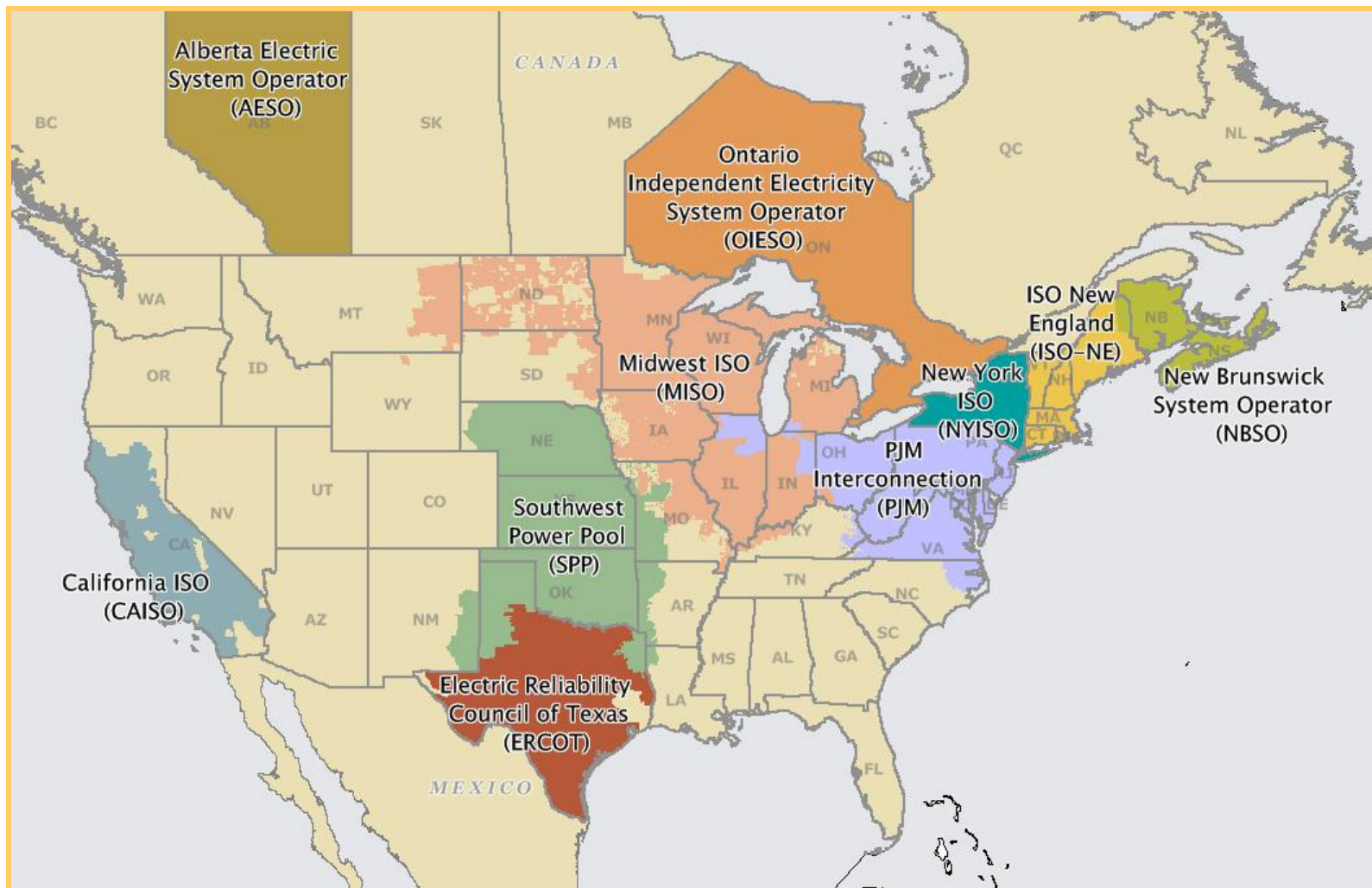
