energy Commission Staff Paper, July 2003.

years old, having been built in the 1950s, 1960s or early 1970s. All of these units have heat rates of 9,000 BTU/KWh or higher. Most have heat rates above 10,000 BTU/KWh.

These older, inefficient plants generated 60,961,190 MWh of electricity in 2001 and consumed approximately 593,420 Mcf of natural gas. As shown in Table 1 below, repowering just the older non-peaking plants in California with newer, combined cycle technology, with heat rates of approximately 7,000 BTU/KWh would save approximately 174 Bcf of natural gas each year. Retiring these aging power plants and replacing their generation with production by newer facilities at more remote sites would save slightly less natural gas due to transmission line losses.

Table 1
Potential Gas Savings from Repowering Aging Power Plants

	2001							After Repowering			
Plant Name	MW	2001 Capacity Factor (percent)	2001 Generation (MWh)	Approx. Heat Rate (BTU/KWh)	BTUs gas/year	Gas Heat Content (BTU/cf)	Unit 2001 Gas Use MMcf/year	Repowered Heat Rate (BTU/KWh)	Repowered BTUs gas/year	Repowered Unit Gas Use MMcf/year	Change from 2001 Gas Use (MMcf/year)
Moss Landing											
Units 6,7	1485	65	8,455,590	9000	7.61003E+13	1019	74,681	7000	5.9189E+13	58,086	-16,596
Alamitos											
Units 1,2	348	13	396,302	13000	5.15193E+12	1019	5,056	7000	2.7741E+12	2,722	-2,333
Units 3,4	642	46	2,587,003	11000	2.8457E+13	1019	27,926	7000	1.8109E+13	17,771	-10,155
Units 5,6	963	58	4,892,810	10000	4.89281E+13	1019	48,016	7000	3.425E+13	33,611	-14,405
Haynes											
Units 1,2	444	33	1,283,515	10000	1.28352E+13	1019	12,596	7000	8.9846E+12	8,817	-3,779
Units 3,4	444	17	661,205	10000	6.61205E+12	1019	6,489	7000	4.6284E+12	4,542	-1,947
Units 5,6	682	25	1,493,580	10000	1.49358E+13	1019	14,657	7000	1.0455E+13	10,260	-4,397
Ormand Beach											
Units 1,2	1492	42	5,489,366	10000	5.48937E+13	1019	53,870	7000	3.8426E+13	37,709	-16,161
Pittsburg power											
Units 5,6	632	60	3,321,792	10000	3.32179E+13	1019	32,599	7000	2.3253E+13	22,819	-9,780
Units 7	700	56	3,433,920	10000	3.43392E+13	1019	33,699	7000	2.4037E+13	23,589	-10,110
Redondo Beach											
Units 5,6	350	17	521,220	13000	6.77586E+12	1019	6,650	7000	3.6485E+12	3,581	-3,069
Units 7,8	967	44	3,727,205	10000	3.7272E+13	1019	36,577	7000	2.609E+13	25,604	-10,973
Morro Bay											
Units 1,2	342	30	898,776	11000	9.88654E+12	1019	9,702	7000	6.2914E+12	6,174	-3,528
Units 3,4	679	55	3,271,422	10000	3.27142E+13	1019	32,104	7000	2.29E+13	22,473	-9,631
Encina											
Units 1,2,3	320	40	1,121,280	11000	1.23341E+13	1019	12,104	7000	7.849E+12	7,703	-4,401
Units 4,5	635	44	2,447,544	11000	2.6923E+13	1019	26,421	7000	1.7133E+13	16,813	-9,608
Huntington Beach											
Units 1,2	430	37	1,393,716	9000	1.25434E+13	1019	12,310	7000	9.756E+12	9,574	-2,735
Scattergood											
Units 1,2	358	28	878,102	10000	8.78102E+12	1019	8,617	7000	6.1467E+12	6,032	-2,585
Units 3	445	25	974,550	10000	9.7455E+12	1019	9,564	7000	6.8219E+12	6,695	-2,869
Etiwanda											
Units 3,4	640	26	1,457,664	9000	1.3119E+13	1019	12,874	7000	1.0204E+13	10,013	-2,861
El Segundo											
Units 3,4	708	37	2,294,770	10000	2.29477E+13	1019	22,520	7000	1.6063E+13	15,764	-6,756
Contra Costa											
Unit 6	336	63	1,854,317	10000	1.85432E+13	1019	18,197	7000	1.298E+13	12,738	-5,459
Unit 7	336	52	1,530,547	10000	1.53055E+13	1019	15,020	7000	1.0714E+13	10,514	-4,506
South Bay											
Units 1,2	297	43	1,118,740	10000	1.11874E+13	1019	10,979	7000	7.8312E+12	7,685	-3,294
Unit 3	176	33	508,781	10000	5.08781E+12	1019	4,993	7000	3.5615E+12	3,495	-1,498
Unit 4	170	12	178,704	12000	2.14445E+12	1019	2,104	7000	1.2509E+12	1,228	-877
Coolwater											
Unit 1	65	43	244,842	10000	2.44842E+12	1019	2,403	7000	1.7139E+12	1,682	-721
Unit 2	82	57	409,442	10000	4.09442E+12	1019	4,018	7000	2.8661E+12	2,813	-1,205
Units 3,4	482	53	2,237,830	9000	2.01405E+13	1019	19,765	7000	1.5665E+13	15,373	-4,392
Mandalay											
Units 1,2	433	45	1,706,886	9000	1.5362E+13	1019	15,076	7000	1.1948E+13	11,725	-3,350
Valley											
Units 1,2	190	0	0	12000	0	1019	0	7000	0	0	0
Units 3,4	323	6	169,769	11000	1.86746E+12	1019	1,833	7000	1.1884E+12	1,166	-666
Total	16,596		60,961,190				593,420			418,772	-174,648

