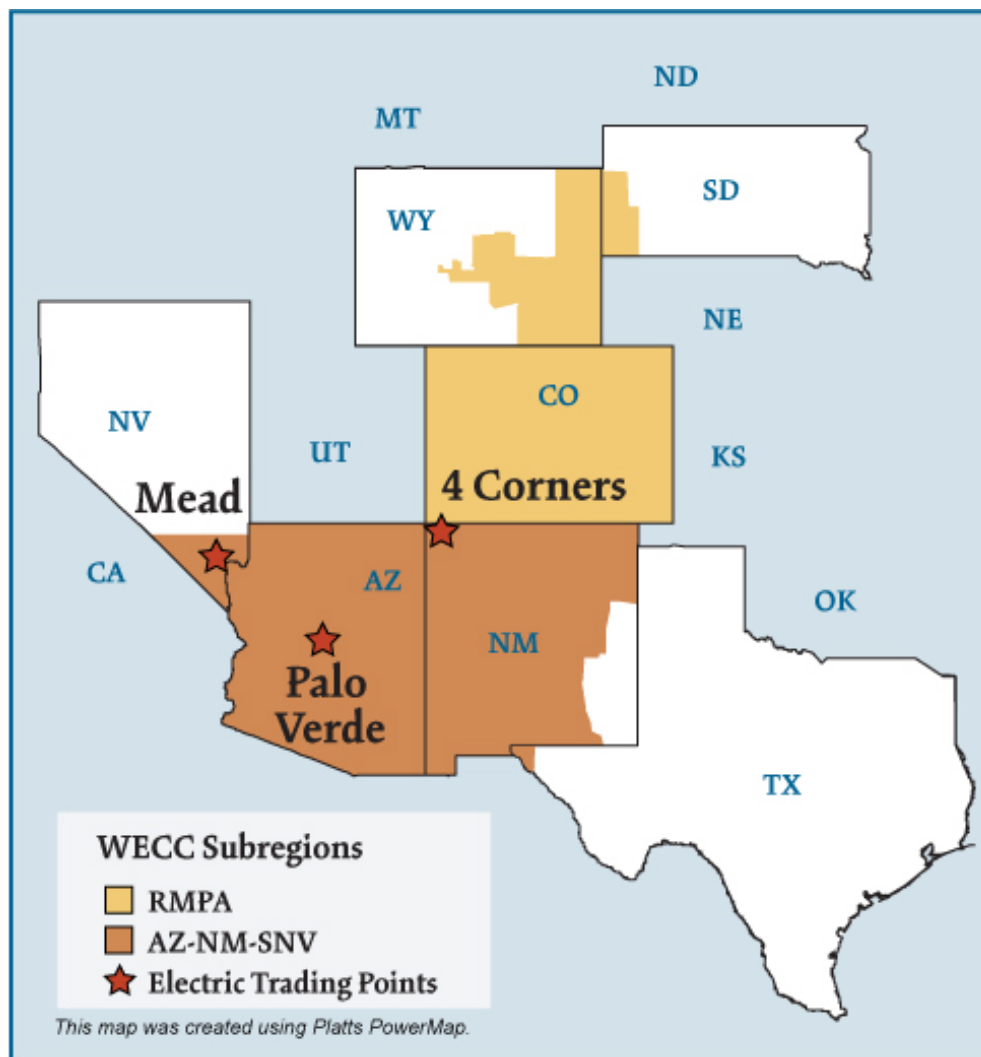


## Southwest Electric Regions



## Overview

### Geography

States covered: All or most of Arizona, New Mexico, Colorado and parts of Nevada, Wyoming and South Dakota.

Reliability region: Rocky Mountain Power Area (RMPA) and Arizona/New Mexico/Southern Nevada Power Area (AZNMSNV) sub-regions of the Western Electric Coordinating Council (WECC)

Balancing authorities: See list on page 5.

Hubs: Four Corners, Mead, Palo Verde

### RTO/ISO

None

### Generation/Supply

Marginal fuel type: Natural gas

Generating capacity: 45,459 MW (2005)

Capacity reserve: 8,940 MW (2005)

Reserve margin: 24% (2005)

The region has a surplus of generating capacity, with much of the generation in Arizona and the Four Corners area. Transmission capacity to the California market is often fully utilized in the high load periods of the summer. In 2005, the regional reserve margin decreased from 2004 as demand growth outpaced supply additions.

**Demand**

Peak demand: 36,519 MW (2005)

Peak demand growth: 3.5% (2004–2005)

**Prices**

Annual Average of Daily Bilateral Day Ahead On-Peak Prices

Platts "Palo Verde" Index

2004: \$50.09/MWh

2005: \$67.39/MWh

2006: \$57.59/MWh

2007: \$61.74/MWh

**Interconnections/Seams**

Generation suppliers export excess power to the rest of the West and particularly to California.

