

**Legal Department** 

American Electric Power 1 Riverside Plaza Columbus, OH 43215-2373 AEP.com

April 27, 2020

Barcy F. McNeal Docketing Division Chief Public Utilities Commission of Ohio 180 East Broad Street Columbus Ohio 43215-3793

Re: In the Matter the Generation Energy and Generation Capacity riders for Ohio Power Company, Case No. 20-943-EL-RDR.

Dear Ms. McNeal:

On February 25, 2015, the Commission Issued an Opinion and Order adopting certain portions of AEP Ohio's Electric Security Plan in Case Nos. 13-2385-EL-SSO, et.al (Opinion and Order). Among other things, the Opinion and Order approved the establishment of the Generation Energy (GENE) and Generation Capacity Riders (GENC). The Company filed its revised compliance tariffs on May 18, 2015 and rates for the GENE and GENC became effective on June 1, 2015 for the delivery period of June 2015 through May 2016.

Under the Opinion and Order, the Commission adopted the Company's request to update the GENE and GENC annually to reflect the results of competitive bid auction for the delivery year. Any over or under recoveries related to these riders are reconciled through the Auction cost recovery rider (ACRR).

On March 2, 2016 the Commission in its Opinion and Order in Case No. 16-0247-EL-UNC found that percentage of income payment plan (PIPP) load will be separated from future competitive requests for proposal (RFP) auctions and auctioned separately in PIPP only RFP auctions for 12 month periods.

On April 25, 2018 the Commission approved the Stipulation in Case No. 16-1852-EL-SSO. The Stipulation adopted the change to remove the Commission and Ohio Consumer Counsel (OCC) assessment fees from the gross up factor used to calculate riders GENE and GENC. This filing reflects that change.

Accordingly, the Company submits its Annual GENE and GENC update for the delivery period of June 2020 through May 2021. The results of the separate PIPP auction mentioned above are included in this filing. The Company requests that the new rates become effective June 1, 2020.

**Steven T. Nourse** VP - Legal (614) 716-1608 (P) (614) 716-2014 (F) stnourse@aep.com Respectfully Submitted,

/s/ Steven T. Nourse

# **Calculation of Blended Competitive Bid Price**

## Non-PIPP Load

Delivery Period: June 2020 - May 2021

	Procurement	No. of			learing		
<u>Line</u>	<u>Date</u>	Tranches	<u>Delivery Period</u>	ă.	Price		
1	Nov-17	16	June 2018 - May 2021	\$	47.27	/MWh	SSO Only
2	Mar-18	16	June 2018 - May 2021	\$	46.53	/MWh	SSO Only
3	Nov-19	17	June 2020 - May 2021	\$	40.18	/MWh	SSO Only
4	Nov-19	17	June 2020 - May 2022	\$	42.83	/MWh	SSO Only
5	Mar-20	17	June 2020 - May 2021	\$	36.74	/MWh	SSO Only
6	Mar-20	17	June 2020 - May 2022	\$	40.00	/MWh	SSO Only
7	Total	100	•				

**Blended SSO Competitive Bid Price** 

\$ 42.17 /MWh

## PIPP Load - PIPP Auction

Delivery Period: June 2020 - May 2021

8

<u>Line</u>	Procurement <u>Date</u>	No. of Tranches	Delivery Period	Clearing <u>Price</u>	
1	Apr-20	100	June 2020 - May 2022	\$	/MWh
2	Total	100			
3	PII	PP Competi	itive Bid Price	\$	/MWh

