

SOUTHERN CALIFORNIA GAS COMPANY SUMMER 2025 TECHNICAL ASSESSMENT

April 11, 2025

Executive Summary

Southern California Gas Company (SoCalGas) has prepared this technical assessment to provide a forecasted outlook of system reliability during the coming summer season (April 1, 2025 through October 31, 2025), assess the preparedness of the system for the following winter season, and analyze the associated risks to energy reliability during these periods. For this assessment, SoCalGas analyzed the following: (1) pipeline capacity available to bring gas into the system, (2) the forecasted summer demand, (3) available system capacity to serve demand, and (4) the forecasted storage inventory for the following winter season. In performing this analysis, this assessment takes into consideration various existing and potential outages and the operating restrictions on gas transmission and storage assets.

SoCalGas finds that it has sufficient capacity to serve the forecasted summer peak demand of 3.240 billion cubic feet per day (BCFD), assuming customers utilize the available receipt capacity to deliver supply to the SoCalGas system and no further infrastructure outages occur than those considered in this assessment.

SoCalGas also performed a preliminary analysis of projected storage injection and resulting inventory through the summer to prepare for the 2025-26 winter season. Using the 2024 California Gas Report (CGR), the projected SoCalGas capacity to receive pipeline supplies, and an estimate of storage field inventory levels on April 1, SoCalGas finds that the current maximum system storage inventory level of 118.8 billion cubic feet (BCF)¹ can be reached by November 1. As such, SoCalGas does not foresee difficulty meeting the November total month-end minimum storage inventory level needed to maintain reliable service to core and critical noncore customers during the following winter season as specified in the SoCalGas Winter 2024-25 Technical Assessment.

¹ The total capacity of 119.5 BCF currently authorized by the CPUC may be unachievable due to operational and/or other regulatory requirements.



System Reliability Assessment of Summer Months

SoCalGas does not have a summer design standard. This is partly because the SoCalGas system is a winter peaking system and service to the core customers is not at risk in the summer season. Although noncore customers are fully interruptible pursuant to the CPUC-approved SoCalGas Tariff Rule No. 23 and San Diego Gas & Electric Company (SDG&E) Gas Rule No. 14, the CPUC and SoCalGas/SDG&E have recognized that supply and operating constraints placed upon the electric grid balancing authorities² in the utilities' service territory can place electric reliability at risk, and understand the importance of working to maintain service to local electric generation (EG) customers in Southern California.

In assessing reliability for the upcoming summer months, SoCalGas analyzed the supply outlook for the system and the peak demand forecast, which are addressed in turn, below.

Supply Outlook, Available Flowing Pipeline Supplies and Storage Withdrawal Capacities

The SoCalGas/SDG&E gas transmission system has a current capability to receive up to 3.775 BCFD of flowing supply on a firm basis. This means if customers deliver that much supply to the SoCalGas system, and there is sufficient customer demand, SoCalGas can redeliver that gas supply to customers.³ Supplies delivered to the SoCalGas/SDG&E system, however, do not reach these available receipt levels for a variety of reasons, including that customers may choose to use SoCalGas's balancing service rather than deliver supplies, California production has declined over time, system demand frequently does not require maximum delivery of supply, or flowing supplies may not be available due to weather patterns or maintenance impacting the interstate pipelines upstream of the SoCalGas system. Additionally, planned and unplanned pipeline outages on the SoCalGas/SDG&E system can further reduce available receipt capacity.

To calculate the capacity of the system to serve customer demand this season, assumptions must be made regarding the available supply. The peak summer demand period is expected to occur after July. During this timeframe, Line 3000 is assumed to be out of service for remediation and sections of Lines 4000 and 4002 are assumed to be operating at reduced pressure, resulting in a Northern Zone receipt capacity of 935 million cubic feet per day (MMcfd). In the Southern Zone, capacity at Blythe is reduced to 940 MMcfd to inspect Line 5000. Lastly, the Wheeler Zone is assumed to have its full capacity of 765 MMcfd since no outages are anticipated on Line 225.

