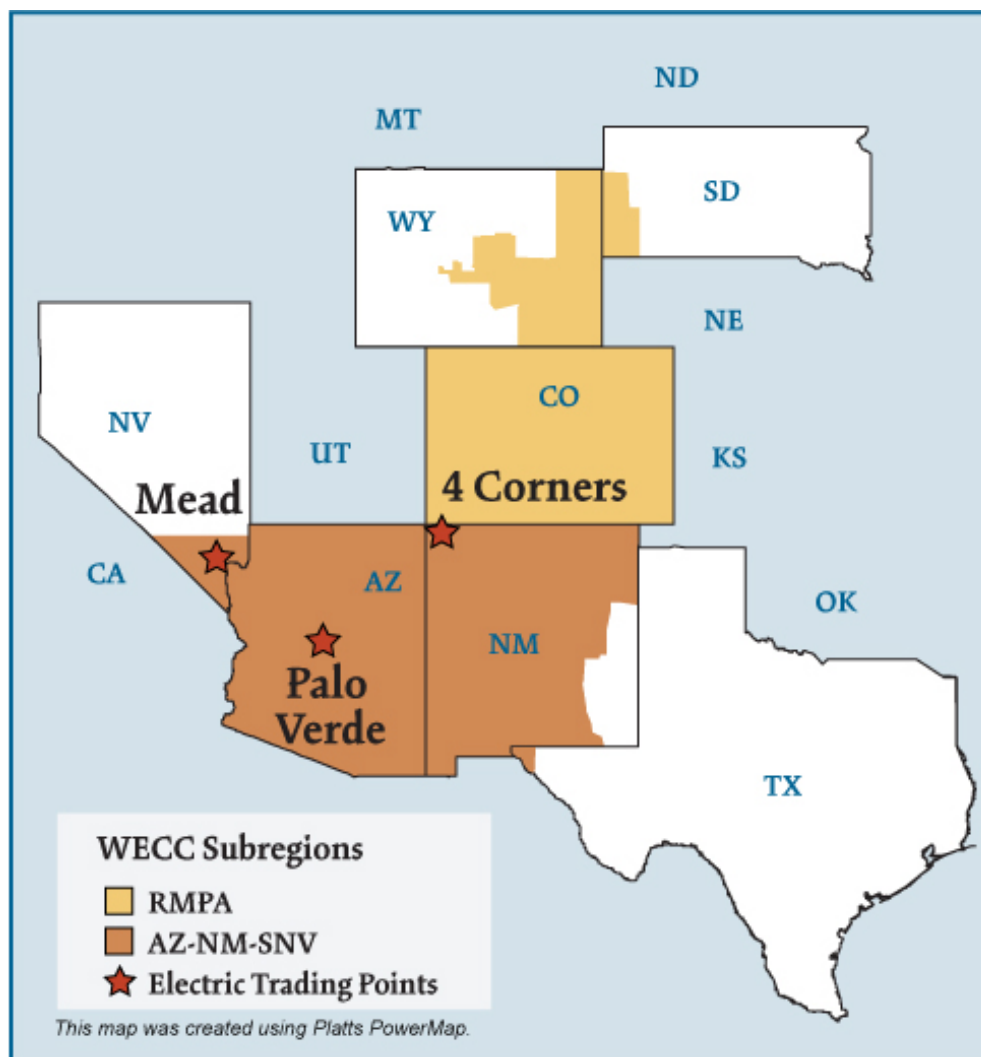


Southwest Electric Regions



Southwest Electric Market: Overview and Focal Points

Federal Energy Regulatory Commission • Market Oversight @ FERC.gov

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.

Updated May 5, 2007

1063

Southwest Electric Market: Overview and Focal Points

Federal Energy Regulatory Commission • Market Oversight @ FERC.gov

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

Supply and Demand Statistics for the Southwest

Supply Demand Statistics			
	2003	2004	2005
Summer Generating Capacity MW	41,646	45,588	45,459
Summer Peak Demand MW	35,815	35,280	36,519
Summer Reserves MW	5,831	10,308	8,940
Summer Reserve Margin:	16%	29%	24%
Annual Load (GWh):	177,401	180,154	185,730
Annual Net Generation GWh	NA	NA	NA

Source: Derived from WECC data.

