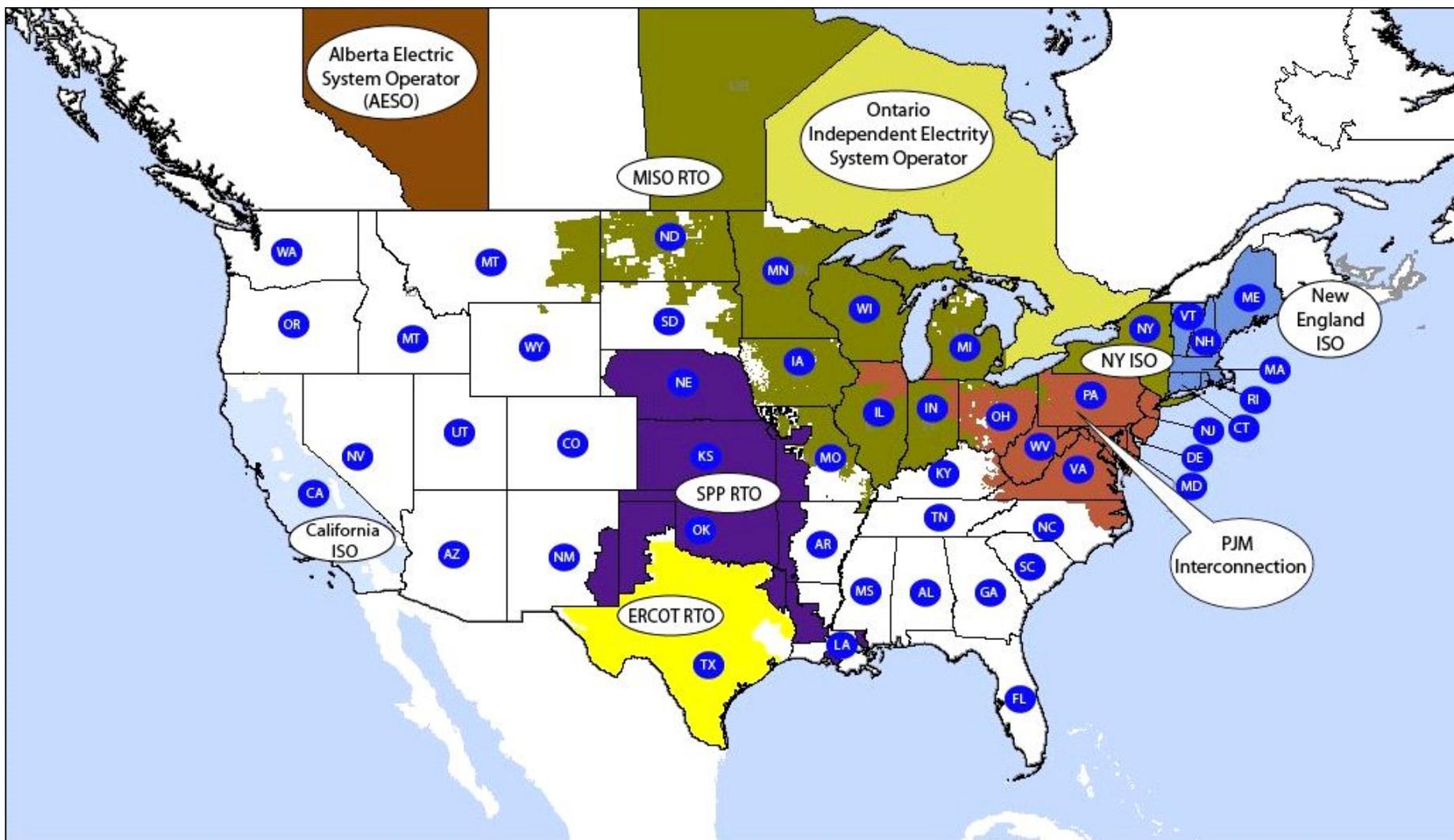
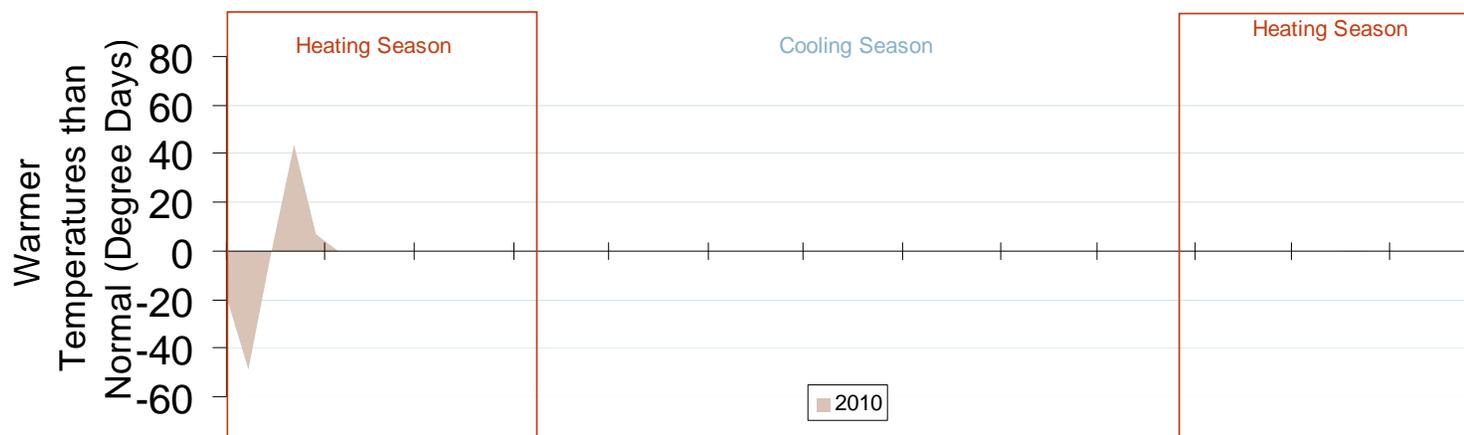