## Balancing Authorities in the Southwest Electric Market

### WECC Subregion and Balancing Authority

### NERC Acronym

#### AZNMSNV

Arizona Public Service Company  
 DECA, LLC - Arlington Valley  
 El Paso Electric Company  
 Gila River Maricopa Arizona  
 Harquahala L.L.C.  
 Imperial Irrigation District  
 Nevada Power Company  
 Public Service Company of New Mexico  
 Salt River Project  
 Tucson Electric Power Company  
 Western Area Power Administration - Lower Colorado

AZPS  
 DEAA  
 EPE  
 GRMA  
 HGMA  
 IID  
 NEVP  
 PNM  
 SRP  
 TEPC  
 WALC

#### RMPA

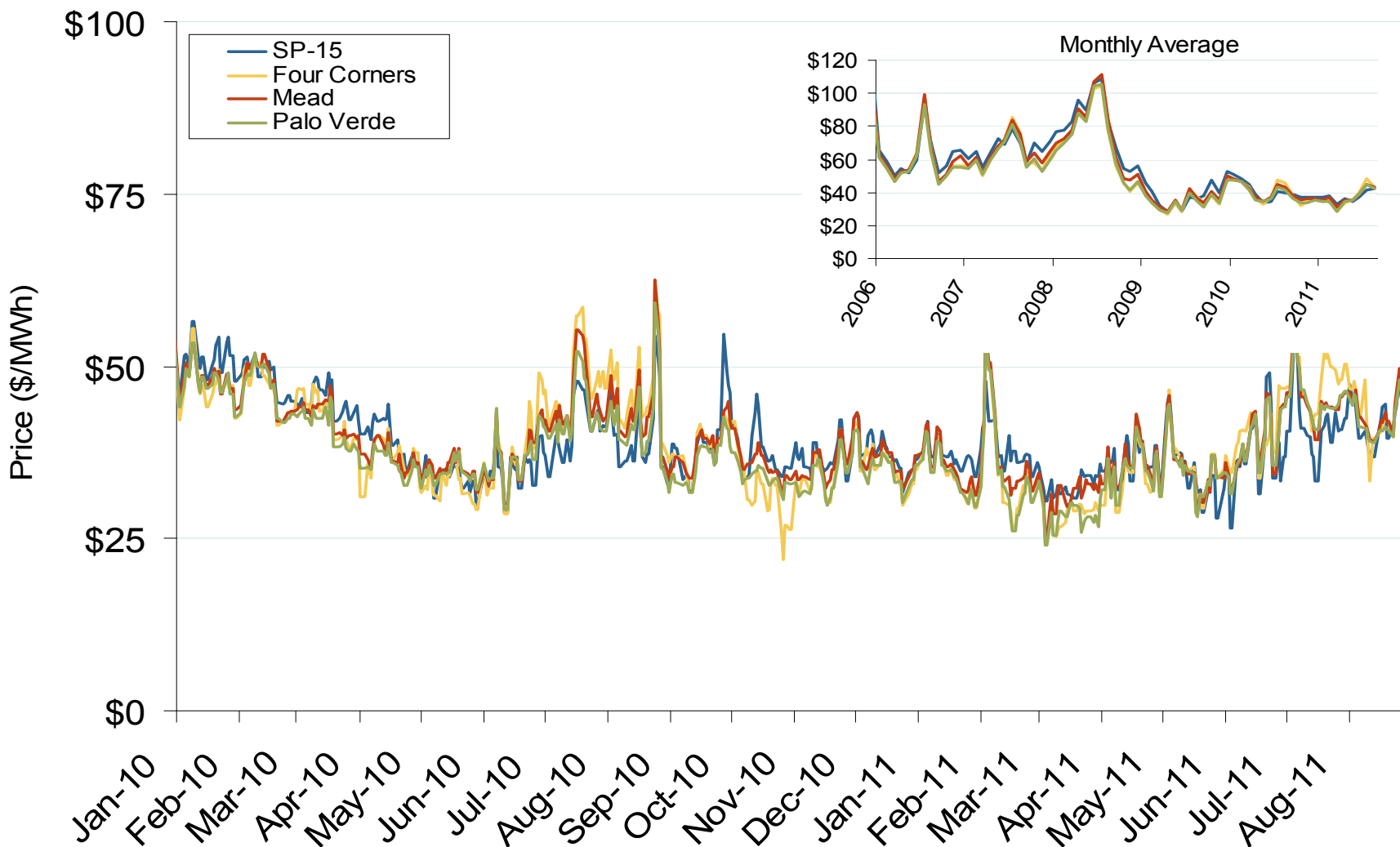
Public Service Company of Colorado  
 Western Area Power Administration - Colorado-Missouri