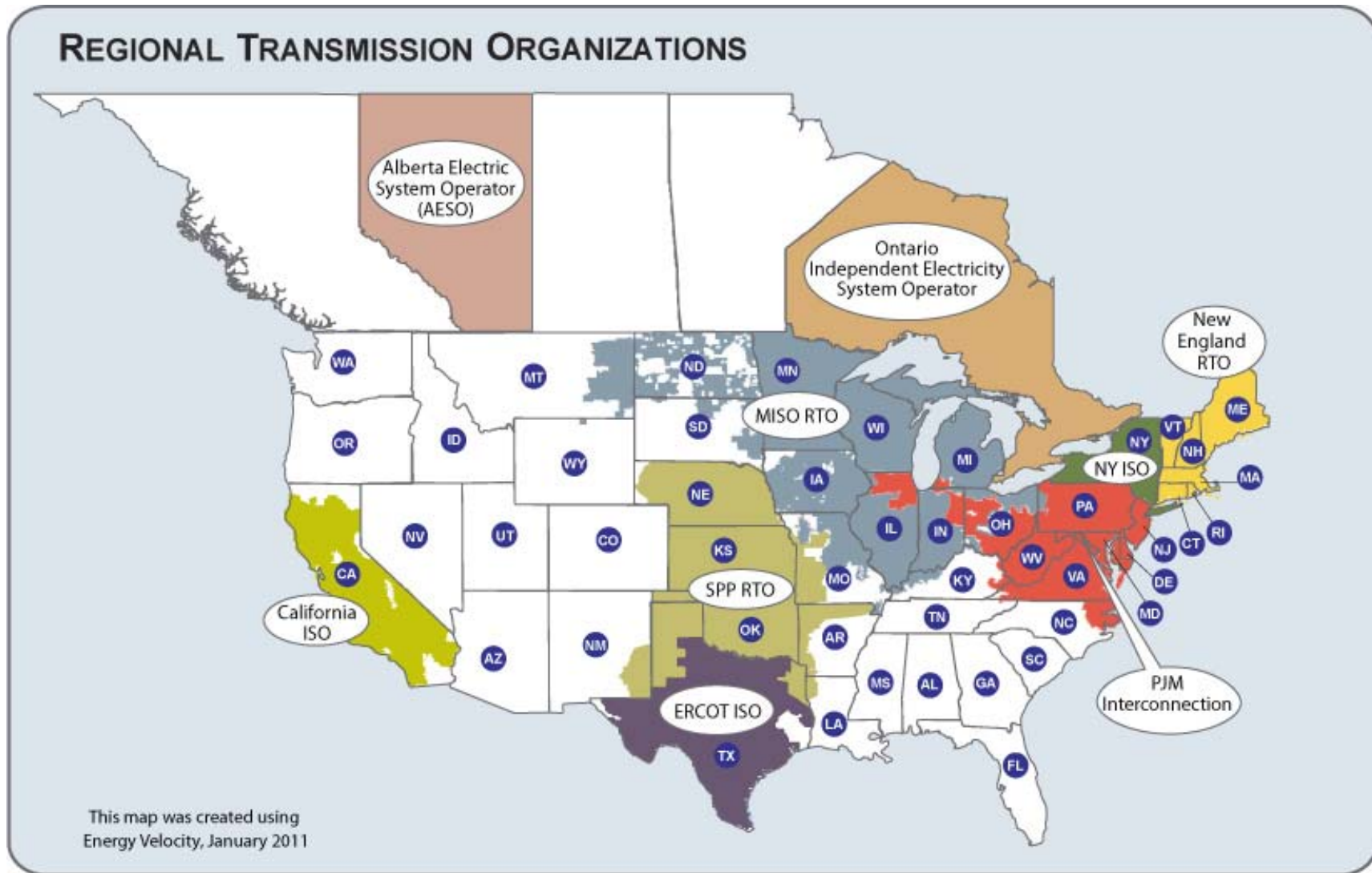


