Case	No16-2213-EL-CSS	-
PUCC	D Case Caption: <u>IMO</u>	
· .	PCC Airfoils, LLC vs	
	The Cleveland Electric	
	Elluminating Company	2017
		HAY !!
		9 PH
List	of exhibits being filed:	يې ( ۲
Jo	int Exhibit	<u> </u>
1	CEI Schedule of Rates for Electric Service	32
Cor	mpany Exhibit	are Stree
1	Direct Testimony of	o cruo suru
2	Direct Testimony of Dean E. Philips, PE	- - - -
Cor	mplainant's Exhibit	00 II T
1	Direct Testimony of Mike Spacek	at the
<del></del>		- - - - - - - - - - - - - - - - - - -
		• <sup>0</sup> 0

•••

Proceedings

1

BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIC	)
In the Matter of: :	
PCC Airfoils, LLC, :	
Complainant, :	
: vs. : Case No. 16-2213-EL-CS	S
The Cleveland Electric : Illuminating Company, :	
Respondent. :	
- <b>-</b> -	
PROCEEDINGS	
before Megan Addison and Patricia Schabo, Hearing	
Examiners, at the Public Utilities Commission of	
Ohio, 180 East Broad Street, Room 11-D, Columbus,	
Ohio, called at 10:00 a.m. on Friday, May 12, 2017	

....

ARMSTRONG & OKEY, INC. 222 East Town Street, Second Floor Columbus, Ohio 43215-5201 (614) 224-9481 - (800) 223-9481

- - -



# SCHEDULE OF RATES FOR ELECTRIC SERVICE



Filed pursuant to Order dated May 27, 2009, in Case No. 08-935-EL-SSO et al., before The Public Utilities Commission of Ohio

#### 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	<b>0</b> 4-01-17
DEFINITION OF TERRITORY	3	05-01-09
ELECTRIC SERVICE REGULATIONS	4	06-01-16
ELECTRIC SERVICE SCHEDULES		
Residential Service (Rate "RS")	10	05-01-09
General Service - Secondary (Rate "GS")	20	05-01-09
General Service - Primary (Rate "GP")	21	05-01-09
General Service - Subtransmission (Rate "GSU")	22	05-01-09
General Service - Transmission (Rate "GT")	23	05-01-09
Street Lighting Provisions	30	05-01-09
Street Lighting (Rate "STL")	31	05-01-09
Traffic Lighting (Rate "TRF")	32	05-01 <b>-</b> 09
Private Outdoor Lighting (Rate "POL")	33	0 <del>6-</del> 01-09
Experimental Company Owned LED Lighting Program	34	06 <b>-</b> 01-16
MISCELLANEOUS CHARGES	75	07 <b>-</b> 05-12
OTHER SERVICE		
Partial Service	46	01-01-06
Cogenerators and Small Power Production Facilities	48	01-01-03
Residential Renewable Energy Credit Purchase Program	60	10-01-09
Interconnection Tariff	95	05-06-16

Filed pursuant to Orders dated May 27, 2009, June 30, 2010, July 18, 2012 and March 31, 2016, in Case Nos. 08-935-EL-SSO et al., 09-1820-EL-ATA, 12-1230-EL-SSO and 14-1297-EL-SSO, respectively and Case Nos. 16-2143-EL-RDR, 16-2165-EL-RDR, 16-2166-EL-RDR, and 16-2168-EL-RDR, before The Public Utilities Commission of Ohio

.

. .

**-** .

\_ \_. . \_ .. .

-----

#### TABLE OF CONTENTS

RIDERS	Sheet	Effective Date
Summary	80	01-01-17
Residential Distribution Credit	81	05-21-10
Transmission and Ancillary Service Rider	83	09-22-10
Alternative Energy Resource	84	04-01-17
School Distribution Credit	85	06-01-09
Business Distribution Credit	86	05-01-09
Hospital Net Energy Metering	87	10-27-09
Peak Time Rebate Program	88	06-01-14
Residential Critical Peak Pricing	89	06-01-16
Universal Service	90	01-01-17
State kWh Tax	92	05-01-09
Net Energy Metering	93	10-27-09
Grandfathered Contract	94	06-01-09
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	06-01-09
Advanced Metering Infrastructure / Modern Grid	106	04-01-17
Line Extension Cost Recovery	107	01 <b>-</b> 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	06-01-16
CEI Delta Revenue Recovery	112	08-06-11
Experimental Critical Peak Pricing	113	06-01-16
Generation Service	114	06-01-16
Demand Side Management and Energy Efficiency	115	01-01-17
Economic Development	116	04-01-17
Deferred Generation Cost Recovery	117	06-21-13
Deferred Fuel Cost Recovery	118	06-21-13
Non-Market-Based Services	119	03-01-17
Residential Deferred Distribution Cost Recovery	120	12-30-11
Non-Residential Deferred Distribution Cost Recovery	121	12-26-11
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

Filed pursuant to Orders dated May 27, 2009, June 30, 2010, July 18, 2012 and March 31, 2016, in Case Nos. 08-935-EL-SSO et al., 09-1820-EL-ATA, 12-1230-EL-SSO and 14-1297-EL-SSO, respectively and Case Nos. 16-2143-EL-RDR, 16-2165-EL-RDR, 16-2166-EL-RDR, and 16-2168-EL-RDR, before The Public Utilities Commission of Ohio

.

-----

.

•• ••

**....** 

# P.U.C.O. No. 13

....

# TABLE OF CONTENTS

RIDERS	<u>Sheet</u>	Effective <u>Date</u>
Commercial High Load Factor Experimental TOU	130	06-01-16
Distribution Modernization	132	01-01-17

Filed pursuant to Order dated December 21, 2016 in Case No. 14-1297-EL-SSO before The Public Utilities Commission of Ohio

**\_..** .. .

. ....

Original Sheet 3 Page 1 of 1

# **DEFINITION OF TERRITORY**

#### **COMPANY'S TERRITORY:**

The term "Company's Territory" shall be deemed to mean and include the territory served by the Company's distribution system in Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, Summit and Trumbull Counties.

Further information concerning specific cities and townships can be found at the PUCO website: <u>http://www.puc.state.oh.us/pucogis/newcntymaps/elcnty.html</u>

1.

# ELECTRIC SERVICE REGULATIONS

# TABLE OF CONTENTS

#### PAGE

	<u>ITEM</u> <u>P</u>	
I.	GENERAL PROVISIONS	2
0.	APPLICATIONS AND CONTRACTS	2
HI.	CREDITWORTHINESS AND DEPOSITS	3
IV.		3
<b>V</b> .	RATE SCHEDULE ALTERNATIVES	4
VI.	BILLING AND PAYMENT	4
VII.	SERVICE CONNECTIONS AND LINE EXTENSIONS	6
VIII.	USE OF SERVICE	9
IX.	METERS, TRANSFORMERS AND SPECIAL FACILITIES	.11
Χ.	CUSTOMER'S WIRING, EQUIPMENT AND SPECIAL SERVICES	.12
XI.	COLLECTION OF PAST DUE BILLS AND DISCONNECTION OF SERVICE	.13
XII.	CERTIFIED SUPPLIERS - CHANGE OF SUPPLIER	.14
XIII.	RETURN TO STANDARD SERVICE OFFER SUPPLY	.14
XIV.	CERTIFIED SUPPLIERS - BILLING AND PAYMENT	.15
XV.	CERTIFIED SUPPLIERS - CUSTOMER AGGREGATION	.16
XVI.	EMERGENCY ELECTRICAL PROCEDURES	.17

P.U.C.O. No. 13

# ELECTRIC SERVICE REGULATIONS

# I. GENERAL PROVISIONS

- A. Filing: The Schedule of Rates and the Electric Service Regulations for the supply of electric service throughout the territory served by the Company are filed with The Public Utilities Commission of Ohio ("PUCO" or "Commission").
- **B. Revisions:** The Company's Schedule of Rates and the Electric Service Regulations as herein contained may be terminated, amended, supplemented or otherwise changed from time to time in accordance with law and the rules promulgated thereunder by The Public Utilities Commission of Ohio.
- C. Applicability: These Electric Service Regulations, together with the provisions of the applicable rate schedule, are a part of every service contract entered into by the Company.

# II. APPLICATIONS AND CONTRACTS

- A. Service Application: For each class of service requested by an individual or an entity, before such service is supplied by the Company, the individual or entity must apply for service following the process required by the Company or enter into another form of contract between the Company and the individual or entity. Service will not be supplied by the Company until the Company accepts the application or supplies service according to the provisions of the application. This requirement generally applies to, but is not limited to, new installations, installations where service is to be re-established, a change in the class of service to be provided to the customer, or to a change in the identity of the customer to be served.
- B. Acceptance Of Application: When the application for service is accepted by the Company or service is supplied according to the provisions of the application, the application constitutes a service contract between the Company and the customer for the supply of electric service subject to these Electric Service Regulations. Additional contracts may be required by tariff, which shall be incorporated in the service contract. Upon acceptance of the application or contract, the individual or entity is now a customer.
- C. Service Contract: The service contract shall constitute the entire agreement between the customer and the Company and no promise, agreement, or representation of any agent, representative or employee of the Company shall be binding upon it unless the same shall be incorporated in the service contract.
- D. Refusal Of Application: The Company may refuse to provide electric service, consistent with Ohio law, including without limitation, for those reasons specified in Chapters 4901:1-10 and 4901:1-18 of the Ohio Administrative Code. Specifically among these reasons, the Company may refuse to furnish electricity to a customer's premises on account of arrearages due it for electricity furnished to persons or entities formerly receiving services at the same premises as customers of the Company, provided the former customers are continuing to reside or do business at such premises.
- E. Same Day Connection: If the customer requests service for the same day on which the request has been made and the service is presently not connected, the Company will charge the customer pursuant to the Company's Tariff Sheet 75, Miscellaneous Charges, Same Day Connection Charge. This fee may be charged at the time of the request or charged with the customer's next monthly billing, at the Company's discretion, and only if the Company provides the service on the date requested. (The Same Day Connection Charge does not apply to requests for reconnection after nonpayment which are governed by Electric Service Regulations, Sheet 4, Section XI, Paragraph D).

Filed pursuant to Orders dated January 21, 2009 and March 31, 2016, in Case Nos.07-551-EL-AIR and

14-1297-EL-SSO, before

# ELECTRIC SERVICE REGULATIONS

- F. Seasonal Or Temporary Discontinuance Of Service: When service has been disconnected at the customer's request because of seasonal occupancy of the premises or when the same customer has moved in and out of the same premise within a 12 month period without another party signing for service during that 12 month period, the Company will charge the customer pursuant to the Company's Tariff Sheet 75, Miscellaneous Charges, Reconnection Charge, to reconnect the service.
- **G.** Large Capacity Arrangements: Existing customers who seek to substantially (by at least 1,000 kW) increase or decrease (including the effects of the addition of onsite generation) their existing capacity requirements and new customers who seek to purchase substantial capacity (at least 1,000 kW) from the Company shall negotiate agreements with the Company containing equitable arrangements both as to the term of the contract and other terms and conditions requiring special consideration, in recognition that serving such increases in capacity may require changes in area facilities or rearrangement of facilities owned by the Company and/or the customer. These arrangements may be subject to the approval of The Public Utilities Commission of Ohio.

# III. CREDITWORTHINESS AND DEPOSITS

- **A. Establishment Of Creditworthiness:** Applicants are required to establish creditworthiness, which may include providing a cash deposit, as a condition to furnishing or continuing to furnish service.
- **B. Deposits:** For those applicants making a cash deposit to establish creditworthiness, interest will be paid on the deposit as prescribed by Chapter 4901:1-17 of the Ohio Administrative Code. Deposits plus accrued interest will be returned to the customer in accordance with the provisions of the Ohio Administrative Code.

# IV. CHARACTERISTICS OF SERVICE

- A. Type: Except as otherwise provided in the Company tariffs, electric service supplied by the Company will be 60-Hz alternating current delivered at the standard voltages available adjacent to the premises where the customer is located.
- B. Continuity: The Company will endeavor, but does not guarantee, to furnish a continuous supply of electric energy and to maintain voltage and frequency within reasonable limits. The Company shall not be liable for damages which the customer may sustain due to variations in service characteristics or phase reversals. If supply voltage is unsatisfactory for particular customer applications or for special apparatus requiring close regulation, then the customer shall install regulative apparatus at the customer's own expense.

The standard secondary voltages are 120/240 volt three wire single phase, 208Y/120 volt four wire three phase and 480Y/277 volt four wire three phase. The Company designs its system so that under normal operating conditions the sustained service voltage is within a range of plus or minus 5% of the normal voltage level for that service. Whenever voltages shall be known to exist outside of such ranges, the Company will take steps to promptly initiate corrective action to restore the sustained voltage level within said ranges.

For primary, subtransmission and transmission voltage services, the Company provides standard voltages that are available from existing facilities. The Company designs its system so that under normal operating conditions the sustained service voltage is within a range of plus or minus 10% of the normal voltage level for that service.

The Public Utilities Commission of Ohio

- C. Delivery Voltage: Subject to the provisions of paragraph IV.B above, and after the Company determines that facilities of adequate capacity are available and adjacent to the premises to be served, the types of service available with the nominal voltages are:
  - 1. Secondary Service Less than or equal to 600 volts
  - 2. Subtransmission Service 11,000 volts three wire and 36,000 volts three wire
  - 3. Transmission Service Greater than or equal to 69,000 volts
  - 4. Primary Service All other available voltages

Delivery voltage will be specified by the Company and will be based upon the availability of lines in the vicinity of the customer's premises and commensurate with the size of the customer's load. Customers with demands in excess of twenty-five hundred (2,500) kW will generally be served at Transmission Service

#### V. **RATE SCHEDULE ALTERNATIVES**

- Α. Selecting Rate Schedule: Where two or more alternative rate schedules are applicable to the same class of service, the Company, upon request, will assist a customer in selecting an appropriate rate schedule to be applied. The customer, however, shall select from the alternative rate schedules and such selection shall be the basis for the application or contract for service. No refund will be made representing the difference in charges under different rate schedules applicable to the same class of service except as required by law.
- В. Changing Rate Schedule: Subject to limitations in the service contract or applicable rate schedule, the customer may change to an alternative applicable rate schedule, except that a customer contracting for a specified capacity served at available primary or transmission voltage shall not be eligible to recontract for service at secondary voltage, unless a secondary voltage circuit of adequate capacity is available adjacent to the premises and the customer complies with all of the provisions of the applicable secondary rate schedule.

#### BILLING AND PAYMENT VI.

- Billing Periods: Bills for electric service will be rendered monthly or at the Company's option at Α. other regular intervals. Bills rendered monthly shall typically cover a period of approximately 30 days.
- В. Due Dates: For residential customers, bills are due and payable to the Company on or before fourteen (14) days from the date the bill is mailed to said customer. Governmental customers' bills are due and payable to the Company on or before thirty (30) days from the date the bill is mailed to said customer. All other customers' bills are due and payable to the Company on or before twentyone (21) days from the date the bill is mailed to said customer. When the due date for payment falls on Saturday, Sunday or a holiday the due date for payment is extended to the next business day. Remittances mailed by the customer for the amount(s) due shall be accepted by the Company as tendered within the period to avoid late payment charges if such payment is received by the Company no more than five (5) days after the due date of the bill.

- **C.** Late Payment Charges: If remittances are received by the Company offices more than five (5) days after the due date of the bill, an additional amount equal to 1.5% may be charged on any unpaid balance existing after the due date. This provision is not applicable to unpaid account balances of customers enrolled on income payment plans pursuant to 4901:1-18 of the Ohio Administrative Code.
- D. Transfer Of Final Bill: If the customer fails to pay in full any final bill for service rendered by the Company at one location, and if the customer is receiving Like Service at a second Company location, the Company may transfer such unpaid balance of the final bill to the service account for such second location. "Like Service" refers to an end use within the broad categories of residential, commercial or industrial service, without regard to whether the customer is receiving generation service from the Company. Such transferred amount shall maintain its original due date at such second location and be subject to collection and disconnection action in accordance with Ohio law, which includes without limitation Chapter 4901:1-18 of the Ohio Administrative Code.
- E. Meter Readings Not To Be Combined: Even if used by the same person, firm or corporation, electricity delivered and metered separately or at different locations will not be combined for bill calculation purposes, except that under the following conditions meter registrations of two or more installations on the same premises may be combined for billing purposes:
  - 1. Where the applicable schedule of rates specifically authorizes the combination of meter registrations, or
  - 2. Where the Company elects, for administrative reasons or engineering reasons affecting the supply of its service, to install or maintain at one or more locations on one premises two or more service connections with separate metering equipment for furnishing service at the same or different voltage levels or number of phases.
- F. Equal Payment Plan: The Company has available for residential customers a plan providing for equal monthly payments for electric service. The equal payment plan amount will be reviewed quarterly and will be adjusted if the customer's recent bills indicate a significant change from past history.
- **G. Estimated Bills:** The Company attempts to read meters on a regular basis but there are occasions when it is impractical or impossible to do so. In such instances the Company will render an estimated bill based upon past use of service. Where the customer has a load meter and the actual load reading when obtained is less than the estimated load used in billing, the account will be recalculated using the actual load reading.
- H. Returned Payment: When the Company reverses the customer's payment because the payment transaction has been dishonored, the Company shall charge the customer pursuant to the Company's Tariff Sheet 75, Miscellaneous Charges, Returned Payment Charge. This charge shall be rendered with the customer's next monthly billing.
- I. Rate Pricing Changes:
  - 1. Seasonal Price Changes: For billing purposes, unless otherwise specified the winter rates shall be applicable beginning with service rendered September 1 through service rendered for May 31. The summer rates unless otherwise specified shall apply in all other billing periods.
  - 2. Non-Seasonal Price Changes: For billing purposes, non-seasonal price changes will begin with service rendered on the effective date of the price change.

Filed pursuant to Orders dated January 21, 2009 and March 31, 2016, in Case Nos. 07-551-EL-AIR and

14-1297-EL-SSO, before

#### ELECTRIC SERVICE REGULATIONS VII. SERVICE CONNECTIONS AND LINE EXTENSIONS

# A. Secondary Voltage Service Connection

- 1. Overhead Connection: Where overhead distribution facilities are available, the Company will install a suitable overhead service drop to a point of attachment on the customer's premises as designated by the Company.
- 2. Underground General Service Network Connection: Where underground distribution facilities are available in commercial areas where network service is available, the Company will install underground service connections from its mains to a point, as designated by the Company, located immediately inside the customer's building wall except where, because of the distance between the customer's building and the Company's mains, an equitable arrangement for prorating the cost of installing these facilities may be required. Where underground service cable and conduit are required within the building to reach a customer's service terminals, the customer will be required to pay the cost of these facilities. Such underground service connection facilities paid for by the customer shall be owned by the customer and maintained at the customer's expense and, when required, replaced by the customer.

Customers requiring underground service from overhead or underground distribution facilities shall at their own expense install and maintain the underground facilities in accordance with the Company's specifications from the meter location on the customer's premises to the Company's distribution wires to which connections are to be made by the Company. The customer shall own such underground facilities and maintain and replace such facilities when required.

- 3. Change In Service Connection Facilities: Should any change in the Company's service connection facilities be necessary due to the erection of, remodeling of or change in any structure on the premises of the customer, or the condition of the customer's premises, or due to any ordinance, governmental action, or any other cause beyond the Company's control, the entire cost of the change in the service connection facilities shall be borne by the customer.
- 4. Temporary Service Drop Connection: When requested by a customer, the Company may provide a Temporary Service Drop Connection. A Temporary Service Drop Connection shall mean the installation of single-phase service up to 200 amps from existing secondary conductors. The charge for a Temporary Service Drop Connection shall be that set forth in the Company's Tariff Sheet 75, Miscellaneous Charges, Temporary Service Drop Connection.
- 5. Temporary Facilities: Temporary Facilities are any separate installations that the Company does not expect to be permanent or where a substantial risk exists that the Company's facilities will be used and useful for a period substantially shorter than their normal expected life, or in which the customer or consumer has no substantial permanent investment. When Temporary Facilities are required for any purpose, the applicant shall deposit with the Company the total estimated cost of construction, plus the total estimated cost of removal, minus the estimated salvage value of all equipment and materials. The amount of the deposit shall be adjusted by a refund or an additional payment when the cost of construction and removal, less the salvage value is determined. No interest will be paid on deposits covering the cost of constructing facilities for temporary electric service. (Temporary Facilities shall not include Temporary Service Drop Connections as defined in paragraph 4 above.)

The Public Utilities Commission of Ohio

# B. Line Extensions

#### 1. Definitions:

<u>Contribution in aid of construction -</u> any amount of money or property contributed to the Company to the extent that the purpose of the contribution is to provide for Line Extensions for new or expanded customer loads.

<u>Cost estimate</u> - the detailed projected expenditure, including material costs and overhead, equipment costs and overhead, labor costs and overhead, and all taxes associated with each major material and service component, required for a Line Extension.

<u>General service installation</u> - any Line Extension request by a commercial or industrial customer, builder, or developer, or any other Line Extension that is not a Residential installation. Customers in a development may be required to have their own General service installation in order to be connected to the Company's distribution system.

<u>Line Extension</u> - the provision of facilities (including, but not limited to, poles, fixtures, wires and appurtenances) necessary for delivering electrical energy from the point where a Line Extension connects with and receives energy from any existing transmission or distribution equipment (the nearest practical point to the customer(s) to be served by the Line Extension at which the appropriate voltage level is available) to one of a customer's points of delivery.

<u>Multi-family installation</u> - any Line Extension to a new residential dwelling that will have two or more dwelling units, where each unit has a separate account for electric service with the Company.

<u>Non-standard multi-family installation</u> - any Line Extension to a new residential dwelling that will have two or more dwelling units, where each unit has a separate account for electric service with the Company where the Company's cost to build the Line Extension is greater than \$2,500, excluding any Premium installation cost.

<u>Non-standard single family installation</u> - any Line Extension to a new home (or home site) with one account for electric service with the Company where the Company's cost to build the Line Extension is greater than \$5,000, excluding any Premium installation cost.

<u>Premium installation</u> - any Line Extension that is in excess of the standard construction and requirements necessary to provide electric service to the customer, including, but not limited to, customer-requested oversizing of facilities, underground construction, Residential Installations exceeding 200 amps and three phase Residential installations.

<u>Premium installation cost</u> - the sum of the Company's cost to provide Premium installation minus the sum of the Company's cost of the standard construction and requirements necessary to provide electric service to the customer.

<u>Residential installation</u> - a Standard single family installation, a Non-standard single family installation, a Standard multi-family installation, or a Non-standard multi-family installation for a single phase Line Extension.

<u>Standard multi-family installation</u> - any Line Extension to a new residential dwelling that will have two or more dwelling units, where each unit has a separate account for electric service with the Company where the Company's cost to build the Line Extension is less than or equal to \$2,500 excluding any Premium installation cost.

<u>Standard single family installation</u> - any Line Extension to a new home (or home site) with one account for electric service with the Company where the Company's cost to build the Line Extension is less than or equal to \$5,000, excluding any Premium installation cost.

#### 2. Terms And Conditions:

#### **Residential installations:**

a. Non-standard single family installation:

The customer shall make arrangements with the Company for the payment to the Company of the Company's cost to build the Non-standard single family installation that exceeds \$5,000, excluding any Premium installation cost. The individual homeowner (non-developer) has the option of paying such costs, plus carrying costs based on the rate of return approved in the Company's then most recent distribution rate case, on a prorated monthly basis for up to fifty months.

b. Non-standard multi-family installation:

The customer shall make arrangements with the Company for the payment to the Company of the Company's cost to build the Non-standard multi-family installation that exceeds \$2,500, excluding any Premium installation cost.

#### General service installations:

A customer requesting a General service installation shall make an up-front payment to the Company equal to 40% of the Company's estimated cost for construction of the Line Extension, plus any and all Premium installation cost.

#### Premium installation:

For any Premium installation the customer shall make an up-front payment to the Company equal to the estimated Premium installation cost for the project. If a project is cancelled after the customer has made the up-front payment for the Premium installation costs, any costs incurred by the Company up to and including the date of cancellation, including without limitation material, labor, design, overheads, taxes, and restocking of materials returned to stock shall be deducted from the premium payment amount, and any remaining funds returned to the customer.

#### Future customers:

A customer may be entitled to a refund of a portion of the amounts such customer paid for a Line Extension, other than for Premium Installation. Any amounts refunded shall be paid in accordance with the following:

If a new customer ("Customer 2"), utilizes, within fifty months of the completion of a Line Extension project, all or part of the Line Extension facilities for which contribution in aid of construction ("CIAC") has been paid by a previous customer (the "Original customer"), then the Original customer who paid the CIAC may be entitled to a refund which represents a pro rata portion of the original CIAC, calculated to equitably share the CIAC responsibility for the Line Extension facilities used in service by both Customer 2 and the Original customer. If any new additional customer ("Customer 3"), utilizes, within fifty months of the completion of the Line Extension project, all or part of the Line Extension facilities for which CIAC has been paid by

14-1297-EL-SSO, before

The Public Utilities Commission of Ohio

the Original customer and Customer 2, then Customer 2 who paid an equitable portion of the CIAC may also be entitled to a refund.

- 3. Line Extensions On Private Property: Customers that require Line Extensions to be constructed on their private property shall, in all cases, provide, without cost to the Company, land clearance, trenching and backfilling (including excavation for and installation of vaults), and an easement for right-of-way in a form acceptable to the Company before the Company's construction is started. The expectation that property will be dedicated to the public use at the conclusion of construction shall not preclude such property from being deemed the customer's private property for purposes of this subsection 3. All Line Extensions shall be the property of and shall be operated and maintained by the Company. The Company shall have the right to use such Line Extension in furnishing service to any applicant located adjacent to such Line Extension and the further right to construct other extensions from the distribution facilities so constructed. Except as provided herein, no customer or third party installation of Line Extension facilities will be permitted on private property or public right-of-way.
- 4. Relocation For Residential, Commercial Or Industrial Customer: A change in location of an overhead or underground service for the customer's convenience shall be made at the customer's expense.
- 5. Relocation For Highway, Street Or Public Works Project: A change in location of an overhead or underground service to provide space necessary for highway, street, or public works projects shall be made in accordance with the contractual agreement with the government entity involved.

#### 6. Other Items:

- a. The Company shall not be required to begin construction on any Line Extension until all required applications have been made by the customer, developer, or builder, as applicable.
- b. The Company shall not be required to install Line Extensions using rear lot line construction. The Company may elect, however, to use rear lot line construction at no additional cost to the customer.
- c. Line Extension cost estimates should not include costs normally incurred by the utility to maintain, protect, or upgrade its distribution system. Nor should system improvements required for the general distribution system that serves multiple customers, which are driven by the customer's load addition, be factored into the Line Extension calculations.

# VIII. USE OF SERVICE

- A. Increased Loads: The customer shall notify the Company of any significant additions or modifications to the customer's facilities that will affect the customer's load characteristics so that the Company may provide facilities sufficient to maintain adequate service.
- **B.** Individual Customer Metering: Service will be supplied under the appropriate rate schedule, to each separate dwelling (single or part of a multiple unit), apartment, farm, commercial or industrial establishment as one customer through one meter or one unified set of meters for each rate schedule.

# ELECTRIC SERVICE REGULATIONS

#### C. Resale:

- 1. Electric service is provided for the sole use of the customer, who shall not sell any of such service to any other person, or permit any other person to use the same, without the written consent of the Company.
- 2. The above provision does not apply to service provided to a landlord for resale or redistribution to tenants where such resale or redistribution takes place only upon property owned by the landlord and where the landlord is not otherwise operating as a public utility.
- D. Parallel Operation: The Company shall provide service in parallel with a customer's generating facilities if the customer has adequate protective and regulating equipment and has sufficient trained personnel to perform the necessary operations, and further, at the Company's option, if the customer provides electronic communications with the offices of the Company's load dispatcher. Net Energy Metering Rider customers shall not be required to provide electronic communications or install a telephone line. The Company will not furnish service in parallel with a customer's generating facilities when, in the opinion of the Company, such parallel operation may create a hazard or disturb, impair or interfere with the Company's service to other customers.
- E. Regulation Of Power Factor: The Company may require the customer to maintain a power factor in the range of 85% to 100% for secondary, primary and subtransmission service and 90% to 100% for transmission service, coincident with the customer's maximum monthly peak demand and to provide, at the customer's expense, any corrective equipment necessary in order to do so. The Company may inspect the customer's installed equipment and/or place instruments on the premises of the customer in order to determine compliance with this requirement, as deemed appropriate by the Company. The Company may charge the customer the Company's installation cost incurred for corrective devices necessary for compliance with this provision. The Company is under no obligation to serve, or to continue to serve, a customer who does not maintain a power factor consistent with the parameters set forth in this provision.
- F. Unbalanced Loads: The customer shall not use three phase electric service in such a manner as to impose an unreasonable unbalance between phases.
- **G.** Interference: The Company reserves the right to discontinue service to any customer if the service is used in a manner that disturbs or impairs the operation of the Company's system, or interferes with the service to other customers. When such interference occurs due to the use of any apparatus installed upon a customer's premises, the customer must either remove said apparatus, or provide the equipment necessary to alleviate such interference. The Company may discontinue service until such adverse conditions are alleviated.

# IX. METERS, TRANSFORMERS AND SPECIAL FACILITIES

A. Installation: The Company will furnish and maintain one meter or one unified set of meters and metering equipment capable of producing data necessary to bill the customer under Company tariffs. Service will normally be metered at the Company's supply voltage. The customer shall provide, at no cost to the Company and close to the point of service entrance, suitable space for the installation of meters, transformers, protective equipment, and other equipment required by the Company shall be placed at locations in accordance with Company standards and such locations shall be maintained by the customer at the customer's expense consistent with reasonable Company standards. Additional or special transformers required by the customer at the customer sequired by the customer's expense. Any metering equipment required by the customer to accommodate requirements of a Certified Supplier will be installed, owned and maintained by the Company and paid for by the customer.

When a transformer vault, customer substation mat, or similar facility is necessary, said vault, mat or other facility shall be furnished and maintained by the customer at the customer's expense consistent with reasonable Company standards.

- **B.** Equipment Ownership: Unless otherwise agreed between the Company and the customer, all equipment furnished by the Company shall remain its exclusive property and the Company shall have the right to remove the same after termination of service for any reason whatsoever.
- C. Meter Testing: The Company tests its meters for accuracy and mutual protection consistent with Chapter 4901:1-10 of the Ohio Administrative Code.

In addition, the Company will test a meter at the request of the customer. If the accuracy of the meter is found to be within the tolerances specified in Chapter 4901:1-10 of the Ohio Administrative Code, the Company may charge the customer a meter test fee as provided in the Company's Tariff Sheet 75, Miscellaneous Charges, Meter Test Charge, except that the customer shall not be charged for the first test at the customer's request within the period specified in Chapter 4901:1-10 of the Ohio Administrative Code.

- D. Meter Failure: If it is determined that a meter, transformer, or any equipment or wiring associated therewith fails for any reason to operate correctly or accurately measure a customer's electricity use, the customer shall pay for the service furnished during such period an estimated amount based upon: (1) the results of a test, or (2) energy usage during a comparable period, or (3) a combination of both of these methods. For residential customers, the estimated amount determined by the Company shall be billed consistent with Chapter 4933.28 of the Ohio Revised Code. For non-residential customers the estimated amount determined by the Company shall be billed consistent with Chapter 4901:1-10 of the Ohio Administrative Code.
- E. Customer Responsibility: The customer shall permit only Company employees, other authorized agents of the Company, or other persons authorized by law, to inspect, test or remove Company equipment located on the customer's premises. If this equipment is damaged or destroyed due to the negligence or willful act of the customer or tampered with by the customer, the cost of repairs or replacement shall be payable by the customer. The Company may also bill the customer for the costs of electric service that was utilized, but not billed for, as a result of the tampering.

The Public Utilities Commission of Ohio

P.U.C.O. No. 13

# ELECTRIC SERVICE REGULATIONS

- F. Special Facilities: All costs (including, without limitation, any government imposed fees) for any special services, facilities, or instrumentation which may be rendered or furnished by the Company for a customer at the customer's request or at the direction of any governmental authority, and not provided for in the Company's rate schedules and not ordinarily necessary or directly involved in the furnishing of electric service, shall be paid for by the customer for whom such services, facilities, or instrumentation are furnished, or by the customers residing within the boundaries of the governmental entity for whom such services, facilities, or instrumentation to the charges for electric service provided for in the applicable rate schedule, and may be itemized on the electric bill to such customer(s) or billed separately by the Company. Upon request by the customer and in the sole discretion of the Company, such special services, facilities, or instrumentation may be supplied and maintained by the customer at the customer's expense.
- **G.** Access To Premises: The customer or, if applicable, the landlord, property manager or owner, shall grant Company's employees and authorized agents access to the customer's premises at all reasonable hours for the purpose of reading, inspecting, testing, repairing, maintaining, replacing, installing, analyzing or removing meters or other Company property. In the event of an emergency, the Company's employees and authorized agents shall have access to customer's premises at any time.

If a customer, landlord, property manager or owner fails to grant access for reasons described above, and judicial or legal redress is necessary to secure such access, the Company may collect from the customer, landlord, property manager or owner any and all costs incurred to secure such access.

# X. CUSTOMER'S WIRING, EQUIPMENT AND SPECIAL SERVICES

- A. Installation: The customer shall supply all wiring on the customer's side of the point of attachment as designated by the Company. All of the customer's wiring and electrical equipment should be installed so as to provide not only for immediate needs but for reasonable future requirements and shall be installed and maintained by the customer to meet the provisions of the National Electrical Code, the regulations of the governmental authorities having jurisdiction over such installations and the reasonable requirements of the Company. As required by Chapter 4901:1-10 of the Ohio Administrative Code, before the Company connects service for any new installations, such installation must be inspected and approved by the local inspection authority or, when there is no local inspection authority, by a licensed electrician. An inspection is also necessary for any changes in wiring on the customer's premises.
- B. Limitation Of Liability: The Company shall not be liable for any loss, cost, damage or expense that the customer may sustain by reason of damage to or destruction of any property, including the loss of use thereof, arising out of, or in any manner connected with, interruptions in service, variations in service characteristics, high or low voltage, phase failure, phase reversal, the use of electrical appliances or the presence of the Company's property on the customer's premises whether such damages that are caused by or involve any fault or failure of the Company or otherwise except such damages that are caused by or due to the willful and wanton misconduct of the Company. The Company shall not be liable for damage to any customer or to third persons resulting from the use of the service on the customer's premises or from the presence of the Company's appliances or equipment on the customer's premises.

The PUCO approval of the above tariff language does not constitute a determination that such limitation language should be upheld in a court of law. Approval by the Commission merely recognizes that since it is a court's responsibility to adjudicate consequent damage claims, it should be also the court's responsibility to determine the validity of the exculpatory clause.

Filed pursuant to Orders dated January 21, 2009 and March 31, 2016, in Case Nos. 07-551-EL-AIR and

14-1297-EL-SSO, before

The Public Utilities Commission of Ohio

# ELECTRIC SERVICE REGULATIONS

Any customer desiring protection against interruptions in service, variations in service characteristics, high or low voltage, phase failure, phase reversal, the use of electrical appliances or the presence of the Company's property on the customer's premises, shall furnish, at the customer's expense, any equipment desired by the customer for such purpose. Interruptions in service shall not relieve the customer from any charges provided in the rate schedule.

C. Special Customer Services: The Company may furnish customers special customer services as identified in this section. No such special customer service shall be provided except where the Company has informed the customer that such service is available from and may be obtained from other suppliers. A customer's decision to receive or not receive special customer services from the Company will not influence the delivery of competitive or non-competitive retail electric service to that customer by the Company. Such special customer services shall be provided at a rate negotiated with the customer, but in no case at less than the Company's fully allocated cost. Such special customer services shall only be provided when their provision does not unduly interfere with the Company's ability to supply electric service under the Schedule of Rates and Electric Service Regulations.

Such special customer services include: design and construction of customer substations; resolving power quality problems on customer equipment; providing training programs for construction, operation and maintenance of electrical facilities; performing customer equipment maintenance, repair or installation; providing service entrance cable repair; providing restorative temporary underground service; providing upgrades or increases to an existing service connection at customer request; performing outage or voltage problem assessment; disconnecting a customer owned transformer at customer request; loosening and refastening customer owned equipment; determining the location of underground cables on customer premises; disconnecting or reconnecting an underground pedestal at customer request; covering up lines for protection at customer request; making a generator available to customer during construction to avoid outage; providing pole-hold for customer to perform some activity; opening a transformer at customer request for customer to install an underground elbow; providing a "service saver" device to provide temporary service during an outage; resetting a customer-owned reclosure device; providing phase rotation of customer equipment at customer request; conducting an evaluation at customer request to ensure that customer equipment meets standards; or upgrading the customer to three phase service.

