2002 California Gas Report

SOUTHERN CALIFORNIA

INTRODUCTION

Southern California Gas Company (SoCalGas) is the principal distributor of natural gas in southern California, providing retail and wholesale customers with procurement, transportation, exchange and storage services. SoCalGas is a gas-only utility and, in addition to serving the residential, commercial, and industrial markets, provides gas for enhanced oil recovery and electric generation in southern California. San Diego Gas & Electric (SDG&E), Southwest Gas Corporation, and the City of Long Beach Energy Department are SoCalGas' three wholesale utility customers. Gas service at wholesale is expected to begin to the City of Vernon during the forecast period.

This report covers a 20-year forecast period, from 2002 through 2022; only the consecutive years 2002 through 2006 and the point years 2007, 2010, 2015 and 2020, and 2022, however, are shown in the tabular data in the next sections. The forecast is subject to uncertainty, but represents best estimates for the future, based upon the most current information available.

The Southern California section of the 2002 California Gas Report (CGR) begins with a discussion of the economic conditions and regulatory issues facing the utilities, followed by a discussion of the factors affecting gas demand in various market sectors. The outlook on gas supply availability, which continues to be favorable, is presented followed by a review of the peak day demand forecast. Summary tables and figures underlying the forecast are provided.

THE SOUTHERN CALIFORNIA ENVIRONMENT

Economics and Demographics

The gas demand projections are partly determined by the long-term economic outlook for the SoCalGas service territory. After suffering prolonged recession in the early-to-mid 1990's, southern California's economy enjoyed a recovery in the last years of the decade before slowing in 2001 and 2002. Even with the recent slowdown, area employment has grown every year since 1994. After strong 3.0% growth in 2000, the area's non-farm jobs grew by a more modest 1.8% in 2001—still much stronger than the anemic 0.4% growth in the United States as a whole. Non-farm employment in 2002 should grow 1.5% and pass 7.8 million. In 2001, local service-sector jobs saw 2.5% growth – slower than previous years, but much better than the 1.4% national growth rate. It is expected that local service jobs will grow by 2.1% in 2002. In manufacturing, local employment dropped by 0.9% in 2001 and is expected to drop a further 2.2% in 2002—less severe than annual drops of more than 4% across the US. However, southern California's manufacturing jobs still remain more than 20% below their 1988 peak of 1.26 million.

From 2001 through 2006, service-area non-farm jobs should see 2.1% average annual growth. Beyond 2006, SoCalGas expects the service area population's average age to gradually increase, part of a national demographic trend of aging "baby boomers". As the population ages and as more people retire, it is expected that employment will grow at slower rates. From 2006 through 2022, local non-farm job growth should average only about 0.7% per year—with annual growth gradually slowing from 1.5% in 2007 to 0.2% by 2022. Area manufacturing jobs should drop an average of about 0.4% per year from 2001 through 2022. Manufacturing's share of non-farm employment will fall from over 13% in 2001 to less than 10% by 2022. Service-sector jobs should average nearly 2% annual growth from 2001 through 2022 – gradually increasing their share from 32% in 2001 to 38% by 2022.

Due to growth in residents, we expect that SoCalGas' active meters will increase by an average of 1.25% per year from 2001 to 2022 – slightly slower than the recent 1.31% average annual growth seen from 1999 through 2001.

REGULATORY ENVIRONMENT

The past year witnessed numerous developments at both the California Public Utilities Commission (CPUC) and Federal Energy Regulatory Commission (FERC) designed to make the natural gas industry more responsive to the changing needs of the marketplace.

State Regulatory Matters

In December of 2001 the California Public Utilities Commission (CPUC) adopted a decision in the Gas Industry Restructuring (GIR) proceeding bringing substantial changes to SoCalGas' services. Once fully implemented, the GIR decision will introduce a new structure in transportation, storage and balancing services. The capacity provisions provide new unbundled service offerings for transportation, storage, and balancing, while setting the revenue requirement for transmission and storage on a embedded cost basis through August 2006. The GIR decision also creates firm tradable rights for SoCalGas' 3875 MMcf/day of firm backbone transmission capacity to be sold at an embedded cost-based reservation charge. After a set-aside for core customers, receipt point rights would be awarded through an open season that ensures customer access and prevents market concentration. The GIR decision results in a number of new options for customers, including: firm tradable backbone transmission rights, fully tradable unbundled storage rights, new storage services, and unbundled balancing options.

In April of 2001, SoCalGas participated in a workshop by the CPUC – Energy Division to assess the adequacy of natural gas infrastructure in California. The Energy Division followed the workshop with a report acknowledging that SoCalGas has sufficient capacity to meet expected demand levels. Rulemaking 01-03-023 was also initiated by the CPUC in 2001 to determine whether curtailment and diversion priorities should be altered to noncore natural gas customers in SoCalGas' service area. After a full presentation of the record in the proceeding, the CPUC acknowledged that there was no need for changes to noncore transportation priorities, since curtailments were not expected in SoCalGas' service areas within the next 12 months.

In addition, the Commission has before it a proposed decision that would consolidate the core gas supply portfolios, storage capacities, and related interstate pipeline capacities of SoCalGas and San Diego Gas & Electric (SDG&E). Under this proposed decision each utility would charge the same procurement rate to customers in each of their service territories.

Federal Regulatory Matters

During the past year SoCalGas has been actively participating in numerous FERC proceedings relative to interstate capacity serving California, including Docket No. RP00-336-002, reviewing the basis for assigning capacity and receipt point rights on the El Paso Natural Gas Company pipeline system. SoCalGas echoed support for the position of FERC staff that FT-1 full requirements service on El Paso's system must be limited consistent with contract demand service to ensure certainty and reliability for shippers on the El Paso system. The FERC staff proposal would also require that the level of contract demand assigned to FT-1 shippers should be the greater of the billing determinants or coincidental peak demand. Finally, SoCalGas supported the position that the El Paso system needs to be fully pathed from the receipt point meter to delivery points to further improve the reliability of the El Paso system and its deliveries to California.

These changes proposed for the El Paso system represent changes similar to those approved by the California Public Utilities Commission for the SoCalGas system in recent years. These changes to SoCalGas' system will increase the reliability and certainty of supply deliveries. FERC issued an order on May 31, 2002 affirming the positions of FERC staff and reallocating the capacity on the El Paso pipeline system. The FERC order also addresses El Paso standards with respect to the allocation of any new expansion capacity added to their pipeline system.

GAS DEMAND (REQUIREMENTS)

OVERVIEW

SoCalGas expects continued growth in the residential market, as well as, in associated service-oriented businesses in the commercial market. These markets, along with small and medium-sized industrial customers, comprise the core market. The remaining large customers make up the noncore market.

The following table compares the composition of SoCalGas' throughput for recorded year 2001 and forecast year 2022.

Composition of SoCalGas Throughput – Bcf
(Average Temperature Year)

	2001	2022	Change
Residential	264	325	23%
Core Non-Residential	100	137	37%
Noncore C&I	146	119	-19%
EOR-Steaming	11	8	-28%
Electric Generation	459	314	-32%
Wholesale	171	173	1%
Other	26	32	24%
TOTAL	**1177**	**1109**	**-6%**

Notes:
1) "Core Non-Residential includes Natural Gas Vehicle (NGV) throughput.
2) "Other" includes international (Mexicali) throughput and Lost and Unaccounted for Gas (L&UAF) + Company-Use gas.

