



Southern California Gas Company's and San Diego Gas & Electric Company's

Comments by:

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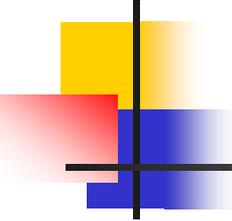
Natural Gas Working Group

Sacramento, California

June 4, 2009

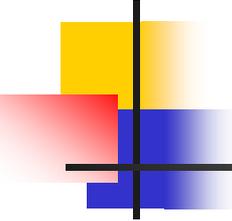
North American LNG deliveries are forecast to increase to 1.974 BCF/d in 2009 compared to 1.288 BCF/d in 2008

LNG Supply Forecast					
		(MMcf/d)			
<u>Year</u>	<u>US</u>	<u>Mexico East Coast</u>	<u>Mexico West Coast</u>	<u>Mexico Total</u>	<u>North America Total</u>
2001	656	0	0	0	656
2002	627	0	0	0	627
2003	1,388	0	0	0	1,388
2004	1,781	0	0	0	1,781
2005	1,732	0	0	0	1,732
2006	1,598	38	0	38	1,637
2007	2,113	247	0	247	2,360
2008	961	327	0	327	1,288
2009	1,529	332	113	445	1,974
2010	1,813	446	250	696	2,508
	Source: PIRA April 2009				



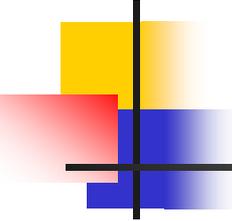
LNG Issues

- **What factors help to determine landed LNG prices in the United States, Europe and Asia?**
 - Internationally LNG prices are tied to oil prices with lag adjustments.
 - LNG producing countries will try to market their product to take advantage of higher priced international markets.
 - Currently worldwide demand for LNG has fallen due to the decline in economic output making the US the market of last resort.
 - LNG storage is limited internationally while the US has 3.79 Tcf of gas storage capacity available which may make US markets desirable for LNG shippers looking for price arbitrage opportunities.
 - In addition, significant new LNG liquefaction capacity equivalent to 6.24 Bcf/d is coming on line in 2009 from Russia, Qatar, Indonesia and Yemen and potentially another 4 Bcf/d in 2011 from other countries adding to the near term supply glut.
 - Therefore, more LNG is forecast to be delivered to the US at prices competitive with domestic supplies in 2009 and 2010 most likely on the East and Gulf coasts of the US.
- **How much LNG could be available to U.S. importers given the large price differences between the United States, European and Asian markets?**
 - Currently the Asia-Europe to US gas price differential has narrowed as oil prices have dropped from \$140/Bbl to around \$65/Bbl making the US market more attractive.
 - Potentially 1 to 2 Bcf/d could be available to the US, most likely on the East and Gulf coasts of the US, in 2009 and as much as 6 Bcf/d in 2011 if the global economy is slow to recover.
- **What other non-economic factors could drive the development of LNG?**
 - In several oil producing countries associated gas is still being flared making LNG liquefaction an attractive option for creating additional revenues for host countries and reducing methane emissions, which would provide benefits in the fight against Global Warming.



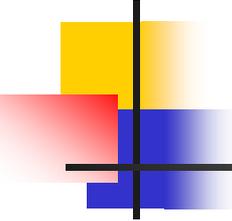
LNG Issues

- **What is the relative balance of liquefaction and re-gasification facilities and LNG tankers available to transport the gas?**
 - Liquefaction capacity, LNG tankers and re-gasification facilities are all expanding at a rapid rate in general lock step with each other internationally.
 - In the US, re-gasification facilities have been ahead of the curve awaiting LNG liquefaction capacity to catch up.
- **What additional LNG terminals may be constructed on the West Coast?**
 - Currently the Oregon Jordan Cove LNG project seems to be moving along while most other proposals in California and Mexico have been dropped or are moving at a slower pace.
 - It is not clear what impact current market conditions and recent U.S. unconventional reserve discoveries will have on this project in the future.
 - This project is encountering significant local opposition.
 - **An LNG export terminal is being proposed at Kitimat, British Columbia, Canada**
- **Could natural gas from shale formations displace the importation of LNG into the United States and Canada?**
 - Shale gas and LNG will present additional competitive alternatives that are available to natural gas consumers and each will discipline the prices of the other.