These aging power plants probably can be expected to generate less electricity in the future than they did in 2001 as a result of expanded energy efficiency programs and

increased output from renewable energy sources and new more-efficient gas-fired units. In addition, some generation from more efficient gas-fired units located outside California also can probably be expected to displace some of the electricity that would otherwise be generated by these aging plants. However, some of the aging units in California are located within transmission constrained areas and, depending on transmission system improvements, can be expected to continue to generate significant amounts of electricity. Consequently, repowering/replacement of aging facilities remains a strategy that has the potential to save significant amounts of natural gas.

There also are other significant benefits from the repowering of aging power plants such as reduced fuel and operating costs and lower NO_x emissions. Water usage also would be dramatically reduced if the repowering is accompanying by conversion from a once-through to a closed-cycle cooling system.

Comment No. 10: There is a significant potential for reducing both core and non-core natural gas demand.

The California Energy Commission's Demand Analysis Office forecasts that the core natural gas demand will increase from 0.66 Tcf to 0.73 Tcf between 2003 and 2013, yielding an annual growth rate of 0.9 percent.[43] Non-core natural gas demand is expected to increase from 0.74 Tcf to 0.77 Tcf during the same period, which is an annual growth rate of only 0.4 percent.[44]

Viewed in terms of end-use consumption by different classes of customers, these forecasts reflect that the residential and commercial sectors' demand for natural gas is expected to grow at approximately one per cent per year.[45] The industrial demand growth is expected to be essentially flat, growing at 0.1 percent per year.

These forecasts assume that the 2003 levels of funding for utility energy efficiency programs will continue through 2011.[46] However, there appears to be widespread agreement among groups as diverse as Sempra Energy, the National Petroleum Council, the American Council for an Energy-Efficient Economy ("ACEEE"), and the Center for Energy Efficiency and Renewable Technologies that increased spending on efficiency programs can lead to significant reductions in natural gas demands.

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43 *Natural Gas Market Assessment,* California Energy Commission Staff Paper, August, 2003, at page 14.