## Schedule 2

# Calculation of Capacity Revenue Requirement in \$/MWh

		June 2020 - May 2021					
<u>Line</u>	<u>Description</u>	<u>Secondary</u>	<u>Primary</u>	Sub/Tran	<u>Total</u>	_	
1	SSO Load - 5 CP at Meter	2,379	37	15	2,432	MW	
2	Transmission and Distribution Losses	1.0932	1.0552	1.0341			
3	5 CP at Generator (1) x (2)	2,601	39	16	2,656	MW	
4	Days in Period				365		
5	MW-days (3) x (4)			,	969,538	-	
6	Final Zonal Capacity Price*				\$90.12	/MW-day	
7	Capacity Revenue Requirement (5) x (6)			,	\$ 87,374,341	-	
<u>Line</u>	<u>Description</u>	<u>Secondary</u>	<u>Primary</u>	Sub/Tran	<u>Total</u>		
8	Energy at Meter (MWh)	11,135,677	209,313	168,127	11,513,116		
9	Transmission and Distribution Losses **	1.0604	1.0235	1.0031			
10	Energy for PJM Settlement (MWh) (8) x (9)	11,808,316	214,241	168,644	12,191,201	_	
11	Capacity Revenue Requirement (\$/MWh) (7) / (10)				\$ 7.17		
* Final Zo	nal Capacity Price consists of:	RPM Auction Clea Final Zonal Scaling Forecast Pool Req	Factor		\$77.31 1.07121 1.0882		

<sup>\*\*</sup> Loss Factors reduced by 3% for marginal loss deration

#### Schedule 3

## **Calculation of Generation Capacity Rider Rates**

GS Non Demand Secondary GS Secondary GS Primary GS Sub/Tran Lighting Line Description **Total** Residential 1 SSO Load - 5 CP at Meter 2,432 2,049 60 271 37 15 2 Transmission and Distribution Losses 1.0932 1.0932 1.0932 1.0552 1.0341 1.0932 3 5 CP at Generator (1) x (2) 2,656 2,240 65 296 39 16 4 2020/2021 Capacity Revenue Requirement on (3) \$ 87,374,341 73,684,546 2,145,074 9,731,752 1,293,596 519,373 Energy at the Meter (MWh) 85,745 5 11,513,116 9,176,602 322,098 1,551,232 209,313 168,127 6 2020/2021 Capacity Rate (\$/MWh) (4) / (5) \$ 8.03 \$ 6.66 \$ 6.27 \$ 6.18 \$ 3.09 \$ 7 Tax Gross-up\* 1.00261 1.00261 1.00261 1.00261 1.00261 1.00261 2020/2021 Rider GENC (\$/MWh) (6) x (7) \$ 8 8.05 \$ 6.68 \$ 6.29 \$ 6.20 \$ \$ 3.10 9 Generation Capacity Rider Rate (¢/kWh) 0.80500 0.66800 0.62900 0.62000 0.31000 0.00000

