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Quarterly State of the Market Report for PJM: January through September

Energy Market and Congestion Appendix

Monitoring Analytics, LLC

2011

Independent Market Monitor for PJM

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APPENDIX A - ENERGY MARKET AND CONGESTION DATA

This Appendix A document reports PJM Energy Market and Congestion data for the first nine months of 2011 as a supplement to Sections 2 and 7 of the 2011 Quarterly State of the Market Report for PJM: January through September.

For detailed descriptions of the data contained here, please see the tables and figures from the 2010 State of the Market Report for PJM that are referenced in the captions.¹

Section 2 - Energy Market, Part 1

Zonal Real-Time, Average LMP

Table A-1 Zonal real-time, simple average LMP (Dollars per MWh): January through September 2010 and 2011 (See 2010 SOM, Table 2-35)

	2010 (Jan - Sept)	2011 (Jan - Sept)	Difference	Difference as Percent of 2010
AECO	\$52.40	\$51.78	(\$0.62)	(1.2%)
AEP	\$39.13	\$40.75	\$1.62	4.1%
AP	\$45.30	\$45.55	\$0.25	0.6%
ATSI	NA	\$42.90	NA	NA
BGE	\$55.05	\$52.80	(\$2.25)	(4.1%)
ComEd	\$35.31	\$35.74	\$0.43	1.2%
DAY	\$39.16	\$40.88	\$1.73	4.4%
DLCO	\$38.17	\$40.60	\$2.43	6.4%
Dominion	\$52.11	\$49.78	(\$2.33)	(4.5%)
DPL	\$52.64	\$51.30	(\$1.34)	(2.5%)
JCPL	\$51.17	\$51.55	\$0.38	0.7%
Met-Ed	\$50.90	\$49.39	(\$1.51)	(3.0%)
PECO	\$50.71	\$50.46	(\$0.25)	(0.5%)
PENELEC	\$43.38	\$45.67	\$2.29	5.3%
Pepco	\$54.04	\$50.69	(\$3.34)	(6.2%)
PPL	\$49.23	\$49.73	\$0.50	1.0%
PSEG	\$52.03	\$52.20	\$0.18	0.3%
RECO	\$50.14	\$47.18	(\$2.96)	(5.9%)
PJM	\$46.13	\$45.79	(\$0.33)	(0.7%)

¹ See the 2010 State of the Market Report for PJM, Volume 2. http://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2010/2010-som-pjm-volume2.pdf

Real-Time, Average LMP by Jurisdiction

Table A-2 Jurisdiction real-time, simple average LMP (Dollars per MWh): January through September 2010 and 2011 (See 2010 SOM, Table 2-36)

	2010 (Jan - Sept)	2011 (Jan - Sept)	Difference	Difference as Percent of 2010
Delaware	\$51.69	\$50.50	(\$1.19)	(2.3%)
Illinois	\$35.31	\$35.74	\$0.43	1.2%
Indiana	\$38.36	\$39.99	\$1.64	4.3%
Kentucky	\$39.32	\$39.98	\$0.66	1.7%
Maryland	\$54.51	\$51.58	(\$2.93)	(5.4%)
Michigan	\$39.05	\$40.98	\$1.93	4.9%
New Jersey	\$51.82	\$51.89	\$0.07	0.1%
North Carolina	\$50.13	\$48.51	(\$1.62)	(3.2%)
Ohio	\$38.48	\$41.12	\$2.64	6.9%
Pennsylvania	\$47.32	\$47.78	\$0.46	1.0%
Tennessee	\$40.06	\$40.04	(\$0.02)	(0.0%)
Virginia	\$50.58	\$48.52	(\$2.06)	(4.1%)
West Virginia	\$39.82	\$41.76	\$1.94	4.9%
District of Columbia	\$54.21	\$50.77	(\$3.44)	(6.3%)

Hub Real-Time, Average LMP

Table A-3 Hub real-time, simple average LMP (Dollars per MWh): January through September 2010 and 2011 (See 2010 SOM, Table 2-37)

	2010 (Jan - Sept)	2011 (Jan - Sept)	Difference	Difference as Percent of 2010
AEP Gen Hub	\$36.53	\$38.60	\$2.07	5.7%
AEP-DAY Hub	\$38.48	\$40.16	\$1.68	4.4%
ATSI Gen Hub	NA	\$42.40	\$42.40	NA
Chicago Gen Hub	\$34.17	\$34.60	\$0.43	1.3%
Chicago Hub	\$35.53	\$35.96	\$0.43	1.2%
Dominion Hub	\$50.56	\$49.22	(\$1.34)	(2.7%)
Eastern Hub	\$52.60	\$51.70	(\$0.90)	(1.7%)
N Illinois Hub	\$35.06	\$35.46	\$0.40	1.2%
New Jersey Hub	\$51.70	\$51.89	\$0.19	0.4%
Ohio Hub	\$38.57	\$40.17	\$1.60	4.1%
West Interface Hub	\$41.57	\$42.67	\$1.10	2.7%
Western Hub	\$46.70	\$46.42	(\$0.28)	(0.6%)



Zonal Real-Time, Load-Weighted, Average LMP

Table A-4 Zonal real-time, load-weighted, average LMP (Dollars per MWh): January through September 2010 and 2011 (See 2010 SOM, Table 2-39)

	2010 (Jan - Sept)	2011 (Jan - Sept)	Difference	Difference as Percent of 2010
AECO	\$59.51	\$57.81	(\$1.70)	(2.9%)
AEP	\$41.37	\$42.97	\$1.60	3.9%
AP	\$48.37	\$48.57	\$0.20	0.4%
ATSI	NA	\$46.88	NA	NA
BGE	\$60.99	\$58.74	(\$2.25)	(3.7%)
ComEd	\$38.46	\$38.97	\$0.51	1.3%
DAY	\$41.82	\$43.90	\$2.08	5.0%
DLCO	\$40.69	\$43.30	\$2.61	6.4%
Dominion	\$57.51	\$54.47	(\$3.04)	(5.3%)
DPL	\$58.42	\$56.76	(\$1.66)	(2.8%)
JCPL	\$57.98	\$58.09	\$0.11	0.2%
Met-Ed	\$55.45	\$53.64	(\$1.81)	(3.3%)
PECO	\$55.59	\$55.19	(\$0.40)	(0.7%)
PENELEC	\$45.58	\$48.18	\$2.60	5.7%
Pepco	\$59.69	\$55.71	(\$3.98)	(6.7%)
PPL	\$53.23	\$53.76	\$0.53	1.0%
PSEG	\$57.37	\$57.16	(\$0.20)	(0.4%)
RECO	\$56.61	\$53.17	(\$3.44)	(6.1%)
PJM	\$49.91	\$49.48	(\$0.44)	(0.9%)

Real-Time, Load-Weighted, Average LMP by Jurisdiction

Table A-5 Jurisdiction real-time, load-weighted, average LMP (Dollars per MWh): January through September 2010 and 2011 (See 2010 SOM, Table 2-40)

	2010 (Jan - Sept)	2011 (Jan - Sept)	Difference	Difference as Percent of 2010
Delaware	\$57.03	\$55.61	(\$1.42)	(2.5%)
Illinois	\$38.46	\$38.97	\$0.51	1.3%
Indiana	\$40.11	\$41.94	\$1.83	4.6%
Kentucky	\$41.92	\$42.38	\$0.46	1.1%
Maryland	\$60.53	\$57.14	(\$3.39)	(5.6%)
Michigan	\$41.72	\$43.63	\$1.91	4.6%
New Jersey	\$57.83	\$57.45	(\$0.38)	(0.7%)
North Carolina	\$55.17	\$52.78	(\$2.39)	(4.3%)
Ohio	\$40.72	\$44.31	\$3.59	8.8%
Pennsylvania	\$50.96	\$51.46	\$0.50	1.0%
Tennessee	\$42.86	\$42.28	(\$0.58)	(1.3%)
Virginia	\$55.56	\$52.88	(\$2.69)	(4.8%)
West Virginia	\$42.08	\$43.98	\$1.90	4.5%
District of Columbia	\$58.79	\$54.76	(\$4.04)	(6.9%)



Zonal Day-Ahead, Average LMP

Table A-6 Zonal day-ahead, simple average LMP (Dollars per MWh): January through September 2010 and 2011 (See 2010 SOM, Table 2-44)

	2010 (Jan - Sept)	2011 (Jan - Sept)	Difference	Difference as Percent of 2010
AECO	\$51.79	\$51.78	(\$0.01)	(0.0%)
AEP	\$39.00	\$40.80	\$1.80	4.6%
AP	\$45.16	\$45.29	\$0.13	0.3%
ATSI	NA	\$42.61	NA	NA
BGE	\$54.65	\$51.87	(\$2.78)	(5.1%)
ComEd	\$35.29	\$35.65	\$0.36	1.0%
DAY	\$38.85	\$40.65	\$1.80	4.6%
DLCO	\$38.90	\$40.15	\$1.25	3.2%
Dominion	\$52.22	\$48.99	(\$3.23)	(6.2%)
DPL	\$52.02	\$51.71	(\$0.31)	(0.6%)
JCPL	\$51.29	\$51.22	(\$0.07)	(0.1%)
Met-Ed	\$50.59	\$49.10	(\$1.49)	(2.9%)
PECO	\$50.90	\$51.00	\$0.11	0.2%
PENELEC	\$44.39	\$45.14	\$0.75	1.7%
Pepco	\$54.25	\$50.75	(\$3.49)	(6.4%)
PPL	\$49.05	\$49.28	\$0.23	0.5%
PSEG	\$52.04	\$52.00	(\$0.04)	(0.1%)
RECO	\$50.86	\$48.89	(\$1.96)	(3.9%)
PJM	\$45.81	\$45.14	(\$0.67)	(1.5%)

Day-Ahead, Average LMP by Jurisdiction

Table A-7 Jurisdiction day-ahead, simple average LMP (Dollars per MWh): January through September 2010 and 2011 (See 2010 SOM, Table 2-45)

	2010 (Jan - Sept)	2011 (Jan - Sept)	Difference	Difference as Percent of 2010
Delaware	\$50.94	\$50.79	(\$0.15)	(0.3%)
Illinois	\$35.29	\$35.65	\$0.36	1.0%
Indiana	\$38.26	\$39.91	\$1.65	4.3%
Kentucky	\$39.08	\$39.87	\$0.78	2.0%
Maryland	\$54.46	\$51.34	(\$3.12)	(5.7%)
Michigan	\$38.87	\$41.03	\$2.15	5.5%
New Jersey	\$51.79	\$51.71	(\$0.08)	(0.2%)
North Carolina	\$50.39	\$47.72	(\$2.67)	(5.3%)
Ohio	\$38.21	\$40.76	\$2.55	6.7%
Pennsylvania	\$47.46	\$47.69	\$0.23	0.5%
Tennessee	\$40.05	\$40.03	(\$0.02)	(0.1%)
Virginia	\$50.88	\$48.04	(\$2.84)	(5.6%)
West Virginia	\$39.69	\$42.12	\$2.42	6.1%
District of Columbia	\$54.28	\$50.75	(\$3.53)	(6.5%)



Zonal Day-Ahead, Load-Weighted LMP

Table A-8 Zonal day-ahead, load-weighted, average LMP (Dollars per MWh): January through September 2010 and 2011 (See 2010 SOM, Table 2-47)

	2010 (Jan - Sept)	2011 (Jan - Sept)	Difference	Difference as Percent of 2010
AECO	\$59.13	\$57.45	(\$1.68)	(2.8%)
AEP	\$41.23	\$42.90	\$1.67	4.0%
AP	\$47.83	\$47.66	(\$0.17)	(0.4%)
ATSI	NA	\$46.14	NA	NA
BGE	\$60.25	\$57.10	(\$3.15)	(5.2%)
ComEd	\$37.68	\$38.12	\$0.44	1.2%
DAY	\$41.31	\$43.25	\$1.94	4.7%
DLCO	\$41.37	\$42.60	\$1.22	3.0%
Dominion	\$57.37	\$53.16	(\$4.21)	(7.3%)
DPL	\$57.37	\$56.97	(\$0.40)	(0.7%)
JCPL	\$56.70	\$56.24	(\$0.46)	(0.8%)
Met-Ed	\$54.68	\$52.37	(\$2.31)	(4.2%)
PECO	\$55.30	\$55.35	\$0.05	0.1%
PENELEC	\$46.03	\$47.41	\$1.37	3.0%
Pepco	\$57.89	\$54.99	(\$2.90)	(5.0%)
PPL	\$52.44	\$52.82	\$0.38	0.7%
PSEG	\$56.46	\$56.24	(\$0.22)	(0.4%)
RECO	\$57.14	\$53.55	(\$3.59)	(6.3%)
PJM	\$49.12	\$48.34	(\$0.78)	(1.6%)

Day-Ahead, Load-Weighted, Average LMP by Jurisdiction

Table A-9 Jurisdiction day-ahead, load weighted LMP (Dollars per MWh): January through September 2010 and 2011 (See 2010 SOM, Table 2-48)

	2010 (Jan - Sept)	2011 (Jan - Sept)	Difference	Difference as Percent of 2010
Delaware	\$55.79	\$55.69	(\$0.09)	(0.2%)
Illinois	\$37.68	\$38.12	\$0.44	1.2%
Indiana	\$40.24	\$41.82	\$1.57	3.9%
Kentucky	\$41.42	\$42.14	\$0.72	1.7%
Maryland	\$59.30	\$56.10	(\$3.21)	(5.4%)
Michigan	\$40.56	\$43.15	\$2.60	6.4%
New Jersey	\$56.88	\$56.34	(\$0.53)	(0.9%)
North Carolina	\$55.39	\$51.91	(\$3.47)	(6.3%)
Ohio	\$40.37	\$44.02	\$3.65	9.0%
Pennsylvania	\$50.45	\$50.88	\$0.43	0.9%
Tennessee	\$42.64	\$42.25	(\$0.39)	(0.9%)
Virginia	\$55.63	\$51.89	(\$3.74)	(6.7%)
West Virginia	\$42.06	\$44.22	\$2.16	5.1%
District of Columbia	\$57.59	\$54.44	(\$3.15)	(5.5%)





Zonal Price Convergence

Table A-10 Zonal day-ahead and real-time simple average LMP (Dollars per MWh): January through September 2011 (See 2010 SOM, Table 2-68)

	Day Ahead	Real Time	Difference	Difference as Percent of Real Time
AECO	\$51.78	\$51.78	\$0.00	0.0%
AEP	\$40.80	\$40.75	(\$0.05)	(0.1%)
AP	\$45.29	\$45.55	\$0.26	0.6%
ATSI	\$42.61	\$42.90	\$0.30	0.7%
BGE	\$51.87	\$52.80	\$0.93	1.8%
ComEd	\$35.65	\$35.74	\$0.10	0.3%
DAY	\$40.65	\$40.88	\$0.23	0.6%
DLCO	\$40.15	\$40.60	\$0.45	1.1%
Dominion	\$48.99	\$49.78	\$0.79	1.6%
DPL	\$51.71	\$51.30	(\$0.41)	(0.8%)
JCPL	\$51.22	\$51.55	\$0.34	0.7%
Met-Ed	\$49.10	\$49.39	\$0.29	0.6%
PECO	\$51.00	\$50.46	(\$0.54)	(1.1%)
PENELEC	\$45.14	\$45.67	\$0.53	1.2%
Pepco	\$50.75	\$50.69	(\$0.06)	(0.1%)
PPL	\$49.28	\$49.73	\$0.45	0.9%
PSEG	\$52.00	\$52.20	\$0.20	0.4%
RECO	\$48.89	\$47.18	(\$1.71)	(3.5%)

Price Convergence by Jurisdiction

Table A-11 Jurisdiction day-ahead and real-time simple average LMP (Dollars per MWh): January through September 2011 (See 2010 SOM, Table 2-69)

	Day Ahead	Real Time	Difference	Difference as Percent of Real Time
Delaware	\$50.79	\$50.50	(\$0.29)	(0.6%)
Illinois	\$35.65	\$35.74	\$0.10	0.3%
Indiana	\$39.91	\$39.99	\$0.08	0.2%
Kentucky	\$39.87	\$39.98	\$0.11	0.3%
Maryland	\$51.34	\$51.58	\$0.24	0.5%
Michigan	\$41.03	\$40.98	(\$0.05)	(0.1%)
New Jersey	\$51.71	\$51.89	\$0.18	0.3%
North Carolina	\$47.72	\$48.51	\$0.78	1.6%
Ohio	\$40.76	\$41.12	\$0.36	0.9%
Pennsylvania	\$47.69	\$47.78	\$0.09	0.2%
Tennessee	\$40.03	\$40.04	\$0.01	0.0%
Virginia	\$48.04	\$48.52	\$0.48	1.0%
West Virginia	\$42.12	\$41.76	(\$0.35)	(0.8%)
District of Columbia	\$50.75	\$50.77	\$0.02	0.0%

Marginal Losses

Table A-12 Zonal real-time, simple average LMP components (Dollars per MWh): January through September 2010 and 2011 (See 2010 SOM, Table 2-51)

	2010 (Jan - Sep)					2011 (Ja	an - Sep)	
	Real-Time LMP	Energy Component	Congestion Component	Loss Component	Real-Time LMP	Energy Component	Congestion Component	Loss Component
AECO	\$52.40	\$46.03	\$3.87	\$2.50	\$51.78	\$45.73	\$3.69	\$2.36
AEP	\$39.13	\$46.03	(\$5.23)	(\$1.66)	\$40.75	\$45.73	(\$3.41)	(\$1.56)
AP	\$45.30	\$46.03	(\$0.42)	(\$0.31)	\$45.55	\$45.73	(\$0.02)	(\$0.16)
ATSI	NA	NA	NA	NA	\$42.90	\$46.63	(\$3.21)	(\$0.52)
BGE	\$55.05	\$46.03	\$6.72	\$2.30	\$52.80	\$45.73	\$5.01	\$2.07
ComEd	\$35.31	\$46.03	(\$7.87)	(\$2.84)	\$35.74	\$45.73	(\$7.23)	(\$2.75)
DAY	\$39.16	\$46.03	(\$5.92)	(\$0.95)	\$40.88	\$45.73	(\$3.92)	(\$0.92)
DLCO	\$38.17	\$46.03	(\$6.08)	(\$1.78)	\$40.60	\$45.73	(\$3.61)	(\$1.51)
Dominion	\$52.11	\$46.03	\$5.31	\$0.78	\$49.78	\$45.73	\$3.45	\$0.60
DPL	\$52.64	\$46.03	\$3.99	\$2.63	\$51.30	\$45.73	\$2.97	\$2.61
JCPL	\$51.17	\$46.03	\$2.79	\$2.35	\$51.55	\$45.73	\$3.44	\$2.38
Met-Ed	\$50.90	\$46.03	\$3.78	\$1.09	\$49.39	\$45.73	\$2.78	\$0.88
PECO	\$50.71	\$46.03	\$2.99	\$1.69	\$50.46	\$45.73	\$3.04	\$1.69
PENELEC	\$43.38	\$46.03	(\$2.36)	(\$0.29)	\$45.67	\$45.73	(\$0.41)	\$0.36
Pepco	\$54.04	\$46.03	\$6.61	\$1.40	\$50.69	\$45.73	\$3.79	\$1.18
PPL	\$49.23	\$46.03	\$2.38	\$0.82	\$49.73	\$45.73	\$3.15	\$0.86
PSEG	\$52.03	\$46.03	\$3.59	\$2.41	\$52.20	\$45.73	\$4.07	\$2.41
RECO	\$50.14	\$46.03	\$2.04	\$2.08	\$47.18	\$45.73	(\$0.70)	\$2.16

Table A-13 Hub real-time, simple average LMP components (Dollars per MWh): January through September 2010 and 2011 (See 2010 SOM, Table 2-52)

		2010 (.	Jan - Sep)			2011 (Ja	ın - Sep)	
	Real-Time LMP	Energy Component	Congestion Component	Loss Component	Real-Time LMP	Energy Component	Congestion Component	Loss Component
AEP Gen Hub	\$36.53	\$46.03	(\$6.29)	(\$3.21)	\$38.60	\$45.73	(\$4.06)	(\$3.06)
AEP-DAY Hub	\$38.48	\$46.03	(\$5.70)	(\$1.85)	\$40.16	\$45.73	(\$3.79)	(\$1.78)
ATSI Gen Hub	NA	NA	NA	NA	\$42.40	\$46.62	(\$3.23)	(\$0.99)
Chicago Gen Hub	\$34.17	\$46.03	(\$8.40)	(\$3.46)	\$34.60	\$45.73	(\$7.77)	(\$3.36)
Chicago Hub	\$35.53	\$46.03	(\$7.67)	(\$2.82)	\$35.96	\$45.73	(\$7.05)	(\$2.72)
Dominion Hub	\$50.56	\$46.03	\$4.29	\$0.25	\$49.22	\$45.73	\$3.33	\$0.17
Eastern Hub	\$52.60	\$46.03	\$3.76	\$2.82	\$51.70	\$45.73	\$3.13	\$2.84
N Illinois Hub	\$35.06	\$46.03	(\$7.89)	(\$3.08)	\$35.46	\$45.73	(\$7.28)	(\$2.98)
New Jersey Hub	\$51.70	\$46.03	\$3.32	\$2.35	\$51.89	\$45.73	\$3.80	\$2.36
Ohio Hub	\$38.57	\$46.03	(\$5.69)	(\$1.76)	\$40.17	\$45.73	(\$3.87)	(\$1.69)
West Interface Hub	\$41.57	\$46.03	(\$2.85)	(\$1.60)	\$42.67	\$45.73	(\$1.83)	(\$1.23)
Western Hub	\$46.70	\$46.03	\$1.01	(\$0.34)	\$46.42	\$45.73	\$0.83	(\$0.13)





Zonal and PJM Real-Time, Load-Weighted, Average LMP Components

Table A-14 Zonal and PJM real-time, load-weighted, average LMP components (Dollars per MWh): January through September 2010 and 2011 (See 2010 SOM, Table 2-53)