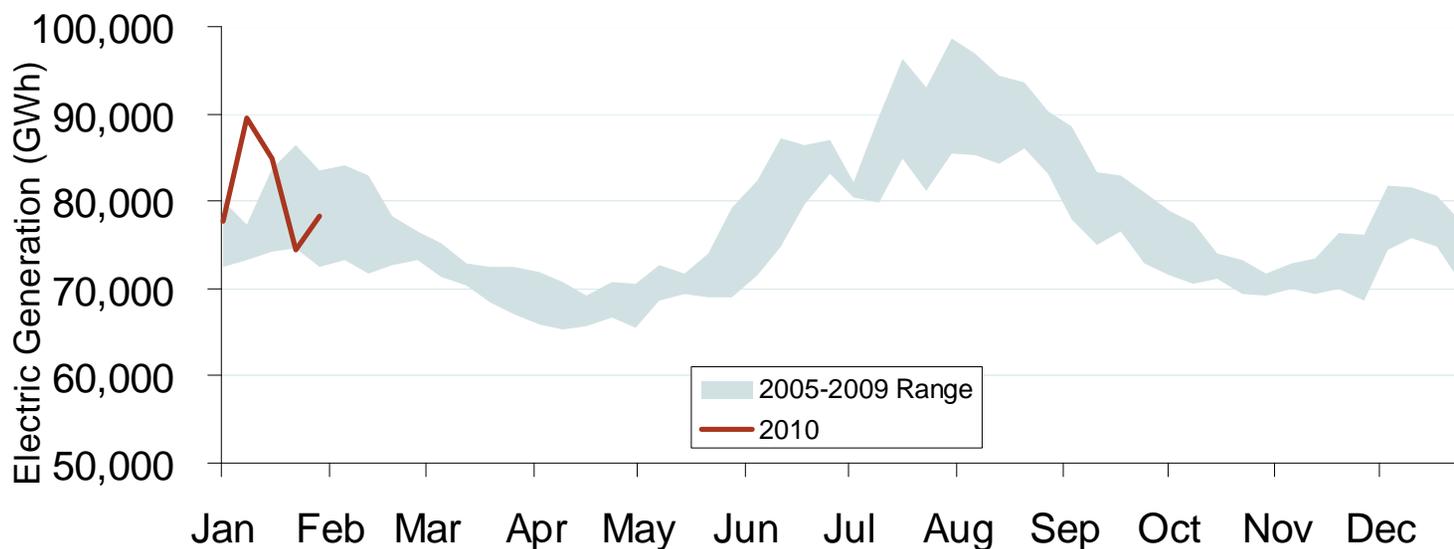




