

Congestion

AFMTF

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The PJM Bill Does Not Define Congestion

- **The CLMP line items in a customer's PJM bill do not define congestion.**
- **CLMP is not congestion. CLMP is a component of LMP.**
- **Congestion is not based on hourly customer specific interchange (buys-sells).**
- **Congestion is the difference, by constraint, between credits and charges**

Congestion Bill

- **An inconsistent definition of congestion leads to an incorrect conclusion about the alignment of the rights to congestion rights with the actual payment of congestion.**



The PJM Bill Does Not Define Congestion

- **Negative CLMP does not indicate that load does not pay congestion.**
- **Congestion cannot be negative for any load, regardless of location.**
- **A definition of congestion based on the PJM bill is not consistent with the actual congestion that is paid and collected.**
- **Comparing the CLMP line item to an ARR or FTR does not show the offset against congestion, or the effectiveness of the “hedge” against price differences.**

PJM's Bill Based Congestion vs ARR/FTR 2018/2019

Zone	ARR Credits	FTR Credits	Balancing + M2M Charge	Surplus Allocation	Total Offset	Settled Costs			Offset
						Day Ahead Congestion (Includes M2M)	Balancing Congestion (Includes M2M)	Total Congestion	
AECO	\$4.9	\$0.0	-\$1.9	\$0.8	\$3.8	-\$19.9	\$1.5	-\$18.4	100%
AEP	\$56.8	\$38.9	-\$23.7	\$21.8	\$93.8	\$126.3	-\$0.2	\$126.1	74%
APS	\$40.8	\$10.4	-\$9.2	\$8.9	\$50.9	\$26.6	\$0.6	\$27.1	188%
ATSI	\$43.3	\$0.3	-\$12.4	\$6.7	\$37.9	\$96.7	\$2.4	\$99.1	38%
BGE	\$67.2	\$1.5	-\$5.8	\$10.7	\$73.6	\$45.5	\$0.9	\$46.4	159%
COMED	\$91.7	\$10.2	-\$17.8	\$17.3	\$101.4	-\$13.7	\$5.0	-\$8.7	100%
DAY	\$7.2	\$0.5	-\$3.2	\$1.1	\$5.6	\$30.8	\$0.8	\$31.5	18%
DEOK	\$41.5	\$9.1	-\$5.0	\$7.7	\$53.3	\$78.4	\$1.6	\$80.0	67%
DUQ	\$9.1	\$0.0	-\$2.5	\$1.4	\$8.0	-\$33.3	\$1.9	-\$31.4	100%
DOM	\$7.1	\$44.3	-\$18.7	\$9.4	\$42.1	\$26.2	\$4.0	\$30.2	140%
DPL	\$39.3	\$8.2	-\$3.4	\$7.0	\$51.1	\$50.0	\$0.4	\$50.4	101%
JCPL	\$2.5	\$0.0	-\$4.2	\$0.4	-\$1.3	\$82.8	-\$3.8	\$79.0	-2%
METED	\$7.9	\$0.4	-\$2.9	\$1.3	\$6.7	-\$6.5	\$0.0	-\$6.5	100%
PECO	\$21.2	\$0.2	-\$7.5	\$3.3	\$17.2	-\$51.5	\$0.7	-\$50.8	100%
PENELEC	\$10.9	\$4.0	-\$3.2	\$2.0	\$13.7	-\$11.4	\$0.7	-\$10.7	100%
PEPCO	\$28.9	\$2.0	-\$5.5	\$5.0	\$30.4	\$28.8	-\$0.2	\$28.6	106%
PPL	\$4.4	\$0.0	-\$7.6	\$0.7	-\$2.5	-\$35.7	-\$0.6	-\$36.3	100%
PSEG	\$40.9	\$0.0	-\$8.1	\$6.3	\$39.1	-\$22.9	\$0.6	-\$22.3	100%
RECO	\$0.1	\$0.0	-\$0.3	\$0.0	-\$0.2	-\$2.3	\$0.1	-\$2.2	100%
Misc	\$3.3	\$0.1	-\$2.3	\$0.5	\$1.6	-\$12.1	\$0.7	-\$11.4	100%
Total	\$529.0	\$130.1	-\$145.2	\$112.3	\$626.2	\$382.7	\$17.2	\$399.9	157%

*Table reflects Load Serving customers only

*Congestion for Load participants that serve across multiple zones is apportioned based on load obligations