PSCO  
 WACM

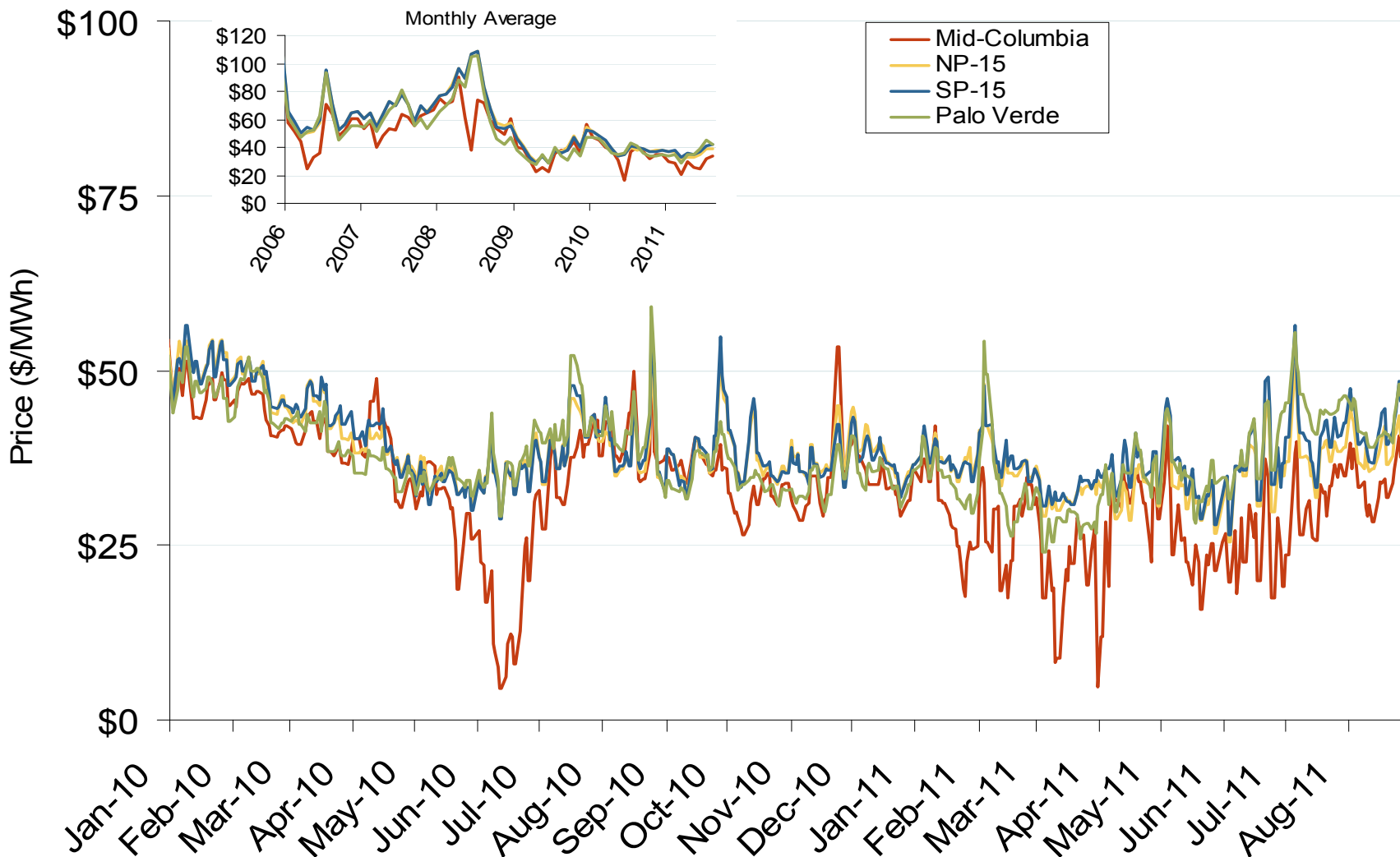
## Southwest Annual Average Bilateral Prices

Annual Average Day Ahead On Peak Prices (\$/MWh)						
	2006	2007	2008	2009	2010	5-Year Avg
Four Corners	\$58.52	\$63.21	\$71.84	\$35.38	\$39.68	\$53.74
Palo Verde	\$57.59	\$61.74	\$71.87	\$34.77	\$38.76	\$52.96
Mead	\$59.93	\$64.49	\$75.63	\$36.58	\$40.11	\$55.36