Updated February 2, 2007

1064

Annual Average Bilateral Prices

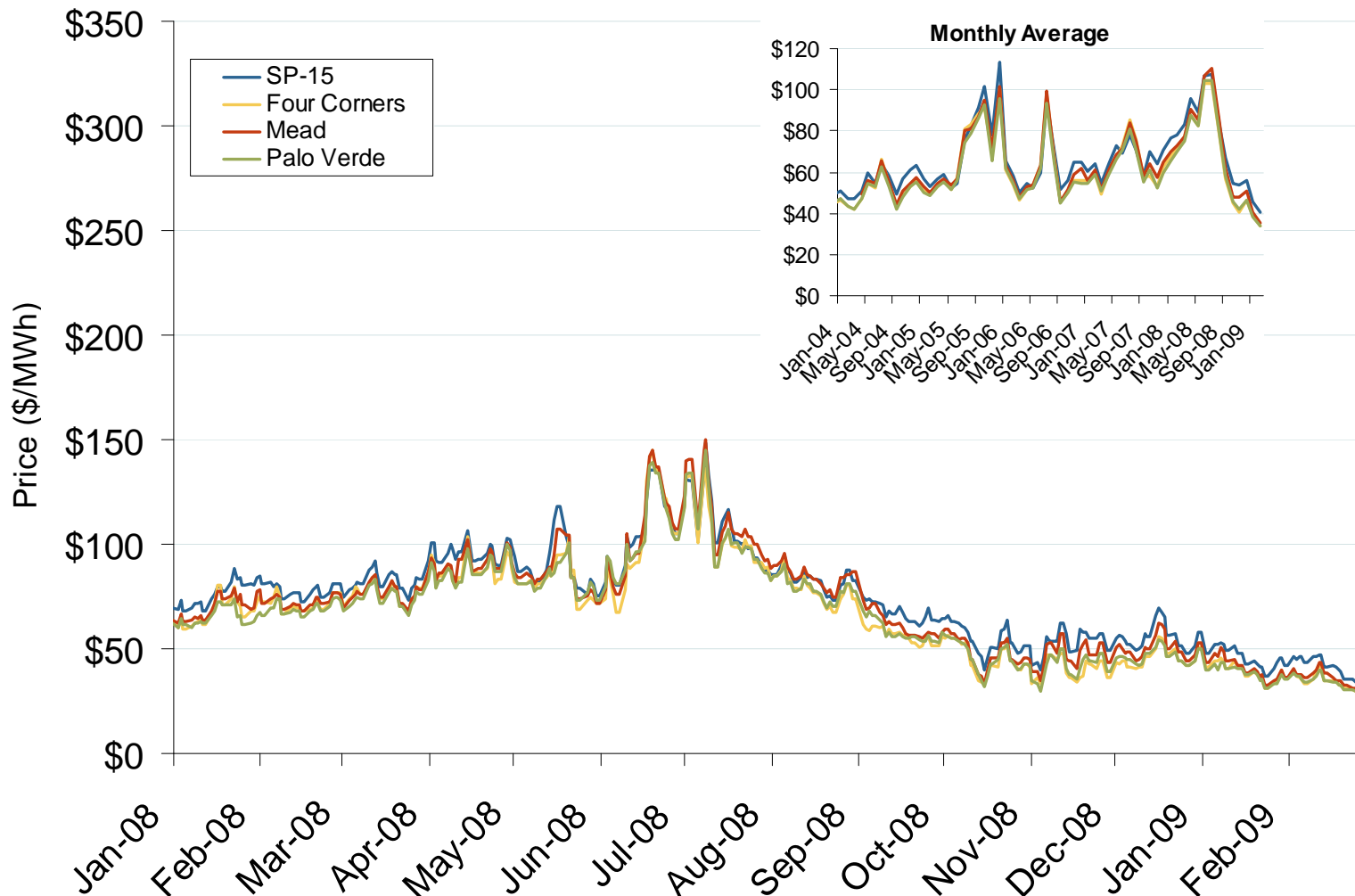
Annual Average Day Ahead On Peak Prices (\$/MWh)						
	2004	2005	2006	2007	2008	5-Year Avg
Four Corners	\$50.48	\$69.39	\$58.52	\$63.21	\$71.84	\$62.69
Palo Verde	\$50.06	\$67.39	\$57.59	\$61.74	\$71.87	\$61.73
Mead	\$52.34	\$70.17	\$59.93	\$64.49	\$75.63	\$64.72

Source: Derived from *Platts* data.