*Zones with total negative congestion charges set to 100% offset

*Misc includes zones with less than three LSEs and Merchant customers

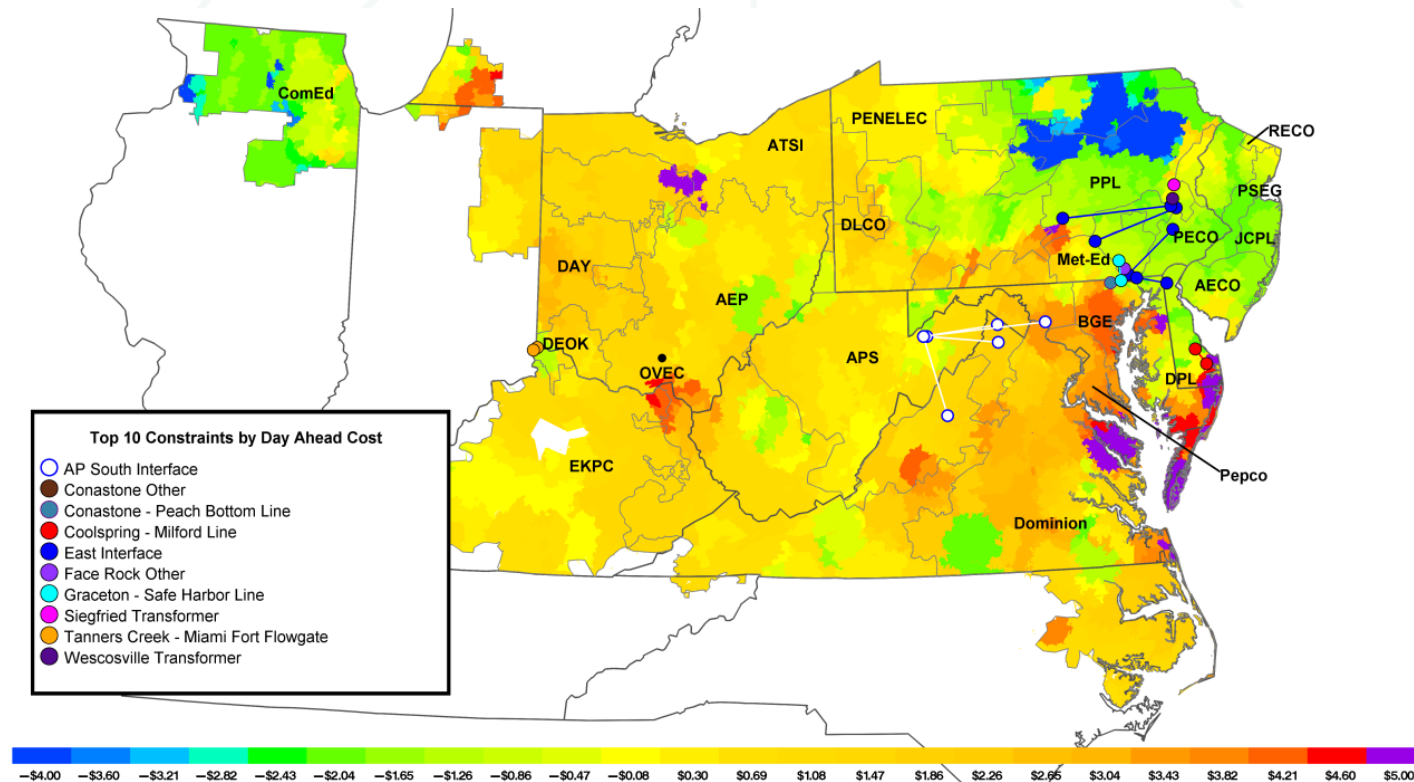
Source: PJM whitepaper presented 4/27/2020



Issues with PJM Bill Based Approach to Congestion

- **Under PJM Bill based definition:**
 - **ComEd was paid (not charged) \$8.1 million in congestion and was also paid \$101.4 million from ARR and associated self-scheduled FTRs.**
 - **ComEd does not pay congestion because CLMPs are negative?**
 - **ComEd has far more than 100 percent offset to congestion, as it pays no congestion and is credited ARR/FTR related surplus.**
 - **Based on PJM definition, no evidence that ComEd needs FTRs to “hedge price risk” or offset congestion?**
- **PJM Bill based conclusion is not consistent with actual congestion based on actual network use.**