# Regional Transmission Organizations



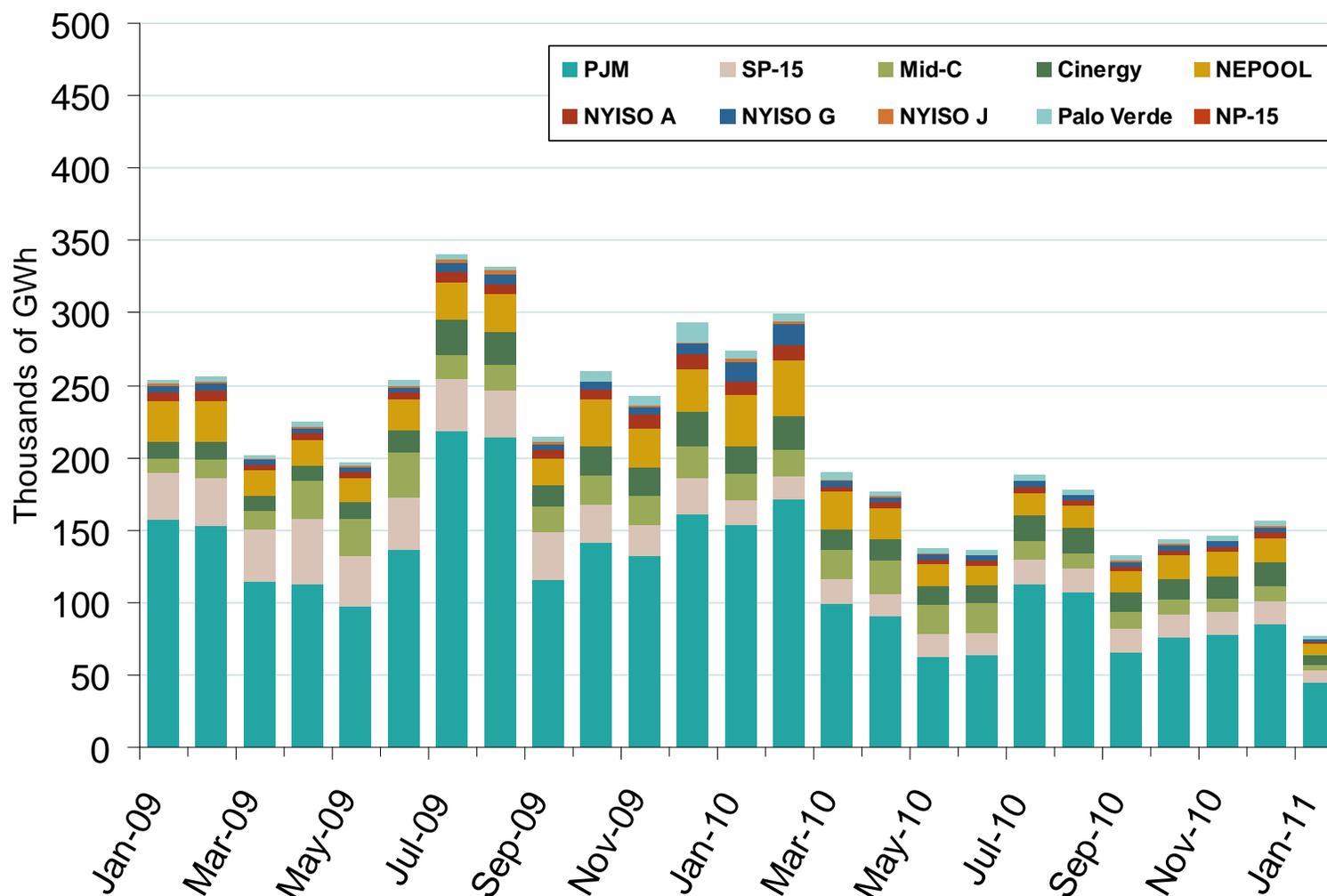
# Weekly U.S. Electric Generation Output and Temperatures



Source: Derived from EEI and NOAA data.