Residential, core non-residential, and wholesale requirements are expected to increase as southern California's economy continues through a gradual economic expansion. Requirements for Enhanced Oil Recovery (EOR) steaming operations, which have declined since the Kern/Mojave pipeline began offering direct service to California customers in 1992, are expected to continue to decline. The electric generation (EG) market is expected to decline dramatically from the unusually high level in 2001. EG sendout in 2001 was unusually high due to low availability of hydro-power, delays in the start-up of new generation projects and unusually low output from nuclear power plants. For the forecast period, more electric power generation is expected to take place outside SoCalGas' service territory, reducing gas demand for electric generation. The decline in wholesale demand is also explained by the electric power generation market impacts in SDG&E's service territory, more than offsetting any expected growth in other core and noncore wholesale markets.

MARKET SENSITIVITY

Temperature

Core demand forecasts are prepared for three design temperature conditions – average, cold, and hot – to quantify changes in space heating demand due to weather. Temperature variations can cause significant changes in winter gas demand due to space heating in the residential, core commercial and industrial markets. The largest demand variations due to temperature occur in the month of January. Degree-day differences between the three conditions are developed from a six-zone temperature monitoring procedure within SoCalGas' service territory. The cold and hot design temperature conditions are based on a statistical recurrence factor of 1-in-35 years.

Pipeline Bypass

The Kern/Mojave Pipeline began operating in California in 1992, leading to bypass of the local gas distribution systems. In 2001, 143 Bcf of gas load bypassed SoCalGas' distribution system. Bypass to the Kern/Mojave mainline is expected to grow gradually to 160 Bcf per year in 2008. The expiration of several major long-term EOR customer transportation contracts by 2009 is expected to lead to an increase of bypass to 183 Bcf per year by 2013. Beyond 2013, bypass load is anticipated to decline slowly as total gas usage in the EOR market declines.

Several new pipeline or expansion projects have been proposed to directly serve customers in southern California. The first project, Questar Southern Trails (Questar), has already received approval from FERC. Questar anticipates initiating service on its East Zone this year. Questar has continued to work with local agencies to finalize the environmental approvals necessary to convert the West Zone to natural gas transportation service. This report assumes the Questar pipeline, with a capacity up to 44 BCF/year, will begin service in the early part of the forecast period. Kern River has completed a 135 MMcf/d expansion and is undertaking another 900 MMcf/d expansion of their system. There have been other projects proposed, but they must still obtain commitments from customers before starting the formal regulatory approval process.

MARKET SECTORS

Residential

Residential demand adjusted for temperature decreased to 238.0 Bcf in 2001 from 255.5 Bcf in 2000. Unadjusted residential demand was 259.5 Bcf in 2001, 9% more than temperature adjusted demand primarily because of colder than normal weather conditions in southern California.

Active residential meters averaged 4.79 million in 2001, an increase of 59,500 (or 1.3%) from the 2000 average. In 2002, SoCalGas expects an increase of more than 53,000 active meters. From 2002 through 2022, active residential meters are expected to grow at an average annual rate of 1.3%, reaching 6.28 million by 2022.

Residential demand is projected to grow from 263.3 Bcf in 2002 to 325.0 Bcf in 2022, an increase of 3.1 Bcf per year. SoCalGas' DSM programs are projected to save about 1 Bcf per year in the residential sector through 2016 and to decline thereafter.

Commercial

On a temperature-adjusted basis, core commercial market demand in 2001 totaled 71.5 Bcf, down 1.4 Bcf from 2000. This decrease is largely the result of the temporary, but substantial, impact of the energy crisis that occurred during years 2000 and 2001 in California. Projected core commercial gas demand (for an average temperature year) is 74.5 Bcf for 2002. Most of this forecasted increase in load is due to the resumption of positive economic conditions in southern California along with energy prices that are more in-line with historical price levels before the energy crisis. The growth, although at a decreasing rate through 2006, averages 3.2%. After 2006, core commercial demand is forecast to increase about 0.6% per year, from 84.5 Bcf in 2006 to 92.5 Bcf in 2022. Over this time frame, growth in employment is positive, but at a declining rate, gas costs decline modestly and space heating efficiency improves steadily.

Noncore commercial demand is forecast to be 20.4 Bcf in 2002, a slight increase of about 0.4 Bcf from 2001 usage. After year 2002, noncore commercial demand is expected to decrease to 17.7 Bcf in 2005 due to the noncore to core customers migration as the result of the Commission's decision in the GIR proceeding. After 2005, the noncore commercial demand is expected to grow at 0.4% per year reaching 20.3 Bcf in 2022. The growth is primarily due to the increase in the commercial employment forecast.

Industrial

In 2001, temperature-adjusted core industrial demand was 20.5 Bcf, a decrease of 0.2 Bcf over 2000 deliveries. From 2002 through 2006, retail core industrial market deliveries (for an average temperature year) are projected to increase from 1.0 Bcf in 2002, at a decreasing rate, to about 27.5 Bcf in 2006. After 2006, core industrial demand is expected to decline by approximately 0.6% per year over the forecast period, dropping to 24.8 Bcf in 2022. This decline results from a combination of a slightly lower industrial employment forecast, higher marginal gas rates and increases in gas equipment energy-efficiencies.

Retail noncore industrial deliveries are forecast to be 67.9 Bcf in 2002 compared to 67.9 Bcf in 2001. The forecast demand is expected to decrease from 68.3 Bcf in 2002 to 59.2 Bcf in 2005. The decrease is primarily due to the reclassification of Vernon load to Wholesale service, and the expected noncore to core customer migration as the result of the Commission's decision in the GIR proceeding. After 2005, noncore industrial demand is forecast to decline gradually to 50.1 Bcf in 2022, due to the decrease in service area industrial employment forecast and higher forecast of natural gas price.

Refinery G30 demand is made up of gas consumption by petroleum refining customers, hydrogen producers and petroleum refined product transporters. Refinery G30 demand is forecast to decline 0.9% per year, from 58.7 Bcf in 2001 to 47.5 Bcf in 2020. This decrease is mainly due to refiners' using alternate fuels during summer months where natural gas prices are forecasted to be less competitive than the alternate fuel prices.

Migration of Commercial and Industrial Load: Noncore to Core

As a result of the Commission's recent GIR decision, some commercial and industrial demand under noncore (G-30) is expected to migrate to commercial and industrial demand under core (G-10) as existing noncore contracts expire. For calendar year 2002 through 2004 the accumulated transfer from noncore to core service is forecast to be 0.5 Bcf, 6.2 Bcf and 9.9 Bcf, respectively. For 2005, and each year thereafter, the forecast is 7.9 Bcf. These forecasts assume a November 1, 2002 implementation date for the new rules governing customers' use of intrastate pipeline and storage capacity on SoCalGas' system.

Commercial and Industrial Load Growth: Incentives for Electric Self-Generation

Capital cost incentives, funded by the State of California through AB970, that encourage installation of self-generation equipment, are expected to lead to additional gas demand for electric generation by commercial and industrial customers. Because the incentives of this program are limited to 1,000 kW, or less per customer, most of the additional load is expected to fall under core rather than noncore service for these applications. Further, the total funding provided by AB970 is limited and customers must make application, prior to year-end 2004, to receive incentives.

Since the program began late in 2001, the load growth we forecast is very uncertain. For core commercial and industrial, the accumulated gas demand is expected to be just under 0.5 Bcf for 2002; growing to 1.3 Bcf and 2.0 Bcf, for 2003 and 2004, respectively; and, by 2005, full saturation of the program's incentives yield a load of 2.6 to 2.7 Bcf for each year thereafter. For the noncore, significant load growth is expected to start in 2003 at just over 0.1 Bcf, then 0.2 Bcf in 2004 and reaching just under 0.3 Bcf in 2005 and for each year thereafter.

