

Potential Impacts of a ComEd FRR

MIC

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Monitoring Analytics

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- IMM analysis of the potential impacts of a ComEd FRR.
- IMM Report, December 18, 2019:
https://www.monitoringanalytics.com/reports/Reports/2019/IMM_Potential_Impacts_of_the_Creation_of_a_ComEd_FRR_20191218.pdf

FRR Option

- **In order to create a new FRR service area, both the state in which the FRR exists and the transmission owner whose zone would be the FRR service area would have to agree to create the FRR and agree on the terms of payment for the capacity required to meet the FRR unforced capacity (UCAP) obligation.**
- **Commonwealth Edison Company (ComEd), as an IOU, could elect to become an FRR entity.**
- **Illinois could require that ComEd elect FRR status.**

FRR Option

- **Regardless of the existence of retail choice, the FRR entity must include all load in the FRR service area and must provide adequate capacity to meet that load.**
- **In the ComEd LDA, Exelon does not own enough capacity resources to meet the PJM defined FRR UCAP obligation.**
- **In order to create a viable FRR, ComEd/Exelon would need to contract with other capacity resource owners in the ComEd LDA, and potentially capacity resource owners external to the ComEd LDA, limited by CETL, to meet the FRR UCAP obligation for the ComEd Zone.**

FRR Option

- **An FRR entity is required to meet the capacity obligations of all alternative retail LSEs in the FRR service area.**
- **The alternative retail LSEs are required to compensate the FRR entity based on a state mandated compensation mechanism or based on the rest of RTO capacity price, in the absence of a state compensation mechanism.**

Ownership of annual generation capacity resources in the ComEd LDA

Owner	ICAP (MW)	Percent
Exelon	10,358.7	41.0%
Other owners	14,932.5	59.0%
Total	25,291.2	100.0%

Scenario 1

- **ComEd/Exelon procures its entire capacity obligation at a rate equal to the current offer cap applicable to the ComEd LDA (\$254.40 per MW-day).**
- **Net load charges for the ComEd Zone under the FRR alternative would increase by \$414.4 million or 23.6 percent compared to the results of the PJM RPM Base Residual Auction (BRA) for the 2021/2022 Delivery Year.**

Net load charges for ComEd LDA (Scenario 1)

ComEd LDA	BRA	Scenario 1	Change	Percent
Base Zonal UCAP Obligation (MW)	24,983.0	23,384.9	(1,598.1)	(6.4%)
Zonal Capacity Price (\$/MW-day)	\$196.08	\$254.40	\$58.32	29.7%
Gross Load Charges	\$1,788,042,829	\$2,171,428,274	\$383,385,446	21.4%
Value of CTRs	\$30,978,820	\$0	(\$30,978,820)	(100.0%)
Net Load Charges	\$1,757,064,009	\$2,171,428,274	\$414,364,265	23.6%

Scenario 2

- **ComEd/Exelon procures its entire capacity obligation at a rate equal to the ComEd LDA clearing price in the 2021/2022 BRA (\$195.55 per MW-day).**
- **Net load charges for the ComEd Zone under the FRR alternative would decrease by \$87.9 million or 5.0 percent compared the results of the RPM Base Residual Auction for the 2021/2022 Delivery Year.**
- **The decrease in net load charges in Scenario 2 is the result of a lower capacity obligation for the ComEd Zone under the FRR rules versus the rules that apply for an LDA in the PJM RPM.**

Net load charges for ComEd LDA (Scenario 2)

ComEd LDA	BRA	Scenario 2	Change	Percent
Base Zonal UCAP Obligation (MW)	24,983.0	23,384.9	(1,598.1)	(6.4%)
Zonal Capacity Price (\$/MW-day)	\$196.08	\$195.55	(\$0.53)	(0.3%)
Gross Load Charges	\$1,788,042,829	\$1,669,114,776	(\$118,928,053)	(6.7%)
Value of CTRs	\$30,978,820	\$0	(\$30,978,820)	(100.0%)
Net Load Charges	\$1,757,064,009	\$1,669,114,776	(\$87,949,233)	(5.0%)

Impacts on capacity market prices

- **Rest of RTO clearing price would decrease by \$61.77 per MW-day to \$78.23 per MW-day, or 44.1 percent compared to the results of the RPM Base Residual Auction for the 2021/2022 Delivery Year.**
- **The DEOK clearing price would decrease by \$11.53 per MW-day, or 8.2 percent.**
- **The clearing price unchanged for the other LDAs that were constrained in the 2021/2022 BRA.**
- **Net load charges for the RTO excluding ComEd would be lower by \$2.1 billion or 27.8 percent compared to the 2021/2022 BRA net load charges.**

Market clearing prices in Scenario 1 and Scenario 2 compared to the actual BRA results

LDA	BRA	Scenario 1 and Scenario 2	Change	Percent
RTO	\$140.00	\$78.23	(\$61.77)	(44.1%)
ATSI	\$171.33	\$171.33	\$0.00	0.0%
ComEd	\$195.55	NA	NA	NA
MAAC	\$140.00	\$78.23	(\$61.77)	(44.1%)
ATSI Cleveland	\$171.33	\$171.33	\$0.00	0.0%
DAY	\$140.00	\$78.23	(\$61.77)	(44.1%)
DEOK	\$140.00	\$128.47	(\$11.53)	(8.2%)
EMAAC	\$165.73	\$165.73	\$0.00	0.0%
PPL	\$140.00	\$78.23	(\$61.77)	(44.1%)
SWMAAC	\$140.00	\$78.23	(\$61.77)	(44.1%)
DPL South	\$165.73	\$165.73	\$0.00	0.0%
PSEG	\$204.29	\$204.29	\$0.00	0.0%
BGE	\$200.30	\$200.30	\$0.00	0.0%
Pepco	\$140.00	\$78.23	(\$61.77)	(44.1%)
PSEG North	\$204.29	\$204.29	\$0.00	0.0%

Net load charges for RTO excluding ComEd LDA

RTO (Excluding ComEd LDA)	Both Scenarios		Change	Percent
	BRA	(1 and 2)		
Base Zonal UCAP Obligation (MW)	138,644.30	140,007.20	1,362.90	1.0%
Gross Load Charges	\$7,926,928,343	\$6,231,181,803	(\$1,695,746,540)	(21.4%)
Value of CTRs	\$297,147,677	\$720,600,778	\$423,453,101	142.5%
Net Load Charges	\$7,629,780,666	\$5,510,581,025	(\$2,119,199,641)	(27.8%)

ZECs

- **The subsidy to Quad Cities was approximately \$125.4 million in 2018.**
- **If Exelon receives comparable subsidies for the Quad Cities, Byron, Braidwood, Dresden and LaSalle nuclear power plants, the total annual subsidies would be approximately \$924.9 million, an increase of \$799.5 million.**
- **The cost of the subsidies should be included in the evaluation of both scenarios.**

Summary

- **The creation of a ComEd FRR is likely to increase payments for capacity by customers in ComEd. Scenario 1 is a reasonable estimate.**
- **The increase in payments by customers in ComEd would be larger with additional subsidies.**
- **Market power is an issue in an FRR.**
- **The actual price for capacity in ComEd and the actual subsidies for nuclear plants in ComEd would be the result of a negotiation between ComEd/Exelon and Illinois, and/or a negotiation between ComEd/Exelon and/or Illinois and the other owners of capacity in the ComEd LDA.**

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