



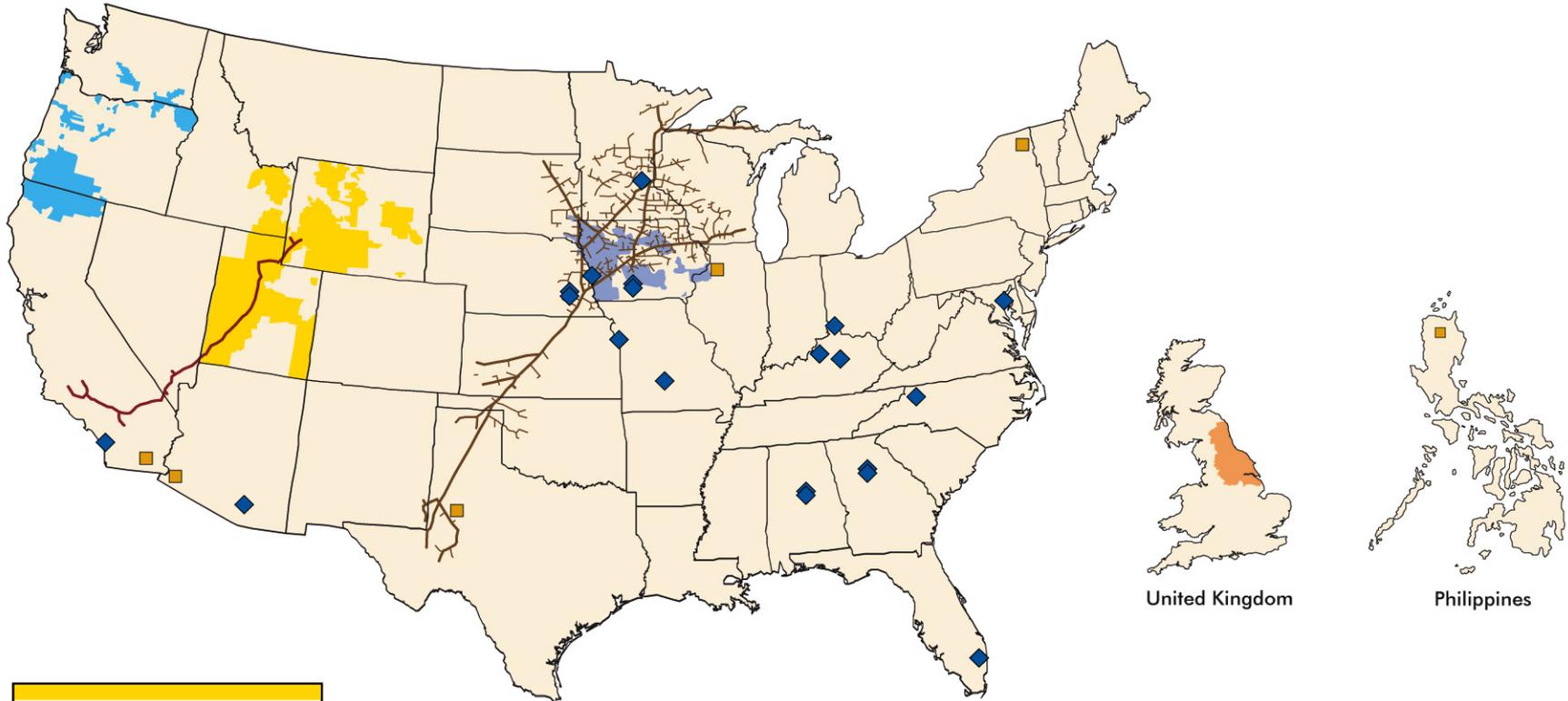
California Energy Commission

June 4, 2009 Workshop

Greg Snow

Kern River Gas Transmission Company

# MidAmerican Energy Holdings Company



**PACIFICORP**

**PACIFIC POWER**

Service Territory

**ROCKY MOUNTAIN POWER**

Service Territory

**PACIFICORP ENERGY**

**Northern Natural Gas**

Pipeline

**Kern River**  
GAS TRANSMISSION COMPANY

Pipeline

**MidAmerican ENERGY.**

Service Territory

**HomeServices of America, INC.**

A Berkshire Hathaway Affiliate

Operating Companies

**CE Electric UK**

Service Territory

**CALENERGY**

Generation

# Kern River Overview

- Based in Salt Lake City
- 1,680 miles of 36-inch and 42-inch pipe
- 1.76 Bcf/d design capacity
- 11 compressor stations
- Meter stations: 25 receipt and 67 delivery
- Access to Rocky Mountain basins
- Markets in Utah, Nevada, California and Arizona