## Southwestern Daily Bilateral Day-Ahead On-Peak Prices



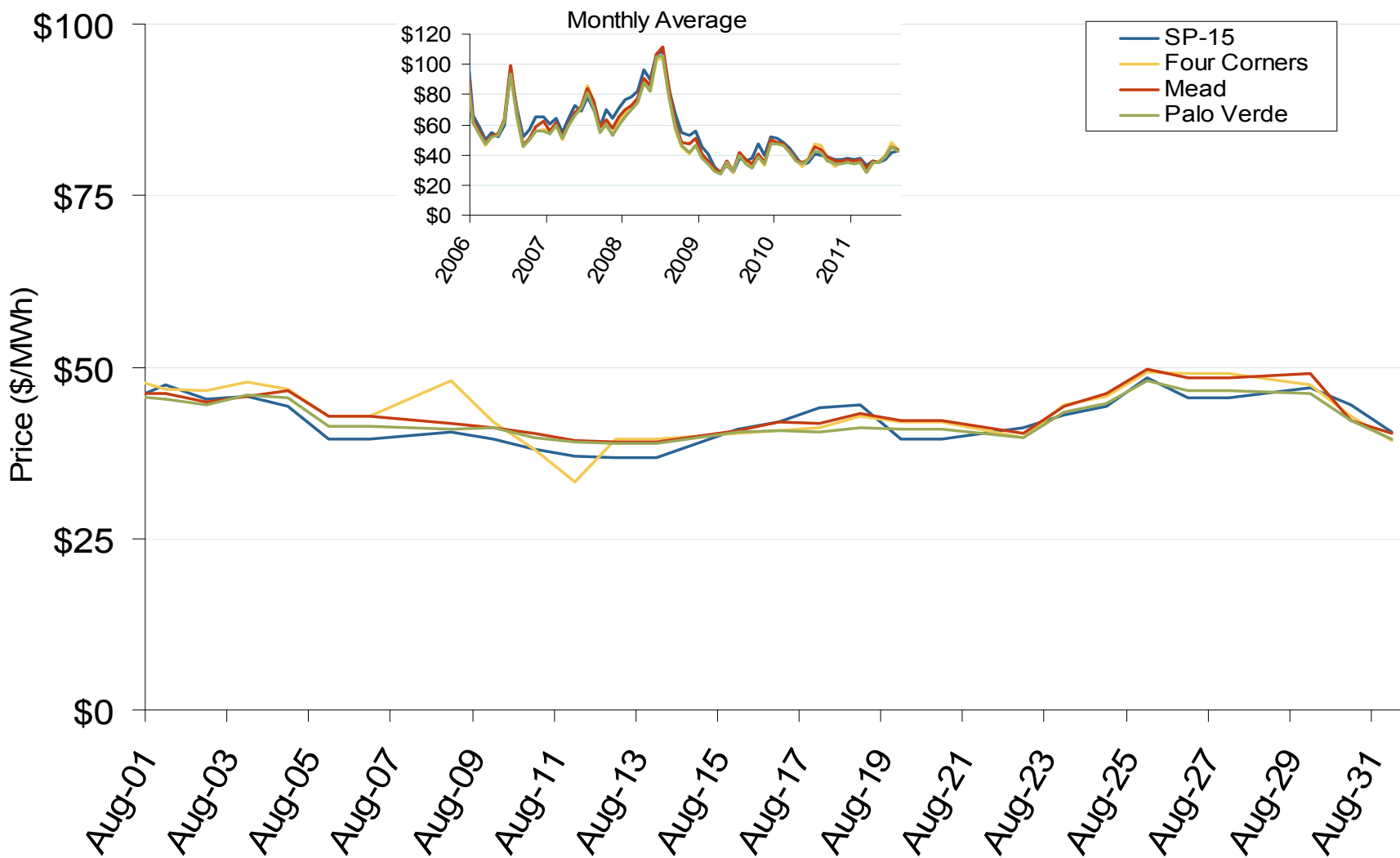
## Western Daily Bilateral Day-Ahead On-Peak Prices



Southwest Electric Market: Last Month's Southwestern Bilateral Prices

Federal Energy Regulatory Commission • Market Oversight • [www.ferc.gov/oversight](http://www.ferc.gov/oversight)