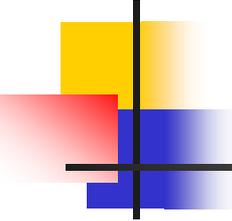
Natural Gas Pipelines and Infrastructure Issues

- **Could natural gas demand growth in upstream markets further limit California's supply access via existing infrastructure?**
 - Yes, it is possible that East of California demand could reduce the natural gas volumes available to California, but this would also require that they exceed the capacity rights they have on interstate pipeline facilities.
 - If this were to occur, the prospect of potential LNG deliveries would provide California with reliability and price protection.
 - Gas demand in California is forecast to be relatively flat due to energy efficiency savings and new renewable electric supply capacity.
- **Will winter and summer natural gas peak demand in the United States continue to grow at current rates?**
 - Winter gas demand peaks are moderating with increased emphasis on energy efficiency and higher gas prices.
 - Summer peak gas demand for power generation is moderating due to increased availability of renewable sources of electric energy supplies.
- **How could daily natural gas demand change as renewable technologies are added to the electric resource mix?**
 - Daily gas demand will probably become more volatile as renewable sources; such as, wind and solar, are added to the electricity supply mix requiring gas-fired peaking units to be brought on line when renewable supplies drop.
- **Can both an Oregon LNG terminal and a Rockies pipeline that add natural gas supply into PG&E at Malin be constructed?**
 - Oregon-based LNG and Rockies supplies at Malin would have to compete on a price basis to enter the California market.
 - More supply at Malin will help to moderate gas prices in California.



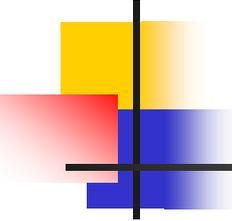
Natural Gas Pipelines and Infrastructure Issues

- **What additional natural gas storage might be constructed or expanded in California?**
 - SoCalGas is planning to expand gas storage in Southern California by 7 BCF over the next 6 years as part of a settlement in the 2009 BCAP Phase One.
 - **Tricor Ten Section Hub** is holding a non-binding open season for a 22.4 BCF working gas capacity facility with a 1 BCF/day withdrawal and 800 MMcfd injection capacity rate located 10 miles southwest of Bakersfield , California.
- **How much and for how long could Rockies natural gas be shipped east of the Rockies?**
 - Rockies supplies are adequate to provide 1 to 2 Bcf/d of supplies to the US Midwest and east for the next 20 years.
 - **Rockies Express Pipeline** (REX - by Kinder Morgan, Sempra Pipeline, Connoco Phillips): 1.8 Bcf of capacity and 1,679-mile natural gas pipeline system from Rio Blanco County, Colorado, to Monroe County, Ohio to connect supplies from the Rockies to demand centers in the northeast. It is composed of 3 segments: Entrega in Colorado and Wyoming, West from Wyoming to Missouri, and East from Missouri to Ohio. The project is currently on the third segment and gas is expected to be flowing to Illinois by April 2009 and continue on to just a few miles shy of West Virginia state line.
- **Could shale supply of natural gas displace Rockies and southwest-produced gas that currently flows to the east part of the country so that such gas becomes available to California?**
 - Yes, with the expansion of pipeline capacities throughout the US gas supplies will become more fungible and competitive reducing the current price differentials between the eastern and western US.
- **What role would LNG from Costa Azul and possibly from a new facility off the southern California coast play in California's future natural gas supply mix?**
 - The availability of Costa Azul-sourced gas will add to Mexico's, California's and the US Southwest's supply mix and thereby increase reliability and moderate gas prices; this is, in effect, free price and reliability insurance for California natural gas consumers.
 - New LNG facilities, if they are built off So. California, would also help moderate gas prices in the Southwest US and Mexico.