		2010 (Ja	an - Sep)			2011 (J	an - Sep)	
	Real-Time LMP	Energy Component	Congestion Component	Loss Component	Real-Time LMP	Energy Component	Congestion Component	Loss Component
AECO	\$59.51	\$51.05	\$5.58	\$2.88	\$57.81	\$50.11	\$4.95	\$2.75
AEP	\$41.37	\$49.05	(\$5.91)	(\$1.78)	\$42.97	\$48.64	(\$3.99)	(\$1.68)
AP	\$48.37	\$49.35	(\$0.62)	(\$0.36)	\$48.57	\$48.99	(\$0.22)	(\$0.20)
ATSI	NA	NA	NA	NA	\$46.88	\$51.24	(\$3.85)	(\$0.51)
BGE	\$60.99	\$50.23	\$8.21	\$2.54	\$58.74	\$49.82	\$6.62	\$2.30
ComEd	\$38.46	\$49.58	(\$8.19)	(\$2.93)	\$38.97	\$49.12	(\$7.32)	(\$2.83)
DAY	\$41.82	\$49.64	(\$6.86)	(\$0.96)	\$43.90	\$49.40	(\$4.57)	(\$0.93)
DLCO	\$40.69	\$49.52	(\$6.89)	(\$1.94)	\$43.30	\$49.12	(\$4.15)	(\$1.67)
Dominion	\$57.51	\$50.39	\$6.29	\$0.83	\$54.47	\$49.83	\$4.04	\$0.60
DPL	\$58.42	\$50.68	\$4.78	\$2.96	\$56.76	\$49.95	\$3.82	\$2.99
JCPL	\$57.98	\$51.43	\$3.91	\$2.64	\$58.09	\$50.73	\$4.62	\$2.74
Met-Ed	\$55.45	\$49.69	\$4.57	\$1.18	\$53.64	\$49.22	\$3.42	\$1.00
PECO	\$55.59	\$49.98	\$3.75	\$1.85	\$55.19	\$49.47	\$3.82	\$1.90
PENELEC	\$45.58	\$48.62	(\$2.72)	(\$0.33)	\$48.18	\$48.27	(\$0.46)	\$0.37
Рерсо	\$59.69	\$50.30	\$7.89	\$1.51	\$55.71	\$49.82	\$4.63	\$1.26
PPL	\$53.23	\$49.43	\$2.91	\$0.89	\$53.76	\$48.95	\$3.85	\$0.96
PSEG	\$57.37	\$50.32	\$4.43	\$2.62	\$57.16	\$49.71	\$4.78	\$2.67
RECO	\$56.61	\$51.42	\$2.88	\$2.31	\$53.17	\$50.88	(\$0.15)	\$2.44
PJM	\$49.91	\$49.81	\$0.06	\$0.04	\$49.48	\$49.40	\$0.05	\$0.03

Table A-15 Zonal day-ahead, simple average LMP components (Dollars per MWh): January through September 2010 and 2011 (See 2010 SOM, Table 2-55)

		2010 (Ja	an - Sep)			2011 (Ja	an - Sep)	
	Day-Ahead LMP	Energy Component	Congestion Component	Loss Component	Day-Ahead LMP	Energy Component	Congestion Component	Loss Component
AECO	\$51.79	\$45.76	\$2.96	\$3.07	\$51.78	\$45.34	\$3.63	\$2.80
AEP	\$39.00	\$45.76	(\$4.41)	(\$2.35)	\$40.80	\$45.34	(\$2.74)	(\$1.81)
AP	\$45.16	\$45.76	(\$0.28)	(\$0.31)	\$45.29	\$45.34	\$0.06	(\$0.11)
ATSI	NA	NA	NA	NA	\$42.61	\$46.60	(\$2.51)	(\$1.48)
BGE	\$54.65	\$45.76	\$5.90	\$2.99	\$51.87	\$45.34	\$4.11	\$2.42
ComEd	\$35.29	\$45.76	(\$6.63)	(\$3.85)	\$35.65	\$45.34	(\$6.32)	(\$3.38)
DAY	\$38.85	\$45.76	(\$5.01)	(\$1.90)	\$40.65	\$45.34	(\$3.56)	(\$1.13)
DLCO	\$38.90	\$45.76	(\$4.69)	(\$2.16)	\$40.15	\$45.34	(\$3.67)	(\$1.52)
Dominion	\$52.22	\$45.76	\$5.13	\$1.33	\$48.99	\$45.34	\$2.96	\$0.69
DPL	\$52.02	\$45.76	\$3.20	\$3.06	\$51.71	\$45.34	\$3.28	\$3.09
JCPL	\$51.29	\$45.76	\$2.43	\$3.10	\$51.22	\$45.34	\$3.09	\$2.78
Met-Ed	\$50.59	\$45.76	\$3.41	\$1.42	\$49.10	\$45.34	\$2.83	\$0.93
PECO	\$50.90	\$45.76	\$2.73	\$2.41	\$51.00	\$45.34	\$3.49	\$2.17
PENELEC	\$44.39	\$45.76	(\$1.32)	(\$0.05)	\$45.14	\$45.34	(\$0.43)	\$0.23
Pepco	\$54.25	\$45.76	\$6.29	\$2.20	\$50.75	\$45.34	\$3.79	\$1.62
PPL	\$49.05	\$45.76	\$2.26	\$1.03	\$49.28	\$45.34	\$3.10	\$0.84
PSEG	\$52.04	\$45.76	\$2.96	\$3.32	\$52.00	\$45.34	\$3.78	\$2.88
RECO	\$50.86	\$45.76	\$2.16	\$2.93	\$48.89	\$45.34	\$1.33	\$2.22



Zonal and PJM Day-Ahead, Load-Weighted, Average LMP Components

Table A-16 Zonal and PJM day-ahead, load-weighted, average LMP components (Dollars per MWh): January through September 2010 and 2011 (See 2010 SOM, Table 2-56)

		2010 (Ja	ın - Sep)			2011 (Ja	an - Sep)	
	Day-Ahead LMP	Energy Component	Congestion Component	Loss Component	Day-Ahead LMP	Energy Component	Congestion Component	Loss Component
AECO	\$59.13	\$51.39	\$4.01	\$3.73	\$57.45	\$49.53	\$4.67	\$3.25
AEP	\$41.23	\$48.81	(\$5.05)	(\$2.53)	\$42.90	\$48.10	(\$3.25)	(\$1.96)
AP	\$47.83	\$48.61	(\$0.43)	(\$0.36)	\$47.66	\$47.96	(\$0.16)	(\$0.15)
ATSI	NA	NA	NA	NA	\$46.14	\$50.87	(\$3.07)	(\$1.66)
BGE	\$60.25	\$49.84	\$7.07	\$3.35	\$57.10	\$49.19	\$5.16	\$2.75
ComEd	\$37.68	\$48.55	(\$6.86)	(\$4.01)	\$38.12	\$48.12	(\$6.46)	(\$3.55)
DAY	\$41.31	\$49.09	(\$5.76)	(\$2.01)	\$43.25	\$48.64	(\$4.21)	(\$1.18)
DLCO	\$41.37	\$48.88	(\$5.16)	(\$2.35)	\$42.60	\$48.39	(\$4.13)	(\$1.67)
Dominion	\$57.37	\$49.84	\$6.09	\$1.44	\$53.16	\$49.11	\$3.35	\$0.70
DPL	\$57.37	\$50.15	\$3.78	\$3.44	\$56.97	\$49.29	\$4.20	\$3.48
JCPL	\$56.70	\$50.23	\$3.04	\$3.43	\$56.24	\$49.45	\$3.73	\$3.06
Met-Ed	\$54.68	\$49.12	\$4.03	\$1.53	\$52.37	\$48.08	\$3.28	\$1.01
PECO	\$55.30	\$49.40	\$3.25	\$2.65	\$55.35	\$48.61	\$4.33	\$2.41
PENELEC	\$46.03	\$47.59	(\$1.50)	(\$0.06)	\$47.41	\$47.72	(\$0.56)	\$0.24
Pepco	\$57.89	\$48.52	\$7.02	\$2.36	\$54.99	\$48.72	\$4.49	\$1.79
PPL	\$52.44	\$48.76	\$2.56	\$1.12	\$52.82	\$48.27	\$3.63	\$0.93
PSEG	\$56.46	\$49.47	\$3.41	\$3.59	\$56.24	\$48.89	\$4.27	\$3.09
RECO	\$57.14	\$51.16	\$2.72	\$3.26	\$53.55	\$49.45	\$1.75	\$2.35
PJM	\$49.12	\$49.05	\$0.11	(\$0.03)	\$48.34	\$48.55	(\$0.05)	(\$0.16)

Zonal Marginal Loss Costs

Table A-17 Marginal loss costs by control zone and type (Dollars (Millions)): January through September 2011 (See 2010 SOM, Table 2-59)

			Marginal	Loss Cos	ts by Control	Zone (Millions	s)		
		Day Ahea	ad			Balanci	ng		
	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total
AECO	\$28.1	\$4.9	\$0.6	\$23.8	\$0.1	(\$0.5)	(\$0.4)	\$0.2	\$24.0
AEP	(\$55.2)	(\$314.6)	\$28.2	\$287.5	\$5.3	\$10.0	(\$9.9)	(\$14.5)	\$273.0
AP	(\$3.5)	(\$85.1)	\$5.9	\$87.5	\$2.0	\$2.7	(\$0.7)	(\$1.4)	\$86.2
ATSI	(\$16.0)	(\$25.5)	\$6.2	\$15.7	\$1.5	\$1.7	(\$7.5)	(\$7.7)	\$8.1
BGE	\$59.5	\$11.6	\$5.1	\$53.0	\$1.5	(\$0.9)	(\$3.8)	(\$1.4)	\$51.6
ComEd	(\$189.5)	(\$378.1)	\$7.8	\$196.4	\$14.2	\$4.0	(\$1.1)	\$9.0	\$205.4
DAY	(\$2.2)	(\$53.3)	\$5.2	\$56.3	\$0.1	\$2.9	(\$2.0)	(\$4.8)	\$51.5
DLCO	(\$14.8)	(\$28.0)	\$0.9	\$14.1	(\$1.9)	\$0.3	(\$0.6)	(\$2.8)	\$11.3
Dominion	\$53.4	(\$55.6)	\$8.4	\$117.4	\$2.4	\$1.2	(\$7.9)	(\$6.7)	\$110.7
DPL	\$54.8	\$8.1	\$1.8	\$48.5	(\$3.1)	\$0.2	(\$1.3)	(\$4.6)	\$43.9
JCPL	\$55.6	\$22.2	\$0.7	\$34.0	\$0.8	(\$0.2)	(\$0.5)	\$0.5	\$34.5
Met-Ed	\$11.5	(\$2.3)	\$0.3	\$14.1	\$0.6	(\$0.1)	(\$0.2)	\$0.5	\$14.6
PECO	\$70.3	\$21.9	\$0.8	\$49.2	(\$0.4)	\$0.4	(\$0.6)	(\$1.4)	\$47.8
PENELEC	(\$8.4)	(\$61.4)	(\$0.5)	\$52.6	\$1.7	\$0.5	\$1.2	\$2.4	\$55.0
Pepco	\$55.1	\$12.8	\$3.5	\$45.8	(\$1.3)	(\$1.0)	(\$2.5)	(\$2.8)	\$42.9
PJM	(\$18.8)	(\$30.5)	(\$38.0)	(\$26.2)	(\$2.1)	(\$5.8)	\$9.8	\$13.6	(\$12.7)
PPL	\$27.7	(\$14.0)	\$1.9	\$43.6	\$2.5	\$1.4	(\$0.4)	\$0.7	\$44.3
PSEG	\$87.6	\$25.0	\$12.8	\$75.4	\$0.4	\$8.3	(\$9.7)	(\$17.6)	\$57.8
RECO	\$2.9	\$0.5	\$0.1	\$2.5	\$0.0	(\$0.4)	(\$0.1)	\$0.3	\$2.8
Total	\$197.9	(\$941.5)	\$51.7	\$1,191.1	\$24.1	\$24.6	(\$38.0)	(\$38.5)	\$1,152.6



Table A-18 Monthly marginal loss costs by control zone (Dollars (Millions)): January through September 2011 (See 2010 SOM, Table 2-60)

				Ma	arginal L	oss Cos	sts by Co	ontrol Zo	ne (Milli	ons)			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Grand Total
AECO	\$2.9	\$2.0	\$1.8	\$1.5	\$1.5	\$3.2	\$6.0	\$3.2	\$1.9	\$0.0	\$0.0	\$0.0	\$24.0
AEP	\$41.9	\$25.6	\$23.8	\$19.2	\$18.2	\$30.5	\$54.8	\$34.5	\$24.6	\$0.0	\$0.0	\$0.0	\$273.0
AP	\$14.3	\$8.4	\$7.7	\$6.5	\$6.6	\$9.1	\$16.1	\$10.1	\$7.4	\$0.0	\$0.0	\$0.0	\$86.2
ATSI	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1.5	\$2.7	\$2.2	\$1.7	\$0.0	\$0.0	\$0.0	\$8.1
BGE	\$6.5	\$5.0	\$3.9	\$3.2	\$3.8	\$6.3	\$11.7	\$6.6	\$4.8	\$0.0	\$0.0	\$0.0	\$51.6
ComEd	\$32.3	\$21.9	\$23.1	\$17.8	\$15.3	\$22.7	\$30.1	\$21.0	\$21.1	\$0.0	\$0.0	\$0.0	\$205.4
DAY	\$5.2	\$5.0	\$4.5	\$2.8	\$4.1	\$5.9	\$10.3	\$7.0	\$6.7	\$0.0	\$0.0	\$0.0	\$51.5
DLCO	\$2.2	\$1.6	\$0.7	\$0.8	\$1.2	\$1.2	\$1.3	\$1.1	\$1.2	\$0.0	\$0.0	\$0.0	\$11.3
Dominion	\$19.8	\$11.6	\$9.7	\$4.3	\$8.2	\$8.2	\$23.9	\$14.7	\$10.3	\$0.0	\$0.0	\$0.0	\$110.7
DPL	\$7.7	\$5.3	\$3.6	\$2.7	\$2.6	\$4.7	\$7.9	\$5.5	\$3.8	\$0.0	\$0.0	\$0.0	\$43.9
JCPL	\$6.2	\$4.1	\$3.1	\$2.5	\$2.3	\$3.6	\$6.6	\$3.3	\$2.7	\$0.0	\$0.0	\$0.0	\$34.5
Met-Ed	\$2.1	\$1.4	\$1.4	\$1.2	\$1.5	\$1.6	\$2.4	\$1.8	\$1.4	\$0.0	\$0.0	\$0.0	\$14.6
PECO	\$6.6	\$3.5	\$3.5	\$3.7	\$4.9	\$6.3	\$10.0	\$5.7	\$3.7	\$0.0	\$0.0	\$0.0	\$47.8
PENELEC	\$8.9	\$5.3	\$3.6	\$3.1	\$5.0	\$6.9	\$10.3	\$7.2	\$4.7	\$0.0	\$0.0	\$0.0	\$55.0
Pepco	\$5.9	\$3.7	\$3.9	\$3.1	\$3.7	\$5.1	\$8.2	\$5.2	\$4.1	\$0.0	\$0.0	\$0.0	\$42.9
PJM	\$6.9	\$4.3	\$0.2	(\$0.6)	\$0.1	(\$2.4)	(\$6.7)	(\$7.2)	(\$7.4)	\$0.0	\$0.0	\$0.0	(\$12.7)
PPL	\$8.6	\$4.7	\$3.0	\$2.6	\$3.1	\$4.4	\$7.9	\$6.1	\$3.9	\$0.0	\$0.0	\$0.0	\$44.3
PSEG	\$7.3	\$6.1	\$6.3	\$4.6	\$5.2	\$6.4	\$9.7	\$6.2	\$6.0	\$0.0	\$0.0	\$0.0	\$57.8
RECO	\$0.5	\$0.3	\$0.3	\$0.2	\$0.2	\$0.3	\$0.5	\$0.3	\$0.3	\$0.0	\$0.0	\$0.0	\$2.8
Total	\$185.7	\$119.9	\$104.0	\$79.2	\$87.3	\$125.4	\$213.7	\$134.5	\$102.9				\$1,152.6

Section 7 - Congestion

Details of Regional and Zonal Congestion

Mid-Atlantic Region Congestion-Event Summaries

AECO Control Zone

Table A-19 AECO Control Zone top congestion cost impacts (By facility): January through September 2011 (See 2010 SOM, Table 7-21)

			Congestion Costs (Millions)											
					Day Ahea	d			Balancin	g			Event l	Hours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	West	Interface	500	\$9.0	\$3.1	\$0.1	\$6.0	\$0.0	(\$0.0)	(\$0.0)	\$0.0	\$6.0	1,596	878
2	5004/5005 Interface	Interface	500	\$6.7	\$2.8	\$0.0	\$3.9	\$0.2	(\$0.3)	(\$0.1)	\$0.5	\$4.3	1,368	878
3	Sherman Avenue	Transformer	AECO	\$3.9	(\$0.3)	\$0.1	\$4.2	(\$0.2)	(\$0.1)	(\$0.0)	(\$0.1)	\$4.1	1,004	46
4	East	Interface	500	\$3.1	\$1.1	\$0.0	\$2.0	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)	\$2.0	590	44
5	Wylie Ridge	Transformer	AP	\$2.7	\$1.0	\$0.0	\$1.7	\$0.1	(\$0.1)	(\$0.0)	\$0.2	\$2.0	3,780	760
6	Shieldalloy - Vineland	Line	AECO	\$3.4	\$0.5	\$0.1	\$3.0	(\$1.4)	\$0.5	(\$0.3)	(\$2.2)	\$0.8	1,276	468
7	Crete - St Johns Tap	Flowgate	MISO	\$1.3	\$0.3	(\$0.0)	\$1.0	\$0.1	(\$0.0)	\$0.0	\$0.1	\$1.1	5,526	1,280
8	Dickerson - Quince Orchard	Line	Pepco	\$1.3	\$0.6	\$0.0	\$0.7	\$0.0	(\$0.1)	(\$0.0)	\$0.1	\$0.8	284	152
9	AP South	Interface	500	\$1.3	\$0.5	\$0.1	\$0.9	(\$0.0)	(\$0.1)	(\$0.1)	\$0.0	\$0.9	6,682	1,740
10	South Mahwah - Waldwick	Line	PSEG	\$0.8	\$0.2	\$0.1	\$0.7	\$0.0	(\$0.0)	(\$0.1)	\$0.0	\$0.7	9,302	946
11	Plymouth Meeting - Whitpain	Line	PECO	\$0.8	\$0.3	\$0.0	\$0.5	\$0.0	(\$0.0)	(\$0.0)	\$0.0	\$0.5	412	144
12	Orchard - Orchard Tap	Line	AECO	\$0.9	\$0.5	\$0.0	\$0.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.5	70	0
13	East Frankfort - Crete	Line	ComEd	\$0.6	\$0.1	\$0.0	\$0.4	\$0.0	\$0.0	(\$0.0)	\$0.0	\$0.4	2,850	630
14	Corson	Transformer	AECO	\$0.1	(\$0.0)	\$0.0	\$0.1	\$0.4	\$0.1	(\$0.0)	\$0.2	\$0.3	62	52
15	Graceton - Raphael Road	Line	BGE	(\$0.5)	(\$0.2)	(\$0.0)	(\$0.3)	\$0.0	\$0.1	\$0.0	(\$0.0)	(\$0.3)	442	212
16	Orchard	Transformer	AECO	\$0.7	\$0.3	\$0.0	\$0.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.4	48	0
32	Monroe	Transformer	AECO	\$0.0	(\$0.0)	(\$0.0)	\$0.0	\$0.1	\$0.1	(\$0.0)	\$0.0	\$0.0	8	32
41	Churchtown	Transformer	AECO	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.0)	\$0.1	\$0.0	(\$0.1)	(\$0.1)	0	66
55	Carlls Corner - Sherman Ave	Line	AECO	\$0.1	\$0.0	\$0.0	\$0.1	\$0.0	\$0.1	(\$0.0)	(\$0.1)	(\$0.0)	188	0
58	Carnegie - Tidd	Line	AECO	\$0.1	\$0.0	\$0.0	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	1,704	0



Table A-20 AECO Control Zone top congestion cost impacts (By facility): January through September 2010 (See 2010 SOM, Table 7-22)

			Congestion Costs (Millions)											
					Day Ahea	d			Balancin	g			Event	Hours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	5004/5005 Interface	Interface	500	\$8.2	\$3.7	\$0.0	\$4.5	\$0.6	(\$0.7)	(\$0.0)	\$1.2	\$5.8	2,758	1,122
2	England - Middletap	Line	AECO	\$4.0	\$0.7	\$0.0	\$3.3	(\$0.4)	(\$0.4)	(\$0.0)	(\$0.0)	\$3.2	672	138
3	Monroe	Transformer	AECO	\$1.7	\$0.2	\$0.0	\$1.5	\$0.1	(\$0.2)	(\$0.0)	\$0.2	\$1.8	464	96
4	Shieldalloy - Vineland	Line	AECO	\$3.2	\$0.9	\$0.1	\$2.3	(\$1.2)	\$0.1	(\$0.0)	(\$1.3)	\$1.1	458	326
5	West	Interface	500	\$3.7	\$1.8	\$0.0	\$1.9	\$0.1	\$0.0	\$0.0	\$0.1	\$2.0	322	116
6	Brandon Shores - Riverside	Line	BGE	\$2.4	\$1.1	\$0.0	\$1.3	\$0.0	(\$0.2)	(\$0.0)	\$0.2	\$1.5	686	324
7	Absecon - Lewis	Line	AECO	\$0.2	\$0.0	\$0.0	\$0.2	(\$1.4)	\$0.1	(\$0.1)	(\$1.6)	(\$1.4)	162	36
8	AP South	Interface	500	\$1.9	\$0.9	\$0.0	\$1.0	\$0.1	(\$0.0)	(\$0.0)	\$0.1	\$1.1	7,024	2,502
9	Branchburg - Readington	Line	PSEG	(\$1.3)	(\$0.5)	(\$0.0)	(\$0.8)	(\$0.1)	\$0.0	\$0.0	(\$0.1)	(\$0.8)	2,420	368
10	Tiltonsville - Windsor	Line	AP	\$1.0	\$0.4	\$0.0	\$0.6	\$0.1	(\$0.1)	(\$0.0)	\$0.1	\$0.7	4,782	820
11	Graceton - Raphael Road	Line	BGE	(\$1.2)	(\$0.5)	(\$0.0)	(\$0.7)	(\$0.0)	\$0.1	\$0.0	(\$0.1)	(\$0.8)	430	224
12	Bedington - Black Oak	Interface	500	\$1.3	\$0.6	\$0.0	\$0.8	\$0.0	\$0.0	(\$0.0)	(\$0.0)	\$0.8	3,638	94
13	Cloverdale - Lexington	Line	AEP	\$0.8	\$0.3	\$0.0	\$0.5	\$0.2	\$0.0	(\$0.0)	\$0.2	\$0.7	2,088	1,240
14	East Frankfort - Crete	Line	ComEd	\$0.9	\$0.2	\$0.0	\$0.6	\$0.1	(\$0.0)	(\$0.0)	\$0.2	\$0.8	4,484	1,602
15	Brunner Island - Yorkana	Line	Met-Ed	(\$0.6)	(\$0.2)	(\$0.0)	(\$0.4)	(\$0.1)	\$0.1	\$0.0	(\$0.2)	(\$0.6)	438	336
24	Corson - Court	Line	AECO	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.2)	\$0.1	(\$0.0)	(\$0.3)	(\$0.3)	14	30
41	Corson - Union	Line	AECO	\$0.0	\$0.0	\$0.0	\$0.0	\$0.2	(\$0.0)	\$0.0	\$0.2	\$0.2	0	32
46	Corson	Transformer	AECO	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	\$0.0	\$0.0	\$0.1	\$0.1	0	34
62	Sherman Avenue	Transformer	AECO	\$0.1	(\$0.0)	\$0.0	\$0.2	(\$0.1)	\$0.0	(\$0.0)	(\$0.1)	\$0.1	50	38
84	Lewis - Motts - Cedar	Line	AECO	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	50	0



