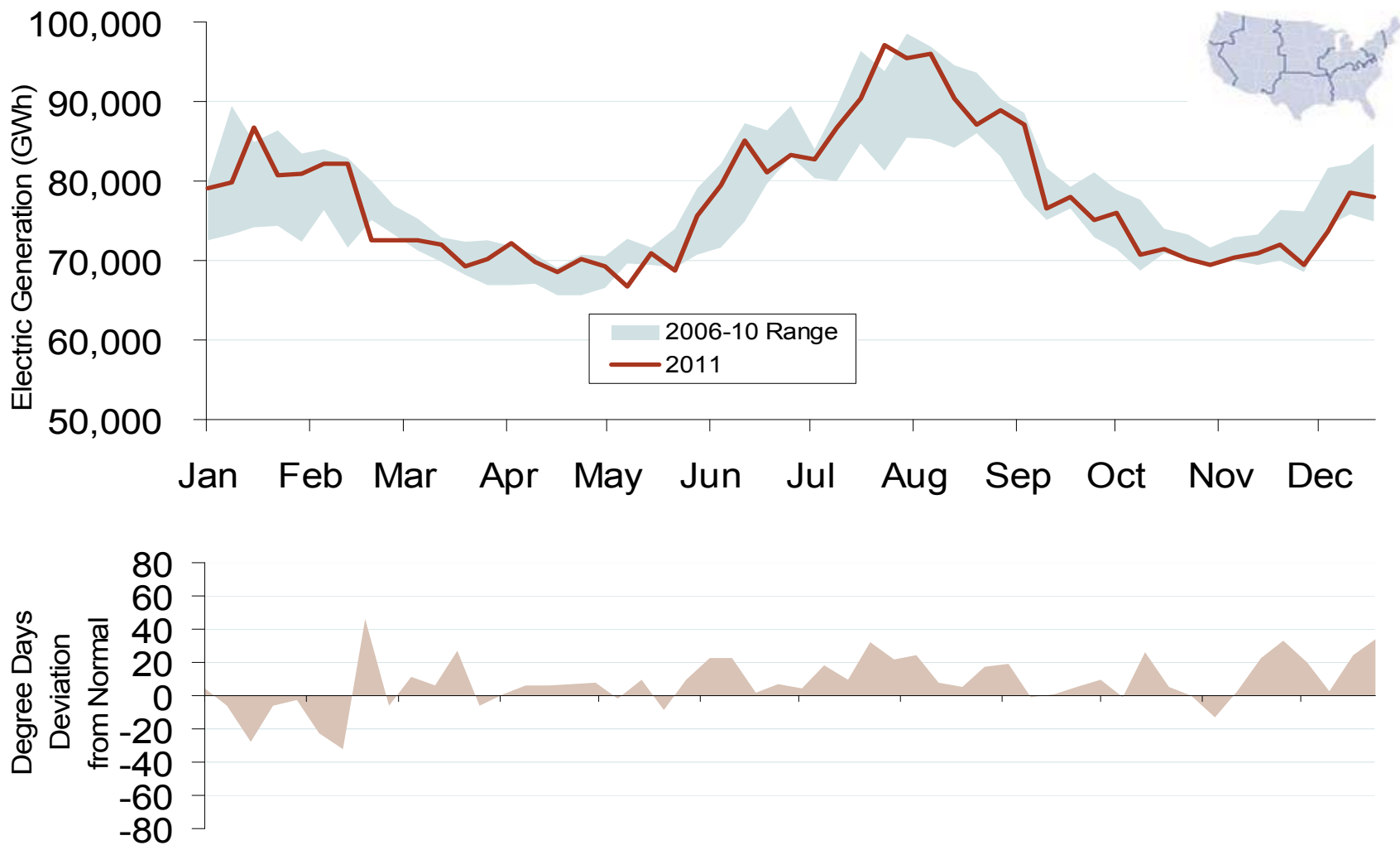


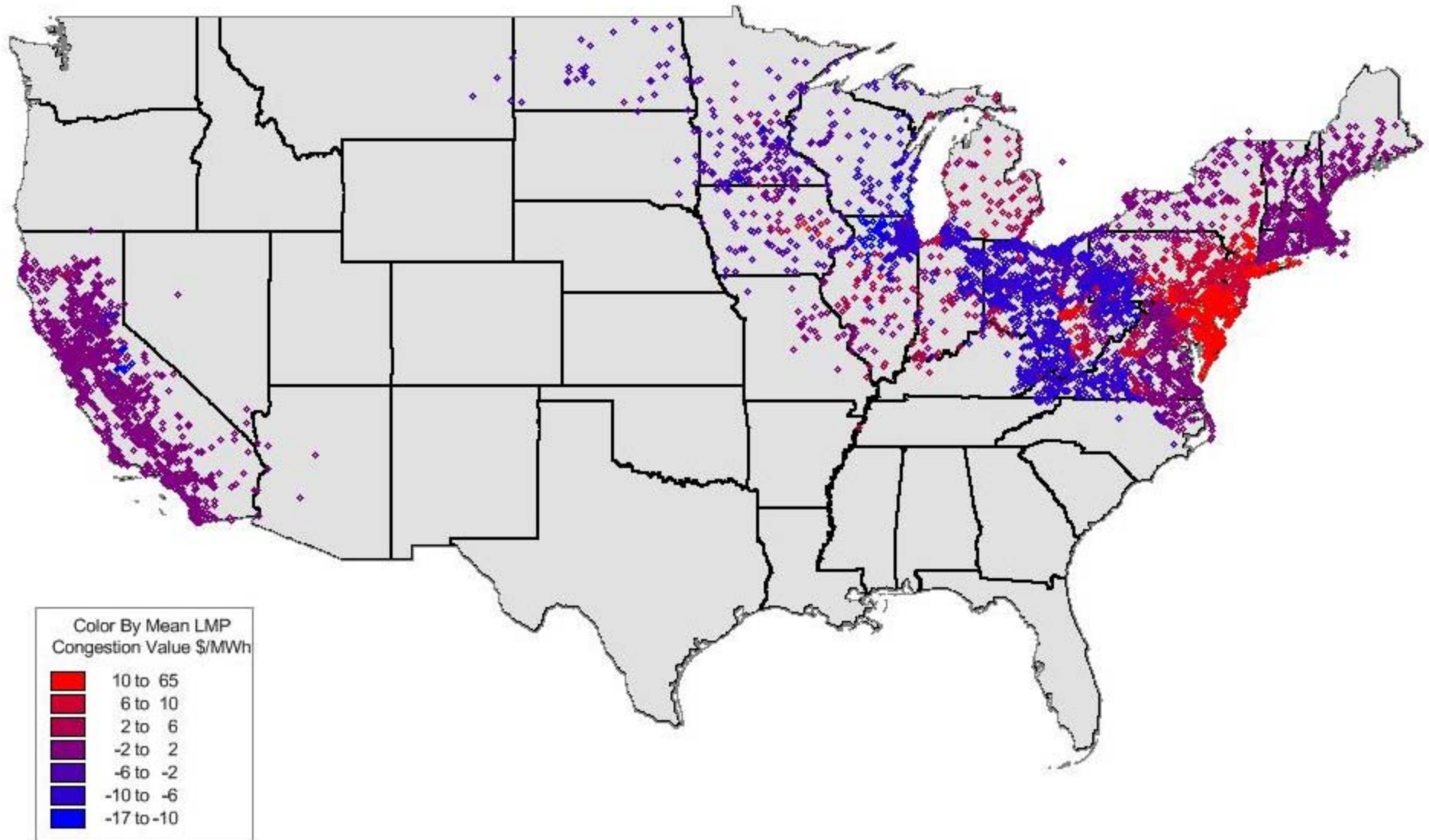




## Weekly U.S. Electric Generation Output and