

Market Monitor Report

MC Webinar
January 22, 2019

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Monitoring Analytics

Total Price Per MWh by Category: 2017 and 2018

Category	2017 \$/MWh	2017 (\$ Millions)	2017 Percent of Total	2018 \$/MWh	2018 (\$ Millions)	2018 Percent of Total	2018 Percent Change
Load Weighted Energy	\$30.99	\$23,513	58.2%	\$38.24	\$30,253	61.4%	23.4%
Capacity	\$11.27	\$8,552	21.2%	\$13.01	\$10,295	20.9%	15.5%
Capacity	\$11.23	\$8,524	21.1%	\$12.97	\$10,260	20.8%	15.5%
Capacity (FRR)	\$0.00	\$0	0.0%	\$0.00	\$0	0.0%	0.0%
Capacity (RMR)	\$0.04	\$28	0.1%	\$0.04	\$34	0.1%	17.1%
Transmission	\$9.54	\$7,242	17.9%	\$9.47	\$7,494	15.2%	(0.8%)
Transmission Service Charges	\$8.83	\$6,703	16.6%	\$8.81	\$6,966	14.1%	(0.3%)
Transmission Enhancement Cost Recovery	\$0.64	\$487	1.2%	\$0.57	\$454	0.9%	(10.6%)
Transmission Owner (Schedule 1A)	\$0.10	\$73	0.2%	\$0.09	\$74	0.2%	(3.0%)
Transmission Seams Elimination Cost Assignment (SECA)	(\$0.03)	(\$21)	(0.1%)	\$0.00	\$0	0.0%	(100.0%)
Transmission Facility Charges	\$0.00	\$0	0.0%	\$0.00	\$0	0.0%	0.0%
Ancillary	\$0.77	\$585	1.4%	\$0.83	\$654	1.3%	7.3%
Reactive	\$0.43	\$327	0.8%	\$0.43	\$342	0.7%	0.1%
Regulation	\$0.14	\$104	0.3%	\$0.18	\$145	0.3%	33.6%
Black Start	\$0.09	\$70	0.2%	\$0.08	\$65	0.1%	(10.7%)
Synchronized Reserves	\$0.06	\$42	0.1%	\$0.06	\$50	0.1%	14.7%
Non-Synchronized Reserves	\$0.01	\$7	0.0%	\$0.02	\$15	0.0%	106.4%
Day Ahead Scheduling Reserve (DASR)	\$0.05	\$35	0.1%	\$0.05	\$37	0.1%	2.0%
Administration	\$0.52	\$393	1.0%	\$0.50	\$399	0.8%	(2.8%)
PJM Administrative Fees	\$0.48	\$367	0.9%	\$0.47	\$371	0.8%	(2.9%)
NERC/RFC	\$0.03	\$24	0.1%	\$0.03	\$25	0.1%	(0.9%)
RTO Startup and Expansion	\$0.00	\$2	0.0%	\$0.00	\$2	0.0%	(3.2%)
Energy Uplift (Operating Reserves)	\$0.14	\$107	0.3%	\$0.23	\$186	0.4%	67.1%
Demand Response	\$0.01	\$5	0.0%	\$0.01	\$5	0.0%	(1.5%)
Load Response	\$0.01	\$5	0.0%	\$0.01	\$5	0.0%	(1.5%)
Emergency Load Response	\$0.00	\$0	0.0%	\$0.00	\$0	0.0%	0.0%
Emergency Energy	\$0.00	\$0	0.0%	\$0.00	\$0	0.0%	0.0%
Total Price	\$53.24	\$40,397	100.0%	\$62.30	\$49,285	100.0%	17.0%
Total Load (GWh)	758,775			791,093			4.3%
Total Billing (\$ Billions)	\$40.40			\$49.29			22.0%