Updated February 6, 2009

1065

Southwestern Daily Bilateral Day-Ahead On-Peak Prices

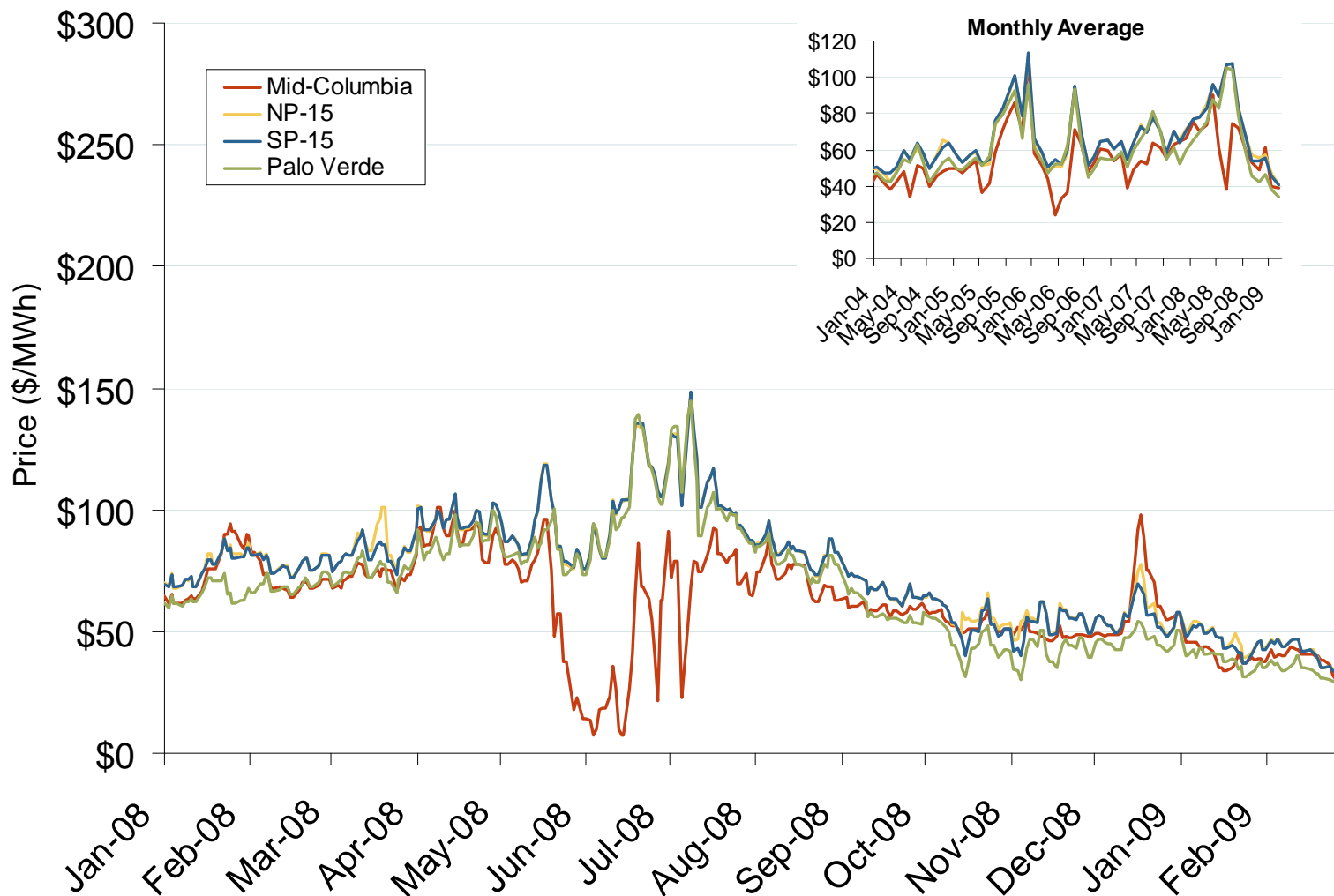


Source: Derived from *Platts* data.

Updated March 9, 2009

1066

Western Daily Bilateral Day-Ahead On-Peak Prices



Source: Derived from *Platts* data.