## North American Regional Transmission Organizations

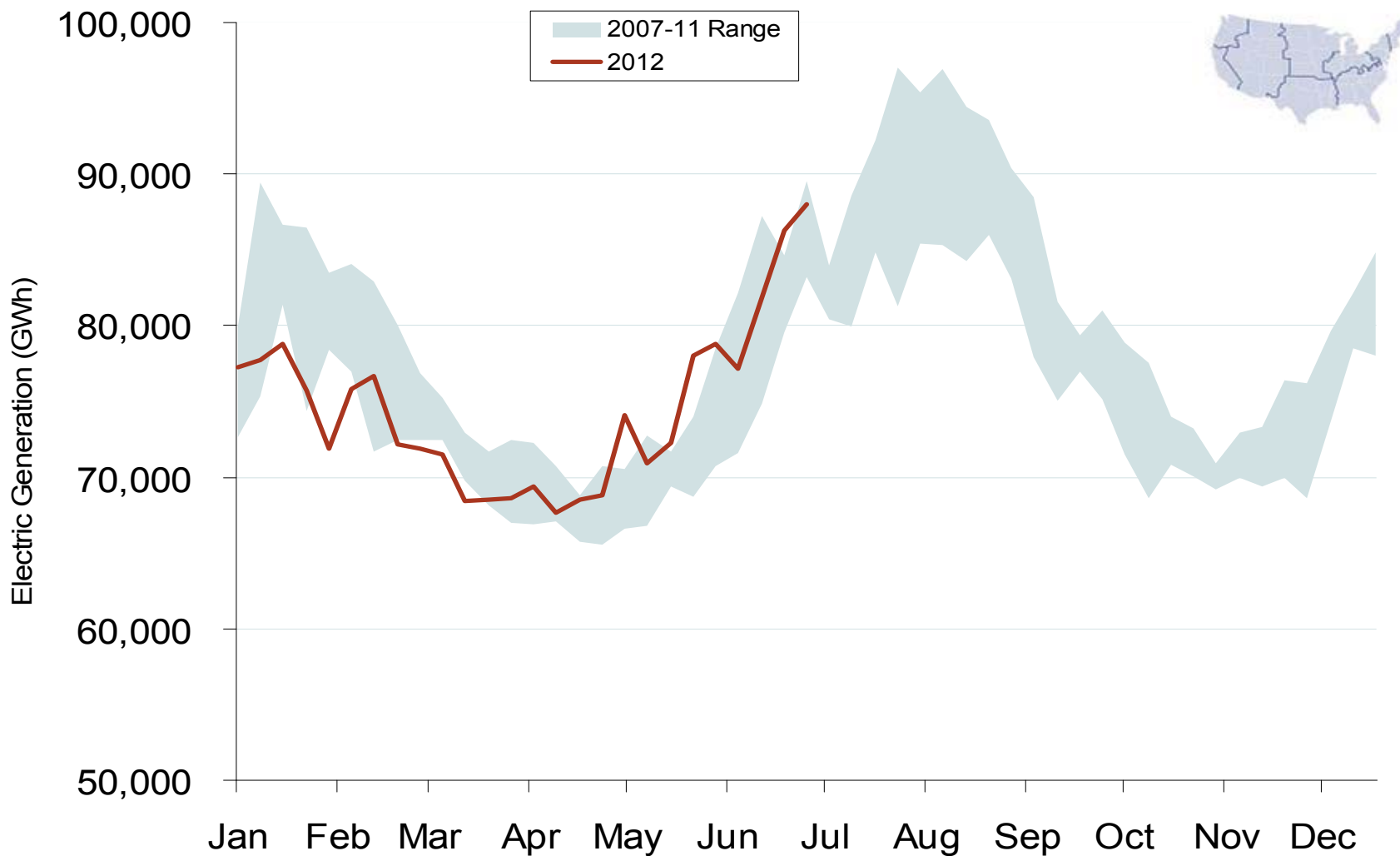


# Regional Transmission Organizations

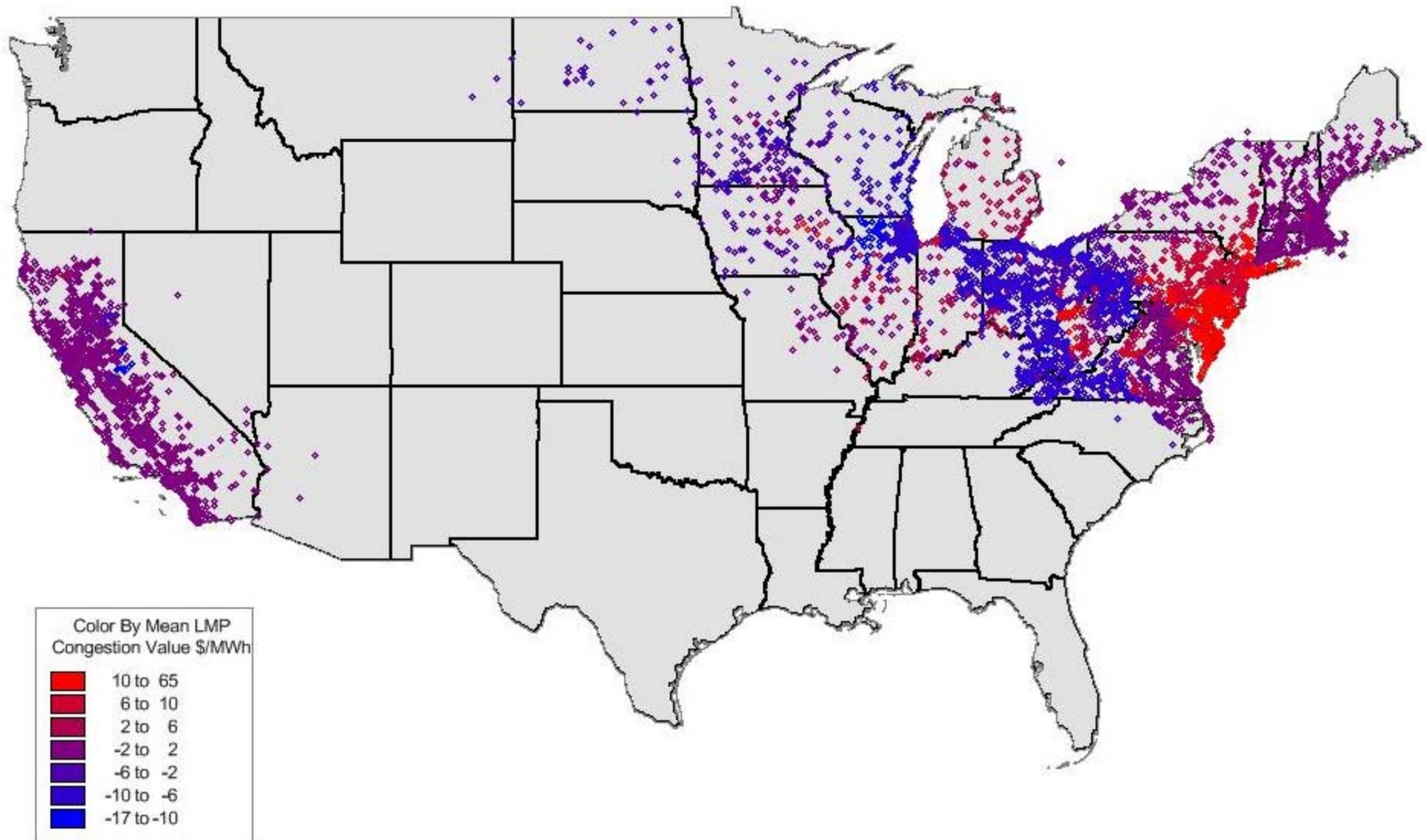


Updated January 13, 2011

## Weekly U.S. Electric Generation Output



## Day Ahead On-Peak Avg. Monthly Congestion - July 2011



Source: Velocity Suite

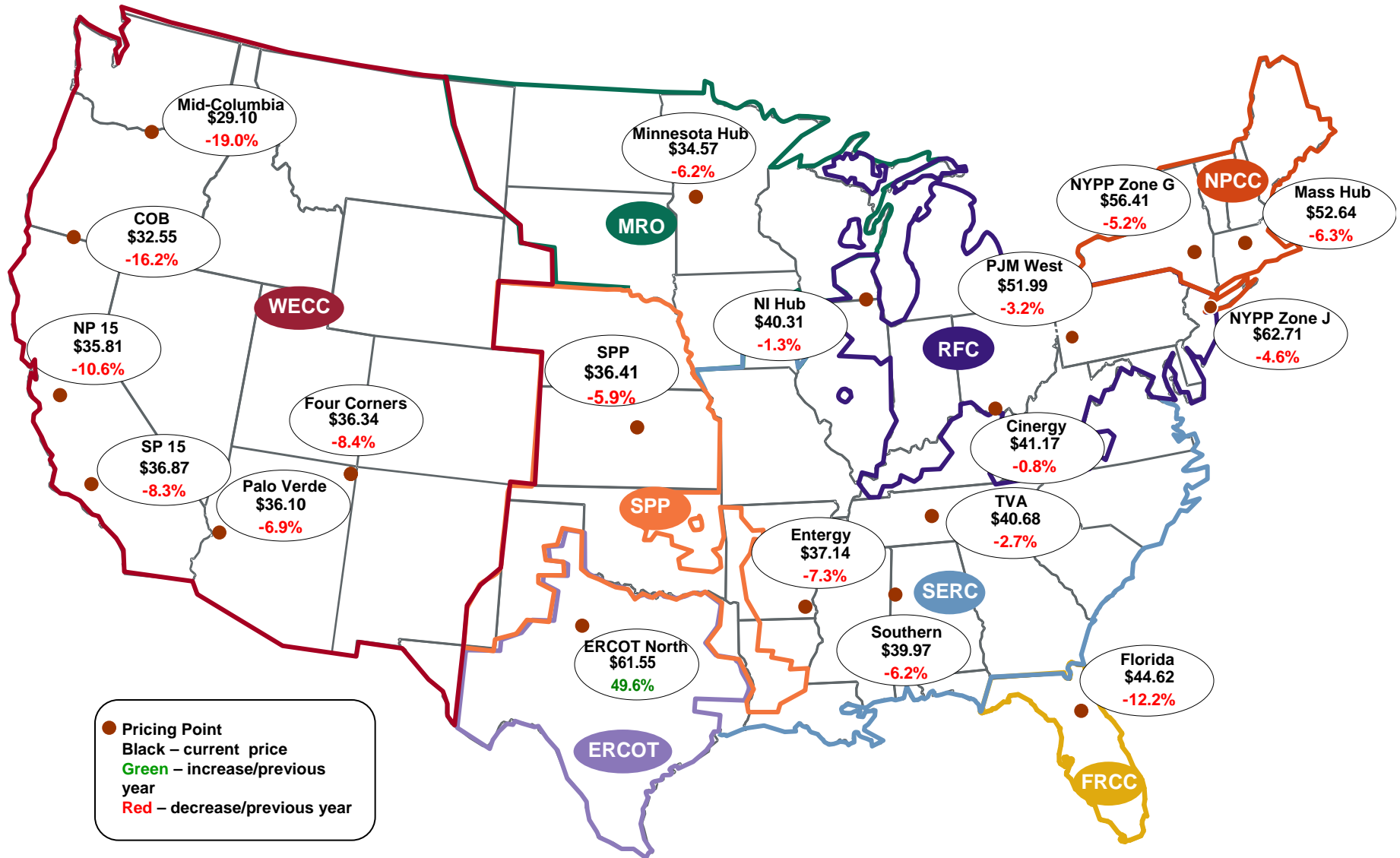
July 2012

Updated August 12, 2011

10005



## Average On-Peak Spot Electric Prices 2011 (\$/MWh)



## Electric Market Overview: Regional Spot Prices

Federal Energy Regulatory Commission • Market Oversight @ FERC.gov

## Regional Spot Prices: 2009-2011

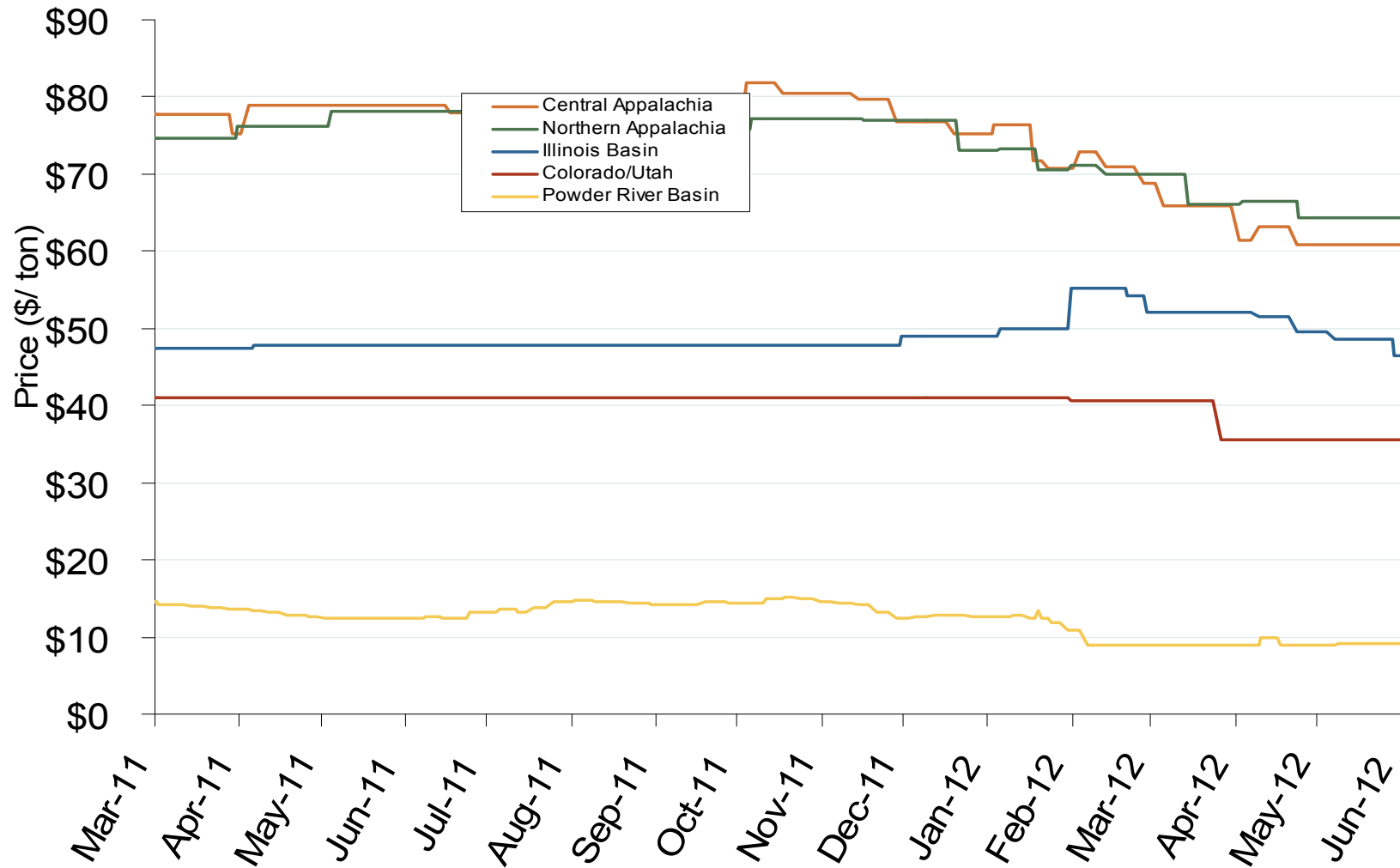