Updated February 5, 2010

## Financial Trading on ICE by Contract Month

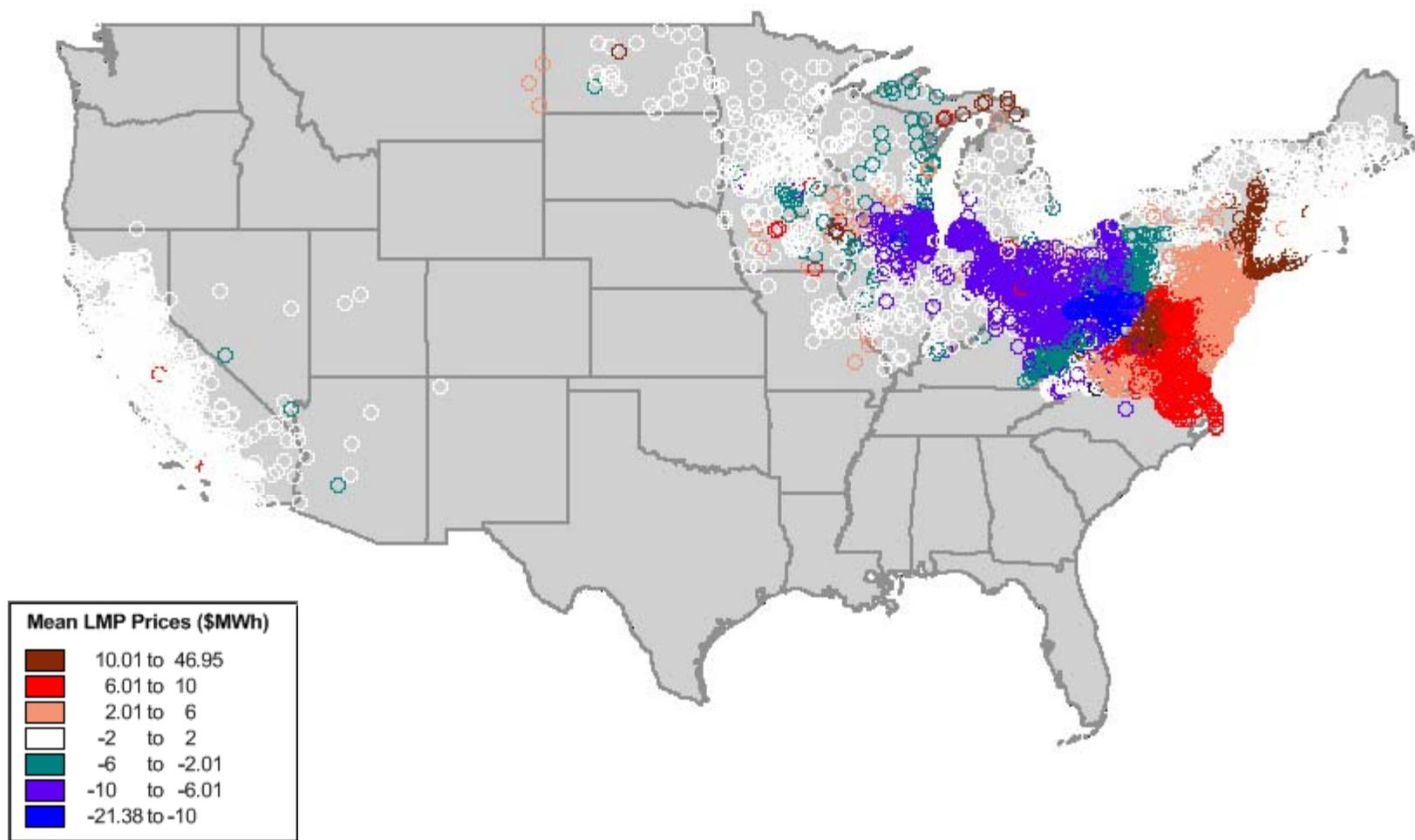


Source: Derived from ICE data. ICE on-peak swaps (financial) volume include monthly, dual monthly, quarterly, and calendar year contracts traded for each month.