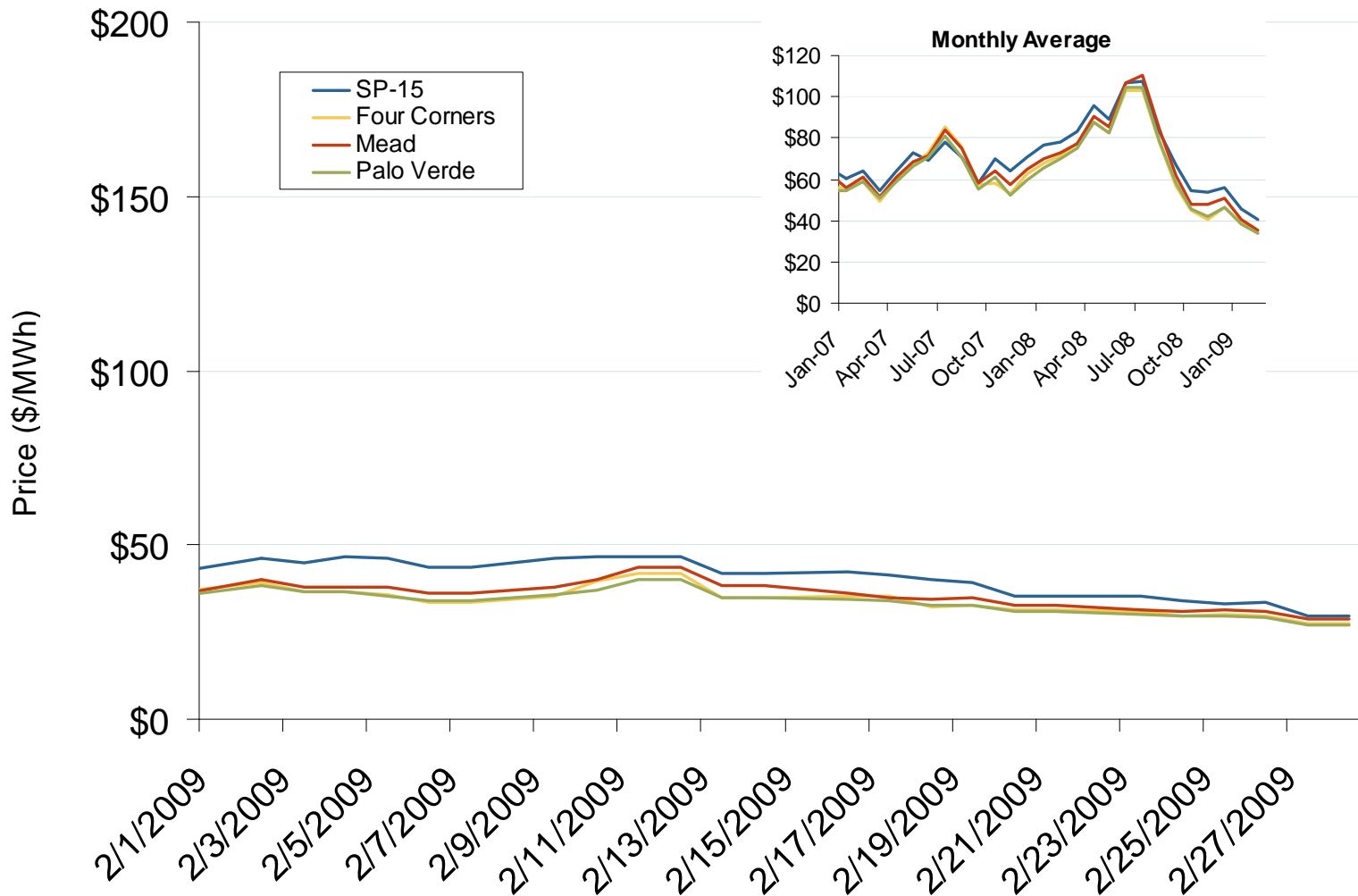
Updated March 9, 2009

1067

Southwest Electric Market: Last Month's Southwestern Bilateral Prices

Federal Energy Regulatory Commission • Market Oversight @ FERC.gov

Southwestern Daily Bilateral Day-Ahead On-Peak Prices

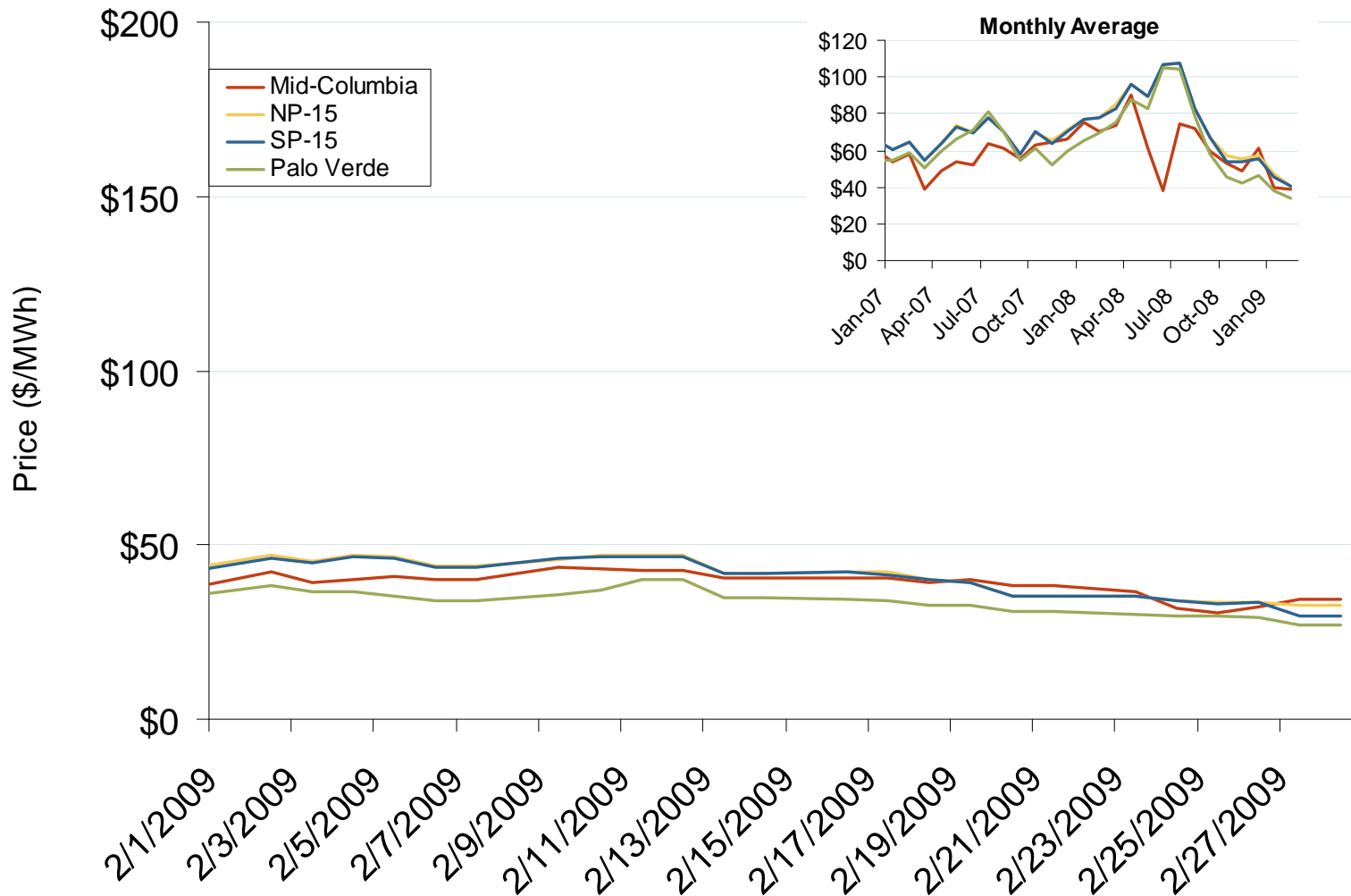


Source: Derived from *Platts* data.

Updated March 9, 2009

14520

Western Daily Bilateral Day-Ahead On-Peak Prices



Source: Derived from *Platts* data.