## Southwestern Daily Bilateral Day-Ahead On-Peak Prices

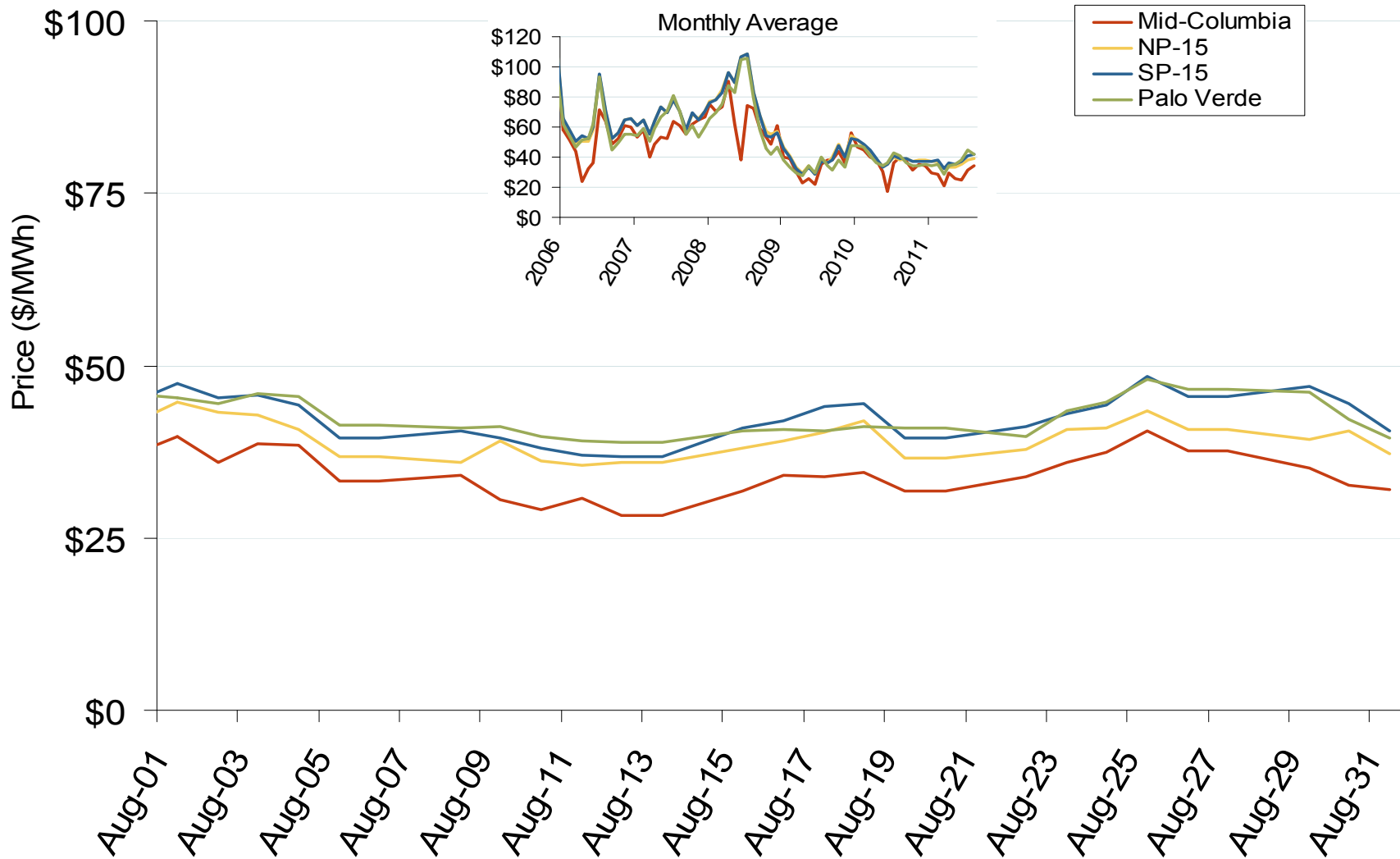




Southwest Electric Market: Last Month's Western Bilateral Prices

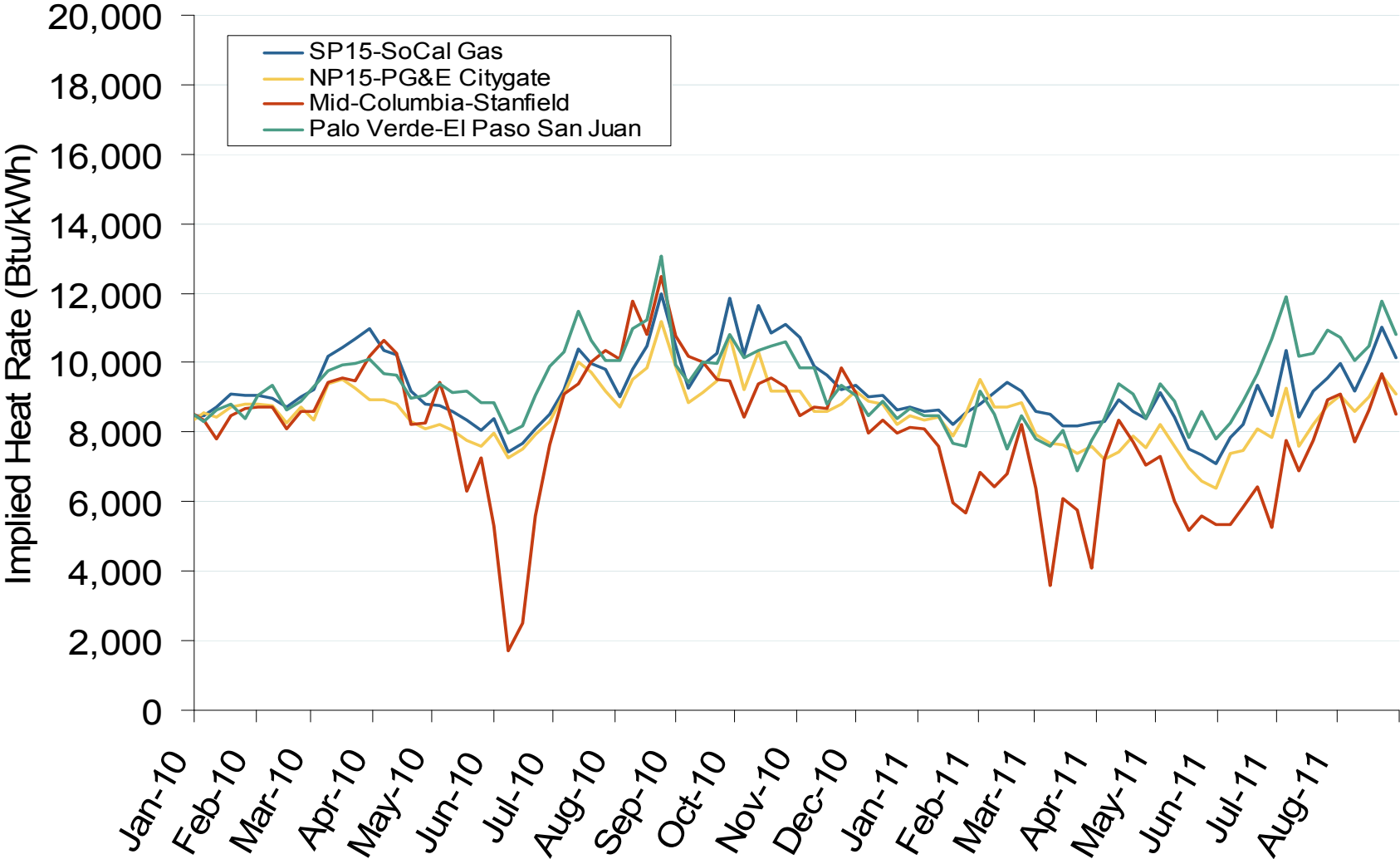
Federal Energy Regulatory Commission • Market Oversight • [www.ferc.gov/oversight](http://www.ferc.gov/oversight)