Electric Generation

The electric generation (EG) sector includes the following markets: noncore commercial/industrial cogeneration and self-generation, enhanced oil recovery (EOR)-related cogeneration, and non-cogeneration electric generation (EG), generally referred to as exempt wholesale generators (EWG) and municipal utility electric generators (UEG). It should be noted that the forecasts of EG-related load are subject to a higher degree of uncertainty associated with the continued operation of existing generation facilities, the construction of new generation facilities in the western United States, and regulatory and market decisions that impact the operation of existing QF facilities and other electric generation plants, including the construction of additional electric transmission transfer capacity.

Commercial/Industrial/Cogeneration <20MW

The commercial/industrial cogeneration segment is generally made up of customers generating less than 20 MW of power. All the cogeneration units in this segment are installed primarily to generate electricity for internal consumption rather than for the sale of power to electric utilities. In 2001, recorded gas deliveries to this market were 13 Bcf, a decrease of 2.5 Bcf from 2000. Commercial/industrial cogeneration demand is projected to be around 15 Bcf for the next 20 years.

Commercial/Industrial/ Cogeneration (>20 MW)

Commercial/industrial cogeneration greater than 20 MW gas demand is forecast to decline 45%, from 61 Bcf in 2002 to 34 Bcf in 2003. The forecast is based on a power market simulation for the period to 2015 and thus reflects the anticipated dispatch of these resources under the forecast market conditions, in addition to receiving contract capacity payments. In addition, some customers are expected to select alternate service providers. The forecast remains at 34 Bcf per year from 2003 to 2015. Gas use increases by 2.0% per year consistent with the general increase in electric sales during the period 2016 through 2022

Refinery-Related Cogeneration

Refinery cogeneration units are installed primarily to generate electricity for internal use. Refinery-related cogeneration is forecast to decline 0.8% per year, from 14.5 Bcf in 2001 to 12.2 Bcf in 2020. This decrease is mainly due to the use of alternative fuels during summer months when gas prices are less competitive with alternate fuels.

EOR-Related Cogeneration

In 2001, recorded gas deliveries to the EOR-related cogeneration market were 14.7 Bcf, a decrease of 11.7 Bcf from 2000. This decrease was mainly due to the temporary decrease in operating time of several plants as a result of the economic impact of electric industry restructuring. In addition, there was increased bypass to the Kern River/Mojave Pipeline and increased usage of customers' own field gas. EOR-related cogeneration demand is expected to decrease to 13.0 Bcf in 2002 because of load displacement by new, more efficient, electric generation plants. Demand will remain at that level until 2008 when usage will start to drop due to the expiration of several EOR long-term gas transportation contracts. Demand is forecast to level off in 2010 at 5.1 Bcf and remain at that level for the remainder of the forecast period.

Non-Cogeneration Electric Generation (EG)

SoCalGas forecasts a decline in retail non-cogeneration EG gas requirements of 44%, from 164 Bcf in 2002 to 91 Bcf in 2003. The forecast decline in gas use is a result of new off-system generation projects, which displace current on-system generator operation. SoCalGas forecasts an increase in retail non-cogeneration EG gas requirements of 7% per year, from 91 Bcf in 2003 to 213 Bcf in 2015. The forecast for SoCalGas' EG customers through 2015 is based on a power market simulation. EG gas use increases by 2.0% per year consistent with the general increase in electric sales during the period 2016 through 2022.

SoCalGas' forecast includes the construction of approximately 40,000 MW from 2002 to 2007 of new resources' capacity. Of that total, 10,500 MW is currently in operation, 26,000 MW are under construction, and 3,500 MW are in advanced development. Thus the forecast assumes only 40,000 MW of the more than 119,000 MW of "announced" generation in the Western Electric Coordinating Council (WECC) to date are actually constructed during the forecast period. Throughout the entire planning period, SoCalGas assumes a minimum planning reserve margin of 15% throughout the WECC. For electric demand within California, SoCalGas used the California Energy Commission's end-use electric demand forecast for California described in their report titled "Electricity Outlook: 2002-2012" which was released in January 2002. For electric demand outside of California, the CGR working group utilized the electric demand forecast based on work done by the energy-consulting firm, PIRA, Inc.

SoCalGas performed two special hydro sensitivities for Year 2005. Due to the displacement of generation by off-system resources, the impact of significant hydro conditions had little impact on gas demand. A one-in-twenty dry hydro year increased demand by 23 Bcf for the Year 2005. A one-in-twenty wet year decreased demand by 11 Bcf for the Year 2005.

Enhanced Oil Recovery – Steam

Recorded deliveries to the EOR steaming market in 2001 were 10.7 Bcf, a decrease of 2.0 Bcf from 2000. This decrease was due to the high gas prices relative to the price of crude oil and to increased usage of customers' own field gas. SoCalGas' EOR steaming demand is expected to remain stable at 10.1 Bcf from 2002 until 2008 when SoCalGas' EOR long-term gas transportation contracts terminate in late 2008. From 2009 through the end of the forecast period, usage is expected to be approximately 7.4 Bcf. These figures include gas delivered to PG&E's EOR customers through interutility exchange. In 2001, 0.01 Bcf of gas was delivered to PG&E through such arrangements. No change in demand is expected in that market. The EOR-related cogeneration demand is discussed in the Electric Generation sector.

Crude oil prices are not expected to reach a level that would initiate any major expansion in EOR operations during the forecast period. As a result, EOR production is expected to gradually decline by approximately 1% per year. In addition, oil producers will rely increasingly on the interstate pipelines in California to supplant traditional supply sources, such as own source gas and SoCalGas' transportation system.

Mexicali

SoCalGas used the forecast prepared by Ecogas, Mexicali, for this report. Mexicali's use is expected to increase from 4.5 Bcf at an average rate of 3.4% per year to 9.4 Bcf in 2022. The forecast assumes industrial loads switch to alternate fuels whenever they are less expensive than natural gas. The forecast assumes that customers will no longer be able to burn fuel oil #6 by 2010 as a result of anticipated future environmental regulations.

Wholesale

The forecast of wholesale gas demand includes transportation to SDG&E, the City of Long Beach Energy Department (Long Beach), Southwest Gas Corporation (SWG), and the City of Vernon (Vernon).

The non-EG gas demand forecast for SDG&E is based on the long-term demand forecast prepared by SDG&E for this report. Under average temperature conditions, total non-EG requirements for SDG&E are expected to increase from 54 Bcf in 2002 at an average growth rate of 1.1% per year to 67 Bcf in 2020.

The forecast of the large EG loads were based on the power market simulation as noted in the Electric Generation chapter for "non-cogeneration EG" demand. EG-related load is subject to a higher degree of uncertainty associated with the continued operation of existing generation facilities and the construction of new facilities. SDG&E's cogeneration and non-cogeneration EG requirements are expected to decrease from 65 Bcf in 2002 to 32 Bcf in 2004. The decline in gas use is a result of new off-system generation, which displace current on-system generation and expectation that a customer will take service from an alternate service provider. SoCalGas forecasts an increase in SDG&E's cogeneration and non-cogeneration EG gas requirements of 7.0% per year, from 32 Bcf in 2004 to 73 Bcf in 2015. SDG&E EG gas use, excluding cogeneration, increased by 2.0% per year consistent with the general increase in electric sales during the period 2016 through 2022.

The cogeneration EG demand forecast is based on the long-term demand forecast prepared by SDG&E for this report. The same assumptions used for the retail non-cogeneration EG demand were used for the wholesale non-cogeneration EG demand.