# XI. COLLECTION OF PAST DUE BILLS AND DISCONNECTION OF SERVICE

- A. **Procedures:** The Company's procedures for collecting past due bills and disconnecting service are set forth in the Ohio Administrative Code, except as permitted by the Order in Case No. 02-1944-EL-CSS.
- **B.** Field Collection: When a customer has a delinquent bill, as defined in Chapter 4901:1-18 of the Ohio Administrative Code, the Company may make a field collection visit to attempt to collect the delinquent amount.

Whenever a field collection visit is made by a Company employee or authorized agent of the Company, the Field Collection Charge included in the Company's Tariff Sheet 75, Miscellaneous Charges, shall either be collected during the field collection visits, or assessed on the customer's next bill. Such Field Collection Charges shall be limited to once per billing cycle.

- C. Disconnection Of Service: Employees or authorized agents of the Company who actually perform the disconnection of service at the meter shall be authorized to accept payment in lieu of disconnection. If payment is made prior to disconnection, service that otherwise would have been disconnected shall remain connected. Any such payment shall include a Field Collection Charge consistent with Field Collection procedures described above. In the event that the Company employee or authorized agent is unable to gain access or is denied access to the meter and it becomes necessary to disconnect service at the pole, the employee or authorized agent disconnection.
- D. Reconnection: When service has been disconnected pursuant to any of these Electric Service Regulations, a charge for reconnection pursuant to the Company's Tariff Sheet 75, Miscellaneous Charges, Reconnection Charge, will be required.
- E. Unauthorized Use Of Service: In the event of fraudulent practice, tampering, or theft of service by the customer, consumer or other person, the Company will comply with the provisions of Chapters 4901:1-10 and 4901:1-18 of the Ohio Administrative Code. In these instances, the Company will assess a charge pursuant to the Company's Tariff Sheet 75, Miscellaneous Charges, Unauthorized Use Investigation Charge.

# XII. CERTIFIED SUPPLIERS - CHANGE OF SUPPLIER

Certified Supplier shall mean all of the entities set forth in Ohio Revised Code, Section 4928.08(A) and (B) which have received certification from the Public Utilities Commission of Ohio under Ohio Revised Code, Section 4928.08 and have otherwise complied with the requirements set forth in the Company's Supplier Tariff. The Company shall change the customer's Certified Supplier only upon receipt of notice instructing such change with respect to the individual customer from a Certified Supplier.

Such notice to the Company will be as provided in the Supplier Tariff and customer instructions that the Certified Supplier is designated to provide services for a minimum time period of one month.

The Company shall develop, update, and maintain a list of Certified Suppliers that offer electric service within the Company's service territory and shall publish such list on the Company's website. All applicants for new service, customers returning from a Certified Supplier and any customer upon request will be directed to the location of this list on the Company's website.

The timing of the change of a customer to a different Certified Supplier shall occur only at the end of a customer's billing month based on and determined by the Company's meter reading schedule.

A customer may have only one Certified Supplier per account for any billing month. A customer may not split non-interruptible generation supply between two Certified Suppliers or between the Company's standard-offer service and service by a Certified Supplier during a billing month.

Except in the event of the default of the customer's Certified Supplier, the Company shall not be obligated to process a change of the customer's selected Certified Supplier more frequently than once every billing month. For purposes of these Electric Service Regulations, default by a Certified Supplier shall mean a failure to deliver services as defined in the Ohio Revised Code, Section 4928.14.

# XIII. RETURN TO STANDARD SERVICE OFFER SUPPLY

A. If a customer that has been receiving service from a Certified Supplier subsequently seeks to have the Company resume providing generation service, the Company will provide service at standard offer rates provided that sufficient notice of such return has been provided to the Company.

The Public Utilities Commission of Ohio

P.U.C.O. No. 13

# ELECTRIC SERVICE REGULATIONS

- **B.** There shall be no minimum stay requirements for customers electing to return to the Company's standard service offer.
- **C.** For all customers, return to the Company's standard service offer may only occur on regularly scheduled meter reading dates, unless otherwise agreed by the Company and subject to the Company's Supplier Tariff. In the event of default of a Certified Supplier, this provision shall not apply.
- D. Subject to the other terms of this Section XIII and the Company's Supplier Tariff, there shall be no notice requirement for customers electing to return to the Company's standard service offer.
- E. Customers returning to the Company's standard service offer as a result of either Certified Supplier Non-Compliance or default on the part of the customer's Certified Supplier are eligible for standard service offer per Revised Code Section 4928.14. Any costs incurred by the Company as a result of either Certified Supplier Non-Compliance or default on the part of the customer's Certified Supplier shall be recoverable under the appropriate recovery mechanism.

# XIV. CERTIFIED SUPPLIERS - BILLING AND PAYMENT

A. Billing: The Company will bill the customer directly for services provided by a Certified Supplier unless the Company receives electronic notice from such supplier that it will bill the customer directly for services provided by the Certified Supplier. If the Company bills the customer for the services provided by a Certified Supplier, the Company will collect the funds from the customer and remit the same to the Certified Supplier.

The Company shall not be liable for the Certified Supplier's default or failure to provide service to a customer, nor shall it be responsible for a customer's failure to pay for its services received from a Certified Supplier as a consequence of the Company performing this role.

- **B. Payments To The Company:** Payments to the Company will be applied to the customer's account in accordance with Ohio Administrative Code, except as permitted by the Order in Case No. 02-1944-EL-CSS. The payment hierarchy specified by this Order is available on the Company website.
- C. Disputes: If the Company bills for services provided by the Certified Supplier, such bills will be based on information supplied to the Company by the Certified Supplier. The Company will have no responsibility to verify the appropriateness of such information, or to resolve any disputes or disagreements over the amount, timing or any other aspect of the billing or payment of charges, other than to confirm amounts billed to the customer, amounts received from the customer and amounts remitted to the Certified Supplier.
- D. Non-Payment Or Partial Payment: Regardless of whether the Company bills customers for the services provided by the Certified Supplier, any failure by the customer to pay any and all charges due the Company in a timely manner shall be subject to any and all applicable provisions of these Electric Service Regulations, including, without limitation, collection, late fees, and termination of service.
- E. Late Payment Fees: The Company may impose late payment fees on that portion of a customer's bill that pertains to services provided by the Company. Pursuant to the Order in Case No. 02-1944-EL-CSS, the Company may also charge late fees on past due amounts due and owing the Certified Supplier.

F. Collection Activity: Except as set forth in the Order in Case No. 02-1944-EL-CSS, the Company shall not be responsible for collection of amounts due from a customer to a Certified Supplier. Pursuant to the Order in Case No. 02-1944-EL-CSS, in situations where a customer is dropped by a Certified Supplier or the customer drops the Certified Supplier, the Certified Supplier's past due amounts will remain on the Company's bill, when applicable, for at least nine billing cycles or until the customer is disconnected or terminated by the Company, whichever occurs first.

# XV. CERTIFIED SUPPLIERS - CUSTOMER AGGREGATION

Customers may be aggregated for purposes of purchasing services from a Certified Supplier. Aggregation of customers is not restricted by the number or class of customers within an aggregated group. Accordingly, any customer may be represented by an aggregator. However, an aggregator is not a customer of the Company by virtue of its position as an aggregator. Each customer that is a member of an aggregated group shall remain an individual customer of the Company for purposes of billing under each customer's applicable rate schedule. The consumption of individual members of an aggregated group shall not be combined for billing purposes. No charge of a tariffed service will be affected by a customer's aggregation status, and aggregation of load cannot be used for qualification under a tariff.

The Public Utilities Commission of Ohio

#### P.U.C.O. No. 13

#### **ELECTRIC SERVICE REGULATIONS**

#### XVI. EMERGENCY ELECTRICAL PROCEDURES

#### A. General

Emergency electrical procedures are deemed necessary if there is a shortage in the electrical energy supply to meet the demands of the Company's customers. It is recognized that such deficiencies can be short term (up to a few days) or long term (a few days or more) in duration; and in view of the difference in nature between short and long term deficiencies, different and appropriate procedures should be adopted for each.

The systems of the Company and its electric utility affiliates are fully integrated and operated as a single electric system to the mutual advantage of the companies and their customers. Each company endeavors to operate and maintain its electric facilities in accordance with accepted utility practices. Because of the method of operating the companies' systems, an emergency arising on the system of one of those companies may affect the system of the others. Should this occur, a company may from time to time be providing assistance to one or more of the others in order to continue to operate most effectively as a single electric system.

- 1. Procedures related to short-term capacity shortages shall, insofar as the situation permits, give special consideration to the following types of customers and such other customers or types of customers which the Commission may subsequently identify for the protection of the public's health and safety:
  - a. "Hospitals" and other institutions which provide medical care to patients and where surgical procedures are performed.
  - b. "Governmental detention institutions" which shall be limited to those facilities used for detention of persons.
  - c. "Police and fire stations" which shall be limited to publicly owned, attended facilities.
  - d. "Federal facilities" essential to national defense.
  - e. "Water pumping facilities" essential to the supply of potable water to a community.
  - f. "Radio, television and newspaper facilities" utilized for transmittal of emergency messages and public information relating to these procedures.
  - g. "Sewage treatment facilities" essential to the collection, treatment or disposal of a community's sewage.
  - h. "Life support equipment," such as a kidney machine or respirator, used to sustain the life of a person.
  - i. "Air terminal facilities" essential to the control of aircraft in flight.

Although these types of customers will be given special consideration in the application of the manual load shedding provisions of this procedure, the Company cannot assure that service to such customers will not be interrupted, and accordingly they should install emergency generation equipment if continuity of service is essential. In case of customers supplied from two Company sources, only one source will be given special consideration. Other customers who, in their opinion, have critical equipment should install emergency battery or auxiliary generating equipment.

2. Procedures related to long-term capacity or fuel shortages shall, insofar as the situation permits, give special consideration to "priority uses of electricity", which shall mean the amount of electrical energy necessary for protection of the public's health and safety and to prevent unnecessary or avoidable damage to buildings and facilities, for the customers identified in Section (A)(1) and at:

- a. Residences (homes, apartments, nursing homes, institutions and facilities for permanent residents or transients);
- b. Electric power generating facilities, telephone central office and central heating plants serving the public;
- c. Local, intrastate and interstate transportation facilities;
- d. Production and refining or processing facilities for fuels;
- e. Pipeline transmission and distribution facilities for fuels;
- f. Production, processing, distribution and storage facilities for dairy products, meat, fish, poultry, eggs, produce, bread, livestock and poultry feed;
- g. Buildings and facilities limited to uses protecting the physical plant and structure, appurtenances, product inventories, raw materials, livestock, and other personal or real property; and
- h. Other similar uses as may be determined by the Commission.

The Company shall promptly advise the Commission of the nature, time and probable duration of all implemented emergency conditions and procedures which affect normal service to customers. The Commission may order the implementation of additional procedures or the termination of the procedures previously employed when circumstances so require.

In addition, each year before March 1, the Company will apprise the Commission of the state of electric supply in its service area.

As may be appropriate in accordance with the nature of the occurring anticipated emergency and of the Company's load and generating, transmission and distribution facilities, the Company shall initiate the following procedures.

#### B. Short-Term Capacity Shortages:

As may be appropriate in accordance with the nature of the occurring emergency, the Company shall initiate the following procedures:

1. Sudden or Unanticipated Short-Term Capacity Shortages.

In the event of a sudden decline of frequency on all or a portion of the Company's system caused by a significant imbalance of load and generation, whether such imbalance occurs in the Company's system or on another system:

- a. Automatic load shedding will take place if the decline in frequency is of the magnitude such as to jeopardize the entire affected area. Ten percent of the load in the affected area will be shed automatically at a frequency of 58.9 hertz. In the event such action does not restore the frequency to a proper level, manual load shedding will be employed. Service so interrupted shall be of selected distribution circuits and lines serving customers throughout the affected area. Such interruptions shall be, where practical, for short periods of time. When the frequency in the affected area recovers to 59.0 hertz or above any action necessary will be taken in the affected area to permit resynchronization to the main network. Such action may include additional manual load shedding.Such automatic and manual load shedding and restoration will be as set forth in ECAR Document No. 3, dated October 31, 1968 as amended.
- 2. Anticipated or predictable Short Term Capacity Shortages.

As soon as it is determined that a critical situation exists on the Company's system which may require implementation of any of the emergency procedures listed below, the Company shall confer by telephone with the Commission Staff. Also, the Commission Staff shall be kept informed when any such emergency procedures are implemented.

In the event an emergency condition of short term duration is anticipated or predicted which cannot be relieved by sources of generation available to the Company within the interconnected area, the following steps will be taken at the appropriate time and in the order appropriate to the situation.

- a. The internal demand of premises owned by the Company will be reduced to the largest extent consistent with the continuity of service.
- b. Voluntary load reductions will be requested of major commercial and industrial customers by procedures established in their respective load reduction plans;
- c. Voluntary load reductions will be requested of all other customers through appropriate media appeals.
- d. Manual load shedding of customer loads will be initiated. Service so interrupted shall, be to customers supplied from (1) selected distribution circuits throughout the area affected by the emergency, and (2) transmission and subtransmission circuits that can be directly controlled from the Company's dispatching offices. Such interruptions shall be consistent with the criteria established in section (A)(1) to protect the public health and safety and shall, insofar as practicable, be alternated among circuits. The length of an interruption of any selected distribution circuit should not exceed two hours and the total interruption should not exceed four hours in any 24 hour period without prior notification to the Commission. Records will be maintained to ensure that, during subsequent capacity shortages, service interruptions may be rotated throughout the area in an equitable manner.

#### C. Long Term Capacity Shortages:

The following actions shall be implemented until it is determined by the Company that any or all actions may be terminated. The public shall be immediately advised through appropriate media sources of the implementation of these procedures.

1. Long Term Capacity Shortages.

If an emergency situation of long term duration arises out of a long term capacity shortage on the Company's system, the following actions shall be taken, as required:

- a. Curtail, during hours of maximum system demand, non-priority electric use on premises controlled by the Company including parking, large area and interior lighting, except lighting required for security and safety.
- b. Initiate voluntary load reduction by all customers during the hours of maximum system demand as specified by the Company by:
  - i Direct contact of customers with an electric demand of 500 kW or higher requesting them to implement their voluntary electric load reduction plans.

# ELECTRIC SERVICE REGULATIONS

- ii Requesting, through mass communication media, voluntary curtailment of electric use by all other customers by suggesting actions to be taken such as: lowering thermostat settings for electric heating in the winter; discontinuing the use of air conditioning in the summer; shutting off electric water heaters; discontinuing use of dishwashers, outside lights, electric clothes dryers and entertainment appliances; reducing the use of interior lighting; reducing the use of refrigeration; discontinuing sign lighting and decorative lighting; reducing the use of elevators and poker ventilation equipment; and rescheduling hours of operation for stores and factories.
- c. Implement procedures for interruption of selected distribution circuits during the period of maximum system demand on a rotational basis minimizing interruption to facilities which are essential to the public health and safety. The length of an interruption of any selected circuit should not exceed two hours, and the total interruption should not exceed four hours in any 24 hour period without prior notification to the Commission.
- d. Notify customers with an electric demand of 500 kW or higher to curtail non-priority use of electricity during hours of maximum system demand as specified by the Company to levels not less than 70 percent of the customer's "monthly base period demand." The Company will establish an adjusted curtailment level when the customer can document that their priority use of electricity exceeds the curtailment level as specified. The Company will notify the Commission prior to such notification of customers.

"Monthly base period demand" is the customers billing demand established during the same month of the preceding year provided, however, that if:

- i. The "monthly base period demand" of a customer was abnormal due to such things as strikes or breakdown of major equipment, upon application by the customer and agreement by the Company, "monthly base period demand" for such customer shall be adjusted to reflect the abnormality.
- ii. A customer has experienced a major change in load or in load use pattern between the same month of the preceding year and the month of notification of curtailment, the "monthly base period demand" shall be multiplied by an adjustment factor equal to the sum of the billing demands of the three consecutive months prior to the month of notification of curtailment divided by the sum of the billing demands of the corresponding months in the prior 12 month period. If the load change occurred within the three monthly billing periods prior to the notification, only the months which include the changed load condition and the corresponding months of the previous year shall be used to calculate the adjustment factor.
- iii. A customer has recently been connected or has received a commitment from the Company to supply a new load or a major load addition expected to be connected subsequent to the initiation of the curtailment, the "monthly base period demand" will be negotiated between the customer and the Company.

Upon prior arrangement and mutual agreement with the Company, customers may effect their electric demand reduction on a corporate basis.

e. Upon notification to the Commission, increase the total hours of interruption of selected distribution circuits during the hours of maximum system demand from four hours to a maximum of eight hours.

# **ELECTRIC SERVICE REGULATIONS**

 Customers who do not curtail service during long term capacity shortages within 30 days after notification by the Company pursuant to (C)(1)(d) may, following notification to the Commission, be wholly disconnected from service until the emergency is past.

#### D. Short Term Capacity Shortages in Neighboring Control Areas:

Service to the Company's customers shall not be interrupted in order to provide emergency service to suppliers of electric energy in neighboring interconnected control areas. Emergency assistance to such suppliers will not be given unless agreed to be provided on a reciprocal basis by such supplier to the Company.

The neighboring control area seeking assistance shall be requested to reduce its takings of electric energy if such takings endanger the reliability of bulk power supply in the Company area. If such neighboring control area fails to reduce its takings and the reliability of bulk power supply in the Company's area is endangered, steps shall be taken to relieve the burden on the Company area including, as a last resort, opening of appropriate interconnections.

#### E. Emergency Procedures for Municipal Wholesale Customers:

The Company also provides electric service to certain municipal Wholesale customers. In order to distribute fairly the burden of an electrical emergency between the Company's retail customers and the retail consumers served by its municipal wholesale customers, each such municipal wholesale customer shall adopt emergency electric procedures designed to curtail service to its consumers to the same extent as service to the Company's consumers would be curtailed under the Emergency Electrical Procedures contained herein. Such procedures shall be implemented by each wholesale customer when notified to do so by the Company.

#### **RESIDENTIAL SERVICE - (RATE "RS")**

# AVAILABILITY:

Available for residential service to installations served through one meter for each family unit in a residence or apartment.

When service is used through the same meter for both residential and commercial purposes the applicable general service rate schedule shall apply.

This rate schedule is not available for service to a commercial, institutional or industrial establishment. The hallways and other common facilities of an apartment building or apartment complex are to be billed on the appropriate general service rate.

#### SERVICE:

Service is provided per the Electric Service Regulations at a secondary voltage.

#### RATE:

All charges under this rate schedule shall be calculated as described below and charged on a monthly basis.

Distribution Charges:	
Service Charge:	\$4.00
Energy Charges:	
All kWh, per kWh	2.9510¢

#### **SPECIAL METERS:**

Time-Of-Day Metering is available from the Company. Charges for such service are specified in the Miscellaneous Charges, Tariff Sheet 75.

#### APPLICABLE RIDERS:

The charges included with the applicable riders as designated on the Summary Rider, Tariff Sheet 80 shall be added to the Rates and charges set forth above.

#### **ELECTRIC SERVICE REGULATIONS:**

The Company's Electric Service Regulations shall apply to the installation and use of electric service.

# **GENERAL SERVICE - SECONDARY (RATE "GS")**

# AVAILABILITY:

Available to general service installations requiring Secondary Service. Secondary Service is defined in the Company's Electric Service Regulations. Choice of voltage shall be at the option of the Company.

#### SERVICE:

All service under this rate schedule will be served through one meter for each installation.

#### RATE:

All charges under this rate schedule shall be calculated as described below and charged on a monthly basis.

Distribution Charges:		
Service Charge:	\$7.00	
Capacity Charge:		
Up to 5 kW of billing demand	\$13.6800	
For each kW over 5 kW of billing demand	\$7.4790	
Reactive Demand Charge applicable to three phase customers only		
For each rkVA of reactive billing demand	\$0.36	

#### BILLING DEMAND:

The billing demand for the month shall be the greatest of:

- 1. Measured Demand, being the highest thirty (30) minute integrated kW
- 2. 5.0 kW
- 3. The Contract Demand

Measured Demand shall be estimated for all customers not having a demand meter and using over 1,000 kWh per month by applying a factor of 200 by the following formula: Measured Demand = kWh / 200.

# **REACTIVE BILLING DEMAND:**

For installations metered with reactive energy metering, the reactive billing demand in rkVA for the month shall be determined by multiplying the Measured Demand by the ratio of the measured lagging reactive kilovoltampere hours to the measured kilowatthours by the following formula: rkVA = Measured Demand X (measured lagging reactive kilovoltampere hours + measured kilowatthours). For all other installations, the reactive billing demand shall be the integrated reactive demand occurring coincident with the Measured Demand.

# **GENERAL SERVICE - SECONDARY (RATE "GS")**

#### CUSTOMER TARIFF OPTION:

A customer qualifying for service under Rate GS may take distribution service under the terms and conditions of Rate GSU (including the Transformer Charge) if the transformer that directly serves such customer is: 1) located in the immediate vicinity; 2) is owned by the Company; and 3) has been directly fed by a Subtransmission voltage line since May 8, 2007.

#### APPLICABLE RIDERS:

The charges included with the applicable riders as designated on the Summary Rider, Tariff Sheet 80 shall be added to the Rates and charges set forth above.

#### ADJUSTMENT FOR PRIMARY METERING:

Where a transformer installation (regardless of ownership) is utilized solely to furnish service to a single customer, the Company may meter the service on the primary side of the transformers, and in such case all the demand and energy registrations shall each be reduced 2%.

#### SPECIAL METERS:

Time-Of-Day and Interval Metering is available from the Company. Charges for such service are specified in the Miscellaneous Charges, Tariff Sheet 75.

#### UNMETERED SERVICE:

Unmetered service is available to customers with loads of constant wattage such that the monthly use may be calculated accurately and where the Company and the customer agree to unmetered service. The Billing Load shall be the connected load in kilowatts. The monthly billing kilowatt-hours shall be the product of Hours of Use times connected load. Hours of Use shall be 730 hours for continuous operation mode and 350 hours for all other operation modes.

The customer shall notify the Company of the initial connected load and operation mode and shall provide advance notice of each subsequent change in such load or operation mode. The Company may make an inspection of the customer's equipment at any time to verify connected loads and operation mode. In the event of the customer's failure to notify the Company of an increase in load, the Company reserves the right to refuse to provide unmetered service at the delivery point thereafter and adjust prior billing amounts accordingly to reflect the increases in load.

# DUPLICATE CIRCUIT SERVICE:

When service is furnished to provide redundancy to the Company's main service as requested by the customer, a contract demand shall be established by mutual agreement and shall be specified in the service contract. Such installations shall be considered a Premium Installation and shall be a separate account from the customer's main service.

#### P.U.C.O. No. 13

# **GENERAL SERVICE - SECONDARY (RATE "GS")**

#### ELECTRIC SERVICE REGULATIONS:

The Company's Electric Service Regulations shall apply to the installation and use of electric service.

# CONTRACT:

Electric service hereunder shall be furnished in accordance with a written contract, at the Company's discretion, which by its term shall be in full force and effect for a minimum period of one year and shall continue in force thereafter from year to year unless either party shall give to the other not less than 60 days notice in writing prior to the expiration date of any said yearly periods that the contract shall be terminated at the expiration date of said yearly period. When a contract is terminated in the manner provided herein, the service will be discontinued.

The Contract Demand shall be specified in the contract for electric service of customers establishing service after April 30, 2009 and of customers requiring or requesting a significant change in service. The Contract Demand shall be 60% of the customer's expected, typical monthly peak load. Customers with a Contract Demand on April 30, 2009 will remain at that existing Contract Demand level, until such time as they reestablish service or request or require a significant change in service. The Contract Demand based on actual usage upon customer request, no more than once per 12 month period.

If the Customer's capacity or service requirements increase, the Company, at its sole and exclusive judgement, may at any time require the Customer to enter into a new contract for electric service.

# **GENERAL SERVICE - PRIMARY (RATE "GP")**

# AVAILABILITY:

Available to general service installations requiring Primary Service. Primary Service is defined in the Company's Electric Service Regulations. Choice of voltage shall be at the option of the Company.

# SERVICE:

All service under this rate schedule will be served through one meter for each installation.

The customer will be responsible for all transforming, controlling, regulating and protective equipment and its operation and maintenance.

# RATE:

All charges under this rate schedule shall be applied as described below and charged on a monthly basis.

Distribution Charges:	
Service Charge:	\$150.00
Capacity Charge:	
For each kW of billing demand	\$2.4050
Reactive Demand Charge applicable to three phase customers only	
For each rkVA of reactive billing demand	\$0.36

# **BILLING DEMAND:**

The billing demand for the month shall be the greatest of:

- 1. Measured Demand, being the highest thirty (30) minute integrated kW
- 2. 30.0 kW
- 3. The Contract Demand

# **REACTIVE BILLING DEMAND:**

For installations metered with reactive energy metering, the reactive billing demand in rkVA for the month shall be determined by multiplying the Measured Demand by the ratio of the measured lagging reactive kilovoltampere hours to the measured kilowatthours by the following formula: rkVA = Measured Demand X (measured lagging reactive kilovoltampere hours ÷ measured kilowatthours). For all other installations, the reactive billing demand shall be the integrated reactive demand occurring coincident with the Measured Demand.

P.U.C.O. No. 13

# **GENERAL SERVICE - PRIMARY (RATE "GP")**

#### CUSTOMER TARIFF OPTION:

A customer qualifying for service under Rate GP may take distribution service under the terms and conditions of Rate GSU (including the Transformer Charge) if the transformer that directly serves such customer is: 1) located in the immediate vicinity; 2) is owned by the Company; and 3) has been directly fed by a Subtransmission voltage line since May 8, 2007.

A customer qualifying for service under Rate GP may take distribution service under the terms and conditions of Rate GT (including the Transformer Charge) if the transformer that directly serves such customer is: 1) located in the immediate vicinity; 2) is owned by the Company; and 3) has been directly fed by a Transmission voltage line since May 8, 2007.

#### APPLICABLE RIDERS:

The charges included with the applicable riders as designated on the Summary Rider, Tariff Sheet 80 shall be added to the Rates and charges set forth above.

#### ADJUSTMENT FOR SECONDARY METERING:

The Company reserves the right to install the metering equipment on either the primary or secondary side of the transformers serving the customer, and when installed on the secondary side, at the Company's option, the Company shall correct for transformer losses by one of the two following methods: 1.) by using compensating-metering equipment or 2.) by increasing all demand and energy registrations by 2% each.

#### SPECIAL METERS:

Time-Of-Day and Interval Metering is available from the Company. Charges for such service are specified in the Miscellaneous Charges, Tariff Sheet 75.

#### **DUPLICATE CIRCUIT SERVICE:**

When service is furnished to provide redundancy to the Company's main service as requested by the customer, a contract demand shall be established by mutual agreement and shall be specified in the service contract. Such installations shall be considered a Premium Installation and shall be a separate account from the customer's main service.

#### ELECTRIC SERVICE REGULATIONS:

The Company's Electric Service Regulations shall apply to the installation and use of electric service.

P.U.C.O. No. 13

# **GENERAL SERVICE - PRIMARY (RATE "GP")**

# CONTRACT:

Electric service hereunder shall be furnished in accordance with a written contract, which by its term shall be in full force and effect for a minimum period of two years and shall continue in force thereafter from year to year unless either party shall give to the other not less than 60 days notice in writing prior to the expiration date of any said yearly periods that the contract shall be terminated at the expiration date of said yearly period. When a contract is terminated in the manner provided herein, the service will be discontinued.

The Contract Demand shall be specified in the contract for electric service of customers establishing service after April 30, 2009 and of customers requiring or requesting a significant change in service. The Contract Demand shall be 60% of the customer's expected, typical monthly peak load. Customers with a Contract Demand on April 30, 2009 will remain at that existing Contract Demand level, until such time as they reestablish service or request or require a significant change in service. The Contract Demand based on actual usage upon customer request, no more than once per 12 month period.

If the Customer's capacity or service requirements increase, the Company, at its sole and exclusive judgement, may at any time require the Customer to enter into a new contract for electric service.

#### P.U.C.O. No. 13

# **GENERAL SERVICE - SUBTRANSMISSION (RATE "GSU")**

# AVAILABILITY:

Available to general service installations requiring Subtransmission Service. Subtransmission Service is defined in the Company's Electric Service Regulations. Choice of voltage shall be at the option of the Company.

A customer qualifying for service under Rate GS may take distribution service under the terms and conditions of Rate GSU (including the Transformer Charge) if the transformer that directly serves such customer is: 1) located in the immediate vicinity; 2) is owned by the Company; and 3) has been directly fed by a Subtransmission voltage line since May 8, 2007.

A customer qualifying for service under Rate GP may take distribution service under the terms and conditions of Rate GSU (including the Transformer Charge) if the transformer that directly serves such customer is: 1) located in the immediate vicinity; 2) is owned by the Company; and 3) has been directly fed by a Subtransmission voltage line since May 8, 2007.

# SERVICE:

All service under this rate schedule will be served through one meter for each installation.

The customer will be responsible for all transforming, controlling, regulating and protective equipment and its operation and maintenance unless the Transformer Charge applies to the customer.

The Transformer Charge is applicable to a customer premise with existing transformation in the immediate vicinity having been provided by the Company for the customer's use since May 8, 2007, in addition to all other applicable tariff charges.

If an increase in capacity of existing transformation owned by the Company is necessary or if the customer requires a change in service voltage on or after January 1, 2009, all necessary transforming, controlling, regulating and protective equipment shall be provided by the customer.

# RATE:

All charges under this rate schedule shall be calculated as described below and charged on a monthly basis.

Distribution Charges: Service Charge:	\$180.00
	φ100.00
Capacity Charge: For Each kW of hilling demand	\$0.9718
Posetive Demand Charge applicable to three phase sustamers only	<i><b>40.07</b></i>
For each rkVA of reactive billing demand	\$0.36
#### P.U.C.O. No. 13

# **GENERAL SERVICE - SUBTRANSMISSION (RATE "GSU")**

### BILLING DEMAND:

The billing demand for the month shall be the greatest of:

- 1. Measured Demand, being the highest thirty (30) minute integrated kW
- 2. 30.0 kW
- 3. The Contract Demand

# **REACTIVE BILLING DEMAND:**

For installations metered with reactive energy metering, the reactive billing demand in rkVA for the month shall be determined by multiplying the Measured Demand by the ratio of the measured lagging reactive kilovoltampere hours to the measured kilowatthours by the following formula: rkVA = Measured Demand X (measured lagging reactive kilovoltampere hours  $\div$  measured kilowatthours). For all other installations, the reactive billing demand shall be the integrated reactive demand occurring coincident with the Measured Demand.

### TRANSFORMER CHARGE:

A monthly Transformer Charge of 54 cents per kW of Measured Demand shall be charged for existing transformation, and the Company will continue to own, operate and maintain all such necessary transforming, controlling, regulating and protective equipment.

#### APPLICABLE RIDERS;

The charges included with the applicable riders as designated on the Summary Rider, Tariff Sheet 80 shall be added to the Rates and charges set forth above.

#### ADJUSTMENT FOR SECONDARY METERING:

The Company reserves the right to install the metering equipment on either the primary or secondary side of the transformers serving the customer, and when installed on the secondary side, at the Company's option, the Company shall correct for transformer losses by one of the two following methods: 1.) by using compensating-metering equipment or 2.) by increasing all demand and energy registrations by 2% each.

#### SPECIAL METERS:

Time-Of-Day and Interval Metering is available from the Company. Charges for such service are specified in the Miscellaneous Charges, Tariff Sheet 75.

#### P.U.C.O. No. 13

# **GENERAL SERVICE - SUBTRANSMISSION (RATE "GSU")**

# DUPLICATE CIRCUIT SERVICE:

When service is furnished to provide redundancy to the Company's main service as requested by the customer, a contract demand shall be established by mutual agreement and shall be specified in the service contract. Such installations shall be considered a Premium Installation and shall be a separate account from the customer's main service.

# ELECTRIC SERVICE REGULATIONS:

The Company's Electric Service Regulations shall apply to the installation and use of electric service. The Company's general policy of supplying regulated voltages does not apply to this rate schedule.

### CONTRACT:

Electric service hereunder shall be furnished in accordance with a written contract, which by its term shall be in full force and effect for a minimum period of two years and shall continue in force thereafter from year to year unless either party shall give to the other not less than 60 days notice in writing prior to the expiration date of any said yearly periods that the contract shall be terminated at the expiration date of said yearly period. When a contract is terminated in the manner provided herein, the service will be discontinued.

The Contract Demand shall be specified in the contract for electric service of customers establishing service after April 30, 2009 and of customers requiring or requesting a significant change in service. The Contract Demand shall be 60% of the customer's expected, typical monthly peak load. Customers with a Contract Demand on April 30, 2009 will remain at that existing Contract Demand level, until such time as they reestablish service or request or require a significant change in service. The Contract Demand based on actual usage upon customer request, no more than once per 12 month period.

If the Customer's capacity or service requirements increase, the Company, at its sole and exclusive judgement, may at any time require the customer to enter into a new contract for electric service.

## **GENERAL SERVICE - TRANSMISSION (RATE "GT")**

### AVAILABILITY:

Available to general service installations requiring Transmission Service. Transmission Service is defined in the Company's Electric Service Regulations. Choice of voltage shall be at the option of the Company.

A customer qualifying for service under Rate GP may take distribution service under the terms and conditions of Rate GT (including the Transformer Charge) if the transformer that directly serves such customer is: 1) located in the immediate vicinity; 2) is owned by the Company; and 3) has been directly fed by a Transmission voltage line since May 8, 2007.

#### SERVICE:

All service under this rate schedule will be served through one meter for each installation.

The customer will be responsible for all transforming, controlling, regulating and protective equipment and its operation and maintenance unless the Transformer Charge applies to the customer.

The Transformer Charge is applicable to a customer premise with existing transformation having been provided by the Company, including leased equipment, for the customer's exclusive use since May 8, 2007, in addition to all other applicable tariff charges.

If an increase in capacity of existing transformation owned by the Company is necessary or if the customer requires a change in service voltage on or after January 1, 2009, all necessary transforming, controlling, regulating and protective equipment shall be provided by the customer.

# RATE:

All charges under this rate schedule shall be calculated as described below and charged on a monthly basis.

Distribution Charges:	
Service Charge:	\$320.00
Capacity Charge: For Each kVA of billing demand	\$0.0010

#### **BILLING DEMAND:**

The billing demand for the month shall be the greatest of:

- 1. Measured Demand, being the highest thirty (30) minute integrated kVA.
- 2. 100.0 kVA
- 3. The Contract Demand

P.U.C.O. No. 13

# **GENERAL SERVICE - TRANSMISSION (RATE "GT")**

## TRANSFORMER CHARGE:

A monthly Transformer Charge of 26 cents per kVA of Measured Demand shall be charged for existing transformation, and the Company will continue to own, operate and maintain all such necessary transforming, controlling, regulating and protective equipment. Any equipment costs incurred by the Company necessary to maintain or update such substation facilities shall be paid in full by the customer before such equipment is installed.

# APPLICABLE RIDERS:

The charges included with the applicable riders as designated on the Summary Rider, Tariff Sheet 80 shall be added to the Rates and charges set forth above.

# ADJUSTMENT FOR SECONDARY METERING:

The Company reserves the right to install the metering equipment on either the primary or secondary side of the transformers serving the customer, and when installed on the secondary side, at the Company's option, the Company shall correct for transformer losses by one of the two following methods: 1.) by using compensating-metering equipment or 2.) by increasing all demand and energy registrations by 2% each.

# SPECIAL METERS:

Time-Of-Day and Interval Metering is available from the Company. Charges for such service are specified in the Miscellaneous Charges, Tariff Sheet 75.

# ELECTRIC SERVICE REGULATIONS:

The Company's Electric Service Regulations shall apply to the installation and use of electric service. The Company's general policy of supplying regulated voltages does not apply to this rate schedule.

# CONTRACT:

Electric service hereunder shall be furnished in accordance with a written contract, which by its term shall be in full force and effect for a minimum period of one year and shall continue in force thereafter from year to year unless either party shall give to the other not less than 60 days notice in writing prior to the expiration date of any said yearly periods that the contract shall be terminated at the expiration date of said yearly period. When a contract is terminated in the manner provided herein, the service will be discontinued.