Updated February 5, 2010

1081

## Day Ahead On-Peak Congestion Average Monthly Prices January 2010

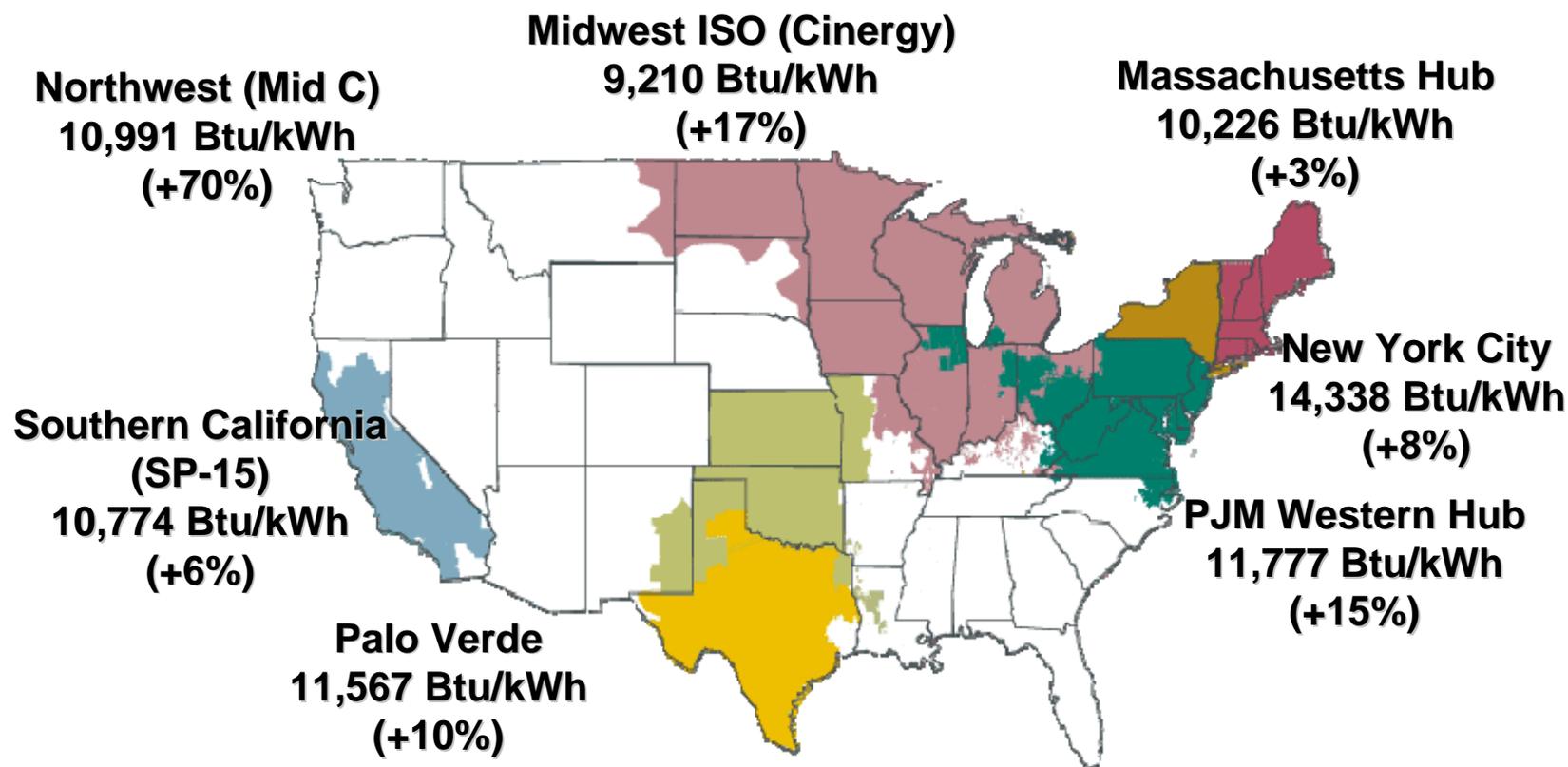


Source: Velocity Suite

Updated February 5, 2010

10005

## June-August Implied Heat Rates, 2009 vs. 2008



Source: Implied heat rates derived from Platts *Megawatt Daily* data.