BGE Control Zone

Table A-21 BGE Control Zone top congestion cost impacts (By facility): January through September 2011 (See 2010 SOM, Table 7-23)

			Congestion Costs (Millions)											
					Day Ahea	d			Balancin	g			Event	Hours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	5004/5005 Interface	Interface	500	\$8.2	\$3.7	\$0.0	\$4.5	\$0.6	(\$0.7)	(\$0.0)	\$1.2	\$5.8	2,758	1,122
2	England - Middletap	Line	AECO	\$4.0	\$0.7	\$0.0	\$3.3	(\$0.4)	(\$0.4)	(\$0.0)	(\$0.0)	\$3.2	672	138
3	Monroe	Transformer	AECO	\$1.7	\$0.2	\$0.0	\$1.5	\$0.1	(\$0.2)	(\$0.0)	\$0.2	\$1.8	464	96
4	Shieldalloy - Vineland	Line	AECO	\$3.2	\$0.9	\$0.1	\$2.3	(\$1.2)	\$0.1	(\$0.0)	(\$1.3)	\$1.1	458	326
5	West	Interface	500	\$3.7	\$1.8	\$0.0	\$1.9	\$0.1	\$0.0	\$0.0	\$0.1	\$2.0	322	116
6	Brandon Shores - Riverside	Line	BGE	\$2.4	\$1.1	\$0.0	\$1.3	\$0.0	(\$0.2)	(\$0.0)	\$0.2	\$1.5	686	324
7	Absecon - Lewis	Line	AECO	\$0.2	\$0.0	\$0.0	\$0.2	(\$1.4)	\$0.1	(\$0.1)	(\$1.6)	(\$1.4)	162	36
8	AP South	Interface	500	\$1.9	\$0.9	\$0.0	\$1.0	\$0.1	(\$0.0)	(\$0.0)	\$0.1	\$1.1	7,024	2,502
9	Branchburg - Readington	Line	PSEG	(\$1.3)	(\$0.5)	(\$0.0)	(\$0.8)	(\$0.1)	\$0.0	\$0.0	(\$0.1)	(\$0.8)	2,420	368
10	Tiltonsville - Windsor	Line	AP	\$1.0	\$0.4	\$0.0	\$0.6	\$0.1	(\$0.1)	(\$0.0)	\$0.1	\$0.7	4,782	820
11	Graceton - Raphael Road	Line	BGE	(\$1.2)	(\$0.5)	(\$0.0)	(\$0.7)	(\$0.0)	\$0.1	\$0.0	(\$0.1)	(\$0.8)	430	224
12	Bedington - Black Oak	Interface	500	\$1.3	\$0.6	\$0.0	\$0.8	\$0.0	\$0.0	(\$0.0)	(\$0.0)	\$0.8	3,638	94
13	Cloverdale - Lexington	Line	AEP	\$0.8	\$0.3	\$0.0	\$0.5	\$0.2	\$0.0	(\$0.0)	\$0.2	\$0.7	2,088	1,240
14	East Frankfort - Crete	Line	ComEd	\$0.9	\$0.2	\$0.0	\$0.6	\$0.1	(\$0.0)	(\$0.0)	\$0.2	\$0.8	4,484	1,602
15	Brunner Island - Yorkana	Line	Met-Ed	(\$0.6)	(\$0.2)	(\$0.0)	(\$0.4)	(\$0.1)	\$0.1	\$0.0	(\$0.2)	(\$0.6)	438	336
24	Corson - Court	Line	AECO	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.2)	\$0.1	(\$0.0)	(\$0.3)	(\$0.3)	14	30
41	Corson - Union	Line	AECO	\$0.0	\$0.0	\$0.0	\$0.0	\$0.2	(\$0.0)	\$0.0	\$0.2	\$0.2	0	32
46	Corson	Transformer	AECO	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	\$0.0	\$0.0	\$0.1	\$0.1	0	34
62	Sherman Avenue	Transformer	AECO	\$0.1	(\$0.0)	\$0.0	\$0.2	(\$0.1)	\$0.0	(\$0.0)	(\$0.1)	\$0.1	50	38
84	Lewis - Motts - Cedar	Line	AECO	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	50	0



Table A-22 BGE Control Zone top congestion cost impacts (By facility): January through September 2010 (See 2010 SOM, Table 7-24)

		Congestion Costs (Millions)												
					Day Ahea	d			Balancin	g			Event l	Hours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	Brandon Shores - Riverside	Line	BGE	\$17.3	(\$8.9)	\$0.2	\$26.4	(\$2.1)	\$0.2	(\$0.3)	(\$2.5)	\$23.9	686	324
2	AP South	Interface	500	\$46.1	\$35.4	\$1.9	\$12.6	\$3.5	(\$1.4)	(\$1.6)	\$3.4	\$16.0	7,024	2,502
3	Doubs	Transformer	AP	\$11.8	\$7.0	\$0.3	\$5.1	\$1.0	(\$1.2)	(\$0.4)	\$1.8	\$6.9	2,460	862
4	Bedington - Black Oak	Interface	500	\$17.9	\$13.3	\$0.6	\$5.3	\$0.4	(\$0.2)	(\$0.1)	\$0.5	\$5.8	3,638	94
5	5004/5005 Interface	Interface	500	\$7.3	\$3.6	\$0.3	\$4.1	\$0.5	(\$0.2)	(\$0.3)	\$0.4	\$4.5	2,758	1,122
6	West	Interface	500	\$6.3	\$3.1	\$0.0	\$3.2	\$0.2	(\$0.0)	(\$0.0)	\$0.2	\$3.4	322	116
7	Mount Storm - Pruntytown	Line	AP	\$4.2	\$3.5	\$0.2	\$0.8	\$1.3	(\$0.6)	(\$0.6)	\$1.4	\$2.2	1,142	1,148
8	Graceton - Raphael Road	Line	BGE	\$5.1	\$3.3	\$0.3	\$2.2	\$0.2	(\$0.5)	(\$0.3)	\$0.4	\$2.5	430	224
9	Burtonsville - Sandy Springs	Line	Pepco	\$0.5	(\$0.0)	\$0.0	\$0.6	\$0.4	\$0.1	(\$0.3)	(\$0.0)	\$0.5	40	82
10	Millvile - Sleepy Hollow	Line	AP	\$0.0	\$0.0	\$0.0	\$0.0	\$0.3	(\$0.0)	(\$0.5)	(\$0.1)	(\$0.1)	0	360
11	Brunner Island - Yorkana	Line	Met-Ed	\$3.5	\$2.1	\$0.2	\$1.7	\$0.2	\$0.0	(\$0.2)	(\$0.1)	\$1.6	438	336
12	Millville - Old Chapel	Line	AP	\$3.3	\$2.8	\$0.3	\$0.8	\$0.7	\$0.2	(\$0.7)	(\$0.2)	\$0.7	356	242
13	Pleasant View	Transformer	Dominion	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.2)	\$0.6	\$0.1	(\$0.7)	(\$0.7)	62	202
14	Cloverdale - Lexington	Line	AEP	\$4.7	\$4.4	\$0.2	\$0.5	\$0.8	(\$0.3)	(\$0.2)	\$0.9	\$1.4	2,088	1,240
15	Harrison - Pruntytown	Line	500	\$0.9	\$0.7	\$0.0	\$0.2	\$0.5	(\$0.2)	(\$0.3)	\$0.5	\$0.7	462	446
29	Fullerton - Windyedge	Line	BGE	\$0.4	(\$0.1)	\$0.0	\$0.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.5	46	0
36	Green Street - Westport	Line	BGE	\$0.3	(\$0.0)	\$0.0	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.3	288	0
50	Five Forks - Rock Ridge	Line	BGE	\$0.3	\$0.1	\$0.0	\$0.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.2	78	0
52	Granite - Harrisonville	Line	BGE	\$0.2	(\$0.0)	\$0.0	\$0.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.2	14	0
53	Graceton - Safe Harbor	Line	BGE	\$0.4	\$0.3	\$0.0	\$0.2	\$0.2	\$0.1	(\$0.1)	(\$0.0)	\$0.1	76	58

DPL Control Zone

Table A-23 DPL Control Zone top congestion cost impacts (By facility): January through September 2011 (See 2010 SOM, Table 7-25)

			Congestion Costs (Millions)											
					Day Ahea	d			Balancin	g			Event	Hours
	• • • • •	_		Load	Generation			Load	Generation	- ""		Grand	Day	Real
No.	Constraint	Туре	Location	Payments	Credits	Explicit	Total	Payments	Credits	Explicit	Total	Total	Ahead	Time
1	5004/5005 Interface	Interface	500	\$11.9	\$3.5	\$0.1	\$8.5	\$0.2	\$0.6	(\$0.2)	(\$0.7)	\$7.9	1,368	38
2	West	Interface	500	\$13.7	\$6.5	\$0.2	\$7.3	\$0.0	\$0.0	(\$0.0)	\$0.0	\$7.3	1,596	38
3	Wylie Ridge	Transformer	AP	\$5.1	\$1.1	\$0.1	\$4.1	\$0.1	\$0.2	(\$0.0)	(\$0.1)	\$4.0	3,780	760
4	East	Interface	500	\$5.2	\$2.1	(\$0.1)	\$3.1	(\$0.0)	\$0.1	(\$0.0)	(\$0.1)	\$3.0	590	44
5	AP South	Interface	500	\$3.4	\$1.0	\$0.2	\$2.7	\$0.0	\$0.2	(\$0.3)	(\$0.5)	\$2.2	6,682	1,740
6	Crete - St Johns Tap	Flowgate	MISO	\$2.3	\$0.4	\$0.0	\$2.0	\$0.1	\$0.2	(\$0.0)	(\$0.2)	\$1.8	5,526	1,280
7	New Church - Piney Grove	Line	DPL	\$1.9	\$0.3	\$0.0	\$1.7	\$0.0	\$0.0	\$0.0	\$0.0	\$1.7	540	0
8	Plymouth Meeting - Whitpain	Line	PECO	\$2.0	\$0.7	\$0.0	\$1.3	\$0.1	\$0.1	(\$0.1)	(\$0.0)	\$1.3	412	144
9	Longwood - Wye Mills	Line	DPL	\$1.2	\$0.1	\$0.0	\$1.1	(\$0.0)	\$0.0	(\$0.0)	(\$0.0)	\$1.1	1,410	6
10	Mardela - Vienna	Line	DPL	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.2)	\$0.4	(\$0.1)	(\$0.7)	(\$0.7)	0	32
11	East Frankfort - Crete	Line	ComEd	\$0.9	\$0.2	\$0.0	\$0.7	\$0.0	\$0.1	\$0.0	(\$0.1)	\$0.7	2,850	630
12	Bedington - Black Oak	Interface	500	\$0.8	\$0.2	\$0.0	\$0.6	(\$0.0)	\$0.0	(\$0.0)	(\$0.0)	\$0.6	1,248	14
13	Dickerson - Quince Orchard	Line	Pepco	\$2.2	\$1.2	\$0.0	\$1.0	\$0.1	\$0.4	(\$0.0)	(\$0.4)	\$0.6	284	152
14	Bryn Mawr - Plymouth Meeting	Line	PECO	\$1.3	\$0.7	\$0.0	\$0.6	(\$0.0)	\$0.0	\$0.0	(\$0.0)	\$0.6	568	8
15	Keeney At5n	Transformer	DPL	\$0.7	\$0.2	\$0.0	\$0.6	(\$0.2)	\$0.5	(\$0.1)	(\$0.7)	(\$0.2)	164	78
16	Hallwood - Oak Hall	Line	DPL	\$0.5	\$0.1	\$0.0	\$0.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.4	298	0
27	Easton - Trappe	Line	DPL	\$0.3	\$0.1	\$0.0	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.3	248	0
40	Greenbush - Hallwood	Line	DPL	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.1)	(\$0.1)	(\$0.0)	(\$0.1)	(\$0.1)	26	34
42	Lums Pond - Reybold	Line	DPL	\$0.0	\$0.0	\$0.0	\$0.0	\$0.2	\$0.0	(\$0.0)	\$0.2	\$0.2	0	0
43	Oak Hall	Transformer	DPL	\$0.2	\$0.0	(\$0.0)	\$0.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.2	10	18



Table A-24 DPL Control Zone top congestion cost impacts (By facility): January through September 2010 (See 2010 SOM, Table 7-26)

		Congestion Costs (Millions)												
					Day Ahea	d			Balancing	j			Event I	lours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	5004/5005 Interface	Interface	500	\$13.4	\$5.7	\$0.1	\$7.8	\$0.5	(\$0.0)	(\$0.2)	\$0.3	\$8.1	2,758	1,122
2	AP South	Interface	500	\$5.0	\$2.2	\$0.1	\$2.9	\$0.2	\$0.0	(\$0.0)	\$0.1	\$3.0	7,024	2,502
3	Oak Hall	Transformer	DPL	\$2.7	\$0.5	\$0.0	\$2.2	\$0.0	\$0.0	\$0.0	\$0.0	\$2.2	1,198	0
4	West	Interface	500	\$5.3	\$3.4	\$0.0	\$1.9	\$0.1	\$0.1	(\$0.0)	\$0.0	\$1.9	322	116
5	New Church - Piney Grove	Line	DPL	\$1.9	\$0.4	\$0.0	\$1.5	\$0.0	\$0.0	\$0.0	\$0.0	\$1.5	592	0
6	Bedington - Black Oak	Interface	500	\$2.7	\$1.2	\$0.0	\$1.6	\$0.0	\$0.0	(\$0.0)	(\$0.0)	\$1.5	3,638	94
7	Brandon Shores - Riverside	Line	BGE	\$3.4	\$2.0	\$0.0	\$1.5	\$0.1	(\$0.0)	(\$0.0)	\$0.1	\$1.5	686	324
8	East Frankfort - Crete	Line	ComEd	\$1.6	\$0.2	\$0.0	\$1.4	\$0.1	\$0.0	(\$0.0)	\$0.0	\$1.4	4,484	1,602
9	Middletown - Mt Pleasant	Line	DPL	\$1.7	\$0.4	\$0.0	\$1.3	\$0.0	\$0.0	\$0.0	\$0.0	\$1.3	326	0
10	Longwood - Wye Mills	Line	DPL	\$1.6	\$0.3	\$0.0	\$1.3	\$0.0	\$0.0	\$0.0	\$0.0	\$1.3	520	0
11	Cloverdale - Lexington	Line	AEP	\$1.4	\$0.3	\$0.0	\$1.1	\$0.2	\$0.0	(\$0.1)	\$0.1	\$1.2	2,088	1,240
12	Graceton - Raphael Road	Line	BGE	(\$2.1)	(\$1.0)	(\$0.0)	(\$1.1)	(\$0.0)	(\$0.1)	\$0.0	\$0.0	(\$1.1)	430	224
13	Branchburg - Readington	Line	PSEG	(\$1.9)	(\$0.9)	(\$0.1)	(\$1.0)	(\$0.0)	(\$0.0)	\$0.0	\$0.1	(\$1.0)	2,420	368
14	Doubs	Transformer	AP	\$0.9	\$0.3	\$0.1	\$0.7	\$0.1	(\$0.0)	(\$0.1)	\$0.0	\$0.7	2,460	862
15	Tiltonsville - Windsor	Line	AP	\$1.6	\$0.7	\$0.0	\$0.9	\$0.0	(\$0.1)	(\$0.0)	\$0.1	\$1.0	4,782	820
16	Cecil - Colora	Line	DPL	\$0.7	\$0.1	\$0.1	\$0.6	(\$0.1)	\$0.1	(\$0.1)	(\$0.3)	\$0.3	164	48
18	Indian River At20	Transformer	DPL	\$0.0	\$0.0	\$0.0	\$0.0	\$0.3	(\$0.6)	(\$0.0)	\$0.9	\$0.9	0	16
19	Kenney - Stockton	Line	DPL	\$1.0	\$0.3	\$0.0	\$0.7	(\$1.5)	(\$0.1)	(\$0.1)	(\$1.4)	(\$0.8)	192	222
20	Easton - Trappe	Line	DPL	\$0.9	\$0.2	\$0.0	\$0.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.7	234	0
22	Dupont Seaford - Laurel	Line	DPL	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.4)	\$0.4	(\$0.0)	(\$0.7)	(\$0.7)	0	30



JCPL Control Zone

Table A-25 JCPL Control Zone top congestion cost impacts (By facility): January through September 2011 (See 2010 SOM, Table 7-27)

						(Congestio	n Costs (Milli	ions)					
					Day Ahea	d			Balancin	g			Event H	lours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	5004/5005 Interface	Interface	500	\$16.1	\$6.0	\$0.0	\$10.1	\$1.1	\$0.3	(\$0.1)	\$0.7	\$10.8	1,368	38
2	West	Interface	500	\$16.8	\$8.5	\$0.1	\$8.4	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)	\$8.4	1,596	38
3	South Mahwah - Waldwick	Line	PSEG	\$5.9	\$2.2	\$0.3	\$3.9	(\$0.0)	\$0.0	(\$0.3)	(\$0.3)	\$3.6	9,302	946
4	Wylie Ridge	Transformer	AP	\$5.9	\$2.4	\$0.0	\$3.5	\$0.1	\$0.1	(\$0.0)	(\$0.0)	\$3.5	3,780	760
5	Redoak - Sayreville	Line	JCPL	(\$1.2)	(\$4.3)	(\$0.1)	\$3.0	\$0.0	\$0.1	\$0.0	(\$0.1)	\$2.9	2,552	22
6	East	Interface	500	\$5.1	\$2.4	\$0.0	\$2.7	(\$0.1)	\$0.0	(\$0.0)	(\$0.1)	\$2.6	590	44
7	Cedar Grove - Roseland	Line	PSEG	(\$2.8)	(\$0.9)	(\$0.1)	(\$2.0)	\$0.0	\$0.0	\$0.0	(\$0.0)	(\$2.0)	1,594	62
8	Bridgewater - Middlesex	Line	PSEG	\$3.1	\$1.2	\$0.0	\$2.0	(\$0.1)	\$0.1	(\$0.0)	(\$0.2)	\$1.8	802	38
9	Crete - St Johns Tap	Flowgate	MISO	\$2.9	\$1.2	\$0.0	\$1.7	\$0.1	\$0.1	(\$0.0)	(\$0.0)	\$1.6	5,526	1,280
10	Dickerson - Quince Orchard	Line	Pepco	\$2.2	\$1.2	\$0.0	\$1.0	\$0.4	\$0.1	(\$0.0)	\$0.3	\$1.3	284	152
11	East Windsor - Smithburg	Line	JCPL	\$0.0	\$0.0	\$0.0	\$0.0	\$0.9	(\$0.1)	\$0.0	\$0.9	\$0.9	0	18
12	Susquehanna	Transformer	PPL	\$1.1	\$0.3	\$0.0	\$0.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.8	240	0
13	East Frankfort - Crete	Line	ComEd	\$1.1	\$0.5	\$0.0	\$0.6	\$0.0	(\$0.0)	(\$0.0)	\$0.0	\$0.6	2,850	630
14	Atlantic - Larrabee	Line	JCPL	\$0.4	(\$0.2)	\$0.0	\$0.5	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)	\$0.5	132	2
15	Roseland - Whippany	Line	PSEG	(\$0.5)	(\$0.1)	(\$0.0)	(\$0.3)	\$0.1	\$0.1	\$0.1	\$0.1	(\$0.2)	436	100
44	Kilmer - Sayreville	Line	JCPL	\$0.3	\$0.1	\$0.0	\$0.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.2	184	0
145	Lakewood - Larrabee	Line	JCPL	\$0.0	(\$0.0)	(\$0.0)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	10	0
154	Kittatiny - Newton	Line	JCPL	\$0.0	(\$0.0)	(\$0.0)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	16	0
176	Stoneybrook - W Wharton	Line	JCPL	(\$0.0)	\$0.0	(\$0.0)	(\$0.0)	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.0)	20	0
399	Franklin - West Wharton	Line	JCPL	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	24	0



Table A-26 JCPL Control Zone top congestion cost impacts (By facility): January through September 2010 (See 2010 SOM, Table 7-28)

