

**DIRECT TESTIMONY OF
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SAN DIEGO GAS & ELECTRIC COMPANY**

I. Introduction

The purpose of my testimony is to provide the technical basis and explanation to support the cost effective energy efficiency savings and demand reduction estimates that are used in SDG&E's long-term resource plan as reflected in the testimony of Mr. Anderson.

D.02-10-062 (at page 27) directed the utilities to

“include in their plans procurement of baseload and intermediate load energy reductions in the form of energy efficiency. Utilities should consider investment in all cost-effective energy efficiency, regardless of limitations of funding through public goods charge (PGC) mechanism.”

The Commission has also expressed its policy preference in this proceeding that resource adequacy first be met through cost effective demand reduction and energy efficiency programs.

SDG&E estimates that cost effective net energy savings of 1,126 Gigawatthours (“GWH”) and net capacity savings of 176 Megawatts (“MW”) are available over the next five years at a cost of \$280 million representing an incremental increase of \$120 million over SDG&E's current authorized collection level of \$160 million from its ratepayers. At this current authorized level of funding, forecasted net energy savings over the next five years is 670 GWH with a corresponding net capacity savings of 133 MW. SDG&E's proposed increase in funding for energy efficiency programs will result in an increase of 456 GWH in net energy savings and 43 MW in net capacity savings.

The following discussion presents an overview of the methodology and assumptions SDG&E used to develop its 20-year energy efficiency forecast for use in SDG&E's long-term resource plan, and SDG&E's proposed 2003 energy efficiency programs.

II. 2003 Energy Efficiency Programs

SDG&E filed its 2003 Energy Efficiency program portfolio with the Commission on November 4, 2002 in R.01-08-028. SDG&E's forecasts for 2003 are 134 GWH in energy savings and 26.6 MW in demand reductions with a program budget of \$30.7 million.¹ SDG&E's program portfolio includes several types of programs that include information programs, statewide marketing and rebate programs. The information and statewide marketing programs provide energy efficiency tips that educate customers on more efficient use of energy and information on rebate programs available to help customers upgrade their appliances or equipment to more energy efficient appliances or equipment. The rebate programs offer customer cash incentives that offset the cost of purchasing energy efficient equipment. SDG&E's rebate programs currently offer customers incentive levels that equate to an average 31 percent of incremental cost of purchasing a more energy efficient model as compared to the standard model.