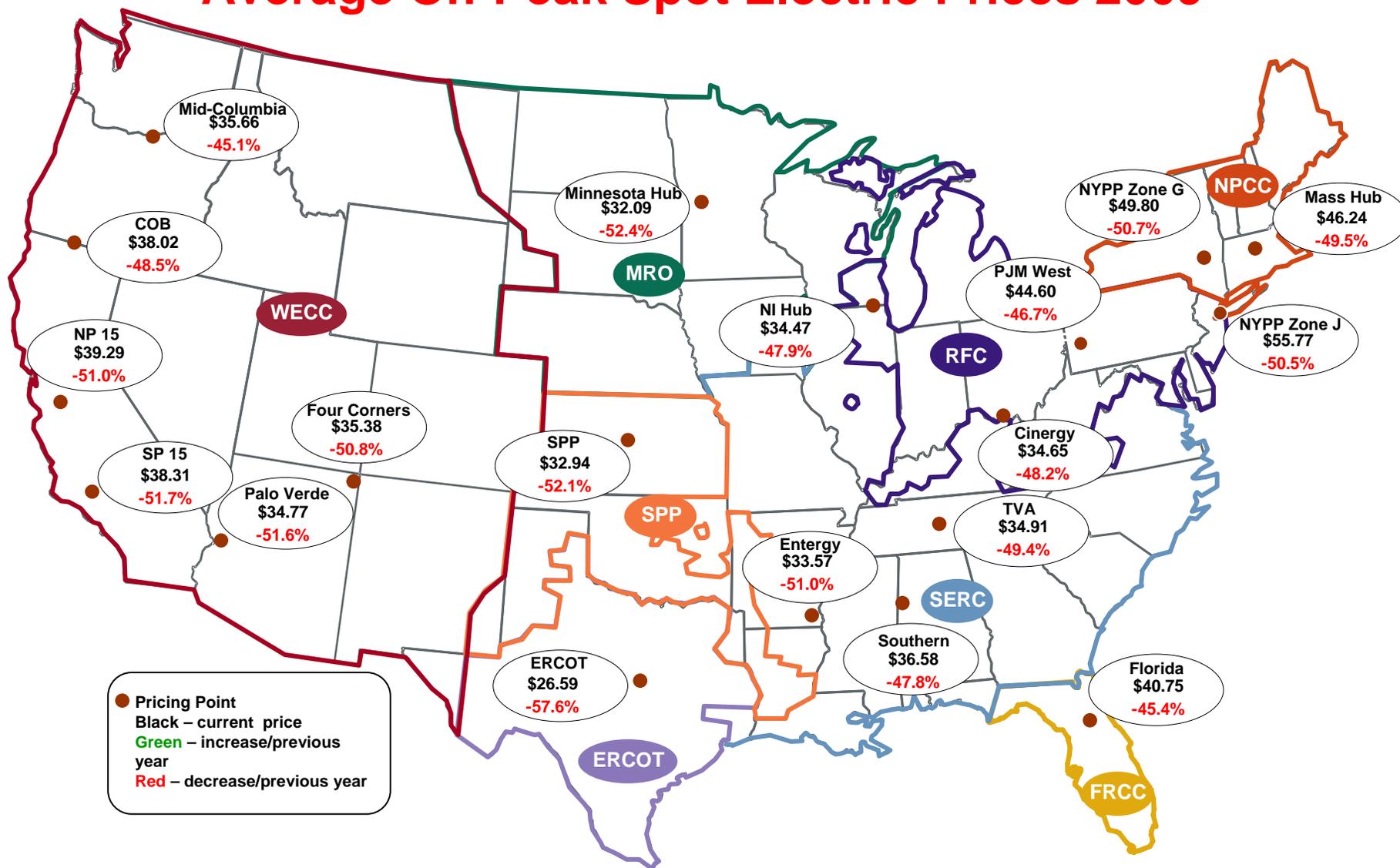
Updated October 7, 2009

1206

## Electric Market Overview: On-Peak Spot Electric Prices

Federal Energy Regulatory Commission • Market Oversight @ FERC.gov

## Average On-Peak Spot Electric Prices 2009

Source: Derived from *Platts* data.