The Contract Demand shall be specified in the contract for electric service of customers establishing service after April 30, 2009 and of customers requiring or requesting a significant change in service. The Contract Demand shall be 60% of the customer's expected, typical monthly peak load. Customers with a Contract Demand on April 30, 2009 will remain at that existing Contract Demand level, until such time as they reestablish service or request or require a significant change in service. The Contract Demand based on actual usage upon customer request, no more than once per 12 month period.

P.U.C.O. No. 13

### **GENERAL SERVICE - TRANSMISSION (RATE "GT")**

If the customer's capacity or service requirements increase, the Company, at its sole and exclusive judgement, may at any time require the customer to enter into a new contract for electric service.

P.U.C.O. No. 13

# STREET LIGHTING PROVISIONS

### **AVAILABILITY:**

Available to municipalities and governmental authorities for the lighting of streets, sidewalks, parks, and other public grounds.

### METERING:

Standard street lighting service shall be unmetered with monthly Kilowatt-hour consumption determined using rated bulb capacity and associated ballasts multiplied by average burn hours. Any street light pole with an electrical outlet shall be metered with all initial costs of metering installation borne by the customer.

### **BURN HOURS:**

Unless otherwise noted, all lamps shall be operated by photoelectric control or by time clocks, with hours of operation from dusk to dawn, 4,200 hours per annum.

The following monthly Kilowatt-hour values shall be used for billing purposes. Any installation with dual lamps shall multiply the below values by two (2).

Bulb Type	Bulb Rating	kWhiper Month
Incandescent	1,000 Lumens	24
Incandescent	2,000 Lumens	56
incandescent	2,500 Lumens	70
Incandescent	4,000 Lumens	126
Incandescent	6,000 Lumens	157
Incandescent	10,000 Lumens	242
Incandescent	15,000 Lumens	282
Fluorescent	6,000 Lumens	45
Fluorescent	13,800 Lumens	94
Fluorescent	21,800 Lumens	135
Fluorescent	43,600 Lumens	264
Mercury Vapor	100 Watts	43
Mercury Vapor	175 Watts	69
Mercury Vapor	175 Watts*	144
Mercury Vapor	250 Watts	104
Mercury Vapor	250 Watts*	216
Mercury Vapor	400 Watts	158
Mercury Vapor	700 Watts	287
Mercury Vapor	1000 Watts	380

\*Operating in continuous burn mode

P.U.C.O. No. 13

Bulb Type	Bulb Rating	kWh per Month
High Pressure Sodium Vapor	70 Watts	29
High Pressure Sodium Vapor	100 Watts	42
High Pressure Sodium Vapor	100 Watts*	87
High Pressure Sodium Vapor	150 Watts	62
High Pressure Sodium Vapor	150 Watts*	129
High Pressure Sodium Vapor	200 Watts	88
High Pressure Sodium Vapor	215 Watts	89
High Pressure Sodium Vapor	250 Watts	105
High Pressure Sodium Vapor	310 Watts	128
High Pressure Sodium Vapor	400 Watts	163
High Pressure Sodium Vapor	1000 Watts	410

# STREET LIGHTING PROVISIONS

\*Operating in continuous burn mode

# **IN-SERVICE DATES:**

All street lighting equipment which is placed in service or removed by and including the 15th day of the month shall be charged by the Company and paid for by the customer as if the equipment had been in service or removed on the 1st day of the subject month. All street lighting equipment which is placed in service or removed subsequent to the 15th of the month shall be charged by the Company and paid for by the customer as if the equipment had been placed in service or removed on the 1st day of the subject month.

# APPLICABLE RIDERS:

The charges included with the applicable riders as designated on the Summary Rider, Tariff Sheet 80, shall be added to the Rates and charges set forth above.

#### **GENERAL RULES:**

Extensions of existing distribution facilities, and/or the addition of transformers, which are required strictly for the purposes of providing street lighting service shall be paid for by the customer.

In cases of vandalism to Company owned lighting equipment, the Company, at its discretion, will repair the damaged property, the cost of which shall be borne by the customer and billed upon completion of work. A written estimate of the cost will be submitted to the customer for approval before work is performed.

In cases of vandalism to customer owned lighting equipment, the customer shall be responsible for repairing the damaged property. The Company may, upon request from the customer, repair the damaged property, the cost of which shall be borne by the customer and billed upon completion of work. A written estimate of the repair cost will be submitted to the customer for approval before work is performed.

P.U.C.O. No. 13

# STREET LIGHTING PROVISIONS

The customer shall have the right to affix street, traffic, regional transit authority, combination, safety, and warning signs on any street lighting equipment installed under this tariff schedule as long as said sign is erected and maintained in a proper and safe manner so as not to interfere in any way with the use of street lighting equipment, appurtenances or equipment of the Company. The customer shall agree to indemnify and hold harmless the Company or its successors and assigns of and from any and all expense and damages resulting to anyone caused by the negligent installation or maintenance of said street sign. The customer shall not attach any signs, devices, posters, banners, handbills or placards of any description, other than the aforementioned traffic, safety and warning signs, to any street lighting equipment installed under this tariff schedule without the express written consent of the Company.

No reduction in billing shall be allowed for lamp outages.

The Company's obligations with respect to making extensions, furnishing service, and supplying electric energy shall at all times be subject to limitations or restrictions by virtue of regulations issued by governmental authorities.

P.U.C.O. No. 13

# STREET LIGHTING SERVICE - (RATE "STL") COMPANY OWNED

### GENERAL RULES:

The Company will install lighting equipment on an approved existing pole or, where necessary, will furnish one pole for mounting the lighting equipment and one section of secondary wire. All additional lighting equipment, not provided for herein, installed by the Company at the request of the customer, shall be the property of the Company and be paid for by the customer.

# CHANGES IN NUMBER, SIZE, TYPE OR LOCATION:

Activities related to the replacement, relocation, alteration, or removal of existing street lighting equipment are not included as part of normal maintenance. Such activities include, but are not limited to, the replacement of an existing fixture, removal or relocation of a lamp, luminaire, bracket, and/or pole, or installation of a luminaire shield. All such requests shall be made in writing by the customer. The Company will supply the customer with a written estimate of charges prior to the start of work.

### **RESPONSIBILITIES FOR OWNERSHIP, MAINTENANCE AND REPLACEMENT:**

All lighting components including lamp, refractor, luminaire, ballast, pole, bracket, and other supporting materials shall be owned by the Company. All service and necessary maintenance will be performed only during the regular working hours of the Company.

### **INSTALLATION COSTS:**

All installation costs for new street lighting investment that exceed the net book value of street lighting investment reflected in the rates below shall be billed to the customer. A written estimate of costs shall be presented to the customer for approval prior to the start of the work and paid in full upon completion.

# RATE:

Monthly charges per customer for all customers served under this schedule shall include Distribution Charges as shown below.

#### **Distribution Charges:**

G (a)	
Overhead Service	Underground Service
\$10.92	\$6.08
	<u>Overhead Service</u> \$10.92

(a) The Company will not install new incandescent lighting equipment but will maintain existing incandescent lighting equipment when practical.

P.U.C.O. No. 13

### STREET LIGHTING SERVICE - (RATE "STL") COMPANY OWNED

#### MERCURY STREET LIGHTING (b)

		Monthly Base Rates		
		<b>Overhead Service</b>	Undergr	ound Service
Rating	Monthly Base	Wood	Post	Pole
<u>in Watts</u>	<u>Rate</u>	Pole	<u>Type</u>	Type
175	per unit	\$7.39	\$11.74	\$18.30
250	per unit	\$8.80	-	\$20.52
400	per unit	\$11.38	-	\$23.32
400*	per unit	-	-	\$23.57
400**	per unit	-	-	\$32.81
1,000	per unit	\$23.49	-	\$37.32

(b) The Company will not install new mercury lighting equipment but will maintain existing mercury lighting equipment when practical.

\* 30 ft. concrete pole

\*\* Steel pole with 2 brackets and dual lamps

		Monthly Base Rates			
		Overhead Service	<u>Underarou</u>	ind Service	Special Architectural
Rating	Monthly Base	Wood	Post	Pole	Pole
<u>in Watts</u>	<u>Rate</u>	Pole	<u>Type</u>	Type	Installations
100	per unit	\$10.29	<b>\$1</b> 4.81	\$21.75	\$20.28
100*	per unit	-	-	-	\$32.31
150	per unit	\$10.95	-	\$22.76	\$21.49
150*	per unit	-	-	-	\$33.16
200	per unit	-	-	-	-
250	per unit	\$13.19	-	\$24.84	\$24.42
250*	per unit	-	-	-	\$36.25
250**	per unit	-	-	\$37.42	-
400	per unit	\$15.16	-	\$26.62	\$26.39
400*	per unit	-	-	-	\$39.03

### HIGH PRESSURE SODIUM LIGHTING (c)

(c) The Company reserves the right to limit the types of posts, luminaries and lamps under this rate for new installations.

\* Special Architectural Installation with dual lamps

\*\* Steel pole with 2 brackets and dual lamps

P.U.C.O. No. 13

1.

# STREET LIGHTING SERVICE - (RATE "STL") COMPANY OWNED

### APPLICABLE RIDERS:

The charges included with the applicable riders as designated on the Summary Rider, Tariff Sheet 80 shall be added to the Rates and charges set forth above.

P.U.C.O. No. 13

# STREET LIGHTING SERVICE - (RATE "STL") CUSTOMER OWNED

### **GENERAL RULES:**

The customer shall inform the Company in writing of any changes to existing unmetered load associated with a customer's street lighting account at least 30 days prior to the anticipated date of change. Changes include, but are not limited to, any modification of rated lamp or bulb capacity or the addition of unmetered lights. If prior notice is not properly provided to the Company, the Company may retroactively bill the customer's account: (1) for all usage from the point such load was added, and (2) up to an additional three months usage. At any point after such notice is not properly provided, the Company may also refuse to continue providing unmetered service at the delivery point. In such case, the cost of metering equipment and installation shall be fully borne by the customer while equipment shall be owned by the Company. The Company may, at any time, inspect the customer's equipment to verify or measure actual load.

## RESPONSIBILITIES FOR OWNERSHIP, MAINTENANCE AND REPLACEMENT:

The customer shall furnish, install, repair, replace, and maintain all lighting components as well as be responsible for the costs, if any, of such work performed by the Company. All lighting components including lamp, refractor, luminaire, ballast, pole, bracket, and other supporting materials shall be owned by the customer.

# RATE:

Monthly charges per customer for all customers served under this schedule shall include Distribution Charges as shown below.

#### **Distribution Charges:**

ALL LAMP TYPES

	Monthly Base Rate:	
All kWh per kWh	3.5937¢	

#### **APPLICABLE RIDERS:**

The charges included with the applicable riders as designated on the Summary Rider, Tariff Sheet 80 shall be added to the Rates and charges set forth above.

P.U.C.O. No. 13

### <u>STREET LIGHTING SERVICE - (RATE "STL")</u> CUSTOMER OWNED, LIMITED COMPANY MAINTENANCE

# APPLICABILITY:

This lighting plan is not available for lighting units installed after December 31, 2008.

### **GENERAL RULES:**

The customer shall inform the Company in writing of any reductions to existing unmetered load associated with a customer's street lighting account at least 30 days prior to the anticipated date of change.

### CHANGES IN NUMBER, SIZE, TYPE OR LOCATION:

Activities related to modification of existing street lighting equipment are not included as part of normal maintenance. Such activities include, but are not limited to, the replacement or alteration of an existing fixture, removal or relocation of a lamp, luminaire, bracket, and/or pole, or installation of a luminaire shield. All such requests shall be made in writing by the customer. The Company will supply the customer with a written estimate of charges prior to the start of work.

### **RESPONSIBILITIES FOR OWNERSHIP, MAINTENANCE AND REPLACEMENT:**

All lighting components shall be furnished, owned, repaired, maintained, and replaced by the customer except for bulbs, refractors, photoelectric cells, luminaires, and ballasts. The Company shall replace bulbs, refractors, luminaires, and ballasts that fail due to normal use twice in a twelve (12) month period at no additional cost when practical. Additional replacements shall be billed to the customer at actual cost.

# RATE:

Monthly charges per customer for all customers served under this schedule shall include Distribution Charges as shown below.

#### **Distribution Charges:**

ALL LAMP TYPES:	
	Monthly Base Rate:
All kWh per kWh	9.6209¢

The following charges apply in addition to the above:

#### APPLICABLE RIDERS:

The charges included with the applicable riders as designated on the Summary Rider, Tariff Sheet 80 shall be added to the Rates and charges set forth above.

P.U.C.O. No. 13

# TRAFFIC LIGHTING SCHEDULE - (RATE "TRF")

# AVAILABILITY:

Available to municipalities, governmental authorities and school districts for the sole purpose of providing electric service to traffic control devices and/or other devices used for traffic control or public safety.

# **METERING:**

New traffic light installations shall be metered, when conditions as determined by the Company allow for such metering, at each Service Connection with the cost of meter installation borne by the customer.

Monthly kilowatt hour consumption for unmetered traffic light equipment shall be determined by the number, rated wattage capacity, and operating characteristics of the traffic lighting.

# <u>RATE:</u>

Monthly charges per customer for all customers served under this schedule shall include Distribution Charges as shown below.

Distribution Charge: Energy Charge:

All kWh, per kWh

0.0813¢

# APPLICABLE RIDERS:

The charges included with the applicable riders as designated on the Summary Rider, Tariff Sheet 80 shall be added to the Rates and charges set forth above.

# SERVICE CONNECTION:

A Service Connection shall be defined as the point at which the device(s) of the customer connect to the facilities of the Company.

# OWNERSHIP:

Traffic control lights, warning lights, traffic signs, and other devices served under this rate schedule shall be owned, installed and maintained by the customer, including all wiring and equipment. All service connections shall be made by the Company.

#### P.U.C.O. No. 13

## TRAFFIC LIGHTING SCHEDULE - (RATE "TRF")

### SERVICE TABULATION:

The customer shall provide, upon the Company's request, a tabulation showing all traffic control lights and warning lights installed and in service. Notwithstanding the above, the customer shall inform the Company in writing of any changes to existing unmetered load associated with a customer's traffic lighting at least 30 days prior to the anticipated date of change. Changes include, but are not limited to, additional traffic control lights, traffic signs, or warning lights installed, or any change made in the wattage of any such unit. If prior notice is not properly provided to the Company, the Company may retroactively bill the customer's account: (1) for all usage from the point such load was added, and (2) up to an additional three months usage. At any point after such notice is not properly provided, the Company may also refuse to continue providing unmetered service at the delivery point. In such case, the cost of metering equipment and installation shall be fully borne by the customer's equipment to verify or measure actual load.

# GENERAL RULES:

Extensions of existing distribution facilities, and/or the addition of transformers, which are required strictly for the purposes of providing traffic lighting service shall be paid for by the customer.

The customer may attach police, fire and rescue signal equipment to the Company's poles. Such attachments shall be made in accordance with accepted standards for safe construction and shall not interfere in any way with the Company's use of its property or the provision of electric service. The customer shall indemnify and hold harmless the Company from and against any and all liability arising from the customer's use of the Company's facilities in this manner.

Warning sirens up to 400 watts and call box lights shall be billed as traffic control devices.

All of the Company's obligations with respect to making extensions, furnishing service and supplying electric energy shall at all times be subject to limitation or restriction by virtue of orders or regulations issued by governmental authorities other than the customer.

# ELECTRIC SERVICE REGULATIONS:

The Company's Electric Service Regulations shall apply to the installation and use of electric service.

P.U.C.O. No. 13

# PRIVATE OUTDOOR LIGHTING SERVICE - (RATE "POL")

# AVAILABILITY:

Available to any customer receiving service at secondary voltages on the lines of the Company for allnight outdoor lighting on private property.

## METERING:

Private Outdoor Lighting service shall be unmetered with monthly kilowatt hour consumption determined using standard bulb ratings and associated ballasts multiplied by average burn hours.

### **BURN HOURS:**

All lamps shall be operated by photoelectric control or by time clocks, with hours of operation from dusk to dawn, 4,200 hours per annum.

The following monthly Kilowatt-hour values shall be used for billing purposes. Any installation with dual lamps shall multiply the below values by two (2).

Bulb Type	<u>Rating</u>	<u>kWh Per Month</u>
Mercury Vapor	175 Watt	69
Mercury Vapor	400 Watt	158
Mercury Vapor	1000 Watt	380
High Pressure Sodium Vapor	100 Watt	42
High Pressure Sodium Vapor	150 Watt	62
High Pressure Sodium Vapor	200 Watt	88
High Pressure Sodium Vapor	250 Watt	105
High Pressure Sodium Vapor	400 Watt	163
Metal Halide	15,000 Lumens	73
Metal Halide	23,000 Lumens	111
Metal Halide	40,000 Lumens	172

### RATE:

Monthly charges per customer for all customers served under this schedule shall include Distribution Charges as shown below.

# **Distribution Charges:**

MERCURY LIG	HTING		
<u>Watts</u>	Monthly Base Rate:	Overhead Wood	All Other Installations
175	per unit	\$8.62	\$10.96
400	per unit	\$15.98	-
1,000	per unit	\$25.45	-

#### P.U.C.O. No. 13

Sheet 33

1<sup>st</sup> Revised Page 2 of 2

PRIVATE OUTDOOR	LIGHTING SERVICE	- (RATE "POL")

HIGH PRESSUR	E SODIUM LIGHTING		
<u>Watts</u>	Monthly Base Rate:	Overhead Wood	All Other Installations
100 or less	per unit	\$12.90	\$15.98
150	per unit	\$15.21	\$20.61
150*	per unit	-	\$32.68
250	per unit	\$16.76	\$23.50
250*	per unit	-	\$35.24
400 or greater	per unit	\$20.89	\$25.21

\*Dual lamps

#### **APPLICABLE RIDERS:**

The charges included with the applicable riders as designated on the Summary Rider, Tariff Sheet 80 shall be added to the Rates and charges set forth above.

### **OWNERSHIP & MAINTENANCE:**

All lighting equipment shall remain the property of the Company. All service and necessary maintenance will be performed only during the regular working hours of the Company.

# CHANGES IN NUMBER, SIZE, TYPE OR LOCATION:

Activities related to the alteration or removal of existing private outdoor lighting equipment are not included as part of normal maintenance. Such activities include, but are not limited to, removal of a lamp, luminaire, bracket, and/or pole, or installation of a luminaire shield. All such requests shall be made in writing by the customer. The Company will supply the customer with a written estimate of charges prior to the start of work.

# **GENERAL RULES:**

The customer shall assume risk of loss or damage to equipment and property installed in connection with the lighting system. The Company may correct hazardous conditions affecting the safety of the public and the customer shall pay expenses incurred by the Company for repairs to equipment owned by the customer.

The customer shall inform the Company in writing of any reductions to existing unmetered load associated with a customer's outdoor lighting account at least 30 days prior to the anticipated date of change

No reduction in billing shall be allowed for lamp outages.

The rates contained herein are for continuous use of the facilities and are not applicable to seasonal usage.

# ELECTRIC SERVICE REGULATIONS:

The Company's Electric Service Regulations shall apply to the installation and use of electric service.

# EXPERIMENTAL COMPANY OWNED LED LIGHTING PROGRAM

# AVAILABILITY:

This program is being offered on an experimental basis through December 31, 2019. Available to municipalities and governmental authorities that elect to take service from The Cleveland Electric Illuminating Company owned light-emitting diode (LED) lights for the lighting of streets, sidewalks, parks, and other public grounds.

This experimental program is only available to new customers and customers currently taking service under the Company Owned program under Street Lighting Service (Rate STL), sheet No. 31. A minimum installation of 12 LED lights per customer is required for participation.

### **GENERAL PROVISIONS:**

Unless otherwise noted, the terms of sheet No. 30 (Street Lighting Provisions) shall apply.

### METERING:

Standard street lighting service shall be unmetered with monthly kilowatt hour consumption determined using rated capacity multiplied by average burn hours.

# BURN HOURS AND MONTHLY KWH CONSUMPTION:

Unless otherwise noted, all lamps shall be operated by photoelectric control or by time clocks, with hours of operation from dusk to dawn, 4,200 hours per annum.

Light Type	Bulb Rating (Lumens)	Bulb Rating (Watts)	kWh per Month
Cobra Head	4,000	50	18
Cobra Head	7,000	90	32
Cobra Head	11,500	130	46
Cobra Head	24,000	260	91
Acorn	2,500	50	18
Acorn	5,000	90	32
Colonial	2,500	50	18
Colonial	5,000	90	32

The following monthly Kilowatt-hour values shall be used for billing purposes.

# COSTS OF INSTALLATION:

The Company will install LED lighting fixtures on approved existing poles. The customer shall not be required to pay for the cost of the LED fixture or its installation prior to taking service under this experimental program. However, any additional and new lighting equipment installed by the Company at the request of the customer, including but not limited to poles, brackets, secondary, transformation, etc., not provided for herein, shall be the property of the Company and be paid for by the customer prior to the customer taking service under this experimental program.

Filed pursuant to Orders dated November 20, 2014 and October 12, 2016 in Case Nos. 14-1027-EL-ATA and 16-470-EL-ATA, before The Public Utilities Commission of Ohio

# EXPERIMENTAL COMPANY OWNED LED LIGHTING PROGRAM

# CHANGES IN NUMBER, SIZE, TYPE OR LOCATION:

Costs associated with activities related to the replacement, relocation, alteration, repair, or removal of existing street lighting equipment are not included as part of normal maintenance and will be the responsibility of the customer. Examples of such activities include, but are not limited to, the replacement of an existing fixture, remaining costs of existing infrastructure, removal or relocation of a lamp, luminaire, bracket, and/or pole, or installation of a luminaire shield.

# **REMAINING COSTS OF EXISTING INFRASTRUCTURE:**

In cases where an existing light is being replaced by an LED light on existing Company owned infrastructure, the customer is responsible for the remaining costs of the existing light, pole and all associated infrastructure prior to installation of the LED light. For each existing light that is being replaced, the remaining costs of the existing infrastructure are to be paid by the customer, in the amount of \$301 per fixture, prior to the customer taking service under this experimental program.

# **RESPONSIBILITIES FOR OWNERSHIP, MAINTENANCE AND REPLACEMENT:**

All lighting components including lamp, refractor, luminaire, ballast, pole, bracket, and other supporting materials shall be owned by the Company. All service and necessary maintenance will be performed only during the regular working hours of the Company. If service and necessary maintenance cannot be performed during regular working hours of the Company, for reasons beyond the Company's control, the incremental costs of performing such work shall be borne by the customer.

# RATE:

Monthly charges per customer for all customers served under this schedule shall include Distribution Charges per fixture per month, as shown below.

#### **Distribution Charges:**

Light Type	Bulb Rating (Lumens)	Bulb Rating (Watts)	Monthly Charge per Fixture
Cobra Head	4,000	50	\$7.39
Cobra Head	7,000	90	\$9.24
Cobra Head	11,500	130	\$9.82
Cobra Head	24,000	260	\$15.13
Acom	2,500	50	\$19.44
Acorn	5,000	90	\$20.53
Colonial	2,500	50	\$11.74
Colonial	5,000	90	\$12.90

Filed pursuant to Orders dated November 20, 2014 and October 12, 2016 in Case Nos. 14-1027-EL-ATA and 16-470-EL-ATA, before The Public Utilities Commission of Ohio

# EXPERIMENTAL COMPANY OWNED LED LIGHTING PROGRAM

### CUSTOMER CANCELLATION:

This experimental program will be offered through December 31, 2019, unless cancelled earlier.

Customers may opt off of this lighting program to the Company's Street Lighting Service, Company Owned schedule with 60 days advanced written notice. Customers electing to opt off of the experimental program shall be responsible for all costs associated with removing the LED lights, including the remaining costs of the existing infrastructure that would otherwise be recoverable absent the customer opting off this program. Opting off this program shall not affect or impair the Company's ownership rights of the LED Lights.

### **OTHER PROVISIONS:**

All energy savings associated with customer participation under this experimental program shall count toward The Cleveland Electric Illuminating Company's energy efficiency and peak demand reduction requirements arising as a result of Section 4928.66, Revised Code and associated Ohio Administrative Code provisions.

### APPLICABLE RIDERS:

Unless otherwise noted, all rider charges applicable to Rate STL as designated on the Summary Rider, Tariff Sheet 80, shall be added to the Rates and charges set forth above for customers participating under this experimental program.

Applicable to any Customer with non-synchronous or synchronous, which does not qualify for The Net Energy Metering Rider, electric generation equipment having been established as a Qualifying Facility, or who requires partial service from the Company as back-up, or as a partial electric requirement to another electric source.

#### MONTHLY RATES:

#### 1. CAPACITY RESERVATION CHARGE

Per kW of Capacity Reservation per Billing Period per Voltage Classification

	Transmission	Subtransmission 33 kV and 11 kV	Distribution 4 kV and 13.2 kV
<u>Transmission &amp;</u>	All kW, per kW	All kW, per kW	All kW, per kW
<u>Distribution Charge:</u>	\$1.58	\$2.51	\$3.42
Generation Charge :	All kW, per kW	All kW, per kW	All kW, per kW
	\$1.80	\$1.83	\$1.89

#### 2. DEMAND CHARGE

Whenever the Customer utilizes Supplemental, Back-Up or Maintenance power, the demand will be charged as indicated below:

a. Supplemental Demand

The Demand Charge found in the appropriate applicable Rate Schedule shall be used to calculate the monthly billing charge for Supplemental power.

b. Back-Up Demand

The Customer shall have the option of either Method A or Method B, below, as the method under which Back-Up Demand shall be calculated. Sixty days prior to the initial one-year contract period, and at least 60 days prior to each succeeding annual period, the Customer shall specify the method chosen. That method shall apply for the full contract period.

#### Method A

The Demand Charge found in the appropriate, applicable Rate Schedule shall be used to calculate the billing period charge for Back-Up Demand.

The Capacity Reservation charge for the billing period shall be reduced to the extent that Back-Up Demand, under Method A, is used during the billing period.

#### Method B

The billing period Demand Charge for Back-Up Power shall be determined by use of daily demand, and will use the appropriate following rate based on service voltage level classification:

<b>Transmission</b>	<b>Subtransmission</b>	<b>Distribution</b>
132 kV and Above	33 kV and 11 kV	4 kV and 13.2 kV
\$ 0.82	\$ 0.87	\$ 0.92
per kW per day	per kW per day	per kW per day

The above charges consist of ancillary service charges from the applicable Rate Schedule and generation charges.

Determination of the daily Demand Charge shall be the maximum daily Back-Up Demand times the appropriate above daily rate. The billing period charge for Back-Up Demand shall be the sum of the billing period's daily Demand Charges.

Method B is applicable no more than fifteen days a year. If in any billing period the use of Backup Power exceeds fifteen days, the Customer will be billed under Method A for the billing period. The fifteen days in that billing period would not count toward the annual limitation.

When the customer has a meter which has the capability of measuring on and off peak kW demands, the kW demand applied to the Method B Backup Demand charge shall be the highest on-peak kW demand recorded during the billing period or the sum of the highest on-peak kW demand plus 25 percent of the difference between the highest off-peak and the highest on-peak kW demand recorded during the billing period, whichever is greater. The resultant kW demand will be applied on a daily basis.

c. Maintenance Demand

Fifty percent of the demand charge found in the appropriate applicable Rate Schedule shall be used and prorated based on the number of days that Maintenance power was used during the billing period.

#### 3. ENERGY CHARGE

The charge for energy provided by the Company for Supplemental, Back-Up (Method A) and Maintenance power shall be that found in the appropriate applicable Rate Schedule.

The Energy Charge for Back-Up Power (Method B) shall be 0.49¢ per kWh. This cost recovery will be split between RTC and RSC in proportion to RTC and RSC charges in the applicable Rate Schedule.

#### 4. REACTIVE DEMAND CHARGE

For each rkva of reactive billing demand \$.20

5. EMERGENCY POWER

Emergency Power Service can only be obtained from the Company. The following charges apply under this schedule:

Demand Charge per kW per billing period	\$ 29.90
Energy Charge per kWh per billing period	\$ 0.147

The Demand Charge will consist of transmission, distribution and generation charges in the same proportion as the Capacity Reservation Charge. The Energy Charge will consist of the RTC and RSC charges from the appropriate applicable Rate Schedule and generation charges. Rider No. 7 shall not apply to the Emergency power charge.

#### **CUSTOMER CHARGE:**

The Customer Charge shall be \$ 95.50 per month.

#### BACK-UP POWER MAXIMUM CHARGE:

The maximum billing period charge for Back-Up power shall be those charges for service which would be billed under the appropriate, applicable Rate Schedule.

If Back-Up power is used during the billing period, the billing period charge for Capacity Reservation shall be reduced to the extent that Back-Up Demand is used.

#### **<u>MINIMUM CHARGE</u>**:

The billing period minimum charge shall be the sum of the Capacity Reservation charge multiplied by the Capacity Reservation, plus the Customer Charge, plus the minimum charges of any applicable Rate Schedules.

#### RIDERS:

Except as otherwise noted, the Rates and charges specified above shall be modified in accordance with the otherwise Applicable Tariff Riders, except for the Net Energy Metering Rider, in effect plus a fuel charge of 1.3605¢ per kWh. The fuel charge is cost recovery split between RTC and RSC in proportion to RTC and RSC charges in the applicable Rate Schedule.

If the total applicable RTC and RSC charges under Method B were to be less than  $1.8505 \notin$  per kWh (the sum of the energy charge for Backup Power plus the fuel charge), the excess would be generation charges.

#### **DETERMINATION OF PARTIAL SERVICE:**

Partial Service Capacity shall be established by the Customer and the Company prior to receiving service under this schedule.

The Customer may request a time dependent Partial Service Capacity level, subject to Company acceptance. The Customer must submit a supply profile for each capacity source sixty (60) days prior to the contract period. The Company has thirty (30) days within which to make any reasonable modifications.

In the event the Customer's alternate supply exceeds the presubmitted supply profile, the Partial Service Capacity will be re-established at the new supply level for that and comparable time periods, and shall be in effect for the remainder of the contract period, unless otherwise altered hereunder.

In the event the Customer installs additional generating equipment, or the metered Back-Up, Maintenance or Emergency demand in any billing period exceeds the Partial Service Capacity, the Partial Service Capacity shall be re-established at the new level and remain in force for the remainder of the contract period, unless otherwise altered hereunder.

#### **DETERMINATION OF CAPACITY RESERVATION:**

The Capacity Reservation demand shall be specified 60 days in advance of the initial contract period by the Customer and shall be equal to the amount of Customer owned generation or capacity from another electric source for which the Customer desires Back-Up capacity.

In the event the Customer requires Emergency power to be supplied by the Company, the Capacity Reservation deemed contracted for thereafter shall be increased by an amount equal to the net demonstrated usage determined by the amount of Emergency power supplied.

The Capacity Reservation shall be in force for the remainder of the contract period, unless otherwise altered hereunder.

#### **CONTRACT PROVISIONS:**

The contract period is defined as a one-year period and service under this schedule shall be for a one-year term and selfrenewing for annual periods thereafter. Unless otherwise authorized by the Company, the Customer may cancel service being provided hereunder upon written notice to the Company, received at least sixty (60) days prior to the end of any contract period.

The Capacity Reservation or Partial Service Capacity may be adjusted during any annual term, upon written request by the Customer, subject to the approval of the Company.

#### **MAINTENANCE POWER SCHEDULE:**

Maintenance power shall be supplied under the applicable Rate Schedule, as determined by the Company using the requested level of maintenance demand, and such power shall be provided only on a prescheduled basis. At no time shall the requested maintenance demand be more than the Partial Service Capacity.

Maintenance power will be available for up to four weeks per calendar year per generating unit. Of these twenty-eight (28) days, the Customer will be permitted up to two consecutive days of Maintenance power, only during off-peak periods, during each of the summer billing periods. A maintenance day shall constitute any 24 consecutive hour period in which Maintenance power is scheduled. Sixty (60) days prior to the initial one-year contract period, and at least 60 days prior to each succeeding annual period, a maintenance schedule shall be presented to the Company by the Customer. Customers with multiple generating units shall present a maintenance schedule for each unit, and shall specify the level of maintenance demand for each unit. The Company reserves the right to modify the maintenance schedule. Any modifications by the Company must be made with reason within 30 days after the annual maintenance schedule is presented by the Customer.

The Customer may request an adjustment in a schedule maintenance outage up to three weeks prior to previously scheduled dates. Adjusted dates must be within one week of the previously scheduled dates and shall result in a scheduled outage of the same seasonal and daily characteristics, time and duration as the previously scheduled maintenance outage. Company approval, or disapproval with reason, for such adjustment shall be given within one week of such request.

The Company may cancel a scheduled maintenance outage with reason at any time with seven (7) days notice prior to the beginning of a scheduled maintenance outage if conditions on the Company's system warrant such a cancellation. Such notification of cancellation shall state the reasons for such cancellation. Summer Maintenance power can be cancelled by the Company within two days of such dates with reason. Scheduled maintenance outage(s) cancelled by the Company shall be rescheduled subject to the mutual agreement of the Customer and the Company.

#### **TERMS AND CONDITIONS:**

- 1. A Time-of-Day demand meter and a watthour meter, equipped with a detent to prevent reverse rotation, shall be used to measure the energy being supplied by the Company to the Customer. A Time-of-Day demand meter and a watthour meter, equipped with a detent to prevent reverse rotation, shall be installed to measure the energy provided to the Customer from sources other than the Company. The Customer's monthly electric bill shall be calculated by using measurements obtained from these meters.
- 2. Supplemental power will be calculated by measuring the total capacity and energy that is provided to the Customer by the Company less any Back-Up, Emergency or Maintenance power provided to the Customer by the Company. Supplemental power shall be supplied to any Customer under the Company's appropriate, applicable Rate Schedule in effect at the time of service. The level of firm power requested by the Customer shall determine the appropriate, applicable Rate Schedule.
- 3. The Customer shall be provided Back-Up power during periods of unscheduled outages, but such power shall not exceed the level of the Customer's Partial Service Capacity. Should recorded demand exceed the level of the Capacity Reservation, the additional demand shall be charged at the Emergency Services Demand and Energy Charge. Back-Up power shall be supplied under the Company's appropriate, applicable Rate Schedule in effect at the time of providing service. The level of Capacity Reservation power requested by the Customer shall determine the appropriate, Applicable Rate Schedule. At no time shall the level of Back-Up power be used to establish demand levels for Supplemental power.
- 4. Maintenance power shall be supplied to a Partial Service Customer under the appropriate, applicable Rate Schedule in effect at the time of providing service, as determined by the Customer's requested level of Maintenance Demand, and shall be provided on a scheduled basis. At no time will the level of Maintenance power be used to establish demand levels for Supplemental power.
- 5. Emergency power shall be supplied, subject to availability, and when there will be no detriment to system service reliability, to a Customer who does not contract with the Company for Capacity Reservation, or for any level of demand that exceeds such Capacity Reservation. At no time will the level of Emergency power be used to establish levels for Supplemental power.

#### GENERAL RULES:

- 1. All Customers shall comply with applicable national, state and local codes, standards and regulations.
- 2. All Customers shall comply with the provisions of this schedule, as well as the Company's General Rules and Regulations. The Company reserves the right to refuse or to terminate service under this schedule upon finding that the alternative energy supply will not be installed or is not operating in compliance with this schedule.

#### GENERAL RULES:(Cont'd)

3. The Customer agrees to be legally responsible for any damage to the Company's facilities resulting from the alternate electrical source or operation of the Customer's generating equipment. The Customer also agrees to indemnify the Company and save it harmless from all damages, costs, claims, and expenses to the Company, its employees, successors and assigns, or to any third party arising out of, or related to, the operation of the Customer's generator and equipment associated with the connection of the said equipment to the Company's system, except where such damages, costs, claims and expenses have been occasioned by the sole negligence of the Company, its agents or employees. The Company may require proof of adequate insurance or bond.