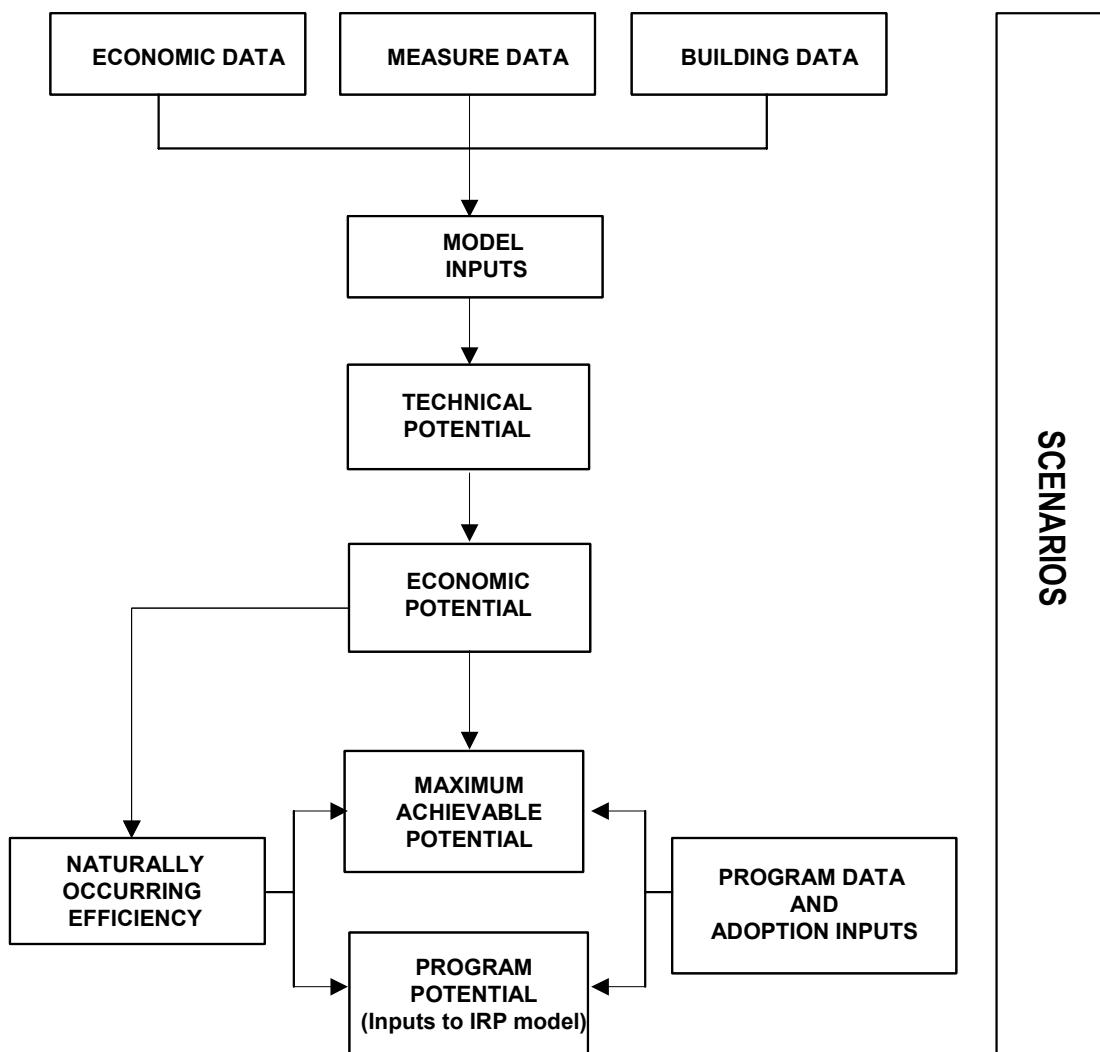
¹ SDG&E's annual authorized electric energy efficiency budget is \$32 million. The SDG&E program budget for 2003 does not include the Commission's allocation to third parties operating local programs in SDG&E's service territory, nor do the estimated program savings reflect the expected savings from these third party programs. The Commission allocated \$33 million to third parties to operate programs in 2002 and 2003. These programs are forecasted to provide 25,111 MWH in energy savings and 6 MW in demand reduction.

III. Energy Efficiency Modeling Process

A. Overview

The core of any EE forecasting process involves carrying out a number of systematic analytical steps that are necessary to produce accurate estimates of EE effects on system load. A simplified overview of these basic analytical steps is shown in Figure 1.

FIGURE 1 – OVERVIEW OF THE MODELING PROCESS



The actual modeling process can be viewed as a five-step process. These steps are:

Step 1: Develop Initial Input Data

- Develop list of EE measure opportunities to include in scope
- Gather and develop technical data (costs and savings) on efficient measure opportunities
- Gather, analyze, and develop information on building characteristics, including total square footage and households, electricity consumption and intensity by end use, end-use consumption load patterns by time of day and year (i.e., load shapes), market shares of key electric consuming equipment, and market shares of EE technologies and practices
- Gather economic input data such as current and forecasted retail electric prices and current and forecasted costs of electricity generation, along with estimates of other potential benefits of reducing supply, such as the value of reducing environmental impacts associated with electricity production

Step 2: Estimate Technical Potential and Develop Supply Curves

- Match and integrate data on efficient measures to data on existing building characteristics to produce estimates of technical potential and EE supply curves.