Temperatures



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



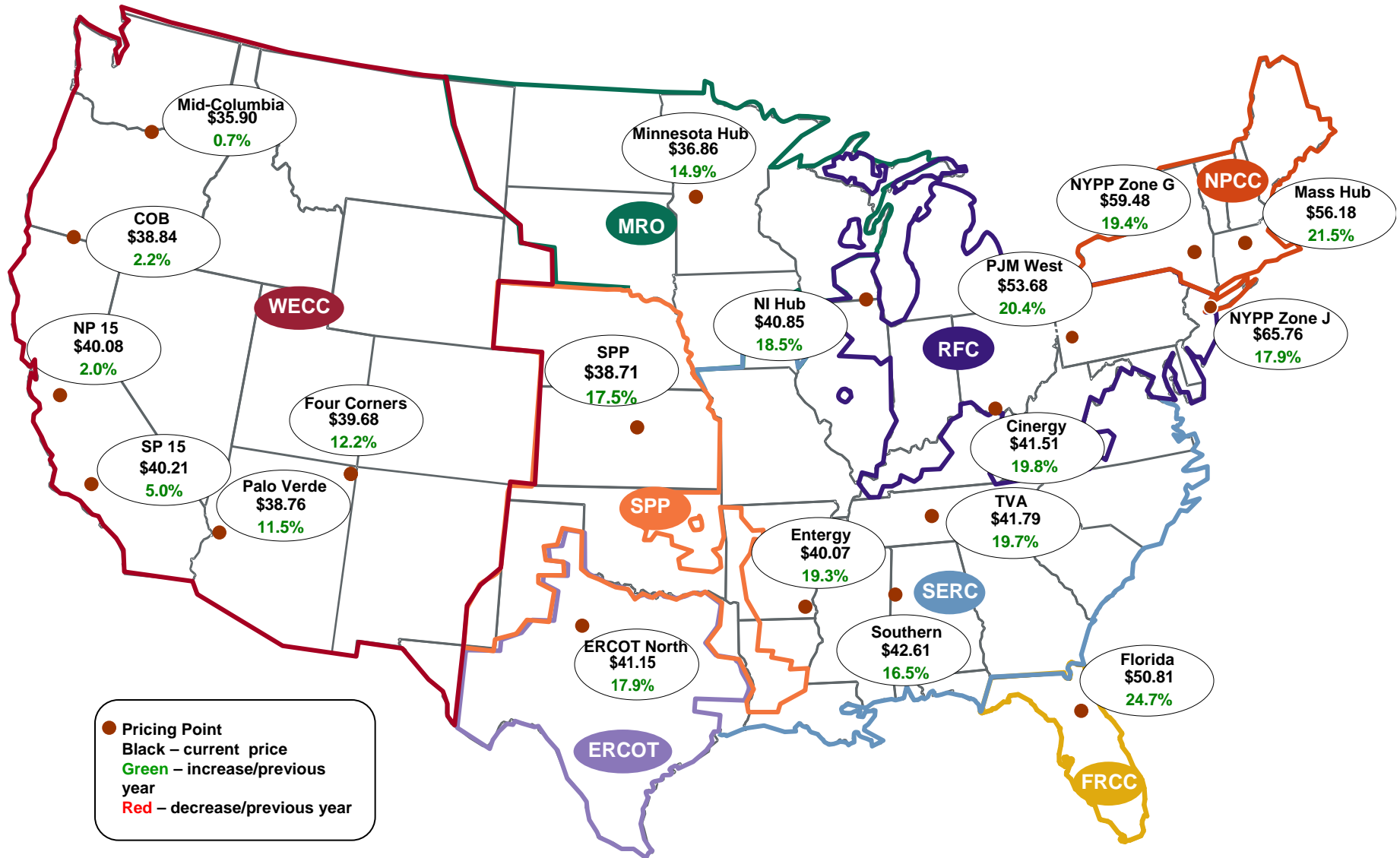
Source: Velocity Suite

January 2012

Updated August 12, 2011

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## Average On-Peak Spot Electric Prices 2010 (\$/MWh)