SoCalGas performed two special hydro sensitivities for Year 2005. Due to the displacement of generation by off-system resources, the impact of significant hydro conditions had little impact on gas demand. A one-in-twenty dry hydro year increased SDG&E's EG demand by 2 Bcf for the Year 2005. A one-in-twenty wet year decreased SDG&E's EG demand by 3 Bcf for the Year 2005.

For the City of Long Beach, SoCalGas used the forecast prepared by Long Beach for this report. Long Beach's use is expected to decrease gradually from 11.9 Bcf at an average rate of -0.1% per year to 11.7 Bcf in 2022. Long Beach's local deliveries are expected to decrease from 3.9 Bcf to 3.6 Bcf in 2022. SoCalGas' transportation to Long Beach is expected to increase from 8.0 Bcf to 8.1 Bcf in 2019.

The demand forecast for SWG is based on a long-term demand forecast prepared by SWG. In 2002, SoCalGas will serve approximately 5.9 Bcf directly, with another 3.7 Bcf being served by PG&E under exchange arrangements with SoCalGas. The direct service load is expected to grow steadily by 1.5% per year throughout the forecast period from 5.9 Bcf in 2002 to approximately 7.9 Bcf in 2022.

The wholesale forecast assumes Vernon initiates municipal gas service to a portion of the existing SoCalGas retail customers within the City's jurisdiction. The forecasted throughput starts at 6 Bcf and grows to 9 Bcf by 2022. Included in this forecast are two customers currently served under SoCalGas' retail EG rate schedule. The throughput forecast for these customers through 2015 is based on a power market simulation.

Natural Gas Vehicles

In November 1995, the CPUC issued a decision regarding Low Emission Vehicle (LEV) programs which approved, among other things, continued ratepayer support for customer information, education and training. Although the decision eliminated ratepayer support for construction of new public access refueling stations and monetary incentives to purchase NGVs, the availability of public funds has allowed the NGV market to continue to grow. SoCalGas' customer information, education and training program facilitates this growth by providing valuable guidance to potential new NGV customers as well as those customers who plan to expand their NGV fleet.

At the end of 2001, 134 fueling stations served approximately 13,000 vehicles that consumed 4.3 Bcf of compressed natural gas (CNG) for the year. SoCalGas remains optimistic about the NGV market growth, forecasting an increase in demand to 12.8 Bcf in 2012 and 20.0 Bcf in 2022. Although SoCalGas has divested all of its fueling stations, which were located on customer property, we expect the forecasted growth will be adequately served by a growing CNG refueling station industry. The growth is being propelled by the private and public sectors, with customer support from SoCalGas' LEV program. The South Coast Air Quality Management District (SCAQMD), in the past two years has passed several fleet rules which required public fleets to purchase NGVs when replacing their fleets. The SCAQMD is also expected to propose rules, which will affect private fleets in the same way as they did the public fleets. These rules have added tremendously to the growth of the NGV industry. There is also legislation, which has already passed in the U.S. Senate, to give incentives to NGV fueling station owners for equipment and CNG fuel price, and to NGV owners to reduce the cost of NGVs by as much as 50 percent. As these programs become effective, the market is expected to grow at an even faster pace.

In 1992 most NGVs were after-market conversions. Today's light-duty NGV market is dominated by Original Equipment Manufacturer (OEM) vehicles. Light-duty NGV products are presently offered by Ford, GM, Honda, Daimler-Chrysler and Toyota. In the medium- and heavy-duty vehicle arena there are more than 35 available engine/vehicle products for transits, schools, refuse and street sweepers. Although repowering of medium and heavy-duty vehicles still exist, the market is dominated by new OEM vehicles.

Reduced vehicle emissions continue to be a major benefit of NGVs. With emissions that are a fraction of California's Ultra Low Emission Vehicle (ULEV) emissions standard, new Ford and Honda products are the cleanest vehicles of their type ever seen in the market. In the heavy-duty market, NGV low emissions have the potential to generate greater air quality improvements. In this arena, Cummins is certifying its new heavy duty natural gas engines to an optional 1.7 gram NOx and NMHC standard that is below the level currently required. With purchase incentives that could include emission reduction credits, tax credits and direct grants, SoCalGas expects that NGVs will continue to provide an attractive option for customers.

On July 1, 2000, Caltrans, DMV and the California Highway Patrol gave the environmentally minded commuters another opportunity to drive more NGVs. On that day California drivers of dedicated NGVs were legally able to use the carpool lanes regardless of number of passengers in their vehicle. This has helped to advance the use of NGVs and increased the use of CNG as a vehicle fuel. Cities like the City of Los Angeles have gone even further, and allowed drivers of NGVs to park at City meters without having to pay for parking. These types of programs have helped to advance the awareness of NGVs, and allow the industry to grow at its rapid pace.

Higher gasoline prices over the last two years have also spurred more interest in NGVs. This year, gasoline prices at the pump have increased to above $2.00 per gallon, while NGV fuel hovered at about $1.35 per gasoline gallon equivalent on the average. This type of cost advantage coupled with tax incentives is expected to encourage the use of more NGVs.

DEMAND-SIDE MANAGEMENT

The cumulative net DSM load impact forecast for selected years is provided in **Table 1**. The net load impact includes all DSM programs that SoCalGas forecasted to implement in the years 2001 and 2002. Savings and goals for these programs are based on SoCalGas' 2000 DSM application to the Commission, since the latest application (filed late 2001) has been subject to significant change. Savings are consistent with those filed in SoCalGas' Biennial Cost Allocation Proceeding (BCAP).

Conservation and energy efficiency activities encourage customers to install energy efficient equipment and weatherization measures and adopt energy saving practices that result in reduced gas usage for a comparable level of service. Conservation and energy efficiency load impacts are shown as positive numbers. The "total net load impact" is the natural gas throughput reduction resulting from SoCalGas' DSM programs.

Savings reported are for measures installed under SoCalGas' DSM programs. Credit is only taken for measures that are installed as a result of SoCalGas' DSM programs, and only for the lifetimes of the measures installed. Measures with lifetimes less than the forecast planning period fall out of the forecast when their expected lifetime is reached. This means, for example, that a measure installed in 2000 with a lifetime of 10 years is only included in the forecast through 2009. Naturally occurring conservation that is not attributable to SoCalGas' DSM activities is not included in the DSM forecast.

Table 1. DSM Load Impact Forecast for Selected Years (MMcf)

Conservation "Hard"	**2002**	**2003**	**2004**	**2006**	**2011**	**2016**
Core Residential	670	1,005	1,341	1,341	1,346	986
Core Commercial	163	245	326	325	323	12
Core Industrial	347	520	694	694	694	672
SUBTOTAL	**1,180**	**1,770**	**2,360**	**2,359**	**2,362**	**1,669**
Conservation "Soft"						
Core Residential	93	140	140	47	0	0
Core Commercial	71	106	107	38	2	0
Core Industrial	142	213	213	71	0	0
SUBTOTAL	**306**	**458**	**459**	**155**	**2**	**0**
Net Load Impact						
Core Residential	763	1,145	1,480	1,387	1,346	986
Core Commercial	234	351	433	363	325	12
Core Industrial	489	733	906	764	694	672
TOTAL NET LOAD IMPACT	**1,486**	**2,228**	**2,819**	**2,515**	**2,365**	**1,669**

Notes:
1. DSM load impacts include 2001 program savings, but do not include pre-2001 program savings
2. "Hard" impacts include measures requiring a physical equipment modification or replacement
3. "Soft" impacts include energy management services type measures.
4. DSM impacts assume a heating value of 1015.35 Btu/cubic foot of natural gas.