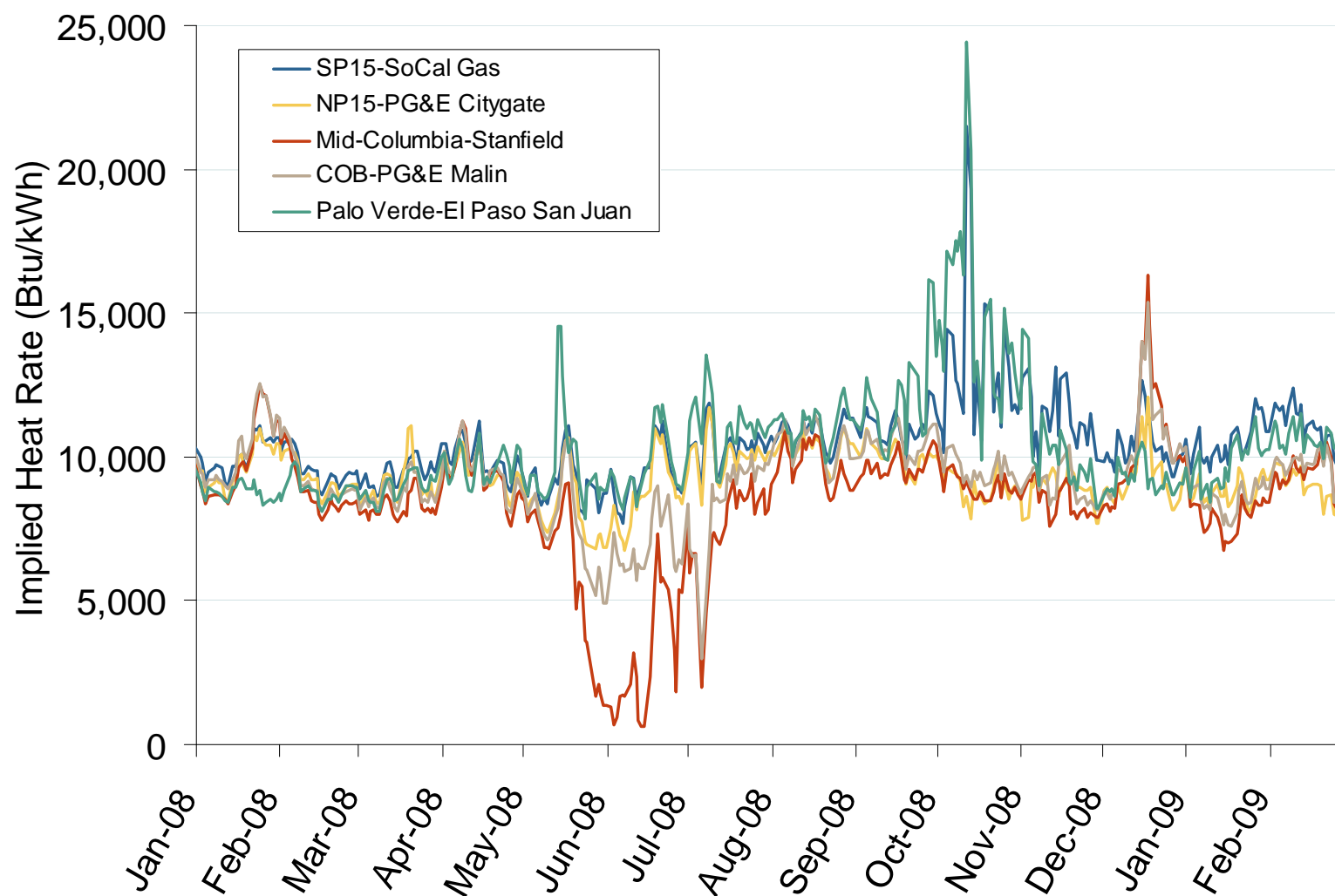
Updated March 9, 2009

14521

Southwest Electric Market: Western Implied Heat Rates

Federal Energy Regulatory Commission • Market Oversight @ FERC.gov

Implied Heat Rates at Western Trading Points

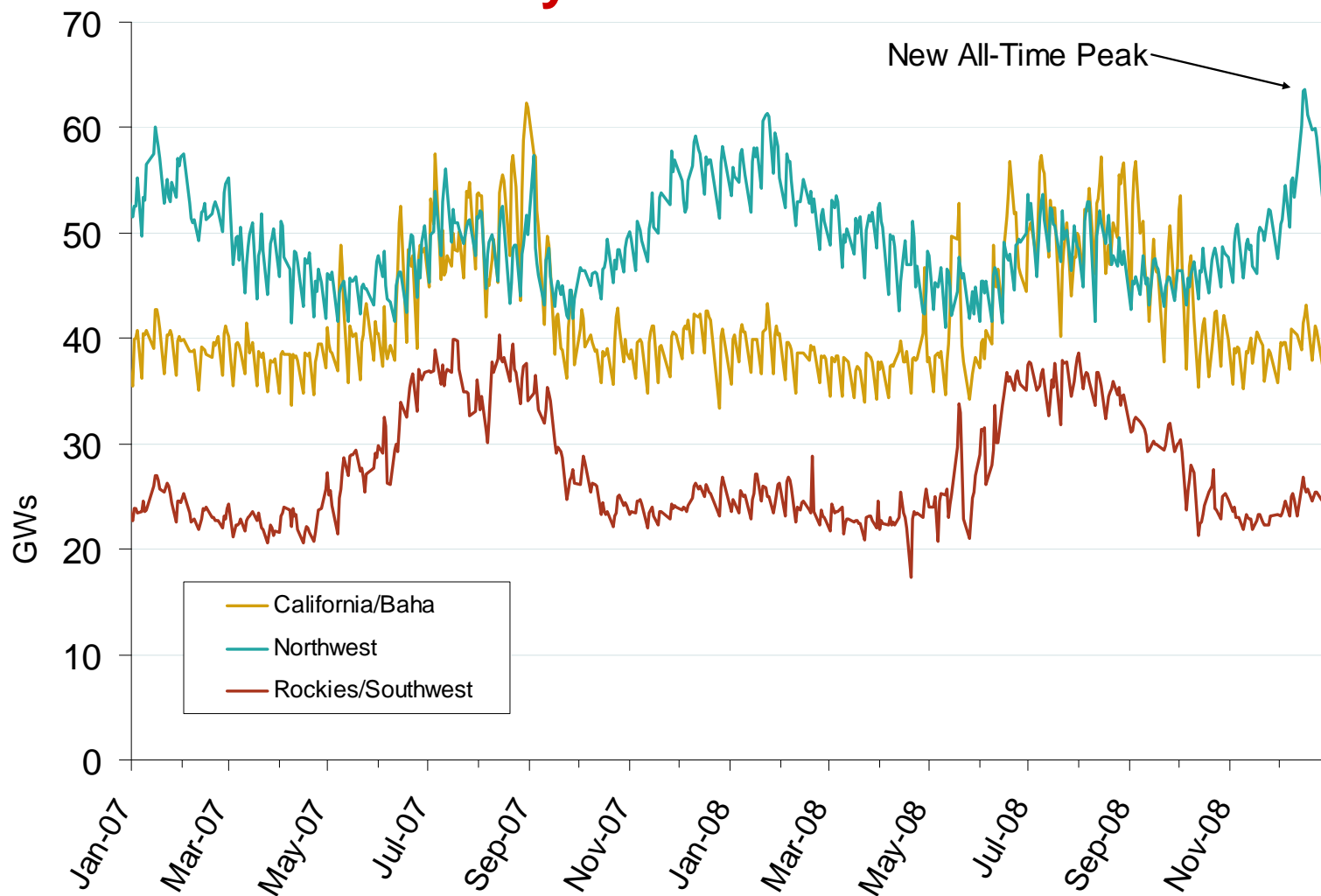
Source: Derived from *Platts* data

Updated March 9, 2009

1141