Updated January 8, 2010

1207

## Electric Market Overview: Regional Spot Prices

Federal Energy Regulatory Commission • Market Oversight @ FERC.gov

## Regional Spot Prices: 2007-2009

	On-peak Spot Prices					Off-peak Spot Prices				
	2007	2008	2009	% Change 07-08	% Change 08-09	2007	2008	2009	% Change 07-08	% Change 08-09
<b>Northeast</b>										
Mass Hub	77.39	91.55	46.24	18.3%	-49.5%	54.73	66.50	34.57	21.5%	-92.4%
Ny Zone G*	83.51	100.99	49.80	20.9%	-50.7%		67.32	34.14		-97.2%
NY Zone J*	94.15	112.63	55.77	19.6%	-50.5%		70.29	35.25		-99.4%
NY Zone A*	64.02	68.34	35.54	6.7%	-48.0%		50.68	27.98		-81.1%
PJM West	71.15	83.70	44.60	17.6%	-46.7%	42.23	51.21	31.68	21.3%	-61.6%
<b>Southeast</b>										
VACAR	60.52	70.86	36.42	17.1%	-48.6%	33.67	39.36	25.68	16.9%	-53.2%
Southern	59.10	70.13	36.58	18.7%	-47.8%	33.03	39.82	25.82	20.6%	-54.2%
TVA	60.28	69.01	34.91	14.5%	-49.4%	33.56	38.61	24.69	15.0%	-56.4%
Florida	65.59	74.66	40.75	13.8%	-45.4%	35.80	41.35	28.00	15.5%	-47.7%
Entergy	59.74	68.49	33.57	14.6%	-51.0%	31.88	35.26	21.89	10.6%	-61.1%
<b>Midwest</b>										
Cinergy	61.20	66.88	34.65	9.3%	-48.2%	28.94	31.14	22.15	7.6%	-40.6%
Michigan Hub	64.43	69.15	36.56	7.3%	-47.1%	31.04	31.81	22.97	2.5%	-38.5%
Minnesota Hub	72.32	67.46	32.09	-6.7%	-52.4%	29.32	25.76	14.19	-12.1%	-81.6%
NI Hub	58.93	66.13	34.47	12.2%	-47.9%	29.32	31.24	19.49	6.5%	-60.3%
Illinois Hub	59.88	62.52	31.36	4.4%	-49.8%	27.40	26.29	17.44	-4.1%	-50.7%
MAPP South	61.18	69.18	33.31	13.1%	-51.9%	30.80	34.00	20.78	10.4%	-63.6%
<b>South Central</b>										
SPP North	60.21	68.77	32.94	14.2%	-52.1%	31.24	33.66	20.36	7.7%	-65.4%
ERCOT	58.27	62.78	26.59	7.7%	-57.6%	38.83	38.36	17.44	-1.2%	-119.9%
<b>Southwest</b>										
Four Corners	63.21	71.84	35.38	13.7%	-50.8%	40.19	49.40	23.76	22.9%	-107.9%
Palo Verde	61.74	71.87	34.77	16.4%	-51.6%	41.94	52.16	24.26	24.4%	-115.0%
Mead	64.49	75.63	36.58	17.3%	-51.6%	44.15	54.90	26.34	24.3%	-108.4%
<b>Northwest</b>										
Mid-C	56.57	65.00	35.66	14.9%	-45.1%	44.00	53.70	28.24	22.0%	-90.2%
COB	62.14	73.86	38.02	18.9%	-48.5%	46.38	55.81	29.22	20.3%	-91.0%
<b>California</b>										
NP15	66.59	80.14	39.29	20.3%	-51.0%	47.10	59.22	28.66	25.7%	-106.6%
SP15	66.48	79.36	38.31	19.4%	-51.7%	46.76	57.86	26.64	23.7%	-117.2%

Note: \* Off Peak as of April 2, 2007.