Step 3: Estimate Economic Potential

- Match and integrate measure and building data with economic assumptions to produce indicators of costs from different viewpoints (e.g., utility, societal, and consumer)
- Estimate total economic potential using supply curve approach

Step 4: Estimate Maximum Achievable, Program, and Naturally Occurring Potentials

- Gather and develop estimates of program costs (e.g., for administration and marketing) and historic program savings
- Develop estimates of customer adoption of EE measures as a function of the economic attractiveness of the measures, barriers to their adoption, and the effects of program intervention

- Estimate maximum achievable, program, and naturally occurring potentials; calibrate achievable and naturally occurring potential to recent program and market data
- Develop alternative economic estimates associated with alternative future scenarios

Step 5: Scenario Analyses and Resource Planning Inputs

- Recalculate potentials under alternate economic scenarios and deliver data in format required for resource planning

B. Estimation of Technical Potential and Supply Curves Used in Developing the Resource Planning Estimates

Technical potential refers to the amount of energy savings or peak demand reduction that would occur with the complete penetration of all measures analyzed in applications where they were deemed technically feasible from an engineering perspective. Total technical potential is developed from estimates of technical potential of individual measures as they are applied to discrete market segments (residential, commercial, etc.). Technical potential for a single measure and market segment takes into consideration (a) the number of residential homes or nonresidential square feet; (b) base equipment consumption per home or square foot; (c) the percentage of homes or square footage for which an energy efficiency equipment is applicable (e.g., the fraction of homes with air conditioning); (d) the percentage of the market that has not yet installed energy efficiency equipment; (e) the percentage of the market for which the measure is technically feasible to install (for example, the fraction of residential lighting sockets that would accept a CFL); and (f) percentage savings that will occur if the target energy efficiency measure is installed.

Achievable potential is then estimated by assessing likely market penetration based on customer awareness and measure cost effectiveness. The method used for estimating adoption of energy-efficiency measures applies equally to the program (adoption of energy efficient equipment that is influenced by program information or incentives) and naturally occurring (installation of energy efficiency measures resulting from customers who install energy efficient equipment without the influence of the utility programs) analyses. Whether as a result of natural market forces or aided by a program intervention, the rate at which measures are adopted is modeled as a function of the following factors: (a) availability of the adoption opportunity as a function of capital equipment turnover rates and changes in building stock over time; (b) customer awareness of the efficiency measure, which can be influenced by program marketing and information efforts; (c) The cost-effectiveness of the efficiency measure; and (d) market barriers associated with the efficiency measure.

The energy efficiency model estimates adoption under both naturally occurring and program intervention situations. The primary difference between the naturally occurring and program analyses is the participant. In any program intervention case in which measure incentives are provided, the participant benefit-cost ratios are adjusted based on the incentives. Thus, if an incentive that pays 50 percent of the incremental measure cost is applied in the program analysis, the participant benefit-cost ratio for that measure will double (since the costs have been halved). The effect of an incentive on the amount of estimated adoption will depend on where the pre- and post-incentive benefit-cost ratios fall on an adoption curve. Several different market-penetration curves are

used to model different classes of measures, based on perceived market barriers that the measures may face.

Achievable potential forecasts are developed for various scenarios. For example, program savings can be modeled under low levels of program intervention, through moderate levels, up to an aggressive DSM acquisition scenario. The primary modeling inputs used to identify program intervention scenarios are program marketing/information budgets and the fraction of incremental measure costs that are paid by incentives. Increases in marketing budgets will increase the number of customers who are aware of energy efficiency measures and who can then consider implementing them. Increases in incentives make the energy efficiency measures more cost effective to customers, moving them up on the implementation curve, and therefore increasing expected measure adoption. The final results produced are annual streams of achievable DSM program impacts (energy and demand by time-of-use period) and all societal and participant costs.

C. Estimation of Economic Potential

Economic potential for energy savings is assessed by first developing a supply-curve analysis. This analysis eliminates double counting of measure savings. On a market segment and end-use/technology basis, measures are stacked in order of cost-effectiveness, and the energy consumption of the system being affected by the efficiency measures goes down as each measure is sequentially applied. As a result, the savings attributable to each subsequent measure decrease. After eliminating double counting of savings, the benefits and costs associated with a given measure and market segment are

compared using the TRC test. Measures with a TRC ratio greater than 1.0 are considered cost effective and are then passed on to the market penetration analysis.

Economic potential is typically used to refer to the technical potential of those energy conservation measures that are cost effective when compared to either supply-side alternatives or the price of energy. Economic potential takes into account the fact that many EE measures cost more to purchase initially than do their standard efficiency counterparts. The incremental costs of each efficiency measure are compared to the savings delivered by the measure to produce estimates of energy savings per unit of additional cost. These estimates of EE resource costs can then be compared to estimates of other resources such as building and operating new power plants.