44 Ibid.

45 *Natural Gas Market Assessment,* California Energy Commission Staff Paper, August, 2003, at page ii.

46 *Natural Gas Market Assessment,* California Energy Commission Staff Paper, August, 2003, at page 14.

For example, the National Petroleum Council has concluded that "greater energy efficiency and conservation are vital near-term and long-term mechanisms for moderating price levels and reducing volatility."[47]

A recent study by ACEEE has estimated that energy efficiency and conservation programs could reduce the residential and commercial use of natural gas in California by 4.8 percent by 2008.[48] Industrial use of natural gas could be reduced by 5.2 percent by 2008.[49] Achieving these reductions would save approximately 70 Bcf per year in total core and non-core demand in 2008 and 73 Bcf in 2013.

Unfortunately, there do not appear to be any comprehensive California-specific studies of the potential for reducing natural gas demand through efficiency programs. Nevertheless, California's gas utilities have themselves emphasized the potential savings from energy efficiency programs. For example, SoCalGas and SDG&E, have recently reported that:

- The current SoCalGas energy efficiency programs have been very effective, consistently exceeded goals and averaging over 1 Bcf per year in reductions.
- SoCalGas's core gas sales per capita decreased from about 193 therms in 1994 to approximately 175 therms in 2001.
- Customer response indicates that the demand for natural gas programs continues to exceed the current funding levels, which have remained constant for the past five years.
- Energy efficiency options are more cost effective because of higher gas commodity costs.[50]

PG&E has similarly reported that the potential for saving natural gas "remains high."[51] In fact, according to PG&E, almost 250 million therms (i.e., approximately 25 Bcf) of natural gas could potentially be saved by increased energy efficiency programs in the residential sector.[52] One hundred and ninety three million therms of natural gas (approximately 19 Bcf) could potentially be saved by increased energy efficiency programs in the commercial sector.[53] Approximately 200 million therms of natural gas

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47 *Balancing Natural Gas Policy – Fueling the Demands of a Growing Economy, Volume I, Summary of Comments and Recommendations,* A Report of the National Petroleum Council, September 25, 2003, at page 21.

48 *Natural Gas Price Effects of Energy Efficiency and Renewable Energy Practices and Policies*, ACEEE, December 2003, at page 17.

49 Ibid, at page 22.

50 *Demand* Reduction, a presentation by Geoffrey Ayres, Director Commercial/Industrial Markets, SoCalGas, SDG&E, as part of Panel II. A. - Demand Reduction at the December 9 and 10, 2003 Natural Gas Workshop.

51 *Demand Reduction Efforts,* a presentation by Dave Hickman, PG&E Manager, Customer Energy Management, as part of Panel II. A. - Demand Reduction at the December 9 and 10, 2003 Natural Gas Workshop.

52 Ibid.

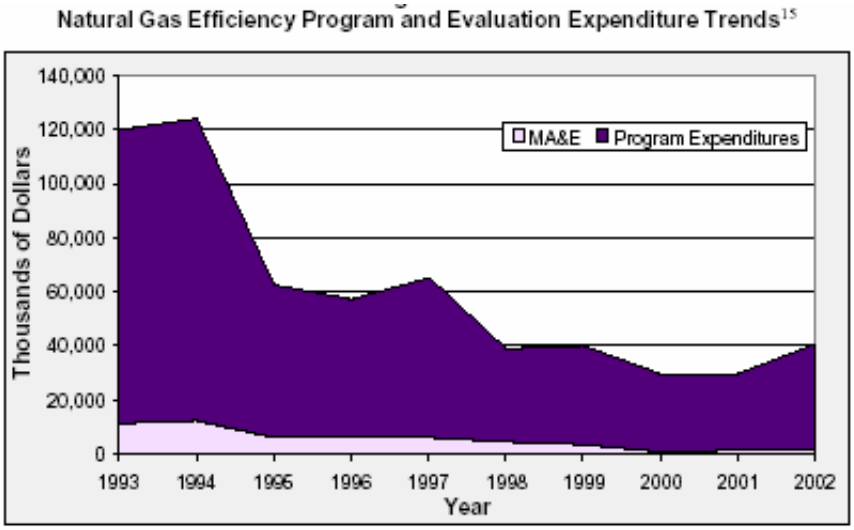
53 Ibid.