Southwest Electric Market: Daily Peak Demand

Federal Energy Regulatory Commission • Market Oversight @ FERC.gov

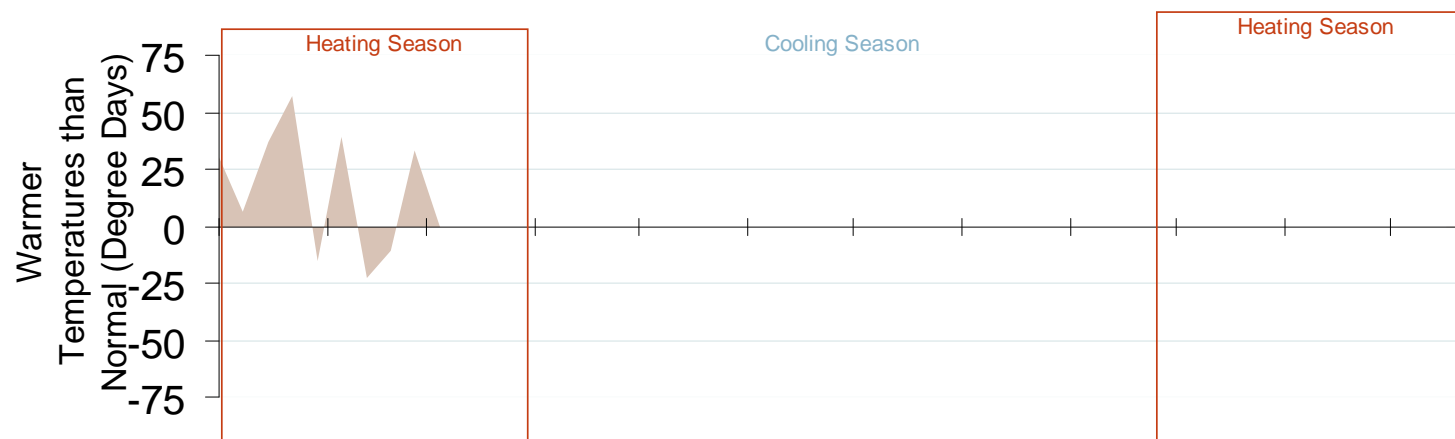
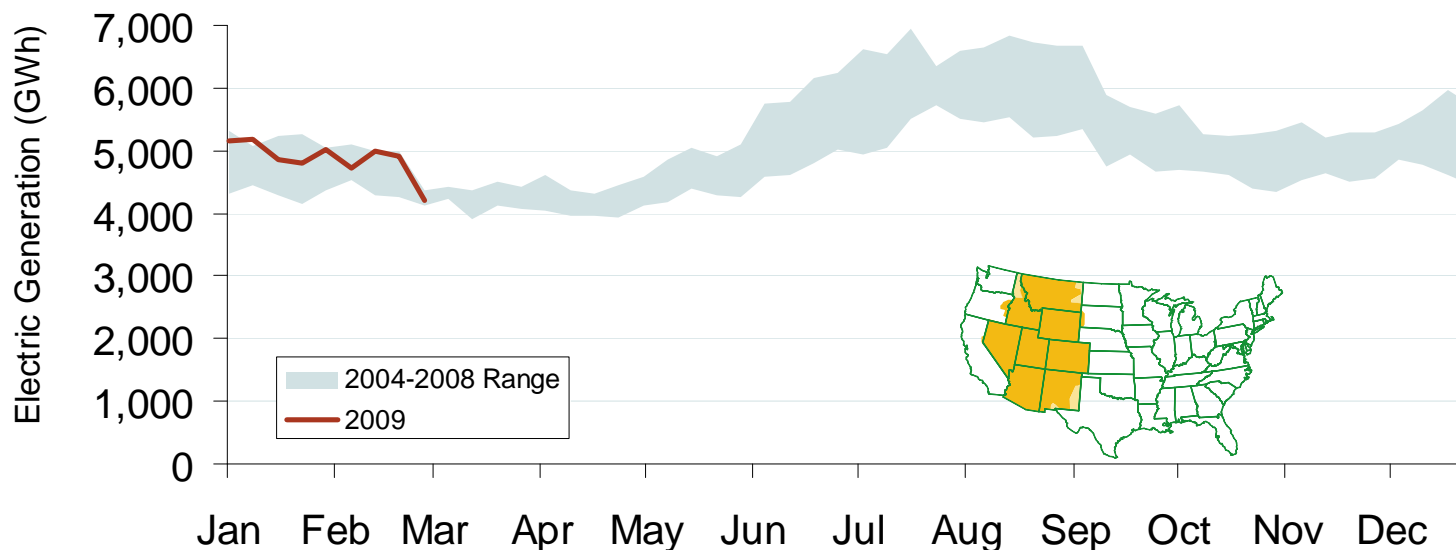
Western Daily Actual Peak Demand

Source: Derived from WECC Daily Report data available at <http://wecc.biz>. Data shown is generally Sunday through Thursday due to limitations of daily reports.