	On-peak Spot Prices (\$/MWh)					Off-peak Spot Prices (\$/MWh)				
	2009	2010	2011	% Change 09-10	% Change 10-11	2009	2010	2011	% Change 09-10	% Change 10-11
<b>Northeast</b>										
Mass Hub	46.24	56.18	52.64	21.5%	-6.3%	34.57	38.84	37.95	12.4%	-2.3%
Ny Zone G	49.80	59.48	56.41	19.4%	-5.2%	34.14	39.47	38.26	15.6%	-3.1%
NY Zone J	55.77	65.76	62.71	17.9%	-4.6%	35.25	40.37	39.19	14.5%	-2.9%
NY Zone A	35.54	43.89	41.52	23.5%	-5.4%	27.98	34.05	32.65	21.7%	-4.1%
PJM West	44.60	53.68	51.99	20.4%	-3.2%	31.68	35.81	33.94	13.0%	-5.2%
<b>Southeast</b>										
VACAR	36.42	43.24	44.44	18.7%	2.8%	25.68	29.18	30.23	13.6%	3.6%
Southern	36.58	42.61	39.97	16.5%	-6.2%	25.82	29.51	27.98	14.3%	-5.2%
TVA	34.91	41.79	40.68	19.7%	-2.7%	24.69	27.43	27.55	11.1%	0.4%
Florida	40.75	50.81	44.62	24.7%	-12.2%	28.00	31.59	31.27	12.8%	-1.0%
Entergy	33.57	40.07	37.14	19.3%	-7.3%	21.89	24.87	24.52	13.7%	-1.4%
<b>Midwest</b>										
Cinergy*	34.65	41.51	41.17	19.8%	-0.8%	22.15	24.34	25.86	9.9%	6.2%
Michigan Hub	36.56	43.68	42.73	19.5%	-2.2%	22.97	26.84	27.52	16.9%	2.5%
Minnesota Hub	32.09	36.86	34.57	14.9%	-6.2%	14.19	17.61	16.39	24.1%	-6.9%
NI Hub	34.47	40.85	40.31	18.5%	-1.3%	19.49	21.70	22.78	11.3%	5.0%
Illinois Hub	31.36	38.22	38.12	21.9%	-0.2%	17.44	20.44	22.20	17.2%	8.6%
MA PP South	33.31	37.60	35.48	12.9%	-5.6%	20.78	21.76	19.90	4.7%	-8.5%
<b>South Central</b>										
SPP North	32.94	38.71	36.41	17.5%	-5.9%	20.36	21.51	20.42	5.7%	-5.1%
ERCOT North	34.89	41.15	61.55	17.9%	49.6%	22.37	26.97	25.74	20.6%	-4.6%
<b>Southwest</b>										
Four Corners	35.38	39.68	36.34	12.2%	-8.4%	23.76	27.02	20.45	13.7%	-24.3%
Palo Verde	34.77	38.76	36.10	11.5%	-6.9%	24.26	27.72	21.57	14.3%	-22.2%
Mead	36.58	40.11	36.92	9.7%	-8.0%	26.34	29.37	22.34	11.5%	-23.9%
<b>Northwest</b>										
Mid-C	35.66	35.90	29.10	0.7%	-19.0%	28.24	29.19	19.98	3.4%	-31.6%
COB	38.02	38.84	32.55	2.2%	-16.2%	29.22	29.86	19.92	2.2%	-33.3%
<b>California</b>										
NP15	39.29	40.08	35.81	2.0%	-10.6%	28.66	29.89	21.26	4.3%	-28.9%
SP15	38.31	40.21	36.87	5.0%	-8.3%	26.64	29.14	21.78	9.4%	-25.3%