(i.e., 20 Bcf) could be saved in the residential and commercial sectors by just a doubling of the low energy efficiency funding levels of the mid-1990s.

The recently adopted 2005 building standards are expected to save 88 million therms (approximately 8 to 9 Bcf) of natural gas per year by 2016.[54]

Unfortunately, as shown in the following chart from the California Energy Commission, spending on gas efficiency programs has been dramatically reduced since the early 1990s.

Figure 4[55]



Annual spending on natural gas efficiency programs and evaluation has declined over the past decade.
Source: California Energy Commission and Xenergy

It appears clear that increased spending on energy efficiency programs has the potential to offset much, if not all, of the projected growth in core and non-core natural gas consumption. The Commission should adopt policies to spur the development and effective implementation of these programs.

By way of contrast, SDG&E and SoCalGas have assumed only relatively minor reductions in natural gas consumption in the forecasts that they have provided in response to Question 1 in OIR R.04-01-025. SDG&E assumed that for the period 2004-2006, the impact of energy efficiency programs would be a reduction in residential gas consumption of roughly 1.8 million therms. For the period 2007-2016, there was an assumed additional reduction of roughly 2.3 million therms.[56] These appear to be reductions of less than one percent of SDG&E's projected average year core gas demand in 2006 and 2016. These reductions are even smaller percentages of the utility's projected 2006 and 2016 core demands in the colder than average year scenarios.

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54 *Energy Action Plan Legislative Report*, dated January 5, 2004, at page 1.

55 *Public Interest Energy Strategies Report*, California Energy Commission, December 2003, at page 37.

56 SDG&E response to Question 1 in RACE's First Data Request.

In its response to Question 1 in OIR R.04-01-025, SoCalGas assumed reductions in core residential, commercial and industrial natural gas consumption of 2.244 Bcf in 2006 and 2.153 Bcf in 2016.[57] These also appear to be reductions of less than one percent of SoCalGas's projected average year core gas demand in 2006 and 2016. As with SDG&E, these reductions are even smaller percentages of SoCalGas's projected 2006 and 2016 core demands in the colder than average year scenarios.

Comment No. 11: PG&E's proposal that ratepayers continue to pay for existing facilities that are used less due to the addition of new supply sources or system capacity is contrary to established regulatory policy.

PG&E has proposed that it "not be penalized" if the addition of new supply or capacity results in some existing PG&E transmission or storage capacity being used less.[58] However, used and useful disallowances are a long standing traditional rate making principle. If the new supply or capacity results in lower cost service, but idles some existing capacity on a permanent basis, there should be some risk to the utility. It is established utility law that rates should provide an opportunity (not a guarantee) for a utility to earn a reasonable return on its investments, but only those investments used and useful for the provision of utility service. Where a resource is obsolete and not used and useful, the resource is, in general, removed from rate base (along with any corresponding reduction in the reserve for depreciation) and from current expenses.

If changing market circumstances that could not have been foreseen lead to the resource becoming not used and useful, despite prudent and economical management, a sharing of the costs that are not used and useful may be considered. One common way to do this, when sharing is deemed appropriate, is to allow recovery of the remaining investments over a reasonable period, say ten years, but without any return on the unamortized balance. At normal rates of return, this amounts to approximately a 50-50 sharing of the remaining investment in present value terms.

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57 SoCalGas response to Question 1 in RACE's First Data Request.

58 *Phase I Proposals and Data Response of Respondent Pacific Gas and Electric Company*, dated February 24, 2004, at page 17.