Cost Effectiveness Tests

To estimate economic potential, it is necessary to develop a method by which it can be determined that a measure or program is economic. SDG&E typically uses the cost-effectiveness criteria used by the Commission in its decisions regarding the cost-effectiveness of EE programs funded under the State's PGC charge. The Commission uses the total resource cost (TRC) test, as defined in the California Standard Practice Manual (CASPM), to assess cost effectiveness (see ALJ Prehearing Conference Statement, March 7, 2003). The TRC is a form of societal benefit-cost test that measures the net costs of a demand-side management program as a resource option based on the total costs of the program, including both the participant's and the utility's costs. The TRC test benefits are generation, transmission and distribution savings and participants' avoided equipment costs (fuel switching only) and the costs are generation costs, program costs paid by the administrator and participant measure costs.

Generation, transmission and distribution savings (hereafter, energy benefits) are defined as the economic value of the energy and demand savings stimulated by the interventions being assessed. These benefits are typically measured as induced changes in energy consumption, valued using some mix of avoided costs. Statewide values of avoided costs are prescribed for use in implementing the test. Electricity benefits are valued using three types of avoided electricity costs: avoided distribution costs, avoided transmission costs, and avoided electricity generation costs.

Participant costs are comprised primarily of incremental measure costs. Incremental measure costs are essentially the costs of obtaining EE. In the case of an add-on device (for example, an adjustable-speed drive or ceiling insulation), the incremental cost is simply the installed cost of the measure itself. In the case of equipment that is available in various levels of efficiency (e.g., a central air conditioner), the incremental cost is the excess of the cost of the high-efficiency unit over the cost of the base (reference) unit.

Administrative costs encompass the real resource costs of program administration, including the costs of administrative personnel, program promotions, overhead, measurement and evaluation, and shareholder incentives. In this context, administrative costs are not defined to include the costs of various incentives (e.g., customer rebates and salesperson incentives) that may be offered to encourage certain types of behavior. The exclusion of these incentive costs reflects the fact that they are essentially transfer payments. That is, from a societal perspective they involve offsetting costs (to the program administrator) and benefits (to the recipient).

A nominal discount rate of 8 percent is used, as required by the CPUC for program filings by major IOUs in 2001.² A normalized measure life of 20 years was used to capture the benefit of long-lived measures. Measures with measure lives shorter than 20 years are “re-installed” in our analysis as many times as necessary to reach the normalized 20-year life of the analysis.

The avoided costs of supply are calculated by multiplying measure energy savings and peak demand impacts by per-unit avoided costs by costing period. Energy savings are allocated to costing periods and peak impacts estimated using load shape factors.

As noted previously, in the measure-level TRC calculation used to estimate economic potential, program costs are excluded. Using the supply curve methodology discussed previously, measures are ordered by TRC (highest to lowest) and then the economic potential is calculated by summing the energy savings for all of the technologies for which the marginal TRC test is greater than 1.0. The supply curve methodology, when combined with estimates of the TRC for individual measures, produces estimates of the economic potential of efficiency improvements.

D. Estimation of Maximum Achievable, Program and Naturally Occurring Potentials

This section discusses the method employed to estimate the fraction of the market that adopts each EE measure in the presence and absence of EE programs that will be used in determining SDG&E’s estimated available energy efficiency opportunities in its

² We recognize that the 8-percent discount is much lower than the implicit discount rates at which customers are observed to adopt efficiency improvements. This is by intent since we seek at this stage of the analysis to estimate the potential that is cost-effective from primarily a societal perspective. The effect of implicit discount rates is incorporated into our estimates of program and naturally occurring potential.

service territory. This estimated energy efficiency potential defines the upper limit of savings for SDG&E's service territory.

The estimates of program potential are typically the most important results of the modeling process. Estimating technical, economic, and maximum achievable potentials are necessary steps in the process from which important information can be obtained; however, the end goal of the process is better understanding how much of the remaining potential can be captured in programs, whether it would be cost-effective to increase program spending, and how program costs may be expected to change in response to measure adoption over time.