#### SPECIAL RULES:

- 1. The Customer's generating equipment must produce a 60 hertz sine wave output, with distortion at a level which is within applicable industry standards, at a voltage compatible with the Company's service voltage at the Customer's service location.
- 2. The Customer shall provide the proper electrical devices to disconnect without intentional time delay its generating equipment from the Company's system in the event of a supply outage or a supply circuit failure. A manual disconnection device, capable of being padlocked by the Company, must be provided. The Company shall have access to such equipment at all times and be the sole judge of whether any safety or operating hazards exist.
- 3. The Customer shall provide the Company with manufacturer's literature describing the electrical characteristics and operation of the proposed generator and associated equipment. The Company shall have the right to refuse connection of any device which it finds incompatible with its electric system.
- 4. The Customer shall pay all Interconnection costs.
- 5. The Customer shall perform and bear all costs associated with maintenance work required for its interconnection equipment.
- 6. Sixty (60) days prior to making any changes or modifications to its equipment which materially impacts operation, the Customer shall notify the Company in writing.
- 7. At the time that a Customer permanently ceases operation, all equipment which was necessary to permit interconnected operations shall be promptly removed. All costs incurred with the removal shall be borne by the Customer.
- 8. Any metering costs associated with the Partial Service operation will be borne by the Customer.

#### SPECIAL RULES: (Cont'd)

- 9. The Company may enter into Individualized agreements with Customers which may deviate from this schedule. Such agreements shall address those significant characteristics of service and cost which would influence a need for individualized agreement such as, but not limited to, the following:
  - a. The ability of the Partial Service Customer to accept interruptible service under backup conditions,
  - b. Whether the arrangement allows for long-term utility planning of least cost capacity availability,
  - c. Whether there is sufficient local facility capacity to serve the load,
  - d. Whether there is sufficient substation capacity to serve the load,
  - e. Whether there is sufficient transmission and generating capacity to serve the load.
- 10. The Company will allow up to a four (4) hour grace period for the Customer to bring its alternative supply back on line in the event of a Company-caused outage of the alternative supply. Upon written notice and proof within ten (10) days by the Customer that a Company service interruption caused such outage, the Company will supply partial service to the Customer through the Supplemental service provisions. This service will continue until restoration of the alternative supply is established but not for longer than four (4) hours after re-establishment of Company service.

#### **DEFINITIONS**:

"Qualifying Facility" (QF) means a cogeneration facility or a small power production facility which is a Qualifying Facility under Subpart 5 of FERC 18 Code of Federal Regulations Part 292.

"Sale" means the sale of electric energy or capacity or both by the Company to a Customer under the Partial Service Schedule.

"Interconnection costs" means the reasonable costs incurred by the Company directly related to the installation and maintenance of the physical facilities necessary to permit interconnected operations with a Customer under the Partial Service Schedule to the extent such costs are in excess of the corresponding costs which the Company would have incurred if it had not engaged in interconnection operations, but instead generated an equivalent amount of electric energy itself or purchased an equivalent amount of electric energy or capacity from other sources. Interconnection costs include, but are not limited to, the cost of connection, switching, metering, transmission, distribution, safety provisions and administrative costs. Interconnection costs do not include any costs included in the calculation of avoided costs. "Supplemental power" means electric energy or capacity or both supplied by the Company regularly used by a Partial Service Customer, in addition to that which the Customer acquires from alternate sources or generates itself.

#### **DEFINITIONS: (Cont'd)**

"Back-Up power" means electric energy or capacity supplied by the Company, to replace energy ordinarily obtained by the Customer from other sources or produced by the Customer's generating facility, during an unscheduled outage.

"Maintenance power" means electric energy or capacity supplied by the Company during scheduled outages of the Customer's generating equipment or alternate electric supply.

"Emergency power" means Company supplied electric energy or capacity to a Customer served under the Partial Service Schedule who does not purchase Capacity Reservation power in an amount sufficient to meet its needs during the period of an unscheduled outage.

"Excitation power" means Company supplied electric energy or capacity equired by the Customer served under the Partial Service Schedule to energize generation equipment, transformers, and other Customer equipment.

"Capacity Reservation" means the level of demand the Customer contracts for on a monthly basis from the Company and shall be that amount up to or equal to the amount of Customer owned generation or capacity from another electric source.

"Partial Service Capacity" means that capacity expected to be achieved by the alternate source of electrical supply as determined by, but not limited to, such indicators as nameplate rating of equipment, alternate power supply agreements, transformer or line limitations, or net demonstrated capability.

"Billing Period" or "billing period" means the monthly period over which the Company normally applies its rates and tariffs.

"Rate Schedule" means the firm power rate schedules contained in the Company's tariffs.

### COGENERATORS AND SMALL POWER PRODUCTION FACILITIES

This schedule is applicable to the purchase of power from cogeneration and small power production facilities which are eligible to qualify under Section 210 of the Public Utilities Regulatory Policies Act of 1978, having design capacity of 100 kilowatts or less.

All other electric service which cogenerators or small power producers may require from the Company, such as supplementary, back-up, interruptible or maintenance power shall be furnished under the Company's filed rate schedules in effect for such service.

#### MONTHLY RATES:

#### For Purchases of Energy from QF's

1. Provided a Time-of-Day watt-hour meter is used to measure the energy supplied from a Qualifying Facility to the Company, the Company shall purchase the energy supplied on Monday through Friday at the following rates per kWh:

Eastern Standard Time	Summer Cents pe	<u>Winter</u> r <u>kWh</u>	Daylight Savings Time
8 a.m. to 8 p.m.	1.6	1.7	9 a.m. to 9 p.m.
8 p.m. to 8 a.m.	1.2	1.4	9 p.m. to 9 a.m.

Energy supplied on Saturday and Sunday from a Qualifying Facility shall be purchased by the Company at a rate of 1.4 cents per kWh in the summer and 1.2 cents per kWh in the winter.

- 2. Provided a standard watthour meter is used to measure the energy supplied from a Qualifying Facility to the Company, the Company shall purchase the energy supplied at a rate of 1.35 cents per kWh in the summer and 1.51 cents per kWh in the winter.
- 3. The Winter Rates specified above shall be applicable in eight consecutive monthly billing periods beginning with the October bills each year. The Summer Rates shall apply in all other billing periods.

### COGENERATORS AND SMALL POWER PRODUCTION FACILITIES

#### For Sales of Energy from the Company

- 4. The Company will provide Transmission and Ancillary Services to a Qualifying Facility under its FERC Open Access Transmission Tariff.
- 5. The following additional monthly charges shall apply to cover the cost of special metering facilities for measuring the amount of energy supplied from a Qualifying Facility to the Company as follows:

	Single Phase	Polyphase Polyphase
Time-of-Day Meter		
For Service of 30 kW or Less	\$14.05	\$19.35
For Service Greater Than 30 kW	26.67	29.99
Standard Watthour Meter		
For Service of 30 kW or Less	\$ 8.67	\$14.05
For Service Greater Than 30 kW	21.38	24.70

These costs reflect metering at 240 volts or less. Charges for metering at higher voltages shall be based upon actual costs.

#### GENERAL RULES:

- 1. All Qualifying Facility installations shall comply with applicable national, state and local codes, standards and regulations.
- 2. All Qualifying Facilities shall comply with Company Rules and Regulations listed in this schedule, as well as the Company's Standard Rules and Regulations on file with the Commission. Furthermore, installations shall be made accessible to authorized Company personnel at the time of installation as well as

for periodic inspections thereafter. The Company reserves the right to refuse or to terminate service under this tariff to a Qualifying Facility if the Company finds that the alternate energy device will not be installed or is not operating in compliance with these rules.

3. The Qualifying Facility agrees to be liable for any damage to the Company's facilities resulting from the operation of the generating equipment. The Qualifying Facility also agrees to indemnify the Company and save it harmless from all damages, costs, claims and expenses to the Company, its employees, successors and assigns, or to any third party arising out of or related to the operation, failure or malfunction of the Customer's generator and equipment associated with the connection of the said generator to the Company's system.

# COGENERATORS AND SMALL POWER PRODUCTION FACILITIES

#### SPECIAL RULES:

- 1. The Qualifying Facility's generating system must produce a 60 hertz sine wave output, with distortion at a level which will not interfere with Company service and which is within applicable industry standards, at a voltage compatible with the Company's service voltage at the Qualifying Facility's service location.
- 2. The maximum capacity of a Qualifying Facility shall be limited to 100 kW.
- 3. The Qualifying Facility shall provide the proper electrical devices to disconnect without intentional time delay its generating equipment from the Company's system in the event of a supply outage or a supply circuit failure. A manual disconnecting device, capable of being padlocked by the Company, must be provided. The Company shall have access to such equipment at all times and be the sole judge of whether any safety or operating hazards exist.
- 4. The Qualifying Facility will provide the Company with manufacturer's literature describing the electrical characteristics and operation of the proposed generator and associated equipment. The Company shall have the right to refuse connection of any device which it finds incompatible with its electric system.
- 5. A standard meter, equipped with a detent to prevent reverse rotation, shall be used to measure the energy being supplied by the Company to the Qualifying Facility. A standard watthour meter or time-of-day watthour meter, also equipped with a detent, will measure the energy flow from the Qualifying Facility to the Company's system. The measurements obtained from these meters will form the basis for the rates provided for above.
- 6. The Qualifying Facility shall pay the costs of connection, switching, transmission, distribution, safety provisions and administrative costs incurred by the electric utility directly related to the installation and maintenance of the physical facilities necessary to permit interconnected operations with a Qualifying Facility, to the extent such costs are in excess of the corresponding costs which the Company would have incurred if it had not engaged in interconnected operations.
- 7. The Qualifying Facility shall perform and bear all costs associated with maintenance work which would be required for its equipment.
- 8. Prior to making any changes or modification to its equipment or operation, the Qualifying Facility shall notify the Company in writing.
- 9. At the time that a Qualifying Facility permanently ceases operation, all equipment associated with the operation of the facility, particularly that involved in the connection with the Company's system, shall be promptly removed. All costs incurred with removal shall be borne by the Qualifying Facility.
- 10. The Qualifying Facility shall make application to the Company for service under this tariff.

# Residential Renewable Energy Credit Purchase Program

### AVAILABILITY:

Available to individual residential customers of Company where:

- 1) Customer is a residential customer that owns or leases a customer-sited renewable energy project in the State of Ohio that has been certified and approved by the Public Utilities Commission of Ohio (the "Project") that meets the criteria listed herein.
- 2) Customer and the Company have signed and completed the Company's Interconnection document.
- 3) Customer has signed and completed all the required documents of, and received approval from the Company to participate in, the Company's Net Energy Metering Rider.
- 4) Customer and the Company has signed and completed the Second Amended Residential Renewable Energy Credit Purchase Program Agreement which was approved by The Public Utilities Commission of Ohio in Case No. 09-551-EL-UNC that contain terms and conditions and the pricing mechanisms to determine the purchase price associated with this Residential Renewable Energy Credit Purchase Program (the "Program").

### CRITERIA:

The Project shall meet the following criteria:

- 1) Project must have a placed-in-service date of January 1, 1998, or after, and meet the definition of "Renewable Energy Resource" as defined in R.C. § 4928.01(A); and
- 2) Project must be able to generate at least one (1) megawatt hour annually and be interconnected to the Company's energy delivery system.
- 3) Project must have a meter that meets the standard set forth in Ohio Administrative Code 4901:1-10 provided by the customer, at the customer's own cost and expense, on the output of the inverter if applicable, where kilowatt hours consist solely from the Project's generation can be measured and verified. This requirement is waived if the existing utility meter has the incremental functionality described above to measure and verify the kilowatt hour output of the Customer Project.
- 4) Project must be attached as a permanent fixture at the customer's property (service address) during the term of the contract.
- Renewable energy delivered from a renewable energy resource project shall be calculated by reading the output of the meter at two different points of the year (i.e. January 1 to December 31). Customer must provide documentation evidencing the initial meter reading.

#### RECOVERY:

All reasonable costs associated with the administration of this Program and the purchase of renewable energy credits shall be recovered through the Companies' Alternative Energy Resource Rider (AER).

**ITEM** 

# P.U.C.O. No. 13

4.

## **MISCELLANEOUS CHARGES**

### **TABLE OF CONTENTS**

## PAGE

1.	SAME DAY CONNECTION CHARGE	.2
2.	FIELD COLLECTION CHARGE	.2
3.	RECONNECTION CHARGE	.2
4.		.3
5.	UNAUTHORIZED USE INVESTIGATION CHARGE	.3
6.	METER TEST CHARGE	.3
7.	DISCONNECTION/RECONNECTION FOR CUSTOMER WORK CHARGE	.3
8.	TEMPORARY SERVICE DROP CONNECTION CHARGE	.3
9.	METER SERVICE CHARGES	.4

P.U.C.O. No. 13

\$35.00

\$60.00

\$35.00

## **MISCELLANEOUS CHARGES**

#### 1. SAME DAY CONNECTION CHARGE

If the customer requests service for the same day on which the request has been made and the service is presently not connected, the Company will charge the customer a fee of \$35.00. (Electric Service Regulations, Sheet 4, Section II, Paragraph E).

## 2. FIELD COLLECTION CHARGE

When a customer has a delinquent bill, the Company may make a field collection visit to attempt to collect the delinquent amount. A Field Collection charge of \$12.00 shall be applicable once per billing cycle for all collection visits made during a billing cycle by the Company to the customer's premises. (Electric Service Regulations, Sheet 4, Section XI, Paragraph B).

### 3. <u>RECONNECTION CHARGE</u>

When service has been disconnected for failure to comply with the terms and conditions of the Rate Schedules or Electric Service Regulations of the Company or has been disconnected at the customer's request, (other than for seasonal or temporary discontinuance of service), the following charges for reconnection of service:

Before 12:30 p.m. Monday through Friday, subject to a different time prescribed by Chapter 4901:1-18 of the Ohio Administrative Code;

Same day reconnection

After 12:30 p.m. Monday through Friday, subject to a different time prescribed by Chapter 4901:1-18 of the Ohio Administrative Code, but before 3:30 p.m., and the customer requests same day reconnection of service;

Same day reconnection

After 12:30 p.m. Monday through Friday, subject to a different time prescribed by Chapter 4901:1-18 of the Ohio Administrative Code;

Next day reconnection

NOTE: The customer must contact the Company and provide proof of payment in order to have service reconnected.

Customer requests for reconnection after normal business hours or on Saturday, Sunday, or Company holidays shall be treated as being received on the following business day. When service has been disconnected at the customer's request because of seasonal occupancy of the premises or for a temporary discontinuance of service where the same customer has moved in and out of the same premise within a 12 month period without another party signing for service during that 12 month period, the Company will charge the customer a reconnection fee of \$15.00. (Electric Service Regulations, Sheet 4, Section II, Paragraph F).

# MISCELLANEOUS CHARGES

# 4. <u>RETURNED PAYMENT CHARGE</u>

The Company shall charge the customer \$15.00 for processing payments that result from dishonored payment transactions. (Electric Service Regulations, Sheet 4, Section VI, Paragraph H).

# 5. UNAUTHORIZED USE INVESTIGATION CHARGE

In the event the customer or consumer commits or is the beneficiary of any fraudulent practice in obtaining electric service from the Company, or falsifies any service application, the Company will assess the customer a minimum fee of \$125.00 for the Company's investigation of the unauthorized use of service. The charge will also be assessed where any connection or device is found on the service entrance equipment or premises of the customer or consumer which prevents the meter from accurately registering total consumption used or to be used, or where the service entrance equipment or other property used to supply electric service has been altered to avoid accurate metering or has been damaged.

The Company will also assess the customer an estimated or actual bill representing the electric service fraudulently or falsely obtained and the actual costs to repair or replace any damaged or missing service entrance equipment or other property used to supply electric service.

# 6. METER TEST CHARGE

The Company will test a meter at the request of the customer. The first test within the period specified in Chapter 4901:1-10 Ohio Administrative Code shall be at no charge to the customer. The Company shall charge \$55.00 for any subsequent tests performed at the customer's request, however, no payment will be required of the customer if the meter is found to be registering incorrectly in accordance with the tolerances specified in Chapter 4901:1-10 of the Ohio Administrative Code. (Electric Service Regulations, Sheet 4, Section IX, Paragraph C).

# 7. DISCONNECTION/RECONNECTION FOR CUSTOMER WORK CHARGE

When a customer requests the Company to disconnect and/or reconnect there will be a charge to the customer for the Company's actual cost to perform the disconnect/reconnect. This charge will not apply to residential accounts unless such work, at the request of the customer, requires work to be performed by the Company outside normal working hours.

# 8. <u>TEMPORARY SERVICE DROP CONNECTION CHARGE</u>

When requested by a customer, the Company may provide a Temporary Service Drop Connection for a charge to the customer of \$200. A Temporary Service Drop Connection shall mean the installation of single-phase service up to 200 amps from existing secondary conductors. (Electric Service Regulations, Sheet 4, Section VII, Paragraph A.4).
# **MISCELLANEOUS CHARGES**

## 9. METER SERVICE CHARGES

Charges specified in this provision apply to customers that request the Company to install metering and to provide certain meter related services, both of which are necessary to bill the customer's account, and that otherwise are not provided by the Company. These charges are in addition to any charges included in the applicable rate schedule and must be paid by the customer prior to the Company installing the requested metering. The customer is responsible for providing communication links to the interval meter per the Company's specifications. If such a communication link is not installed by the first regularly scheduled interval meter read date, the Company may install a communication link and charge the customer on a monthly basis in accordance with charges specified in this provision.

Replace Meter with Interval Meter and Modem	\$550.00
Replace Meter with Time-of-Day Meter	\$105.00

Company installed communication link charge is \$50.00 per month.

If the Company is required to visit the meter site due to the inability to gain access to the meter location or the necessary communication link has not been installed, or the communication link is not working properly, or the Company elects to make a site visit to read the meter, a charge shall be applicable per site visit of \$50.00.

#### Cleveland, Ohio

### P.U.C.O. No. 13

# SUMMARY RIDER

Rates and charges included in the rate schedules listed in the following matrix shall be modified consistent with the terms and conditions of the indicated Riders:

		Rate Schedule							
	Rider - (Sheet)	RS GS GP GSU GT STL TRF F					POL		
Q	Advanced Metering Infrastructure / Modern Grid - (106)	•	•	•	•		•	•	٠
Q	Atternative Energy Resource - (84)	•	•	•	•	٠	•	•	•
	Business Distribution Credit - (86)		•	•					
Q	CEI Delta Revenue Recovery - (112)	•	•	•	•	•	•	•	•
	Commercial High Load Factor Experimental TOU – (130)		•	•			1		
	Deferred Fuel Cost Recovery - (118)	•	•	•	•	•	•	•	•
A	Deferred Generation Cost Recovery - (117)	•	•	•	•	•	•	•	•
Q	Delivery Capital Recovery - (124)	•	•	•	•				
	Delivery Service Improvement - (108)	•	•	•	•				
Q	Delta Revenue Recovery - (96)	•	•	•	•	•	•	•	•
Т	Demand Side Management - (97)	•							
T	Demand Side Management and Energy Efficiency - (115)	•	•	•	•	•	•	•	•
A	Distribution Modernization – (132)	•	•	•	•	٠	•	•	•
Q	Distribution Uncollectible - (99)	•	•	•	•	•	•	•	•
Q	Economic Development - (116)	•	•	•	•	•	•	•	•
	Economic Load Response Program - (101)		<u> </u>	•	•	•			
	Experimental Critical Peak Pricing - (113)		•	•	•	•		-	
<u> </u>	Experimental Real Time Pricing - (111)		•	•	•	•	T		
ļ –	Fuel - (105)	•	•	•	•	٠	•	•	•
a	Generation Cost Reconciliation - (103)	•	•	•	•	•	•	•	•
	Generation Service - (114)	•	٠	•	•	•	•	•	٠
T	Government Directives Recovery – (126)	•	•	•	•	•	•	•	•
	Grandfathered Contract - (94)		•	•	•	•			
	Hospital Net Energy Metering - (87)		•	•	•	•	T		
Q	Line Extension Cost Recovery - (107)	•	•	•	•	•	•	•	٠
	Net Energy Metering - (93)	•	•	•	•	•	T I		
Q	Non-Distribution Uncollectible - (110)	•	•	•	•	•	•	•	٠
A	Non-Market-Based Services - (119)	•	•	•	•	•	•	•	•
P	Non-Residential Deferred Distribution Cost Recovery - (121)		•	•	•	•	•	•	•
A	Ohio Renewable Resources - (129)	•	•	•	•	•	•	•	•
A	Peak Time Rebate Program (88)	•							
T	Phase-In Recovery (125)	•	•	•	•	•	•	•	•
٩	PIPP Uncollectible - (109)	•	•	•	•	•	•	•	•
	Reasonable Arrangement - (98)		•	•	•	•	1		
Ρ	Residential Deferred Distribution Cost Recovery - (120)	•					Τ		
	Residential Distribution Credit ~ (81)	•					Γ		
Т	Residential Electric Heating Recovery - (122)	· •					T		
<b></b>	Residential Generation Credit - (123)	•					T		1

#### The Cleveland Electric Illuminating Company

Cleveland, Ohio

P.U.C.O. No. 13

### SUMMARY RIDER

	School Distribution Credit - (85)		•	•	٠				
	State kWh Tax - (92)	•	•	•	٠	•	•	•	•
A	Transmission and Ancillary Services - (83)	•	•	•	٠	•	•	•	٠
P	Universal Service - (90)	•	٠	٠	٠	•	•	•	•

• - Rider is applicable or available to the rate schedules indicated

A - Rider is updated/reconciled annually

Q - Rider is updated/reconciled quarterly

T - Rider is updated/reconciled twice per year

1.

P - Rider is updated/reconciled periodically

# RIDER RDC Residential Distribution Credit Rider

# **APPLICABILITY:**

Applicable to any customer taking service under Rate Schedule RS who took service from the Company under one of the following rate schedules as of January 1, 2007, or any subsequent customer at that same service address, who continues to comply with the requirements of the previously applicable rate schedule set forth below, excluding customers who began service from the Company subsequent to April 30, 2009 who otherwise would qualify for service under this Rider on the basis of service identified as "Original Sheet No. 12" below:

Residential Schedule (Solely under the Optional Load Management Rate)	Original Sheet No. 10
Residential Add-On Heat Pump	Original Sheet No. 11
Residential Water Heating	Original Sheet No. 12
Residential Space Heating	Original Sheet No. 13
Residential Water Heating and Space Heating	Original Sheet No. 14
Optional Electrically Heated Residential Apartment Schedule	Original Sheet No. 15

# RATE:

A customer's distribution charges as set forth in Rate Schedule RS shall be reduced by 1.70¢ per kWh for all kWhs in excess of 500 kWhs consumed by the customer during each winter billing period, as defined in the Electric Service Regulations, Tariff Sheet 4, Section VI.I.1., Seasonal Price Changes.

#### RIDER TAS Transmission and Ancillary Services Rider

## APPLICABILITY:

Applicable to any customer who receives electric service under the Company's rate schedules.

## PURPOSE:

The Transmission and Ancillary Services Rider (TAS) will recover all transmission and transmissionrelated costs, including ancillary and congestion costs, imposed on or charged to the Company by FERC or a regional transmission organization, independent transmission operator, or similar organization approved by FERC.

# RATE:

For the time period of January 1, 2010 through December 31, 2010, the TAS2 charge for each rate schedule shall be calculated as follows:

TAS2 =	TAC - E	TAC - E		
	BU		1 - CAT	

Where:

**TAC** = The amount of the Company's total projected Transmission and Ancillary Servicesrelated costs for the Computation Period, allocated to each rate schedule.

The Computation Period over which TAS2 will apply shall be January 1 through December 31, 2010.

- E = The net over- or under-collection of the TAC, including applicable interest, invoiced during the 12-month period ending September 30 of the year immediately preceding the Computation Period, allocated to rate schedules.
- **BU** = Forecasted billing units for the Computational Period for each Rate Schedule.
- **CAT** = The Commercial Activity Tax rate as established in Section 5751.03 of the Ohio Revised Code.

The balance remaining as of December 31, 2010 in TAS2 shall be carried forward into TAS1.

The TAS1 charges are not applied to customers during the period the customer takes electric generation service from a certified supplier.

The TAS2 charges are not avoidable for customers who take electric generation service from a certified supplier during the period January 1, 2010 through December 31, 2010.

### RIDER TAS <u>Transmission and Ancillary Services Rider</u>

For the time period beginning January 1, 2011, the TAS1 charge for each rate schedule shall be calculated as follows:

TAS1 = 
$$\begin{bmatrix} TAC - E \\ BU \end{bmatrix} \times \begin{bmatrix} 1 \\ 1 - CAT \end{bmatrix}$$

Where:

**TAC** = The amount of the Company's total projected Transmission and Ancillary Servicesrelated costs for the Computation Period, allocated to each rate schedule.

The Computation Period over which TAS1 will apply shall be January 1 through December 31 of each year.

- E = The net over- or under-collection of the TAC, including applicable interest, invoiced during the 12-month period ending September 30 of each year that immediately precedes the Computation Period, allocated to rate schedules.
- **BU** = Forecasted billing units for the Computational Period for each rate schedule.
- **CAT** = The Commercial Activity Tax rate as established in Section 5751.03 of the Ohio Revised Code.

The TAS1 charges are not applied to customers during the period the customer takes electric generation service from a certified supplier.

The TAS2 charges are not avoidable for customers who take electric generation service from a certified supplier during the period January 1, 2010 through December 31, 2010.

## RIDER TAS Transmission and Ancillary Services Rider

# TAS charges:

The following charges will apply, by rate schedule, effective for service rendered beginning January 1, 2010:

	<u>TAS1</u>	<u>TAS2</u>
RS (all kWhs, per kWh)	0.0000¢	(0.1908)¢
GS* (per kW of Billing Demand)	\$ 0.0000	\$ (0.4908)
GP* (per kW of Billing Demand)	\$ 0.0000	\$ (0.3554)
GSU (per kW of Billing Demand)	\$ 0.0000	\$ (0.5623)
GT (per kVa of Billing Demand)	\$ 0.0000	\$ (0.2492)
STL (all kWhs, per kWh)	0.0000¢	(0.0956)¢
TRF (all kWhs, per kWh)	0.0000¢	(0.0956)¢
POL (all kWhs, per kWh)	0.0000¢	(0.0956)¢

\* Separately metered outdoor recreation facilities owned by non-profit governmental and educational institutions, such as athletic fields, served under Rate GS or GP, primarily for lighting purposes, will be charged per the TAS charge applicable to Rate Schedule POL.

# **RIDER UPDATES:**

The charges contained in this Rider shall be updated and reconciled on an annual basis. The TAS Rider will be filed with the Public Utilities Commission of Ohio on or before October 18 of each year and be effective for service rendered January 1 through December 31 of the subsequent year, unless otherwise ordered by the Commission.

The TAS2 charges of this Rider shall no longer be applied as of service rendered beginning September 22, 2010, pending final reconciliation of the costs authorized by the Commission's December 16, 2009 Finding and Order issued in Case No. 09-968-EL-ATA.

#### RIDER AER Alternative Energy Resource Rider

#### **APPLICABILITY:**

Applicable to any customer that takes electric service under the Company's rate schedules. The Alternative Energy Resource Rider (AER) is not applied to customers during the period the customer takes electric generation service from a certified supplier. The following charge will apply, for all rate schedules, effective for service rendered beginning April 1, 2017, for all kWhs per kWh:

#### RATE:

AER charge

0.0083¢

#### PROVISIONS:

The charges set forth in this Rider recover costs incurred by the Company associated with securing compliance with the alternative energy resource requirements in Section 4928.64, Revised Code. The costs recovered through this Rider will be all costs associated with securing compliance with the alternative energy resource requirements including, but not limited to, all Renewable Energy Credits costs, any reasonable costs of administering the request for proposal, and applicable carrying costs. This rider shall be in effect until all costs are fully recovered.

#### **RIDER UPDATES:**

The charges contained in this Rider shall be updated and reconciled on a quarterly basis. No later than December 1st, March 1st, June 1st and September 1st of each year, the Company will file with the PUCO a request for approval of the Rider charges which, unless otherwise ordered by the PUCO, shall become effective on a service rendered basis on January 1st, April 1st, July 1st and October 1st of each year, beginning October 1, 2016.

# RIDER SDC School Distribution Credit Rider

## **APPLICABILITY:**

Applicable to any public school district building that is not taking service under the Company's Business Distribution Credit Rider (BDC), or under a contract pursuant to 4905.31, Revised Code or 4905.34, Revised Code and that either: 1) was served under the Company's Energy for Education II program on December 31, 2008, or 2) is a Cleveland Municipal School District building that was served by the Company on January 21, 2009, or 3) is a new public school district building in the Cleveland Municipal School District or in a school district that was served under the Company's Energy for Education II program on December 31, 2008 of which fifty-percent (50%) or more of the total square footage of such building is used for classroom-related purposes including any such building that is a mobile unit or temporary structure.

Customer buildings qualifying for service under this rider may opt-out upon written request in order to take service under the Company's Rider BDC. Such customer buildings opting out may not return to service under this rider for a period of one year. Should Rider BDC be terminated or withdrawn, such customer buildings may return to service under this rider as soon as practical anytime subsequent to such termination upon written request of the customer and so long as this rider remains in effect.

# RATE:

The sum of distribution charges specified in Company's General Service - Secondary ("Rate GS"), General Service Primary ("GP"), or General Service - Subtransmission ("GSU") rates including all applicable riders as approved in and consistent with Case Number 07-551-EL-AIR, shall be reduced by 8.693 percent.

# RIDER BDC Business Distribution Credit Rider

## APPLICABILITY:

Applicable to any customer taking service under Rate Schedules GS or GP who on April 30, 2009 took service from the Company under one of the following rate schedules and has not had a change of service address or a change to qualifying conditions subsequent to April 30, 2009. Qualifying conditions are those in effect in the below rate schedules as they existed on April 30, 2009 and continues to comply with the requirements of the previously applicable rate schedule set forth below:

Electric Space Conditioning All Electric Large General Service Optional Electric Process Heating and Electric Boiler Load Management Original Sheet No. 31 Original Sheet No. 34

Original Sheet No. 39

## RATE:

A customer's distribution charges as set forth in Rate Schedule GS shall be reduced by 1.50¢ per kWh for all kWhs consumed by the customer during winter billing periods, as defined in the Electric Service Regulations, Tariff Sheet 4, Section VI.1.1., Seasonal Price Changes.

A customer's distribution charges as set forth in Rate Schedule GP shall be reduced by 0.50¢ per kWh for all kWhs consumed by the customer during winter billing periods, as defined in the Electric Service Regulations, Tariff Sheet 4, Section VI.I.1., Seasonal Price Changes.

Cleveland, Ohio

P.U.C.O. No. 13

# RIDER HNM Hospital Net Energy Metering Rider

# AVAILABILITY:

Available to qualifying Hospitals having self-generation equipment located on the Hospital's premises that operates in parallel with the Company's facilities ("net metering system") pursuant to RC 4928.67 (A)(2). "Hospital" is defined as public health centers and general, mental, chronic disease, and other types of hospitals and related facilities, such as laboratories, outpatient departments, nurses' home facilities, extended care facilities, self-care units, and central service facilities operated in connection with hospitals, and also includes education and training facilities for health professions personnel operated as an integral part of a hospital, but does not include any hospital furnishing primarily domiciliary care.

A net metering system used by a Hospital shall meet all applicable safety and performance standards established by the National Electrical Code, the Institute of Electrical and Electronic Engineers, Underwriters Laboratories and Rules 4901:1-22-03 and 4901:1-22-04 of the Ohio Administrative Code and be approved by the Company for interconnection with the Company's system.

# METERING:

In order to receive service under this Rider, Net Metering must be accomplished using either two meters or a single meter with two registers that are capable of separately measuring the flow of electricity in both directions. One meter or register shall be capable of measuring the electricity generated by the Hospital at the time it is generated per time interval. If the Hospital's existing electrical meter is not capable of separately measuring electricity the Hospital generates at the time it is generated, the Company will, upon written request by the Hospital, acquire, install, maintain, and read an approved meter or meters. The Hospital shall be responsible for all expenses involved in purchasing and installing an approved meter or meters. Maintenance of the meters will be the responsibility of the Company, which will own the meters.

The Hospital may operate its electric generating facilities individually or collectively. If additional metering is necessary to accommodate multiple generating facilities, the Hospital shall be responsible for all expenses involved in purchasing and installing such approved additional meters, having the capabilities specified in this Rider.

Metering charges shall be consistent with the Company's Miscellaneous Charges, Tariff Sheet 75.

#### **BILLING:**

The Hospital shall be charged for all electricity used by the Hospital in accordance with the rate schedule for which the Hospital would otherwise qualify, including applicable riders, if the Hospital did not have said net metering system ("Company Charges").

All electricity generated by the Hospital shall be credited on an hourly basis for the time the Hospital's electricity is generated, at the locational marginal price of energy quoted by the applicable Regional Transmission Organization ("Generation Credits").

The Hospital's monthly bill shall equal Company Charges less the sum of all Generation Credits occurring during the billing period. If the resulting bill indicates a net credit dollar amount, the credit shall be netted against the Hospital's bill until the Hospital requests in writing a refund that amounts to, but is no greater than, an annual true-up of accumulated credits over a twelve-month period.

4.

# Original Sheet 87 Page 2 of 2

### RIDER HNM Hospital Net Energy Metering Rider

## **APPLICATION:**

Hospitals seeking to receive service under the provisions of this Rider must submit, at least 45 days prior to the date it expects to take service under this Rider, a written application to the Company demonstrating the total generating capacity of the net metering system and compliance with the provisions set forth herein.

# RIDER PTR Peak Time Rebate Rider

# AVAILABILITY:

This Rider is only available to those customers taking service at service locations within the particular geographic area identified in FirstEnergy's Smart Grid Modernization Initiative filed by the Company with the Department of Energy, who are not taking service under Rider CPP or Rider RTP or any other alternative critical peak pricing rate schedule and who have been selected by the Company to participate in the program. The Company will randomly select customers that will be offered an option to participate in this Rider. Customers so assigned may opt-out of service under this Rider pursuant to the "Term" provision specified below.

# PURPOSE:

The Peak Time Rebate program (PTR Program) will be used to collect data to gauge customer response to requests to reduce energy usage during times of peak system demand in exchange for rebates. PTR Program participants may receive rebates to their bill for reduced energy use during critical peak hours as described below. Rebate payments will be based on the amount of reduced energy usage as compared to a calculated baseline usage level.

# CRITICAL PEAK EVENTS:

Upon assignment to this Rider, PTR Program participants will be assigned a critical peak period (CPP) by the Company. During the months of June through August, the Company will call up to fifteen (15) Critical Peak Events each year (a "Critical Peak Event").

Baseline Usage for each Critical Peak Event is calculated using customer-specific energy usage for recent historical days. Baseline Usage shall be calculated in one of two fashions:

- (a) This baseline calculation shall be used for customers enrolling prior to September 1, 2013. Customers participating will be randomly assigned a CPP of either 1 P.M. EDT through 7 P.M. EDT or 2 P.M. EDT through 6 P.M. EDT. The customer's average energy usage occurring during the customer's CPP of the first five (5) non-holiday, non-weekend, non-Critical Peak Event days immediately prior to each Critical Peak Event adjusted by the usage in the two hours prior to the event, or
- (b) This baseline calculation shall be used for customers who enroll after September 1, 2013. The CPP will be defined as 1 P.M. EDT through 7 P.M. EDT for customers who participate. The customer's 3 highest usage days from the 14 most recent days, excluding weekend days, holidays and prior critical peak event days are selected. The usage during the hours of 1 P.M. EDT through 7 P.M. EDT is used to determine highest usage days. The event period average Humidity Index (HI) of each of the three days is compared to the average HI of the event day. Any day with an average HI that is not within +/- 10% of the event day average HI is eliminated. If all three days are eliminated, the single highest usage day of the three is used as the baseline.

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

# RIDER PTR Peak Time Rebate Rider

# NOTIFICATION:

For scheduled Critical Peak Events, the Company will notify PTR customers by 6 P.M. EDT the previous day or as soon as possible thereafter. Notification of a Critical Peak Event 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. Operation, maintenance and functionality of such communication devices selected by the customer as well as receipt of notifications of Critical Peak Events shall be the sole responsibility of the customer.

# RATES:

A rebate amount of \$0.40 per kWh reduced will be available to customers who elect to take service under this Rider. The customer's usage occurring during the customer's CPP shall be subtracted from the Baseline Usage to determine the number of kWhs eligible for the rebate for each Critical Peak Event. Negative results from this calculation shall be set to a result of zero, which will cause no rebate for that specific Critical Peak Event.

# OTHER PROVISIONS:

- 1. Rebates will be rewarded as a line-item credit on the customer's monthly bill for electric service. For a Critical Peak Event that falls near the end of the customer's billing cycle, rebates may carry over to the next month's bill.
- 2. No later than December 1<sup>st</sup> of each year, the Company shall file with the Public Utilities Commission of Ohio ("Commission") either 1) documentation sufficient to demonstrate that the PTR Program is reflective of current market conditions, or 2) a request for amendment to this Rider as necessary to reflect changes in program requirements and market conditions.