Construction of new Gas Transmission Lines in the West

- **What additional pipelines bringing gas from the Rockies can be constructed to the West Coast?**
 - **Phoenix Expansion** (by Transwestern Pipeline): Additional 0.5 Bcf/Day of year-round natural gas pipeline transportation capacity to serve the central and southern Arizona markets. Service commenced March 1, 2009.
 - **Ruby Pipeline** (by El Paso Pipeline): 1.5 Bcf/Day of initial capacity beginning at Opal Hub in Wyoming and terminating at Malin, Oregon. Expected service date is March 2011.
 - **Sunstone Pipeline** (by Williams Gas Pipeline, TransCanada Pipeline, Sempra Pipeline): 1.2 Bcf/Day of capacity beginning at Opal, Wyoming to Stanfield, Oregon. Expected service date is 2011.
 - **Bronco Pipeline** (by Spectra Energy): 1.0 Bcf/Day of capacity beginning at Wyoming to Malin, Oregon. Expected service date is 2011.
 - **Kern River's 2010 expansion** construction started and is expected to add 145 MDth/Day capacity in 2010 for California deliveries.
 - **Kern River's Apex expansion** is in planning and expected to add 266 MDth/Day capacity in 2011 to Las Vegas.
 - **Kern River announced an open season** to add potentially 200 MDth/Day to Arvin, CA, and additional 100 MDth/Day to new/existing CA delivery points upstream of Arvin.
 - **Kern River** added 400 MDth/Day backhaul capacity from CA to NV is now in active use to move El Paso gas to Nevada Power.
 - **PG&E** announced an open season for the Baja Path near Arvin for CA deliveries.



Gas Supplies and pipeline delivery capacity to California are more than adequate to meet even high demand periods of cold winters and low hydro conditions.

SOUTHERN CALIFORNIA

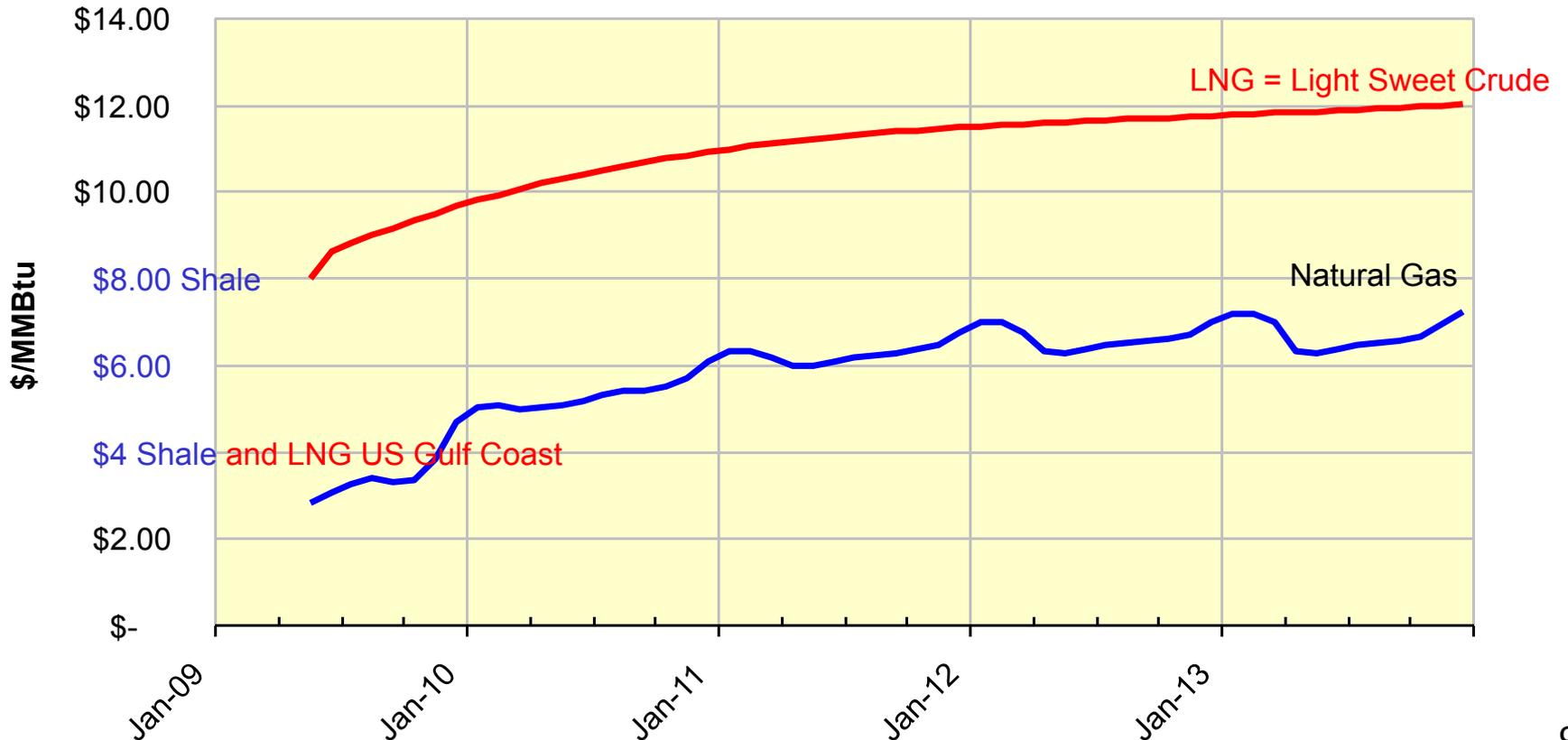
Upstream Capacity to Southern California