Calculation for PIPP Auction

10 Energy for PJM Settlement (MWh)

11 Capacity Revenue Requirement (\$/MWh) (4) / (10)



<sup>\*</sup> Tax Gross-up includes: CAT Tax

# **Generation Capacity Rider Design for Time-of-Day Rates**

CSP Rate Zone - RLM								June 2020	- Ma	y 2021		
	Generation		n-May 2015			Residential						
	Capacity Rider Rate	(-	Generation Capacity			Service Generation				Generation		
	Design Usage		Rider			Capacity				Capacity		
<u>Description</u>	<u>(kWh)</u>		Rates		Billing	<u>Rider</u>		<u>Billing</u>		<u>Rider</u>		Billing
Winter Season												
First 750 kWh per Month	277,398	\$	0.024344	\$	6,753	\$ 0.008050	\$	2,233	\$	0.0111664	\$	3,098
Next 150 kWh per kW Over 5 kW per Month	1,090,206	\$	0.013174	\$	14,363	\$ 0.008050	\$	8,776	\$	0.0060429	\$	6,588
All Additional kWh per Month	1,381,854	\$	0.015407	\$	21,291	\$ 0.008050	\$	11,124	\$	0.0070672	\$	9,766
Summer Season												
First 750 kWh per Month	126,228	\$	0.024344	\$	3,073	\$ 0.008050	\$	1,016	\$	0.0111664	\$	1,410
Next 150 kWh per kW Over 5 kW per Month	454,573	\$	0.023126	\$	10,512	\$ 0.008050	\$	3,659	\$	0.0106074	\$	4,822
All Additional kWh per Month	600,445	\$	0.021638	\$	12,992	\$ 0.008050	\$	4,834	\$	0.0099252	\$	5,960
Total				\$	68,984		\$	31,642			\$	31,642
CSP Rate Zone - RS-ES / RS-TOD								June 2020	- Ma	y 2021		
	Generation	Ja	n-May 2015			Residential						
	Capacity	(	Generation			Service						
	Rider Rate Design Usage		Capacity Rider			Generation Capacity				Generation Capacity		
Description	(kWh)		Rates		Billing	Rider		Billing		<u>Rider</u>		Billing
On-Peak kWh	30,565	\$	0.030371	\$	928	\$ 0.008050	\$	246	\$	0.0139308	\$	426
Off-Peak kWh	54,955	\$	0.030371	\$	573	\$ 0.008050	\$	442	\$		\$	263
Total	34,333	٦	0.010413	\$	1,501	ŷ 0.000000	\$	688	,	0.0047732	\$	688
					,							
CSP Rate Zone - Experimental RS-TOD2	Generation	Ja	n-May 2015			Residential		June 2020	- IVIa	y 2021		
	Capacity		Generation			Service						
	Rider Rate		Capacity			Generation				Generation		
	Design Usage		Rider		5.111	Capacity		B.1111		Capacity		
<u>Description</u>	<u>(kWh)</u>		<u>Rates</u>		<u>Billing</u>	<u>Rider</u>		Billing		<u>Rider</u>		Billing
High Cost Hours	1,589,576	\$	0.175869	\$	279,557	\$ 0.008050	\$	12,796	\$	0.0806691	\$	128,230
Low Cost Hours	18,387,409	\$	0.003864	\$	71,040	\$ 0.008050	_	148,019	\$	0.0017721	\$	32,584
Total				\$	350,597		\$	160,815			\$	160,814
CSP Rate Zone - RS-CPP								June 2020	- Ma	y 2021		
	Generation		n-May 2015			Residential						
	Capacity Rider Rate	(	Generation Capacity			Service Generation				Generation		
	Design Usage		Rider			Capacity				Capacity		
Description	(kWh)		Rates		<u>Billing</u>	Rider		Billing		<u>Rider</u>		Billing
Wr G												
Winter Season First 800 kWh	6,400	\$	0.016017	\$	103	\$ 0.008050	ć	52	Ś	0.0073468	\$	47
Over 800 kWh	2,172		0.01001/	۶ \$	103	\$ 0.008050		52 17	\$ \$	0.00/3406	\$ \$	- 47
Critical Peak Hours	28	\$	0.387317		11	\$ 0.008050		0		0.1776580	\$	5
Summer Season	20	ب	0.00/01/	ب	11	7 0.000000	ٻ	U	ب	5.177556	ب	,
Low Cost Hours	2,289	\$	0.003873	\$	9	\$ 0.008050	\$	18	\$	0.0017766	\$	4
Medium Cost Hours	1,082	\$	0.012144	\$	13	\$ 0.008050	\$	9	\$	0.0055703	\$	6
High Cost Hours	892	\$	0.024824	\$	22	\$ 0.008050	\$	7	\$	0.0113865	\$	10
Critical Peak Hours	184	\$	0.387317	\$	71	\$ 0.008050	\$	1	\$		\$	33
Total				\$	229	,	\$	105			\$	105
CSP Rate Zone - RS-RTP								June 2020	_ N/1~	v 2021		
COL MARC ZONG - NO-NTI	Generation	Ja	n-May 2015			Residential		June 2020	IVIG	, 2021		
	Capacity		Generation			Service						
	Rider Rate		Capacity			Generation				Generation		
Description	Design Usage (kWh)		Rider		Billing	Capacity		Rilling		Capacity		Billing
<u>Description</u>	(KVVII)		Rates		צווווום	<u>Rider</u>		Billing		<u>Rider</u>		Billing
Fixed Energy Charge Total	14,595	\$	21.35	\$	256 256	\$ 0.008050	\$	117 117	\$	9.79	\$	117 117