In addition to the outages and restrictions discussed above, SoCalGas's analysis took into consideration that customers do not typically fully balance their supply with their demand given SoCalGas's balancing rules. Reviewing scheduled deliveries shows that customers have historically used on average 85% of available interstate receipt capacity. In situations with significant infrastructure outages and limited storage supply, however, SoCalGas would require tighter balancing and expect to see higher capacity utilization as a result.

² California Independent System Operator (CAISO), Los Angeles Department of Water and Power (LADWP), and Imperial Irrigation District (IID).

³ Customer demand may also be required to be in a specific location, such as on the Southern System in order to receive the full receipt capacity of 1,210 MMcfd at Blythe and Otay Mesa.



SUMMER 2025 TECHNICAL ASSESSMENT

Given these considerations, and multiple infrastructure outages, for the purpose of this peak day capacity calculation, SoCalGas has adopted a peak day utilization assumption of 90% for all supplies except for local California production, which is assumed at the current production rate.

Using the scenario information outlined above, the resulting receipt capacities during the peak summer period are detailed below in Table 1.

Receipt Point	Capacity/Supply (MMCFD)	Details				
North Needles	800	Northern Zone capacity limited to 935 MMcfd due to pressure				
Topock	0	reduction on Lines 4000 and 4002. No receipt capacity from Topock due to Line 3000 remediation. Line 3000 remediation does				
Kramer Junction	135	not further impact zone capacity.				
Blythe	940	Line 5000 inspection.				
Otay Mesa	0	Supplies at Otay Mesa are typically zero.				
Wheeler Ridge & Kern River Station	765					
California Production	70	Current level of local California production.				
Total	2,710					
Assume 90% pipeline utilization	2,446	90% utilization except at California Production.				

Table 1. Available Flowing Pipeline Supplies

While SoCalGas has factored in the anticipated operating restrictions on its transmission pipelines, unexpected outages on the transmission system, such as those resulting from third-party damage and safety-related conditions, may still occur throughout the summer season, further reducing available receipt capacity beyond the levels projected in this assessment.

For this assessment, based on current storage field withdrawal capacities, the supplies assumed in Table 1, and the resultant inventory levels expected during the peak summer demand period, SoCalGas assumed that 2.445 BCFD of storage withdrawal capacity would be available during the peak summer season. These capacities are dependent on having sufficient inventory levels in storage to sustain these withdrawal rates.



Peak Summer Demand Forecast and System Capacity Calculation

For the upcoming summer season, the forecasted level of total system demand is approximately 3.240 BCFD as shown in Table 2, itemized by customer type as:

Customer Type	Summer Demand (BCFD)		
Core	0.737		
Noncore, Non-EG	0.712		
Noncore, EG	1.791		
Total	3.240		

 Table 2.
 Summer 2025 Forecasted Customer Demand

Using the values reflected in Table 2, SoCalGas analyzed how much of this forecasted demand the system can sustain using hydraulic simulations of its gas transmission and storage system under the pipeline supply scenario described in Table 1.

Based on the forecasted summer 2025 demand and system capacity, SoCalGas would be able to meet the peak day demand. SoCalGas does not have a detailed demand forecast for the summer season greater than the peak day demand of 3.240 BCFD, and the location and level of EG demand impacts the system capacity. However, given the level of available pipeline and withdrawal capacity, SoCalGas has capacity to serve a higher level of EG demand than shown in Table 2, should it develop.⁴

Note that the system capacity is typically less than the sum of the available pipeline and storage supplies as a result of system hydraulics. Customer demand is not constant over the course of the day, and gas supplies from interstate pipelines travel slowly across the pipeline network at a constant rate. During those times of the day when demand exceeds the pipeline supply, SoCalGas would use supplies from its storage fields to make up the difference. When customer demand drops off, SoCalGas would reduce the amount of supply withdrawn from its storage fields or even inject excess supply into them if system conditions permit. Because storage supplies are not used at a constant rate for the entire day, the system capacity is typically less than the sum of the available pipeline and storage supplies. Additionally, the increasing ramping needs of the EG demand pattern represented by the "duck curve" presents operational challenges with gas supply and may impact the need and frequency of supplies from our storage fields.