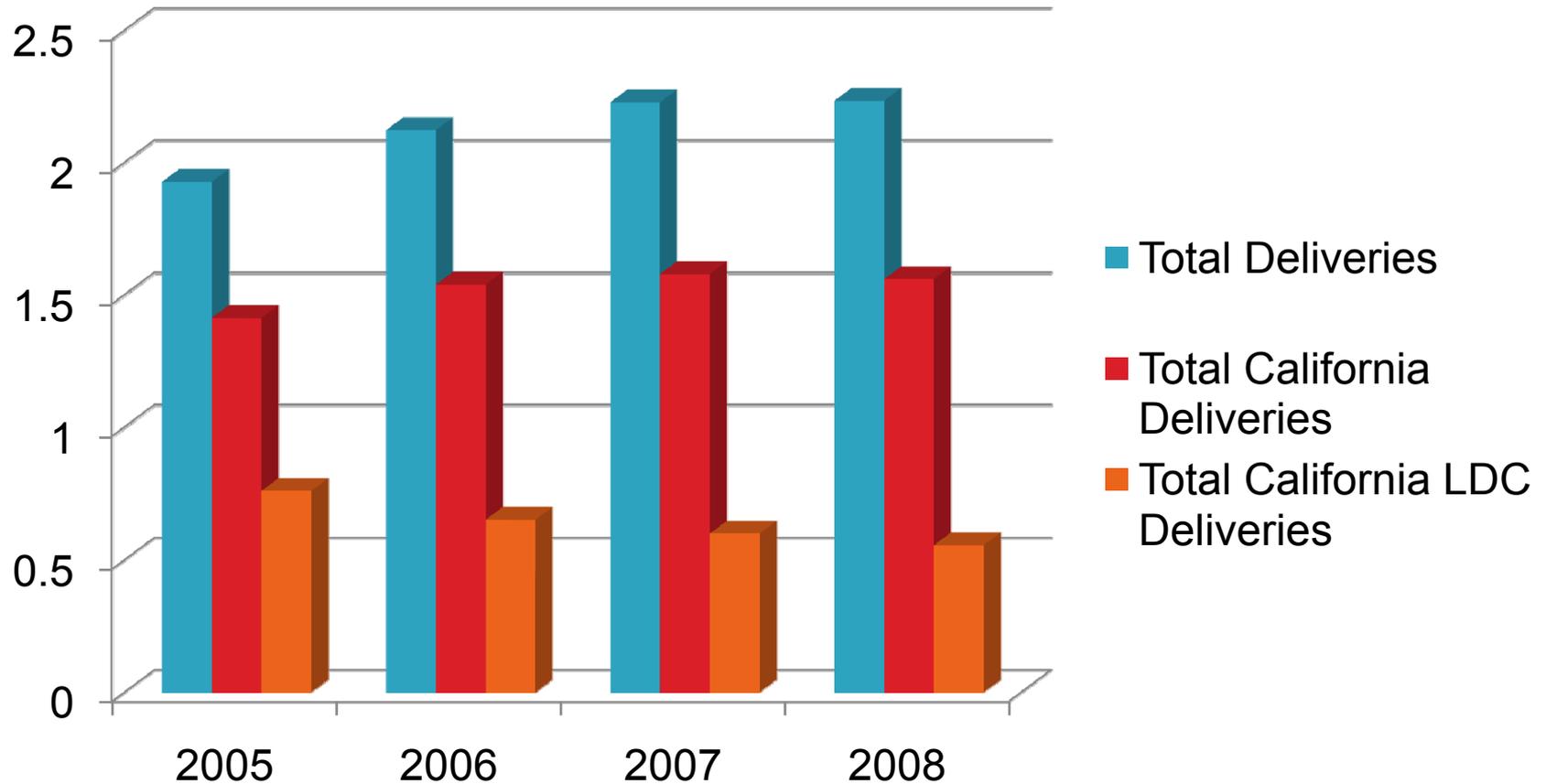


# 2008 Operational Overview

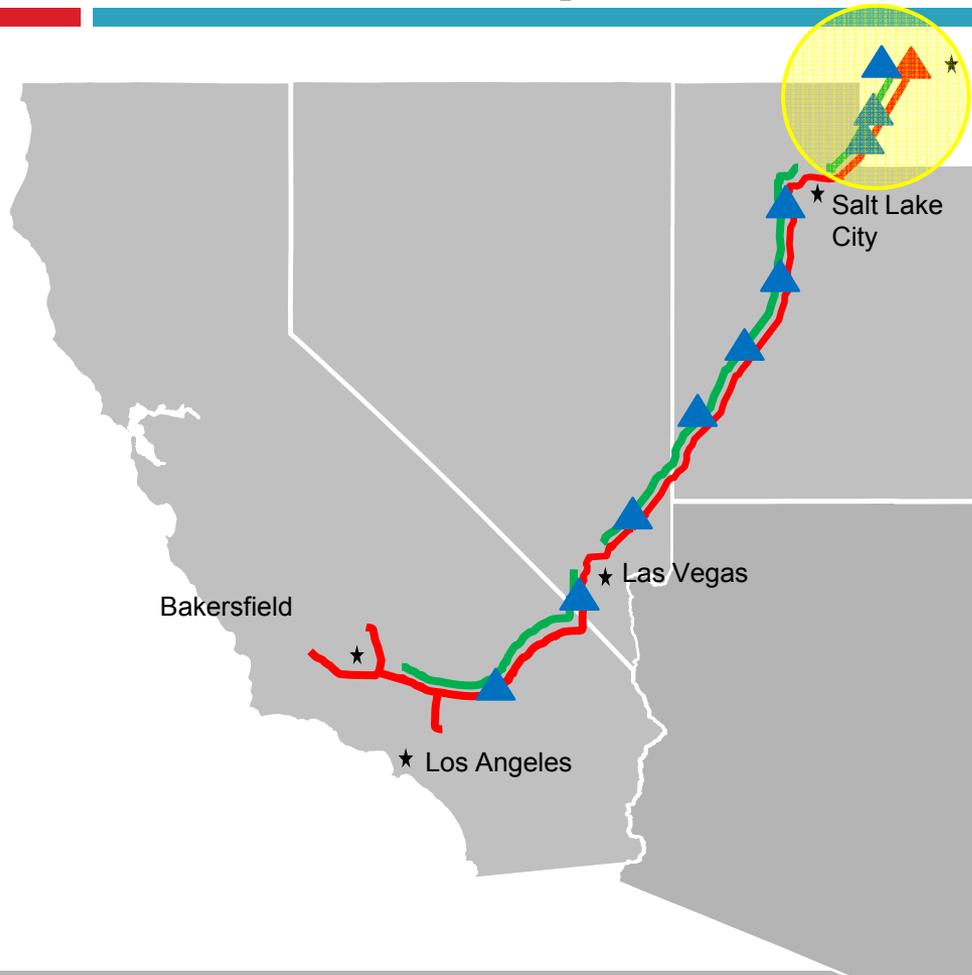
- Average 2008 throughput was 2.19 Bcf/d
- 2008 load factor was 124% of design capacity
- Ranked #1 in growth over last five years of 28 major interstate pipelines <sup>(1)</sup>
- Ranked #1 in operational efficiency of 28 major interstate pipelines <sup>(1)</sup>
- Ranked 1st out of 41 interstate pipelines in 2009 Mastio & Company pipeline survey for customer satisfaction