Pipeline	Upstream Capacity (MMcf/d)
El Paso at Blythe	1,410
El Paso at Topock	540
Transwestern at Needles	1,150
PG&E at Kern River	650 (1)
Southern Trails at Needles	80
Kern/ Mojave at Wheeler Ridge	885
Kern at Kramer Junction	500
Occidental at Wheeler Ridge	150
California Production	310
TGN at Otay Mesa	400
North Baja at Blythe	<u>1,200</u>
Total Potential Supplies	<u>7,275</u>

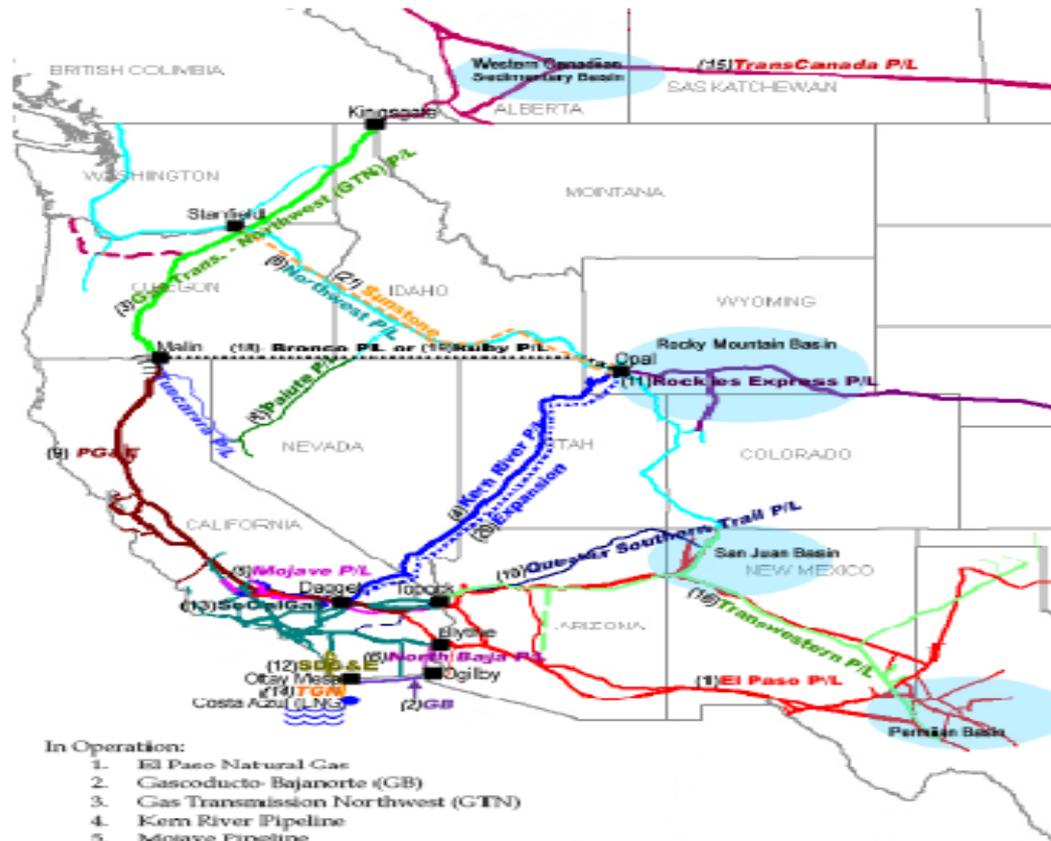
(1) Estimate of physical capacity.