						(Congesti	on Costs (Milli	ions)					
					Day Ahea	ıd			Balancin	g			Event I	Hours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	5004/5005 Interface	Interface	500	\$18.1	\$8.0	\$0.0	\$10.1	\$1.0	(\$0.2)	(\$0.1)	\$1.1	\$11.2	2,758	1,122
2	Branchburg - Readington	Line	PSEG	\$6.8	\$0.4	\$0.1	\$6.5	(\$0.5)	(\$0.3)	\$0.1	(\$0.2)	\$6.3	2,420	368
3	West	Interface	500	\$7.5	\$4.0	\$0.0	\$3.6	\$0.0	(\$0.1)	(\$0.0)	\$0.2	\$3.7	322	116
4	Redoak - Sayreville	Line	JCPL	(\$1.9)	(\$5.5)	\$0.0	\$3.6	\$0.1	\$0.7	\$0.0	(\$0.6)	\$3.0	1,590	114
5	Athenia - Saddlebrook	Line	PSEG	(\$3.2)	(\$1.0)	(\$0.0)	(\$2.2)	(\$0.2)	\$0.1	\$0.0	(\$0.2)	(\$2.4)	5,894	662
6	Brandon Shores - Riverside	Line	BGE	\$4.5	\$2.4	\$0.0	\$2.2	\$0.1	(\$0.1)	(\$0.0)	\$0.1	\$2.3	686	324
7	East Frankfort - Crete	Line	ComEd	\$2.1	\$0.9	(\$0.0)	\$1.1	\$0.0	(\$0.1)	\$0.0	\$0.1	\$1.3	4,484	1,602
8	Tiltonsville - Windsor	Line	AP	\$2.3	\$1.2	\$0.0	\$1.1	\$0.0	(\$0.1)	(\$0.0)	\$0.1	\$1.2	4,782	820
9	Graceton - Raphael Road	Line	BGE	(\$2.4)	(\$1.3)	(\$0.0)	(\$1.1)	\$0.2	\$0.1	\$0.0	\$0.1	(\$1.0)	430	224
10	Cloverdale - Lexington	Line	AEP	\$1.6	\$0.7	\$0.0	\$0.9	\$0.1	(\$0.1)	(\$0.0)	\$0.1	\$1.0	2,088	1,240
11	Atlantic - Larrabee	Line	JCPL	\$0.9	\$0.1	\$0.0	\$0.9	\$0.0	(\$0.1)	(\$0.0)	\$0.1	\$0.9	246	24
12	Bedington - Black Oak	Interface	500	\$1.5	\$0.8	\$0.1	\$0.8	(\$0.0)	(\$0.0)	(\$0.0)	\$0.0	\$0.8	3,638	94
13	Brunner Island - Yorkana	Line	Met-Ed	(\$2.0)	(\$1.1)	(\$0.0)	(\$0.9)	\$0.3	\$0.1	\$0.0	\$0.2	(\$0.7)	438	336
14	Wylie Ridge	Transformer	AP	\$1.2	\$0.6	\$0.0	\$0.6	(\$0.0)	(\$0.1)	(\$0.0)	\$0.1	\$0.6	1,008	752
15	Doubs	Transformer	AP	\$1.0	\$0.6	\$0.0	\$0.4	\$0.1	(\$0.2)	(\$0.0)	\$0.2	\$0.6	2,460	862
28	Sayreville - Werner	Line	JCPL	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	(\$0.1)	\$0.0	\$0.3	\$0.3	0	8
33	Franklin - West Wharton	Line	JCPL	\$0.4	\$0.2	\$0.0	\$0.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.2	114	0
38	Kilmer - Sayreville	Line	JCPL	\$0.5	\$0.3	\$0.0	\$0.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.2	234	0
205	Montville - Roseland	Line	JCPL	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.0)	\$0.0	\$0.0	(\$0.0)	(\$0.0)	0	10
218	Greystone - West Wharton	Line	JCPL	(\$0.0)	\$0.0	(\$0.0)	(\$0.0)	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.0)	8	0

Met-Ed Control Zone

Table A-27 Met-Ed Control Zone top congestion cost impacts (By facility): January through September 2011 (See 2010 SOM, Table 7-29)

							Congesti	on Costs (Mill	ions)					
					Day Ahea	d			Balancin	g			Event l	Hours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	West	Interface	500	\$9.1	\$13.6	\$0.1	(\$4.5)	\$0.0	\$0.0	(\$0.0)	(\$0.0)	(\$4.5)	1,596	760
2	Wylie Ridge	Transformer	AP	\$4.1	\$6.0	\$0.1	(\$1.8)	\$0.1	\$0.0	(\$0.0)	\$0.1	(\$1.7)	3,780	760
3	Hunterstown	Transformer	Met-Ed	\$1.3	(\$0.2)	\$0.0	\$1.5	\$0.0	\$0.0	(\$0.0)	\$0.0	\$1.5	158	18
4	Middletown Jct - TMI	Line	Met-Ed	\$0.4	(\$0.7)	\$0.0	\$1.1	\$0.0	\$0.0	\$0.0	\$0.0	\$1.1	62	0
5	Crete - St Johns Tap	Flowgate	MISO	\$1.9	\$2.7	(\$0.0)	(\$0.9)	\$0.1	\$0.0	\$0.0	\$0.1	(\$0.8)	5,526	1,280
6	Dickerson - Quince Orchard	Line	Pepco	\$1.1	\$1.7	\$0.0	(\$0.5)	\$0.2	\$0.1	(\$0.0)	\$0.1	(\$0.5)	284	152
7	East	Interface	500	\$0.3	(\$0.2)	(\$0.0)	\$0.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.5	590	44
8	East Frankfort - Crete	Line	ComEd	\$0.7	\$1.1	\$0.0	(\$0.4)	\$0.0	(\$0.0)	(\$0.0)	\$0.0	(\$0.4)	2,850	630
9	Middletown Jctn Three Mile Island	Line	Met-Ed	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.1)	\$0.1	(\$0.1)	(\$0.4)	(\$0.4)	0	30
10	Conastone - Graceton	Line	BGE	\$0.1	(\$0.3)	(\$0.0)	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.3	236	0
11	Susquehanna	Transformer	PPL	\$0.3	(\$0.0)	(\$0.0)	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.3	240	0
12	Bunsonville - Eugene	Flowgate	MISO	\$0.4	\$0.6	\$0.0	(\$0.2)	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.2)	3,604	0
13	5004/5005 Interface	Interface	500	\$9.5	\$10.1	(\$0.0)	(\$0.7)	\$0.6	(\$0.0)	(\$0.0)	\$0.6	(\$0.1)	1,368	878
14	Danville - East Danville	Line	AEP	\$0.3	\$0.5	\$0.0	(\$0.2)	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.2)	6,610	0
15	Juniata	Transformer	PPL	\$0.2	\$0.4	\$0.0	(\$0.2)	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.2)	50	0
24	Cly - Collins	Line	Met-Ed	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.0)	\$0.1	(\$0.0)	(\$0.1)	(\$0.1)	0	26
30	Middletown Jct - Yorkhaven	Line	Met-Ed	\$0.1	(\$0.0)	\$0.0	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	44	0
63	Jackson - North Hanover	Line	Met-Ed	\$0.0	(\$0.0)	\$0.0	\$0.0	(\$0.0)	\$0.1	(\$0.0)	(\$0.1)	(\$0.0)	14	10
74	Manor - Safe Harbor	Line	Met-Ed	(\$0.1)	(\$0.1)	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)	\$0.0	\$0.0	(\$0.0)	14	0
75	Jackson - TMI	Line	Met-Ed	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.0)	(\$0.0)	\$0.0	\$0.0	0	12



Table A-28 Met-Ed Control Zone top congestion cost impacts (By facility): January through September 2010 (See 2010 SOM, Table 7-30)

						(Congesti	on Costs (Mill	ions)					
					Day Ahea	ıd			Balancin	g			Event l	Hours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	Brunner Island - Yorkana	Line	Met-Ed	\$1.9	(\$4.1)	\$0.1	\$6.1	\$0.0	\$0.2	(\$0.0)	(\$0.2)	\$5.9	438	336
2	Hunterstown	Transformer	Met-Ed	\$4.1	(\$0.7)	\$0.1	\$4.8	\$0.0	\$0.0	(\$0.0)	(\$0.0)	\$4.8	622	52
3	Doubs	Transformer	AP	\$3.2	\$2.1	\$0.1	\$1.2	(\$0.0)	(\$0.1)	(\$0.2)	(\$0.2)	\$1.0	2,460	862
4	5004/5005 Interface	Interface	500	\$10.8	\$10.3	\$0.0	\$0.5	(\$0.3)	(\$0.7)	(\$0.1)	\$0.3	\$0.7	2,758	1,122
5	West	Interface	500	\$4.2	\$5.4	\$0.0	(\$1.1)	\$0.0	(\$0.1)	(\$0.0)	\$0.1	(\$1.1)	322	116
6	AP South	Interface	500	\$4.9	\$4.0	\$0.1	\$1.0	(\$0.1)	(\$0.1)	(\$0.2)	(\$0.2)	\$0.8	7,024	2,502
7	Jackson - TMI	Line	Met-Ed	\$0.5	(\$0.6)	\$0.1	\$1.2	(\$0.1)	\$0.3	(\$0.0)	(\$0.4)	\$0.8	74	108
8	Middletown Jct	Transformer	Met-Ed	\$0.6	(\$0.1)	\$0.0	\$0.7	(\$0.1)	\$0.1	\$0.0	(\$0.1)	\$0.6	22	24
9	Graceton - Raphael Road	Line	BGE	(\$1.7)	(\$2.4)	(\$0.0)	\$0.7	\$0.1	\$0.2	\$0.1	(\$0.0)	\$0.7	430	224
10	Brandon Shores - Riverside	Line	BGE	\$3.3	\$3.8	\$0.0	(\$0.5)	(\$0.0)	(\$0.1)	(\$0.0)	\$0.0	(\$0.5)	686	324
11	Middletown Jct - Yorkhaven	Line	Met-Ed	\$0.6	\$0.1	\$0.0	\$0.6	(\$0.0)	\$0.0	\$0.0	(\$0.0)	\$0.5	380	24
12	Collins - Middletown Jct	Line	Met-Ed	\$0.3	(\$0.3)	\$0.0	\$0.6	(\$0.0)	\$0.1	(\$0.0)	(\$0.1)	\$0.5	338	78
13	Cloverdale - Lexington	Line	AEP	\$1.3	\$1.7	\$0.0	(\$0.3)	\$0.0	\$0.1	(\$0.0)	(\$0.1)	(\$0.4)	2,088	1,240
14	Wylie Ridge	Transformer	AP	\$0.8	\$1.1	\$0.0	(\$0.3)	(\$0.0)	\$0.0	(\$0.0)	(\$0.1)	(\$0.4)	1,008	752
15	Millville - Old Chapel	Line	AP	\$1.0	\$1.1	\$0.1	(\$0.0)	(\$0.1)	(\$0.0)	(\$0.2)	(\$0.3)	(\$0.4)	356	242
45	Cly - Collins	Line	Met-Ed	\$0.0	(\$0.0)	\$0.0	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	38	0
60	Yorkana A	Transformer	Met-Ed	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.0)	\$0.0	\$0.0	0	10
80	Germantown - Straban	Line	Met-Ed	\$0.1	\$0.0	(\$0.0)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	22	0
96	Carlisle Pike - Gardners	Line	Met-Ed	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	10	0
113	Glendon - Hosensack	Line	Met-Ed	\$0.0	(\$0.0)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	2	22

PECO Control Zone

Table A-29 PECO Control Zone top congestion cost impacts (By facility): January through September 2011 (See 2010 SOM, Table 7-31)

						(Congesti	on Costs (Mil	lions)					
					Day Ahea	d			Balancin	g			Event H	lours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	West	Interface	500	\$25.9	\$33.3	\$0.1	(\$7.3)	(\$0.0)	(\$0.0)	(\$0.0)	\$0.0	(\$7.3)	1,596	144
2	Plymouth Meeting - Whitpain	Line	PECO	\$9.2	\$1.3	\$0.0	\$7.9	(\$0.3)	\$0.0	(\$0.1)	(\$0.4)	\$7.6	412	144
3	5004/5005 Interface	Interface	500	\$24.5	\$26.6	\$0.2	(\$2.0)	(\$0.1)	\$1.4	(\$0.1)	(\$1.6)	(\$3.6)	1,368	878
4	AP South	Interface	500	\$4.9	\$8.7	\$0.1	(\$3.7)	(\$0.1)	\$0.1	(\$0.1)	(\$0.3)	(\$4.0)	6,682	1,740
5	East	Interface	500	\$8.8	\$4.0	\$0.0	\$4.8	(\$0.1)	\$0.1	(\$0.0)	(\$0.2)	\$4.6	590	44
6	Bryn Mawr - Plymouth Meeting	Line	PECO	\$5.4	\$1.0	\$0.0	\$4.4	(\$0.1)	(\$0.1)	\$0.0	\$0.0	\$4.5	568	8
7	Wylie Ridge	Transformer	AP	\$10.0	\$12.7	\$0.1	(\$2.7)	\$0.0	\$0.1	(\$0.1)	(\$0.1)	(\$2.8)	3,780	760
8	Cromby	Transformer	PECO	\$3.9	(\$0.6)	\$0.0	\$4.5	(\$0.3)	\$0.7	(\$0.0)	(\$1.0)	\$3.5	644	276
9	Dickerson - Quince Orchard	Line	Pepco	\$4.1	\$5.7	\$0.0	(\$1.5)	\$0.2	\$0.4	(\$0.0)	(\$0.2)	(\$1.7)	284	152
10	Bradford - Planebrook	Line	PECO	\$1.8	(\$0.7)	\$0.0	\$2.5	\$0.1	\$0.2	\$0.0	(\$0.1)	\$2.4	240	76
11	Crete - St Johns Tap	Flowgate	MISO	\$4.6	\$6.1	\$0.0	(\$1.5)	\$0.1	\$0.2	(\$0.0)	(\$0.1)	(\$1.6)	5,526	1,280
12	Bala - Plymouth Meeting	Line	PECO	\$2.2	\$0.3	(\$0.0)	\$1.8	\$0.0	\$0.0	\$0.0	\$0.0	\$1.8	152	0
13	Conastone - Graceton	Line	BGE	(\$0.4)	(\$1.9)	(\$0.0)	\$1.5	\$0.0	\$0.0	\$0.0	\$0.0	\$1.5	236	0
14	Chichester	Transformer	PECO	\$1.3	(\$0.2)	\$0.0	\$1.5	(\$0.0)	\$0.0	(\$0.0)	(\$0.1)	\$1.4	118	8
15	Graceton - Raphael Road	Line	BGE	(\$1.5)	(\$2.3)	(\$0.0)	\$0.8	\$0.4	(\$0.0)	\$0.0	\$0.4	\$1.2	442	212
16	Limerick	Transformer	PECO	\$1.7	\$0.3	(\$0.0)	\$1.4	\$0.0	\$0.0	\$0.0	\$0.0	\$1.4	60	0
23	Eddystone - Saville	Line	PECO	\$0.5	(\$0.2)	\$0.0	\$0.6	\$0.0	\$0.1	\$0.0	(\$0.0)	\$0.6	136	32
39	Blue Grass - Byberry	Line	PECO	\$0.2	(\$0.1)	\$0.0	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.3	68	0
45	Chichester - Eddystone	Line	PECO	\$0.2	(\$0.0)	\$0.0	\$0.2	\$0.0	\$0.0	(\$0.0)	\$0.0	\$0.2	90	0
55	Burlington - Croydon	Line	PECO	(\$0.1)	(\$0.2)	(\$0.0)	\$0.1	\$0.0	(\$0.1)	(\$0.0)	\$0.1	\$0.2	1,152	4



Table A-30 PECO Control Zone top congestion cost impacts (By facility): January through September 2010 (See 2010 SOM, Table 7-32)

							Congesti	on Costs (Mil	llions)					
					Day Ahea	ıd			Balancin	g			Event I	lours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	5004/5005 Interface	Interface	500	\$10.3	\$16.8	\$0.0	(\$6.5)	(\$0.5)	\$1.4	(\$0.1)	(\$2.0)	(\$8.5)	2,758	1,122
2	Eddystone - Island Road	Line	PECO	\$3.8	(\$4.4)	(\$0.0)	\$8.1	(\$0.0)	\$0.0	\$0.0	(\$0.0)	\$8.1	372	6
3	Limerick	Transformer	PECO	\$3.0	\$0.6	\$0.0	\$2.4	\$0.1	(\$3.8)	(\$0.0)	\$3.8	\$6.3	106	36
4	AP South	Interface	500	\$2.3	\$7.0	\$0.1	(\$4.6)	(\$0.1)	\$0.2	(\$0.0)	(\$0.4)	(\$4.9)	7,024	2,502
5	West	Interface	500	\$4.8	\$7.1	\$0.0	(\$2.3)	(\$0.0)	\$0.0	(\$0.0)	(\$0.0)	(\$2.4)	322	116
6	Bedington - Black Oak	Interface	500	\$1.8	\$3.8	\$0.0	(\$1.9)	\$0.0	\$0.0	(\$0.0)	(\$0.0)	(\$2.0)	3,638	94
7	Graceton - Raphael Road	Line	BGE	(\$1.5)	(\$3.0)	(\$0.0)	\$1.5	\$0.3	\$0.4	\$0.0	(\$0.2)	\$1.3	430	224
8	East	Interface	500	\$1.4	\$0.5	(\$0.0)	\$1.0	(\$0.0)	\$0.0	\$0.0	(\$0.0)	\$1.0	308	2
9	Peachbottom	Transformer	PECO	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.7)	\$0.1	(\$0.4)	(\$1.2)	(\$1.2)	0	28
10	Doubs	Transformer	AP	\$1.0	\$2.0	\$0.0	(\$1.0)	(\$0.3)	(\$0.1)	(\$0.0)	(\$0.2)	(\$1.2)	2,460	862
11	Plymouth Meeting - Whitpain	Line	PECO	\$1.1	\$0.2	\$0.0	\$0.9	(\$0.0)	(\$0.0)	\$0.0	\$0.0	\$0.9	72	2
12	Tiltonsville - Windsor	Line	AP	\$1.3	\$2.3	\$0.0	(\$0.9)	(\$0.1)	(\$0.0)	(\$0.0)	(\$0.1)	(\$1.0)	4,782	820
13	Keeney At5n	Transformer	DPL	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.4)	\$0.5	(\$0.0)	(\$0.9)	(\$0.9)	52	26
14	East Frankfort - Crete	Line	ComEd	\$1.6	\$2.5	(\$0.0)	(\$0.9)	(\$0.1)	(\$0.1)	\$0.0	\$0.0	(\$0.8)	4,484	1,602
15	Brandon Shores - Riverside	Line	BGE	\$4.2	\$4.6	\$0.0	(\$0.4)	(\$0.2)	\$0.2	(\$0.0)	(\$0.4)	(\$0.8)	686	324
20	Burlington - Croydon	Line	PECO	(\$0.2)	(\$0.6)	(\$0.0)	\$0.4	\$0.0	(\$0.1)	(\$0.0)	\$0.1	\$0.4	2,068	66
32	Jenkintown - Tabor	Line	PECO	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.1)	\$0.2	\$0.0	(\$0.3)	(\$0.3)	0	20
40	Eddystone - Saville	Line	PECO	\$0.1	(\$0.1)	\$0.0	\$0.1	\$0.0	\$0.0	(\$0.0)	\$0.0	\$0.1	120	78
53	Bryn Mawr - Plymouth Meeting	Line	PECO	\$0.2	\$0.0	\$0.0	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	28	0
54	Bradford - Planebrook	Line	PECO	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	(\$0.1)	\$0.0	\$0.1	\$0.1	0	2

PENELEC Control Zone

Table A-31 PENELEC Control Zone top congestion cost impacts (By facility): January through September 2011 (See 2010 SOM, Table 7-33)

							Congesti	on Costs (Mil	lions)					
					Day Ahea	ad			Balancin	g			Event l	Hours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	5004/5005 Interface	Interface	500	(\$5.9)	(\$29.3)	(\$1.7)	\$21.6	\$1.3	\$2.6	\$2.5	\$1.3	\$22.9	1,368	1,740
2	AP South	Interface	500	(\$18.9)	(\$34.0)	(\$0.4)	\$14.7	\$2.2	\$0.5	\$0.8	\$2.5	\$17.3	6,682	1,740
3	West	Interface	500	(\$4.3)	(\$19.7)	(\$1.4)	\$14.0	\$0.0	\$0.1	\$0.1	\$0.0	\$14.0	1,596	38
4	Wylie Ridge	Transformer	AP	\$3.5	\$15.4	\$0.8	(\$11.1)	(\$0.5)	(\$0.3)	(\$0.4)	(\$0.6)	(\$11.7)	3,780	760
5	Crete - St Johns Tap	Flowgate	MISO	\$3.4	\$5.9	\$0.1	(\$2.5)	(\$0.1)	\$0.1	(\$0.1)	(\$0.3)	(\$2.7)	5,526	1,280
6	Bedington - Black Oak	Interface	500	(\$2.6)	(\$4.9)	(\$0.1)	\$2.2	\$0.0	\$0.0	\$0.0	\$0.0	\$2.2	1,248	14
7	Altoona - Bear Rock	Line	PENELEC	(\$1.7)	(\$4.4)	(\$0.1)	\$2.6	\$0.6	\$0.6	\$0.2	\$0.2	\$2.9	378	154
8	Johnstown - Seward	Line	PENELEC	\$1.7	(\$0.9)	\$0.0	\$2.6	\$0.0	\$0.0	\$0.0	\$0.0	\$2.6	102	0
9	East	Interface	500	(\$1.0)	(\$2.5)	(\$0.3)	\$1.3	\$0.0	\$0.1	\$0.1	\$0.0	\$1.3	590	44
10	Susquehanna	Transformer	PPL	\$0.6	(\$1.1)	(\$0.1)	\$1.6	\$0.0	\$0.0	\$0.0	\$0.0	\$1.6	240	0
11	Butler - Karns City	Line	AP	\$4.6	\$2.9	\$0.3	\$2.0	(\$0.1)	\$0.0	(\$0.1)	(\$0.3)	\$1.7	760	116
12	Blairsville East	Transformer	PENELEC	(\$3.3)	(\$3.8)	(\$0.2)	\$0.3	(\$0.0)	\$0.0	\$0.0	(\$0.0)	\$0.3	688	22
13	Yukon	Transformer	AP	\$0.7	(\$0.9)	(\$0.0)	\$1.6	(\$0.1)	\$0.1	\$0.0	(\$0.2)	\$1.4	562	128
14	AEP-DOM	Interface	500	(\$1.3)	(\$2.0)	\$0.0	\$0.7	\$0.0	\$0.0	(\$0.0)	\$0.0	\$0.7	2,570	344
15	East Frankfort - Crete	Line	ComEd	\$1.5	\$2.2	\$0.1	(\$0.6)	(\$0.0)	\$0.1	(\$0.1)	(\$0.2)	(\$0.8)	2,850	630
21	Seward	Transformer	PENELEC	\$0.2	\$0.1	\$0.0	\$0.1	(\$0.3)	\$0.4	(\$0.0)	(\$0.8)	(\$0.6)	12	44
23	Laurel Lake - Tiffany	Line	PENELEC	\$0.7	\$0.1	\$0.1	\$0.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.7	154	0
27	Keystone - Shelocta	Line	PENELEC	(\$0.2)	(\$0.1)	(\$0.0)	(\$0.1)	(\$0.4)	\$0.0	(\$0.0)	(\$0.5)	(\$0.6)	24	16
31	Juniata	Transformer	PENELEC	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	\$0.5	\$0.1	(\$0.4)	(\$0.4)	190	36
36	Bear Rock - Johnstown	Line	PENELEC	(\$0.2)	(\$0.5)	(\$0.0)	\$0.3	\$0.0	\$0.1	\$0.1	\$0.0	\$0.3	96	52



