

May 1, 2017

Mrs. Barcy McNeal Commission Secretary The Public Utilities Commission of Ohio 180 East Broad Street Columbus, OH 43215

SUBJECT: Case No. 16-2168-EL-RDR

89-6008-EL-TRF

Dear Mrs. McNeal:

In response to and compliance with the Commission's Orders in Case No. 14-1297-EL-SSO (ESP IV) dated March 31, 2016 and May 25, 2016, please file the attached tariff pages on behalf of The Toledo Edison Company. These tariff pages reflect changes to Riders RTP, CPP and HLF and their associated pages and associated workpapers.

By filing these tariffs, The Toledo Edison Company is not relinquishing or otherwise diminishing its right to withdraw the ESP IV as permitted under R.C. 4928.143.

Please file one copy of the tariffs in Case No. 16-2168-EL-RDR and one copy in Case No. 89-6008-EL-TRF, and provide two copies to the Staff. Thank you.

Sincerely,

Santino L. Fanelli

Director, Rates & Regulatory Affairs

Santino L. Famelli

# Calculation of Summer Midday Peak Pricing Under Rider CPP\*

(A) (B) (C) (D) (E)

	Rate GS	TOD Option		Rider CPP	
	Rate GS	TOD Option	CPP Days	Other Days	Total
(1)	Days	65	10	55	65
(2)	Hours / Day	6	6	6	
(3)	Total Hours	390	60	330	390
(4)	Price (\$ / kWh)	\$0.082905	\$0.247833	\$0.052903	
(5)	Revenue	\$32.33	\$14.87	\$17.46	\$32.33

- (1) Estimated number of Midday Peak days in a summer. Column C assumes the maximum number of days with Critical Peak Pricing Hours in a given summer.
- (2) Number of Midday Peak hours each day
- (3) Calculation: Line 1 x Line 2
- (4) Column B Summer Midday Peak price for the GS Time-of-Day Option under Rider GEN. Column C Calculation: Line 5 / Line 3.
  - Column D Summer Shoulder Peak price for the GS Time-of-Day Option under Rider GEN.
- (5) Column B Calculation: Line 3 x Line 4
  - Column C Calculation: Column B Column D.
  - Column D Calculation: Line 3 x Line 4
  - Revenue calculations assume constant 1 kWh consumption during all hours.
  - \* The capacity pricing under Rider CPP is the same as Rider GEN, therefore the above workpaper only includes the energy charges of Rider CPP.
  - \*\* Customers taking service under the experimental critical peak pricing rider will pay the shoulder peak price from the Time of Day Option under Rider GEN during summer midday peak hours, excluding Critical Peak Pricing Hours in which case these customers will pay the Midday-Peak CPP charge.

# **Calculation of Fixed Charges Under Rider RTP**

## I. Calculation of Weighted Average Forecasted LMP

(A)	(B)	(C)	(D)	(E)	(F)
Р	rocurement	No. of	Delivery Period	Forecasted LN	ЛР (\$ / MWH)
No.	Date	Tranches	Delivery Feriod		
1	April 13, 2016	17	June 2016 - May 2018		
2	April 13, 2016	17	June 2016 - May 2019		
3	April 26, 2016	17	June 2016 - May 2018		
4	April 26, 2016	17	June 2016 - May 2019		
5	October 3, 2016	16	June 2017 - May 2018		
6	January 31, 2017	16	June 2017 - May 2018		
	•	100	•		

Weighted Average Forecasted LMP (\$ / MWH) *	\$31.06	\$31.28

# **NOTES**

- (A) (D) Procurement schedule for the Blended Competitive Bid Price for the delivery period June 2017-May 2018.
  - (E) Market forward round-the-clock summer LMPs observed at the time of the various solicitations for the delivery period June 2017 May 2018.
  - (F) Market forward round-the-clock winter LMPs observed at the time of the various solicitations for the delivery period June 2017 May 2018.
    - \* The Weighted Average Forecasted LMP for a given Delivery Period is equal to the average forecasted round-the-clock seasonal LMPs that were observed at the time of the various solicitations for the portion of the delivery period that the corresponding retail rate will be in effect, weighted by the number of tranches from each applicable procurement.