Shale gas can be produced in the \$4.50 to \$7.50/MMbtu range depending on location. LNG delivered cost on the US Gulf Coast is currently \$3.50/MMbtu and \$4.50/MMbtu to the west coast of Mexico with costs for new plants in the \$6.50/MMbtu range. LNG is priced internationally based on crude oil prices currently in the \$8 to \$10/MMbtu range. (Source: Borgstrom and Foti, *Oil and Gas Journal* March 9, 2009)

**NYMEX Futures: Natural Gas at SoCalGas Border vs. Crude Oil
on April 28, 2009**



Western North American Natural Gas Pipelines

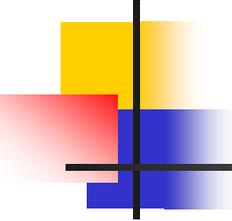


In Operation:

1. El Paso Natural Gas
2. Gasoducto- Bajanorte (GB)
3. Gas Transmission Northwest (GTN)
4. Kern River Pipeline
5. Mojave Pipeline
6. North Baja Pipeline
7. Northwest Pipeline
8. Palute Pipeline
9. Pacific Gas Electric Company
10. Questar Southern Trail Pipeline
11. Rockies Express (REX)
12. San Diego Gas & Electric Company
13. Southern California Gas Company
14. Transportadora de Gas Natural (TGN)
15. TransCanada Pipeline
16. Transwestern Pipeline
17. Tuscarora Pipeline

Proposed:

