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

						Settled Costs			
Zone	ARR Credits	FTR Credits	Balancing + M2M Charge	Surplus Allocation	Total Offset	Day Ahead Congestion (Includes M2M)	Balancing Congestion (Includes M2M)	Total Congestion	Offset
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%

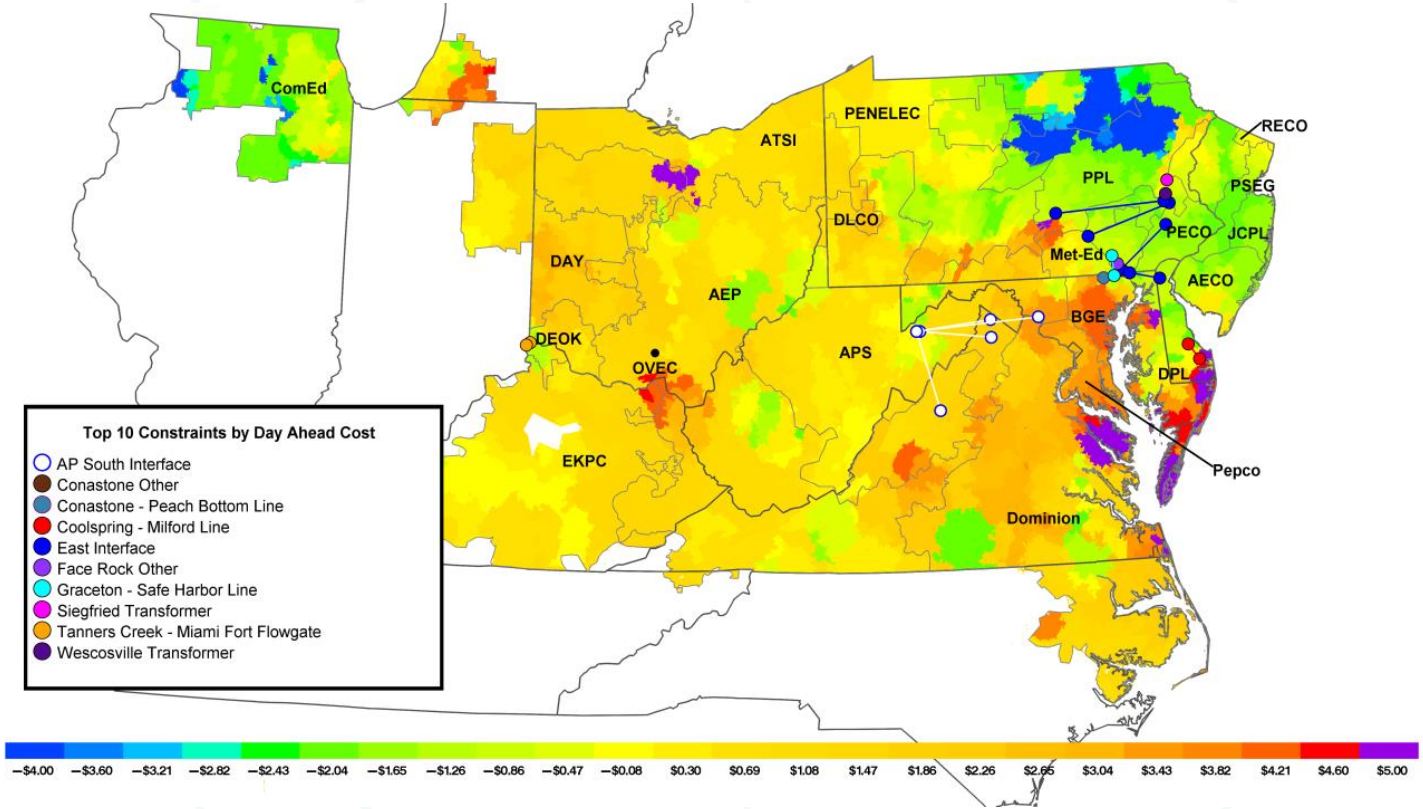
*Table reflects Load Serving customers only
*Congestion for Load participants that serve across multiple zones is apportioned based on load obligations
*Zones with total negative congestion charges set to 100% offset
*Misc includes zones with less than three LSEs and Merchant customers

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 ARRs 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



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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	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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