Updated January 9, 2009

1193

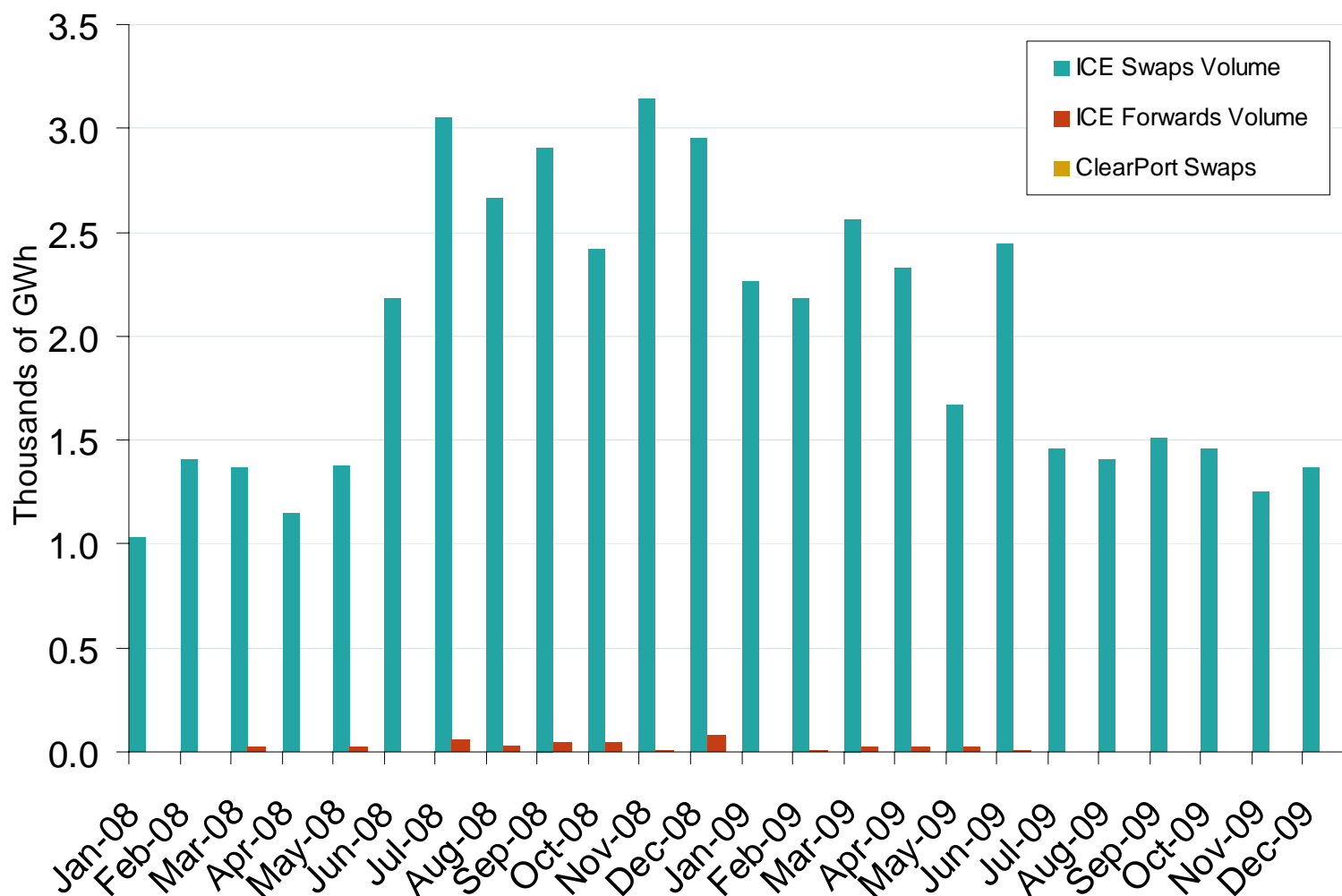
Weekly Electric Generation Output and Temperatures Rocky Mountains Region



Source: Derived from EEI and NOAA data.

Updated March 9, 2009

Palo Verde Forward and Swap Volumes



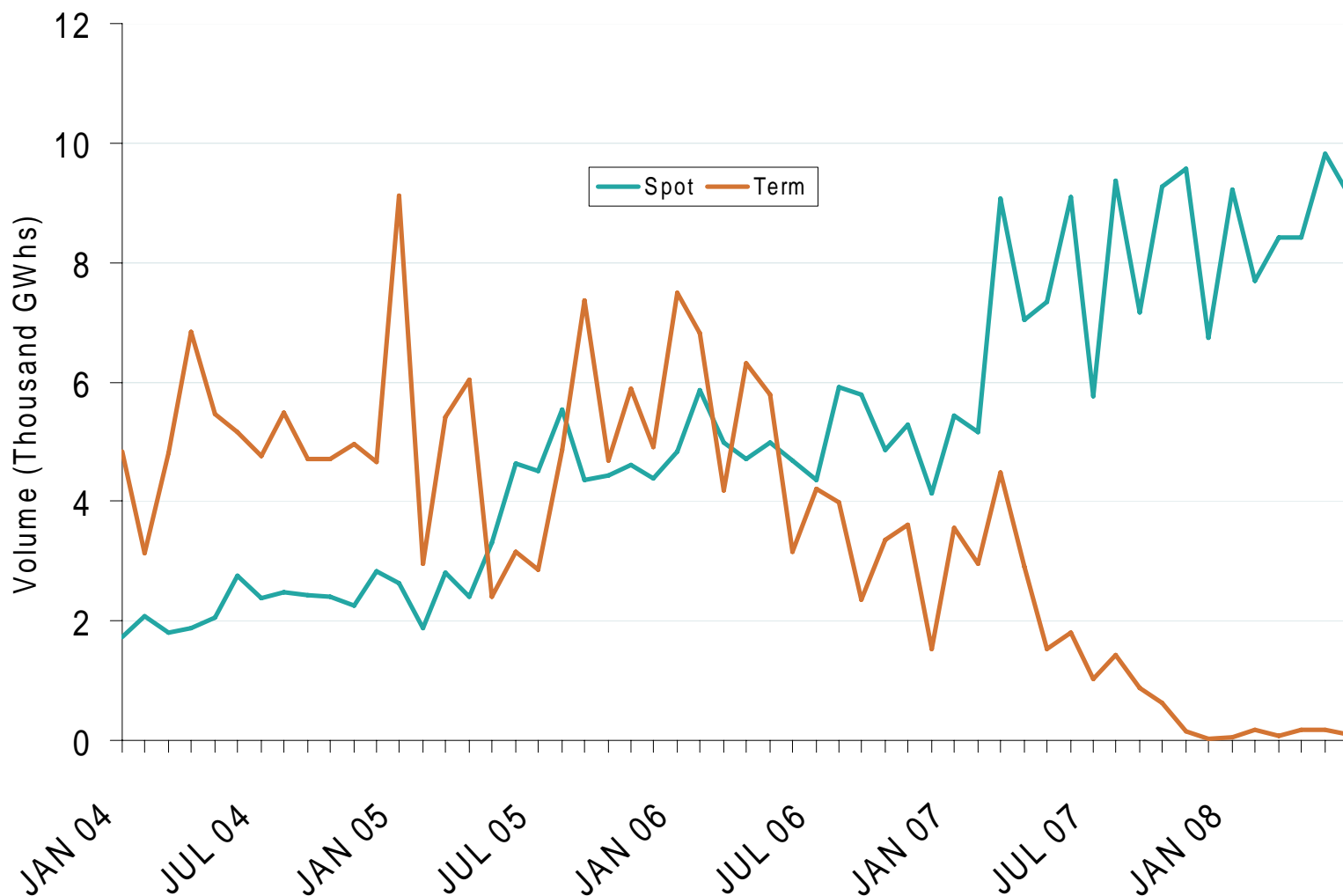
Source: Derived from ICE and Nymex ClearPort data. ICE on-peak forward (physical) and swap (financial) volumes are for Palo Verde and include monthly, dual monthly, quarterly, and calendar year contracts traded for each month. Nymex ClearPort on-peak swap (financial) volumes are for Palo Verde and are traded by month.