18. Bronco Pipeline
19. Ruby Pipeline
20. Kern River Expansion
21. Sunstone Pipeline

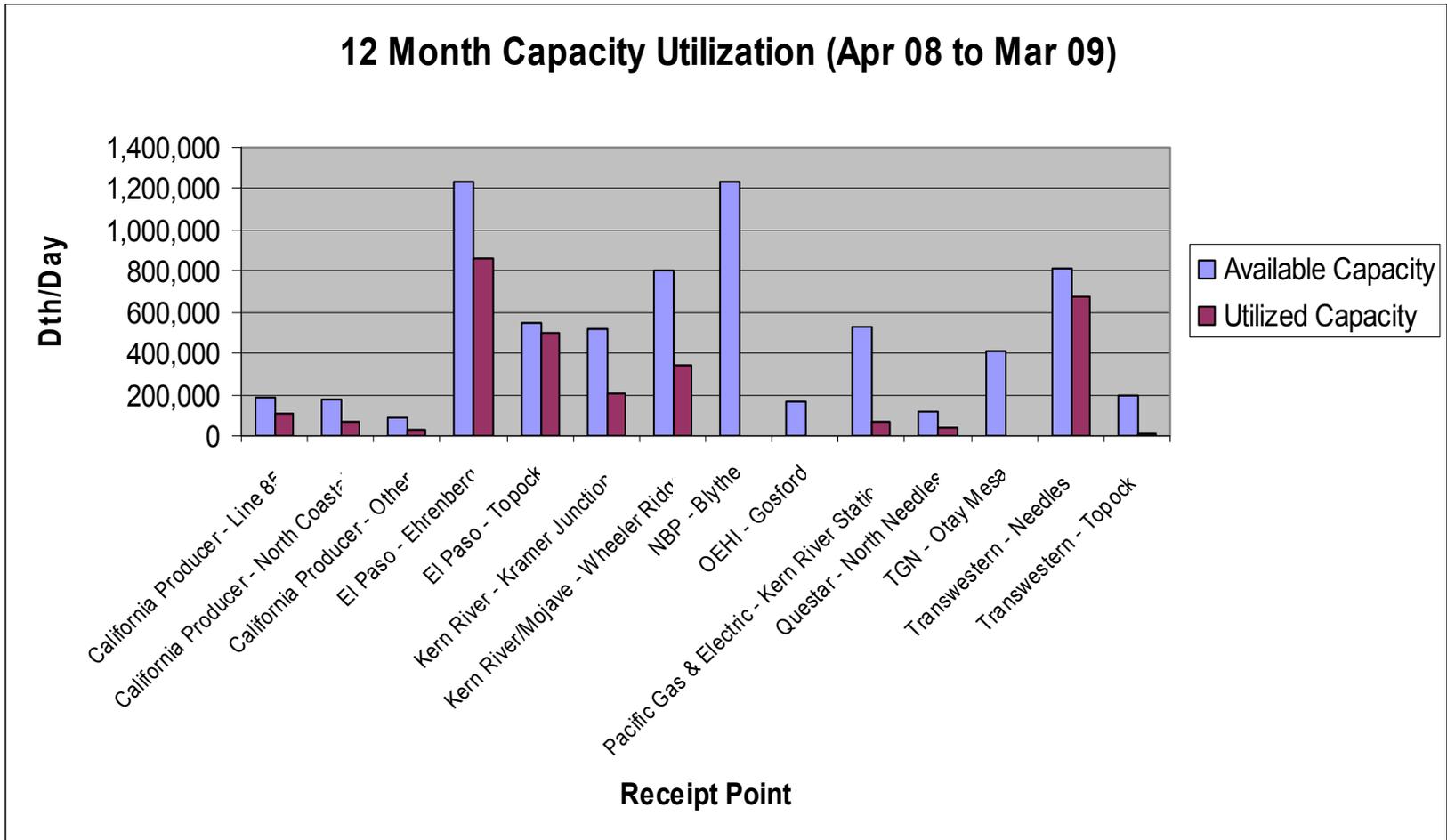


SoCalGas has adequate pipeline receipt capacity to meet cold year demand and low hydro conditions.

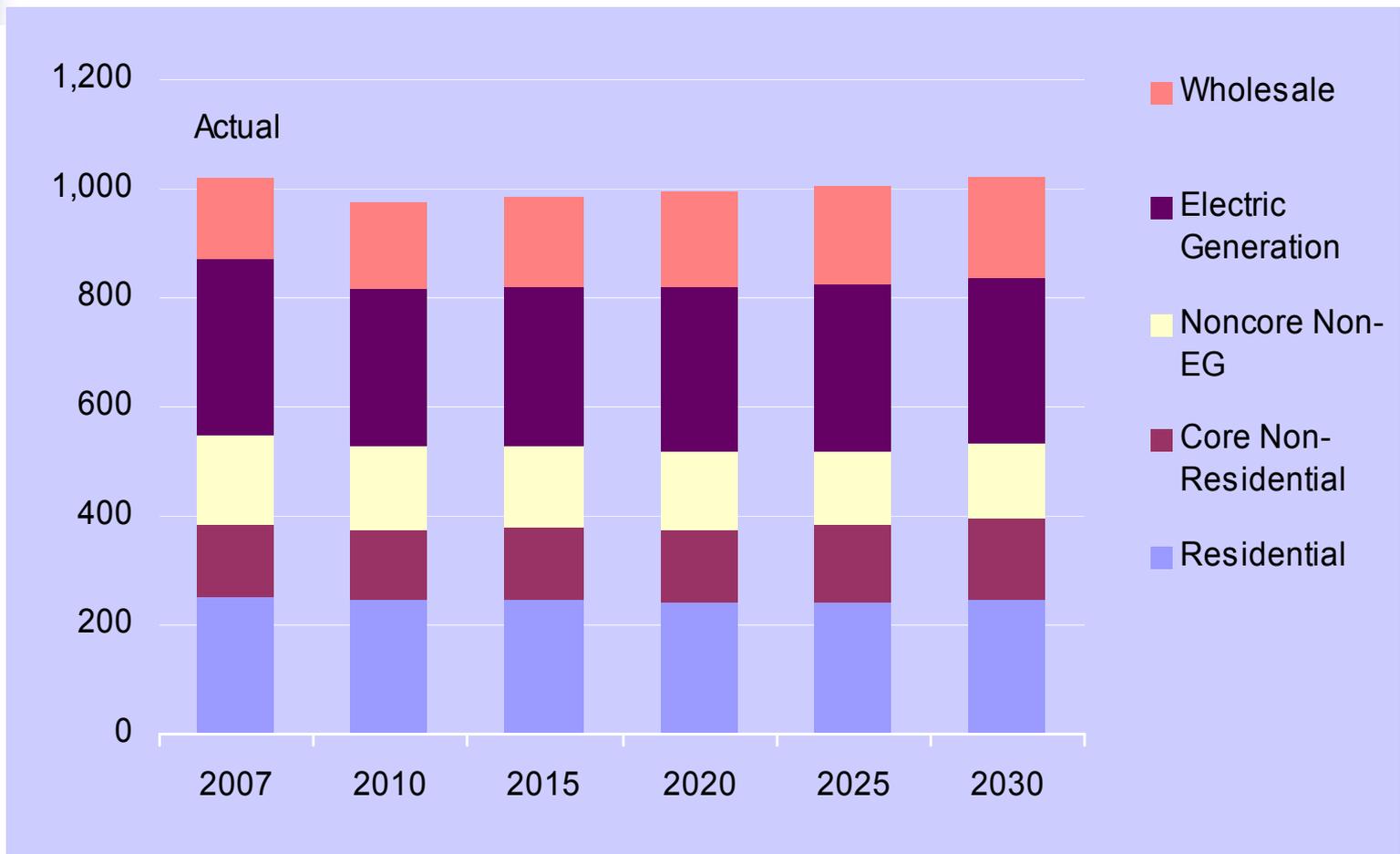
SoCalGas/SDG&E Current Firm Receipt Capacity