# **II. Calculation of Fixed Charges**

(G)	(H)	(1)	(J)	(K)	(L)	(M)
Rate	Forecasted LN	1P (\$ / kWh)	Rider GEN SSO (	incl capacity)	Rider RTP F	ixed Charge
Schedule	Summer	Winter	Summer	Winter	Summer	Winter
GS	\$0.031065	\$0.031282	\$0.061507	\$0.053178	\$0.030442	\$0.021896
GP	\$0.031065	\$0.031282	\$0.057925	\$0.049886	\$0.026860	\$0.018604
GSU	\$0.031065	\$0.031282	\$0.054439	\$0.046626	\$0.023374	\$0.015344
GT	\$0.031065	\$0.031282	\$0.052923	\$0.045117	\$0.021858	\$0.013835

- (H) (I) Weighted Average Forecasted LMP from Section I above.
- (J) (K) Seasonal Total Energy and Capacity Charges from Rider GEN (\$ / kWh)
  - (L) Calculation: Column J Column H (\$ / kWh)
  - (M) Calculation: Column K Column I (\$ / kWh)

# **Calculation of Fixed Charges Under Rider RTP**

## I. Calculation of Weighted Average Forecasted LMP

(A)	(B)	(C)	(D)	(E)	(F)
Р	rocurement	No. of	Delivery Period	Forecasted LI	MP (\$ / MWH)
No.	Date	Tranches	Delivery Feriod	Summer	Winter
1	April 13, 2016	17	June 2016 - May 2018		
2	April 13, 2016	17	June 2016 - May 2019		
3	April 26, 2016	17	June 2016 - May 2018		
4	April 26, 2016	17	June 2016 - May 2019		
5	October 3, 2016	16	June 2017 - May 2018		
6	January 31, 2017	16	June 2017 - May 2018		
	•	100	•		

Weighted Average Forecasted LMP (\$ / MWH) *	\$31.06	\$31.28

## NOTES

- (A) (D) Procurement schedule for the Blended Competitive Bid Price for the delivery period June 2017-May 2018.
  - (E) Market forward round-the-clock summer LMPs observed at the time of the various solicitations for the delivery period June 2017 May 2018.
  - (F) Market forward round-the-clock winter LMPs observed at the time of the various solicitations for the delivery period June 2017 May 2018.
    - \* The Weighted Average Forecasted LMP for a given Delivery Period is equal to the average forecasted round-the-clock seasonal LMPs that were observed at the time of the various solicitations for the portion of the delivery period that the corresponding retail rate will be in effect, weighted by the number of tranches from each applicable procurement.

# II. Calculation of Fixed Charges

(G)	(H)	(I)	(J)	(K)	(L)	(M)
Rate	Forecasted LN	/IP (\$ / kWh)	Rider GEN SS	O (incl capacity)	Rider RTP F	Fixed Charge
Schedule	Summer	Winter	Summer	Winter	Summer	Winter
GS	\$0.031065	\$0.031282	\$0.061156	\$0.052827	\$0.030091	\$0.021545
GP	\$0.031065	\$0.031282	\$0.055812	\$0.047773	\$0.024747	\$0.016491
GSU	\$0.031065	\$0.031282	\$0.054822	\$0.047009	\$0.023757	\$0.015727
GT	\$0.031065	\$0.031282	\$0.051838	\$0.044032	\$0.020773	\$0.012750

- (H) (I) Weighted Average Forecasted LMP from Section I above.
- (J) (K) Seasonal Total Energy and Capacity Charges from Rider GEN (\$ / kWh)
  - (L) Calculation: Column J Column H (\$ / kWh)
  - (M) Calculation: Column K Column I (\$ / kWh)

# Calculation of Fixed Charges Under Rider RTP

# I. Calculation of Weighted Average Forecasted LMP

(A)	(B)	(C)	(D)	(E)	(F)
F	Procurement	No. of	Delivery Period	Forecasted LI	MP (\$ / MWH)
No.	Date	Tranches	Delivery Feriod	Summer	Winter
1	April 13, 2016	17	June 2016 - May 2018		
2	April 13, 2016	17	June 2016 - May 2019		
3	April 26, 2016	17	June 2016 - May 2018		
4	April 26, 2016	17	June 2016 - May 2019		
5	October 3, 2016	16	June 2017 - May 2018		
6	January 31, 2017	16	June 2017 - May 2018		
	_	100			