CAPACITY, SOURCES, AND STORAGE

INTERSTATE PIPELINE CAPACITY

Southern California continues to operate in an environment of interstate pipeline capacity in excess of anticipated demand. Interstate pipeline delivery capability into southern California is over 4,000 MMcf/day, with approximately 3,230 MMcf/day available directly to SoCalGas customers (the remaining interstate capacity serves local distribution company bypass customers). These pipeline systems provide access to several large supply basins, located in: New Mexico (San Juan Basin), West Texas (Permian Basin), Rocky Mountains and Western Canada. The interstate pipeline systems, along with local California gas supplies, deliver gas to most southern California customers through SoCalGas.

SoCalGas has firm receipt capacity at the following locations for its customers to access supply and interstate pipelines.

	Interstate and Local Volumes MMcf/day
Current Firm Capacity	
El Paso at Blythe	1,210
El Paso at Topock	540
North Needles (Transwestern, Questar Southern Trails)	800
Hector Road (Mojave)	50
Wheeler Ridge (PG&E, Kern/Mojave, CA Production)	765
Line 85 (CA Production)	190
North Coastal (CA Production)	120
Kramer Junction (Kern/Mojave)	200
Total Firm Supply Access	**3,875**

SoCalGas has added 335 MMcfd of receipt point capacity to its system within the last year and will add an additional 40 MMcfd by the end of summer 2002.

GAS SUPPLY SOURCES

Southern California receives gas supplies from several sedimentary basins in the western United States and Canada.

California Gas

Gas supply available to SoCalGas from California sources (state onshore plus state/federal offshore supplies) was about 400 MMcf/day in 2001.

Southwestern U.S. Gas

Traditional Southwestern U.S. sources of natural gas, especially from the San Juan Basin, will continue to supply most of southern California's natural gas demand. This gas is delivered via the El Paso Natural Gas Company and Transwestern Pipeline Company pipelines. The majority of San Juan basin gas is coalbed methane production, which has recently reached a plateau. Although the Unconventional Fuels Tax Credit (which expires in 2003) provides producers with an incentive to produce as much gas as possible from wells drilled before 1993, coalbed methane drilling is still profitable in the San Juan Basin and parts of Wyoming and Utah. The San Juan Basin's conventionally produced gas supplies have increased since 1991 and are expected to meet southern California's gas demand. Permian basin gas also provides an additional source of supply into California.

Rocky Mountain Gas

Rocky Mountain supply presents a viable alternative to traditional Southwestern U.S. gas sources for Southern California. This gas is delivered to southern California primarily on the Kern River Gas Transmission Company's pipeline, although there is also access through the San Juan Basin. While the majority of Rocky Mountain gas is conventional gas supplies, substantial gas supplies also qualify for the Unconventional Fuels Tax Credit through 2003 – mainly as tight formation gas and some as coal seam gas. In recent years, Rocky Mountain gas has increasingly flowed to Midwestern and Pacific Northwest Markets.

Canadian Gas

SoCalGas anticipates that the role of Canadian gas in meeting southern California's demand during the forecast period will decline. New pipeline capacity out of western Canada to the Midwest and eastern United States are likely to move Canadian gas away from California. Increased gas deliveries from the Permian Basin to California are expected to replace these supplies.

RETAIL CORE PEAK DAY DEMAND

SoCalGas plans and designs its system to provide continuous service to its core customers under an extreme peak day event. The extreme peak day design criteria is declined as in a 1-in-35 year event; this correlates to a system average temperature of 38 degrees Fahrenheit. Demand on an extreme peak day is met through a combination of withdrawals from underground storage facilities and flowing pipeline supplies. The following table summarizes the forecasted retail core demand and the supplies required to provide firm service on a peak day.

Retail Core Peak Day Demand and Supply Requirements (MMCF/day)

	2002	2005	2010	2015
Retail Core Demand	3,193	3,338	3,506	3,689
Firm Storage Withdrawal	1,935	1,935	2,032	2,139
Required Flowing Supplies	1,258	1,403	1,474	1,550

Notes:
Firm withdrawal requirements are held constant at 1,935 MMcf/d through year 2005 per the Comprehensive Settlement Agreement for GIR. Firm withdrawal and flowing supply requirements are shown to increase proportionally with demand growth beginning in 2006 and afterwards. Firm withdrawal plus firm pipeline supplies must be sufficient to meet peak day operating requirements. GIR may provide core customers with additional options to meet their peak requirements in the future.

2002 California Gas Report

SOUTHERN CALIFORNIA GAS COMPANY
TABULAR DATA

SOUTHERN CALIFORNIA GAS COMPANY

ANNUAL GAS SUPPLY AND SENDOUT - MMCF/DAY
RECORDED YEARS 1997 TO 2001

Line			1997	1998	1999	2000	2001
	CAPACITY AVAILABLE						
1	California Source Gas						
	Out-of-State Gas						
2	California Offshore -POPCO / PIOC						
3	El Paso Natural Gas Co.						
4	Transwestern Pipeline Co.						
5	Kern / Mojave						
6	PGT / PG&E						
7	Other						
8	Total Out-of-State Gas						
9	TOTAL CAPACITY AVAILABLE						
	GAS SUPPLY TAKEN						
10	California Source Gas		236	250	271	386	388
	Out-of-State Gas						
11	Pacific Interstate Companies		263	277	111	0	0
12	Other Out-of-State		2,085	2,242	2,412	2,689	2,907
13	Total Out-of-State Gas		2,348	2,519	2,523	2,689	2,907
14	TOTAL SUPPLY TAKEN		2,584	2,769	2,794	3,075	3,295
15	Net Underground Storage Withdrawal		(8)	(79)	6	78	(70)
16	TOTAL THROUGHPUT (1)(2)		2,576	2,689	2,800	3,153	3,225
	ACTUAL DELIVERIES BY END-USE (3)						
17	Core	Residential	657	745	761	694	724
18		Commercial	175	190	197	199	205
19		Industrial	51	54	54	56	57
20		NGV	3	5	6	9	12
21		Subtotal	886	993	1,018	957	998
22	Noncore	Commercial	70	70	71	71	61
23		Industrial	365	370	377	392	338
24		EOR Steaming	41	29	25	33	29
25		Electric Generation	808	750	856	1,199	1,257
26		Subtotal	1,284	1,219	1,329	1,695	1,685
27	Wholesale	Residential	111	125	134	120	116
28		Com/Ind & Others	85	86	87	84	77
29		Electric Generation	182	206	181	231	276
30		Subtotal	378	417	402	435	469
31	International DGN		1	6	11	11	6
32	Co. Use & LUAF		27	55	40	55	66
33	SYSTEM TOTAL-THROUGHPUT (1)		2,576	2,689	2,800	3,153	3,225
	TRANSPORTATION AND EXCHANGE						
34	Core	All End Uses	40	38	42	42	26
35	Noncore	Commercial/Industrial	410	428	439	457	393
36		EOR Steaming	41	29	25	33	29
37		Electric Generation	806	749	855	1,197	1,255
38		Subtotal-Retail	1,297	1,244	1,361	1,729	1,703
39	Wholesale	All End Uses	378	417	402	435	469
40	International DGN		1	6	11	11	6
41	TOTAL TRANSPORTATION & EXCHANGE		1,676	1,667	1,774	2,175	2,178
	CURTAILMENT (RETAIL & WHOLESALE)						
42		Core	0	0	0	0	0
43		Noncore	0	0	0	0	0
44		TOTAL - Curtailment	0	0	0	0	0
45	REFUSAL		0	0	0	0	0
	NOTES:						
	(1) Figures exclude pipeline bypass load losses due to interstate pipelines.		411	392	395	387	393
	(2) Exclude own-source gas supply of procurement by Edison and City of Long Beach.		19	19	10	11	11

(3) Actual deliveries by end-use includes sales, transportation, and exchange volumes; exchange volumes in 2001 includes total delivery to PG&Es' customers.