Transmission Zone	Total Transmission Zone Firm Access (MMcf/d)	Specific Point of Access ⁽¹⁾ (Limitations)⁽²⁾ (MMcf/d)
Southern	1,210	EPN Ehrenberg (1,200) TGN Otay Mesa (400) NEP Blythe (1,200)
Northern	1,590	EPN Topock (540) TW North Needles (800) QST North Needles (120) KR Kramer Junction (500)
Wheeler Ridge	765	KR/MP Wheeler Ridge (765) PG&E Kern River Station (520) OEHI Gosford (150)
Line 85	160	California Supply
Coastal	150	California Supply
Other	<u>N/A</u>	California Supply
Total	3,875	

SoCalGas has adequate pipeline receipt capacity to meet cold year demand and low hydro conditions. (System-wide daily average utilization = 66% of capacity)



SoCalGas' Demand Forecast is relatively flat over the next 20 years



California gas demand is forecast to grow at a low rate over the next 20 years due to extensive energy efficiency investments and renewable sources of electricity generation (*California Gas Report 2008*).

STATEWIDE TOTAL SUPPLY SOURCES-TAKEN
Average Temperature and Normal Hydro Year
MMcf/Day

Utility	2008	2010	2015	2020	2025	2030
<i>Northern California</i>						
California Sources ⁽¹⁾	158	158	158	158	158	158
Out-of-State	2,131	2,172	2,064	2,181	2,144	2,135
Northern California Total	2,289	2,330	2,222	2,339	2,302	2,293
<i>Southern California</i>						
California Sources ⁽²⁾	310	310	310	310	310	310
Out-of-State	2,384	2,286	2,314	2,329	2,355	2,399
Southern California Total	2,694	2,596	2,624	2,639	2,665	2,709
Utility Total	4,983	4,926	4,846	4,978	4,968	5,002
Non-Utility Served Load ⁽³⁾	1,471	1,438	1,454	1,479	1,498	1,517
Statewide Supply Sources Total	6,454	6,363	6,299	6,457	6,465	6,518

Notes:

- (1) Includes utility purchases and exchange/transport gas.
 - (2) Includes utility purchases and exchange/transport gas and City of Long Beach "own-source" gas.
 - (3) Consists of California production and deliveries by El Paso, Kern/Mojave and TGN pipelines to industrial, EOR Cogen, EOR steaming and powerplant customers, and gas uses at Blythe and Elk Hills powerplants.
- Source: CEC 2007 Natural Gas Market Assessment Report, Dec. 2007 (2008-2017 published in Table J-4).