Weighted Average Forecasted LMP (\$ / MWH) *	\$31.06	\$31.28

## **NOTES**

- (A) (D) Procurement schedule for the Blended Competitive Bid Price for the delivery period June 2017-May 2018.
  - (E) Market forward round-the-clock summer LMPs observed at the time of the various solicitations for the delivery period June 2017 May 2018.
  - (F) Market forward round-the-clock winter LMPs observed at the time of the various solicitations for the delivery period June 2017 May 2018.
    - \* The Weighted Average Forecasted LMP for a given Delivery Period is equal to the average forecasted round-the-clock seasonal LMPs that were observed at the time of the various solicitations for the portion of the delivery period that the corresponding retail rate will be in effect, weighted by the number of tranches from each applicable procurement.

# II. Calculation of Fixed Charges

(G)	(H)	(I)	(J)	(K)	(L)	(M)
Rate	Forecasted LIV	IP (\$ / kWh)	Rider GEN SS	O (incl capacity)	Rider RTP F	ixed Charge
Schedule	Summer	Winter	Summer	Winter	Summer	Winter
GS	\$0.031065	\$0.031282	\$0.061216	\$0.052887	\$0.030151	\$0.021605
GP	\$0.031065	\$0.031282	\$0.057552	\$0.049513	\$0.026487	\$0.018231
GSU	\$0.031065	\$0.031282	\$0.052220	\$0.044407	\$0.021155	\$0.013125
GT	\$0.031065	\$0.031282	\$0.052988	\$0.045182	\$0.021923	\$0.013900

- (H) (I) Weighted Average Forecasted LMP from Section I above.
- (J) (K) Seasonal Total Energy and Capacity Charges from Rider GEN (\$ / kWh)
  - (L) Calculation: Column J Column H (\$ / kWh)
  - (M) Calculation: Column K Column I (\$ / kWh)

# RATE CALCULATION FOR RIDER HLF (June 2017 - May 2018)

(1)	Capacity Charge C	Calculation			
(2) (3) (4)	Capacity (\$/MW-E	Day)		\$150.00	Source: Case No. 14-1297-EL-SSO  Based on wholesale sales <sup>1</sup> and PLC Contribution <sup>2</sup>
(5) (6)	Annual Capacity (	\$/MWH)	-	\$12.21	Calculation: Ln 3 x 365 / 8,760 / Ln 4
(7)	Summer Midday F	Peak Hours		390	Applicable hours for 2017/2018 delivery year
(8) (9)	Summer Midday F	Peak Capacity (\$,	/MWH)	\$140.38	Calculation: Ln 5 x 8,760 / Ln 7 x Ln 4
(10)	Rate Schedule	Loss Factor	Rate (\$/kWh)		
(11)	Rate GS	0.0628	\$0.150177	Calculation: Ln	8 / (1 - LF) / (1 - CAT) / 1,000; CAT = 0.26%
(12)	Rate GP	0.0291	\$0.144964	Calculation: Ln	8 / (1 - LF) / (1 - CAT) / 1,000; CAT = 0.26%

(13)	Energy Charge Ca	lculation		
(14)	Lifergy Charge Ca	<u>iculation</u>		
(15)	Auction Price (\$/N	MWH)	1	
(16)	Total	\$50.62	Source: Blend	ed CBP clearing p
(17)	Capacity	\$12.21	Source: Line 4	
(18)	Energy	\$38.41	Calculation: Lr	n 16 - Ln 17
(19)				
(20)	Rate Schedule	Loss Factor	Auction Costs	<b>Energy Charge</b>
	Rate Schedule	LOSS FACIOI	(\$/kWh) 4	(\$/kWh) *
(21)	Rate GS	0.0628	\$0.000094	\$0.041183
(22)	Rate GP	0.0291	\$0.000094	\$0.039757
	* Calculation: [(	Line 18) / (1 - Lo	ss Factor) / (1 - C	AT) / 1,000] + Au