Table A-32 PENELEC Control Zone top congestion cost impacts (By facility): January through September 2010 (See 2010 SOM, Table 7-34)

						С	ongestic	on Costs (Mill	ions)					
					Day Ahea	d			Balancin	g			Event l	Hours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	AP South	Interface	500	(\$45.3)	(\$68.8)	(\$0.0)	\$23.5	\$4.8	(\$0.3)	\$0.1	\$5.2	\$28.7	7,024	2,502
2	5004/5005 Interface	Interface	500	(\$10.8)	(\$35.6)	(\$0.1)	\$24.6	\$4.0	\$1.8	\$0.1	\$2.3	\$27.0	2,758	1,122
3	Bedington - Black Oak	Interface	500	(\$15.6)	(\$23.5)	(\$0.0)	\$7.9	\$0.2	(\$0.1)	\$0.0	\$0.4	\$8.3	3,638	94
4	West	Interface	500	(\$3.6)	(\$8.7)	\$0.0	\$5.1	\$0.2	\$0.1	\$0.0	\$0.1	\$5.2	322	116
5	Mount Storm - Pruntytown	Line	AP	(\$3.5)	(\$5.7)	\$0.0	\$2.2	\$2.7	\$0.1	\$0.1	\$2.7	\$4.9	1,142	1,148
6	Seward	Transformer	PENELEC	\$11.9	\$7.1	\$0.0	\$4.8	(\$0.2)	\$0.6	(\$0.0)	(\$0.8)	\$4.0	742	126
7	Altoona - Bear Rock	Line	PENELEC	(\$2.4)	(\$4.8)	(\$0.0)	\$2.3	\$0.5	(\$0.1)	\$0.0	\$0.5	\$2.9	496	110
8	Wylie Ridge	Transformer	AP	\$0.9	\$3.3	\$0.1	(\$2.3)	(\$0.4)	\$0.3	(\$0.1)	(\$0.8)	(\$3.0)	1,008	752
9	Bear Rock - Johnstown	Line	PENELEC	(\$2.1)	(\$4.1)	(\$0.0)	\$1.9	\$1.1	\$0.0	\$0.0	\$1.1	\$3.0	394	114
10	East Frankfort - Crete	Line	ComEd	\$4.3	\$5.7	\$0.0	(\$1.4)	(\$0.5)	\$0.2	(\$0.0)	(\$0.7)	(\$2.1)	4,484	1,602
11	Tiltonsville - Windsor	Line	AP	\$3.5	\$4.8	\$0.0	(\$1.2)	(\$0.8)	\$0.2	(\$0.0)	(\$1.0)	(\$2.3)	4,782	820
12	AEP-DOM	Interface	500	(\$4.4)	(\$6.3)	(\$0.0)	\$1.8	\$0.2	(\$0.1)	\$0.0	\$0.3	\$2.1	942	178
13	Roxbury - Shade Gap	Line	PENELEC	(\$0.8)	(\$0.7)	(\$0.0)	(\$0.0)	\$0.8	\$1.4	\$0.0	(\$0.6)	(\$0.6)	64	192
14	Doubs	Transformer	AP	(\$2.2)	(\$3.2)	\$0.1	\$1.0	\$0.5	(\$0.1)	(\$0.0)	\$0.6	\$1.6	2,460	862
15	Johnstown - Seward	Line	PENELEC	\$2.7	\$0.7	\$0.0	\$2.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2.0	104	0
20	Homer City - Seward	Line	PENELEC	\$4.6	\$3.3	\$0.0	\$1.4	\$0.0	\$0.0	\$0.0	\$0.0	\$1.4	166	0
26	Keystone - Shelocta	Line	PENELEC	\$3.0	\$2.0	\$0.0	\$0.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.9	78	0
28	Homer City - Shelocta	Line	PENELEC	(\$4.8)	(\$5.0)	(\$0.0)	\$0.2	\$0.1	\$0.1	(\$0.0)	\$0.1	\$0.3	442	52
30	Blairsville - Shelocta	Line	PENELEC	\$1.7	\$1.1	\$0.0	\$0.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.6	48	0
36	Garrett	Transformer	PENELEC	\$1.1	\$0.9	\$0.0	\$0.2	\$0.0	\$0.1	\$0.0	(\$0.0)	\$0.2	204	6

Pepco Control Zone

Table A-33 Pepco Control Zone top congestion cost impacts (By facility): January through September 2011 (See 2010 SOM, Table 7-35)

							Congesti	ion Costs (Mi	llions)					
					Day Ahea	d			Balancin	ıg			Event I	Hours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	AP South	Interface	500	\$52.4	\$33.2	\$1.2	\$20.5	(\$2.1)	(\$1.4)	(\$1.1)	(\$1.8)	\$18.6	6,682	152
2	Dickerson - Quince Orchard	Line	Pepco	\$21.1	\$5.5	\$0.2	\$15.9	\$0.1	\$1.4	(\$0.2)	(\$1.5)	\$14.4	284	152
3	West	Interface	500	\$13.6	\$7.8	\$0.3	\$6.0	(\$0.0)	(\$0.0)	(\$0.0)	\$0.0	\$6.1	1,596	38
4	Wylie Ridge	Transformer	AP	\$8.2	\$5.1	\$0.3	\$3.5	(\$0.3)	(\$0.2)	(\$0.1)	(\$0.1)	\$3.4	3,780	760
5	Bedington - Black Oak	Interface	500	\$7.9	\$5.0	\$0.2	\$3.1	(\$0.0)	(\$0.1)	(\$0.0)	\$0.0	\$3.1	1,248	14
6	Danville - East Danville	Line	AEP	\$4.9	\$2.8	(\$0.0)	\$2.1	\$0.0	\$0.0	\$0.0	\$0.0	\$2.1	6,610	0
7	Crete - St Johns Tap	Flowgate	MISO	\$4.9	\$2.8	\$0.1	\$2.2	(\$0.1)	(\$0.0)	(\$0.1)	(\$0.2)	\$2.0	5,526	1,280
8	AEP-DOM	Interface	500	\$4.8	\$3.1	\$0.1	\$1.8	(\$0.1)	(\$0.1)	\$0.0	\$0.0	\$1.8	2,570	344
9	5004/5005 Interface	Interface	500	\$3.8	\$2.3	\$0.0	\$1.5	(\$0.0)	(\$0.1)	(\$0.1)	(\$0.1)	\$1.5	1,368	878
10	Gore - Hampshire	Line	AP	\$2.9	\$1.7	\$0.0	\$1.2	\$0.0	\$0.0	\$0.0	\$0.0	\$1.2	1,554	0
11	East	Interface	500	(\$3.1)	(\$2.1)	(\$0.1)	(\$1.0)	\$0.0	\$0.1	\$0.0	(\$0.1)	(\$1.1)	590	44
12	East Frankfort - Crete	Line	ComEd	\$2.1	\$1.0	\$0.1	\$1.2	(\$0.0)	(\$0.0)	(\$0.1)	(\$0.1)	\$1.1	2,850	630
13	Mount Storm	Transformer	AP	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.5)	\$0.1	(\$0.3)	(\$1.0)	(\$1.0)	0	218
14	Riverside	Other	BGE	(\$0.1)	(\$0.0)	(\$0.0)	(\$0.0)	\$0.5	(\$0.3)	\$0.1	\$0.9	\$0.9	40	262
15	Clover	Transformer	Dominion	\$3.8	\$2.5	\$0.3	\$1.6	(\$0.4)	(\$0.0)	(\$0.4)	(\$0.8)	\$0.8	2,386	920
26	Pumphrey	Transformer	Pepco	(\$1.1)	(\$0.6)	(\$0.0)	(\$0.4)	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.4)	486	0
30	Burches Hill	Transformer	Pepco	\$0.6	\$0.3	\$0.1	\$0.4	\$0.0	(\$0.0)	(\$0.2)	(\$0.2)	\$0.1	134	88
73	Buzzard - Ritchie	Line	Pepco	\$0.1	(\$0.0)	\$0.0	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	138	0
90	Burtonsville - Sandy Springs	Line	Pepco	(\$0.2)	(\$0.1)	(\$0.0)	(\$0.1)	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.1)	24	0
190	Howard - Pumphrey	Line	Рерсо	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.0)	56	0



Table A-34 Pepco Control Zone top congestion cost impacts (By facility): January through September 2010 (See 2010 SOM, Table 7-36)

						C	ongestic	on Costs (Mill	lions)					
					Day Ahea	d			Balancin	g			Event l	lours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	AP South	Interface	500	\$106.1	\$78.5	\$1.8	\$29.3	(\$3.4)	(\$1.5)	(\$1.6)	(\$3.6)	\$25.7	7,024	2,502
2	Bedington - Black Oak	Interface	500	\$39.4	\$27.7	\$0.8	\$12.4	(\$0.3)	(\$0.5)	(\$0.3)	(\$0.1)	\$12.3	3,638	94
3	Doubs	Transformer	AP	\$39.2	\$24.9	\$0.7	\$15.0	(\$3.8)	\$1.4	(\$1.7)	(\$6.8)	\$8.2	2,460	862
4	Mount Storm - Pruntytown	Line	AP	\$9.4	\$6.7	\$0.1	\$2.7	(\$1.9)	(\$1.5)	(\$0.4)	(\$0.9)	\$1.9	1,142	1,148
5	Cloverdale - Lexington	Line	AEP	\$10.7	\$7.6	\$0.1	\$3.2	(\$0.9)	(\$0.9)	(\$0.3)	(\$0.3)	\$2.9	2,088	1,240
6	Brandon Shores - Riverside	Line	BGE	(\$13.6)	(\$10.2)	(\$0.2)	(\$3.5)	\$1.2	\$0.5	\$0.3	\$1.1	(\$2.4)	686	324
7	5004/5005 Interface	Interface	500	\$6.8	\$4.6	\$0.2	\$2.4	(\$0.3)	(\$0.1)	(\$0.1)	(\$0.3)	\$2.0	2,758	1,122
8	Reid - Ringgold	Line	AP	\$4.6	\$2.8	\$0.1	\$2.0	(\$0.0)	(\$0.1)	(\$0.0)	\$0.0	\$2.0	542	50
9	Millvile - Sleepy Hollow	Line	AP	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.9)	(\$1.3)	(\$0.2)	\$0.2	\$0.2	0	360
10	West	Interface	500	\$5.9	\$3.9	\$0.0	\$2.0	(\$0.1)	(\$0.1)	(\$0.0)	(\$0.1)	\$1.8	322	116
11	East Frankfort - Crete	Line	ComEd	\$4.9	\$3.0	\$0.0	\$1.9	(\$0.3)	(\$0.1)	(\$0.0)	(\$0.2)	\$1.7	4,484	1,602
12	Graceton - Raphael Road	Line	BGE	\$5.6	\$3.8	\$0.2	\$2.0	(\$0.6)	(\$0.4)	(\$0.1)	(\$0.3)	\$1.7	430	224
13	Millville - Sleepy Hollow	Line	Dominion	\$6.5	\$4.9	\$0.1	\$1.7	\$0.0	\$0.0	\$0.0	\$0.0	\$1.7	430	0
14	AEP-DOM	Interface	500	\$8.0	\$6.6	\$0.1	\$1.5	(\$0.1)	(\$0.2)	(\$0.1)	(\$0.0)	\$1.5	942	178
15	Bowie	Line	Pepco	\$2.3	\$1.1	\$0.1	\$1.3	\$0.0	\$0.0	\$0.0	\$0.0	\$1.3	88	0
17	Bowie - Lanham	Line	Pepco	\$2.2	\$0.9	\$0.1	\$1.4	(\$0.3)	(\$0.2)	(\$0.1)	(\$0.2)	\$1.1	72	26
25	Benning - Ritchie	Line	Pepco	\$0.8	\$0.2	\$0.1	\$0.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.7	156	0
31	Buzzard - Ritchie	Line	Pepco	\$0.5	\$0.0	\$0.0	\$0.5	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)	\$0.5	116	2
41	Burtonsville - Sandy Springs	Line	Pepco	(\$0.3)	(\$0.2)	(\$0.0)	(\$0.1)	\$0.4	\$0.2	\$0.0	\$0.2	\$0.2	40	82
42	Bowie	Transformer	Pepco	\$0.0	\$0.0	\$0.0	\$0.0	\$0.2	\$0.4	(\$0.1)	(\$0.3)	(\$0.3)	0	18



PPL Control Zone

Table A-35 PPL Control Zone top congestion cost impacts (By facility): January through September 2011 (See 2010 SOM, Table 7-37)

						(Congesti	on Costs (Mil	llions)					
					Day Ahea	d			Balancin	g			Event l	Hours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	5004/5005 Interface	Interface	500	\$32.1	\$42.2	\$1.1	(\$9.0)	\$2.1	\$1.2	(\$0.7)	\$0.2	(\$8.8)	1,368	38
2	West	Interface	500	\$24.3	\$29.8	\$0.9	(\$4.6)	\$0.0	(\$0.1)	(\$0.0)	\$0.1	(\$4.5)	1,596	38
3	Susquehanna	Transformer	PPL	\$12.6	\$2.7	\$0.2	\$10.1	\$0.0	\$0.0	\$0.0	\$0.0	\$10.1	240	0
4	Wylie Ridge	Transformer	AP	\$10.9	\$13.6	\$0.4	(\$2.3)	\$0.6	\$0.1	(\$0.1)	\$0.4	(\$1.9)	3,780	760
5	Crete - St Johns Tap	Flowgate	MISO	\$5.0	\$6.4	\$0.0	(\$1.4)	\$0.3	\$0.2	(\$0.0)	\$0.1	(\$1.3)	5,526	1,280
6	Harwood - Susquehanna	Line	PPL	\$0.3	(\$1.7)	\$0.0	\$2.0	\$0.1	\$0.3	\$0.0	(\$0.3)	\$1.8	170	56
7	AP South	Interface	500	\$0.2	(\$1.1)	\$0.4	\$1.7	\$0.3	\$0.1	(\$0.1)	\$0.0	\$1.7	6,682	1,740
8	Susquehanna	Transformer	PSEG	\$0.0	\$0.0	\$0.0	\$0.0	\$0.6	(\$1.3)	(\$0.2)	\$1.7	\$1.7	0	104
9	South Mahwah - Waldwick	Line	PSEG	\$2.2	\$3.0	\$0.8	\$0.0	\$0.2	\$0.3	(\$0.9)	(\$1.0)	(\$1.0)	9,302	946
10	East Frankfort - Crete	Line	ComEd	\$1.8	\$2.6	\$0.0	(\$0.8)	\$0.0	(\$0.0)	(\$0.0)	\$0.0	(\$0.7)	2,850	630
11	Middletown Jctn Three Mile Island	Line	Met-Ed	\$0.0	\$0.0	\$0.0	\$0.0	\$0.4	(\$0.7)	(\$0.0)	\$1.1	\$1.1	0	30
12	Dickerson - Quince Orchard	Line	Pepco	\$2.9	\$3.0	\$0.1	\$0.0	\$0.4	\$0.5	(\$0.0)	(\$0.1)	(\$0.1)	284	152
13	Plymouth Meeting - Whitpain	Line	PECO	(\$1.8)	(\$2.4)	(\$0.0)	\$0.5	(\$0.1)	(\$0.0)	\$0.0	(\$0.0)	\$0.5	412	144
14	Cedar Grove - Roseland	Line	PSEG	(\$1.9)	(\$2.4)	(\$0.2)	\$0.3	(\$0.1)	(\$0.0)	\$0.0	(\$0.0)	\$0.3	1,594	62
15	Wescosville	Transformer	PPL	\$1.3	\$0.6	\$0.0	\$0.7	\$0.5	\$0.2	(\$0.0)	\$0.3	\$1.0	88	72
23	Mountain	Transformer	PPL	\$0.1	(\$0.2)	\$0.0	\$0.2	(\$0.2)	\$0.1	(\$0.1)	(\$0.4)	(\$0.1)	80	80
36	Juniata	Transformer	PPL	\$0.6	\$0.5	\$0.0	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	50	0
39	Elroy	Transformer	PPL	\$0.4	\$0.5	\$0.0	(\$0.1)	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.1)	418	0
82	Dauphin - Juniata	Line	PPL	\$0.2	\$0.1	\$0.0	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	8	10
87	Frackville - Siegfried	Line	PPL	(\$0.0)	(\$0.1)	(\$0.0)	\$0.1	(\$0.0)	(\$0.0)	\$0.0	\$0.0	\$0.1	24	4



Table A-36 PPL Control Zone top congestion cost impacts (By facility): January through September 2010 (See 2010 SOM, Table 7-38)

						(Congesti	on Costs (Mill	ions)					
					Day Ahea	ad			Balancin	g			Event l	Hours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	5004/5005 Interface	Interface	500	\$32.9	\$42.5	\$0.9	(\$8.8)	\$2.9	\$1.3	(\$0.4)	\$1.1	(\$7.6)	2,758	1,122
2	Brunner Island - Yorkana	Line	Met-Ed	(\$5.2)	(\$9.3)	(\$0.1)	\$4.0	\$0.3	\$0.2	\$0.1	\$0.1	\$4.2	438	336
3	West	Interface	500	\$9.4	\$12.2	\$0.2	(\$2.7)	\$0.1	\$0.2	(\$0.1)	(\$0.2)	(\$2.8)	322	116
4	Brandon Shores - Riverside	Line	BGE	\$6.6	\$7.4	\$0.2	(\$0.6)	\$0.7	\$0.2	(\$0.1)	\$0.4	(\$0.2)	686	324
5	Graceton - Raphael Road	Line	BGE	(\$3.6)	(\$4.8)	(\$0.1)	\$1.1	(\$0.0)	\$0.1	\$0.0	(\$0.0)	\$1.1	430	224
6	East Frankfort - Crete	Line	ComEd	\$3.5	\$4.9	(\$0.0)	(\$1.4)	\$0.2	(\$0.1)	\$0.0	\$0.3	(\$1.1)	4,484	1,602
7	AP South	Interface	500	\$2.8	\$2.0	\$0.5	\$1.3	\$0.3	(\$0.0)	(\$0.1)	\$0.3	\$1.6	7,024	2,502
8	Millville - Sleepy Hollow	Line	Dominion	\$1.9	\$2.8	\$0.1	(\$0.9)	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.9)	430	0
9	Tiltonsville - Windsor	Line	AP	\$3.1	\$4.1	\$0.1	(\$0.9)	\$0.4	\$0.2	(\$0.0)	\$0.2	(\$0.7)	4,782	820
10	Cloverdale - Lexington	Line	AEP	\$2.5	\$3.6	\$0.1	(\$1.0)	\$0.3	(\$0.0)	\$0.0	\$0.4	(\$0.6)	2,088	1,240
11	Harwood - Siegfried	Line	PPL	(\$0.2)	(\$1.7)	\$0.0	\$1.5	(\$0.3)	\$2.2	(\$0.1)	(\$2.6)	(\$1.1)	184	234
12	Juniata	Transformer	PENELEC	\$0.0	\$0.0	\$0.1	\$0.1	\$0.7	\$0.2	\$0.4	\$0.9	\$1.0	92	54
13	Harwood - Susquehanna	Line	PPL	\$0.2	(\$1.0)	\$0.0	\$1.3	\$0.3	\$0.5	(\$0.1)	(\$0.3)	\$1.0	102	44
14	Crete - St Johns Tap	Flowgate	MISO	\$1.6	\$2.5	(\$0.0)	(\$0.8)	\$0.1	(\$0.1)	\$0.0	\$0.2	(\$0.6)	1,600	490
15	Eldred - Sunbury	Line	PPL	\$0.6	(\$0.1)	\$0.0	\$0.7	\$0.1	(\$0.1)	(\$0.0)	\$0.1	\$0.8	100	66
19	Susquehanna	Transformer	PPL	\$1.0	\$0.3	\$0.0	\$0.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.7	78	0
20	East Palmerton - Siegfried	Line	PPL	(\$0.1)	(\$0.7)	\$0.0	\$0.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.6	140	0
25	East Palmerton - Harwood	Line	PPL	(\$0.0)	(\$0.5)	\$0.0	\$0.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.5	102	0
27	Frackville - Siegfried	Line	PPL	(\$0.1)	(\$0.5)	(\$0.0)	\$0.4	(\$0.0)	\$0.0	(\$0.0)	(\$0.0)	\$0.4	68	14
33	Eldred - Frackville	Line	PPL	\$0.1	(\$0.2)	\$0.0	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.3	40	0



PSEG Control Zone

Table A-37 PSEG Control Zone top congestion cost impacts (By facility): January through September 2011 (See 2010 SOM, Table 7-39)