# TERM:

This Rider shall expire with service rendered through August 31, 2014, unless earlier terminated by the Company with approval by the Commission. A customer may terminate their participation in this Rider, effective with the next scheduled meter reading following at least 12 days notice to the Company by the customer.

## RIDER RCP Residential Critical Peak Pricing Rider

## AVAILABILITY:

This Rider is only available to those customers taking service at service locations within the particular Ohio geographic area identified in FirstEnergy's Smart Grid Modernization Initiative filed by the Company with the Department of Energy. The Rider is not available to customers during the period the customer takes generation service from a certified supplier or during the period the customer is taking service under the Peak Time Rebate Rider. Participation is limited to 250 customers who enroll on a first come first serve basis.

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

The Rider RCP charge shall reflect time-of-day pricing or critical peak pricing, for all kWh per kWh, for summer months only. For the winter months, the Rider RCP charge shall reflect non time differentiated pricing for all kWh per kWh, as shown below:

# RATE:

The following charges will be applicable to customers taking service under this Rider in lieu of Generation Service Rider charges. All other rate schedules and riders that apply to a customer taking Standard Service Offer Generation Service shall apply to customers taking service under the Residential Critical Peak Pricing Rider.

Summer Charge	es per kWh (Capacity and	Energy Charges)	
	<u>Off-peak</u>	<u>On-peak</u>	Critical Peak
RS	2.9954¢	6.3481¢	28.2800¢

Winter Charges per kWh

_	•	Capacity Charges	Energy Charges
RS		1.2325¢	4.0007¢

Summer On-peak period shall be 7 a.m. to 11 p.m. EDT, Monday through Friday, excluding holidays and periods when Critical Peak Summer Charges apply.

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

The Critical Peak Period shall be 1 p.m. to 7 p.m. EDT for up to fifteen (15) Critical Peak Periods as determined solely by the Company during the summer. The hours of 7 a.m. to 1 p.m. and 7 p.m. to 11 p.m. EDT during the same day as the Critical Peak Periods shall be defined as Summer On-peak hours.

Summer Off-peak period shall be all hours when Summer Charges apply that are not Summer On-peak or Critical Peak Period hours.

For billing purposes, the Winter Charges shall be applicable beginning with service rendered during each winter billing period as defined in the Electric Service Regulations. The Summer Charges shall apply in all other billing periods.

The Public Utilities Commission of Ohio

## RIDER RCP Residential Critical Peak Pricing Rider

### METERING

The customer must have an AMI meter defined as an automated meter with two-way communication capability.

## NOTIFICATION:

For Critical Peak Periods, the Company will endeavor to notify RCP customers by 6 P.M. the day before the Critical Peak Period commences, or as soon as practically possible thereafter. Notification of a Critical Peak Period 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. Operation, maintenance and functionality of such communication devices selected by the customer as well as receipt of notifications of Critical Peak Periods shall be the sole responsibility of the customer.

# TERM:

A customer may terminate their participation in this Rider, effective with the next scheduled meter reading following at least 12 days notice to the Company by the customer.

Cleveland, Ohio

P.U.C.O. No. 13

# RIDER USF Universal Service Fund Rider

A Universal Service charge of 0.10497¢ per kWh for the first 833,000 kWh and 0.05680¢ per kWh for the kWh above 833,000 kWh shall be added to the energy charge of all applicable rate schedules for the exclusive purposes of providing funding for the low-income customer assistance programs and for the Consumer Education Program authorized under Section 4928.56 of the Ohio Revised Code, and for paying the administrative costs of the low-income customer assistance programs and the Consumer Education Program.

This Universal Service Rider replaces the Interim Emergency and Temporary Recovery Method for Percentage of Income Payment Plan Arrearages. Any service subject to Interim Emergency and Temporary Recovery Method for Percentage of Income Payment Plan Arrearages shall be subject to this Universal Service Rider instead. Cleveland, Ohio

P.U.C.O. No. 13

# RIDER SKT State kWh Tax Rider

#### **APPLICABILITY:**

A state kWh tax shall be applied to each kWh delivered to a customer taking service under Rate Schedules RS, GS, GP, GSU, GT, STL, TRF and POL consistent with Section 5727.81 of the Ohio Revised Code, unless a customer elects to be a self-assessing purchaser that has been approved by the Ohio Department of Taxation. A self-assessing purchaser is any customer taking service from the Company that consumed over the course of the previous calendar year more than 45,000,000 kWhs of electricity and meets the requirements set forth in Section 5727.81 of the Ohio Revised Code.

#### RATE:

First 2,000 kWhs Next 13,000 kWhs All Excess Over 15,000 kWhs 0.465¢ per kWh 0.419¢ per kWh 0.363¢ per kWh

In the event that the customer's meter is not actually read for the billing period, the estimated kWhs to collect Company charges may be used to collect the State kWh Tax.

#### ADDITIONAL TAXES:

The Ohio Commercial Activity Tax (CAT) rate as established in Section 5751.02 of the Ohio Revised Code shall be applied to the above charges according to the formula 1 / (1 - CAT).

# Rider No. 17 Net Energy Metering Rider

## <u>Availability</u>

Pursuant to Section 4928.01(A)(30)-(32) of the Revised Code (Net Metering), a customer-generator is a customer of the Company that is a user of a net metering system. To qualify for a net metering system, the customer-generator facility must use as its fuel either solar, wind, biomass, landfill gas, or hydropower, or use a microturbine or a fuel cell which is located on the customer-generator's premises and operates in parallel with the Company's transmission and distribution systems and is intended primarily to offset part or all of the customer's requirements for electricity. A net metering system used by a customer-generator shall meet all applicable safety and performance standards established by the National Electrical Code, the Institute of Electrical and Electronic Engineers, Underwriters Laboratories and Rules 4901:1-22-03 and 4901:1-22-04 of the Ohio Administrative Code.

# **Metering**

In order to receive service under this Rider, Net Metering must be accomplished using a single meter capable of registering the flow of electricity in each direction. If the existing electrical meter in service at the customer's facility is not capable of measuring the flow of electricity in each direction, the Company will, upon written request by the customer-generator, acquire, install, maintain, and read an approved meter that is capable of measuring electricity in each direction. The customer-generator will pay the Company all expenses involved in either modifying the existing meter or providing a new meter capable of registering the flow of electricity in each direction. Maintenance of the meter will be the responsibility of the Company, which will own the meter. The Company, at its own expense and with written consent of the customer-generator, may install additional meters to monitor the flow of electricity. Maintenance of the additional meter(s) will be the responsibility of the Company, which will own the meter(s).

# <u>Billing</u>

The provisions of this rider will be applied to the rate schedule to which the customer would be assigned if that customer were not a customer-generator. The customer-generator will be billed or credited charges and applicable riders as measured by the meter. Measured demand specified in the appropriate tariff shall be based on the peak demand measured as supplied by the Company only, flowing from the Company's system to the customer-generator's facility. If the Company supplies more kilowatt-hours of electricity than the customer-generator facility feeds back to the Company's system during the billing period, all energy charges of the appropriate rate schedule shall be applied to the net kilowatt-hours of electricity back to the system than the Company supplies to the customer-generator facility during the billing period, energy charges of the Generation Service Rider (GEN) shall be applied to the net kilowatt-hours of electricity as a bill credit until netted against the customer generator's bill, or until the customer-generator requests in writing a refund that amounts to, but is no greater than, an annual true-up of accumulated credits over a twelve-month period.

1.

## Net Energy Metering Rider

### **Application**

Customer-generators seeking to receive service under the provisions of this rider must submit a written application to the Company demonstrating compliance with the Net Energy Metering Rider provisions and quantifying the total rated generating capacity of the customer-generator facility.

#### **Interconnection**

The Company's Distribution Interconnection Tariff shall apply to service under this rider.

### RIDER GRC Grandfathered Contract Riders

### **APPLICABILITY:**

Applicable only to customer facilities taking service under a special contract entered into with the Company prior to January 1, 2001.

### Rider No. 1 - ELECTRIC FUEL COMPONENT RATE

This Rider is applicable only to customer facilities under a special contract pursuant to Ohio Revised Code 4905.31, entered into prior to January 1, 2001, which requires the inclusion of an electric fuel component (EFC) rate according to the terms and conditions of the special contract, or where the special contract provides for billing under a tariffed rate schedule.

For those special contract customers whose terms and conditions require inclusion of the EFC rate, the EFC rate shall be 1.3918¢ per kWh.

For those special contract customers that are billed pursuant to a rate schedule, the following shall apply:

- a. The tariff rate's generation charge shall be reduced by the fuel portion of the generation charge at a rate of 1.3918¢ per kWh., and
- b. The EFC Rider charge shall be applied at a rate of 1.3918¢ per kWh.

#### **Rider No. 7 - OFF-PEAK DEMAND FORGIVENESS**

This Rider is applicable to Full Service Customers with service provided for the purpose of religious worship or to any Full Service Customer having a kW Demand Billing equal to or more than 100 kW (or 20 kW or greater on the Optional Electric Process Heating and Electric Boiler Load Management Schedule) in the current month or any of the preceding eleven months, provided that such Customers either elect to pay a \$4.30 per month per meter charge associated with the metering equipment necessary to effectively implement that off-peak option, or has metering equipment to determine off-peak demand measurement. (When minimum/maximum charges are calculated, the \$4.30 charge will be added to that calculation.) In such event, the monthly billing kilowatt demand shall be the highest on-peak kW demand plus 25 percent of the difference between the highest off-peak and highest on-peak kW demand recorded during the billing period, whichever is greater.

A Full Service customer is one that receives all electric services, including Generation Services, from the Company. On - peak shall be defined as 8:00 a.m. - 8:00 p.m. weekdays, except Holidays. Unless otherwise specified, off peak will be Saturdays, Sundays, and those time periods not defined as on peak. Other days and time periods may be considered off -peak at the option of the Company.

## RIDER GRC Grandfathered Contract Riders

## Rider No. 16 - STATE AND LOCAL TAX RIDER

#### State kWh Tax

### Applicability:

For bills rendered reflecting metered usage occurring on and after January 1, 2003, in addition to the charges provided in each of the Company tariffs, an excise tax will be imposed at the rates identified below to each end user of electricity in the State of Ohio pursuant to Sec. 5727.81 of the Revised Code.

Beginning with bills rendered with metered usage occurring on and after January 1, 2003: a Commercial or Industrial Customer of the Company that receives electricity through a meter as an end user and consumes over the course of the previous calendar year more than 45,000,000 kWhs of electricity may elect to self-assess the tax.

## Rate:

For all end users of electricity under Company's tariffs that are not self-assessing State kWh Tax, the tax imposed below shall apply for all bills rendered with metered usage on and after January 1, 2003:

First 2,000 kWhs	\$0.00465 per kWh
Next 13,000 kWhs	\$0.00419 per kWh
All Excess Over 15,000 kWhs	\$0.00363 per kWh

In the event that the customer's meter is not actually read for the billing period, the estimated kWhs to collect Company charges may be used to collect the State kWh Tax.

The Ohio Commercial Activity Tax (CAT) rate as established in Section 5751.03 of the Ohio Revised Code shall be applied to the above charges according to the formula 1 / (1 - CAT).

#### Municipal Distribution Tax

N/A

## RIDER GRC Grandfathered Contract Riders

### Rider No. 18 - STATE KWH TAX SELF-ASSESSOR CREDIT RIDER

#### Applicability:

For all end users of electricity approved by the Ohio Department of Taxation as a self-assessing purchaser under the provisions of Section 5727.81 of the Revised Code. This Rider will apply to all bills rendered with meter reading dates occurring on and after January 1, 2006.

#### Self-Assessor Credit:

The Self-Assessor Credit shall equal the Statutory kWh Tax, as calculated based upon the State kWh Tax Rate section of the State and Local Tax Rider and shall effectively apply to all self-assessors. Where the State and Local Tax Rider does not expressly apply to the rate tariff under which the self-assessor receives electric service, the Self-Assessor Credit shall equal the Statutory kWh Tax as calculated based upon the State kWh Tax Rate section of the State and Local Tax Rider. Where the State and Local Tax Rider does expressly apply to the rate tariff under which the self-assessor receives electric service, the Self-Assessor Credit shall equal the Statutory kWh Tax, and shall be effected by not charging the Statutory kWh Tax Rate.

# **Interconnection Tariff**

### Applicability

This tariff applies to those situations where an Interconnection Service Customer seeks to physically connect such customer's electric generation facility to, and may operate it in parallel with, the Company's Distribution system, if said customer qualifies for either the Simplified, Expedited or Standard Interconnection Procedure as defined in the Ohio Administrative Code.

#### Purpose

The purpose of this tariff is to implement Ohio Revised Code Section 4928.11, which calls for uniform interconnection standards that are not unduly burdensome or expensive and also ensure safety and reliability, to the extent governing authority is not preempted by Federal law. This Tariff states the terms and conditions that govern the Interconnection and Parallel Operation of an Interconnection Service Customer's facility with the Company's Distribution System.

#### Definitions

(A) "Applicant" means the person requesting interconnection service and may be any of the following:

(1) A customer generator as defined by division (A)(29) of section 4928.01 of the Revised Code.

(2) A self-generator as defined by division (A)(32) of section 4928.01 of the Revised Code.

(3) The owner or operator of distributed generation as defined in paragraph (K) of this rule.

(B) "Application" means a request to an electric distribution utility (EDU) using the format set forth on the web site of the public utilities commission of Ohio for interconnection of distributed generation to the electric distribution system owned by the EDU.

(C) "Area network" means a type of electric distribution system served by multiple transformers interconnected in an electrical network circuit, which is generally used in large metropolitan areas that are densely populated, in order to provide highly reliable service. Area network has the same meaning as the term "distribution secondary grid network" found in institute of electrical and electronics engineers (IEEE) standard 1547 sub clause 4.1.4.

(D) "Automatic sectionalizing device" means any self-contained, circuit-opening device used in conjunction with a source-side protective device, which features automatic reclosing capability.

(E) "Backup electricity supply" means replacement electric power supplied to an applicant by the EDU at a tariff rate or alternatively, as a market-based option or by a competitive retail electric service provider of the applicant's choice at a rate to be determined between the provider and the applicant.

(F) "Business Day" means any day which is not a Saturday, Sunday, or legal holiday.

(G) "Calendar Day" means any day, including Saturday, Sunday, and legal holidays.

(H) "Commission" means the public utilities commission of Ohio.

(I) "Competitive retail electric service" means a component of retail electric service that is competitive as provided under division (B) of section 4928.01 of the Revised Code.

(J) "Cost recovery" means collection, upon approval by the commission pursuant to its authority under section 4909.15 of the Revised Code, of such documented EDU interconnection costs that are incurred at reasonable levels for prudent purposes and that are over and above the review processing fees set forth in rules 4901:1-22-06 to 4901:1-22-08 of the Administrative Code.

(K) "Distributed generation" is a general term for all or part of a system of a distributed electrical generator or a static inverter either by itself or in the aggregate of twenty megawatts or less in size together with all protective, safety, and associated equipment installed at a point of common coupling on the EDU's distribution system in close proximity to the customer load.

(L) "Electric distribution utility" or (EDU) means an electric distribution utility, which is an investorowned electric utility that owns and operates a distribution wires system and supplies at least retail electric distribution service.

(M) "Equipment package" means distributed generation facility assembled to include not only a generator or electric source but related peripheral devices that facilitate operation of the distributed generation.

(N) "Expedited procedure" means a review process for certified distributed generation that passes a certain prespecified review procedure, has a capacity rating of two megawatts or less, and does not qualify for simplified procedures.

(O) "Interconnection" means the physical connection of the applicant's facilities to the EDU's system for the purpose of electrical power transfers.

(P) "Interconnection point" means the point at which the applicant's distributed generation facility physically connects to the EDU's system.

(Q) "Interconnection service" means the services provided by an EDU or transmission provider for the applicant's distributed generation facility.

(R) "Line section" means either that portion of an EDU's electric system connected to a customer bounded by automatic sectionalizing devices, the end of the distribution line, or a line segment identified as appropriate for study by a utility engineer.

(S) "Minor modification" to an interconnection application means a change in the technical characteristics that improves the reliability, safety and compatibility of the interconnection with the electric distribution system while not materially increasing the size or cost of the intended distributed generation facility installation.

(T) "Parallel operation with the EDU's system" means all electrical connections between the applicant's distributed generation facility and the EDU's system that are capable of operating in conjunction with each other.

(U) "Point of common coupling" means the point which the distributed generation facility is connected to the EDU's system.

(V) "Reliability" means the degree of performance of the elements of the electric system that results in electricity being delivered to and from an applicant in the amount desired while avoiding adverse effects on the adequacy and security of the electric supply, defined respectively as:

(1) The ability of the electric system to supply the aggregate electrical demand and energy requirements at all times, taking into account scheduled and unscheduled outages of system elements.

(2) The ability of the electric system to withstand sudden disturbances such as electric short circuits or unanticipated loss of system elements.

(W) "Retail electric service provider" means any entity in this state that provides retail electric service as defined by division (A)(27) of section 4928.01 of the Revised Code.

(X) "Sale for resale" means a sale of energy to an energy supplier, electric utility or a public authority for resale purposes.

(Y) "Scoping meeting" means a meeting between representatives of the applicant and the EDU conducted for but not limited to the following purposes:

(1) To discuss alternative interconnection options.

(2) To exchange information including any electric distribution system data and earlier study evaluations that would be expected to impact such interconnection options.

(3) To analyze such information.

(4) To determine the potential points of common coupling.

(Z) "Simplified procedures" means a review process for interconnection of inverter-based distributed generation twenty-five kilowatts or less in size on a radial or spot network system under certain conditions.

(AA) "Standard procedure" means a review process for interconnection of any generating facility(s) that has a power rating of twenty megawatts or less, not qualifying for either simplified or expedited interconnection review processes.

(BB) "Spot network," as defined by IEEE standard 1547 sub clause 4.1.4, means a type of electric distribution system that uses two or more inter-tied transformers to supply an electrical network circuit and is generally used to supply power to a single customer or a small group of customers.

#### Scope and Application

(A) The rules in this chapter are intended to do all of the following:

(1) Make compliance within this tariff not unduly burdensome or expensive for any applicant in accordance with division (A) of Section 4928.11 of the Revised Code.

(2) Establish uniform nondiscriminatory, technology-neutral procedures for interconnecting distributed generators to distribution facilities in a manner that protects public and worker safety and system reliability.

(3) Apply in the entire territory where commission-approved tariffs apply to those situations where an applicant seeks to physically connect distributed generation to, and operate it in parallel with, the EDU's distribution system.

(4) Provide three review options for an applicant's request for interconnection with the EDU including simplified procedures, expedited procedures, and standard procedures.

(B) Each EDU in the state of Ohio shall file uniform interconnection service tariffs for commission review and approval pursuant to division (A) of Section 4928.11 of the Revised Code that includes the procedures and technical requirements set forth in this chapter for interconnection service on a first-come, first-served basis.

(C) The rules in this chapter shall not relieve any applicant from complying with all applicable federal, state, and local laws and ordinances.

#### **Industry Standards**

The safety and performance standards established by the institute of electrical and electronics engineers (IEEE), the underwriters laboratory (UL), and the National Electric Code (NEC), as included in this chapter by reference, and as required consistent with division (B)(4) of section 4928.67 of the Revised Code, shall be the effective version at the time the applicant applies for interconnection.

#### **General Provisions**

(A) Prohibitions

(1) In accordance with the EDU's code of conduct adopted pursuant to section 4928.17 of the Revised Code, an EDU or its affiliates shall not use, without the customer's consent, such knowledge of proposed interconnection service to prepare competing proposals to the interconnection service that offer either discounted rates in return for not providing the interconnection service or competing generation.

(2) No EDU shall reject, penalize, or discourage the use or development of new technology for interconnection service in accordance with division (A) of section 4928.11 of the Revised Code.

(B) Pre-application

(1) The EDU will designate an employee or office from which information on the requirements for EDU's application review process can be obtained through an informal request by the applicant that includes discussion of the following:

(a) The applicant's proposed interconnection of a distributed generation facility at a specific location on the EDU's distribution system.

(b) Qualifications under EDU's level 1, level 2 or level 3 review procedures.

(2) In addition to the information described in paragraph (B)(1) of this rule, which may be provided in response to an informal request, an applicant may submit a formal request along with a nonrefundable processing fee of three hundred dollars for a preapplication report on a proposed project at a specific site. The EDU shall provide the pre-application data described in paragraph (B)(3) of this rule to the applicant within ten business days of receipt of the written request and payment of the three hundred dollar processing fee.

(3) The pre-application report will include the following information:

(a) Total generation capacity (in megawatts) of substation/area bus, bank or circuit based on normal or operating ratings likely to serve the proposed site.

(b) Existing aggregate generation capacity (in megawatts) interconnected to a substation/area bus, bank or circuit, which is the online amount of generation, likely to serve the proposed site.

(c) Aggregate queued generation capacity (in megawatts) for a substation/area bus, bank or circuit, which is the amount of generation in the queue likely to serve the proposed site.

(d) Available generation capacity (in megawatts) of substation/area bus or bank and circuit most likely to serve the proposed site, which is the total capacity less the sum of existing aggregate generation capacity and aggregate queued generation capacity.

(e) Substation nominal distribution voltage and/or transmission nominal voltage, if applicable.

(f) Nominal distribution circuit voltage at the proposed site.

(g) Approximate circuit distance between the proposed site and the substation.

(h) Relevant line section(s) peak load estimate, and minimum load data, when available.

(i) Number and rating of protective devices and number and type (standard, bi-directional) of voltage regulating devices between the proposed site and the substation/area. Identify whether substation has a load tap changer.

(j) Number of phases available at the site.

(k) Limiting conductor ratings from the proposed point of interconnection to the distribution substation.

(1) Based on the proposed point of interconnection, existing or known constraints such as, but not limited to, electrical dependencies at that location, short circuit interrupting capacity issues, power quality or stability issues on the circuit, capacity constraints, or secondary networks.

(4) The pre-application report need only include pre-existing data. A pre-application report request does not obligate the EDU to conduct a study or other analysis of the proposed generator in the event that data is not readily available. If the EDU cannot complete some of a preapplication report due to lack of available data, the EDU shall provide the applicant with a pre-application report that includes the data that is available.

(C) Application processing

(1) EDUs shall process all applications for interconnection service and parallel operation with the EDU's system in a nondiscriminatory manner and in the order in which they are received.

(2) Where minor modifications to a pending application are required during the EDU's review of the application, such minor modifications shall not require a new or separate application to be filed by the applicant.

(3) When an application is submitted, the EDU shall determine whether the application is complete and provide the applicant with a written or email notice of receipt within ten business days after the application has been received.

(4) If the EDU determines that the application is complete, the EDU shall issue a notice of receipt with the following:

(a) A copy of the applicable review process.

(b) A target date for processing the application.

(5) If the EDU determines that the application is incomplete, the EDU shall issue a notice of receipt with the following:

(a) A copy of the application review process.

(b) A checklist or description of the information needed to complete the application.

(c) A statement that processing the application cannot begin until the needed information is received.

(6) Upon receiving any necessary application materials missing from the original application, the EDU shall provide the applicant with a second, written or email notice establishing a target date for processing the application.

(7) If an EDU determines that it cannot connect the applicant's facility within the time frames stated in this chapter, it will notify the applicant in writing of that fact within ten business days after the application has been received. The notification must include the following:

(a) The reason or reasons interconnection service could not be performed within the time frames stated in this rule.

(b) An alternative date for interconnection service.

(D) Compliance with national industry standards

An EDU shall file tariffs for uniform interconnection service with the commission that are consistent with the following:

(1) The institute of electric and electronics engineers 1547 standard, effective as set forth in rule 4901:1-22-03 of the Administrative Code.

(2) Underwriters laboratory 1741 standard for inverters, converters, and controllers for use in independent power systems, effective as set forth in rule 4901:1-22-03 of the Administrative Code.

(3) The appropriate criteria and interconnection parameters for the customer's technology, so as not to impose technical and economic barriers to new technology or the development, installation, and interconnection of an applicant's facilities, pursuant to division (A) of section 4928.11 of the Revised Code.

#### (E) Metering

Any metering installation, testing, or recalibration performed by the EDU at the request of the applicant for installation of the applicant's distributed generation facility shall be provided consistent with the electric service and safety standards pursuant to Chapter 4928. of the Revised Code, and rule 4901:1-10-05 and , as applicable, paragraph (C) of rule 4901:1-10-28 of the Administrative Code. Interconnection requested by the applicant for the purposes of net metering must follow the commission's net metering rules promulgated pursuant to division (A)(31) of section 4928.01 of the Revised Code. Any exception to the net metering rules shall be implemented in accordance with any special metering or communication infrastructure ordered by the commission.

(F) Disposal of excess energy produced by the applicant's distributed generation

(1) An applicant proposing to install a self-generator as defined in division (A)(32) of section 4928.01 of the Revised Code for the purposes of selling excess electricity to retail electric service providers as a competitive service to the extent not preempted by federal law must first seek certification of managerial, technical and financial capability consistent with section 4928.08 of the Revised Code.

(2) An applicant requesting interconnection for the purpose of selling energy to any party as a sale for resale or as a wholesale transaction may be subject to applicable rules for regional interstate sales at wholesale prices in markets operated by independent transmission system operators or regional transmission operators under the jurisdiction of the federal energy regulatory commission.

(G) Construction or system upgrades of the EDU's system

(1) Where construction or system upgrades of the EDU's system are required by the applicant's installation of a distributed generation facility, the EDU shall provide the applicant with an estimate of the timetable and the applicant's cost for the construction or system upgrades, consistent with the provisions of this chapter.

(2) All construction or distribution system upgrade costs shall be the responsibility of the interconnection applicant.

(3) If the applicant desires to proceed with the construction or system upgrades, the applicant and EDU shall enter into a contract for the completion of the construction or system upgrades.

(4) All construction and system upgrade cost estimates and invoices shall be itemized and clearly explained.

(5) Interconnection service shall take place no later than two weeks following the completion of such construction or system upgrades.

#### Application Requirements for Interconnection

(A) Application forms

(1) Each applicant for interconnection to an EDU's system shall complete either of the following:

(a) A "short form" application for interconnection of distributed generators that are twenty-five kilowatts or less and utilize equipment that is certified in compliance with IEEE 1547 standard and UL 1741 standard, as set forth in rule 4901:1-22-03 of the Administrative Code.

(b) A standard application for interconnection of generation equipment that does not qualify for a "short form" application.

(2) The application form shall follow the format and content set forth on the commission's website, and must be submitted to the EDU from which the applicant receives retail electric distribution service. Application forms will be available from the applicant's local EDU. The applicant's completed application form should not be sent to the commission for the purposes of review and approval.

(3) The applicant also is advised to refer to the "applicant's checklist" found on the commission website to determine whether to complete the "short form" or the standard form to request interconnection service.

(B) Certified equipment

(1) Each applicant shall provide the EDU a description of the applicant's distributed generation equipment package that is consistent with the following:

(a) An applicant's equipment package shall be considered certified for interconnected operation if it has been:

(i) Submitted by a manufacturer to a nationally recognized testing laboratory for certification.

(ii) Type-tested consistent with the institute of electrical and electronics engineers 1547.1 standard, effective as set forth in rule 4901:1-22-03 of the Administrative Code.

(iii) Listed by a nationally recognized testing and certification laboratory for continuous interactive operation with a utility grid in compliance with the applicable codes and standards listed in rule 4901:1-22-03 of the Administrative Code.

(b) Certified equipment does not include equipment provided by the EDU.

(C) Equipment packages

(1) An applicant's equipment package shall include the following:

(a) All interface components including switchgear, inverters, or other interface devices.

(b) An integrated generator or electric source.

(c) Access for the EDU for commissioning purposes.

(d) A schedule for periodic compliance testing.

(2) If the applicant's equipment package includes only the interface components (switchgear, inverters, or other interface devices), then the applicant must show in writing that the generator or electric source to be used with the equipment package meets the following criteria:

(a) Compatibility with the equipment package.

(b) Consistency with the testing and listing specified for the package.

(D) Disconnect switch

A disconnect switch provided, installed by, and paid for by the applicant, whether or not it is an integrated feature of the equipment package or a compatible external device, must meet the following criteria:

(1) The applicant's disconnect switch must be capable of isolating the distributed generation facility for the purposes of safety during EDU system maintenance and during emergency conditions.

(2) If the applicant's disconnect switch is external to the equipment package, it must be accessible to and lockable by the EDU personnel at either the primary voltage level, which may include load-break cutouts, switches and elbows, or the secondary voltage level, which may include a secondary breaker or switch.

(3) The applicant's disconnect switch must be clearly labeled as a distributed generation facility disconnect switch.

(E) Solar equipment

In the case of solar equipment, the photovoltaic power source shall be clearly labeled in accordance with the requirements of the National Electric Code article 690, effective as set forth in rule 4901:1-22-03 of the Administrative Code, to identify the following:

(a) Operating current ( system maximum-power current).

(b) Operating voltage (system maximum-power voltage).

- (c) Maximum system voltage.
- (d) Short-circuit current.
- (F) The EDU's review processing fees

(1) Each applicant shall pay the EDU's interconnection fees in accordance with the EDU's tariff for the EDU review and processing of an application, established at levels consistent with the distributed generation size and technology as well as the location on the electric distribution system of the interconnection.

(2) The EDU's review processing fee levels will apply in accordance with the EDU's tariff to all interconnections, including those for the purposes of net metering, combined heat and power or waste heat from industrial processes, as well as any customer-generator used for energy efficiency or the promotion and utilization of renewable or clean secondary fuels.

(3) Exception to the EDU's fee schedule may be determined by the EDU if the EDU invokes a feefree feature on a nondiscriminatory basis.

#### Level 1 Simplified Review Procedure

(A) Level 1 qualifying criteria

In order for the application to be approved by the EDU under the level 1 simplified review procedure, the applicant's generating facility must meet the following requirements:

(1) The generation facility must use inverter-based equipment that is certified in compliance with IEEE 1547 standard and UL 1741 standard, as set forth in rule 4901:1-22-03 of the Administrative Code.

(2) The generation facility must have a nameplate capacity of twenty-five kilowatts or less.

(B) Level 1 approval criteria

(1) The EDU shall approve an application for interconnection under level 1 simplified review procedures if the generation facility meets the following approval criteria:

(a) The applicant's proposed distributed generation facility's point of common coupling is not on a transmission line.

(b) For interconnection of a proposed distributed generation facility to a radial distribution circuit, the aggregated generation, including the proposed distributed generation facility, on the circuit shall not exceed fifteen per cent of the line section annual peak load as most recently measured at the substation.

(c) The proposed distributed generation facility, in aggregation with other generation on the distribution circuit, shall not contribute more than ten per cent to the distribution circuit's maximum fault current at the point on the high voltage (primary) level nearest the proposed point of common coupling.

(d) For interconnection of a proposed distributed generation facility to the load side of spot network protectors, the proposed distributed generation facility must utilize an inverter-based equipment package and, together with the aggregated other inverter-based generation, shall not exceed the smaller of five per cent of a spot network's maximum load or fifty kilowatts.

(e) Direct current injection shall be maintained at or below five-tenths of a per cent of full rated inverter output current into the point of common coupling.

(f) When a proposed distributed generation facility is single phase and is to be interconnected on a center tap neutral of a two hundred forty volt service, its addition shall not create an imbalance between the two sides of the two hundred forty volt service of more than twenty per cent of the nameplate rating of the service transformer.

(g) The proposed distributed generation facility installation is certified to pass an applicable nonislanding test, or uses reverse power relays or other means to meet the unintentional islanding requirements of the institute of electrical and electronics engineers (IEEE) 1547 standard, effective as set forth in rule 4901:1-22-03 of the Administrative Code.

(h) The proposed distributed generation facility installation complies with the IEEE 1547 standard and underwriters laboratory 1741 standard, as set forth in rule 4901:1-22-03 of the Administrative Code.

(2) Having complied with the parameters set forth in paragraph (B)(1) of this rule, the applicant's proposed distributed generation facility installation requires no further study by the EDU for the purpose of interconnection to the EDU's distribution system.

(C) Level 1 review timeframe

(1) Within fifteen business days after the EDU notifies the applicant that it has received a complete short form interconnection service application, the EDU shall perform a review using the criteria set forth in paragraph (B)(1) of this rule and shall notify the applicant of the results, and shall include with the notification copies of the analysis and data underlying the EDU's determinations under the criteria.

(2) If the proposed interconnection fails one or more of the screening criteria, the application shall be denied. At the applicant's request, the EDU shall provide copies of the analysis and data underlying the EDU's determinations under the criteria. Upon denial of the level 1 interconnection request, the applicant may elect to submit a new application for consideration under level 2 or level 3 procedures, in which case the queue position assigned to the level 1 application shall be retained.

(3) If the proposed interconnection meets the criteria, the application shall be approved and the EDU will provide the applicant a standard interconnection agreement within five business days after the determination. The standard interconnection agreement shall be consistent with the uniform requirements for an interconnection agreement in rule 4901:1-22-10 of the Administrative Code, and include a timetable for the physical interconnection of the applicant's proposed distributed generation facility to the EDU's system.

(D) Level 1 application fee

The EDU's tariff for a level 1 fee shall not exceed fifty dollars and may be waived.

#### Level 2 Expedited Review Procedure

(A) Level 2 qualifying criteria

In order for the application to be reviewed by the EDU under the level 2 expedited review procedure, the applicant's generating facility must meet the following requirements:

(1) The generating facility utilizes equipment that is certified in compliance with IEEE 1547 standard and UL 1741 standard as set forth in rule 4901:1-22-03 of the Administrative Code.

(2) The generating facility does not meet the level 1 interconnection review requirements.

(3) The generating facility capacity does not exceed the limits identified in the table below, which vary according to the voltage of the line at the proposed point of interconnection. Distributed generation facilities located within 2.5 miles of a substation and on a main distribution line with minimum 600-ampere capacity are eligible for expedited review under the higher thresholds. These eligibility limits do not guarantee fast track approval.

Une Voltage	Expedited Review Regardless of Location	Expedited Review on a 600 amp line and within 2.5 feeder miles from substation
less than or equal to 5kV	less than or equal to 500 kW	less than 2 MW
5kV less than or equal to 15 kV	less than or equal to 2MW	less than 3 MW
15 kV less than or equal to 30 kV	less than or equal to 3MW	less than 4 MW
30 kV less than or equal to 69 kV	less than or equal to 4MW	less than 5 MW

(B) Level 2 approval criteria

(1) The EDU shall approve an application for interconnection under level 2 review procedures if the generation facility meets the following criteria:

(a) The proposed distributed generation facility's point of interconnection is not on a transmission line.

(b) The proposed distributed generation facility complies with IEEE 1547 standard and UL 1741 standard, effective as set forth in rule 4901:1-22-03 of the Administrative Code.

(c) The proposed distributed generation facility is not located in an area where there are known or posted transient stability limitations to generating units located in the general electrical vicinity (for example, three or four distribution busses from the point of interconnection), or the proposed distributed generation facility shall not have interdependencies, known to the EDU, with earlier queued transmission system interconnection requests. The EDU shall not disclose confidential information in the application of this screen.

(d) For interconnection of a proposed distributed generation facility to a radial distribution circuit, the aggregated generation, including the proposed distributed generation facility, on the circuit shall not exceed fifteen per cent of the line section annual peak load as most recently measured at the substation. The application of this screen addresses back feed and islanding conditions.

(e) The proposed distributed generation facility, in aggregation with other generation on the distribution circuit, shall not contribute more than ten per cent to the distribution circuit's maximum fault current at the point on the primary voltage distribution line nearest the point of common coupling.

(f) The proposed distributed generation facility, in aggregation with other generation on the distribution circuit, may not cause any distribution protective devices and equipment including substation breakers, fuse cutouts, and line reclosers, or other customer equipment on the electric distribution system, to be exposed to fault currents exceeding ninety per cent of the short circuit interrupting capability; nor shall an applicant requesting interconnection on a circuit that already exceeds ninety per cent of the short circuit interrupting capability be permitted.

(g) When a proposed distributed generation facility is single phase and is to be interconnected on a center tap neutral of a two hundred forty volt service, its addition shall not create an imbalance

between the two sides of the two hundred forty volt service of more than twenty per cent of the nameplate rating of the service transformer.