## Electric Market Overview: Regional Spot Prices

Federal Energy Regulatory Commission • Market Oversight @ FERC.gov

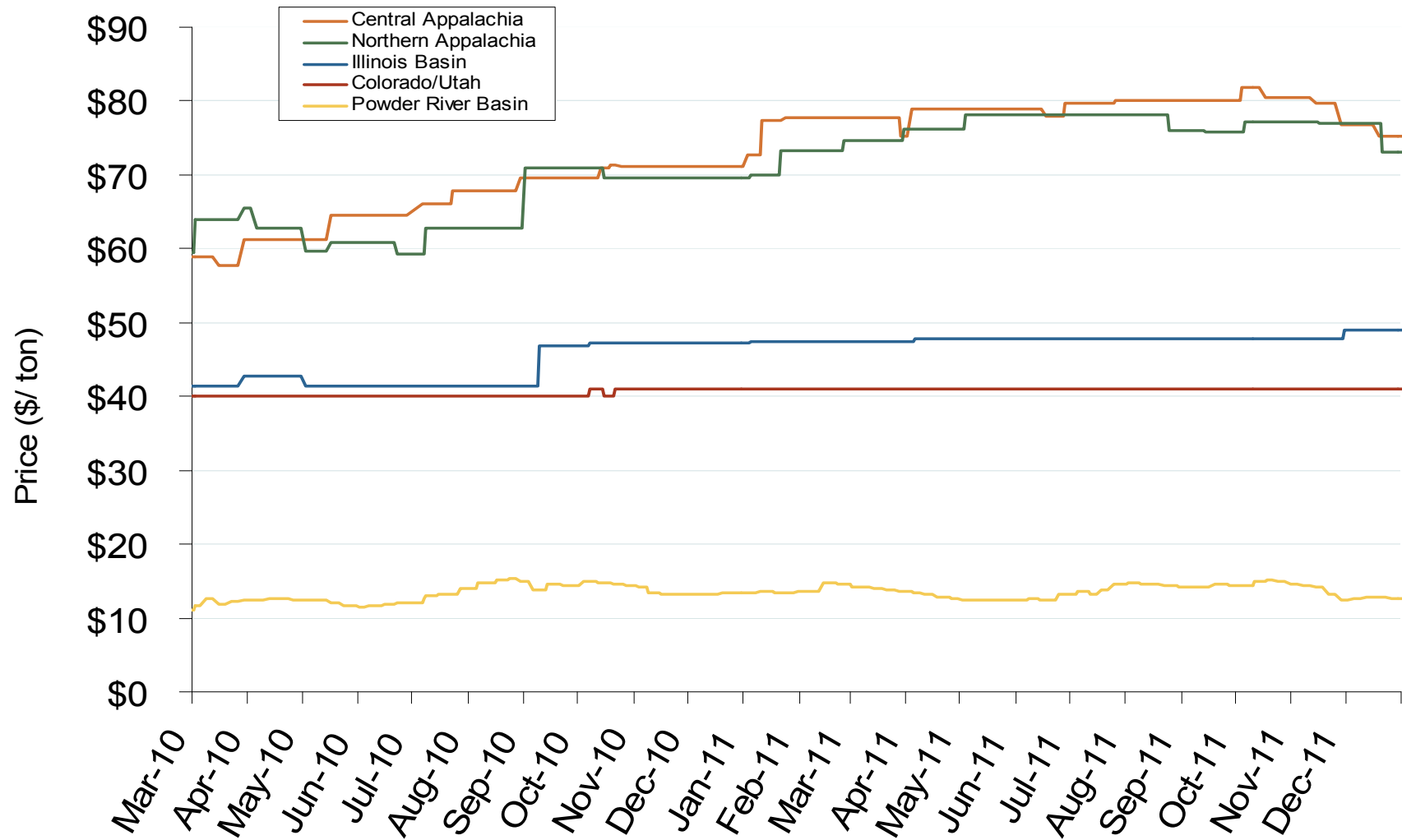
## Regional Spot Prices: 2008-2010

	On-peak Spot Prices (\$/MWh)					Off-peak Spot Prices (\$/MWh)				
	2008	2009	2010	% Change 08-09	% Change 09-10	2008	2009	2010	% Change 08-09	% Change 09-10
<b>Northeast</b>										
Mass Hub	91.55	46.24	56.18	-49.5%	21.5%	66.50	34.57	38.84	-48.0%	12.4%
Ny Zone G*	100.99	49.80	59.48	-50.7%	19.4%	67.32	34.14	39.47	-49.3%	15.6%
NY Zone J*	112.63	55.77	65.76	-50.5%	17.9%	70.29	35.25	40.37	-49.8%	14.5%
NY Zone A*	68.34	35.54	43.89	-48.0%	23.5%	50.68	27.98	34.05	-44.8%	21.7%
PJM West	83.70	44.60	53.68	-46.7%	20.4%	51.21	31.68	35.81	-38.1%	13.0%
<b>Southeast</b>										
VACAR	70.86	36.42	43.24	-48.6%	18.7%	39.36	25.68	29.18	-34.7%	13.6%
Southern	70.13	36.58	42.61	-47.8%	16.5%	39.82	25.82	29.51	-35.1%	14.3%
TVA	69.01	34.91	41.79	-49.4%	19.7%	38.61	24.69	27.43	-36.1%	11.1%
Florida	74.66	40.75	50.81	-45.4%	24.7%	41.35	28.00	31.59	-32.3%	12.8%
Entergy	68.49	33.57	40.07	-51.0%	19.3%	35.26	21.89	24.87	-37.9%	13.7%
<b>Midwest</b>										
Cinergy	66.88	34.65	41.51	-48.2%	19.8%	31.14	22.15	24.34	-28.9%	9.9%
Michigan Hub	69.15	36.56	43.68	-47.1%	19.5%	31.81	22.97	26.84	-27.8%	16.9%
Minnesota Hub	67.46	32.09	36.86	-52.4%	14.9%	25.76	14.19	17.61	-44.9%	24.1%
NI Hub	66.13	34.47	40.85	-47.9%	18.5%	31.24	19.49	21.70	-37.6%	11.3%
Illinois Hub	62.52	31.36	38.22	-49.8%	21.9%	26.29	17.44	20.44	-33.6%	17.2%
MAPP South	69.18	33.31	37.60	-51.9%	12.9%	34.00	20.78	21.76	-38.9%	4.7%
<b>South Central</b>										