Maximum achievable potential is a type of program potential that defines the upper limit of savings from market interventions. Therefore, in the remainder of this section, the term "program potential" will be used to represent both program and maximum achievable potential.

Adoption Method Overview

Part of the analysis involves estimating adoption of EE measures that applies equally to be our program and naturally occurring analyses. Whether as a result of natural market forces or aided by a program intervention, the rate at which measures are adopted is modeled in our method as a function of the following factors:

- The availability of the adoption opportunity as a function of capital equipment turnover rates and changes in building stock over time
- Customer awareness of the efficiency measure
- The cost-effectiveness of the efficiency measure
- Market barriers associated with the efficiency measure.

The method employed is executed in the measure penetration module of XENERGY's DSM ASSYST model. Only measures that pass the measure-level TRC test (TRC is greater than 1.0) are put into the penetration module for estimation of customer adoption.

E. Scenario Analyses

Achievable potential forecasts can be developed for multiple scenarios for long-term resource planning. For example, program savings can be modeled under low levels of program intervention, through moderate levels, up to an aggressive DSM acquisition scenario. The final results produced will be annual streams of achievable DSM program impacts (energy and demand by time-of-use period) and all societal and participant costs.

A number of energy efficiency market scenarios were assessed by SDG&E. For the program effort scenarios, marketing costs were held constant in real dollars. Effects of energy efficiency programs were then assessed for varying incentive levels, based on the percent of incremental avoided costs in order to meet the Commission's direction to consider investment in all cost-effective energy efficiency, regardless of limitations of funding through public goods charge (PGC) mechanism. The scenarios addressed 30 percent, 50 percent, 60 percent, 70 percent, and 95 percent incentive levels. All scenarios consider all cost-effective energy efficiency measures.

SDG&E's rebate programs currently offer customers incentive levels that equate to an average 31 percent of incremental cost of purchasing a more energy efficient model as compared to the standard model. The alternative scenarios propose more aggressive funding levels and also provide for greater savings potential. With the increased levels, for example at the 95 percent level, the savings are high for the first three years and start declining in the fourth year. This is because at the 95 percent scenario, the adoption rates

and the penetration rates would be higher, thus addressing a significant portion of the economic potential. However, the budget requirement would also be higher.

SDG&E is proposing the 60 percent scenario for its proposed program activity and budget level. The 60 percent scenario meets the Commission's requirement to consider investment in all cost-effective energy efficiency measures. At 70 percent, the model begins predicting decreasing marginal returns; i.e., the energy savings per dollar spent begins to decline. This phenomenon continues as incentives increase. In addition, concerns regarding free-ridership are exacerbated at the higher incentive levels. The annual funding level requirement supports SDG&E's request for multi-year programs (see Ms. Smith's testimony) since the funding levels for the next five years would be stable. The rate impact of the additional funding would also be more stable over a longer period as compared to the higher scenarios, for example the 95 percent level.

In order to validate the robustness of the energy efficient measures in the resource plan, SDG&E modeled scenarios with the avoided costs varying by 20%. The following graphs (Figures 2 and 3) show the economic potential estimates under Base, Low, and High avoided cost scenarios. For the Low scenario, avoided costs are set at 80% of Base avoided costs. For the High scenario, avoided costs are set at 120% of the Base avoided costs. As shown, most of the variation is in the residential sector, particularly in the Low avoided costs scenario. Most of the drop off is due to the "refrigerator early replacement" measure being slightly non-cost effective (TRC ratio= 0.98) under the low-cost scenario. This analysis reveals that in general energy savings and demand reduction estimates are robust.