(1) Fosters Financial Reports

# System Deliveries (MDth)



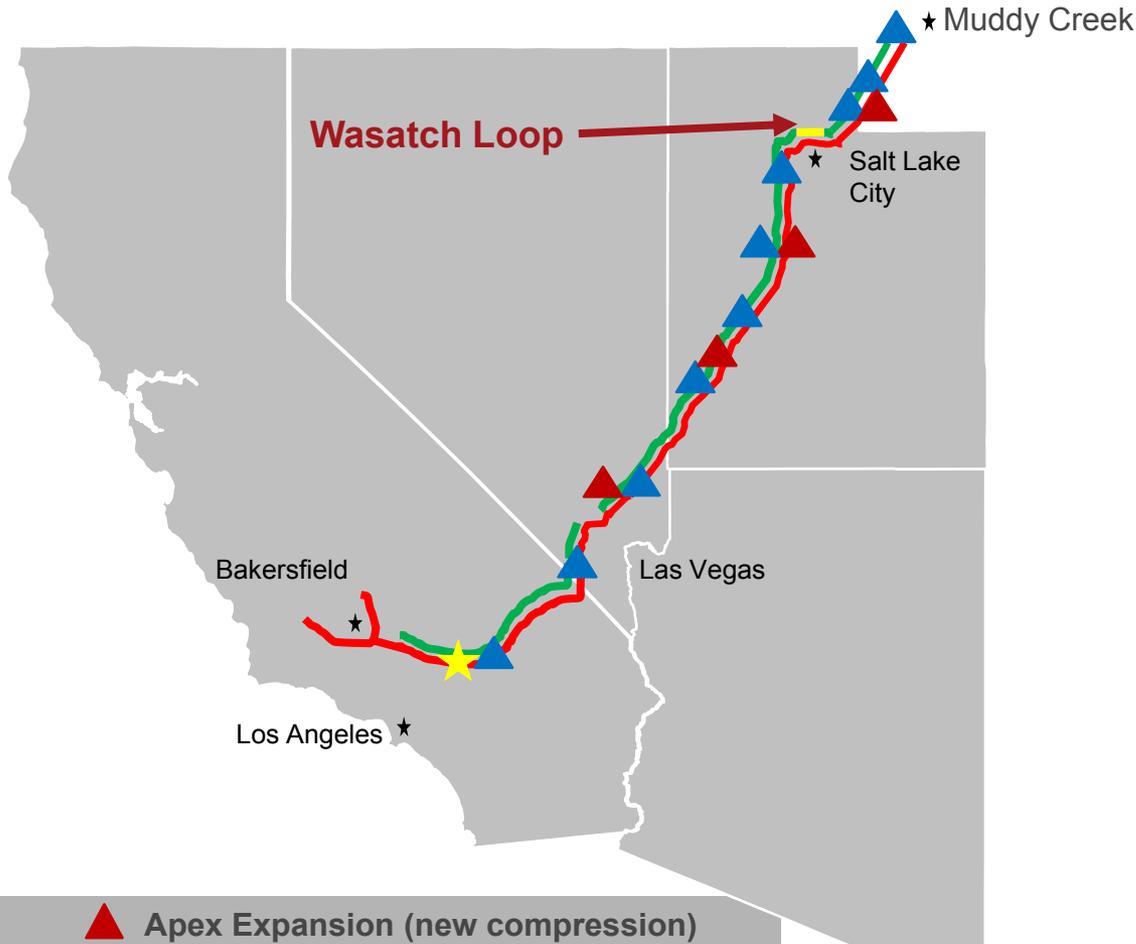
# 2010 Expansion Project



-  2010 Expansion Compressor (new compression)
-  Existing Compressors
-  Original Mainline
-  2003 Loop Line