⁴ The highest summer EG demand in the last ten years was 1.87 BCFD and occurred on September 9, 2015.



System Reliability Assessment for 2025-2026 Winter

While the summer season is a peak EG demand period, it is also when SoCalGas prepares for the upcoming winter season by injecting gas supply into storage for the following winter season.⁵

Using the public demand forecast data published in the 2024 CGR workpapers for the summer season (April through October 2025, average temperature with base hydro condition), storage inventory levels on April 10 (75.7 BCF), and estimates for injection capacity at each field, SoCalGas performed a mass balance for the summer season examining the ability to fill storage.

The available pipeline supply used in the mass balance reflects foreseeable outages due to in-line inspections, hydrotests, and other maintenance and compliance work over the summer months. These supply assumptions consider the most reasonable outage for potential summer impacts and are assumed to further reduce receipt capacity and available supplies due to extended outage periods or pressure reductions.

The mass balance assessments assumed receipt point utilizations depending upon which assets are expected to be in service. SoCalGas analyzed different levels of receipt point utilization depending on the forecasted available supply. These utilization factors differ from those used in assessing the peak day capacities because the mass balance is a seasonal assessment, spanning all 214 days of the summer season. SoCalGas performed a mass balance using the 2024 CGR demand forecast under an average temperature condition with base hydro where supplies are at 85% utilization if the total receipt capacity is over 3 BCFD for that month, and at 90% utilization if the total receipt capacity is under 3 BCFD for that month. Storage injection (INJ) and excess supply values are positive and storage withdrawal (WD) and supply shortfall values are negative. However, as system-wide injection capacity is diminished, it may become increasingly difficult to receive high levels of pipeline supply consistently through the summer season. This mass balance is presented below in Table 3.

⁵ SoCalGas Operations does not purchase and store any gas supply for the use of any customer. SoCalGas's Gas Acquisition department purchases supplies for storage only for the SoCalGas retail core and the SDG&E wholesale core market segment, excluding those core customers served by Core Transport Agents as part of a Core Aggregation Transportation program (CAT) and other wholesale providers.



SUMMER 2025 TECHNICAL ASSESSMENT

	APR	MAY	JUN	JUL	AUG	SEP	ОСТ
Supply Utilization	85%	90%	90%	90%	90%	90%	90%
Pipeline Supply	77,873	67,673	70,485	79,531	82,739	74,535	69,905
CGR Demand	64,409	56,830	53,390	66,714	72,622	61,492	64,256
Storage INJ (+) / WD (-)	8,860	8,266	15,731	8,611	1,572	0	0
Excess (+) / Short (-)	4,604	2,617	1,364	4,205	8,545	13,043	5,649
Month End Inv. (BCF)	84.66	92.89	108.62	117.23	118.80	118.80	118.80

Table 3. 2025 Monthly Storage Assessment (CGR Average Temperature with Base Hydro) (MMCF)

SoCalGas expects to have sufficient capacity and supply to fill its storage fields by the end of the summer season, and store more than the minimum level of 47.2 BCF required for core reliability specified in the SoCalGas Winter 2024-25 Technical Assessment. Moreover, this calculation shows excess pipeline supply of approximately 40 BCF over the summer season based upon the current storage inventory limitations. The mass balance assessment assumes no supplies at Otay Mesa as they are typically zero.

Conclusion

This technical assessment provides forecasts of the upcoming summer and winter seasons. For the upcoming summer season, SoCalGas estimates that it would be able to meet the forecasted peak day demand. SoCalGas also expects to be able to fill its storage inventory in preparation for the winter 2025-26 season.