		Congestion Costs (Millions)												
				Day Ahead				Balancing				Event Hours		
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	South Mahwah - Waldwick	Line	PSEG	\$19.1	\$4.9	(\$7.2)	\$7.0	(\$1.7)	\$4.0	(\$11.9)	(\$17.6)	(\$10.7)	9,302	38
2	West	Interface	500	\$22.8	\$20.6	\$1.3	\$3.6	(\$0.0)	\$0.1	(\$0.0)	(\$0.2)	\$3.4	1,596	38
3	5004/5005 Interface	Interface	500	\$20.5	\$19.3	\$1.2	\$2.4	\$1.3	\$4.1	(\$1.5)	(\$4.2)	(\$1.8)	1,368	878
4	Waldwick	Transformer	PSEG	\$1.4	\$0.4	\$1.4	\$2.3	(\$0.6)	\$0.6	(\$7.6)	(\$8.7)	(\$6.4)	272	186
5	Cedar Grove - Roseland	Line	PSEG	\$6.2	\$0.9	\$0.1	\$5.4	(\$0.1)	\$0.6	(\$0.1)	(\$0.7)	\$4.7	1,594	62
6	Wylie Ridge	Transformer	AP	\$8.1	\$8.3	\$0.7	\$0.5	\$0.0	\$1.0	(\$0.4)	(\$1.4)	(\$0.9)	3,780	760
7	East	Interface	500	\$7.3	\$7.7	\$0.4	\$0.0	(\$0.1)	\$0.5	(\$0.1)	(\$0.7)	(\$0.7)	590	44
8	AP South	Interface	500	(\$0.8)	\$3.3	\$1.3	(\$2.7)	\$0.1	(\$0.2)	(\$1.3)	(\$0.9)	(\$3.7)	6,682	1,740
9	Bayway - Federal Square	Line	PSEG	\$1.4	(\$0.7)	\$0.1	\$2.2	(\$0.0)	\$0.0	(\$0.0)	(\$0.1)	\$2.1	1,554	30
10	Crete - St Johns Tap	Flowgate	MISO	\$4.5	\$4.3	\$0.1	\$0.3	\$0.1	\$0.5	(\$0.1)	(\$0.5)	(\$0.2)	5,526	1,280
11	Branchburg - Readington	Line	PSEG	\$1.8	\$0.1	\$0.2	\$1.9	(\$0.1)	\$0.3	(\$0.1)	(\$0.5)	\$1.4	492	80
12	Susquehanna	Transformer	PPL	\$1.2	(\$0.1)	\$0.0	\$1.3	\$0.0	\$0.0	\$0.0	\$0.0	\$1.3	240	0
13	Dickerson - Quince Orchard	Line	Pepco	\$3.1	\$3.3	\$0.2	\$0.0	\$0.4	\$0.4	(\$0.3)	(\$0.3)	(\$0.3)	284	152
14	Plymouth Meeting - Whitpain	Line	PECO	(\$0.5)	\$0.8	\$0.0	(\$1.2)	\$0.1	(\$0.1)	(\$0.0)	\$0.1	(\$1.1)	412	144
15	Redoak - Sayreville	Line	JCPL	\$0.8	(\$0.2)	\$0.1	\$1.1	(\$0.0)	\$0.0	(\$0.0)	(\$0.0)	\$1.0	2,552	22
17	Roseland - Whippany	Line	PSEG	\$1.0	\$0.2	\$0.1	\$0.9	(\$0.0)	\$0.1	(\$0.3)	(\$0.4)	\$0.5	436	100
19	Roseland - West Caldwell	Line	PSEG	\$1.0	\$0.1	\$0.1	\$1.0	(\$0.0)	\$0.2	(\$0.1)	(\$0.3)	\$0.7	144	20
21	Hawthorn - Waldwick	Line	PSEG	\$0.1	\$0.0	\$0.6	\$0.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.7	1,318	0
23	Camden	Transformer	PSEG	\$0.7	\$0.0	\$0.0	\$0.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.7	434	22
27	Montville - Roseland	Line	PSEG	\$0.7	\$0.2	\$0.0	\$0.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.6	90	104



Table A-38 PSEG Control Zone top congestion cost impacts (By facility): January through September 2010 (See 2010 SOM, Table 7-40)

							Congesti	ion Costs (Mi	llions)					
					Day Ahea	d			Balancir	ıg			Event l	Hours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	Athenia - Saddlebrook	Line	PSEG	\$12.6	\$2.5	\$7.5	\$17.6	(\$6.8)	\$2.5	(\$5.0)	(\$14.3)	\$3.3	5,894	662
2	Branchburg - Readington	Line	PSEG	\$8.9	\$1.2	\$0.6	\$8.3	\$0.1	\$1.0	(\$0.5)	(\$1.4)	\$6.9	2,420	368
3	5004/5005 Interface	Interface	500	\$24.2	\$23.2	\$2.0	\$3.0	\$2.0	\$1.8	(\$1.8)	(\$1.6)	\$1.5	2,758	1,122
4	AP South	Interface	500	\$1.1	\$5.4	\$2.4	(\$1.9)	\$0.2	(\$0.3)	(\$1.5)	(\$1.0)	(\$2.9)	7,024	2,502
5	Hawthorn - Waldwick	Line	PSEG	\$0.1	(\$0.0)	(\$0.0)	\$0.0	(\$0.7)	\$1.1	(\$1.7)	(\$3.4)	(\$3.4)	908	78
6	Bedington - Black Oak	Interface	500	\$1.8	\$3.6	\$0.9	(\$0.8)	(\$0.0)	(\$0.0)	(\$0.1)	(\$0.1)	(\$0.9)	3,638	94
7	West	Interface	500	\$8.9	\$8.3	\$0.3	\$0.9	(\$0.0)	\$0.3	(\$0.2)	(\$0.5)	\$0.4	322	116
8	Eddystone - Island Road	Line	PECO	\$1.0	(\$0.7)	\$0.0	\$1.7	\$0.0	\$0.0	(\$0.0)	\$0.0	\$1.7	372	6
9	Hawthorn - Hinchmans Ave	Line	PSEG	(\$0.0)	(\$0.0)	(\$0.2)	(\$0.2)	(\$0.1)	\$0.4	(\$0.9)	(\$1.4)	(\$1.6)	418	70
10	Redoak - Sayreville	Line	JCPL	\$1.2	(\$0.2)	\$0.0	\$1.4	\$0.0	(\$0.0)	(\$0.0)	(\$0.0)	\$1.4	1,590	114
11	Graceton - Raphael Road	Line	BGE	(\$3.4)	(\$3.6)	(\$0.2)	(\$0.0)	\$0.3	(\$0.2)	\$0.3	\$0.8	\$0.8	430	224
12	East Frankfort - Crete	Line	ComEd	\$3.2	\$3.2	\$0.1	\$0.1	(\$0.0)	\$0.3	(\$0.1)	(\$0.4)	(\$0.4)	4,484	1,602
13	Cloverdale - Lexington	Line	AEP	\$2.4	\$2.6	\$0.3	\$0.0	\$0.2	\$0.5	(\$0.3)	(\$0.5)	(\$0.5)	2,088	1,240
14	North Ave - Pvsc	Line	PSEG	\$0.2	(\$0.8)	\$0.1	\$1.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1.0	1,312	0
15	Brandon Shores - Riverside	Line	BGE	\$5.8	\$5.0	\$0.3	\$1.0	\$0.4	\$0.1	(\$0.3)	(\$0.0)	\$1.0	686	324
16	Bayway - Federal Square	Line	PSEG	\$0.6	(\$0.3)	\$0.0	\$1.0	(\$0.0)	\$0.0	(\$0.0)	(\$0.0)	\$0.9	1,038	16
17	Hillsdale - New Milford	Line	PSEG	\$0.5	\$0.3	\$0.7	\$1.0	\$0.0	\$0.0	(\$0.0)	(\$0.0)	\$0.9	496	12
19	Leonia - New Milford	Line	PSEG	\$0.4	\$0.2	\$0.7	\$0.9	(\$0.0)	\$0.1	(\$0.0)	(\$0.2)	\$0.7	2,056	12
21	Bergen - Hoboken	Line	PSEG	\$0.1	(\$0.2)	\$0.4	\$0.7	(\$0.2)	(\$0.1)	\$0.1	\$0.1	\$0.7	942	58
22	Fairlawn - Saddlebrook	Line	PSEG	\$0.4	\$0.2	\$0.7	\$0.9	(\$0.0)	\$0.1	(\$0.4)	(\$0.5)	\$0.4	984	34

RECO Control Zone

Table A-39 RECO Control Zone top congestion cost impacts (By facility): January through September 2011 (See 2010 SOM, Table 7-41)

						C	ongestic	on Costs (Mill	ions)					
					Day Ahea	d			Balancin	g			Event l	lours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	South Mahwah - Waldwick	Line	PSEG	(\$1.4)	(\$0.6)	(\$0.0)	(\$0.8)	(\$0.0)	\$1.0	\$0.0	(\$1.0)	(\$1.8)	9,302	38
2	West	Interface	500	\$0.9	\$0.0	\$0.0	\$0.9	(\$0.0)	(\$0.0)	(\$0.0)	\$0.0	\$0.9	1,596	38
3	5004/5005 Interface	Interface	500	\$0.8	\$0.1	\$0.0	\$0.7	\$0.0	(\$0.1)	(\$0.0)	\$0.1	\$0.9	1,368	878
4	Waldwick	Transformer	PSEG	(\$0.2)	(\$0.1)	(\$0.0)	(\$0.1)	(\$0.1)	\$0.4	\$0.0	(\$0.4)	(\$0.5)	272	186
5	Wylie Ridge	Transformer	AP	\$0.3	\$0.1	\$0.0	\$0.3	\$0.0	(\$0.0)	(\$0.0)	\$0.0	\$0.3	3,780	760
6	Cedar Grove - Roseland	Line	PSEG	\$0.3	\$0.1	\$0.0	\$0.3	(\$0.0)	(\$0.0)	(\$0.0)	\$0.0	\$0.3	1,594	62
7	East	Interface	500	\$0.3	\$0.0	\$0.0	\$0.3	(\$0.0)	(\$0.0)	\$0.0	\$0.0	\$0.3	590	44
8	Crete - St Johns Tap	Flowgate	MISO	\$0.2	\$0.0	\$0.0	\$0.1	\$0.0	(\$0.0)	(\$0.0)	\$0.0	\$0.2	5,526	1,280
9	Dickerson - Quince Orchard	Line	Pepco	\$0.1	\$0.0	\$0.0	\$0.1	\$0.0	(\$0.0)	\$0.0	\$0.0	\$0.2	284	152
10	AP South	Interface	500	(\$0.1)	(\$0.0)	\$0.0	(\$0.1)	\$0.0	\$0.0	(\$0.0)	(\$0.0)	(\$0.1)	6,682	1,740
11	Branchburg - Readington	Line	PSEG	\$0.1	\$0.0	\$0.0	\$0.1	\$0.0	(\$0.0)	\$0.0	\$0.0	\$0.1	492	80
12	East Frankfort - Crete	Line	ComEd	\$0.1	\$0.0	\$0.0	\$0.1	(\$0.0)	(\$0.0)	(\$0.0)	\$0.0	\$0.1	2,850	630
13	Plymouth Meeting - Whitpain	Line	PECO	(\$0.1)	(\$0.0)	(\$0.0)	(\$0.1)	\$0.0	\$0.0	\$0.0	(\$0.0)	(\$0.1)	412	144
14	Susquehanna	Transformer	PPL	\$0.1	\$0.0	\$0.0	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	240	0
15	Athenia - Saddlebrook	Line	PSEG	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	2,296	8



Table A-40 RECO Control Zone top congestion cost impacts (By facility): January through September 2010 (See 2010 SOM, Table 7-42)

						(Congesti	on Costs (Mi	llions)					
					Day Ahea	d			Balancin	g			Event	Hours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	5004/5005 Interface	Interface	500	\$0.9	\$0.1	\$0.0	\$0.8	\$0.2	(\$0.1)	(\$0.0)	\$0.3	\$1.1	2,758	1,122
2	Branchburg - Readington	Line	PSEG	\$0.6	\$0.0	\$0.0	\$0.5	\$0.1	(\$0.0)	(\$0.0)	\$0.1	\$0.6	2,420	368
3	West	Interface	500	\$0.4	\$0.0	\$0.0	\$0.4	\$0.0	(\$0.0)	\$0.0	\$0.0	\$0.4	322	116
4	Brandon Shores - Riverside	Line	BGE	\$0.2	\$0.0	\$0.0	\$0.2	\$0.0	(\$0.0)	\$0.0	\$0.0	\$0.3	686	324
5	AP South	Interface	500	(\$0.2)	(\$0.0)	\$0.0	(\$0.2)	(\$0.0)	\$0.0	(\$0.0)	(\$0.1)	(\$0.2)	7,024	2,502
6	Athenia - Saddlebrook	Line	PSEG	\$0.2	\$0.0	(\$0.0)	\$0.2	\$0.0	(\$0.1)	\$0.0	\$0.1	\$0.2	5,894	662
7	Tiltonsville - Windsor	Line	AP	\$0.1	\$0.0	\$0.0	\$0.1	\$0.0	(\$0.0)	(\$0.0)	\$0.0	\$0.2	4,782	820
8	Graceton - Raphael Road	Line	BGE	(\$0.1)	(\$0.0)	(\$0.0)	(\$0.1)	(\$0.0)	\$0.0	\$0.0	(\$0.0)	(\$0.2)	430	224
9	East Frankfort - Crete	Line	ComEd	\$0.1	\$0.0	\$0.0	\$0.1	\$0.0	(\$0.0)	(\$0.0)	\$0.0	\$0.1	4,484	1,602
10	Brunner Island - Yorkana	Line	Met-Ed	(\$0.1)	(\$0.0)	(\$0.0)	(\$0.1)	(\$0.0)	\$0.0	\$0.0	(\$0.0)	(\$0.1)	438	336
11	Hawthorn - Waldwick	Line	PSEG	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.0)	\$0.1	\$0.0	(\$0.1)	(\$0.1)	908	78
12	Hawthorn - Hinchmans Ave	Line	PSEG	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.0)	\$0.1	\$0.0	(\$0.1)	(\$0.1)	418	70
13	Doubs	Transformer	AP	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.0)	(\$0.0)	\$0.0	\$0.1	2,460	862
14	Wylie Ridge	Transformer	AP	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.0)	\$0.0	\$0.0	\$0.1	1,008	752
15	Cloverdale - Lexington	Line	AEP	\$0.1	\$0.0	\$0.0	\$0.1	\$0.0	(\$0.0)	(\$0.0)	\$0.0	\$0.1	2,088	1,240

Western Region Congestion-Event Summaries

AEP Control Zone

Table A-41 AEP Control Zone top congestion cost impacts (By facility): January through September 2011 (See 2010 SOM, Table 7-43)

						C	Congesti	on Costs (Mil	lions)					
					Day Ahea	d			Balancir	ıg			Event I	Hours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	AP South	Interface	500	(\$22.2)	(\$56.1)	(\$1.2)	\$32.7	\$1.5	\$4.7	\$2.0	(\$1.2)	\$31.5	6,682	998
2	Belmont	Transformer	AP	\$15.8	(\$11.9)	\$4.7	\$32.4	(\$1.9)	(\$0.2)	(\$3.7)	(\$5.4)	\$26.9	7,724	998
3	AEP-DOM	Interface	500	\$3.6	(\$17.3)	\$2.2	\$23.1	\$0.2	\$1.1	(\$0.6)	(\$1.5)	\$21.6	2,570	344
4	Brues - West Bellaire	Line	AEP	\$16.1	\$1.3	\$1.8	\$16.5	(\$1.8)	\$1.7	(\$1.8)	(\$5.3)	\$11.2	3,074	970
5	West	Interface	500	(\$14.8)	(\$25.7)	(\$0.6)	\$10.4	\$0.0	\$0.1	\$0.0	(\$0.0)	\$10.4	1,596	38
6	5004/5005 Interface	Interface	500	(\$16.2)	(\$26.4)	(\$0.7)	\$9.5	\$1.8	\$2.7	\$1.2	\$0.3	\$9.8	1,368	878
7	Wylie Ridge	Transformer	AP	(\$10.4)	(\$16.5)	(\$1.3)	\$4.8	\$0.2	\$0.9	\$0.6	(\$0.2)	\$4.6	3,780	760
8	Ruth - Turner	Line	AEP	\$3.0	(\$1.8)	\$0.5	\$5.3	(\$1.6)	\$1.7	(\$1.0)	(\$4.3)	\$1.0	740	376
9	Michigan City - Laporte	Flowgate	MISO	\$9.3	\$3.6	\$3.6	\$9.3	(\$2.7)	(\$1.4)	(\$3.6)	(\$4.9)	\$4.4	4,646	1,142
10	Bedington - Black Oak	Interface	500	(\$3.4)	(\$7.6)	(\$0.1)	\$4.1	\$0.1	\$0.0	\$0.0	\$0.0	\$4.2	1,248	14
11	Danville - East Danville	Line	AEP	(\$12.4)	(\$12.3)	(\$4.9)	(\$5.0)	\$0.0	\$0.0	\$0.0	\$0.0	(\$5.0)	6,610	0
12	Wolfcreek	Transformer	AEP	(\$1.0)	(\$5.9)	\$1.2	\$6.2	(\$0.3)	\$0.4	(\$1.2)	(\$1.9)	\$4.3	4,296	452
13	Cloverdale	Transformer	AEP	(\$0.2)	(\$4.5)	\$0.4	\$4.7	(\$0.0)	\$0.6	(\$0.0)	(\$0.7)	\$4.0	1,386	248
14	Muskingum River	Transformer	AEP	\$0.6	(\$2.7)	\$0.5	\$3.9	\$0.0	\$0.0	\$0.0	\$0.0	\$3.9	636	0
15	Carnegie - Tidd	Line	AECO	(\$0.8)	(\$3.0)	(\$0.6)	\$1.6	\$0.0	\$0.0	\$0.0	\$0.0	\$1.6	1,704	0
16	Kammer	Transformer	AEP	\$3.7	(\$0.7)	\$0.5	\$4.9	(\$3.2)	(\$0.1)	(\$1.1)	(\$4.2)	\$0.8	568	94
17	Conesville Prep - Conesville	Line	AEP	(\$0.3)	(\$2.1)	(\$0.7)	\$1.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1.0	2,542	0
18	Muskingum River - East New Concord	Line	AEP	\$1.1	(\$1.3)	\$0.2	\$2.7	\$0.0	\$0.0	\$0.0	\$0.0	\$2.7	218	0
22	Carbondale - Kanawha River	Line	AEP	(\$0.9)	(\$3.0)	\$0.2	\$2.3	\$0.0	\$0.0	\$0.0	\$0.0	\$2.3	548	16
32	Kenova - Tri State	Line	AEP	\$0.5	(\$0.8)	\$0.0	\$1.4	(\$0.1)	(\$0.1)	(\$0.0)	\$0.0	\$1.4	214	58



Table A-42 AEP Control Zone top congestion cost impacts (By facility): January through September 2010 (See 2010 SOM, Table 7-44)

						(Congesti	ion Costs (Mi	llions)					
					Day Ahea	d			Balancin	g			Event l	Hours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	AP South	Interface	500	(\$32.8)	(\$81.6)	\$0.4	\$49.3	(\$3.3)	\$2.6	\$1.1	(\$4.8)	\$44.5	7,024	2,502
2	AEP-DOM	Interface	500	\$7.5	(\$20.1)	\$1.0	\$28.5	(\$0.2)	(\$0.3)	(\$0.3)	(\$0.1)	\$28.4	942	178
3	Bedington - Black Oak	Interface	500	(\$12.2)	(\$26.5)	\$0.1	\$14.4	(\$0.1)	(\$0.0)	\$0.0	(\$0.1)	\$14.3	3,638	94
4	5004/5005 Interface	Interface	500	(\$17.9)	(\$27.2)	(\$0.4)	\$8.9	(\$0.1)	\$2.8	\$0.6	(\$2.4)	\$6.6	2,758	1,122
5	Baker - Broadford	Line	AEP	\$0.1	(\$0.2)	\$0.0	\$0.3	(\$1.5)	\$1.0	(\$3.5)	(\$5.9)	(\$5.6)	20	148
6	Belmont	Transformer	AP	\$3.7	(\$0.8)	\$0.7	\$5.3	\$0.2	(\$0.1)	(\$0.5)	(\$0.2)	\$5.1	2,114	218
7	Doubs	Transformer	AP	(\$10.7)	(\$13.8)	(\$0.2)	\$2.9	\$0.0	\$0.9	\$0.3	(\$0.6)	\$2.3	2,460	862
8	Mount Storm - Pruntytown	Line	AP	(\$2.9)	(\$8.1)	(\$0.1)	\$5.1	(\$0.8)	\$1.5	\$0.5	(\$1.8)	\$3.3	1,142	1,148
9	West	Interface	500	(\$5.6)	(\$9.0)	(\$0.1)	\$3.3	(\$0.2)	\$0.3	\$0.1	(\$0.4)	\$2.9	322	116
10	Mahans Lane - Tidd	Line	AEP	(\$1.4)	(\$4.7)	(\$0.3)	\$3.0	\$0.3	\$0.1	\$0.0	\$0.2	\$3.2	1,292	414
11	Kanawha River	Transformer	AEP	\$2.7	(\$0.5)	\$0.5	\$3.7	\$0.0	(\$0.0)	(\$0.0)	\$0.0	\$3.7	380	22
12	Brues - West Bellaire	Line	AEP	\$0.0	\$0.0	\$0.0	\$0.0	(\$2.1)	\$0.8	(\$0.2)	(\$3.2)	(\$3.2)	0	156
13	Tiltonsville - Windsor	Line	AP	(\$8.9)	(\$11.2)	(\$0.8)	\$1.5	\$0.2	\$1.6	\$1.1	(\$0.3)	\$1.2	4,782	820
14	Cloverdale - Lexington	Line	AEP	(\$10.8)	(\$11.7)	(\$0.7)	\$0.2	(\$0.4)	\$0.8	\$0.6	(\$0.6)	(\$0.4)	2,088	1,240
15	Kanawha - Kincaid	Line	AEP	\$1.4	(\$0.7)	\$0.2	\$2.3	\$0.0	\$0.0	\$0.0	\$0.0	\$2.3	440	0
19	Culloden - Wyoming	Line	AEP	\$0.6	(\$0.8)	\$0.5	\$1.9	\$0.0	\$0.0	\$0.0	\$0.0	\$1.9	92	0
20	Kammer - Natrium	Line	AEP	\$1.5	(\$0.4)	\$0.2	\$2.0	(\$0.3)	\$0.1	(\$0.1)	(\$0.4)	\$1.6	614	96
25	Sullivan	Transformer	AEP	(\$0.0)	(\$1.4)	(\$0.0)	\$1.3	\$0.0	\$0.0	\$0.0	(\$0.0)	\$1.3	370	94
27	Poston - Postel Tap	Line	AEP	\$0.3	(\$0.9)	\$0.1	\$1.3	\$0.1	\$0.5	\$0.0	(\$0.3)	\$0.9	398	144
28	Ruth - Turner	Line	AEP	\$0.7	(\$0.3)	\$0.1	\$1.1	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)	\$1.0	176	72



AP Control Zone

Table A-43 AP Control Zone top congestion cost impacts (By facility): January through September 2011 (See 2010 SOM, Table 7-45)