23) <u>Total Rider HLF Charge (\$/kWh)</u> 24)					
5)	Rate Schedule	Summer Middav *	All Other Hours		
)	Rate GS	\$0.191360	\$0.041183	* Line 11 Rate (\$/kWh) + Line 21 Energy Charge (\$/kWh)	
27)	Rate GP	\$0.184721	\$0.039757	* Line 12 Rate (\$/kWh) + Line 22 Energy Charge (\$/kWh)	

# Note(s):

- 1 Source: 2017/18 Rider GEN Workpapers Case No. 17-0338-EL-RDR Pg 6 (Total OH Wholesale kWh Sales / 1,000) 2 Source: 2017/18 Rider GEN Workpapers Case No. 17-0338-EL-RDR Pg 4, Ln 13, ((Col D Col H) x Pg 4, Ln 1 Col K) 3 Source: 2017/18 Rider GEN Workpapers Case No. 17-0338-EL-RDR Pg 2, Ln 7 (Blended Competitive Bid Price)
- 4 Source: 2017/18 Rider GEN Workpapers Case No. 17-0338-EL-RDR Pg 8, Ln 11 (\$/kWh (grossed up for CAT))

# **TABLE OF CONTENTS**

The following rates, rules and regulations for electric service are applicable throughout the Company's service territory except as noted.

	<u>Sheet</u>	Effective <u>Date</u>
TABLE OF CONTENTS	1	06-01-17
DEFINITION OF TERRITORY	3	01-23-09
ELECTRIC SERVICE REGULATIONS	4	06-01-16
ELECTRIC SERVICE SCHEDULES		
Residential Service (Rate "RS")	10	01-23-09
General Service - Secondary (Rate "GS")	20	01-23-09
General Service - Primary (Rate "GP")	21	01-23-09
General Service - Subtransmission (Rate "GSU")	22	01-23-09
General Service - Transmission (Rate "GT")	23	01-23-09
Street Lighting Provisions	30	01-23-09
Street Lighting (Rate "STL")	31	06-01-09
Traffic Lighting (Rate "TRF")	32	01-23-09
Private Outdoor Lighting (Rate "POL")	33	06-01-09
Experimental Company Owned LED Lighting Program	34	06-01-16
MISCELLANEOUS CHARGES	75	07-05-12
OTHER SERVICE		
Partial Service	52	01-01-06
Residential Renewable Energy Credit Purchase Program	60	10-01-09
Cogeneration and Small Power Producer	70	01-01-03
Interconnection Tariff	76	05-06-16

Issued by: Steven E. Strah, President Effective: June 1, 2017

Effective: June 1, 2017

Toledo, Ohio P.U.C.O. No. 8 75th Revised Page 2 of 2

# **TABLE OF CONTENTS**

	_	Effective
<u>RIDERS</u>	<u>Sheet</u>	<u>Date</u>
Summary	80	01-01-17
Residential Distribution Credit	81	05-21-10
Transmission and Ancillary Services	83	09-10-10
Alternative Energy Resource	84	04-01-17
School Distribution Credit	85	06-01-09
Business Distribution Credit	86	01-23-09
Hospital Net Energy Metering	87	10-27-09
Economic Development (4a)	88	01-23-09
Universal Service	90	01-01-17
State kWh Tax	92	01-23-09
Net Energy Metering	93	10-27-09
Delta Revenue Recovery	96	04-01-17
Demand Side Management	97	01-01-16
Reasonable Arrangement	98	06-01-09
Distribution Uncollectible	99	04-01-17
Economic Load Response Program	101	06-01-16
Generation Cost Reconciliation	103	04-01-17
Fuel	105	12-14-09
Advanced Metering Infrastructure / Modern Grid	106	04-01-17
Line Extension Cost Recovery	107	01-01-15
Delivery Service Improvement	108	01-01-12
PIPP Uncollectible	109	04-01-17
Non-Distribution Uncollectible	110	04-01-17
Experimental Real Time Pricing	111	06-01-17
Experimental Critical Peak Pricing	113	06-01-17
Generation Service	114	06-01-17
Demand Side Management and Energy Efficiency	115	01-01-17
Economic Development	116	06-01-17
Deferred Generation Cost Recovery	117	06-01-09
Deferred Fuel Cost Recovery	118	06-21-13
Non-Market-Based Services	119	03-01-17
Residential Deferred Distribution Cost Recovery	120	01-01-12
Non-Residential Deferred Distribution Cost Recovery	121	01-01-12
Residential Electric Heating Recovery	122	01-01-17
Residential Generation Credit	123	10-31-16
Delivery Capital Recovery	124	03-01-17
Phase-In Recovery	125	01-01-17
Government Directives Recovery	126	06-01-16
Automated Meter Opt Out	128	01-01-15
Ohio Renewable Resources	129	06-01-16
Commercial High Load Factor Experimental TOU	130	06-01-17
Distribution Modernization	132	01-01-17