Updated March 9, 2009

1068

Southwest Electric Market: ICE Physical Volumes

Federal Energy Regulatory Commission • Market Oversight @ FERC.gov

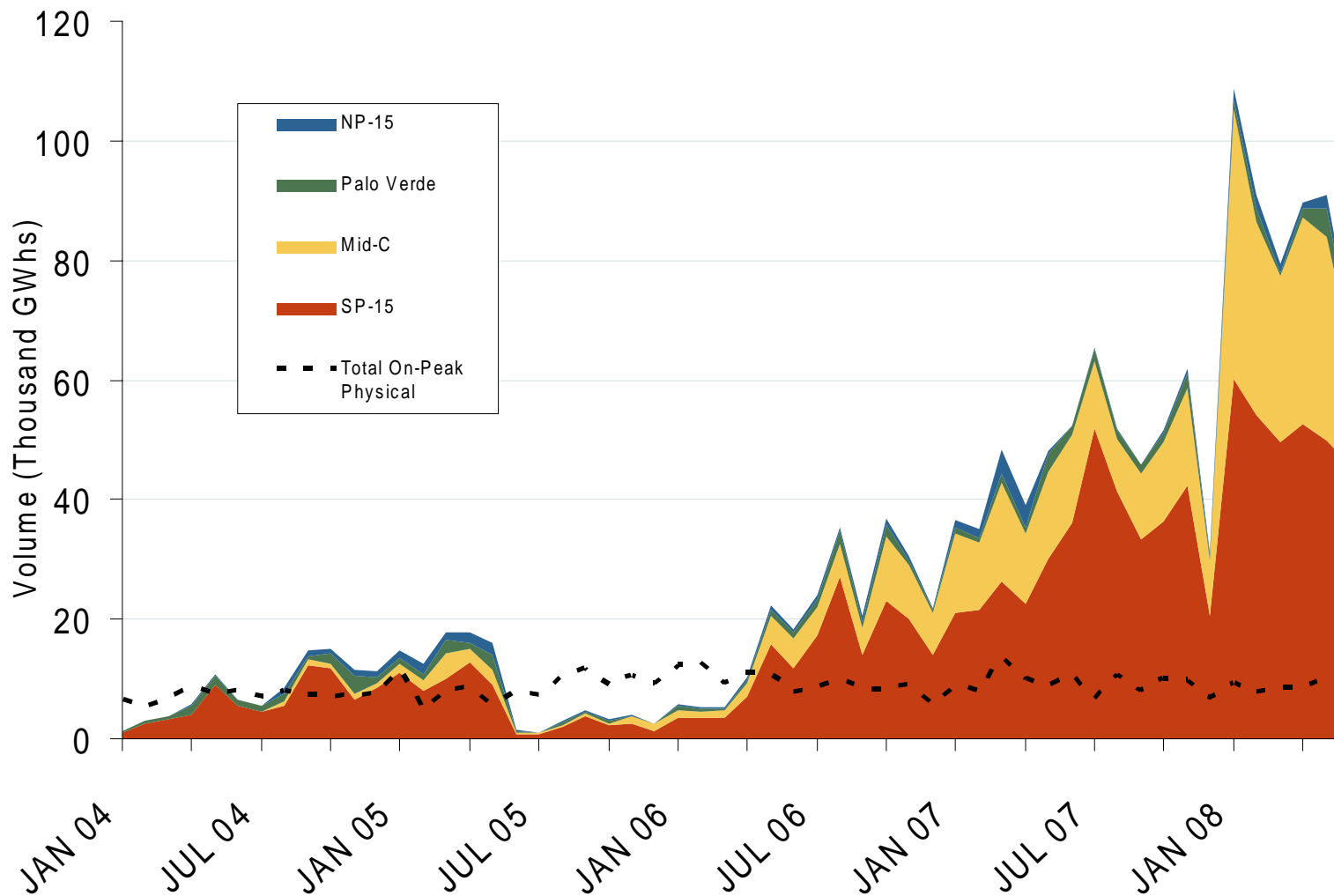
Western Physical Power Volumes Traded on ICE by Month

Source: Derived from ICE data.

Updated August 14, 2008

1202

Western Financial On-Peak Products Traded on ICE by Hub



Source: Derived from ICE data.

Updated August 14, 2008

1205