# **Generation Capacity Rider Design for Time-of-Day Rates**

CSP Rate Zone - GS-2-LMTOD / GS-2-TOD							June 2020	- Ma	ay 2021		
	Generation Capacity	Jan-May 2015 Generation			General Service Non Demand	2					
	Rider Rate	Capacity			Generation				Generation		
	Design Usage	Rider			Capacity				Capacity		
<u>Description</u>	<u>(kWh)</u>	Rates		Billing	<u>Rider</u>		Billing		<u>Rider</u>		Billing
On-Peak kWh	1,973,797	\$ 0.038071	\$	75,144	\$ 0.006680	\$	13,185	\$	0.0199932	\$	39,463
Off-Peak kWh	3,974,408	\$ 0.000130	\$	517	\$ 0.006680	\$	26,549	\$	0.0000683	\$	271
Total			\$	75,661		\$	39,734			\$	39,734
OP Rate Zone - RS-ES / RS-TOD							June 2020	- Ma	ay 2021		
	Generation	Jan-May 2015			Residential						
	Capacity	Generation			Service				Conorotion		
	Rider Rate Design Usage	Capacity Rider			Generation Capacity				Generation Capacity		
Description	(kWh)	Rates		Billing	Rider		Billing		Rider		Billing
					· <u></u>						
On-Peak kWh	2,046,613	\$ 0.036343		74,380	\$ 0.008050	\$	16,475	\$		\$	34,117
Off-Peak kWh	5,102,322	\$ 0.010012		51,084	\$ 0.008050	\$	41,074	\$	0.0045924	\$	23,432
Total			\$	125,464		\$	57,549			\$	57,549
OP Rate Zone - RDMS							June 2020	- Ma	ay 2021		
(1) 2	Generation	Jan-May 2015			Residential						
(No Data, Use RS-ES / RS-TOD Scaling)	Capacity Rider Rate	Generation Capacity			Service Generation				Generation		
	Design Usage	Rider			Capacity				Capacity		
<u>Description</u>	(kWh)	Rates		Billing	Rider		Billing		Rider		Billing
WinterConne											
Winter Season kWh > 400 times billing demand	_	\$ 0.020158	\$	_	\$ 0.008050	\$	_	\$	0.0092460	\$	_
First 500 on-peak kWh	_	\$ 0.025186	\$	_	\$ 0.008050	\$	_	\$		\$	_
Over 500 on-peak kWh	_	\$ 0.018756	\$	_	\$ 0.008050	\$	_	\$		\$	_
All Additional kWh per Month	_	\$ 0.005710	\$	_	\$ 0.008050	\$	_	\$		\$	_
Total		,	\$	-	,	\$	-			\$	-
OP Rate Zone - GS-1-ES							June 2020	- Ma	av 2021		
	Generation	Jan-May 2015			General Service	;			, -		
	Capacity	Generation			Non Demand						
	Rider Rate Design Usage	Capacity Rider			Generation Capacity				Generation Capacity		
Description	(kWh)	<u>Rates</u>		Billing	Rider		Billing		Rider		Billing
On-Peak kWh	95,196	\$ 0.026019		2,477	\$ 0.006680	\$	636		0.0136639	\$	1,301
Off-Peak kWh Total	179,823	\$ 0.005680	\$ \$	1,021 3,498	\$ 0.006680	\$	1,201 1,837	\$	0.0029828	\$	536 1,837
Total			Ţ	3,430		Y	1,037			Y	1,037
OP Rate Zone - GS-2-ES / GS-TOD	G	I M 2015			Company Co.		June 2020	- Ma	y 2021		
	Generation Capacity	Jan-May 2015 Generation			General Service Non Demand	2					
	Rider Rate	Capacity			Generation				Generation		
	Design Usage	Rider			Capacity				Capacity		
<u>Description</u>	(kWh)	Rates		<u>Billing</u>	<u>Rider</u>		<u>Billing</u>		Rider		Billing
On-Peak kWh	18,875,479	\$ 0.020841	Ś	393,380	\$ 0.006680	Ś	126,088	\$	0.0109447	Ś	206,586
Off-Peak kWh	27,663,099	\$ 0.007179		198,591	\$ 0.006680		184,790		0.0037701		104,293
Total			\$	591,971			310,878				310,879