						(Congestio	on Costs (Mil	lions)					
					Day Ahea	d			Balancin	g			Event H	lours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	AP South	Interface	500	(\$18.2)	(\$78.6)	(\$7.8)	\$52.6	\$4.3	\$4.5	\$6.6	\$6.4	\$59.0	6,682	998
2	Belmont	Transformer	AP	\$27.9	\$1.4	\$0.9	\$27.4	(\$2.1)	(\$3.0)	(\$0.6)	\$0.3	\$27.7	7,724	998
3	West	Interface	500	(\$15.4)	(\$21.1)	(\$3.2)	\$2.6	\$0.0	\$0.0	\$0.1	\$0.1	\$2.7	1,596	38
4	Bedington - Black Oak	Interface	500	(\$2.2)	(\$10.5)	(\$1.9)	\$6.3	\$0.0	\$0.0	\$0.1	\$0.1	\$6.4	1,248	14
5	5004/5005 Interface	Interface	500	(\$16.4)	(\$25.3)	(\$3.7)	\$5.2	\$1.1	\$1.5	\$4.3	\$3.9	\$9.1	1,368	878
6	Wylie Ridge	Transformer	AP	\$5.7	\$9.4	\$3.7	(\$0.0)	(\$0.1)	(\$0.3)	(\$3.1)	(\$2.9)	(\$2.9)	3,780	760
7	Gore - Hampshire	Line	AP	(\$1.5)	(\$3.0)	(\$0.4)	\$1.2	\$0.0	\$0.0	\$0.0	\$0.0	\$1.2	1,554	0
8	Yukon	Transformer	AP	\$3.5	(\$0.1)	\$0.1	\$3.7	\$0.3	\$0.4	(\$0.1)	(\$0.2)	\$3.5	562	128
9	AEP-DOM	Interface	500	(\$0.9)	(\$4.0)	(\$0.0)	\$3.1	\$0.1	\$0.1	\$0.3	\$0.4	\$3.5	2,570	344
10	Wolfcreek	Transformer	AEP	\$3.8	\$6.1	\$0.9	(\$1.4)	(\$0.3)	(\$0.4)	(\$1.0)	(\$0.9)	(\$2.3)	4,296	452
11	Cloverdale - Lexington	Line	AEP	\$0.5	(\$0.5)	\$0.3	\$1.3	\$0.2	\$0.0	(\$1.1)	(\$0.8)	\$0.5	1,178	854
12	Dickerson - Quince Orchard	Line	Pepco	(\$6.0)	(\$4.4)	(\$0.9)	(\$2.5)	(\$0.8)	(\$0.2)	\$1.3	\$0.8	(\$1.7)	284	152
13	Clover	Transformer	Dominion	\$0.5	(\$0.4)	\$0.7	\$1.6	\$0.2	\$0.0	(\$1.3)	(\$1.1)	\$0.6	2,386	920
14	Mount Storm	Line	AP	(\$0.3)	(\$1.8)	\$0.1	\$1.6	\$0.0	\$0.0	\$0.0	\$0.0	\$1.6	162	0
15	Danville - East Danville	Line	AEP	\$0.4	(\$0.9)	\$0.2	\$1.5	\$0.0	\$0.0	\$0.0	\$0.0	\$1.5	6,610	0
18	Tiltonsville - Windsor	Line	AP	\$2.0	\$0.5	\$0.2	\$1.8	(\$0.2)	(\$0.0)	(\$0.2)	(\$0.4)	\$1.3	1,472	140
22	Bedington	Transformer	AP	\$0.3	(\$0.7)	(\$0.1)	\$0.8	(\$0.0)	\$0.0	\$0.0	(\$0.0)	\$0.8	60	10
23	Mount Storm	Transformer	AP	\$0.0	\$0.0	\$0.0	\$0.0	\$0.5	\$0.9	(\$0.6)	(\$1.1)	(\$1.1)	0	218
25	Hamilton - Weirton	Line	AP	\$0.9	\$0.3	\$0.1	\$0.8	\$0.0	(\$0.0)	(\$0.0)	(\$0.0)	\$0.8	304	0
28	Kingwood - Pruntytown	Line	AP	\$0.6	(\$0.1)	\$0.0	\$0.7	(\$0.0)	(\$0.1)	(\$0.0)	(\$0.0)	\$0.7	260	14



Table A-44 AP Control Zone top congestion cost impacts (By facility): January through September 2010 (See 2010 SOM, Table 7-46)

									(Congestior	n Costs (I	Millions)		
						Day	Ahead			Ва	lancing		Event	Hours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	AP South	Interface	500	(\$30.9)	(\$119.5)	(\$8.3)	\$80.3	\$5.2	\$6.1	\$7.4	\$6.4	\$86.7	7,024	2,502
2	Bedington - Black Oak	Interface	500	(\$10.2)	(\$38.0)	(\$1.8)	\$25.9	\$0.3	\$0.4	\$0.1	(\$0.0)	\$25.9	3,638	94
3	Doubs	Transformer	AP	\$14.0	(\$10.2)	(\$0.1)	\$24.0	\$3.3	\$0.8	\$0.1	\$2.7	\$26.7	2,460	862
4	Mount Storm - Pruntytown	Line	AP	(\$2.8)	(\$11.2)	(\$0.4)	\$8.0	\$2.4	\$1.6	\$2.0	\$2.8	\$10.7	1,142	1,148
5	Tiltonsville - Windsor	Line	AP	\$15.3	\$3.6	\$1.4	\$13.1	(\$2.2)	(\$0.6)	(\$1.6)	(\$3.2)	\$9.9	4,782	820
6	5004/5005 Interface	Interface	500	(\$17.2)	(\$26.4)	(\$1.4)	\$7.8	\$2.0	\$2.8	\$1.4	\$0.6	\$8.4	2,758	1,122
7	Belmont	Transformer	AP	\$7.2	(\$0.7)	\$0.2	\$8.1	(\$0.3)	(\$0.3)	(\$0.2)	(\$0.2)	\$7.9	2,114	218
8	AEP-DOM	Interface	500	(\$2.1)	(\$7.8)	\$0.4	\$6.0	\$0.3	(\$0.2)	(\$0.1)	\$0.4	\$6.4	942	178
9	Cloverdale - Lexington	Line	AEP	\$1.4	(\$3.4)	\$0.9	\$5.7	(\$0.1)	\$0.4	(\$1.8)	(\$2.3)	\$3.4	2,088	1,240
10	Kingwood - Pruntytown	Line	AP	\$5.1	\$1.6	\$0.6	\$4.1	\$0.0	(\$0.1)	(\$0.2)	(\$0.0)	\$4.1	842	98
11	Harrison - Pruntytown	Line	500	\$1.1	(\$1.8)	\$0.4	\$3.4	\$0.0	\$0.9	(\$1.7)	(\$2.6)	\$0.8	462	446
12	Endless Caverns	Transformer	Dominion	\$2.6	\$0.0	\$0.3	\$2.9	\$0.0	\$0.0	(\$0.0)	(\$0.0)	\$2.9	1,082	6
13	Nipetown - Reid	Line	AP	\$0.0	(\$2.5)	(\$0.0)	\$2.5	\$0.1	\$0.2	(\$0.0)	(\$0.1)	\$2.4	592	126
14	Mahans Lane - Tidd	Line	AEP	\$3.9	\$1.4	\$0.4	\$2.9	(\$0.4)	(\$0.1)	(\$0.2)	(\$0.5)	\$2.4	1,292	414
15	Fort Martin - Ronco	Line	AP	\$0.2	\$0.2	\$0.1	\$0.2	(\$0.2)	\$0.9	(\$1.4)	(\$2.5)	(\$2.3)	62	84
16	Middlebourne - Willow	Line	AP	\$2.0	(\$0.2)	\$0.3	\$2.5	(\$0.2)	(\$0.1)	(\$0.2)	(\$0.3)	\$2.1	634	162
18	Halfway - Marlowe	Line	AP	\$0.6	(\$0.7)	(\$0.0)	\$1.3	\$0.2	(\$0.1)	\$0.0	\$0.2	\$1.5	120	40
20	Wylie Ridge	Transformer	AP	\$0.9	\$1.5	\$0.6	\$0.0	(\$0.7)	(\$0.2)	(\$1.4)	(\$1.9)	(\$1.9)	1,008	752
21	Hamilton - Weirton	Line	AP	\$2.8	\$1.0	\$0.2	\$2.0	(\$0.1)	\$0.1	(\$0.1)	(\$0.3)	\$1.7	886	36
22	Yukon	Transformer	AP	\$1.7	\$0.1	\$0.1	\$1.7	\$0.0	\$0.1	\$0.1	(\$0.0)	\$1.7	224	34



ATSI Control Zone

Table A-45 ATSI Control Zone top congestion cost impacts (By facility): January through September 2011 (New table)

							Congestic	on Costs (Mil	lions)					
					Day Ahea	ad			Balancin	g			Event l	Hours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	AP South	Interface	500	(\$15.3)	(\$6.8)	(\$1.5)	(\$10.0)	(\$1.2)	\$1.9	\$4.0	\$0.8	(\$9.2)	6,682	38
2	West	Interface	500	(\$14.2)	(\$6.2)	(\$0.1)	(\$8.2)	(\$0.0)	\$0.0	\$0.0	(\$0.0)	(\$8.2)	1,596	38
3	Niles - Evergreen	Line	ATSI	\$3.7	\$0.4	\$1.0	\$4.3	(\$0.2)	\$0.2	(\$1.2)	(\$1.6)	\$2.7	658	54
4	5004/5005 Interface	Interface	500	(\$2.2)	(\$1.1)	(\$0.1)	(\$1.2)	(\$0.5)	\$1.1	\$0.6	(\$1.0)	(\$2.2)	1,368	878
5	Dickerson - Quince Orchard	Line	Pepco	(\$3.2)	(\$1.3)	\$0.0	(\$1.9)	(\$0.7)	\$0.4	\$0.0	(\$1.1)	(\$3.0)	284	152
6	Mount Storm	Transformer	AP	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.7)	\$0.8	\$1.2	(\$0.2)	(\$0.2)	0	218
7	Clover	Transformer	Dominion	(\$1.9)	(\$0.6)	\$0.5	(\$0.9)	(\$0.2)	\$0.4	(\$0.7)	(\$1.3)	(\$2.2)	2,386	920
8	Danville - East Danville	Line	AEP	(\$2.5)	(\$0.7)	(\$0.3)	(\$2.1)	\$0.0	\$0.0	\$0.0	\$0.0	(\$2.1)	6,610	0
9	AEP-DOM	Interface	500	(\$2.7)	(\$1.0)	(\$0.1)	(\$1.8)	\$0.0	\$0.1	\$0.3	\$0.3	(\$1.5)	2,570	344
10	Muskingum River - Waterford	Line	AEP	\$0.1	\$0.1	\$0.1	\$0.2	\$0.2	(\$0.1)	(\$1.5)	(\$1.2)	(\$1.0)	304	106
11	East Frankfort - Crete	Line	ComEd	\$1.5	\$0.6	\$0.3	\$1.1	\$0.1	(\$0.1)	(\$0.9)	(\$0.8)	\$0.4	2,850	630
12	Bayshore - Jeep	Line	ATSI	\$0.9	(\$0.2)	\$0.0	\$1.1	\$0.6	\$0.2	\$0.0	\$0.4	\$1.5	32	12
13	South Canton - Torrey	Line	AEP	\$1.6	\$0.1	\$0.0	\$1.5	\$0.0	\$0.0	\$0.0	\$0.0	\$1.5	82	16
14	Valley	Transformer	Dominion	(\$1.1)	(\$0.5)	\$0.0	(\$0.6)	(\$0.0)	\$0.1	\$0.7	\$0.5	(\$0.1)	438	196
15	Michigan City - Laporte	Flowgate	MISO	\$1.4	\$0.5	\$0.3	\$1.2	\$0.1	(\$0.0)	(\$0.6)	(\$0.5)	\$0.7	4,646	1,142
33	Jeep - Dixie	Line	ATSI	\$0.5	(\$0.1)	\$0.0	\$0.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.6	28	0
38	Sammis - Wylie Ridge	Line	ATSI	(\$0.7)	(\$0.9)	(\$0.2)	(\$0.1)	(\$0.0)	(\$0.0)	\$0.0	\$0.0	(\$0.1)	484	8
43	Galion – GM Mansfield	Line	ATSI	\$0.3	(\$0.0)	\$0.0	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.3	36	0
47	Galion - Leaside	Line	ATSI	\$0.1	\$0.0	\$0.1	\$0.1	\$0.2	(\$0.0)	(\$0.0)	\$0.2	\$0.3	44	0
56	Brookside - Wellington	Line	ATSI	\$0.1	\$0.0	\$0.1	\$0.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.2	176	0



ComEd Control Zone

Table A-46 ComEd Control Zone top congestion cost impacts (By facility): January through September 2011 (See 2010 SOM, Table 7-47)

						(Congesti	on Costs (Mi	llions)					
					Day Ahea	d			Balancin	g			Event	Hours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	Crete - St Johns Tap	Flowgate	MISO	(\$53.0)	(\$78.9)	(\$13.3)	\$12.6	\$4.2	\$2.5	\$4.9	\$6.6	\$19.2	5,526	316
2	Electric Jct - Nelson	Line	ComEd	\$2.4	(\$32.8)	\$5.5	\$40.7	\$0.9	\$3.7	(\$5.1)	(\$7.9)	\$32.8	4,628	316
3	AP South	Interface	500	(\$47.6)	(\$59.1)	(\$0.8)	\$10.6	\$6.7	\$2.0	\$0.3	\$5.0	\$15.6	6,682	1,740
4	East Frankfort - Crete	Line	ComEd	(\$21.8)	(\$35.7)	(\$4.6)	\$9.2	\$1.1	\$0.3	\$2.1	\$2.9	\$12.1	2,850	630
5	Pleasant Valley - Belvidere	Line	ComEd	(\$1.3)	(\$12.9)	\$1.1	\$12.7	(\$0.3)	\$2.3	(\$1.3)	(\$3.8)	\$9.0	1,982	630
6	Bunsonville - Eugene	Flowgate	MISO	(\$13.1)	(\$21.8)	(\$0.2)	\$8.5	\$0.0	\$0.0	\$0.0	\$0.0	\$8.5	3,604	0
7	5004/5005 Interface	Interface	500	(\$24.2)	(\$30.4)	(\$0.4)	\$5.7	\$3.2	\$1.2	\$0.5	\$2.5	\$8.2	1,368	878
8	Kenosha - Lakeview	Flowgate	MISO	\$5.0	\$1.7	\$1.2	\$4.6	(\$0.5)	(\$0.3)	(\$3.9)	(\$4.1)	\$0.4	1,978	698
9	Oak Grove - Galesburg	Flowgate	MISO	(\$1.1)	(\$8.5)	\$3.6	\$11.0	(\$0.4)	\$3.3	(\$7.5)	(\$11.1)	(\$0.1)	2,196	1,302
10	Rising	Flowgate	MISO	(\$8.9)	(\$14.1)	(\$0.4)	\$4.8	\$0.1	\$0.9	(\$1.1)	(\$1.9)	\$2.9	1,894	344
11	West	Interface	500	(\$24.9)	(\$28.4)	(\$0.2)	\$3.3	\$0.1	\$0.0	\$0.0	\$0.1	\$3.4	1,596	38
12	Wylie Ridge	Transformer	AP	(\$15.3)	(\$20.0)	(\$0.1)	\$4.6	\$1.5	\$0.3	(\$0.1)	\$1.1	\$5.7	3,780	760
13	Michigan City - Laporte	Flowgate	MISO	(\$15.0)	(\$17.0)	\$1.2	\$3.2	\$2.1	\$0.2	(\$0.8)	\$1.1	\$4.3	4,646	1,142
14	Pleasant Prairie - Zion	Flowgate	MISO	\$0.3	(\$1.5)	\$2.6	\$4.4	\$0.0	\$0.1	(\$6.7)	(\$6.8)	(\$2.4)	1,678	420
15	Lakeview - Pleasant Prairie	Flowgate	MISO	\$0.2	\$0.1	\$0.2	\$0.3	(\$0.2)	(\$0.0)	(\$4.8)	(\$5.0)	(\$4.7)	48	588
17	Waukegan - Zion	Line	ComEd	\$0.5	(\$1.1)	\$2.5	\$4.1	(\$0.0)	\$0.0	(\$0.2)	(\$0.2)	\$3.9	2,754	8
20	Belvidere - Woodstock	Line	ComEd	\$0.2	(\$2.7)	\$0.3	\$3.3	(\$0.0)	\$0.1	(\$0.2)	(\$0.3)	\$2.9	372	66
24	Glidden - West Dekalb	Line	ComEd	(\$0.0)	(\$2.5)	\$0.2	\$2.7	\$0.0	(\$0.0)	(\$0.0)	(\$0.0)	\$2.7	1,248	2
25	Cherry Valley	Transformer	ComEd	\$1.0	(\$1.4)	\$0.4	\$2.8	\$0.1	\$0.1	(\$0.2)	(\$0.2)	\$2.5	798	120
33	Nelson - Cordova	Line	ComEd	\$1.0	(\$0.7)	\$0.9	\$2.6	(\$0.3)	\$0.9	(\$2.5)	(\$3.7)	(\$1.1)	854	40

Table A-47 ComEd Control Zone top congestion cost impacts (By facility): January through September 2010 (See 2010 SOM, Table 7-48)

						C	ongesti	on Costs (Mil	lions)					
					Day Ahea	d			Balancin	g			Event l	Hours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	AP South	Interface	500	(\$74.2)	(\$99.5)	(\$0.7)	\$24.6	(\$3.0)	(\$0.3)	(\$0.0)	(\$2.7)	\$21.9	7,024	2,502
2	East Frankfort - Crete	Line	ComEd	(\$32.0)	(\$61.1)	(\$4.2)	\$24.9	(\$3.2)	(\$0.1)	\$1.1	(\$2.0)	\$22.9	4,484	1,602
3	Electric Jct - Nelson	Line	ComEd	\$1.1	(\$24.6)	\$6.5	\$32.2	\$1.3	\$3.6	(\$7.6)	(\$9.9)	\$22.3	2,908	472
4	Crete - St Johns Tap	Flowgate	MISO	(\$18.9)	(\$31.3)	(\$1.2)	\$11.2	(\$0.9)	(\$1.1)	\$0.4	\$0.7	\$11.9	1,600	490
5	Pleasant Valley - Belvidere	Line	ComEd	(\$3.0)	(\$16.7)	\$1.3	\$15.0	\$0.1	\$2.6	(\$1.9)	(\$4.4)	\$10.6	3,550	710
6	5004/5005 Interface	Interface	500	(\$25.3)	(\$35.2)	(\$0.1)	\$9.8	(\$4.3)	(\$0.7)	\$0.2	(\$3.3)	\$6.5	2,758	1,122
7	Bedington - Black Oak	Interface	500	(\$26.2)	(\$34.4)	(\$0.2)	\$8.0	(\$0.2)	\$0.1	\$0.0	(\$0.3)	\$7.7	3,638	94
8	Nelson - Cordova	Line	ComEd	\$7.6	(\$2.5)	\$3.3	\$13.4	\$0.8	\$1.4	(\$3.4)	(\$4.1)	\$9.4	1,930	180
9	AEP-DOM	Interface	500	(\$10.3)	(\$16.3)	(\$0.4)	\$5.6	(\$0.1)	(\$0.2)	\$0.0	\$0.1	\$5.7	942	178
10	Cloverdale - Lexington	Line	AEP	(\$11.3)	(\$17.3)	(\$0.4)	\$5.7	(\$1.5)	\$0.1	\$0.3	(\$1.2)	\$4.5	2,088	1,240
11	Waterman - West Dekalb	Line	ComEd	(\$1.7)	(\$7.3)	\$0.8	\$6.4	\$0.4	\$0.3	(\$0.2)	(\$0.0)	\$6.4	5,086	576
12	Pleasant Prairie - Zion	Flowgate	MISO	\$0.4	(\$3.4)	\$1.4	\$5.1	\$0.4	\$0.9	(\$5.3)	(\$5.9)	(\$0.7)	2,196	612
13	Doubs	Transformer	AP	(\$15.2)	(\$19.0)	(\$0.1)	\$3.7	(\$1.0)	\$0.5	\$0.1	(\$1.5)	\$2.2	2,460	862
14	Rising	Flowgate	MISO	(\$2.2)	(\$6.9)	(\$0.0)	\$4.7	(\$0.0)	\$0.0	\$0.0	(\$0.0)	\$4.6	1,552	88
15	Tiltonsville - Windsor	Line	AP	(\$9.6)	(\$12.7)	(\$0.2)	\$2.9	(\$1.1)	\$0.0	\$0.3	(\$0.8)	\$2.1	4,782	820
19	Wilton Center	Transformer	ComEd	(\$2.3)	(\$3.7)	\$0.2	\$1.6	(\$0.3)	\$0.8	(\$0.9)	(\$2.1)	(\$0.5)	390	180
20	Cherry Valley	Transformer	ComEd	\$0.9	(\$1.1)	\$0.2	\$2.1	\$0.1	\$0.1	(\$0.1)	(\$0.1)	\$2.0	208	74
24	Glidden - West Dekalb	Line	ComEd	\$0.0	(\$1.6)	\$0.2	\$1.9	\$0.0	\$0.0	\$0.0	\$0.0	\$1.9	752	0
31	Electric Junction - Aurora	Line	ComEd	\$1.3	\$0.2	\$0.0	\$1.1	\$0.0	\$0.1	\$0.1	\$0.1	\$1.2	272	70
33	Woodstock - 12205	Line	ComEd	(\$0.0)	(\$1.0)	\$0.1	\$1.2	\$0.0	\$0.0	\$0.0	\$0.0	\$1.2	182	0



DAY Control Zone

Table A-48 DAY Control Zone top congestion cost impacts (By facility): January through September 2011 (See 2010 SOM, Table 7-49)