- Economically expand by 145 MDth/d
  - Signed precedent agreements with 11 shippers
- Service to Southern California and Las Vegas
- \$62m capital cost
- Add 20,500 HP of incremental compression
- Increase maximum allowable operating pressure from 1,200 psig to 1,333 psig
- Submitted FERC application June 2008
- Anticipate FERC certificate approval by June 2009
- In-service: December 2009

# Apex Expansion Project



-  Apex Expansion (new compression)
-  Existing Compressors
-  New receipt point meter station
-  Original Mainline
-  2003 Loop Line

## Mainline Expansion

- Economically expand by 266 MDth/d
  - 20-year term contract
- Service to Las Vegas
- \$373m capital cost
- Close Wasatch Loop with 28 miles of 36-inch pipe
- Add 78,000 HP of new compression at four locations
- Submit application to FERC by December 2009
- Anticipate FERC certificate approval by December 2010
- In-service: November 1, 2011

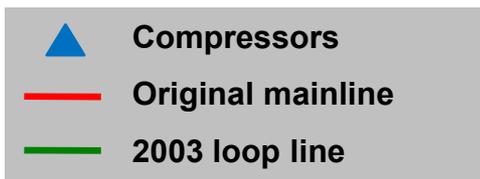
## Backhaul Capacity Contract

- New ability to receive 400 MDth/d of firm backhaul
- In-service: April 1, 2009

# Mainline System History

■ Original system capacity (1992)	724,449 Dth/d
■ 2002 Expansion Project added	124,500 Dth/d
■ 2003 Expansion Project added	906,626 Dth/d
■ <b>Total system capacity in 2008</b>	<b><u>1,755,575 Dth/d</u></b>
■ 2010 Expansion Project will add	145,000 Dth/d
■ <b>Total system capacity in 2010</b>	<b><u>1,900,575 Dth/d</u></b>
■ Apex Expansion Project will add	266,000 Dth/d
■ <b>Total system capacity in 2011</b>	<b><u>2,166,575 Dth/d</u></b>

# 2013 Proposed Expansion Project



- Close Las Vegas loop
- Incremental compression
- Anticipated design
  - Wyoming and Utah Receipt Points
  - 200,000 Dth/d to Arvin
  - Up to 100,000 Dth/d to other upstream delivery points
  - 76 miles, 36-inch pipe
  - 70,000 horsepower
- \$0.65 - \$0.75 rate