## Calculation of Generation Energy Rider Rates

2020/2021 550

2020/2021 PIPP

				SSO		PIPP	
Blended Competitive Bid Price				\$ 42.17	/MWh	\$	/MWh
Capacity Revenue Requirement				\$ 7.17	/MWh	\$	/MWh
Residual Energy Price				\$ 35.00	/MWh	\$	/MWh
Tax Gross-up*		1.00261			Generation Energy		Generation Energy
Rate		Fa	ctors	RIDER	Rider Rate	RIDER	Rider Rate
<u>Schedule</u>	Season	Loss**	Season	GENE***	(¢/kWh)	GENE***	(¢/kWh)
Residential	Summer	1.0604	1.00	\$ 37.21	3.721		

Tax Gross-up*		1.00261				Energy		Energy
Rate		Fa	ctors	F	RIDER	Rider Rate	RIDER	Rider Rate
Schedule	Season	Loss**	Season	GI	NE***	(¢/kWh)	GENE***	(¢/kWh)
Residential	Summer	1.0604	1.00	\$	37.21	3.721		
	Winter	1.0604	1.00	\$	37.21	3.721		
PIPP Residential	Summer	1.0604	1.00				\$	
	Winter	1.0604	1.00				\$	
GS Non Demand Secondary	Summer	1.0604	1.00	\$	37.21	3.721		
	Winter	1.0604	1.00	\$	37.21	3.721		
GS Secondary	Summer	1.0604	1.00	\$	37.21	3.721		
	Winter	1.0604	1.00	\$	37.21	3.721		
GS Primary	Summer	1.0235	1.00	\$	35.92	3.592		
	Winter	1.0235	1.00	\$	35.92	3.592		
GS Sub/Tran	Summer	1.0031	1.00	\$	35.20	3.520		
	Winter	1.0031	1.00	\$	35.20	3.520		
Lighting	Summer	1.0604	1.00	\$	37.21	3.721		
	Winter	1.0604	1.00	\$	37.21	3.721		

<sup>\*</sup> Tax Gross up includes: Commercial Activities Tax

\*\* Loss Factors reduced by 3% for marginal loss deration

\*\*\* Residual Energy Price x Tax Gross up x Loss Factor x Seasonal Factor

Annualized Factors for Typical Bills (4 Summer Months / 8 Winter Months)							
Annual	0.37210						
Annual	0.37210						
Annual	0.37210						
Annual	0.35920						
Annual	0.35200						
Annual	0.37210						
	Annual Annual Annual Annual Annual						



#### P.U.C.O. NO. 20

#### **GENERATION ENERGY RIDER**

Effective June 1, 20<del>1920</del>, all customer bills subject to the provisions of this Rider, including any bills rendered under special contract, shall be adjusted by the Generation Energy charge as follows:

Schedule	Summer (Jun-Sep)	Winter (Oct-May)
	¢/KWH	¢/KWH
Residential		
RS, RR, RR-1, RS-ES, RS-TOD, RLM, RS-TOD2, CPP, RTP,	<del>4.02600</del> 3.72100	<del>4.02600</del> 3.72100
and RDMS		
PIPP Residential	2 727002 12000	2 727002 12000
RS, RR, RR-1, RS-ES, RS-TOD, RLM, , , , and RDMS	<del>3.72700</del> <u>3.12800</u>	<del>3.72700</del> <u>3.12800</u>
Non Demand Metered		
GS-1, GS-1 TOD		
GS-2 Recreational Lighting, GS-TOD, GS-2-TOD, and GS-2-ES	<del>4.02600</del> 3.72100	<del>4.02600</del> 3.72100
GS-3-ES		
EHS		
SS		
Demand Metered Secondary		
GS-2	4.02600 <u>3.72100</u>	4 <del>.02600</del> 3.72100
GS-3		
EHG		
Demand Metered Primary		
GS-2	3.88600 <u>3.59200</u>	<del>3.88600</del> 3.59200
GS-3		
GS-4		
Demand Metered Subtransmission/Transmission	3.80900 <u>3.52000</u>	3.80900 <u>3.52000</u>
GS-2		
GS-3		
GS-4		
Lighting		
AL	4.02600 <u>3.72100</u>	4.02600 <u>3.72100</u>
SL		

Filed pursuant to Order dated May 2920, 201920 in Case No. 1920-1030-EL-RDR.