## Western Daily Bilateral Day-Ahead On-Peak Prices



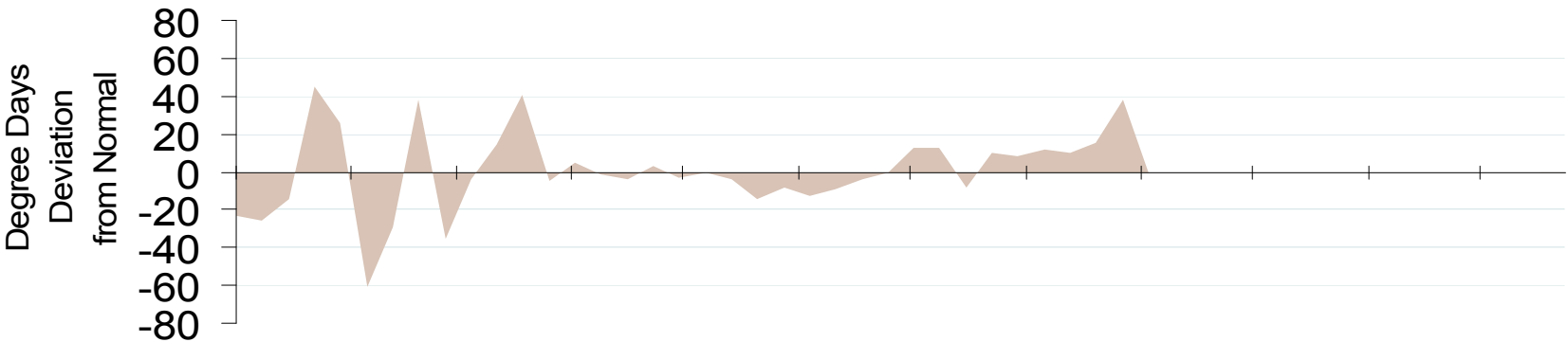
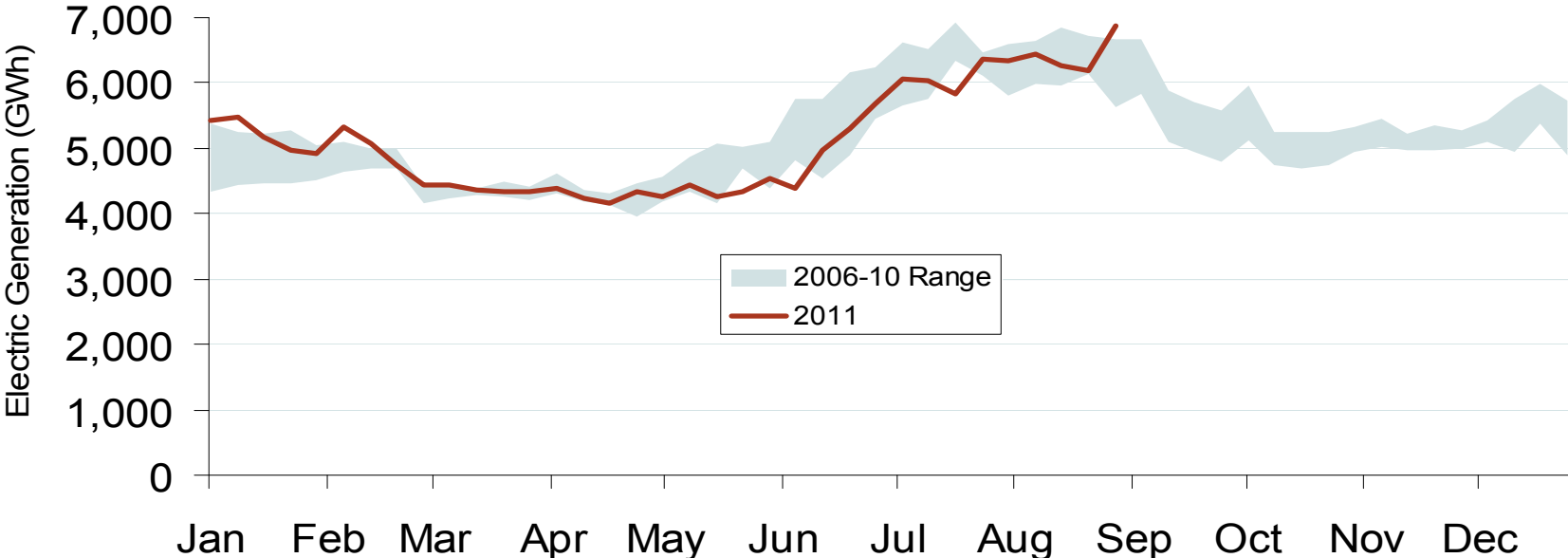
Federal Energy Regulatory Commission • Market Oversight • [www.ferc.gov/oversight](http://www.ferc.gov/oversight)