FIGURE 2: ENERGY SAVINGS POTENTIAL

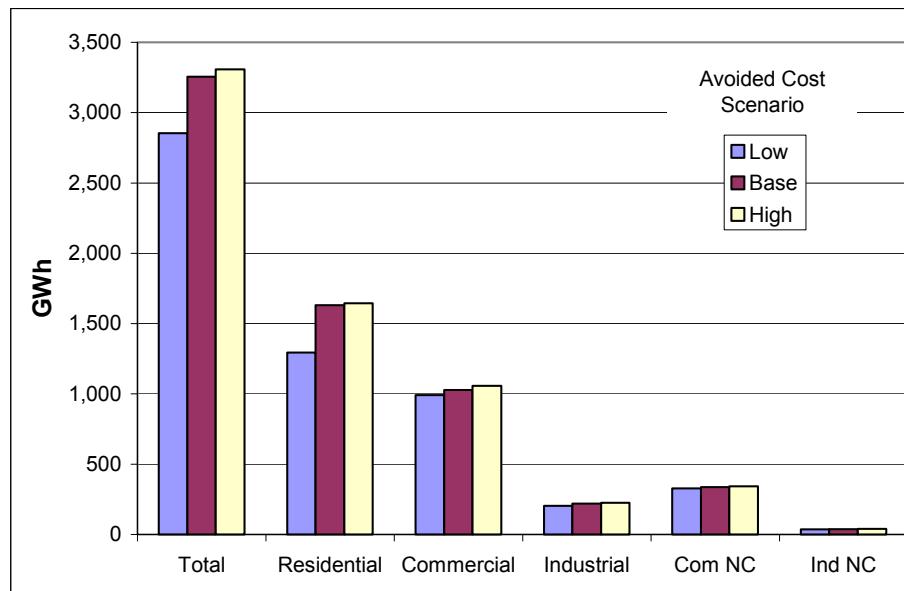
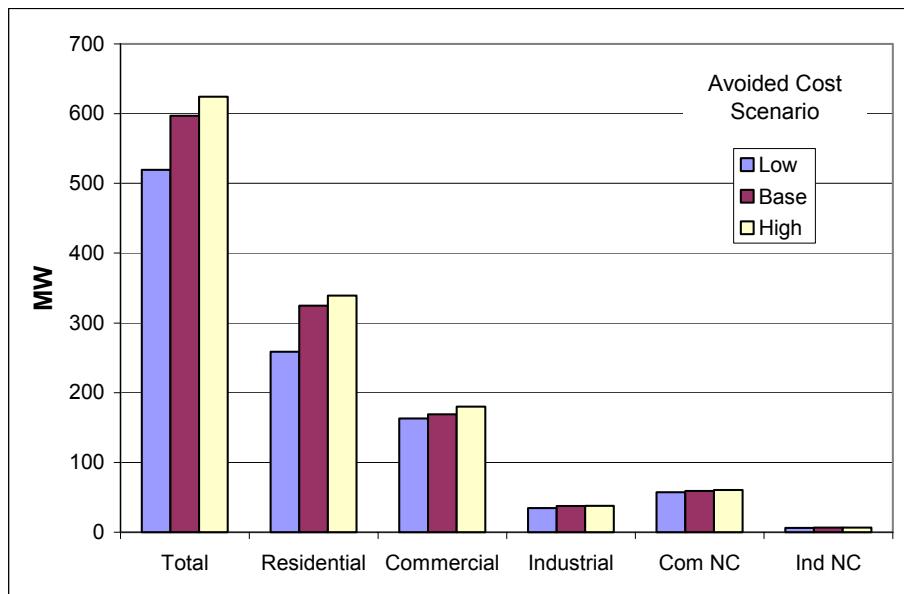


FIGURE 3: DEMAND REDUCTION POTENTIAL



IV. Major Assumptions Used to Develop Energy Efficiency Component of SDG&E's Resource Plan

The majority of measure data for the residential, commercial and industrial market segments used in this analysis had already been collected as part of various statewide studies that have been conducted over the past few years relative to the utilities' measurement and evaluation activities for their energy efficiency programs.³ Key building data for the study include: units of consumption (number of households and

³ The California Statewide Commercial Sector Energy Efficiency Potential Study, XENERGY, 2002 (covering the commercial existing construction market); The California Statewide Residential Sector Energy Efficiency Potential Study, XENERGY, 2003 (covering the residential existing construction market); California's Secret Energy Surplus: The Potential for Energy Efficiency, XENERGY, 2002 (covering the industrial and new construction markets). 2001 Database for Energy Efficiency Resources ("DEER") Update study, XENERGY, 2001. The Statewide Residential Lighting and Appliance Saturation Study RLW, 2000 The Residential Market Share Tracking Project, RER, 2001 and 2002

square feet of building space), end use energy consumption and saturations, and load shapes.