(h) The proposed distributed generation facility shall be interconnected to the EDU's primary distribution system as shown below:

Primary Distribution Line Configuration	Interconnection to Primary Distribution Line
Three phase, three wire	If a three-phase or single-phase generating facility, interconnection must be phase-to-phase
Three phase, four wire	If a three-phase (effectively grounded) or single phase generating facility, interconnection must be line-to-neutral

(i) A review of the type of electrical service provided to the applicant, including line configuration and the transformer connection, will be conducted to limit the potential for creating over voltages on the EDU's electric distribution system due to a loss of ground during the operating time of any antiislanding function.

(j) When the proposed distributed generation facility is to be interconnected on single-phase shared secondary line, the aggregate generation capacity on the shared secondary line, including the proposed distributed generation facility, will not exceed sixty-five per cent of the transformer nameplate rating.

(k) For interconnection of a proposed distributed generation facility to the load side of spot or area network protectors, the proposed distributed generation facility must utilize an inverter-based equipment package and, together with the aggregated other inverter-based generation, shall not exceed the lesser of five per cent of a spot or area network's maximum load or fifty kilowatts.

(1) Construction of facilities by the EDU on its own system is not required to accommodate the distributed generation facility.

(C) Level 2 review timeframe

(1) Within twenty business days after the EDU notifies the applicant it has received a complete application, the EDU shall perform an initial review using the criteria set forth in paragraph (B) of this rule and shall notify the applicant of the results.

(2) If the proposed interconnection meets the criteria, the application shall be approved and the EDU will provide the applicant a standard interconnection agreement within five business days after the determination. The standard interconnection agreement shall be consistent with the uniform requirements for an interconnection agreement enumerated in rule 4901:1-22-10 of the Administrative Code, and include a timetable for the physical interconnection of the applicant's proposed distributed generation facility to the EDU's system.

(3) If the proposed interconnection fails to meet the criteria, but the EDU determines that the proposed distributed generation facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards, the EDU shall provide the applicant a standard interconnection agreement within five business days after the determination and include a timetable for the physical interconnection of the applicant's proposed distributed generation facility to the EDU's system.

(4) If the proposed interconnection fails to meet the criteria and the EDU determines that minor modifications or further study may be required to interconnect the proposed distributed generation facility to the EDU's distribution system consistent with safety, reliability, and power quality standards, the EDU shall:

(a) Offer to perform facility modifications or minor modifications to the EDU's electric system (e.g., change meters, fuses, relay settings), or,

(b) Offer to perform a supplemental review if the EDU concludes that the supplemental review might determine that the proposed distributed generation facility could continue to qualify for interconnection pursuant to the expedited review process,

(c) Obtain the applicant's agreement to continue evaluating the application under level 3 standard review.

(5) At the applicant's request, the EDU shall provide copies of the analysis and the data underlying the EDU's determinations that minor modifications or further study is required.

(D) Facility or minor system modifications

(1) If facility modifications or minor system modifications are required to allow the proposed distributed generation facility to be interconnected consistent with safety, reliability, and power quality standards under these procedures, the EDU shall provide the applicant with a non-binding good faith estimate of the cost to make such modifications.

(2) If the interconnection customer agrees to pay for the modifications to the EDU's distribution system, the EDU shall provide the applicant with a standard distributed generation interconnection agreement within five business days. The standard interconnection agreement shall be consistent with the uniform requirements for an interconnection agreement enumerated in rule 4901:1-22-10 of the Administrative Code, and include a timetable for the physical interconnection of the applicant's proposed distributed generation facility to the EDU's system.

(E) Level 2 supplemental review

(1) If the customer requests that the EDU perform a supplemental review, the customer shall agree in writing within fifteen business days of the offer, and submit a supplemental review deposit of twenty-five hundred dollars, or the application shall be deemed withdrawn. Within twenty-five business days following receipt of the supplemental review deposit, the EDU shall perform a supplemental review using the screens set forth in this rule and notify the applicant of the results. For interconnection of a proposed distributed generation facility to an area network, the EDU may utilize different analytical procedures for conducting supplemental review than those set forth in this rule. Following study completion, the EDU shall bill or credit the applicant any difference between the supplemental review deposit and the actual cost to perform the review. If the proposed interconnection fails one or more of the supplemental review screens, the EDU shall include with the notification copies of the analysis and data underlying the EDU's determinations under the screens.

(a) A supplemental review may be performed where twelve months of line section minimum load data is available or can be calculated, estimated from existing data, or determined from a power flow model, and where the aggregate distributed generation facility capacity on the line section is less than one hundred per cent of the minimum load for all line sections bounded by automatic sectionalizing devices upstream of the proposed distributed generation facility. If minimum load data is not available, or cannot be calculated, estimated or determined, the EDU shall include the reason(s) that it is unable to calculate, estimate or determine minimum load in its supplemental review results notification as set forth in paragraph (E)(1) of rule 4901:1-22-07 of the Administrative Code.

(i) The type of generation used by the proposed distributed generation facility will be taken into account when calculating, estimating, or determining the circuit or line section minimum load. For the application of a solar photovoltaic generation system with no battery storage, use daytime minimum load, and use absolute minimum load for other generation.
(ii) When this screen is being applied to a distributed generation facility that serves some onsite electrical load, the total load must be considered as part of the aggregate generation.

(iii) The EDU will consider generating facility capacity known to be reflected in the minimum load data as part of the aggregate generation for purposes of this screen.

(b) In aggregate with existing generation on the line section: (i) the voltage regulation on the line section can be maintained in compliance with relevant requirements under all system conditions, (ii) the voltage fluctuation is within acceptable limits as defined by IEEE 1453 or utility practice similar to IEEE 1453, and (iii) the harmonic levels meet IEEE 519 limits at the point of interconnection.

(c) The location of the proposed distributed generation facility and the aggregate generation capacity on the line section do not create impacts to safety or reliability that cannot be adequately addressed without application of the level 3 standard review. The EDU may consider the following and other factors in determining potential impacts to safety and reliability in applying the screen:

(i) Whether the line section has significant minimum loading levels dominated by a small number of customers.

(ii) If there is an even or uneven distribution of loading along the feeder.

(iii) If the proposed distributed generation facility is located within 2.5 electrical line miles to the substation and if the distribution line from the substation to the customer is composed of a 600A class cable or conductor.

(iv) If the proposed distributed generation facility incorporates a time delay function to prevent reconnection of the generator to the system until system voltage and frequency are within normal limits for a prescribed time.

(v) If operational flexibility is reduced by the proposed distributed generation facility, such that transfer of the line section(s) of the distributed generation facility to a neighboring distribution circuit/substation may trigger overloads or voltage issues.

(2) If the proposed interconnection meets the supplemental review criteria, the application shall be approved and the EDU will provide the applicant a standard interconnection agreement within five business days after the determination. The standard interconnection agreement shall be consistent with the uniform requirements for an interconnection agreement enumerated in rule 4901:1-22-10 of the Administrative Code and include a timetable for the physical interconnection of the applicant's proposed distributed generation facility to the EDU's system.

(3) If the proposed interconnection fails the supplemental review criteria, the EDU shall obtain the applicant's agreement to continue evaluating the application under level 3 standard review. If the applicant agrees to have the project evaluated under the level 3 standard review process, the cost of supplemental review shall be deducted from the otherwise applicable Level 3 standard review fee. If the level 3 standard review fee is less than the supplemental review cost, standard review fee shall be waived.

(F) Level 2 fees

The EDU's tariff for level 2 expedited review processing fees will include the following:

(1) An application fee of up to fifty dollars, plus one dollar per kilowatt of the applicant's system nameplate capacity rating.

(2) In the event that an application is evaluated under supplemental review, any or all of the following fees may be assessed by the EDU:

(a) The twenty-five hundred dollar supplemental review deposit, adjusted following study completion to reflect the cost of engineering work billed at actual costs.

(b) The actual cost of any minor modification of the electric distribution utility's system that would otherwise not be done but for the applicant's interconnection request.

#### Level 3 Standard Review Procedures

(A) Level 3 standard review qualifying criteria

In order for the application to be approved by the EDU under the level 3 review procedure, the following conditions must apply:

(1) The generation facility does not qualify or failed to meet the level 1 or level 2 interconnection review requirements.

(2) The generation does not utilize equipment that is certified in compliance with IEEE 1547 standard and UL 1741 standard as set forth in rule 4901:1-22-03 of the Administrative Code.

(3) The generation facility has a nameplate capacity of twenty megawatts or less.

(B) Level 3 approval criteria

(1) Level 3 standard review procedure shall use the determinations made in the scoping meeting and any feasibility, system impact, or facilities study defined in rule 4901:1-22-09 of the Administrative Code for technical analysis of the applicant's proposed distributed generation facility installation.

(2) The EDU shall approve an application for interconnection under level 3 review procedures if the EDU determines that the safety and reliability of the public utility's transmission or distribution system will not be compromised by interconnecting with the generation facility.

(C) Level 3 fees

(1) The EDU's tariff for level 3 standard review fees will include the following:

(a) An application fee of up to one hundred dollars, plus two dollars per kilowatt of the system's nameplate capacity.

(i) The cost of engineering work done as part of any feasibility, system impact or facilities study, billed at actual cost.

(ii) The actual cost of any modifications of the EDU's system that would otherwise not be done but for the applicant's interconnection request.

(2) Within five business days after completion of the level 3 standard procedure including any applicable feasibility, system impact or facilities studies leading to the EDU's approval for interconnection of the applicant's proposed distributed generation facility installation and collection by the EDU of all the actual costs for the studies as billed to the applicant, the EDU shall provide the applicant with a standard interconnection agreement.

#### Scoping Meeting and Interconnection Studies

(A) Scoping meeting

(1) A scoping meeting will be held within ten business days after the interconnection application is deemed complete, or as otherwise mutually agreed to by the parties. The EDU and the applicant may bring to the meeting personnel, including system engineers and other resources as may be reasonably required to accomplish the purpose of the meeting.

(2) The purpose of the scoping meeting is to discuss alternative interconnection options, to determine potential points of common coupling, to examine the applicant's proposed point of interconnection on the EDU's distribution system, or to review an applicant's pre-application report or existing studies relevant to the interconnection application. The parties shall further discuss the appropriate level 3 interconnection studies required to evaluate the interconnection of the proposed distributed generation facility to the EDU's distribution system.

(3) The scoping meeting may be waived by mutual agreement if the parties decide to proceed directly to the level 3 interconnection studies.

(B) Queuing

(1) When an interconnection request is complete, the EDU shall assign the application a queue position to establish the order in which the interconnection request will be reviewed in relation to other interconnection requests on the same or nearby sections of the EDU's distribution system.

(2) The queue position of an interconnection request shall be used to determine the cost responsibility necessary for the construction of any facilities to accommodate the interconnection in relation to other interconnection requests on the same or nearby sections of the EDU's distribution system.

(3) The EDU shall notify the applicant at the scoping meeting about other higher-queued applicants.

(C) Interconnection study requirements

(1) One or more interconnection studies may be required by the EDU prior to interconnection including a feasibility study, a system impact study, and a facilities study.

(2) Each type of study required will include an EDU interconnection tariff fee schedule approved by the commission as set forth in rule 4901:1-22-08 of the Administrative Code.

(3) Each type of study will be the subject of a written study agreement between the applicant and the EDU that includes the following:

(a) A target date for completion of any required feasibility study, system impact study, and facilities study.

(b) A provision to share the results of the study by the EDU with the applicant.

(c) A clear explanation of all estimated charges.

(d) A good faith estimate of the total number of hours needed to complete the study.

(e) An estimate of the total interconnection study fee.

(4) A written study agreement may include an alternative provision that allows the required studies related to the interconnection of the generating facility(s) to be conducted by a qualified third party with the consent of the EDU.

(5) By mutual agreement of the parties, a feasibility study, a system impact study, or a facilities study under level 3 procedures may be waived by the EDU.

(6) When the EDU determines, as a result of the studies conducted under a level 3 review, that it is appropriate to interconnect the distributed generation facility, the EDU shall provide the applicant with a standard distributed generation interconnection agreement.

(7) If the interconnection request is denied, the EDU shall provide a written explanation within five business days from the denial. The EDU must allow the applicant thirty business days to cure the reasons for denial while the applicant's position in the queue is maintained.

(D) The feasibility study

(1) No later than five business days after the scoping meeting, the EDU shall provide the applicant with a feasibility study agreement in accordance with the EDU's tariff to determine the feasibility of interconnecting the applicant's proposed distributed generation facility at a particular point on the EDU's system. The study shall include both of the following:

(a) An outline of the scope of the study.

(b) A non-binding good faith estimate of the cost to perform the study.

(2) A feasibility study shall include the following analyses for the purpose of identifying a potential adverse system impact to the EDU's system that would result from the interconnection:

(a) Initial identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection.

(b) Initial identification of any thermal overload or voltage limit violations resulting from the interconnection.

(c) Initial review of grounding requirements and system protection.

(d) A description and nonbinding estimated cost of facilities required to interconnect the distributed generation facility to the EDU's system in a safe and reliable manner.

(3) When an applicant requests that the feasibility study evaluate multiple potential points of interconnection, additional evaluations may be required.

(4) The actual cost of the EDU's additional evaluations shall be paid by the applicant.

(E) The system impact study

(1) No later than five business days after the completion of or a waiver of the feasibility study, the EDU shall provide a distribution system impact study agreement to the applicant, using a form of system impact study agreement in accordance with the EDU's tariff that includes an outline of the scope of the study and a nonbinding good faith estimate of the cost to perform the study.

(2) If the feasibility study concludes there is no adverse system impact, or the study identifies an adverse system impact but the EDU is able to identify a remedy, no system impact study is required.

(3) A system impact study shall evaluate the impact of the proposed interconnection on the safety and reliability of the EDU's system. The study shall:

(a) Identify and detail the system impacts that result when a distributed generation facility is interconnected without project or system modifications.

(b) Consider the adverse system impacts identified in the feasibility study, or potential impacts including those identified in the scoping meeting.

(c) Consider all generating facilities that, on the date the system impact study is commenced, are directly interconnected with the EDU's system.

(d) Consider pending higher queue position of facilities requesting interconnection to the system, or consider pending higher queue position of facilities requesting interconnection having a signed interconnection agreement.

(4) A system impact study performed by the EDU shall consider the following criteria:

(a) A load flow study.

(b) A short circuit analysis.

(c) A stability analysis.

(d) Voltage drop and flicker studies.

(e) Protection and set point coordination studies.

(f) Grounding reviews.

(5) The EDU shall state the underlying assumptions of the study and show the results of the analyses to the applicant, including the following:

(a) Any potential impediments to providing the requested interconnection service.

(b) Any required distribution system upgrades and provide a nonbinding good faith estimate of cost and time to construct the system upgrades.

(F) The facilities study

(1) Within five business days of completion of the system impact study, a report will be transmitted by the EDU to the applicant with a facilities study agreement in accordance with the EDU's interconnection tariff.

(2) When the parties agree at the scoping meeting that no system impact study is required, the EDU shall provide to the applicant, no later than five business days after the scoping meeting, a facilities study agreement in accordance with the EDU's interconnection tariff that enables the EDU to determine the interconnection facilities needed to interconnect the applicant's proposed distributed generation facility at a particular point on the EDU's system.

(3) The facilities study agreement shall include both of the following:

(a) An outline of the scope of the study.

(b) A nonbinding good faith estimate of the cost to perform the study to cover the cost of the equipment, engineering, procurement and construction work, including overheads, needed to implement the conclusions of the feasibility study and/or the system impact study to interconnect the distributed generation facility.

(4) The facilities study shall identify all of the following:

(a) The electrical switching configuration of the equipment, including transformer, switchgear, meters, and other station equipment.

(b) The nature and estimated cost of the EDU's interconnection facilities and distribution upgrades necessary to accomplish the interconnection.

(c) An estimate of the time required to complete the construction and installation of such facilities.

(5) The parties may agree to permit an applicant to separately arrange for a third party to design and construct the required interconnection facilities under the following conditions:

(a) The EDU may review the facilities to be designed and constructed by a third party under provisions included in the facilities study agreement for that purpose.

(b) The applicant and the third party separately arranging for design and construction agree to comply with security and confidentiality requirements.

(c) The EDU shall provide the applicant with all relevant information and required specifications available to permit the applicant to obtain an independent design and cost estimate for the facilities, which must be built in accordance with the specifications.

#### Uniform Requirements for Interconnection Agreements

(A) The EDU shall provide the applicant with a standard interconnection agreement for distributed generation within five business days following completion of project review. If applicable, the applicant must pay for the interconnection facilities and distribution upgrades identified in the facilities study.

(B) The applicant shall have thirty business days or another mutually agreeable time frame after the standard interconnection agreement is received to sign and return the interconnection agreement to the EDU.

(C) When the applicant does not sign the agreement within thirty business days, the interconnection request will be deemed withdrawn unless the applicant requests an extension of the deadline in writing. The request for extension shall not be denied by the EDU, unless conditions on the EDU system have changed.

(D) Milestones for construction

(1) When construction is required, the interconnection of the distributed generation will proceed according to any milestones agreed to by the parties in the standard interconnection agreement.

(2) The interconnection agreement may not become effective until the milestones agreed to in the standard interconnection agreement are satisfied, including the following:

(a) The distributed generation is approved by electric code officials with jurisdiction over the interconnection.

(b) The applicant provides a certificate of completion to the EDU; or there is a successful completion of an on-site operational test within ten business days or at a mutually convenient time, unless waived. The operational test shall be observed by EDU personnel or a qualified third party with sufficient expertise to verify that the criteria for testing have been met.

(E) Insurance

(1) Any EDU interconnection agreement with the applicant shall not require additional liability insurance beyond proof of insurance or any other suitable financial instrument sufficient to meet its construction, operating and liability responsibilities in accordance with the EDU's tariff with respect to this rule.

(2) At no time shall the EDU require the applicant to negotiate any policy or renewal of any policy covering any liability through a particular insurance agent, solicitor, or broker.

(F) Alternative dispute resolution

The EDU or the applicant who is a nonmercantile, nonresidential customer may seek resolution of any disputes which may arise out the EDU tariffs filed under these rules, in accordance with Chapter 4901:1-26 of the Administrative Code, for alternative dispute resolution procedures.

(G) Site testing

The applicant must provide the EDU a reasonable opportunity to witness the testing of installed switchgear, protection system, and generator as included in the applicant's installation test plan and maintenance schedule that has been reviewed and approved by the EDU.

(H) Periodic testing

(1) Any periodic tests of the interconnection equipment (including any relays, interrupting devices, control schemes, and batteries that involve protection of the EDU's system) as recommended by the applicant's equipment manufacturer or required by the institute of electrical and electronics engineers (IEEE) 1547 standards, effective as set forth in rule 4901:1-22-03 of the Administrative Code, shall be the responsibility of the applicant.

(2) Such periodic tests shall be included in the applicant's installation test plan and maintenance schedule that has been reviewed and approved by the EDU.

(3) The applicant shall make copies of the periodic test reports or inspection logs available to the EDU for review.

(4) Upon a written request, the EDU is to be informed of the next scheduled maintenance and be able to witness the maintenance program and any associated testing.

(I) Disconnection of the applicant's facility

Except as provided for in paragraph (J)(2) of this rule, when the EDU discovers the applicant's equipment is not in compliance with IEEE 1547 standards, effective as set forth in rule 4901:1-22-03 of the Administrative Code, and such noncompliance has the potential to adversely affect the safety and reliability of the electric system, the EDU may disconnect the applicant's facility according to the following procedures:

(1) The EDU shall provide a notice to the applicant with a description of the specific noncompliance condition.

(2) The disconnection can only occur after a reasonable time to cure the noncompliance condition has elapsed.

(J) Other disconnection of the unit

(1) The applicant retains the option to temporarily disconnect from the EDU's system at any time. Such temporary disconnection shall not be a termination of the interconnection agreement unless the applicant exercises its termination rights under the interconnection agreement. (2) The EDU shall have the right to disconnect the applicant's unit(s) without notice in the event of an emergency or to eliminate conditions that constitute a potential hazard to the EDU personnel or the general public. The EDU shall notify the applicant of the emergency as soon as circumstances permit.

(K) Service interruption

During routine maintenance and repairs on the EDU's system consistent with Chapter 4901:1-23 of the Administrative Code, or other commission order, the EDU shall provide the applicant with a seven-day notice of service interruption.

(L) Effective term and termination rights of an interconnection agreement

(1) An interconnection agreement becomes effective when executed by both parties and shall continue in force until terminated under any of the following conditions:

(a) The applicant terminates the interconnection agreement at any time by giving the EDU sixty calendar days prior notice.

(b) The EDU terminates the interconnection agreement upon failure of the applicant to generate energy from the applicant's facility in parallel with the EDU's system by the later of two years from the date of the executed interconnection agreement or twelve months after completion of the interconnection.

(c) Either party terminates by giving the other party at least sixty calendar days prior written notice that the other party is in default of any of the material terms and conditions of the interconnection agreement, so long as the notice specifies the basis for the termination and there is reasonable opportunity to cure the default.

(2) All applicants' installations existing on or before the effective date of this rule are exempted from the changes instituted by this rule.

(3) Upon termination of an interconnection agreement, the applicant's facilities will be disconnected from the EDU's system.

(4) The termination of the interconnection agreement shall not relieve either party of its liabilities and obligations, owed or continuing at the time of the termination.

### **Backup Electricity Supply**

Replacement electric power for the applicant shall be supplied in accordance with division (C) of section 4928.15 of the Revised Code, by either of the following:

(A) The EDU either at a tariff rate or at the market price as provided for in its tariff.

(B) By the applicant's competitive retail electric service provider at a rate to be determined by contract.

### **Electric Service Regulations**

The Company's Electric Service Regulations shall apply to the installation and use of electric service.

1.

### Other Terms and Conditions

The customer and the Company shall be subject to the interconnection-related rules set forth in Sections 4901:1-22-01 et seq. of the Ohio Administrative Code, as amended from time to time. Said rules are incorporated herein by reference. In the event that there is any conflict between the terms and conditions set forth in this Tariff and those set forth in said rules, the latter shall control.

### RIDER DRR Delta Revenue Recoverv Rider

### APPLICABILITY:

Applicable to any customer receiving electric service under the Company's rate schedules or reasonable arrangement (special contract) approved by the Public Utilities Commission of Ohio. The Delta Revenue Recovery Rider (DRR) charge will apply, for all rate schedules, effective for service rendered beginning April 1, 2017, for all kWhs per kWh. This Rider is not avoidable for customers who take electric generation service from a certified supplier.

# PURPOSE:

The DRR charge recovers the difference in revenue ("delta revenue") between the application of rates in the otherwise applicable rate schedule and the result of any economic development schedule, energy efficiency schedule, reasonable arrangement, or governmental special contract approved by the Public Utilities Commission of Ohio on or after January 1, 2009.

# RATE:

રઙ	0.0000¢
GS	0.0000¢
GP	0.0000¢
GSU	0.0000¢
GT	0.0000¢
STL	0.0000¢
TRF	0.0000¢
POL	0.0000¢

### RIDER UPDATES:

The charges contained in this Rider shall be updated and reconciled on a quarterly basis. No later than December 1st, March 1st, June 1st and September 1st of each year, the Company will file with the PUCO a request for approval of the Rider charges which, unless otherwise ordered by the PUCO, shall become effective on a service rendered basis on January 1st, April 1st, July 1st and October 1st of each year.

Filed pursuant to Orders dated May 27, 2009, July 18, 2012 and March 31, 2016, in Case Nos. 08-935-EL-SSO et al., 12-1230-EL-SSO and 14-1297-EL-SSO, respectively and Case No. 16-2168-EL-RDR before

### RIDER DSM Demand Side Management Rider

# APPLICABILITY:

A Demand Side Management ("DSM") Charge shall be applied to each kilowatt-hour ("kWh") delivered during a billing month to all retail customers taking service under Rate Schedule RS. The DSM Charge is not avoidable to customers during the period the customer takes electric generation service from a certified supplier.

# RATES:

On the Effective Date ("ED"), the DSM Charge shall be 0.0000¢, and shall be adjusted semi-annually based on the following formula:

DSM Charge = [((ADB - ADFIT) x CC + AMORT + RA) / PS] x [1 / (1-CAT)], rounded to the fifth decimal place.

Where:

ADB	=	The net accumulated balance of the residential demand side management costs deferred by the Company, including applicable Carrying Costs ("CC"). Residential demand side management costs that are deferred shall include all DSM program costs incurred for programs contemplated in the Settlement Stipulation approved in PUCO Case Nos. 05- 1125-EL-ATA, 05-1126-EL-AAM and 05-1127-EL-UNC, all reasonable administrative costs to conduct such DSM programs and lost distribution revenues until included in the Company's tariffs established in a subsequent rate case.
-----	---	--

The initial ADB will be based on the Company's filing in Case No. 07-551-EL-AIR, with all subsequent ADB's being based on the deferred balance at each March 31 and September 30 thereafter.

- ADFIT = The accumulated deferred income tax associated with the ADB.
- AMORT = The ADB amortized over a three year period. However in no case will the amortization period extend beyond December 31, 2012. Any ADB at April 30, 2012 will be collected over the RHY effective July 1, 2012.
- RA = The net over or under collection of the RC during the Recovery Half-Year ("RHY"), plus Carrying Costs. A positive RA reflects an under collection of the RC.
- PS = The Company's forecasted kWh retail sales during the RHY for customers taking service under Rate Schedule RS.
- CAT = The Commercial Activity Tax rate as established in Section 5751.03 of the Ohio Revised Code.
- CC = The return earned on the RC and RA, which shall be calculated by multiplying the RC and RA by the Company's cost of debt.
- RHY = The calendar half-year in which the then current DSM Charge is collected. The RHY commences on January 1 and July 1, immediately following the determination of the ADB as of September 30 or March 31 for such DSM Charge.

# RIDER DSM Demand Side Management Rider

ED = The date on which the DSM Charge becomes effective. The ED for the initial DSM Charge shall be May 1, 2009 with all subsequent DSM Charges becoming effective on each following July 1 and January 1.

# OTHER PROVISIONS:

- 1. No later than December 1 and June 1 of each year, the Company shall file with the Public Utilities Commission of Ohio ("Commission") a request for approval of a DSM Charge which, unless otherwise ordered by the Commission, shall become effective on a service rendered basis on January 1 and July 1 following the determination of the ADB to which the DSM Charge applies.
- 2. The Company shall submit with its semi-annual filing documentation sufficient to demonstrate that the DSM Charge that is the subject of the filing is calculated consistent with the DSM Charge formula set forth in this DSM Rider. All such documentation shall be subject to Commission audit and review.
- 3. If after the Effective Date, but prior to the next semi-annual filing, the Commission determines that the DSM Charge proposed by the Company is unreasonable, any differential in amounts collected under this DSM Rider based on the DSM Charge on the Effective Date, and that authorized in a final order of the Commission for said Recovery Half Year, including any Carrying Costs on said differential, shall be adjusted in the next Reconciling Adjustment.

# Original Sheet 98

Page 1 of 1

# RIDER RAR Reasonable Arrangement Rider

Applicability, terms and conditions and level of incentives associated with this Rider, shall be determined as part of The Public Utilities Commission of Ohio's review and approval of the application filed pursuant to RC 4905.31 and consistent with OAC 4901:1-38.

Recovery of the difference in revenue from the application of rates in the otherwise applicable rate schedule and this Rider shall be realized as part of the Company's Delta Revenue Recovery Rider (DRR) and shall be subject to review by the PUCO.

Each customer taking electric service under a Reasonable Arrangement pursuant to RC 4905.31 and consistent with OAC 4901:1-38 shall be subject to the Company's Electric Service Regulations and all riders unless otherwise expressly set forth in the Reasonable Arrangement.

# RIDER DUN Distribution Uncollectible Rider

#### APPLICABILITY:

Applicable to any customer who receives electric service under the Company's rate schedules. The Distribution Uncollectible Rider (DUN) charge will apply, for all rate schedules, effective for service rendered beginning April 1, 2017, for all kWhs per kWh. This Rider is not avoidable for customers during the period the customer takes electric generation service from a certified supplier.

# RATE:

DUN charge

0.0049¢

### RIDER UPDATES:

The charges contained in this Rider shall be updated and reconciled on a quarterly basis. No later than December 1st, March 1st, June 1st and September 1st of each year, the Company shall file with the PUCO a request for approval of the rider charges which, unless otherwise ordered by the PUCO, shall become effective on a service rendered basis on January 1st, April 1st, July 1st and October 1st of each year.

The Cleveland Electric Illuminating Company

Cleveland, Ohio

P.U.C.O. No. 13

# RIDER ELR Economic Load Response Program Rider

### **APPLICABILITY:**

This Economic Load Response Program Rider ("Program") is available to customers taking service from the Company at primary voltages or higher voltages provided that all of the following seven conditions are met at the time of initiation of service to the customer under this Rider and on a continuing basis thereafter: (i) the customer took service under the Program as of May 31, 2016 or the customer was historically eligible for Rider ELR and provided written notice of intent to participate in the Program on or before May 31, 2015 for up to an additional 136,250 kW of Curtailable Load effective on or after June 1, 2016; (ii) the customer can successfully demonstrate to the Company that it can reduce its measured load to a pre-established contract Firm Load (as defined under Other Provisions, paragraph A., below) within two hours of notification provided by the Company without the need of a generator (A customer may intend to use a generator to reduce its usage to below its Firm Load, but if the generator does not operate, the customer must still reduce its usage to or below its Firm Load. Failure of a customer to reduce its usage to or below its Firm Load shall result in the consequences listed in the Emergency Curtailment Event Section herein.); (iii) the customer executes the Company's standard Program contract; (iv) the customer is taking generation service from the Company or a Competitive Retail Electric Service ("CRES") provider using consolidated billing; (v) the customer is not participating in any other load curtailment or demand response program, including without limitation a demand response program offered by PJM Interconnection, L.L.C. ("PJM") or any other independent system operator; (vi) the customer commits its demand response capability to Company for integration into Company's R.C. § 4928.66 compliance programs; and, (vii) the Commission finds that the demand response capabilities of customers electing service under this rider shall count towards the Company's compliance with the peak demand reduction benchmarks set forth in R.C. § 4928.66 as applied by the Commission's applicable rules and regulations and shall be considered incremental to interruptible load on the Company's system that existed in 2008. Nothing herein shall preclude a customer from requesting and receiving an exemption from any mechanism designed to recover the cost of energy efficiency and peak demand reduction programs to the extent the exemption is requested to reasonably encourage the commitment of customer-sited capabilities to the Company.

# RATES:

In addition to any other charges under any other rate schedules applicable to customer's service, customers participating in the Program shall also pay the charges and receive the credit set forth below:

### Charges:

Program Administrative Charge:

\$150.00 per month

### ECE Charge:

During an Emergency Curtailment Event (as defined under Other Provisions, paragraph D., below), the portion of the customer's actual measured load that exceeds its pre-established contract Firm Load for any and all hours during such event shall be assessed an ECE Charge which is calculated for each hour of the event as follows. Revenue collected by the Company as a result of any ECE Charge less amounts associated with the Commercial Activity Tax ("CAT") (as defined below) shall be credited towards costs to be collected through the DSE1 charge of Rider DSE:

Filed pursuant to Orders dated August 25, 2010, February 25, 2015 and March 31, 2016 in Case Nos. 10-388-EL-SSO, 14-2037-EL-ATA and 14-1297-EL-SSO, respectively, before The Public Utilities Commission of Ohio

### RIDER ELR Economic Load Response Program Rider

ECE Charge =	(AL x PJM LMP x 300%) x (1 + LAF) x ([1/(1-CAT)])
--------------	---

Where:

- AL = the customer's actual hourly load during an Emergency Curtailment Event that exceeds the customer's pre-established contract Firm Load.
- **PJM LMP** = the final Real-Time Locational Marginal Price as defined and specified by PJM at the appropriate pricing node during the applicable hour(s).
- **CAT** = the Commercial Activity Tax rate as established in Section 5751.03 of the Ohio Revised Code.
- LAF = Loss Adjustment Factor 3.0% for primary voltages 0.1% for subtransmission voltages 0.0% for transmission voltages

# Program Credit ("PC"):

Customers taking service under this Rider shall receive a monthly Program Credit which shall be calculated as follows:

### PC = CL x (\$5.00) /kW/month

Where:

CL is the Curtailable Load, which shall be calculated by the Company for each customer by subtracting the customer's contract Firm Load from its monthly highest thirty (30) minute integrated kW load occurring during the non-holiday weekday hours of 11 a.m. to 5 p.m. Eastern Standard Time (equivalent to noon to 6 p.m. EDT). In no circumstance can the CL be negative nor can the CL be in excess of a contract amount determined based upon the customers 12 month history as of February 1, 2008. Holidays are defined as New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

# RIDER ELR Economic Load Response Program Rider

#### Minimum Bill:

The application of the Program Credit shall not produce a total monthly bill for any customer, after including the effects of all rate schedules, riders, and if applicable, the CRES consolidated billing, that results in an average price per kWh less than two (2) cents per kWh.

### **OTHER PROVISIONS:**

### A. Firm Load

For purposes of this Rider, "Firm Load" shall be that portion of a customer's electric load that is not subject to curtailment. A customer may request a reduction to its contract Firm Load no more than once in any twelve month period. The Firm Load may be reduced to the extent that such reduction is consistent with other terms and conditions set forth in this Rider. Any such change in Firm Load shall be applied beginning with the customer's January bill immediately following the year in which the change has been approved by the Company, provided that advance written request is provided to the Company no less than thirty (30) days prior to the effective billing month of the change. The Company may increase the Firm Load at any time if the Company, at its sole discretion, determines the Firm Load is at a level that the customer fails to demonstrate that they can reach. The Company shall promptly notify the customer of any such change.

#### B. Load Response Program Contract

Customers taking service under this optional Rider shall execute the Company's standard Program contract which, among other things, will establish the Customer's Firm Load and commit the Customer's demand response capability to Company for purposes of Company's compliance with the peak demand reduction benchmarks set forth in R.C. § 4928.66 as applied by the Commission's applicable rules and regulations.

### C. Metering

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

# RIDER ELR Economic Load Response Program Rider

#### D. Emergency Curtailment Event

Upon advance notification provided by the Company, a customer taking service under this Rider must curtail all load above its Firm Load during an Emergency Curtailment Event consistent with the Company's instructions. For purposes of this Rider, an Emergency Curtailment Event shall be one in which the Company, a regional transmission organization and/or a transmission operator determines, in its respective sole discretion, that an emergency situation exists that may jeopardize the integrity of either the distribution or transmission system in the area. PJM, which is the regional transmission organization of which the Company is a member, may also initiate an Emergency Curtailment Event upon their sole determination that a pre-emergency situation exists.

If an Emergency Curtailment Event is requested solely by the Company or a transmission operator, a customer will be given no less two hours advance notification to curtail all load above its Firm Load during the Emergency Curtailment Event. An Emergency Curtailment Event requested solely by the Company or a transmission operator may occur anytime during the year with no restrictions on the number of events or the duration of an event.

If the Emergency Curtailment Event is requested by PJM, a customer will be notified by the Company of the start time of the Emergency Curtailment Event as determined by PJM. The start time of the Emergency Curtailment Event will be approximately thirty (30) minutes from the time the Company receives notification from PJM of the Emergency Curtailment Event. However, PJM at its sole discretion may grant a customer an exception to the thirty (30) minute advance notification time of either sixty (60) minutes or one hundred and twenty (120) minutes based on the customer's physical capability to provide load reduction. A customer wishing to seek such exception must submit to the Company a completed request form that the Company will then submit to PJM. If PJM approves the customer request for an exception for sixty (60) minutes, then the start time of any PJM-called Emergency Curtailment Events for that customer will be approximately sixty (60) minutes from the time the Company receives notification from PJM of the Emergency Curtailment Event. If PJM approves the customer request for an exception for one hundred and twenty (120) minutes, then the start time of any PJM-called Emergency Curtailment Events for that customer will be approximately one hundred and twenty (120) minutes from the time the Company receives notification from PJM of the Emergency Curtailment Event. The maximum duration that load must be curtailed when an Emergency Curtailment Event is called by PJM will be six (6) hours and shall be limited to ten events per planning year as defined by PJM and will only occur between 12:00 PM (Noon) to 8:00 PM (Eastern Prevailing Time) for the months of June through September on weekdays other than PJM Holidays.