SOUTHERN CALIFORNIA GAS COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED YEARS 2002 THRU 2006

AVERAGE TEMPERATURE YEAR

LINE	FIRM CAPACITY AVAILABLE		2002	2003	2004	2005	2006	LINE
1	California Source Gas		510	510	510	510	510	1
	Out-of-State Gas							
2	Mojave (Hector Road)		50	50	50	50	50	2
3	El Paso Natural Gas Co. (Blythe)		1,210	1,210	1,210	1,210	1,210	3
4	El Paso Natural Gas Co. (Topock)		540	540	540	540	540	4
5	Transwestern Pipeline Co. (No. Needles)		800	800	800	800	800	5
6	Kern-Mojave, PG&E, Oxy (Wheeler Ridge)		765	765	765	765	765	6
7	Total Out-of-State Gas		3,365	3,365	3,365	3,365	3,365	7
8	TOTAL CAPACITY AVAILABLE /1		3,875	3,875	3,875	3,875	3,875	8
	GAS SUPPLY TAKEN							
9	California Source Gas		510	510	510	510	510	9
10	Out-of-State		2,106	1,760	1,939	1,983	2,032	10
11	TOTAL SUPPLY TAKEN		2,616	2,270	2,449	2,493	2,542	11
12	Net Underground Storage Withdrawal		0	0	0	0	0	12
13	TOTAL THROUGHPUT 1/, 2/		2,616	2,270	2,449	2,493	2,542	13
	REQUIREMENTS FORECAST BY END-USE 3/							
14	CORE	Residential	721	728	731	738	743	14
15		Commercial	204	214	223	228	231	15
16		Industrial	57	67	74	75	75	16
17		NGV	14	17	19	21	23	17
18		Subtotal-CORE	996	1,026	1,047	1,062	1,072	18
19	NONCORE	Commercial	56	50	47	47	53	19
20		Industrial	356	339	325	314	305	20
21		EOR Steaming	28	28	28	28	28	21
22		Electric Generation (EG)	739	463	636	641	673	22
23		Subtotal-NONCORE	1,179	880	1,036	1,030	1,059	23
24	WHOLESALE	Core	172	174	175	177	179	24
25		Noncore Excl. EG	24	36	37	38	42	25
26		Electric Generation (EG)	178	94	91	121	123	26
27		Subtotal-WHOLESALE	374	304	303	336	344	27
28	INTERNATIONAL	DGN (Mexicali)	12	12	11	12	13	28
29		Co. Use & LUAF	55	48	52	53	54	29
30	SYSTEM TOTAL THROUGHPUT /1		2,616	2,270	2,449	2,493	2,542	30
	TRANSPORTATION AND EXCHANGE							
31	CORE	All End Uses	23	23	23	24	24	31
32	NONCORE	Commercial/Industrial	408	387	372	361	358	32
33		EOR Steaming	28	28	28	28	28	33
34		Electric Generation (EG)	738	463	636	641	673	34
35		Subtotal-RETAIL	1,197	901	1,059	1,054	1,083	35
36	WHOLESALE	All End Uses	374	304	303	336	344	36
37	INTERNATIONAL	All End Uses	12	12	11	12	13	37
38	TOTAL TRANSPORTATION & EXCHANGE		1,583	1,217	1,373	1,402	1,440	38
	CURTAILMENT (RETAIL & WHOLESALE)							
39		Core	0	0	0	0	0	39
40		Noncore	0	0	0	0	0	40
41		TOTAL - Curtailment	0	0	0	0	0	41

NOTES:

	2002	2003	2004	2005	2006
1/ Figures exclude pipeline bypass load losses of to non-jurisdictional gas suppliers.	403	470	475	479	485
2/ Excludes own-source gas supply of gas procurement by the City of Long Beach	11	11	11	11	11

3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.

SOUTHERN CALIFORNIA GAS COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED YEARS 2007 THRU 2022

AVERAGE TEMPERATURE YEAR

LINE	FIRM CAPACITY AVAILABLE		2007	2010	2015	2020	2022	LINE
1	California Source Gas		510	510	510	510	510	1
	Out-of-State Gas							
2	Mojave (Hector Road)		50	50	50	50	50	2
3	El Paso Natural Gas Co. (Blythe)		1,210	1,210	1,210	1,210	1,210	3
4	El Paso Natural Gas Co. (Topock)		540	540	540	540	540	4
5	Transwestern Pipeline Co. (No. Needles)		800	800	800	800	800	5
6	Kern-Mojave, PG&E, Oxy (Wheeler Ridge)		765	765	765	765	765	6
7	Total Out-of-State Gas		3,365	3,365	3,365	3,365	3,365	7
8	TOTAL CAPACITY AVAILABLE /1		3,875	3,875	3,875	3,875	3,875	8
	GAS SUPPLY TAKEN							
9	California Source Gas		510	510	510	510	510	9
10	Out-of-State		2,092	2,174	2,296	2,458	2,527	10
11	TOTAL SUPPLY TAKEN		2,602	2,684	2,806	2,968	3,037	11
12	Net Underground Storage Withdrawal		0	0	0	0	0	12
13	TOTAL THROUGHPUT 1/, 2/		2,602	2,684	2,806	2,968	3,037	13
	REQUIREMENTS FORECAST BY END-USE 3/							
14	CORE	Residential	749	773	818	868	890	14
15		Commercial	234	240	247	253	253	15
16		Industrial	75	74	70	69	68	16
17		NGV	25	30	40	50	55	17
18		Subtotal-CORE	1,083	1,117	1,175	1,240	1,266	18
19	NONCORE	Commercial	53	54	55	56	56	19
20		Industrial	298	286	274	270	269	20
21		EOR Steaming	28	21	21	21	21	21
22		Electric Generation (EG)	723	780	762	830	861	22
23		Subtotal-NONCORE	1,102	1,141	1,112	1,177	1,207	23
24	WHOLESALE	Core	182	179	191	201	206	24
25		Noncore Excl. EG	42	42	42	42	42	25
26		Electric Generation (EG)	125	133	205	220	227	26
27		Subtotal-WHOLESALE	349	354	438	463	475	27
28	INTERNATIONAL	DGN (Mexicali)	13	15	22	25	25	28
29		Co. Use & LUAF	55	57	59	63	64	29
30	SYSTEM TOTAL THROUGHPUT /1		2,602	2,684	2,806	2,968	3,037	30
	TRANSPORTATION AND EXCHANGE							
31	CORE	All End Uses	24	25	25	26	26	31
32	NONCORE	Commercial/Industrial	351	340	329	325	324	32
33		EOR Steaming	28	21	21	21	21	33
34		Electric Generation (EG)	723	780	762	830	861	34
35		Subtotal-RETAIL	1,126	1,166	1,137	1,202	1,232	35
36	WHOLESALE	All End Uses	349	354	438	463	475	36
37	INTERNATIONAL	All End Uses	13	15	22	25	25	37
38	TOTAL TRANSPORTATION & EXCHANGE		1,488	1,535	1,597	1,690	1,732	38
	CURTAILMENT (RETAIL & WHOLESALE)							
39		Core	0	0	0	0	0	39
40		Noncore	0	0	0	0	0	40
41		TOTAL - Curtailment	0	0	0	0	0	41

NOTES:

	2007	2010	2015	2020	2022
1/ Figures exclude pipeline bypass load losses of to non-jurisdictional gas suppliers.	493	550	556	549	547
2/ Excludes own-source gas supply of gas procurement by the City of Long Beach	10	10	10	10	10

3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.