# RIDER RTP **Experimental Real Time Pricing Rider**

# RTP Energy Charge:

The RTP Energy Charge (RTPEC) is equal to the customers hourly energy usage applied to the hourly energy price quotes made publicly available by PJM, as defined in the LMPt definition below.

The RTPEC is calculated as follows:

$$RTPEC = \sum_{t=1}^{n} (kWh_t \times LMP_t)$$

Where:

kWht Customer's kilowatt-hour usage in hour t

An hour in the billing period t =

Total number of hours in the billing period n

the "Day-Ahead" Locational Marginal Price, or "LMP" in hour t as defined and  $LMP_t =$ 

specified by PJM at the appropriate pricing node, as this node may be changed or superseded from time to time by PJM. In the event there is an error in the LMP reported by PJM, the Company shall apply such prices as corrected by PJM in

monthly billings.

The Company shall not be responsible for failure of the customer to receive and act upon market based quotes. The customer is responsible for its access to the Internet for access to PJM pricing.

## RTP Fixed Charges:

The following RTP Fixed Charges will apply, by rate schedule, for all kWhs per kWh:

	<u>Summer</u>	<u>Winter</u>
GS	3.0151¢	2.1605¢
GP	2.6487¢	1.8231¢
GSU	2.1155¢	1.3125¢
GT	2.1923¢	1.3900¢

For billing purposes, the winter rates shall be applicable during each winter billing period as defined in the Electric Service Regulations. The summer rates shall apply in all other billing periods.

The Public Utilities Commission of Ohio

Sheet 111

# RIDER CPP Experimental Critical Peak Pricing Rider

## **AVAILABILITY:**

This Rider is not available to customers during the period the customer takes electric generation service from a certified supplier. This Rider is not available to customers during the period the customer is taking service under Rider ELR, Rider HLF, or Rider RTP.

The Experimental Critical Peak Pricing Rider (CPP) shall be applied in lieu of the Generation Service Rider (GEN) to customers participating in this voluntary experimental program.

The CPP Charge shall reflect time-of-day pricing, for all kWh per kWh, for both Summer and Winter seasons, as shown below:

# RATE:

In addition to any other charges under all other rate schedules applicable to customer's service, exclusive of Rider GEN, customers taking service under this Rider shall also pay the charges set forth below:

## **Charges:**

Program Administrative Charge:

\$37.50 per month

Effective: June 1, 2017

8th Revised Page 1 of 2

Capacity Charges		Summer			Winter	
	Midday <u>Peak</u>	Shoulder <u>Peak</u>	Off-Peak	Midday <u>Peak</u>	Shoulder <u>Peak</u>	Off-Peak
GS	1.4116¢	1.4116¢	1.4116¢	1.4116¢	1.4116¢	1.4116¢
GP	1.2084¢	1.2084¢	1.2084¢	1.2084¢	1.2084¢	1.2084¢
GSU	0.8028¢	0.8028¢	0.8028¢	0.8028¢	0.8028¢	0.8028¢
GT	0.8840¢	0.8840¢	0.8840¢	0.8840¢	0.8840¢	0.8840¢
Energy Charges		Summer			Winter	
	Midday <u>Peak</u>	Shoulder <u>Peak</u>	Off-Peak	Midday <u>Peak</u>	Shoulder <u>Peak</u>	Off-Peak
GS	5.2903¢	5.2903¢	3.1557¢	4.5568¢	5.2097¢	2.9361¢
GP	5.1070¢	5.1070¢	3.0464¢	4.3990¢	5.0293¢	2.8345¢
GSU	4.9636¢	4.9636¢	2.9609¢	4.2756¢	4.8882¢	2.7550¢
GT	4.9587¢	4.9587¢	2.9579¢	4.2713¢	4.8833¢	2.7522¢

Midday-peak time shall be noon to 6 p.m. EST, Monday through Friday, excluding holidays.