The key economic inputs utilized in the forecasting process are avoided costs, electricity rates, discount rates and inflation rates. The discount rate (8.15%) used in the analysis is consistent with the CPUC-authorized discount rate that is used in utility and third party energy efficiency program filings. The inflation rate (2.7%) used in the analysis is consistent with the assumptions used in the avoided cost forecast. Electricity rates for the 2004-2012 period were developed by the CEC. The July 2002 forecast, as posted on the CEC website, was used. An annual inflation rate was applied to the 2012 CEC forecast to project rates for subsequent years.

Avoided cost projections by SDG&E cost period were developed using inputs from Henwood (see Mr. Anderson's testimony for specifics on the Henwood model) and SDG&E. Following is the process used to develop avoided costs:

1. Hourly market prices (\$ per MWH) from the Henwood model were provided for years: 2004-2012, 2017, 2022, and 2027. For each year, prices for a typical week (7 days of 24 hours each) in each month were provided. These typical week costs were allocated over each month to provide a yearly forecast (8760 hours per year). Simple averaging was then used to develop prices by SDG&E costing period. Linear interpolation was used (by costing period) to develop prices for the years that were not covered by the Henwood model.
2. Volatility premium estimates (\$ per kW) were provided by Henwood for each year of the forecast period. These premiums were allocated to

SDG&E costing period using the following factors: 70.8% for summer on-peak, 15.6% for summer semi-peak, and 13.6% for summer off-peak.

These factors were developed using 1998 as the base year.

3. The market price forecast was then augmented by 6% to account for transmission, distribution, and unaccounted for energy costs.
4. The price forecast was augmented again by 4% to account for ancillary services. Ancillary services charges, expressed as dollars per MWH of load, have historically been about 4% of forward market energy prices.
5. An externality cost was then added to the price forecast. This adder was consistent with the CPUC-authorized value beginning 2002 through 2012 and was extended using inflation rates for ensuing years.⁴
6. Finally, the adjusted price forecast and volatility premium forecast was converted into inputs that are utilized by the DSM forecasting model (\$ per kWh for the price forecast and \$ per kW for the volatility premium forecast for each year for each of the six SDG&E costing periods).

V. Energy Efficiency Recommendation

SDG&E's energy efficiency proposal provides for cost effective energy savings of 1,126 GWH and demand reductions of 176 MW over the first five years at a cost of \$280 million representing an incremental increase of \$120 million over SDG&E's current authorized funding level of \$160 million. SDG&E's proposed increased funding for energy efficiency programs will result in an increase of 456 GWH in energy savings and

⁴ See D.01-11-066 Attachment 1 Energy Efficiency Policy Manual at page 24.

43 MW in demand reductions. This recommendation is based on the assumption that the level of incentive relative to the incremental measure cost is set an average of 60%. This level was selected to provide an aggressive portfolio designed to achieve significant savings and demand reductions. SDG&E's proposal meets the Commission's requirement that the utilities propose investment in all cost-effective energy efficiency, regardless of limitations of funding through the public goods charge (PGC) mechanism. The funding level requirement supports SDG&E's request for multi-year programs since the funding levels for the next five years would be stable. The rate impact of the additional funding would also be more stable over a longer period as compared to the higher scenarios. The following tables show the forecasted results for the next five years and the twentieth year.

ENERGY EFFICIENCY PROGRAMS FORECAST

Year	1	2	3	4	5	20
Net Energy Savings - kWh	235,645,943	495,130,502	739,430,346	950,784,274	1,126,498,306	3,192,512,798
Net Peak Demand Savings - kW	36,163	76,033	114,085	147,617	176,015	515,710
New Net Energy Savings - kWh	235,645,943	259,484,560	244,299,844	211,353,928	175,714,031	135,306,916
New Net Peak Demand Savings - kW	36,163	39,870	38,052	33,532	28,397	22,281
Program Costs - Real (2.8% Inflation Rate)	\$56,792,647	\$60,488,484	\$58,977,453	\$54,617,988	\$49,356,156	\$43,436,250
Annual TRC	2.34	2.34	2.30	2.23	2.15	

The “Net Energy Savings – kWh” is a cumulative number and the “New Net Energy Savings – kWh” is that amount achieved in the given year. This means that Net for year N is the Net for year (N-1) plus the New Net for year N. This is the same for the “Net Peak Demand Savings – kW” and the “New Net Peak Demand Savings – kW.” The energy savings and demand reductions are from actual installation of measures that take

into account the impacts from continued information and audit programs and marketing efforts (including the impacts of "Flex Your Power" campaign).

