## Transmission Penalty Factors: Impact on Energy Market Results Additional Data

MIC Special Session – TX Constraint Penalty Factor August 8, 2018



## **Impact on Generation Credits in 2017**

- The IMM simulated the clearing of the real-time market, setting the shadow prices of violated transmission constraints equal to the transmission penalty factors.
- The load weighted average LMP for every transmission zone was calculated using simulated LMPs.
- For every generating unit, credits were calculated using the simulated LMPs.

## Impact on Zonal Load Weighted Average LMP January through December, 2017

	Load Weig	Load Weighted Average LMP	
	Actual	Transmission Penalty Factors Set Prices	
AECO	\$29.63	\$29.42	
AEP	\$30.17	\$30.07	
APS	\$31.32	\$31.27	
ATSI	\$31.23	\$31.16	
BGE	\$34.76	\$34.97	
ComEd	\$28.29	\$28.24	
DAY	\$31.06	\$30.95	
DEOK	\$30.55	\$30.51	
Dominio	\$33.49	\$33.65	
DPL	\$33.39	\$34.80	

	Load Weighted Average LMP	
	Actual	Transmission Penalty Factors Set Prices
DLCO	\$30.63	\$30.54
EKPC	\$29.19	\$29.03
JCPL	\$30.74	\$30.58
Met-Ed	\$31.15	\$31.23
PECO	\$29.80	\$29.63
PENELEC	\$30.48	\$30.54
Pepco	\$33.70	\$33.83
PPL	\$29.99	\$29.86
PSEG	\$30.92	\$30.84
RECO	\$31.26	\$31.19



## Impact on Generation Credits in 2017 by Unit

Balancing Market	Impact (\$ Millions)
Total change in generation credits	\$10.05
Largest unit level decrease in generation credits	\$2.13
Largest unit level increase in generation credits	\$1.18

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