SOUTHERN CALIFORNIA GAS COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED YEARS 2002 THRU 2006

COLD TEMPERATURE YEAR

LINE	FIRM CAPACITY AVAILABLE		2002	2003	2004	2005	2006	LINE
1	California Source Gas		510	510	510	510	510	1
	Out-of-State Gas							
2	Mojave (Hector Road)		50	50	50	50	50	2
3	El Paso Natural Gas Co. (Blythe)		1,210	1,210	1,210	1,210	1,210	3
4	El Paso Natural Gas Co. (Topock)		540	540	540	540	540	4
5	Transwestern Pipeline Co. (No. Needles)		800	800	800	800	800	5
6	Kern-Mojave, PG&E, Oxy (Wheeler Ridge)		765	765	765	765	765	6
7	Total Out-of-State Gas		3,365	3,365	3,365	3,365	3,365	7
8	TOTAL CAPACITY AVAILABLE /1		3,875	3,875	3,875	3,875	3,875	8
	GAS SUPPLY TAKEN							
9	California Source Gas		510	510	510	510	510	9
10	Out-of-State		2,245	1,901	2,080	2,125	2,176	10
11	TOTAL SUPPLY TAKEN		2,755	2,411	2,590	2,635	2,686	11
12	Net Underground Storage Withdrawal		0	0	0	0	0	12
13	TOTAL THROUGHPUT 1/, 2/		2,755	2,411	2,590	2,635	2,686	13
	REQUIREMENTS FORECAST BY END-USE 3/							
14	CORE	Residential	825	832	836	844	850	14
15		Commercial	217	228	237	242	246	15
16		Industrial	59	69	76	77	77	16
17		NGV	14	17	19	21	23	17
18		Subtotal-CORE	1,115	1,146	1,168	1,184	1,196	18
19	NONCORE	Commercial	56	50	47	47	53	19
20		Industrial	356	339	325	314	305	20
21		EOR Steaming	28	28	28	28	28	21
22		Electric Generation (EG)	739	463	636	641	673	22
23		Subtotal-NONCORE	1,179	880	1,036	1,030	1,059	23
24	WHOLESALE	Core	189	192	192	194	196	24
25		Noncore Excl. EG	24	36	37	38	42	25
26		Electric Generation (EG)	178	94	91	121	123	26
27		Subtotal-WHOLESALE	391	322	320	353	361	27
28	INTERNATIONAL	DGN (Mexicali)	12	12	11	12	13	28
29		Co. Use & LUAF	58	51	55	56	57	29
30	SYSTEM TOTAL THROUGHPUT /1		2,755	2,411	2,590	2,635	2,686	30
	TRANSPORTATION AND EXCHANGE							
31	CORE	All End Uses	25	25	25	25	26	31
32	NONCORE	Commercial/Industrial	408	387	372	361	358	32
33		EOR Steaming	28	28	28	28	28	33
34		Electric Generation (EG)	738	463	636	641	673	34
35		Subtotal-RETAIL	1,199	903	1,061	1,055	1,085	35
36	WHOLESALE	All End Uses	391	322	320	353	361	36
37	INTERNATIONAL	All End Uses	12	12	11	12	13	37
38	TOTAL TRANSPORTATION & EXCHANGE		1,602	1,237	1,392	1,420	1,459	38
	CURTAILMENT (RETAIL & WHOLESALE)							
39		Core	0	0	0	0	0	39
40		Noncore	0	0	0	0	0	40
41		TOTAL - Curtailment	0	0	0	0	0	41

NOTES:	2002	2003	2004	2005	2006
1/ Figures exclude pipeline bypass load losses of to non-jurisdictional gas suppliers.	403	470	475	479	485
2/ Excludes own-source gas supply of gas procurement by the City of Long Beach	11	11	11	11	11

3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.

SOUTHERN CALIFORNIA GAS COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED YEARS 2007 THRU 2022

COLD TEMPERATURE YEAR

LINE			2007	2010	2015	2020	2022	LINE
	FIRM CAPACITY AVAILABLE							
1	California Source Gas		510	510	510	510	510	1
	Out-of-State Gas							
2	Mojave (Hector Road)		50	50	50	50	50	2
3	El Paso Natural Gas Co. (Blythe)		1,210	1,210	1,210	1,210	1,210	3
4	El Paso Natural Gas Co. (Topock)		540	540	540	540	540	4
5	Transwestern Pipeline Co. (No. Needles)		800	800	800	800	800	5
6	Kern-Mojave, PG&E, Oxy (Wheeler Ridge)		765	765	765	765	765	6
7	Total Out-of-State Gas		3,365	3,365	3,365	3,365	3,365	7
8	TOTAL CAPACITY AVAILABLE /1		3,875	3,875	3,875	3,875	3,875	8
	GAS SUPPLY TAKEN							
9	California Source Gas		510	510	510	510	510	9
10	Out-of-State		2,237	2,321	2,452	2,625	2,700	10
11	TOTAL SUPPLY TAKEN		2,747	2,831	2,962	3,135	3,210	11
12	Net Underground Storage Withdrawal		0	0	0	0	0	12
13	TOTAL THROUGHPUT 1/, 2/		2,747	2,831	2,962	3,135	3,210	13
	REQUIREMENTS FORECAST BY END-USE 3/							
14	CORE	Residential	857	885	936	994	1,020	14
15		Commercial	248	254	261	268	268	15
16		Industrial	77	75	72	70	70	16
17		NGV	25	30	40	50	55	17
18		Subtotal-CORE	1,207	1,244	1,309	1,382	1,413	18
19	NONCORE	Commercial	53	54	55	56	56	19
20		Industrial	298	286	274	270	269	20
21		EOR Steaming	28	21	21	21	21	21
22		Electric Generation (EG)	723	780	762	830	861	22
23		Subtotal-NONCORE	1,102	1,141	1,112	1,177	1,207	23
24	WHOLESALE	Core	199	196	209	222	227	24
25		Noncore Excl. EG	43	42	42	43	43	25
26		Electric Generation (EG)	125	133	205	220	227	26
27		Subtotal-WHOLESALE	367	371	456	485	497	27
28	INTERNATIONAL	DGN (Mexicali)	13	15	22	25	25	28
29		Co. Use & LUAF	58	60	63	66	68	29
30	SYSTEM TOTAL THROUGHPUT /1		2,747	2,831	2,962	3,135	3,210	30
	TRANSPORTATION AND EXCHANGE							
31	CORE	All End Uses	26	27	27	28	28	31
32	NONCORE	Commercial/Industrial	351	340	329	325	324	32
33		EOR Steaming	28	21	21	21	21	33
34		Electric Generation (EG)	723	780	762	830	861	34
35		Subtotal-RETAIL	1,128	1,168	1,139	1,204	1,234	35
36	WHOLESALE	All End Uses	367	371	456	485	497	36
37	INTERNATIONAL	All End Uses	13	15	22	25	25	37
38	TOTAL TRANSPORTATION & EXCHANGE		1,508	1,554	1,617	1,714	1,756	38
	CURTAILMENT (RETAIL & WHOLESALE)							
39		Core	0	0	0	0	0	39
40		Noncore	0	0	0	0	0	40
41		TOTAL - Curtailment	0	0	0	0	0	41

NOTES:

	2007	2010	2015	2020	2022
1/ Figures exclude pipeline bypass load losses of to non-jurisdictional gas suppliers.	493	550	556	549	547
2/ Excludes own-source gas supply of gas procurement by the City of Long Beach	10	10	10	10	10

3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.