# The Fuel of Choice

## Proposed Natural Gas-Fired Power Plants



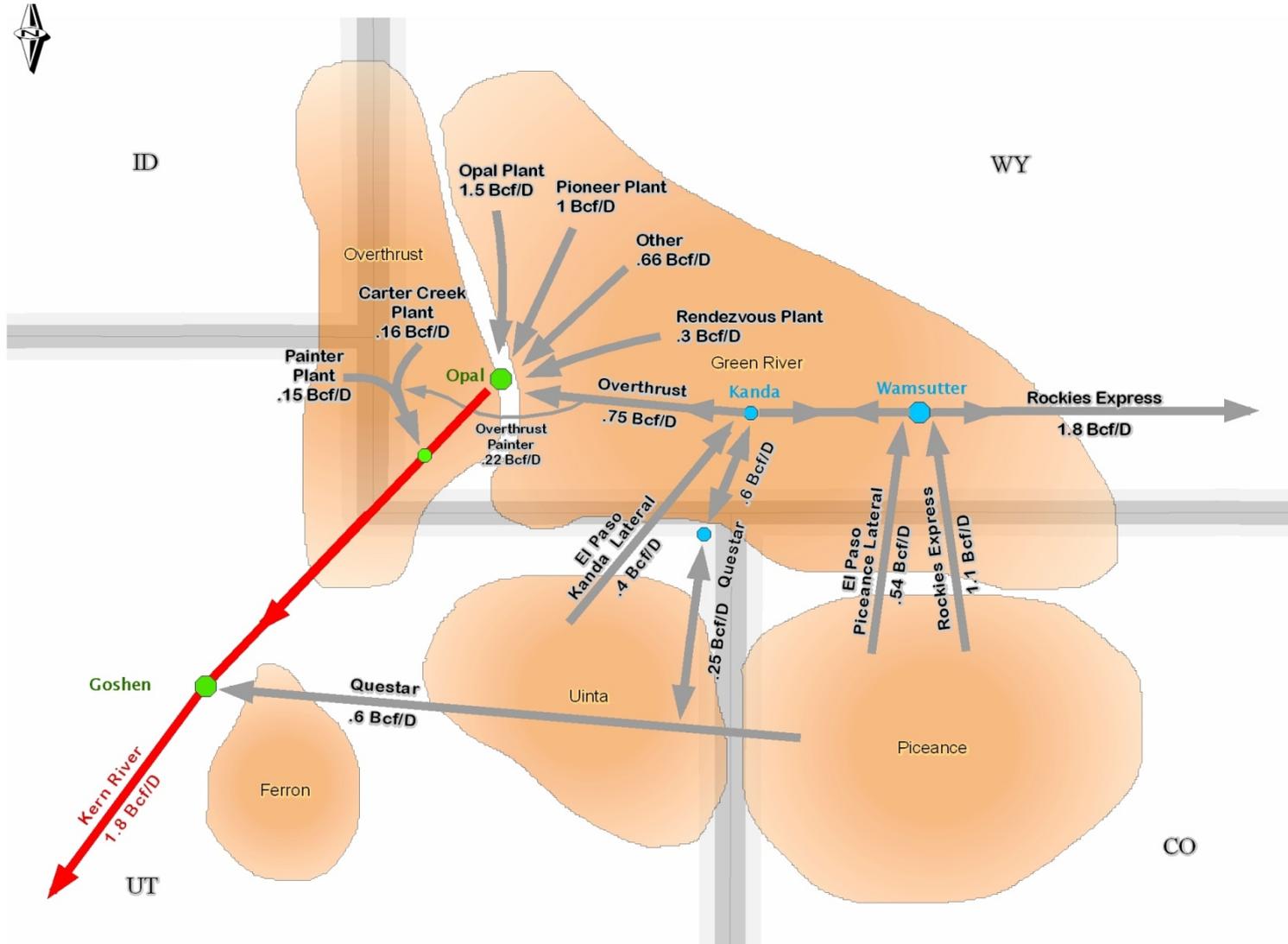
Source: California Energy Commission

### PROPOSED POWER PLANTS

PROJECT	SPONSOR	MW	
1	Palmdale	City of Palmdale	500
2	Walnut Creek	Edison Mission	500
3	S.E. Regional	City of Vernon	943
4	Victorville Hybrid	City of Victorville	550
5	Highgrove	AES	300
6	Sun Valley	Edison Mission	500
7	Avenal	Avenal Power	600
8	Inland Empire	G.E. & Calpine	800
9	Panoche	EIF	400
10	Colusa	E&L (PG&E)	660
11	Willow Pass	Mirant	550
12	Starwood	Starwood Power	120
13	Canyon Power	SCPPA	200
14	Gateway	PG&E	530
15	San Gabriel	Reliant	650
16	Sentinel	CPV/SCE	850
17	Pastoria Exp.	Calpine	160
18	Harry Allen Exp.	Nevada Power	500

**TOTAL MW 9,313**

# Supply Area Infrastructure



# System Accessibility

- Receipt point capacity is 6.57 Bcf/d
  - 3.7x system design capacity
  - 2.9 Bcf/d of new receipt point capacity added since 2003 Expansion
- Delivery point capacity is 7.53 Bcf/d
  - 4x system design capacity
  - 1.5 Bcf/d of new delivery point capacity added since 2003 Expansion