Shoulder-peak time shall be 6 a.m. to noon and 6 p.m. to 10 p.m. EST, Monday through Friday, excluding holidays.

Holidays are defined as New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. Off-Peak shall be all other hours.

Effective: June 1, 2017

# RIDER CPP Experimental Critical Peak Pricing Rider

For billing purposes, the winter rates shall be applicable during each winter billing period as defined in the Electric Service Regulations.. The summer rates shall apply in all other billing periods.

\* With day-ahead notification by the Company, the applicable Midday-Peak CPP Charge shall change to 24.7833¢ per kWh for up to 10 days for a period of 6 hours each day, noon to 6 p.m. EST, during the summer as determined by the Company ("Critical Peak Pricing Hours").

## **METERING:**

Toledo, Ohio

The customer must arrange for interval metering consistent with the Company's Miscellaneous Charges, Tariff Sheet 75.

## **NOTIFICATION:**

Customers served under this Rider shall be provided notification of Critical Peak Pricing Hours by the Company. Customers shall be provided clock times of the beginning and ending of Critical Peak Pricing Hours. Receipt of notifications of Critical Peak Pricing Hours shall be the sole responsibility of the customer.

Notification of Critical Peak Pricing Hours consists of an electronic message issued by the Company to a device or devices such as telephone, facsimile, pager or email, selected and provided by the customer and approved by the Company. Two-way information capability shall be incorporated by the Company and the customer in order to provide confirmation of receipt of notification messages. Operation, maintenance and functionality of such communication devices selected by the customer shall be the sole responsibility of the customer.

## TERM:

This Rider shall expire with service rendered through May 31, 2024.

A customer may terminate its participation in this Rider, effective with the next scheduled meter reading following at least 12 days notice to the Company by the customer. Customers who withdraw from participation in this Rider may not return to this Rider at any time.

# RIDER HLF Commercial High Load Factor Experimental Time-of-Use Rider

### **AVAILABILITY:**

Available to qualifying commercial customers with headquarters located in Ohio having at least 30 facilities in the Companies' combined service territory with each facility consuming at least 1,500,000 kWh annually and having refrigeration as a major portion of the load. In addition, each individual facility must have interval metering, must have an average monthly load factor during the preceding 12 months of 70% or higher, and must otherwise be served under the Companies' Rate GS or Rate GP rate schedules. Once a facility qualifies for the Commercial High Load Factor Experimental Time-of-Use Rider (HLF) and is enrolled in Rider HLF, that facility may remain on Rider HLF notwithstanding any subsequent change in the load characteristics of the facility or reduction in energy consumption by the facility.

Rider HLF shall be applied in lieu of the Generation Service Rider (GEN), effective for service rendered beginning June 1, 2017, for customers participating in this voluntary experimental program.

## RATE:

For customers with the appropriate qualifying interval metering and who elect to be served under Rider HLF, the charge by rate schedule will be as shown below, for all kWhs, per kWh:

Rider	HLF	Charges
-------	-----	---------

	Summer Midday <u>Peak Hours</u>	All Other <u>Hours</u>
Rate GS	19.1360¢	4.1183¢
Rate GP	18.4721¢	3.9757¢

For billing purposes, the summer rates shall be applicable during each summer billing period as defined in the Electric Service Regulations.

Midday-peak time shall be noon to 6 p.m. EST, Monday through Friday, excluding holidays.

Holidays are defined as New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day.

### **METERING:**

The customer must arrange for interval metering consistent with the Company's Miscellaneous Charges, Tariff Sheet 75.

## TERM:

This Rider shall expire with service rendered through May 31, 2024.

Effective: June 1, 2017

This foregoing document was electronically filed with the Public Utilities

**Commission of Ohio Docketing Information System on** 

5/1/2017 1:17:53 PM

in

Case No(s). 16-2168-EL-RDR, 89-6008-EL-TRF

Summary: Tariff Update of Riders RTP, CPP and HLF for PUCO #08 electronically filed by Ms. Tamera J Singleton on behalf of The Toledo Edison Company and Fanelli, Santino L. Mr.