Total Zonal Congestion:2017

Control Zone	Congestion Costs (Millions)					
	Area Based			Constraint Based		
	Day-Ahead	Balancing	Total	Day-Ahead	Balancing	Total
AECO	(\$2.3)	(\$1.4)	(\$3.7)	\$9.3	(\$0.6)	\$8.7
AEP	\$91.5	(\$9.6)	\$81.8	\$116.4	(\$7.5)	\$108.9
APS	\$20.7	(\$0.4)	\$20.3	\$31.1	(\$3.3)	\$27.8
ATSI	\$26.8	(\$7.2)	\$19.5	\$43.7	(\$4.2)	\$39.5
BGE	\$42.4	(\$2.5)	\$39.9	\$26.6	(\$1.9)	\$24.7
ComEd	\$231.9	(\$3.7)	\$228.2	\$161.8	(\$4.9)	\$156.9
DAY	(\$1.4)	\$1.5	\$0.1	\$12.2	(\$0.9)	\$11.3
DEOK	\$13.9	\$5.1	\$18.9	\$21.8	(\$1.1)	\$20.7
DLCO	\$0.8	(\$1.4)	(\$0.6)	\$7.6	(\$0.7)	\$6.9
Dominion	\$63.7	(\$10.0)	\$53.7	\$73.7	(\$6.3)	\$67.3
DPL	(\$7.6)	\$14.5	\$6.9	\$22.2	\$13.0	\$35.2
EKPC	(\$6.2)	\$2.7	(\$3.6)	\$10.6	(\$0.7)	\$9.9
EXT	(\$10.1)	(\$14.7)	(\$24.8)	(\$1.9)	(\$2.5)	(\$4.4)
JCPL	\$6.7	\$0.8	\$7.6	\$21.2	(\$1.5)	\$19.7
Met-Ed	\$18.1	\$1.5	\$19.6	\$16.5	(\$1.5)	\$15.0
PECO	\$79.5	(\$4.4)	\$75.2	\$36.3	(\$2.7)	\$33.7
PENELEC	\$57.8	(\$7.6)	\$50.2	\$16.2	(\$1.6)	\$14.6
Pepco	\$32.9	\$6.2	\$39.1	\$24.2	(\$1.7)	\$22.5
PPL	\$28.8	\$4.4	\$33.3	\$39.8	(\$2.2)	\$37.5
PSEG	\$46.2	(\$9.5)	\$36.7	\$42.2	(\$2.5)	\$39.8
RECO	(\$1.1)	\$0.1	(\$0.9)	\$1.5	(\$0.1)	\$1.4
Total	\$733.1	(\$35.5)	\$697.6	\$733.1	(\$35.5)	\$697.6



Total Zonal Congestion: 2018

Control Zone	Congestion Costs (Millions)					
	Area Based			Constraint Based		
	Day-Ahead	Balancing	Total	Day-Ahead	Balancing	Total
AECO	\$2.4	(\$5.4)	(\$3.0)	\$16.9	(\$0.8)	\$16.1
AEP	\$358.2	(\$36.9)	\$321.4	\$234.9	(\$11.6)	\$223.3
APS	\$54.9	(\$1.1)	\$53.8	\$79.9	(\$3.8)	\$76.2
ATSI	\$96.0	(\$20.6)	\$75.4	\$102.9	(\$5.7)	\$97.2
BGE	\$57.5	(\$0.6)	\$56.8	\$48.1	(\$2.3)	\$45.8
ComEd	\$188.9	\$45.2	\$234.2	\$172.3	(\$9.4)	\$162.9
DAY	\$16.8	(\$1.8)	\$15.0	\$27.9	(\$1.2)	\$26.7
DEOK	\$77.2	(\$10.1)	\$67.1	\$50.8	(\$2.0)	\$48.7
DLCO	\$5.8	\$1.6	\$7.4	\$17.3	(\$1.3)	\$16.0
Dominion	\$105.5	(\$2.9)	\$102.5	\$158.9	(\$7.4)	\$151.5
DPL	\$54.2	(\$9.5)	\$44.7	\$87.8	(\$0.5)	\$87.3
EKPC	(\$17.0)	\$4.6	(\$12.4)	\$24.0	(\$0.9)	\$23.1
EXT	(\$2.2)	(\$14.4)	(\$16.6)	\$1.4	(\$4.4)	(\$3.1)
JCPL	\$19.4	(\$14.4)	\$5.0	\$39.2	(\$1.4)	\$37.9
Met-Ed	\$37.6	(\$5.7)	\$31.8	\$31.6	(\$1.7)	\$29.8
OVEC	\$0.4	(\$0.2)	\$0.2	(\$0.0)	\$0.0	\$0.0
PECO	\$103.3	(\$1.3)	\$102.0	\$62.4	(\$2.6)	\$59.8
PENELEC	\$75.4	(\$2.6)	\$72.8	\$32.1	(\$2.1)	\$30.0
Pepco	\$47.8	\$3.8	\$51.5	\$44.6	(\$2.2)	\$42.3
PPL	\$45.1	\$11.2	\$56.3	\$69.9	(\$3.0)	\$66.9
PSEG	\$52.7	(\$6.5)	\$46.1	\$73.4	(\$4.1)	\$69.3
RECO	(\$1.2)	(\$1.0)	(\$2.2)	\$2.6	(\$0.6)	\$1.9
Total	\$1,378.9	(\$69.0)	\$1,309.9	\$1,378.9	(\$69.0)	\$1,309.9

MIRA Update: Fuel Policy Enhancement

- **New functionality:**
 - Fuel policies submitted for review for specific units
 - Combined IMM and PJM review workflows
 - Annual review period
- **Available in MIRA Sandbox environment now**
- **Production release first week of February**
- **Details in MIRA User Guide by end of January**
<http://www.monitoringanalytics.com/tools/tools.shtml>
- **Email Monitoring Analytics for more details**
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