SOUTHERN CALIFORNIA GAS COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED YEARS 2002 THRU 2006

HOT TEMPERATURE YEAR

LINE	FIRM CAPACITY AVAILABLE		2002	2003	2004	2005	2006	LINE
1	California Source Gas		510	510	510	510	510	1
	Out-of-State Gas							
2	Mojave (Hector Road)		50	50	50	50	50	2
3	El Paso Natural Gas Co. (Blythe)		1,210	1,210	1,210	1,210	1,210	3
4	El Paso Natural Gas Co. (Topock)		540	540	540	540	540	4
5	Transwestern Pipeline Co. (No. Needles)		800	800	800	800	800	5
6	Kern-Mojave, PG&E, Oxy (Wheeler Ridge)		765	765	765	765	765	6
7	Total Out-of-State Gas		3,365	3,365	3,365	3,365	3,365	7
8	TOTAL CAPACITY AVAILABLE /1		3,875	3,875	3,875	3,875	3,875	8
	GAS SUPPLY TAKEN							
9	California Source Gas		510	510	510	510	510	9
10	Out-of-State		1,974	1,626	1,804	1,844	1,893	10
11	TOTAL SUPPLY TAKEN		2,484	2,136	2,314	2,354	2,403	11
12	Net Underground Storage Withdrawal		0	0	0	0	0	12
13	TOTAL THROUGHPUT 1/, 2/		2,484	2,136	2,314	2,354	2,403	13
	REQUIREMENTS FORECAST BY END-USE 3/							
14	CORE	Residential	618	623	626	631	635	14
15		Commercial	191	201	209	214	217	15
16		Industrial	56	66	73	73	74	16
17		NGV	14	17	19	21	23	17
18		Subtotal-CORE	879	907	927	939	949	18
19	NONCORE	Commercial	56	50	47	47	53	19
20		Industrial	356	339	325	314	305	20
21		EOR Steaming	28	28	28	28	28	21
22		Electric Generation (EG)	739	463	636	641	673	22
23		Subtotal-NONCORE	1,179	880	1,036	1,030	1,059	23
24	WHOLESALE	Core	159	162	163	164	166	24
25		Noncore Excl. EG	24	36	37	38	42	25
26		Electric Generation (EG)	178	94	91	121	123	26
27		Subtotal-WHOLESALE	361	292	291	323	331	27
28	INTERNATIONAL	DGN (Mexicali)	12	12	11	12	13	28
29		Co. Use & LUAF	53	45	49	50	51	29
30	SYSTEM TOTAL THROUGHPUT /1		2,484	2,136	2,314	2,354	2,403	30
	TRANSPORTATION AND EXCHANGE							
31	CORE	All End Uses	21	21	21	22	22	31
32	NONCORE	Commercial/Industrial	408	387	372	361	358	32
33		EOR Steaming	28	28	28	28	28	33
34		Electric Generation (EG)	738	463	636	641	673	34
35		Subtotal-RETAIL	1,195	899	1,057	1,052	1,081	35
36	WHOLESALE	All End Uses	361	292	291	323	331	36
37	INTERNATIONAL	All End Uses	12	12	11	12	13	37
38	TOTAL TRANSPORTATION & EXCHANGE		1,568	1,203	1,359	1,387	1,425	38
	CURTAILMENT (RETAIL & WHOLESALE)							
39		Core	0	0	0	0	0	39
40		Noncore	0	0	0	0	0	40
41		TOTAL - Curtailment	0	0	0	0	0	41

NOTES:

	2002	2003	2004	2005	2006
1/ Figures exclude pipeline bypass load losses of to non-jurisdictional gas suppliers.	403	470	475	479	485
2/ Excludes own-source gas supply of gas procurement by the City of Long Beach	11	11	11	11	11

3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.

SOUTHERN CALIFORNIA GAS COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED YEARS 2007 THRU 2022

HOT TEMPERATURE YEAR

LINE	FIRM CAPACITY AVAILABLE		2007	2010	2015	2020	2022	LINE
1	California Source Gas		510	510	510	510	510	1
	Out-of-State Gas							
2	Mojave (Hector Road)		50	50	50	50	50	2
3	El Paso Natural Gas Co. (Blythe)		1,210	1,210	1,210	1,210	1,210	3
4	El Paso Natural Gas Co. (Topock)		540	540	540	540	540	4
5	Transwestern Pipeline Co. (No. Needles)		800	800	800	800	800	5
6	Kern-Mojave, PG&E, Oxy (Wheeler Ridge)		765	765	765	765	765	6
7	Total Out-of-State Gas		3,365	3,365	3,365	3,365	3,365	7
8	TOTAL CAPACITY AVAILABLE /1		3,875	3,875	3,875	3,875	3,875	8
	GAS SUPPLY TAKEN							
9	California Source Gas		510	510	510	510	510	9
10	Out-of-State		1,952	2,030	2,144	2,296	2,363	10
11	TOTAL SUPPLY TAKEN		2,462	2,540	2,654	2,806	2,873	11
12	Net Underground Storage Withdrawal		0	0	0	0	0	12
13	TOTAL THROUGHPUT 1/, 2/		2,462	2,540	2,654	2,806	2,873	13
	REQUIREMENTS FORECAST BY END-USE 3/							
14	CORE	Residential	641	661	699	742	761	14
15		Commercial	220	226	232	238	238	15
16		Industrial	73	72	69	67	66	16
17		NGV	25	30	40	50	55	17
18		Subtotal-CORE	959	989	1,040	1,097	1,120	18
19	NONCORE	Commercial	53	54	55	56	56	19
20		Industrial	298	286	274	270	269	20
21		EOR Steaming	28	21	21	21	21	21
22		Electric Generation (EG)	723	780	762	830	861	22
23		Subtotal-NONCORE	1,102	1,141	1,112	1,177	1,207	23
24	WHOLESALE	Core	169	166	177	186	191	24
25		Noncore Excl. EG	42	42	42	42	42	25
26		Electric Generation (EG)	125	133	205	220	227	26
27		Subtotal-WHOLESALE	336	341	424	448	460	27
28	INTERNATIONAL	DGN (Mexicali)	13	15	22	25	25	28
29		Co. Use & LUAF	52	54	56	59	61	29
30	SYSTEM TOTAL THROUGHPUT /1		2,462	2,540	2,654	2,806	2,873	30
	TRANSPORTATION AND EXCHANGE							
31	CORE	All End Uses	22	23	23	24	24	31
32	NONCORE	Commercial/Industrial	351	340	329	325	324	32
33		EOR Steaming	28	21	21	21	21	33
34		Electric Generation (EG)	723	780	762	830	861	34
35		Subtotal-RETAIL	1,124	1,164	1,135	1,200	1,230	35
36	WHOLESALE	All End Uses	336	341	424	448	460	36
37	INTERNATIONAL	All End Uses	13	15	22	25	25	37
38	TOTAL TRANSPORTATION & EXCHANGE		1,473	1,520	1,581	1,673	1,715	38
	CURTAILMENT (RETAIL & WHOLESALE)							
39		Core	0	0	0	0	0	39
40		Noncore	0	0	0	0	0	40
41		TOTAL - Curtailment	0	0	0	0	0	41

NOTES:

	2007	2010	2015	2020	2022
1/ Figures exclude pipeline bypass load losses of to non-jurisdictional gas suppliers.	493	550	556	549	547
2/ Excludes own-source gas supply of gas procurement by the City of Long Beach	10	10	10	10	10

3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.