SPP North	68.77	32.94	38.71	-52.1%	17.5%	33.66	20.36	21.51	-39.5%	5.7%
ERCOT North	73.42	34.89	41.15	-52.5%	17.9%	46.71	22.37	26.97	-52.1%	20.6%
<b>Southwest</b>										
Four Corners	71.84	35.38	39.68	-50.8%	12.2%	49.40	23.76	27.02	-51.9%	13.7%
Palo Verde	71.87	34.77	38.76	-51.6%	11.5%	52.16	24.26	27.72	-53.5%	14.3%
Mead	75.63	36.58	40.11	-51.6%	9.7%	54.90	26.34	29.37	-52.0%	11.5%
<b>Northwest</b>										
Mid-C	65.00	35.66	35.90	-45.1%	0.7%	53.70	28.24	29.19	-47.4%	3.4%
COB	73.86	38.02	38.84	-48.5%	2.2%	55.81	29.22	29.86	-47.7%	2.2%
<b>California</b>										
NP15	80.14	39.29	40.08	-51.0%	2.0%	59.22	28.66	29.89	-51.6%	4.3%
SP15	79.36	38.31	40.21	-51.7%	5.0%	57.86	26.64	29.14	-54.0%	9.4%

## Regional Electric and Input Prices: 2008-2010

Electricity and Input Prices, 2008-10			
	2008	2009	2010
<b>Electric Spot Prices (On-Peak \$ per MWh)</b>			
Mass Hub	\$91.55	\$46.24	\$56.18
Cinergy	\$66.88	\$34.65	\$41.51
SP-15	\$79.36	\$38.31	\$40.21
<b>Input Prices</b>			
<b>Natural Gas (\$ per MMBtu)</b>			
Henry Hub	\$8.85	\$3.92	\$4.38
New York	\$10.13	\$4.89	\$5.41
Southern California	\$7.80	\$3.61	\$4.25
<b>Coal (\$ per ton)</b>			
Central Appalachian (Eastern)	\$92.37	\$53.65	\$64.97
Powder River Basin (Western)	\$13.72	\$9.09	\$12.75
<b>Emissions (\$ per ton)</b>			
SO <sub>2</sub> Allowances	\$272.60	\$81.01	\$16.59
NO <sub>x</sub> allowances	\$797.40	\$305.39	\$45.03
<b>Oil</b>			
WTI (Crude - \$ per barrel)	\$99.63	\$61.84	\$79.39
Residual Fuel, New York (\$ per barrel)	\$91.94	\$61.18	\$78.98
Distillate Fuel, New York (\$ per gallon)	\$3.08	\$1.90	\$2.38

## 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: January 04, 2012