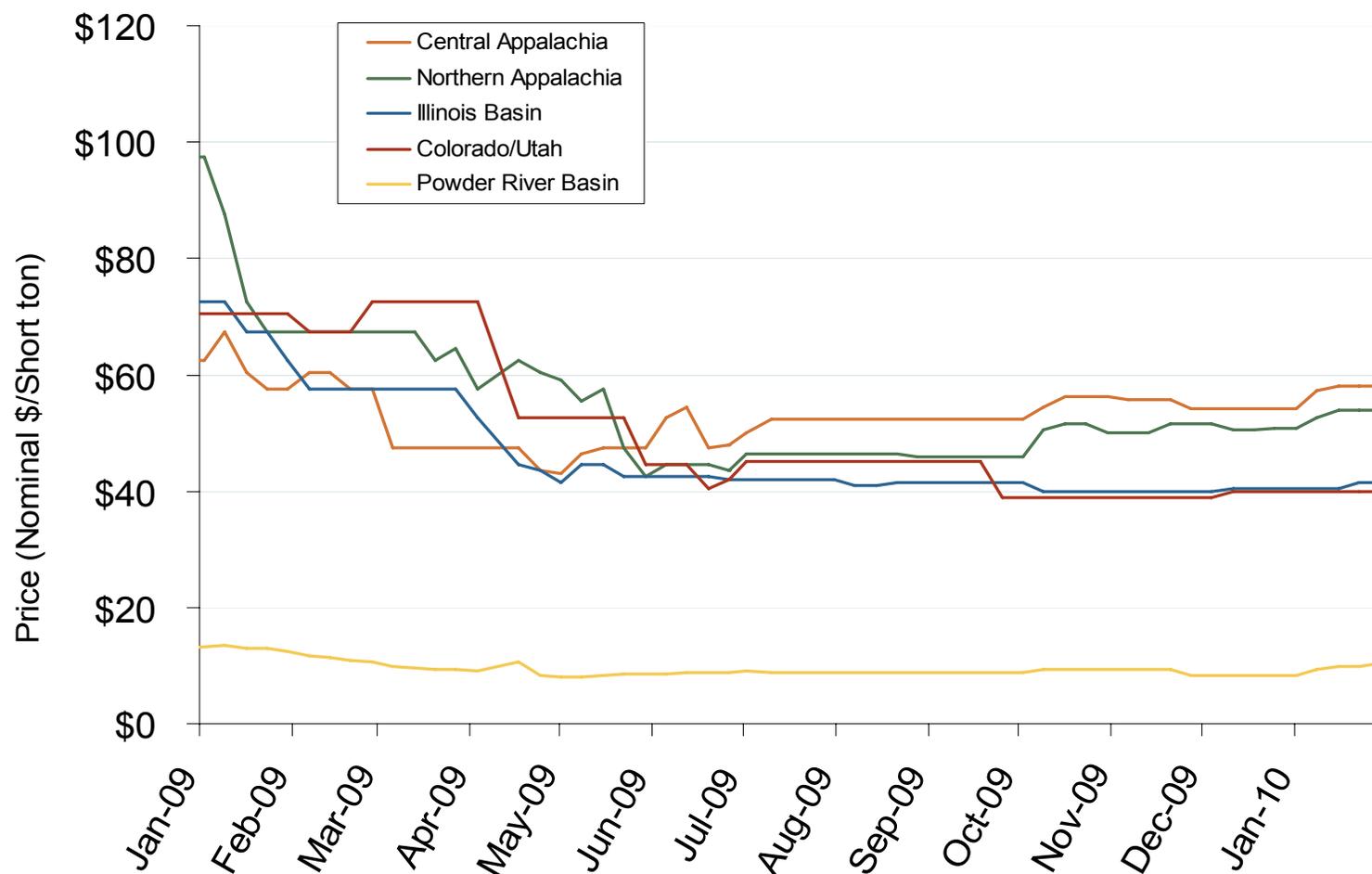
## Regional Electric and Input Prices: 2007-2009

Electricity and Input Prices, 2007-09			
	2007	2008	2009
<b>Electric Spot Prices (On-Peak \$ per MWh)</b>			
Mass Hub	\$77.39	\$91.55	\$46.24
Cinergy	\$61.20	\$66.88	\$34.65
SP-15	\$66.48	\$79.36	\$38.31
<b>Input Prices</b>			
<b>Natural Gas (\$ per MMBtu)</b>			
Henry Hub	\$6.94	\$8.85	\$3.92
New York	\$8.46	\$10.13	\$4.89
Southern California	\$6.41	\$7.80	\$3.61
<b>Coal (\$ per ton)</b>			
Central Appalachian (Eastern)	\$45.72	\$92.37	\$53.65
Powder River Basin (Western)	\$10.28	\$13.72	\$9.09
<b>Emissions (\$ per ton)</b>			
SO <sub>2</sub> Allowances	\$527.58	\$272.60	\$81.01
NO <sub>x</sub> allowances	\$815.87	\$797.40	\$67.50
<b>Oil</b>			
WTI (Crude - \$ per barrel)	\$72.45	\$99.63	\$61.84
Residual Fuel, New York (\$ per barrel)	\$64.35	\$91.94	\$61.18
Distillate Fuel, New York (\$ per gallon)	\$2.22	\$3.08	\$1.90

## National Electric Market Overview: Coal Prices

Federal Energy Regulatory Commission • Market Oversight @ FERC.gov

## Central Appalachian and Powder River Basin Coal Prices



Note: the Central Appalachian (CAPP) coal is priced at Big Sandy. All others are mine mouth prices. Prices do not include transportation costs to a plant, as those can vary widely by contract specifications. Prices exclude incremental cost of emissions allowances.

Source: Derived from *Bloomberg* data.

Updated February 5, 2010

1148