						(Congesti	on Costs (Mil	llions)					
					Day Ahea	d			Balancin	g			Event l	Hours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	Pierce - Foster	Flowgate	MISO	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.1)	(\$1.7)	(\$1.6)	(\$1.6)	0	38
2	West	Interface	500	(\$1.5)	(\$2.8)	(\$0.0)	\$1.3	\$0.0	(\$0.0)	\$0.0	\$0.0	\$1.3	1,596	38
3	AP South	Interface	500	(\$3.4)	(\$4.7)	(\$0.4)	\$0.9	\$0.5	\$1.2	\$0.5	(\$0.2)	\$0.7	6,682	1,740
4	Danville - East Danville	Line	AEP	(\$0.5)	(\$1.3)	(\$0.0)	\$0.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.8	6,610	0
5	AEP-DOM	Interface	500	(\$0.7)	(\$1.5)	(\$0.0)	\$0.7	\$0.0	\$0.2	\$0.1	(\$0.0)	\$0.7	2,570	344
6	Clover	Transformer	Dominion	(\$0.4)	(\$0.9)	\$0.1	\$0.6	\$0.2	\$0.2	(\$0.1)	(\$0.1)	\$0.5	2,386	920
7	Wolfcreek	Transformer	AEP	(\$0.3)	(\$0.7)	(\$0.0)	\$0.4	\$0.1	\$0.1	\$0.0	(\$0.0)	\$0.4	4,296	452
8	Wylie Ridge	Transformer	AP	(\$1.1)	(\$1.5)	(\$0.1)	\$0.2	\$0.1	\$0.2	\$0.1	(\$0.1)	\$0.2	3,780	760
9	East Frankfort - Crete	Line	ComEd	\$0.2	\$0.5	\$0.1	(\$0.3)	(\$0.0)	\$0.0	(\$0.1)	(\$0.1)	(\$0.4)	2,850	630
10	Valley	Transformer	Dominion	(\$0.2)	(\$0.6)	(\$0.0)	\$0.4	\$0.1	\$0.1	\$0.0	(\$0.0)	\$0.4	438	196
11	Belmont	Transformer	AP	(\$0.3)	(\$0.6)	\$0.1	\$0.4	\$0.0	\$0.1	(\$0.0)	(\$0.1)	\$0.3	7,724	998
12	Bunsonville - Eugene	Flowgate	MISO	\$0.3	\$0.6	\$0.1	(\$0.2)	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.2)	3,604	0
13	Bedington - Black Oak	Interface	500	(\$0.5)	(\$0.7)	(\$0.0)	\$0.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.2	1,248	14
14	Cloverdale	Transformer	AEP	(\$0.2)	(\$0.5)	\$0.0	\$0.3	\$0.0	\$0.1	\$0.0	(\$0.0)	\$0.3	1,386	248
15	Dickerson - Quince Orchard	Line	Pepco	(\$0.5)	(\$0.6)	(\$0.0)	\$0.1	\$0.2	\$0.1	\$0.0	\$0.1	\$0.2	284	152
123	Foster2 - Pierce	Line	DAY	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)	0	2



Table A-49 DAY Control Zone top congestion cost impacts (By facility): January through September 2010 (See 2010 SOM, Table 7-50)

						(Congesti	on Costs (Mil	lions)					
					Day Ahea	d			Balancin	g			Event l	Hours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	AP South	Interface	500	(\$4.5)	(\$6.3)	(\$0.9)	\$0.8	\$0.1	\$0.5	\$0.6	\$0.2	\$1.0	7,024	2,502
2	5004/5005 Interface	Interface	500	(\$1.4)	(\$2.5)	(\$0.2)	\$0.9	\$0.3	\$0.0	\$0.4	\$0.7	\$1.6	2,758	1,122
3	Cloverdale - Lexington	Line	AEP	(\$0.5)	(\$1.4)	(\$0.2)	\$0.6	\$0.1	(\$0.0)	\$0.2	\$0.3	\$1.0	2,088	1,240
4	AEP-DOM	Interface	500	(\$0.7)	(\$1.4)	(\$0.0)	\$0.7	(\$0.0)	(\$0.0)	\$0.0	\$0.0	\$0.7	942	178
5	Bedington - Black Oak	Interface	500	(\$1.4)	(\$2.1)	(\$0.4)	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.4	3,638	94
6	Pleasant Prairie - Zion	Flowgate	MISO	\$0.0	(\$0.0)	\$0.5	\$0.5	(\$0.0)	\$0.0	(\$1.4)	(\$1.4)	(\$0.9)	2,196	612
7	Mount Storm - Pruntytown	Line	AP	(\$0.4)	(\$0.5)	(\$0.0)	\$0.1	\$0.2	\$0.3	\$0.7	\$0.6	\$0.7	1,142	1,148
8	Doubs	Transformer	AP	(\$0.9)	(\$1.3)	(\$0.1)	\$0.3	\$0.1	\$0.1	\$0.1	\$0.1	\$0.4	2,460	862
9	Tiltonsville - Windsor	Line	AP	(\$0.6)	(\$0.9)	(\$0.3)	(\$0.0)	\$0.1	(\$0.0)	\$0.4	\$0.5	\$0.5	4,782	820
10	Harrison - Pruntytown	Line	500	(\$0.1)	(\$0.2)	(\$0.0)	\$0.0	\$0.1	\$0.1	\$0.4	\$0.4	\$0.5	462	446
11	Electric Jct - Nelson	Line	ComEd	\$0.0	\$0.0	\$4.3	\$4.3	(\$0.0)	\$0.0	(\$4.3)	(\$4.3)	(\$0.0)	2,908	472
12	West	Interface	500	(\$0.6)	(\$0.8)	(\$0.1)	\$0.1	\$0.0	\$0.0	\$0.0	(\$0.0)	\$0.1	322	116
13	Waterman - West Dekalb	Line	ComEd	\$0.0	\$0.0	\$0.5	\$0.5	\$0.0	\$0.0	(\$0.1)	(\$0.1)	\$0.4	5,086	576
14	Pleasant Valley - Belvidere	Line	ComEd	\$0.0	\$0.0	\$0.8	\$0.8	(\$0.0)	\$0.0	(\$1.2)	(\$1.2)	(\$0.4)	3,550	710
15	Branchburg - Flagtown	Line	PSEG	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.4)	(\$0.4)	(\$0.4)	0	0



DLCO Control Zone

Table A-50 DLCO Control Zone top congestion cost impacts (By facility): January through September 2011 (See 2010 SOM, Table 7-51)

		Congestion Costs (Millions)												
				Day Ahead					Balancin	Event Hours				
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	AP South	Interface	500	(\$14.0)	(\$18.3)	(\$0.4)	\$3.9	(\$1.3)	(\$0.0)	\$0.3	(\$0.9)	\$3.0	6,682	760
2	Wylie Ridge	Transformer	AP	(\$9.4)	(\$14.7)	(\$0.4)	\$4.8	(\$0.4)	(\$0.1)	\$0.2	(\$0.2)	\$4.7	3,780	760
3	Crescent	Transformer	DLCO	\$3.9	(\$0.1)	\$0.1	\$4.1	(\$0.0)	(\$0.0)	(\$0.0)	\$0.0	\$4.1	360	52
4	5004/5005 Interface	Interface	500	(\$6.0)	(\$7.7)	(\$0.1)	\$1.5	(\$0.6)	\$0.5	\$0.1	(\$1.0)	\$0.5	1,368	878
5	Collier - Elwyn	Line	DLCO	\$1.8	(\$0.2)	\$0.0	\$2.0	\$0.1	\$0.1	(\$0.0)	(\$0.0)	\$1.9	504	60
6	West	Interface	500	(\$5.3)	(\$5.7)	(\$0.1)	\$0.4	(\$0.0)	\$0.0	\$0.0	(\$0.0)	\$0.4	1,596	38
7	AEP-DOM	Interface	500	(\$1.3)	(\$2.0)	\$0.0	\$0.7	(\$0.1)	(\$0.0)	\$0.0	(\$0.0)	\$0.7	2,570	344
8	Crete - St Johns Tap	Flowgate	MISO	\$1.5	\$2.1	\$0.1	(\$0.5)	\$0.1	\$0.0	(\$0.0)	\$0.0	(\$0.5)	5,526	1,280
9	Beaver - Sammis	Line	DLCO	(\$0.5)	(\$1.1)	(\$0.0)	\$0.6	(\$0.1)	\$0.1	\$0.0	(\$0.2)	\$0.4	368	22
10	Bedington - Black Oak	Interface	500	(\$1.7)	(\$2.3)	(\$0.0)	\$0.6	(\$0.0)	\$0.0	\$0.0	(\$0.0)	\$0.5	1,248	14
11	Yukon	Transformer	AP	\$1.2	\$0.9	\$0.1	\$0.4	\$0.3	(\$0.2)	(\$0.2)	\$0.3	\$0.7	562	128
12	South Mahwah - Waldwick	Line	PSEG	(\$0.8)	(\$1.1)	\$0.1	\$0.4	(\$0.2)	\$0.0	(\$0.1)	(\$0.3)	\$0.0	9,302	946
13	Danville - East Danville	Line	AEP	(\$0.7)	(\$1.0)	(\$0.0)	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.3	6,610	0
14	East Frankfort - Crete	Line	ComEd	\$0.5	\$0.9	\$0.0	(\$0.3)	\$0.0	\$0.0	(\$0.0)	\$0.0	(\$0.3)	2,850	630
15	Arsenal - Highland	Line	DLCO	\$0.0	(\$0.0)	\$0.0	\$0.0	\$0.0	(\$0.3)	\$0.0	\$0.4	\$0.4	26	28
20	Arsenal - Brunot Island	Line	DLCO	\$0.2	\$0.0	\$0.0	\$0.2	\$0.0	(\$0.0)	(\$0.0)	\$0.0	\$0.2	22	18
33	Arsenal - Oakland	Line	DLCO	\$0.1	(\$0.0)	\$0.0	\$0.1	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)	\$0.1	48	12
38	Arsenal	Transformer	DLCO	\$0.1	(\$0.0)	\$0.0	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	34	0
71	Collier	Transformer	DLCO	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.0)	(\$0.0)	\$0.0	\$0.0	0	14
73	Dravosburg	Transformer	DLCO	\$0.0	(\$0.0)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	86	0



Table A-51 DLCO Control Zone top congestion cost impacts (By facility): January through September 2010 (See 2010 SOM, Table 7-52)

		Congestion Costs (Millions)												
				Day Ahead					Balancin		Event Hours			
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	Crescent	Transformer	DLCO	\$12.2	(\$0.0)	\$0.2	\$12.4	\$0.2	(\$0.5)	(\$0.3)	\$0.4	\$12.8	1,260	282
2	AP South	Interface	500	(\$36.5)	(\$43.1)	(\$0.2)	\$6.4	(\$2.3)	(\$0.5)	\$0.2	(\$1.5)	\$4.9	7,024	2,502
3	Collier - Elwyn	Line	DLCO	\$4.5	\$0.3	\$0.1	\$4.4	(\$0.0)	(\$0.1)	(\$0.0)	\$0.0	\$4.4	920	222
4	5004/5005 Interface	Interface	500	(\$10.9)	(\$12.7)	(\$0.1)	\$1.7	(\$1.3)	(\$0.1)	\$0.1	(\$1.1)	\$0.6	2,758	1,122
5	Bedington - Black Oak	Interface	500	(\$11.6)	(\$13.3)	(\$0.1)	\$1.7	(\$0.2)	(\$0.1)	\$0.0	(\$0.1)	\$1.6	3,638	94
6	Carson - Oakland	Line	DLCO	\$2.5	\$0.0	\$0.0	\$2.5	(\$0.0)	(\$0.0)	\$0.0	(\$0.0)	\$2.5	340	2
7	Wylie Ridge	Transformer	AP	(\$1.8)	(\$2.9)	(\$0.0)	\$1.1	(\$0.7)	\$0.6	\$0.0	(\$1.3)	(\$0.2)	1,008	752
8	AEP-DOM	Interface	500	(\$4.3)	(\$5.7)	(\$0.0)	\$1.4	(\$0.2)	(\$0.1)	\$0.0	(\$0.1)	\$1.3	942	178
9	Mount Storm - Pruntytown	Line	AP	(\$2.7)	(\$3.3)	(\$0.0)	\$0.6	(\$0.7)	(\$0.1)	\$0.0	(\$0.6)	\$0.0	1,142	1,148
10	Sammis - Wylie Ridge	Line	ATSI	(\$1.8)	(\$3.2)	(\$0.0)	\$1.4	(\$0.1)	\$0.2	\$0.0	(\$0.2)	\$1.2	1,042	120
11	East Frankfort - Crete	Line	ComEd	\$1.2	\$2.0	(\$0.0)	(\$0.9)	\$0.1	(\$0.0)	(\$0.0)	\$0.1	(\$0.7)	4,484	1,602
12	Doubs	Transformer	AP	(\$3.4)	(\$3.7)	(\$0.0)	\$0.3	(\$0.5)	(\$0.0)	(\$0.0)	(\$0.5)	(\$0.2)	2,460	862
13	Cloverdale - Lexington	Line	AEP	(\$1.4)	(\$2.1)	\$0.0	\$0.7	(\$0.2)	(\$0.0)	(\$0.0)	(\$0.2)	\$0.5	2,088	1,240
14	Elrama - Mitchell	Line	AP	(\$2.4)	(\$1.9)	(\$0.1)	(\$0.6)	(\$0.1)	\$0.0	\$0.1	(\$0.0)	(\$0.6)	822	484
15	Arsenal - Highland	Line	DLCO	\$0.5	(\$0.0)	\$0.0	\$0.5	(\$0.0)	\$0.0	(\$0.0)	(\$0.0)	\$0.4	82	14
19	Beaver - Sammis	Line	DLCO	(\$0.4)	(\$0.8)	(\$0.0)	\$0.4	(\$0.1)	\$0.3	\$0.0	(\$0.4)	\$0.1	750	110
20	Collier	Transformer	DLCO	\$0.3	\$0.0	\$0.0	\$0.3	\$0.0	(\$0.1)	(\$0.0)	\$0.1	\$0.4	16	16
23	Arsenal - Oakland	Line	DLCO	\$0.1	(\$0.1)	\$0.0	\$0.2	(\$0.3)	\$0.2	(\$0.0)	(\$0.5)	(\$0.3)	144	92
25	Beaver - Mansfield	Line	DLCO	(\$0.1)	(\$0.4)	(\$0.0)	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.3	326	0
32	Crescent - Sewickly	Line	DLCO	\$0.2	\$0.0	\$0.0	\$0.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.2	24	0



Southern Region Congestion-Event Summaries

Dominion Control Zone

Table A-52 Dominion Control Zone top congestion cost impacts (By facility): January through September 2011 (See 2010 SOM, Table 7-53)

		Congestion Costs (Millions)												
					Day Ahead Balancing									Hours
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	AP South	Interface	500	\$46.2	(\$27.6)	\$3.0	\$76.8	(\$0.3)	\$1.0	(\$3.3)	(\$4.5)	\$72.3	6,682	920
2	Clover	Transformer	Dominion	\$8.5	(\$6.7)	\$4.4	\$19.7	(\$1.1)	\$2.0	(\$8.0)	(\$11.2)	\$8.5	2,386	920
3	Dooms	Transformer	Dominion	\$4.3	(\$0.3)	\$1.1	\$5.7	(\$4.5)	(\$0.5)	(\$3.6)	(\$7.6)	(\$1.9)	298	236
4	Hopewell - Chesterfield	Line	Dominion	\$3.4	\$0.2	\$0.3	\$3.5	(\$0.5)	(\$1.3)	(\$2.0)	(\$1.2)	\$2.3	308	126
5	Valley	Transformer	Dominion	\$5.2	\$0.5	\$1.1	\$5.8	(\$1.0)	\$0.0	(\$1.3)	(\$2.3)	\$3.5	438	196
6	Cloverdale - Lexington	Line	AEP	\$4.0	\$0.7	\$0.9	\$4.2	(\$0.5)	(\$0.9)	(\$2.1)	(\$1.7)	\$2.5	1,178	854
7	Mount Storm	Transformer	AP	\$0.0	\$0.0	\$0.0	\$0.0	(\$1.0)	(\$1.5)	(\$3.4)	(\$2.8)	(\$2.8)	0	218
8	Danville - East Danville	Line	AEP	\$7.7	\$3.1	\$0.7	\$5.3	\$0.0	\$0.0	\$0.0	\$0.0	\$5.3	6,610	0
9	West	Interface	500	(\$5.1)	(\$7.6)	(\$1.3)	\$1.2	\$0.0	\$0.0	\$0.0	(\$0.0)	\$1.1	1,596	38
10	AEP-DOM	Interface	500	\$6.9	\$3.4	\$1.4	\$4.9	(\$0.2)	(\$0.5)	(\$0.4)	(\$0.1)	\$4.8	2,570	344
11	Dickerson - Quince Orchard	Line	Pepco	(\$5.8)	(\$2.7)	(\$0.9)	(\$4.1)	\$0.4	\$1.0	\$1.5	\$0.8	(\$3.3)	284	152
12	Hollymead - Charlottesville	Line	Dominion	\$0.9	(\$0.6)	\$0.3	\$1.8	(\$0.3)	(\$0.6)	(\$1.7)	(\$1.4)	\$0.4	382	290
13	Bedington - Black Oak	Interface	500	\$6.1	\$2.9	\$0.5	\$3.8	\$0.0	(\$0.0)	(\$0.1)	\$0.0	\$3.8	1,248	14
14	Chaparral - Carson	Line	Dominion	\$0.6	(\$0.1)	\$0.5	\$1.2	(\$0.2)	\$1.2	(\$3.0)	(\$4.5)	(\$3.3)	392	360
15	Cranes Corner - Fredericksburg	Line	Dominion	(\$0.3)	(\$2.9)	(\$0.2)	\$2.4	\$0.1	\$0.3	\$0.2	(\$0.0)	\$2.4	234	46
18	Halifax - Mount Laurel	Line	Dominion	\$2.1	(\$0.7)	\$0.2	\$3.1	(\$0.7)	(\$0.0)	(\$0.2)	(\$0.9)	\$2.2	1,428	294
20	Danville - East Danville	Line	Dominion	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.6)	(\$1.2)	(\$0.6)	\$0.0	\$0.0	0	642
22	Elmont	Transformer	Dominion	\$0.0	(\$0.0)	\$0.0	\$0.0	(\$0.0)	(\$0.3)	(\$0.8)	(\$0.5)	(\$0.4)	20	50
23	Bristers - Ox	Line	Dominion	(\$0.1)	(\$1.6)	\$0.0	\$1.5	\$0.2	\$0.2	(\$0.1)	(\$0.1)	\$1.4	66	0
26	Powhatan - Bremo	Line	Dominion	\$0.9	(\$0.2)	\$0.1	\$1.2	\$0.0	\$0.0	\$0.0	\$0.0	\$1.2	60	0

Table A-53 Dominion Control Zone top congestion cost impacts (By facility): January through September 2010 (See 2010 SOM, Table 7-54)

		Congestion Costs (Millions)												
				Day Ahead					Balancin	Event Hours				
No.	Constraint	Туре	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
1	AP South	Interface	500	\$70.7	(\$39.9)	\$0.8	\$111.3	\$2.7	\$4.8	(\$0.6)	(\$2.7)	\$108.7	7,024	2,502
2	Cloverdale - Lexington	Line	AEP	\$17.6	\$5.1	\$2.0	\$14.5	(\$1.8)	(\$2.4)	(\$2.4)	(\$1.7)	\$12.7	2,088	1,240
3	Doubs	Transformer	AP	(\$0.0)	(\$11.5)	(\$0.1)	\$11.4	\$1.5	\$0.8	\$0.5	\$1.2	\$12.6	2,460	862
4	Bedington - Black Oak	Interface	500	\$22.4	\$15.6	\$3.0	\$9.7	(\$0.2)	(\$0.1)	(\$0.3)	(\$0.3)	\$9.4	3,638	94
5	Mount Storm - Pruntytown	Line	AP	\$7.8	\$7.2	\$1.7	\$2.3	(\$3.5)	(\$4.6)	(\$4.7)	(\$3.6)	(\$1.3)	1,142	1,148
6	Clover	Transformer	Dominion	\$5.8	(\$2.2)	\$1.5	\$9.5	(\$0.4)	\$0.4	(\$1.8)	(\$2.5)	\$7.0	928	486
7	Pleasant View	Transformer	Dominion	\$0.3	\$0.0	\$0.0	\$0.3	(\$4.2)	\$1.4	(\$0.6)	(\$6.2)	(\$6.0)	62	202
8	Millville - Sleepy Hollow	Line	Dominion	\$1.1	(\$2.5)	(\$0.2)	\$3.4	\$0.0	\$0.0	\$0.0	\$0.0	\$3.4	430	0
9	Millville - Old Chapel	Line	AP	\$0.3	(\$2.9)	(\$0.4)	\$2.8	\$0.7	\$0.5	\$1.3	\$1.6	\$4.4	356	242
10	Ox - Francona	Line	Dominion	\$3.3	(\$0.6)	\$0.0	\$3.9	\$0.0	\$0.0	\$0.0	\$0.0	\$3.9	132	0
11	Dooms	Transformer	Dominion	\$3.3	(\$0.4)	(\$0.0)	\$3.7	(\$0.6)	(\$0.9)	\$0.1	\$0.4	\$4.1	152	62
12	Ox - Glebe	Line	Dominion	\$2.5	(\$0.7)	\$0.0	\$3.2	\$0.0	\$0.0	\$0.0	\$0.0	\$3.2	60	0
13	AEP-DOM	Interface	500	\$14.9	\$12.1	\$0.6	\$3.4	(\$0.1)	(\$0.3)	(\$0.1)	\$0.1	\$3.5	942	178
14	Endless Caverns	Transformer	Dominion	\$0.8	(\$1.2)	\$0.0	\$2.0	(\$0.0)	(\$0.0)	\$0.0	\$0.0	\$2.0	1,082	6
15	Chuckatuck - Benns Church	Line	Dominion	\$2.5	(\$0.2)	\$0.0	\$2.7	\$0.0	\$0.0	\$0.0	\$0.0	\$2.7	152	0
17	Beechwood - Kerr Dam	Line	Dominion	\$1.7	(\$1.3)	(\$0.1)	\$2.9	(\$0.7)	\$0.5	(\$0.0)	(\$1.2)	\$1.7	1,180	612
23	Yadkin	Transformer	Dominion	\$1.5	\$0.1	\$0.0	\$1.5	\$0.4	\$0.0	(\$0.1)	\$0.3	\$1.7	52	42
24	Danville - East Danville	Line	Dominion	\$5.1	\$3.3	(\$0.3)	\$1.5	(\$0.1)	(\$0.4)	(\$0.0)	\$0.2	\$1.7	2,614	276
26	Greenwich - Elizabeth River	Line	Dominion	\$1.6	(\$0.2)	\$0.0	\$1.8	\$0.1	\$0.0	(\$0.0)	\$0.0	\$1.8	64	44
27	Pleasant View	Line	Dominion	\$1.8	\$0.1	\$0.1	\$1.8	\$0.0	\$0.0	\$0.0	\$0.0	\$1.8	64	0