Issued: MayApril 3027, 201920 Effective: June 1, 201920

#### P.U.C.O. NO. 20

## **GENERATION CAPACITY RIDER**

Effective June 1, 20<u>1920</u>, all customer bills subject to the provisions of this Rider, including any bills rendered under special contract, shall be adjusted by the Generation Capacity charge as follows:

#### Columbus Southern Power Rate Zone

Rate		¢/kWh or \$/Month
RR, RR-1		<del>1.06600</del> 0.80500
RLM	Winter Rate First 750 KWH Next 150 KWH All Other KWH Summer Rate First 750 KWH Next 150 KWH All Other KWH	1.478681.11664 0.800210.60429 0.935850.70672 1.478681.11664 1.404661.06074 1.314310.99252
RS-ES, RS-TOD	On Peak KWH Off-Peak KWH	1.84474 <u>1.39308</u> 0.63288 <u>0.47792</u>
RS-TOD2	Low Cost Hours High Cost Hours	0.23467 <u>0.17721</u> 10.68239 <u>8.06691</u>
Schedule CPP	Winter Rate First 800 KWH Over 800 KWH Critical Peak Hours Summer Rate Low Cost Hours Medium Cost Hours High Cost Hours Critical Peak Hours	0.97288 <u>0.73468</u> 0.00000 23.52589 <u>17.76580</u> 0.23526 <u>0.17766</u> 0.73763 <u>0.55703</u> 1.50783 <u>1.13865</u> 23.52589 <u>17.76580</u>
RS-RTP	Per Month	<del>12.97</del> 9.79
GS-1, GS-1 TOD		<u>0.88500</u> <u>0.66800</u>
GS-2-TOD, GS-2 LMTOD	On-Peak Hours Off-Peak Hours	2.64880 <u>1.99932</u> 0.00905 <u>0.00683</u>
Demand Metered Secondary GS-2 GS-3		0.842000.62900
Demand Metered Primary GS-2 GS-3		0.85200 <u>0.62000</u>
Demand Metered Subtransmission/Transmission GS-4		<del>0.48300<u>0.31000</u></del>

# Seasonal Periods

The winter period shall be the billing months of October through May and the summer period shall be the billing months of June through September.

Filed pursuant to Order dated May 2920, 201920 in Case No. 1920-1030-EL-RDR.

Issued: MayApril 3027, 201920 Effective: June 1, 201920

## P.U.C.O. NO. 20

## **GENERATION CAPACITY RIDER**

Effective June 1, 20<u>1920</u>, all customer bills subject to the provisions of this Rider, including any bills rendered under special contract, shall be adjusted by the Generation Capacity charge as follows:

## Ohio Power Rate Zone

Rate		¢/kWh or \$/Month
RS		1.066000.80500
RDMS	KWH > 400 times billing demand	1.224380.92460
	First 500 on-peak KWH All Over 500 on-peak	<del>1.52981</del> <u>1.15525</u>
	KWH	<del>1.13928</del> <u>0.86034</u>
	All additional KWH	0.346820.26190
RS-ES, RS-TOD	On Peak KWH Off-Peak KWH	2.207501.66701 0.608130.45924
GS-1, EHS, SS, GS-2 Recreational Lighting		0.885000.66800
GS-1 ES	On-Peak Hours Off-Peak Hours	<del>1.81027</del> <u>1.36639</u> <del>0.39518</del> <u>0.29828</u>
GS-TOD, GS-2-ES	On-Peak Hours Off-Peak Hours	1.45001 <u>1.09447</u> 0.49948 <u>0.37701</u>
Demand Metered Secondary GS-2 GS-3 EHG		0.842000.62900
Demand Metered Primary GS-2 GS-3 GS-4		0.852000.62000
Demand Metered Subtransmission/Transmission GS-2 GS-3 GS-4		0.483000.31000

Filed pursuant to Order dated May 2920, 201920 in Case No. 1920-1030-EL-RDR.

Issued: MayApril 3027, 201920 Effective: June 1, 201920

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**Commission of Ohio Docketing Information System on** 

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in

Case No(s). 20-0943-EL-RDR

Summary: Application -Ohio Power Company submits its Annual GENE and GENC update for the delivery period of June 2020 through May 2021 electronically filed by Mr. Steven T Nourse on behalf of Ohio Power Company