### Implied Heat Rates at Western Trading Points - Weekly Avgs.



Source: Derived from *Platts* on-peak electric and natural gas price data  
September 2011

# Weekly Power Generation & Temps. - Rocky Mountains



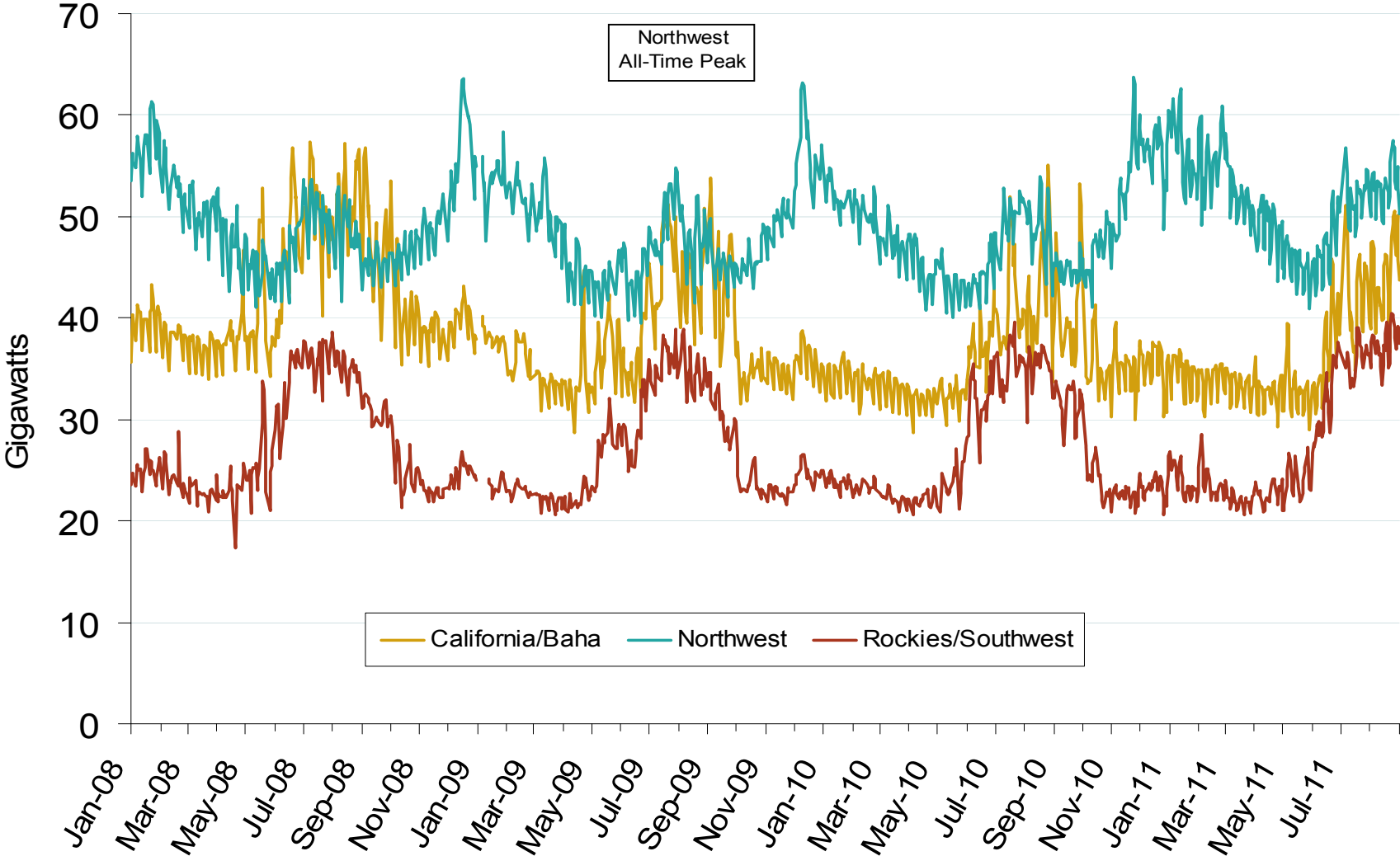
Source: Derived from EEI and NOAA data  
September 2011