It is assumed that there is deterioration of savings [equipment is retired/burns out after a specified number of years (useful life)] but when it is retired/burned-out we assume it is eligible to participate again the year that it needs to be replaced. In addition, the model accounts for forecasted residential and nonresidential customer growth.

The program costs include the following cost categories: (a) program administration, (b) marketing--includes information programs, (c) audits and advertising (also "Flex Your Power" campaign), (d) customer incentives and (e) measurement & evaluation costs. The current program authorized level of funding is already included in the program costs.

SDG&E's Program Portfolio

SDG&E proposes a comprehensive portfolio of programs that include information programs and continuing support for the statewide advertising campaigns, energy management services and rebate or incentive programs for different market segments. Most of the programs that will be implemented will not be significantly different from the current programs that are currently in place and approved by the Commission. However, given that the funding for these programs are higher than the current authorized level, SDG&E will have the ability to provide more aggressive rebates and incentives to increase program participation, and continue to identify emerging technologies or measures that serve as the next generation of energy efficiency equipment and appliances.

Residential Market (Retrofit Market)

These programs will be designed to provide energy efficiency opportunities for single-family and multifamily residential homes by providing incentives for energy efficient appliances and technologies. SDG&E will continue to work with the Department of Energy's ENERGY STAR® programs for appliances. Under this program category, SDG&E will continue to provide mail-in and online audit services to customers.

Residential Market (New Construction)

These programs will target the residential new construction market, including new single family and multifamily buildings, additions to existing buildings, and major remodels. New construction builders will be encouraged to exceed existing Title 24 standard by a specified percentage and comply with ENERGY STAR® standards through a combination of financial incentives, design assistance, and educational and outreach activities.

Commercial/Industrial/Agricultural Market (Retrofit Programs)

These programs will continue to support energy efficiency retrofits in small, medium and large nonresidential customer facilities that include providing technical support, emerging technology demonstration and financial assistance to encourage the installation of energy efficiency equipment. SDG&E proposes to increase opportunities for large nonresidential customers to install more energy efficiency equipment.

Commercial/Industrial/Agricultural Market (New Construction)

The program will target the commercial, industrial, and agricultural new construction markets and will be delivered through information and educational

programs, design assistance and financial incentives for building owners and design teams.

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Qualifications

My name is Athena M. Besa. My business address is 8335 Century Park Court, Suite 1200, San Diego, California 92123-1257. I am employed by San Diego Gas & Electric Company and Southern California Gas Company as the Energy Efficiency Analysis and Support Manager in the Mass Markets Department. In my current position, I am responsible for the measurement of energy efficiency and customer assistance programs and the measurement and analysis of demand-side management ("DSM") programs. I also serve as the Sempra Utilities' representative and the current chairperson of the California DSM Measurement Advisory Committee ("CADMAC").

I attended the University of the Philippines in Quezon City, Philippines. I graduated with a Bachelor of Science degree in Statistics in 1983, and a Master of Science degree in Statistics in 1986. I have completed coursework at University of California, Davis towards a Doctorate degree in Statistics.

I was hired by SDG&E in 1990 in the Load Research Section of the Marketing Department. Since that time I have held positions of increasing responsibility in the Department. I have been in my present position for six months. I have previously testified before this Commission in the 1996 AEAP, 1997 AEAP, 1998 AEAP, 1999 AEAP and PY2000/2001 Energy Efficiency Program Application Proceeding.

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Rulemaking No: R.01-10-024
Exhibit No.: _____
Witness: Athena M. Besa

Order Instituting Rulemaking to Establish Policies)
and Cost Recovery Mechanisms for Generation) R.01-10-024
Procurement and Renewable Resource Development.)

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**DIRECT TESTIMONY
OF
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SAN DIEGO GAS & ELECTRIC COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA
April 15, 2003