Filed pursuant to Orders dated August 25, 2010, February 25, 2015 and March 31, 2016 in Case Nos. 10-388-EL-SSO, 14-2037-EL-ATA and 14-1297-EL-SSO, respectively, before The Public Utilities Commission of Ohio The Cleveland Electric Illuminating Company

#### P.U.C.O, No. 13

# RIDER ELR Economic Load Response Program Rider

During the entire period of an Emergency Curtailment Event, the customer's actual measured load must remain at or below its Firm Load with such load being measured every clock half hour. A customer's actual measured load shall be determined using the greater of the customer's highest lagging kVA or highest kW during the Emergency Curtailment Event.

If at any time during the Emergency Curtailment Event a customer's actual measured load exceeds its contract Firm Load, the Company may disconnect the customer from the transmission system for the duration of the Emergency Curtailment Event, at the customer's expense. The Company shall not be liable for any direct or indirect costs, losses, expenses, or other damages, special or otherwise, including, without limitation, lost profits that arise from such disconnection.

If at any time during the Emergency Curtailment Event a customer's actual measured load exceeds 110% of its Firm Load, the customer shall be subject to all four (4) of the following: (i) forfeit its Program Credit for the month in which the Emergency Curtailment Event occurred; (ii) pay the ECE Charge set forth in the Rates section of this Rider; (iii) pay the sum of all Program Credits received by the customer under the Program during the immediately preceding twelve billing months which shall include credits from this Rider and the Economic Development Rider; and (iv) the Company's right, at its sole discretion, to remove the customer from the Program for a minimum of 12 months.

If at any time during the Emergency Curtailment Event a customer's actual measured load is greater than 100% and less than or equal to 110% of its Firm Load during the Emergency Curtailment Event, the customer shall forfeit its Program Credit for the month in which the Emergency Curtailment Event occurred and shall pay the ECE Charge set forth in the Rates section of this Rider.

In no event shall the penalties for non-performance listed above be less than PJM's nonperformance penalties plus ECE charge for a non-performing customer during the Emergency Curtailment Event.

In a calendar year when an Emergency Curtailment Event has not been requested of customers by PJM on this Rider between June 1 and September 7, the Company shall simultaneously interrupt all customers on this Rider by September 30 in order to meet the Company's PJM test obligations for Load Management Resources. The duration of this test will be one hour. The Company will schedule the test and Customers shall receive advance notification of the test. All provisions of this Rider shall apply to this test.

In the event of any conflict between the terms and conditions set forth in this Rider and other service reliability requirements and/or obligations of the Company, the latter shall prevail.

# RIDER ELR Economic Load Response Program Rider

#### E. Notification

Emergency Curtailment Event notifications called by PJM will be stated such that customers must curtail their actual measured load to Firm Load prior to the start time of the Emergency Curtailment Event set forth in the PJM notification to the Company. Emergency Curtailment Event notifications called for either by the Company or a transmission operator will be stated such that customers must curtail actual measured load to Firm Load within two hours of the time the Company sends such notification to the customer. The Company will provide customers a notification of when Emergency Curtailment Events have ended. Receipt of notifications set out in this paragraph shall be the sole responsibility of the customer.

Notification of an Emergency Curtailment Event 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.

### F. <u>Term</u>

This Rider shall become effective for service rendered beginning June 1, 2016, and shall expire with service rendered through May 31, 2024.

A customer may terminate its participation in the Program consistent with other terms and conditions to be effective June 1<sup>st</sup>, so long as the customer provides written notice to the Company no less than 38 months prior to the requested June 1<sup>st</sup> date upon which the requested termination would become effective. Except as otherwise provided in this Rider, a qualifying customer may return to the Program after a hiatus from the Program of at least one (1) year on the first day of the customer's billing cycle upon at least thirty days prior written notice of the customer's intent to return.

### G. Conditions

Payment by the customer of all charges herein is a condition of service under this Economic Load Response Program Rider.

# RIDER GCR Generation Cost Reconciliation Rider

# **APPLICABILITY:**

Applicable to any customer who receives electric service under the Company's rate schedules. The Generation Cost Reconciliation Rider (GCR) charge will apply, by rate schedule, effective for service rendered beginning April 1, 2017 for all kWhs per kWh.

RATE:	<u>GCR1</u>	GCR2
RS	(0.2219)¢	0.0000¢
GS	(0.2219)¢	0.0000¢
GP	(0.2142)¢	0.0000¢
GSU	(0.2082)¢	0.0000¢
GT	(0.2080)¢	0.0000¢
STL	(0.2219)¢	0.0000¢
TRF	(0.2219)¢	0.0000¢
POL	(0.2219)¢	0.0000¢

The GCR charge shall be calculated as follows:

# GCR = {[GCR Deferral Balance] / S} x 1/(1 - CAT) x {(1 - LOSSAvg) / (1 - LOSS)}

Where:

- i. The calculation period is the three-month period ended two months prior to the effective dates of the updated rider (i.e. three months ended October 31, January 31, April 30, and July 31).
- ii. Each component of the formula includes the aggregated data for The Cleveland Electric Illuminating Company, Ohio Edison Company, and The Toledo Edison Company.
- iii. For any given billing period, only the non-zero GCR charge will be applied.

# RIDER GCR

# Generation Cost Reconciliation Rider

GCR Deferral Balance =	[(BP - GCRREV - GENR	EV + Es + ECBP) + I]
------------------------	----------------------	----------------------

- **B**<sub>P</sub> = The actual reconciliation balance, including applicable interest, at the end of the previous calculation period.
- **GCR**<sub>REV</sub> = The actual revenue associated with Rider GCR, as billed for the calculation period, excluding applicable Commercial Activity Tax.
- **GEN**<sub>REV</sub> = The actual revenue associated with Riders GEN, HLF, RCP, RTP and CPP as billed for the calculation period, excluding applicable Commercial Activity Tax.
- Es = The actual cost of supplying generation service to SSO customers and customers taking service under special contracts for the calculation period.
- ECBP = The competitive bidding process expenses.
- I = The applicable interest for the calculation period at a monthly rate of 0.7066%.
- **S** = The projected kWh sales for the period during which Rider GCR will be charged.
- CAT = The Commercial Activity Tax rate as established in Section 5751.03 of the Ohio Revised Code.
- LOSS = The loss factor associated with each rate category based on service voltage. (See Page 1 of Exhibit C to the Application in Case No. 08-0935-EL-SSO).
- LOSS<sub>AVG</sub> = The aggregated loss factor.

# AVOIDABILITY:

The GCR charge shall equal GCR1 and GCR1 is not applied to customers during the calculation period the customer takes electric generation service from a certified supplier, unless the GCR Deferral Balance >  $(10\% \times E_s)$  for two consecutive calculation periods. If the GCR Deferral Balance >  $(10\% \times E_s)$  for two consecutive calculations periods, then, subject to Commission approval, GCR2 = GCR and GCR2 is not avoidable for customers who take electric generation service from a certified supplier.

Regardless, in the event that a supplier that has been providing power as a result of the competitive bid process defaults during the applicable ESP period, the Company upon its belief that such default will cause the GCR Deferral Balance to exceed the 10% threshold, may determine that the GCR charge is not avoidable for customers who take generation from a certified supplier, subject to Commission approval.

### **RIDER UPDATES:**

The charges contained in this Rider shall be updated and reconciled on a quarterly basis. No later than December 1st, March 1st, June 1st and September 1st of each year, the Company will file with the PUCO a request for approval of the Rider charges which, unless otherwise ordered by the PUCO, shall become effective on a service rendered basis on January 1st, April 1st, July 1st and October 1st of each year.

### <u>Fuel Rider</u>

### **APPLICABILITY:**

Cleveland, Ohio

Applicable to any customer who receives electric service under the Company's rate schedules. The Fuel Rider will apply, for all rate schedules, effective for service rendered beginning June 1, 2009 for all kWhs per kWh. This Rider is not applied to customers during the period the customer takes electric generation service from a certified supplier.

#### RATE:

RS	0.0000¢
GS	0.0000¢
GP	0.0000¢
GSU	0.0000¢
GT	0.0000¢
STL	0.0000¢
TRF	0.0000¢
POL	0.0000¢

# **RIDER PROVISIONS:**

The Rider recovers costs as authorized by the Commission's January 14, 2009 Finding and Order in Case No. 09-21-EL-ATA et al. The Fuel Rider charge shall be reconciled to reflect the difference between actual and forecasted costs and the difference between actual and forecasted generation revenue and revenue collected under this Rider.

#### RIDER AMI Advanced Metering Infrastructure / Modern Grid Rider

### APPLICABILITY:

Applicable to any customer who receives electric service under the Company's rate schedules, with the exception of General Service - Transmission (Rate "GT"). This Advanced Metering Infrastructure / Modern Grid Rider charge is a fixed monthly charge and will be effective for service rendered beginning April 1, 2017. This Rider is not avoidable for customers during the period the customer takes electric generation service from a certified supplier.

# CHARGE \*:

RS	\$ 0.243
GS	\$ 1.295
GP	\$17.370
GSU	\$20.276
STL (per lighting unit)	\$ 0.055
TRF	\$ 0.237
POL	\$ 0.345

\* The charges listed above, except those for rate schedule STL, will be applied per customer, per month. Any customer who receives electric service under rate schedule STL will have the above charge applied per lighting unit, per month.

### **PROVISIONS:**

The charges set forth in this Rider recover costs associated with the Ohio Site Deployment of the Smart Grid Modernization Initiative in Case No. 09-1820-EL-ATA. Any additional costs associated with expansion of the Ohio Site Deployment or the implementation of any additional advanced metering or grid modernization infrastructure in Ohio including, but not limited to, Commission directed, legislatively mandated or Company initiated and Commission approved infrastructure expansion will be collected through this Rider.

# **RIDER UPDATES:**

The charges contained in this Rider shall be updated and reconciled on a quarterly basis. No later than December 1st, March 1st, June 1st and September 1st of each year, the Company shall file with the PUCO a request for approval of the Rider charges which, unless otherwise ordered by the PUCO, shall become effective on a service rendered basis on January 1st, April 1st, July 1st and October 1st of each year.

Filed pursuant to Orders dated June 30, 2010, July 18, 2012 and March 31, 2016, in Case Nos. 09-1820-EL-ATA, 12-1230-EL-SSO and 14-1297-EL-SSO, respectively and Case No. 16-2166-EL-RDR before

# RIDER LEX Line Extension Cost Recovery Rider

# **APPLICABILITY:**

Applicable to any customer receiving electric service under the Company's rate schedules. The Line Extension Cost Recovery Rider (LEX) charge will apply for all rate schedules, on a service rendered basis, for all kWhs per kWh. This Rider is not avoidable for customers who take electric generation service from a certified supplier.

# RATE:

LEX charge

0.0000¢

# RIDER UPDATES:

The charges contained in this Rider shall be updated and reconciled on a quarterly basis beginning December 1, 2011, and thereafter no later than December 1st, March 1st, June 1st and September 1st of each year, the Company will file with the PUCO a request for approval of the Rider charges which, unless otherwise ordered by the PUCO, shall become effective on a service rendered basis on January 1st, April 1st, July 1st and October 1st of each year.

# RIDER DSI Delivery Service Improvement Rider

# **APPLICABILITY:**

Applicable to any customer who receives electric service under the Company's Rate Schedules. The Delivery Service Improvement Rider (DSI) charges will be applied to customers, effective for bills rendered beginning January 1, 2012, upon the Rate Schedule designation established in Case No. 07-551-EL-AIR, (which designation shall be reflected on the customers' bills). This Rider is not avoidable for customers who shop with a certified supplier.

# RATE:

RS (all kWhs, per kWh)	0.0000¢
GS (per kW of Billing Demand)	\$ 0.0000
GP (per kW of Billing Demand)	\$ 0.0000
GSU (per kW of Billing Demand)	\$ 0.0000

### RIDER PUR <u>PIPP Uncollectible Rider</u>

# **APPLICABILITY:**

Applicable to any customer who receives electric service under the Company's rate schedules. The PIPP Uncollectible Rider (PUR) charge will apply, for all rate schedules, effective for service rendered beginning April 1, 2017, for all kWhs per kWh. This Rider is not avoidable for customers during the period the customer takes electric generation service from a certified supplier. This Rider recovers uncollectible expense associated with PIPP customers to the extent such expense is incurred by the Company and is not recovered elsewhere.

# RATE:

PUR charge

0.0056¢

# **RIDER UPDATES:**

The charges contained in this Rider shall be updated and reconciled on a quarterly basis. No later than December 1st, March 1st, June 1st and September 1st of each year, the Company shall file with the PUCO a request for approval of the rider charges which, unless otherwise ordered by the PUCO, shall become effective on a service rendered basis on January 1st, April 1st, July 1st and October 1st of each year.

# RIDER NDU Non-Distribution Uncollectible Rider

### APPLICABILITY:

Applicable to any customer who receives electric service under the Company's rate schedules. The Non-Distribution Uncollectible Rider (NDU) charge / (credit) will apply, for all rate schedules, effective for service rendered beginning April 1, 2017, for all kWhs per kWh. This Rider is not applied to customers during the period the customer takes electric generation service from a certified supplier.

# RATE:

NDU charge / (credit)

0.0504¢

# RIDER UPDATES:

The charges / credits contained in this Rider shall be updated and reconciled on a quarterly basis. No later than December 1st, March 1st, June 1st and September 1st of each year, the Company shall file with the PUCO a request for approval of the rider charges / credits which, unless otherwise ordered by the PUCO, shall become effective on a service rendered basis on January 1st, April 1st, July 1st and October 1st of each year.

# RIDER RTP Experimental Real Time 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 CPP.

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

# **PROGRAM DESCRIPTION:**

The RTP Program is voluntary and will be offered on an experimental basis through May 31, 2024. Its purpose is to test customer response to hourly price signals quoted by PJM Interconnection, L.L.C. ("PJM") or any other applicable independent system operator to supply electricity. Participation in the RTP Program offers customers the opportunity to manage their electric costs by either shifting load from higher price to lower price periods or by adding new load during lower price periods.

# 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:

\$150.00 per month

### **RTP Billing:**

Customers taking service under this Rider will be billed based on the following calculation:

RTP Bill = Program Charge + RTP Energy Charge + RTP Fixed Charge + All Applicable Riders

# 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:

$$RTPEC = \sum_{t=1}^{n} (kWht \times LMPt)$$

Where:

kWht	=	Customer's kilowatt-hour usage in hour t
t	=	An hour in the billing period
n	=	Total number of hours in the billing period
LMPt	=	the "Day-Ahead" Locational Marginal Price, or "LMP" in hour t as defined and 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:

	Summer	<u>Winter</u>
GS	3.1411¢	2.2926¢
GP	2.6091¢	1.7892¢
GSU	2.3968¢	1.5993¢
GT	2.2476¢	1.4508¢

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.

# RIDER RTP Experimental Real Time Pricing Rider

### **METERING:**

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

# TERMS AND CONDITIONS:

Failure by the customer to timely pay all amounts due within thirty (30) days of when due may be cause for removal from service under this Rider, at the option of the Company.

A customer may terminate service under this Rider effective with the next scheduled meter reading following at least 12 days notice to the Company by the customer. Customers who withdraw or are removed from the RTP Program may not return to the RTP Program.

# RIDER CDR CEI Delta Revenue Recovery Rider

# **APPLICABILITY:**

Applicable to any customer receiving electric service under the Company's rate schedules except those customers served under an existing special contract (i.e. a contract which sets the price for service different than the rate under the otherwise applicable tariff) that was in effect prior to January 1, 2009 and continues in effect in 2009. The CEI Delta Revenue Recovery Rider (CDR) charge / (credit) will apply, for all rate schedules, effective for service rendered beginning August 6, 2011, for all kWhs per kWh. This Rider is not avoidable for customers who shop with a certified supplier.

# PURPOSE:

The CDR charge / (credit) recovers the difference in revenue ("delta revenue") from the application of rates in the otherwise applicable rate schedule and the application of any special contract entered into prior to January 1, 2009 and that continues in effect in 2009.

# RATE:

CDR charge / (credit)

(0.0110)¢

# RIDER UPDATES:

The charges / credits contained in this Rider shall be updated and reconciled on a quarterly basis. No later than December 1st, March 1st, June 1st and September 1st of each year, the Company shall file with the PUCO a request for approval of the rider charges / credits which, unless otherwise ordered by the PUCO, shall become effective on a service rendered basis on January 1st, April 1st, July 1st and October 1st of each year.

The CDR credit of this Rider shall no longer be applied as of service rendered beginning August 6, 2011, pending final reconciliation of the delta revenue authorized by the Commission's May 27, 2009 Finding and Order issued in Case No. 08-935-EL-SSO et al.

# 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

	Summer			Winter	
Midday <u>Peak</u>	Shoulder <u>Peak</u>	<u>Off-Peak</u>	Midday <u>Peak</u>	Shoulder <u>Peak</u>	<u>Off-Peak</u>
1.4023¢	1.4023¢	1.4023¢	1.4023¢	1.4023¢	1. <b>40</b> 23¢
1.0373¢	1.0373¢	1.0373¢	1.0373¢	1.0373¢	1.0373¢
0.9557¢	0.9557¢	0.9557¢	0.9557¢	0.9557¢	0.9557¢
0.8110¢	0.8110¢	0.8110¢	0.8110¢	0.8110¢	0.8110¢
	Summer				
Midday <u>Peak</u>	Shoulder <u>Peak</u>	Off-Peak	Midday <u>Peak</u>	Shoulder <u>Peak</u>	Off-Peak
5.4186¢	5.4186¢	3.2 <b>322¢</b>	4.7020¢	5.3758¢	3.0297¢
5.2310¢	5.2310¢	3.1203¢	4.5394¢	5.1898¢	2.9249¢
5.0842¢	5.0842¢	3.0328¢	4.4121¢	5.0443¢	2.8429¢
5.0 <b>79</b> 1¢	5.0791¢	3.0298¢	4.4076¢	5.0392¢	2.8400¢
	Midday Peak 1.4023¢ 1.0373¢ 0.9557¢ 0.8110¢ Midday Peak 5.4186¢ 5.2310¢ 5.0842¢ 5.0791¢	Summer   Midday Shoulder   Peak Peak   1.4023¢ 1.4023¢   1.0373¢ 1.0373¢   0.9557¢ 0.9557¢   0.8110¢ 0.8110¢   Summer Midday   Midday Shoulder   Peak Peak   5.4186¢ 5.4186¢   5.0842¢ 5.0842¢   5.0791¢ 5.0791¢	$\begin{tabular}{ c c c c } \hline Summer \\ \hline Midday & Shoulder \\ \hline Peak & Peak & Off-Peak \\ \hline 1.4023 & 1.4023 & 1.4023 & 1.4023 & 1.0373 & 1.0373 & 1.0373 & 1.0373 & 0.9557 & 0.9557 & 0.9557 & 0.9557 & 0.9557 & 0.9557 & 0.8110 & 0.$	$\begin{tabular}{ c c c c c c } \hline Summer & \hline Midday & Shoulder & \hline Midday & Peak & Off-Peak & Peak & Peak & \\ \hline Midday & Peak & Off-Peak & Peak & \\ \hline 1.4023 & 1.4023 & 1.4023 & 1.4023 & 1.4023 & \\ \hline 1.0373 & 1.0373 & 1.0373 & 1.0373 & \\ \hline 0.9557 & 0.9557 & 0.9557 & 0.9557 & \\ \hline 0.8110 & 0.8110 & 0.8110 & \\ \hline & & & & & & \\ \hline Summer & & & & & \\ \hline Midday & Shoulder & & & & \\ \hline Midday & Shoulder & & & & & \\ \hline Midday & Shoulder & & & & & \\ \hline Midday & Shoulder & & & & & \\ \hline Midday & Shoulder & & & & & \\ \hline Midday & Shoulder & & & & & \\ \hline S.4186 & 5.4186 & 3.2322 & & & & & \\ \hline 5.2310 & 5.2310 & & & & & & & \\ \hline 5.0842 & 5.0842 & & & & & & & \\ \hline 5.0791 & 5.0791 & & & & & & & \\ \hline \end{tabular}$	$\begin{tabular}{ c c c c c c } \hline Summer & & & & & & & & & & & & & & & & & & &$

Filed pursuant to Orders dated August 25, 2010, July 18, 2012 and March 31, 2016, in

Case Nos. 10-388-EL-SSO, 12-1230-EL-SSO and 14-1297-EL-SSO, respectively,

and Case No. 15-1842-EL-RDR before

# RIDER CPP Experimental Critical Peak Pricing Rider

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.

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 25.4000¢ 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:

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.

Filed pursuant to Orders dated August 25, 2010, July 18, 2012 and March 31, 2016, in Case Nos. 10-388-EL-SSO,12-1230-EL-SSO and 14-1297-EL-SSO, respectively, and Case No. 15-1842-EL-RDR before The Public Utilities Commission of Ohio

# RIDER GEN Generation Service Rider

#### APPLICABILITY:

For customers taking the Standard Service Offer electric generation service ("SSO Generation Service") from the Company, the following Standard Service Offer Generation Charges (SSOGC) by rate schedule, will apply, effective for service rendered beginning June 1, 2016, for all kWhs per kWh, unless otherwise noted. For billing purposes, the winter rates shall be applicable during each winter billing period as defined in the Electric Service Regulations.

Capacity costs will be developed based on the results from annual PJM capacity auctions (including incremental auctions) and allocated to each Company and tariff schedule based on the average of coincident peaks, including distribution losses, for the months of June through September of the year prior to the applicable PJM delivery year. The calculated wholesale capacity costs are used to develop capacity charges.

These calculated wholesale capacity costs will be converted to an energy basis and will then be subtracted from the SSO competitive bid process ("CBP") results to develop the non-capacity related energy charges.

# RATE:

Capacity Charges	<u>Summer</u>	<u>Winter</u>
RS*	1.2325¢	1.2325¢
GS	1.4023¢	1.4023¢
GP	1.0373¢	1.0373¢
GSU	0.9557¢	0.9557¢
GT	0.8110¢	0.8110¢
STL	0.0000¢	0.0000¢
TRF	0.8979¢	0.8979¢
POL	0.0000¢	0.0000¢
Energy Charges	Summer	<u>Winter</u>
RS*	4.8242¢	4.0007¢
GS	4.8242¢	4.0007¢
GP	4.6572¢	3.8623¢
GSU	4.5265¢	3.7 <b>540</b> ¢
GT	4.5220¢	3.7502¢
STL	4.8242¢	4.0007¢
TRF	4.8242¢	4.0007¢
POL	4.8242¢	4.0007¢

\* Customers participating in the Percentage of Income Payment Plan (PIPP) program shall pay 5.3118¢, for all kWh per kWh, in lieu of the Rate RS Capacity and Energy Charges shown above.

Filed pursuant to Orders dated August 25, 2010, July 18, 2012, March 31, 2016 and May 4, 2016, in Case Nos. 10-388-EL-SSO, 12-1230-EL-SSO, 14-1297-EL-SSO, and 16-936-EL-UNC, respectively and

Case No. 16-541-EL-RDR, before

# RIDER GEN Generation Service Rider

# TIME-OF-DAY OPTION:

For customers with the appropriate qualifying time-of-day metering and who elect to be served under the Time-Of-Day Option, the charge by rate schedule will be as shown below, for all kWhs, per kWh:

<u>Capacity Charges</u>	Summer			Winter		
	Midday <u>Peak</u>	Shoulder <u>Peak</u>	<u>Off-Peak</u>	Midday <u>Peak</u>	Shoulder <u>Peak</u>	Off-Peak
GS	1.4023¢	1.4023¢	1. <b>40</b> 23¢	1.4023¢	1.4023¢	1.4023¢
GP	1.0373¢	1.0373¢	1.0373¢	1.0373¢	1.0373¢	1.0373¢
GSU	0.9557¢	0.9557¢	0.9557¢	0.9557¢	0.9557¢	0.9557¢
GT	0.8110¢	0.8110¢	0.8110¢	0.8110¢	0.8110¢	0.8110¢
<u>Energy Charges</u>	Summer			Winter		
	Midday <u>Peak</u>	Shoulder <u>Peak</u>	<u>Off-Peak</u>	Midday <u>Peak</u>	Shouider <u>Peak</u>	<u>Off-Peak</u>
GS	8.4916¢	5.4186¢	3.2322¢	4.7020¢	5.3758¢	3.0297¢
GP	8.1976¢	5.2310¢	3.1203¢	4.5394¢	5.1898¢	2.9249¢
GSU	7.9676¢	5.0842¢	3.0328¢	4.4121¢	5.0443¢	2.8429¢
GT	7.9597¢	5.0791¢	3.0298¢	4.4076¢	5.0392¢	2.8400¢

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.

A customer may terminate its participation in this time-of-day option at any time effective with the next scheduled meter reading. A qualifying customer may return to the time-of-day option at any time after a hiatus from the time-of-day option of at least one (1) year.

### METERING:

The customer must arrange for time-of-day metering consistent with the Company's Miscellaneous Charges, Tariff Sheet 75.
## **RIDER DSE**

# Demand Side Management and Energy Efficiency Rider

The Company reserves the right to revise such schedule consistent with the Commission's final rules, which may include modification or deletion of all or portions of this schedule.

## APPLICABILITY:

Applicable to any customer that takes electric service under the Company's rate schedules. The following charges will apply, by rate schedule, effective for service rendered beginning January 1, 2017, for all kWhs per kWh:

RATE:	DSE1	DSE2
RS	0.0577¢	0.4827¢
GS	0.0577¢	0.2886¢
GP	0.0577¢	0.1606¢
GSU	0.0577¢	0.1061¢
GT	0.0577¢	0.1395¢
STL	0.0577¢	0.0310¢
TRF	0.0577¢	1.1596¢
POL	0.0577¢	0.0000¢

## PROVISIONS:

- 1. The DSE1 charges set forth in this Rider recover costs incurred by the Company associated with customers taking service under the Economic Load Response Rider (ELR).
- 2. The DSE2 charges set forth in this Rider recover costs incurred by the Company associated with the programs that may be implemented by the Company to secure compliance with the, energy efficiency and peak demand reduction requirements in Section 4928.66, Revised Code through demand-response programs, energy efficiency programs, peak demand reduction programs, and self-directed demand-response, energy efficiency or other customer-sited programs. The costs initially deferred by the Company and subsequently fully recovered through this Rider will be all program costs, including but not limited to any customer incentives or rebates paid, applicable carrying costs, all reasonable administrative costs to conduct such programs, lost distribution revenues resulting from the implementation of such programs, and any performance incentives such as shared savings.

## **RIDER UPDATES:**

1. The DSE1 charges set forth in this Rider shall be updated semi-annually. No later than December 1st and June 1st of each year, the Company shall file with the PUCO a request for approval of the Rider charges which, unless otherwise ordered by the PUCO, shall become effective on a service rendered basis on January 1st and July 1st of each year.

Filed pursuant to Orders dated May 27, 2009, May 4, 2011 July 18, 2012 and March 31, 2016, in Case Nos. 08-935-EL-SSO et al., 09-581-EL-EEC et al., 12-1230-EL-SSO and 14-1297-EL-SSO, respectively and Case No. 16-2167-EL-RDR, before

#### **RIDER DSE**

## Demand Side Management and Energy Efficiency Rider

2. The DSE2 charges set forth in this Rider shall be updated and reconciled semi-annually. No later than December 1st and June 1st of each year, the Company shall file with the PUCO a request for approval of the these charges which, unless otherwise ordered by the PUCO, shall become effective on a service rendered basis on January 1st and July 1st of each year. This rider shall be in effect until all costs are fully recovered.

## AVOIDABILITY:

- 1. The DSE1 charges set forth in this Rider are avoidable for (1) those customers taking service under Rider ELR and (2) a customer, as that term is defined in Section 4928.6610, Revised Code, which elects to opt out of the Company's portfolio plan as that term is defined in Section 4928.6610, Revised Code.
- 2. The DSE2 charges set forth in this Rider are avoidable for (1) a customer, as that term is defined in Section 4928.6610, Revised Code, which elects to opt out of the Company's portfolio plan as that term is defined in Section 4928.6610, Revised Code and (2) Non-Residential customers who are not taking service under a unique arrangement (special contract) and meet the criteria of all of paragraphs a) through f) below.

Each customer applying to the Company to avoid the DSE2 charges must at a minimum meet all of the criteria set forth below and must submit to the Company verifiable information detailing how the criteria are met, and must provide an affidavit from a company official attesting to the accuracy and truthfulness of the information provided. Qualification and verification on an annual basis is required, subject to the Failure to Comply section of this rider.

- a) The customer is a mercantile customer, as that term is defined in Section 4928.01, Revised Code.
- b) The customer identifies its capital investments and expenses related to customer-sited demandresponse programs, energy efficiency programs or peak demand reduction programs.
- c) For consideration of avoidance of this Rider, the customer shall provide sufficient data to illustrate that it has undertaken or will undertake energy efficiency and/or demand reduction programs that have produced or will produce energy savings and/or peak demand reductions equal to or greater than the statutory benchmarks to which the Company is subject. The energy savings and demand reductions resulting from the customer's programs shall be calculated using the same methodology used to calculate the Company's energy savings and demand reductions for purposes of determining compliance with statutory benchmarks, including normalization adjustments to the baseline, where appropriate.
- d) The customer commits, in writing, its customer-sited capabilities for integration into the Company's portfolio of programs such that the customer-sited capabilities shall assist the Company in satisfying the requirements in Section 4928.66, Revised Code.
- e) The customer demonstrates to the satisfaction of the Company that the avoidance of the DSE2 charges shall reasonably encourage the customer to commit its customer-sited capabilities for integration into the Company's portfolio of programs described above.
- f) The customer commits to use its best efforts to cooperate with and assist the Company in conjunction with any reviews conducted by a regulatory authority of the Company's efforts to utilize the customer's customer-sited capabilities to satisfy the requirements in Section 4928.66, Revised Code.

The customer must complete a standard application form in order to be considered for qualification to avoid charges under this Rider. The Company shall provide a standard

Filed pursuant to Orders dated March 25, 2009 and March 31, 2016, in Case Nos. 08-935-EL-SSO et al. and 14-1297-EL-SSO, respectively and Case No. 15-1843-EL-RDR, before

#### **RIDER DSE**

## Demand Side Management and Energy Efficiency Rider

application form upon request by the customer. Customers applying to avoid the DSE2 charges must successfully demonstrate that they have completed an energy efficiency project within the past three calendar years without financial support from the Company. The burden of proof to successfully demonstrate compliance with the standard application form lies with the customer.

Upon the Commission's approval of the customer's completed standard application form, the DSE2 charges shall be avoidable by the customer as long as, on an annual basis, the customer makes a filing with the Commission demonstrating that it remains eligible for the exemption under the criteria set forth herein.

## **REPORTING REQUIREMENTS:**

Customers served under this Rider must submit an annual report to the Company (Director, Ohio Rates and Regulatory Affairs), no later than April 30th of each year. The format of that report shall be identical to the Standard Application Form such that a determination of the compliance with the eligibility criteria can be determined.

The burden of proof to demonstrate on-going compliance with this Rider lies with the customer.

## **CONFIDENTIALITY:**

Customer information provided to demonstrate eligibility under this Rider, which has been identified as confidential, shall be treated as confidential by the Company. The name and address of customers eligible for the schedules, including eligible to avoid the DSE2 charges, shall be public information. The Public Utilities Commission of Ohio and its Staff shall have access to all customer and Company information related to service provided pursuant to this Rider for periodic and random audits.

#### FAILURE TO COMPLY:

If the customer being provided with service pursuant to this Rider fails to comply with any of the criteria for eligibility to avoid charges under this Rider, the Company will provide reasonable notice to the customer that the customer will pay all charges under this Rider. Furthermore, the Company shall charge the customer for the sum of all of the customer's avoided charges realized under this Rider, which the customer shall thus be obligated to pay.

## RIDER EDR Economic Development Rider

## a. Residential Non-Standard Credit Provision

## **APPLICABILITY:**

Applicable to residential customers taking service under the Company's rate schedule RS to which the Company's Residential Distribution Credit Rider (RDC) applies. This Residential Non-Standard Credit Provision is not applied to customers during the period the customer takes electric generation service from a certified supplier.

## RATE:

The following Residential Non-Standard credits are effective for service rendered beginning September 1, 2009, for all kWhs per kWh in excess of 500 kWhs per month which are consumed by the customer during the winter billing periods as defined in the Electric Service Regulations:

Customer rate schedule as of December 31, 2008	
"Optional Load Management" section of Residential Standard (Original Sheet No. 10)	(1.9000)¢
Residential Add-On Heat Pump (Original Sheet No. 11)	(1.9000)¢
Residential Water Heating (Original Sheet No. 12)	(0.5000)¢
Residential Space Heating (Original Sheet No. 13)	(1.9000)¢
Residential Water Heating and Space Heating (Original Sheet No. 14)	(1.9000)¢
Optional Electrically Heated Residential Apartment Schedule (Original Sheet No. 15)	(1.9000)¢

## b. Interruptible Credit Provision

## APPLICABILITY:

Applicable to all customers taking service under the Company's Economic Load Response Program Rider (ELR).

## RATE:

The following interruptible credits will apply, by rate schedule, effective for service rendered beginning June 1, 2016 by unit of Curtailable Load, as defined in Rider ELR:

GP (per kW)	\$ (5.000)
GSU (per kW)	\$ (5.000)
GT (per kW)	\$ (5.000)

## RIDER EDR Economic Development Rider

#### c. Non-Residential Credit Provision

#### **APPLICABILITY:**

Applicable to any customer taking General Service - Transmission (GT), Street Lighting (STL), Traffic Lighting (TRF), and Private Outdoor Lighting (POL) service under the Company's rate schedules. This Non-Residential Credit Provision is not applied during the period a customer takes electric generation service from a certified supplier.

#### RATE:

The following credits will apply, by rate schedule, effective for service rendered beginning April 1, 2017, for all kWhs, per kWh:

GT	(0.0000)¢
STL	(0.000)¢
TRF	(2.1731)¢
POL	(0.0000)¢

#### d. General Service - Transmission (Rate GT) Provision

#### APPLICABILITY:

Applicable to any customer taking service under the Company's General Service – Transmission (Rate GT). This provision is not avoidable for customers who take electric generation service from a certified supplier.

#### RATE:

The following charge will apply, effective for service rendered beginning June 1, 2009:

GT (per kVA of billing demand)

The following credit will apply, effective for service rendered beginning April 1, 2017:

GT (all kWhs, per kWh)

(1.6535)¢

\$ 8.000

#### ADDITIONAL PROVISION:

The charges provided for by Section (d) of this Rider shall be applied to the greater of (i) the measured monthly on-peak demand, or (ii) 25% of the measured monthly off-peak demand. Monthly on-peak demand is defined as the highest thirty (30) minute integrated kVA between the hours of 6:00 a.m. to 10:00 p.m. EST (equivalent to 7:00 a.m. to 11:00 p.m. EDT), Monday through Friday, excluding holidays. Holidays are defined as New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. Monthly off-peak demand is defined as the highest thirty (30) minute integrated kVA for all other hours. This provision of Rider EDR is reconciled within this subpart (d) quarterly and is revenue neutral to the Companies.

Filed pursuant to Orders dated August 25, 2010, July 18, 2012 and March 31, 2016 in in Case Nos. 10-388-EL-SSO, 12-1230-EL-SSO, and 14-1297-EL-SSO, respectively and Case No. 16-2143-EL-RDR, before

1.

#### RIDER EDR Economic Development Rider

#### e. Standard Charge Provision

#### APPLICABILITY:

Applicable to any customer that takes electric service under the Company's rate schedules. This Standard Charge Provision is not avoidable for customers who take electric generation service from a certified supplier.

#### **PURPOSE:**

The charges provided for by Section (e) of this Rider recover the difference in revenues resulting from the application of rates in the otherwise applicable rate schedule, and the application of credits in sections (a), (b), and (c) of this Rider.

#### RATE:

The following total charges will apply, by rate schedule for all kWhs per kWh:

	Provision 1	Provision 2	Total
RS	0.0000¢	0.0272¢	0.0272¢
GS	0.2417¢	0.0171¢	0.2588¢
GP	0.4283¢	0.0066¢	0.4349¢
GSU	0.0000¢	0.0026¢	0.0026¢
GT	0.0000¢	0.0008¢	0.0008¢
STL	0.0000¢	0.0632¢	0.0632¢
TRF	0.0000¢	0.0122¢	0.0122¢
POL	0.0000¢	0.0816¢	0.0816¢

#### f. Provision expired

## RIDER EDR Economic Development Rider

#### g. Provision expired

#### h. Automaker Credit Provision

## APPLICABILITY:

Applicable to domestic automaker facilities with more than 45 million kilowatt-hours of consumption for the 12 monthly billing periods ended December 31, 2009 at a single site. This Automaker Credit Provision is available for customers who take electric generation service from a certified supplier.