Note: Effective January 1, 2012, Platts will replace the Cinergy Hub with the Indiana Hub.

## Regional Electric and Input Prices: 2009-2011

Electricity and Input Prices, 2009-11			
	2009	2010	2011
<b>Electric Spot Prices (On-Peak \$ per MWh)</b>			
Mass Hub	\$46.24	\$56.18	\$52.64
Cinergy	\$34.65	\$41.51	\$41.17
SP-15	\$38.31	\$40.21	\$36.87
<b>Input Prices</b>			
<b>Natural Gas (\$ per MMBtu)</b>			
Henry Hub	\$3.92	\$4.37	\$3.99
New York	\$4.89	\$5.41	\$4.98
Southern California	\$3.61	\$4.25	\$4.05
<b>Coal (\$ per ton)</b>			
Central Appalachian (Eastern)	\$53.65	\$64.97	\$78.70
Powder River Basin (Western)	\$9.09	\$12.75	\$13.63
<b>Oil</b>			
WTI (Crude - \$ per barrel)	\$0.00	\$79.39	\$98.17
Residual Fuel, New York (\$ per barrel)	\$61.18	\$78.98	\$115.07
Distillate Fuel, New York (\$ per gallon)	\$1.90	\$2.38	\$3.24

## Central Appalachian and Powder River Basin Coal Prices



Notes: 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: July 13, 2012