Day-Ahead Average CLMPs load weighted : 2019



Zonal ARR and FTR total congestion offset (\$M) for ARR holders: 2018/2019

Zone	ARR Credits	FTR Credits	Balancing+ M2M Charge	Surplus Allocation	Total Offset	Day Ahead Congestion	Balancing Congestion	M2M Payments	Total Congestion	Total Offset
AECO	\$4.9	\$0.0	(\$1.9)	\$0.8	\$3.8	\$11.9	(\$1.5)	(\$0.4)	\$10.0	37.8%
AEP	\$56.8	\$38.9	(\$23.7)	\$21.8	\$93.8	\$129.6	(\$18.9)	(\$5.1)	\$105.7	88.7%
APS	\$40.8	\$10.4	(\$9.2)	\$8.9	\$50.9	\$53.7	(\$6.9)	(\$2.0)	\$44.8	113.6%
ATSI	\$43.3	\$0.3	(\$12.4)	\$6.7	\$37.9	\$64.8	(\$9.7)	(\$2.6)	\$52.5	72.3%
BGE	\$67.2	\$1.5	(\$5.8)	\$10.7	\$73.6	\$26.1	(\$4.8)	(\$1.2)	\$20.0	367.3%
ComEd	\$91.7	\$10.2	(\$17.8)	\$17.3	\$101.3	\$113.0	(\$12.7)	(\$3.8)	\$96.5	105.0%
DAY	\$7.2	\$0.5	(\$3.2)	\$1.1	\$5.5	\$16.1	(\$2.6)	(\$0.7)	\$12.8	42.8%
DEOK	\$41.5	\$9.1	(\$5.0)	\$7.7	\$53.4	\$28.9	(\$4.1)	(\$1.1)	\$23.7	225.5%
DLCO	\$9.1	\$0.0	(\$2.5)	\$1.4	\$8.0	\$10.2	(\$1.9)	(\$0.5)	\$7.7	104.2%
Dominion	\$7.1	\$44.3	(\$18.7)	\$9.4	\$42.3	\$84.4	(\$14.2)	(\$4.0)	\$66.2	63.9%
DPL	\$39.3	\$8.2	(\$3.4)	\$7.0	\$51.0	\$63.0	(\$3.3)	(\$0.7)	\$59.0	86.5%
EKPC	\$0.0	\$0.0	(\$2.4)	\$0.0	(\$2.3)	\$11.8	(\$1.7)	(\$0.5)	\$9.5	(24.1%)
EXT	\$3.4	\$0.0	\$0.0	\$0.5	\$3.9	\$0.7	(\$4.8)	\$0.0	(\$4.1)	(95.8%)
JCPL	\$2.5	\$0.0	(\$4.2)	\$0.4	(\$1.3)	\$24.6	(\$3.3)	(\$0.9)	\$20.4	(6.2%)
Met-Ed	\$7.9	\$0.4	(\$2.9)	\$1.3	\$6.6	\$17.9	(\$2.6)	(\$0.6)	\$14.6	45.2%
PECO	\$21.2	\$0.2	(\$7.5)	\$3.3	\$17.2	\$37.3	(\$5.7)	(\$1.6)	\$30.0	57.3%
Penelec	\$10.9	\$4.0	(\$3.2)	\$2.0	\$13.7	\$21.7	(\$3.4)	(\$0.7)	\$17.6	77.7%
Pepco	\$28.9	\$2.0	(\$5.5)	\$5.0	\$30.3	\$23.6	(\$4.2)	(\$1.2)	\$18.2	166.3%
PPL	\$4.4	\$0.0	(\$7.6)	\$0.7	(\$2.4)	\$44.2	(\$5.9)	(\$1.6)	\$36.7	(6.7%)
PSEG	\$40.9	\$0.0	(\$8.1)	\$6.3	\$39.2	\$47.3	(\$7.0)	(\$1.7)	\$38.6	101.5%
RECO	\$0.1	\$0.0	(\$0.3)	\$0.0	(\$0.2)	\$2.0	(\$0.9)	(\$0.1)	\$1.1	(19.0%)
Total	\$529.0	\$130.1	(\$145.2)	\$112.3	\$626.2	\$832.7	(\$120.0)	(\$31.1)	\$681.6	91.9%

Definition of Congestion Should be Consistent with Network Solution

- **PJM Bill based definition provides energy charges and credits.**
- **PJM Bill does not provide information about congestion.**
- **Network, constraint specific, congestion shows that load upstream of constraints pays more for energy than the sources are energy are paid.**
- **Accurate metric for evaluating congestion payments and offsets.**

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