Updated: September 08, 2011

Southwest Electric Market: Daily Peak Demand

Federal Energy Regulatory Commission • Market Oversight • [www.ferc.gov/oversight](http://www.ferc.gov/oversight)

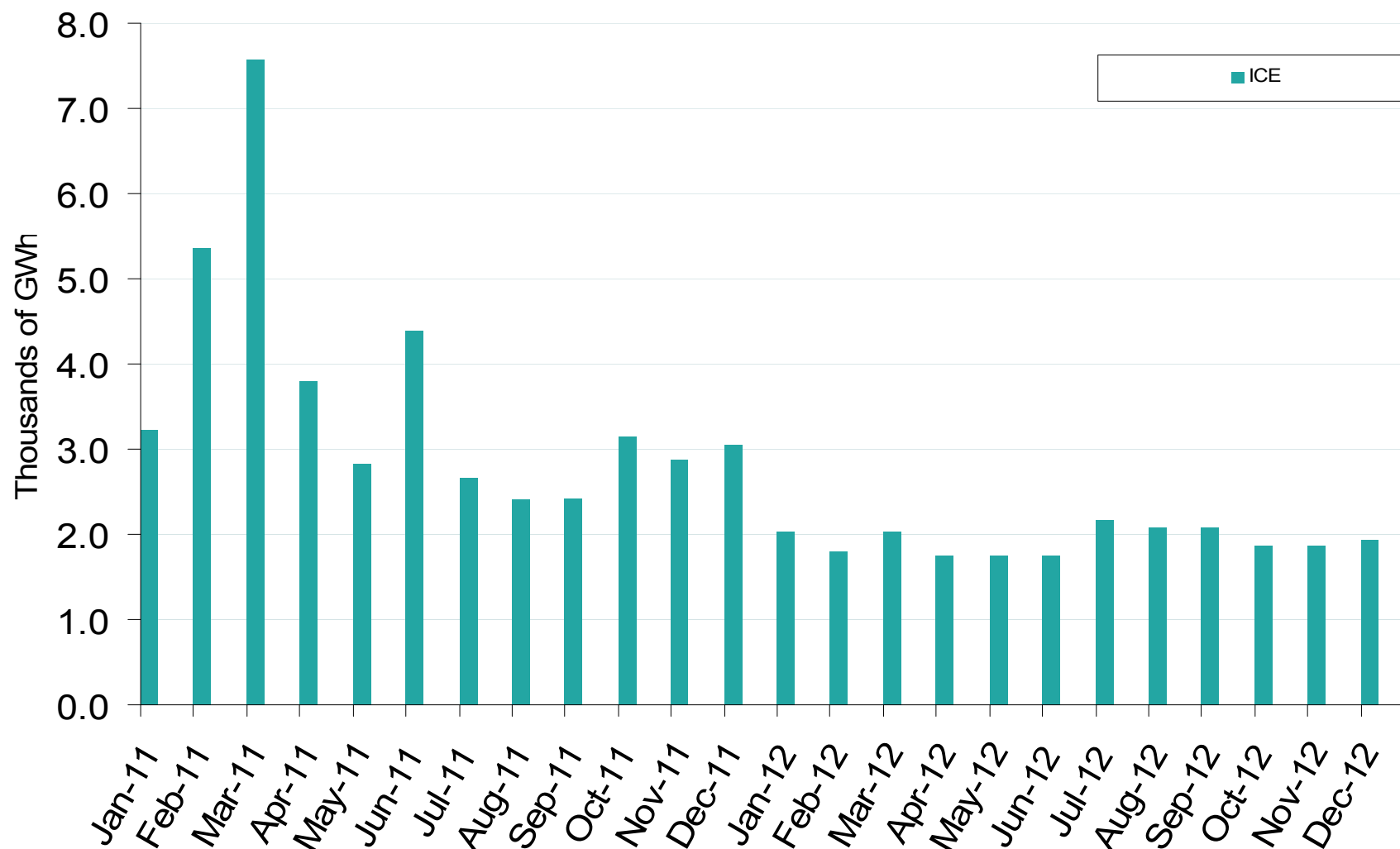
### Western Daily Actual Peak Demand



Notes: Data does not include weekends and holidays. Some data for 12/31/2008 – 1/9/2009 are not available from WECC

Source: Derived from WECC Daily Report data available at <http://wecc.biz>

## Palo Verde Forward and Swap Volumes



Note: ICE on-peak forward (physical) and swap (financial) volumes are for Palo Verde and include monthly, dual monthly, quarterly, and calendar year contracts traded for each month

Source: Derived from ICE data

September 2011

Updated: September 20, 2011

1068