#### RATE:

All credits included in Section (h) of this Rider are applied only to usage that exceeds the average of the customer's twelve (12) billing periods ended December 31, 2009 ("Baseline Usage").

All kWhs over Baseline Usage, per kWh

(1.0000)¢

## RIDER EDR Economic Development Rider

## i. Automaker Charge Provision

#### APPLICABILITY:

Applicable to any customer that takes electric service under the Company's rate schedules with the exception of General Service - Transmission (GT), Street Lighting (STL), Traffic Lighting (TRF), and Private Outdoor Lighting (POL). This Automaker Charge Provision is not avoidable for customers who take electric generation service from a certified supplier.

## PURPOSE:

The charges provided for by Section (i) of this Rider recover costs associated with implementation of the Automaker Credit Provision.

## RATE:

The following charge will apply effective for service rendered beginning April 1, 2017, for all kWhs per kWh:

Automaker Charge

0.0055¢

## **RIDER UPDATES:**

The charges contained in this Rider shall be updated and reconciled on a quarterly basis. No later than December 1st, March 1st, June 1st and September 1st of each year, the Company will file with the PUCO a request for approval of the Rider charges which, unless otherwise ordered by the PUCO, shall become effective on a service rendered basis on January 1st, April 1st, July 1st and October 1st of each year. After May 31, 2024, all provisions of this Rider shall be used for reconciliation purposes only.

#### Cleveland, Ohio

P.U.C.O. No. 13

## RIDER DGC Deferred Generation Cost Recovery Rider

## **APPLICABILITY:**

Applicable to any customer receiving electric service under the Company's rate schedules except those customers served under an existing special contract that includes a fixed price for service where such fixed price is different than the rate under the otherwise applicable tariff and where the contract term includes the period of January 1, 2009 through May 31, 2009. The following Deferred Generation Cost Recovery Rider (DGC) charges will apply, by rate schedule, effective on a service rendered basis, for all kWhs per kWh. This Rider is not avoidable for customers who take electric generation service from a certified supplier.

## RATE:

RS	0.0000¢
GS	0.0000¢
GP	0.0000¢
GSU	0.0000¢
GT	0.0000¢
STL	0.0000¢
TRF	0.0000¢
POL	0.0000¢

## **PROVISIONS:**

- 1. The amount of this Rider reflects recovery of generation costs deferred from June 2009 through May 2011 due to any future Commission Order plus the associated Commission approved carrying costs on the unrecovered deferred cost balance.
- 2. The amount of this Rider reflects recovery of generation costs deferred from January 2009 through May 2009 due to Commission Opinion and Order January 14, 2009 in Case No. 09-21-EL-ATA plus the associated Commission approved carrying costs on the unrecovered deferred cost balance.

## **RIDER UPDATES:**

The charges contained in this Rider shall be updated and reconciled on an annual basis, or more frequently if necessary, beginning June 1, 2011. The Company will file with the PUCO a request for approval of the Rider charges which, unless otherwise ordered by the PUCO, shall become effective on a service rendered basis on the first day of the subsequent month, but no less than 30 days after the filing of such request.

## RIDER DFC Deferred Fuel Cost Recovery Rider

#### **APPLICABILITY:**

Applicable to any customer who receives electric service under the Company's rate schedules. The Deferred Fuel Cost Rider (DFC) charge will apply, for all rate schedules, effective for service rendered beginning January 1, 2011, for all kWhs per kWh. This Rider is not avoidable for customers who take electric generation service from a certified supplier.

The amount of this Rider reflects eligible fuel costs deferred from January 2006 through December 2007, plus the associated Commission approved carrying costs on the unrecovered deferred cost balance.

#### RATE:

DFC charge

0.0000¢

## RIDER NMB Non-Market-Based Services Rider

## **APPLICABILITY:**

Applicable to any customer who receives electric service under the Company's rate schedules. The Non-Market-Based Services Rider (NMB) charge will apply, by rate schedule, effective for service rendered as described below. This Rider is not avoidable for customers who take electric generation service from a certified supplier, unless the customer is a participant in the Rider NMB Opt-Out Pilot Program.

## PURPOSE:

The Rider NMB will recover non-market-based costs, fees or charges imposed on or charged to the Company by FERC, the State of Ohio, a regional transmission organization, independent transmission operator, transmission owner, or similar organization approved by FERC or the PUCO, and any other non-market-based charges impacting both CRES and SSO Suppliers where such charges and credits generally fall into the following non-market-based related categories: (i) PJM charges and credits for service including, but not limited to, procuring transmission services, transmission enhancement, uplift charges, generation deactivation, and out-of-market bilateral settlements; and (ii) Midwest Independent Transmission System Operator, Inc. ("MISO") Transmission Expansion Plan (MTEP) charges assessed under Schedule 26 of the MISO Tariff, whether assessed directly by MISO, PJM or American Transmission Systems, Incorporated. The current list of the PJM-related non-market-based costs, fees or charges is included in the Company's Electric Generation Supplier Coordination Tariff and the Company's Master Supply Agreement with SSO Suppliers and is subject to Rider NMB updates as described herein.

Rider NMB may be updated to include: 1) any current costs, fees, charges or credits that were not previously classified as non-market-based, or 2) any new costs, fees, charges or credits or modification to current costs, fees, charges or credits that were not in effect as of August 4, 2014 but were subsequently imposed on or charged by FERC, the State of Ohio, a regional transmission organization, independent transmission operator, or similar organization approved by FERC.

## RATE:

The NMB charge for each rate schedule shall be calculated as follows:



Where:

Filed pursuant to Orders dated August 25, 2010, July 18, 2012, July 1, 2015, February 24, 2016 and March 31, 2016 in Case Nos. 10-388-EL-SSO, 12-1230-EL-SSO, 15-0648-EL-RDR,15-2035-EL-RDR and 14-1297-EL-SSO

respectively,

## RIDER NMB <u>Non-Market-Based Services Rider</u>

**NMBC** = The amount of the Company's total projected Non-Market-Based Services-related costs for the Computation Period, allocated to each rate schedule.

The Computation Period over which NMB will apply shall be for a 12 month period beginning no later than 75 days after filing, which will be no later than January 15th of each year.

- E = Starting June 1, 2012, any net over- or under-collection of the Non-Market-Based Services-related costs, including applicable interest, invoiced during the period from June 1, 2011 to March 31, 2012, allocated to rate schedules. Thereafter, E will be calculated for the 12-month period immediately preceding the Computation Period.
- **BU** = Forecasted billing units for the Computation Period for each rate schedule.
- **CAT** = The Commercial Activity Tax rate as established in Section 5751.03 of the Ohio Revised Code.

#### **NMB** charges:

RS (all kWhs, per kWh)	1.4002¢
GS* (per kW of Billing Demand)	\$3.4872
GP* (per kW of Billing Demand)	\$4.4316
GSU (per kW of Billing Demand)	\$3.8707
GT (per kVa of Billing Demand)	\$2.6203
STL (all kWhs, per kWh)	0.0000¢
TRF (all kWhs, per kWh)	0.7977¢
POL (all kWhs, per kWh)	0.0000¢

\* Separately metered outdoor recreation facilities owned by non-profit, governmental and educational institutions, such as athletic fields, served under Rate GS or GP, primarily for lighting purposes, will be charged per the NMB charge applicable to Rate Schedule POL.

#### **RIDER UPDATES:**

The charges contained in this Rider shall be updated and reconciled on an annual basis. The Company will file with the PUCO a request for approval of the Rider NMB charges no later than January 15th of each year, which shall become effective on a service rendered basis no later than 75 days after filing, unless otherwise ordered by the Commission.

Filed pursuant to Orders dated August 25, 2010, July 18, 2012, July 1, 2015, March 31, 2016 and February 23, 2017 in Case Nos. 10-388-EL-SSO, 12-1230-EL-SSO, 15-0648-EL-RDR, 14-1297-EL-SSO and 16-2043-EL-RDR respectively, before The Public Utilities Commission of Ohio

Issued by: Steven E. Strah, President

Effective: March 1, 2017

## RIDER RDD Residential Deferred Distribution Cost Recovery Rider

## APPLICABILITY:

Applicable to any residential customer who receives electric service under the Company's rate schedules. The Residential Deferred Distribution Cost Recovery Rider (RDD) charge will apply, effective for service rendered beginning September 1, 2009 and continuing until recovery of the actual August 31, 2009 balances related to the post May 31, 2007, ETP Transition Tax, Line Extension and RCP Distribution deferrals, including applicable interest, is completed. This Rider is not avoidable for customers who take electric generation service from a certified supplier.

RATE:	Summer	<u>Winter</u>
Monthly Charge	\$0.000	\$0.000
First 500 kWhs, per kWh	0.0000¢	0.0000¢
All excess kWhs, per kWh	0.0000¢	0.0000¢

# **RIDER UPDATES:**

The charges contained in this Rider shall be updated and reconciled May 31, 2010, December 31, 2010, and May 31, 2011. For the May 2010 and May 2011 reconciliation, the Company shall file with the Public Utilities Commission of Ohio ("PUCO") a request for approval of the rider updated charges which, unless otherwise ordered by the PUCO, shall become effective on a service rendered basis September 1, 2010 and September 1, 2011, respectively. The rider charges resulting from the December 31, 2010 reconciliation will become effective in January 2011 upon filing with the PUCO subject to final reconciliation in May 2011. Regardless of the scheduled reconciliation periods, the deferred balance will be tracked and the charges will actually cease with the billing portion immediately following the one in which full recovery of the deferred balances is achieved.

## **RIDER NDD**

## Non-Residential Deferred Distribution Cost Recovery Rider

#### **APPLICABILITY:**

Applicable to any non-residential service customer who receives electric service under the Company's rate schedules<sup>1</sup>. The Non-Residential Deferred Distribution Cost Recovery Rider (NDD) charge will apply, by rate schedule, effective for service rendered as described in the following section to recover the actual August 31, 2009 balances related to the post May 31, 2007, ETP Transition Tax, Line Extension and RCP Distribution deferrals, plus applicable interest. This Rider is not avoidable for customers who take electric generation service from a certified supplier.

RATE:	Summer	<u>Winter</u>
GS <sup>1</sup> (all kWhs, per kWh)	0.0000¢	0.0000¢
GP <sup>1,2</sup> (per kW of Billing Demand)	\$ 0.0000	\$ 0.0000
GSU <sup>1</sup> (per kW of Billing Demand)	\$ 0.0000	\$ 0.0000
GT (per kVa of Billing Demand)	\$ 0.0000	\$ 0.0000
STL <sup>3</sup> (all kWhs, per kWh)	0.0000¢	0.0000¢
TRF (all kWhs, per kWh)	0.0000¢	0.0000¢
POL (all kWhs, per kWh)	0.0000¢	0.0000¢

#### Note:

- 1 Customers subject to the School Credit Provision of Rider EDR are exempted from this Rider.
- 2 Separately metered outdoor recreation facilities owned by non-profit governmental and educational institutions, such as athletic fields, served under Rate GP, primarily for lighting purposes, will be charged per the NDD charge applicable to Rate Schedule GS.
- 3 Customers receiving electric service under Rate Schedule STL will have the above noted charge applied on a service rendered basis, effective September 1, 2011 through December 31, 2011.

# Cleveland, Ohio

#### RIDER NDD Non-Residential Deferred Distribution Cost Recovery Rider

#### **RIDER UPDATES:**

The charges contained in this Rider shall be updated and reconciled May 31, 2010, December 31, 2010, and May 31, 2011. For the May 2010 and May 2011 reconciliation, the Company shall file with the Public Utilities Commission of Ohio ("PUCO") a request for approval of the rider updated charges which, unless otherwise ordered by the PUCO, shall become effective on a service rendered basis September 1, 2010 and September 1, 2011, respectively. The rider charges resulting from the December 31, 2010 reconciliation will become effective in January 2011 upon filing with the PUCO subject to final reconciliation in May 2011.

## RIDER RER Residential Electric Heating Recovery Rider

## **APPLICABILITY:**

Applicable to any residential customer that takes electric service under the Company's rate schedules. The Residential Electric Heating Recovery Rider (RER) charges will apply, by rate schedule, effective for service rendered as described below. This Rider is not avoidable for customers who take electric generation service from a certified supplier.

## PURPOSE:

The charges provided for in this Rider recover deferred purchased power costs which represent the differential between the amounts paid by customers that received or are receiving Rider RGC credits and the amounts that otherwise would have been paid by those customers but for the Commission's orders and entries in the 10-176-EL-ATA proceeding, including applicable interest.

- The RER1 charge set forth in this Rider recovers deferred purchased power costs associated with the 10-176-EL-ATA proceeding incurred by the Company from the implementation of Rider RGC through June 30, 2011, including applicable interest.
- The RER2 charge set forth in this Rider recovers on-going deferred purchased power costs not otherwise recovered through the RER1 charge per the Order in Case No. 10-176-EL-ATA dated May 25, 2011, including applicable interest.

## RATE:

The following charges will apply, by rate schedule for all kWhs per kWh:

	<u>RER1</u>	RER2
RS	0.0000¢	0.1387¢

#### **RIDER UPDATES:**

The RER charges set forth in this Rider shall be updated and reconciled on a semi-annual basis. No later than December 1st and June 1st of each year, the Company shall file with the PUCO a request for approval of these rider charges which, unless otherwise ordered by the PUCO, shall become effective on a service rendered basis on January 1st and July 1st of each year.

## RIDER RGC Residential Generation Credit Rider

## **APPLICABILITY:**

Applicable to any customer taking service under Rate Schedule RS who took service from the Company under one of the following rate schedules as of January 1, 2007, or any subsequent customer at that same service address, who continues to comply with the requirements of the previously applicable rate schedule set forth below, and who uses electricity as their primary or sole source of heat at that address:

Residential Schedule (Solety under the Optional Load Management Rate) Residential Add-On Heat Pump Residential Space Heating Residential Water Heating and Space Heating Optional Electrically Heated Residential Apartment Schedule Original Sheet No. 10 Original Sheet No. 11 Original Sheet No. 13 Original Sheet No. 14 Original Sheet No. 15

This Residential Generation Credit Rider (RGC) credit is effective for service rendered beginning October 31 through March 31, per kWh, for all kWhs, consumed by the customer during each such billing period. This Rider is not avoidable for customers who take electric generation service from a certified supplier.

# RATE:

**RGC credit** 

(1.0400)¢

# ADDITIONAL PROVISION:

Any customer taking service under Rate Schedule RS who took service from the Company under one of the above rate schedules as of January 1, 2007, or any subsequent customer at that same service address, who continues to comply with the requirements of the previously applicable rate schedule set forth above, and who takes electric generation service from a certified supplier, will have generation charges reduced by 1.90¢ per kWh for all kWhs in excess of 500 kWhs consumed by the customer during each winter billing period as defined in the Electric Service Regulations.

## RIDER DCR Delivery Capital Recovery Rider

## **APPLICABILITY:**

Applicable to any customer who receives electric service under the Company's rate schedules set forth below. The Delivery Capital Recovery Rider (DCR) charges will apply, by rate schedule, effective for bills rendered beginning March 1, 2017. This Rider is not avoidable for customers who take electric generation service from a certified supplier.

## RATE:

RS (all kWhs, per kWh)	0.6957¢
GS (per kW of Billing Demand)	\$3.0947
GP (per kW of Billing Demand)	\$1.0912
GSU (per kW of Billing Demand)	\$0.7610

#### **PROVISIONS:**

The charges set forth in this Rider recover costs associated with delivery plant investments made since the date certain in Case No. 07-551-EL-AIR, exclusive of any delivery plant investments being recovered elsewhere.

#### **RIDER UPDATES:**

The charges contained in this Rider shall be updated on a quarterly basis. Effective with the filing made on or about April 20, 2014, the Company will file a request for approval of the Rider charges on or about March 31st, June 30th, September 30th and December 31st of each year. Charges, unless otherwise ordered by the PUCO, shall become effective on a bills rendered basis on June 1st, September 1st, December 1st and March 1st of each year.

## Sheet 125 7<sup>th</sup> Revised Page 1 of 1

## RIDER PIR Phase-In Recovery Rider

## **APPLICABILITY:**

Applicable to any customer who receives electric service under the Company's rate schedules set forth below. The Phase-In Recovery Rider (PIR) charges will apply, by rate schedule, for all kWhs per kWh. This Rider is nonbypassable within the meaning of O.R.C. § 4928.231 and is not avoidable for customers who take electric generation service from a certified supplier.

## RATE:

२ऽ	0.1336¢
38	0.1336¢
GP1	0.1300¢
GP2	0.0305¢
GSU1	0.1273¢
GSU2	0.0305¢
GT1	0.1271¢
GT2	0.0305¢
STL	0.1336¢
TRF	0.1336¢
POL	0.1336¢

## **PROVISIONS:**

- 1. The charges set forth in this Rider recover costs associated with phase-in recovery bonds issued to securitize costs for which the Company was previously authorized recovery, in accordance with O.R.C. §§ 4928.23 through 4928.2318.
- The GP2, GSU2, and GT2 PIR charges are applicable to those customers served under a special contract that included a fixed price for service where such fixed price was different than the rate under the otherwise applicable tariff and where the contract term included the period January 1, 2009 through May 31, 2009. The GP1, GSU1, and GT1 PIR charges are applicable to all other customers taking service under these rate schedules.

#### **RIDER UPDATES:**

The charges contained in this Rider shall be updated on a semi-annual basis. No later than November 1<sup>st</sup> and May 1st of each year, the Company will file with the PUCO a request for approval of the Rider charges which, unless otherwise ordered by the PUCO, shall become effective on a service rendered basis on January 1<sup>st</sup> and July 1<sup>st</sup> of each year.

## Akron, Ohio

P.U.C.O. No. 13

## RIDER GDR Government Directives Recovery Rider

## APPLICABILITY:

Applicable to any customer who receives electric service under the Company's rate schedules. This Government Directives Recovery Rider (GDR) charge is a fixed monthly charge and will be effective for service rendered beginning June 1, 2016. This Rider is not avoidable for customers during the period the customer takes electric generation service from a certified supplier.

#### PURPOSE:

Charges set forth in this Rider shall recover costs associated with federal or state government mandates enacted after August 4, 2014.

#### CHARGE\*:

\$0.0000
\$0.0000
\$0.0000
\$0.0000
\$0.0000
\$0.0000
\$0.0000
\$0.0000

\* The charges listed above, except those for rate schedule STL, will be applied per customer, per month. Any customer who receives electric service under rate schedule STL will have the above charge applied per lighting unit, per month.

#### **RIDER UPDATES:**

The charges contained in this Rider shall be updated and reconciled on a semi-annual basis. No later than December 1st and June 1st of each year, the Company shall file with the PUCO a request for approval of these charges which, unless otherwise ordered by the PUCO, shall become effective on a service rendered basis on January 1st and July 1st of each year, beginning January 1, 2017.

## **RIDER AMO** Automated Meter Opt-out Rider

# **APPLICABILITY:**

Applicable to any customer taking service under all rate schedules who has been notified that the customer's meter will be replaced with an advanced meter and who does not wish to have an advanced meter installed at the customer's premises or any customer who currently has an advanced meter who wishes to have it removed (hereafter, "Opt-out Customers"). This Rider is not avoidable for any customer during the period the customer takes electric generation service from a certified supplier. The tariff shall not be available to any customer taking generation service under a time differentiated rate.

# RATE:

The charge to remove the advanced meter for this service and install a non-communicating meter is \$0. In addition, Opt-out Customers will receive a monthly customer charge.

**Customer Charge** 

ADDITIONAL PROVISION:

A non-communicating meter will be used to provide electric service for customers who elect this option. Opt-out Customers will be charged the initial and monthly charges described above once the replacement meter(s) is installed. Customers who opt out prior to the advanced meter installation will be charged only the monthly charge described above.

The Company may refuse to provide advanced meter opt-out service in either of the following circumstances:

- 1) If such a service creates a safety hazard to consumers or their premises, the public, or the electric utility's personnel or facilities.
- If a customer does not allow the electric utility's employees or agents access to the meter at the customer's premises.

\$00.00

P.U.C.O. No. 13

Cleveland, Ohio

P.U.C.O. No. 13

#### RIDER ORR Ohio Renewable Resources Rider

#### **APPLICABILITY:**

Applicable to any customer who receives electric service under the Company's rate schedules. This Ohio Renewable Resources Rider (ORR) will be effective for service rendered beginning June 1, 2016. This Rider is not avoidable for customers during the period the customer takes electric generation service from a certified supplier.

The ORR charges will apply, by rate schedule, as follows:

#### <u>RATE:</u>

RS (all kWhs, per kWh)	0.0000¢
GS (per kW of Billing Demand)	\$0.0000
GP (per kW of Billing Demand)	\$0.0000
GSU (per kW of Billing Demand)	\$0.0000
GT (per kVa of Billing Demand)	\$0.0000
STL (all kWhs, per kWh)	0.0000¢
TRF (all kWhs, per kWh)	0.0000¢
POL (all kWhs, per kWh)	0.000¢

#### **RIDER UPDATES:**

The charges contained in this Rider shall be updated on an annual basis. No later than April 1st of each year, the Company will file with the PUCO a request for approval of the Rider charges which, unless otherwise ordered by the PUCO, shall become effective on a service rendered basis on June 1st of each year.

#### **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, 2016, 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>	Ali Other <u>Hours</u>
Rate GS	19.0793¢	4.0616¢
Rate GP	18.4174¢	3.9210¢

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.

## RIDER HLF

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

A customer may terminate its participation in Rider HLF at any time effective with the next scheduled meter reading, following appropriate notice to the Company by the customer. A customer may return to Rider HLF at any time provided that the customer meets the qualifications set forth in the rider.

## RIDER UPDATES:

Cleveland, Ohio

The charges contained in this Rider shall be updated annually. No later than May 1st of each year, the Company will file with the PUCO a request for approval of the Rider charges coincident with the Rider GEN filing which, unless otherwise ordered by the PUCO, shall become effective on a service rendered basis on June 1st of each year.

# Original Sheet 132 Page 1 of 1

#### RIDER DMR Distribution Modernization Rider

## APPLICABILITY:

Applicable to any customer who receives electric service under the Company's rate schedules. This Distribution Modernization Rider (DMR) will be effective for service rendered beginning January 1, 2017. This Rider is not avoidable for customers during the period the customer takes electric generation service from a certified supplier.

The DMR charges will apply, by rate schedule, as follows:

## RATE:

RS (all kWhs, per kWh)		0.4046¢
GS (per kW of Billing Demand) GS (all kWhs, per kWh)	\$0.7133	0.1958¢
GP (per kW of Billing Demand) GP (all kWhs, per kWh)	\$0.8918	0.1958¢
GSU (per kW of Billing Demand) GSU (all kWhs, per kWh)	\$0.7315	0.1958¢
GT (per kVA of Billing Demand) GT (all kWhs, per kWh)	\$0.4764	0.1958¢
STL (all kWhs, per kWh)		0.1958¢
TRF (all kWhs, per kWh)		0.3558¢
POL (all KWhs, per kWh)		0.1958¢

#### **RIDER UPDATES:**

The charges contained in this Rider shall be updated on an annual basis. No later than December 1<sup>st</sup> of each year, the Company will file with the PUCO a request for approval of the Rider charges which, unless otherwise ordered by the PUCO, shall become effective on a service rendered basis on January 1<sup>st</sup> of each year.

Filed pursuant to Order dated December 21, 2016 in Case No. 14-1297-EL-SSO and Case No. 16-2003-EL-RDR

# EXHIBIT



## The Public Utilities Commission of Ohio

In the Matter of the Complaint of PCC Airfoils LLC,

Complainant,

Case no. 16-2213-EL-CSS

v.

Cleveland Electric Eliminating Company,

Respondent.

## **Testimony of Mike Spacek**

Q. Please state your name and address.

A. My name is Mike Spacek. My company is Engineered Process Systems Ltd.,

P.O. Box 471, Huron Oho 44839.

Q. What is your education?

A. I have a Bachelor's degree in Applied Science and Technology from

Youngstown State University, 1987.

Q. What other training have you received by way of seminars or continuing

education?

÷.,

A. I attend the monthly Association of Energy Engineers lunch and learn which covers a variety of subjects related to energy engineering. I also obtain annual Professional Development Units (PDU's) to keep my professional engineering registration. Some of the relevant seminars I have attended include:

1

AMP, Ohio Annual Conference 2013-2015 Association of Energy Engineers, GlobalCon 2014-2016 Half-Moon, Solar Photovoltaic Project Design and Development Northern Power, Wind Turbine installation and maintenance

Q. What licenses, registrations or certifications do you hold?

A. I am a registered professional engineer in Ohio and Pennsylvania. I am also a certified energy manager, certified energy auditor and a certified distribution generation professional. The certifying agency is The Association of Energy Engineers.

Q. What is your work experience in the electrical energy utilities field?

A. I've attached my resume as Exhibit 1 to this testimony. I was employed by Ohio Edison and FirstEnergy for 21 years. My Ohio Edison/FirstEnergy work included substation maintenance field work, corporate distribution design, environmental and special projects, division distribution engineering and national account sales. I became familiar with how to understand and apply the tariffs and rates.

Among other things when with FirstEnergy, I worked with customers to improve their energy efficiency and energy rate structures. While with FirstEnergy, I had worked with Wilkes and Company on energy efficiency projects. For example, we had customers with chiller systems they use a lot of energy year-round. Wilkes and Company provided design and construction to convert the customer to a closed loop primary-secondary process cooling system whereby natural exterior cold during the winter provided the cooling, rather than year-round cooling through electrical energy. At some point, Wilkes and Company asked me to come work for them and I accepted.

Q. What is your current business?

A. I am a minority owner of Wilkes and Company and director of Engineered Process Systems Ltd. (EPS), a wholly owned subsidiary of Wilkes. I have been working primarily through EPS for 16 years. In addition, I am a managing member of Effective Utility Services LLC, which has ownership in common with Wilkes and Company.

Q. What is the business of Wilkes and Company?

A. Wilkes and Company is an industrial mechanical contractor.

2

Q. What is Engineered Process Systems, Ltd.?

A. It is a wholly-owned subsidiary of Wilkes and Company. EPS designs and builds energy facilities. Essentially, EPS identifies and markets to customers who would receive energy cost benefits from engineered systems, either through systems that improve the utility rate structure or systems that introduce energy efficiency, or both. For example, customers with chillers as I described previously. As another example, EPS will analyze a customer's system and rate structure and recommend the engineering and construction electrical facilities that may allow a customer to migrate to a more favorable rate structure, as in this case.

Q. What do you do with EPS? I have worked in energy consulting and procurement. I work energy projects from conception and implementation to completion. I will analyze a customer's energy billings and systems to make appropriate recommendations on how the customer may save on its energy costs. We will then perform the design and construction services necessary to achieve the energy cost savings. In addition to projects involving increased energy efficiency, my projects have included rate conversions from General Service Secondary (GS) to General Service Primary (GP) and GP to General Service Transmission (GT) rate schedules. I am responsible for project management of energy efficient and effective programs such as boilers, chillers, lighting, compressed air, power factor correction, electrical transformers, and other customer facility projects.

Q. What is Effective Utility Services LLC?

A. Effective Utility Services (EUS) is a related company that essentially finances energy facilities. If the customer does not want to pay upfront for the energy facility

3

directly or to finance it through conventional means, EUS will become the owner and essentially lease or sell the energy facility back to the customer.

Q. How many customers have you worked with?

A. It would be difficult to estimate an accurate number over the years. The existing Wilkes customer base is 260 commercial, governmental and industrial accounts. At FirstEnergy, I contacted and worked with at least 300-customers.

Q. What is your engagement with PCC Airfoils?

A. I initially consulted with PCC Airfoils through Energy Planners of Columbus, Ohio (EPCO) regarding PCC Airfoils' electric and natural gas bill review and generation and distribution procurement. Currently, I consult under the law firm of Carroll, Ucker & Hemmer LLC regarding PCC Airfoils desire to migrate the PCC Airfoils SMP facility in Wickliffe, Ohio, to a subtransmission system and the General Subtransmission Service (GSUB) rate structure. If that is unattainable, I am also consulting through EPCO on the technical issues related to a transfer of the service at PCC Airfoils from the General Service Secondary (GS) to the General Service Primary (GP) rate schedule.

Q. Describe the PCC Airfoils SMP facility.

A. PCC Airfoils SMP facility is located at 29501 Clayton Avenue, Wickliffe, OH. This facility is approximately 100,000 square feet. A 36,000 volt Cleveland Electric Eliminating Company (CEI) subtransmission line runs east and west adjacent to PCC Airfoils property.

Q. What does PCC Airfoils do on its property?

A. The SMP Plant casts airfoils and other hot section components, primarily for aircraft jet engines. PCC Airfoils is a subsidiary of Precision Castparts Corp.

Q. What class of service would PCC Airfoils fall under?

A. Service can be classified in various different ways. Typically an overview of the classes would be industrial, commercial, governmental, and residential. PCC Airfoils would be in the industrial class of service. CEI's tariff does not specifically define classes of service, however.

Q. What analysis have you done concerning the electrical needs of PCC Airfoils?

A. I reviewed historic billings and electrical distribution system. I wanted to determine whether PCC Airfoils could qualify for more favorable electric rates under CEI's tariff.

Q. Did you analyze the PCC Airfoils electric demand?

A. Yes. PCC Airfoils had a 3370 kW average demand in 2016. That is consistent with its previous demand levels.

Q. Did you make any recommendation to PCC Airfoils concerning its rate schedules and metering?

A. Not directly. The recommendations were made through EPCO. I was "at the table" with EPCO, part of the team.

Q. Other than changes involving engineering changes did EPCO and you make any recommendations to PCC Airfoils?

A. Yes. I determined that the Business Development Credit (BDC) Rider had not been applied after May 2010 but should have been.

Q. What, if anything, did you do with respect to that recommendation?

A. I worked with CEI to obtain reinstatement of the BDC Rider and reimbursement of failure to apply the BDC Rider.

Q. Did you make any other recommendations?

A. In addition to pursuing the refund of the non-applied BDC Rider, I recommended that PCC Airfoils make application with FirstEnergy to convert from General Service Secondary (GS) to General Service Subtransmission (GSUB). In addition, I reviewed generation procurement.

Q. We will return to the issue relating to migrating to GSUB, but explain your work for PCC Airfoils in obtaining a refund of rate resulting from the past failure to apply the BDC Rider.

A. First, we identified the relevant tariff. PCC Airfoils is currently served by CEI's General Service Secondary (GS) rate schedule with the BDC Rider.

Q. Was that the rate schedule treatment that PCC Airfoils was receiving when you first began to consult with PCC Airfoils?

A. No. In reviewing the tariff and rate schedule, we determined that PCC Airfoils had not been, but should have been, receiving rates based upon the BDC Rider.

Q. How did you proceed in assisting PCC Airfoils with respect to its treatment under CEI's rate schedules?

A. After CEI initially denied the application for the migration to General Service Subtransmission, we decided first to address the issues about treatment of PCC Airfoils under the BDC Rider dating from October 2009. We worked with CEI from January 2016 through April 2016 on the past BDC Rider issue. We explained to CEI that PCC Airfoils qualified for the BDC Rider under the terms of its tariff, because it had been under the BDC Rider on April 30, 2009 as provided in the tariff. When CEI checked its records, CEI agreed.

The next step was to pursue a refund for the excess rates that had been paid when PCC Airfoils should have been charged rates based upon the BDC Rider.

6

Ultimately on March 28, 2016, CEI agreed to refund PCC Airfoils the excess charges.

# **General Service Subtransmission Issue**

Q. Returning to the General Service Subtransmission issue, why do you think

GSUB is appropriate for PCC?

A. I have never before seen a utility deny a customer the ability to migrate from one rate to another when the customer qualified for the new rate schedule. In this case with some engineering changes, PCC Airfoils clearly qualifies to migrate to General Service Subtransmission service under the terms of CEI's tariff.

Q. Please explain why PCC Airfoils qualifies under the tariff to change to GSUB rates.

A. I attach CEI's tariff Sheet 4 consisting of 21 pages as Exhibit 2 to my

testimony. Section IV, Page 4 of 21, states in part:

Section C. Delivery Voltage: Subject to the provisions of paragraph IV.B above and after the Company determines that facilities of adequate capacity are available and adjacent to the premises to be served, the types of services available with the nominal voltages are:

- 1. Secondary Service Less than or equal to 600-volts
- 2. Subtransmission Service 11,000 volts three wire and 36,000 volts three wire
- 3. Transmission Service Greater than or equal to 69,000 volts
- 4. Primary Service All other available voltages

Delivery voltage will be specified by the company and will be based upon the availability of lines in the vicinity of the customer's premises and commensurate with the size of the customer's load. Customers with demands in excess of twenty-five hundred (2,500) kW will generally be served at Transmission Service. In this case, there is no question that CEI has facilities specifically including a 36 kV line available and adjacent to the PCC Airfoils premises. Furthermore, PCC Airfoils has a consistent demand in the neighborhood of 3000 kW, which exceeds the 2500 kW load stated in the tariff.

Q. How do you know that CEI has adequate facilities adjacent to PCC Airfoils?

A. CEI engineers never even hinted that CEI's available facilities lacked adequate capacity during the conference call of June 30, 2015. They merely complained that it was bad precedent and they said that PCC is already adequately served via the distribution system. In discovery in this case, CEI resopnded to a request for admission submitted to it by PCC Airfoils, "The Cleveland Electric Illuminating Company admits that it has subtransmission facilities of adequate capacity available adjacent to PCC Airfoils premises." Exhibit 3 to this testimony is a copy of CEI's response to Request for Admission 1.

Q. What is PCC Airfoils' peak demand?

A. According to CEI's billings, PCC Airfoils average peak demand in 2016 was 3,370 kW. The past five years demand loads according to CEI breakdown as follows:

2011	3,179 kW
2012	3,339 kW
2013	3,334 kW
2014	3,212 kW
2015	3,271. kW

Q. Does CEI have customers who are receiving subtransmission service but whose demand is less than the 2500 kW load stated in the tariff?

A. Yes. According to the interrogatory answer provided in discovery, CEI has 489 customers receiving sub transmission service who have less than a 2500 kW demand. CEI has 502 customers receiving sub transmission service with less than a 3000 kW demand. CEI has 514 customers receiving sub transmission service with a less

than 3500 kW demand. Exhibit 4 attached to my testimony is a copy of the CEI's

Answer to Interrogatory 15 providing that information.

Q. Why do you think that PCC Airfoils has a right to choose the rate schedule?

A. CEI's tariff states:

Paragraph V, Rate Schedule Alternatives

Section A. Selecting Rate Schedule: Where two or more alternative rate schedules are applicable to the same class of service, the Company, upon request, will assist a customer in selecting an appropriate rate schedule to be applied. The customer, however, shall select from the alternative rate schedules and such selection shall be the basis for the application or contract for service. No refund will be made representing the difference in charges under different rate schedules applicable to the same class of service except as required by law.

Section B. Changing Rate Schedule: Subject to limitations in the service contract or applicable rate schedule, the customer may change to an alternative applicable rate schedule, except that a customer contracting for a specified capacity served at available primary or transmission voltage shall not be eligible to recontract for service at secondary voltage, unless a secondary voltage circuit of adequate capacity is available adjacent to the premises and the customer complies with all the provisions of the applicable secondary rate schedule.

PCC Airfoils is an industrial class customer. Section A says, "the customer ...

**shall select** from the alternative rate schedules...." It does not say that the utility makes the selection. Section A gives the customer rather than the utility the right to select the appropriate rate schedule. Section B gives the customer the ability to change to an appropriate rate schedule, identifying exception to that right not applicable here.

Q. How is the tariff supposed to work with respect to the selection of the voltage?

A. Upon selection of a rate schedule, CEI has the right to select the voltage

applicable to the rate schedule selected. At PCC Airfoils, the 36,000 volt line meets the

criterion of being adjacent and having adequate capacity. Exhibit 5 is a copy of CEI's Response to Request for Admission 4. Circuit R 16&17-LY-G-X is the 36 kV line. Therefore, CEI must select this voltage to serve PCC. If there were an adjacent line with 11,000 volts having adequate capacity, CEI could elect to serve PCC Airfoils with subtransmission service at that voltage. However, CEI does not have the right or authority to force customers into unfavorable rate schedules using CEI's voltage selection as an excuse.

Q. What physical changes would PCC Airfoils have to make to migrate to the General Service Subtransmission rate schedule?

A. PCC Airfoils would need to install its own transformer to step down the voltage for its use. We would work with CEI's engineering department for a satisfactory configuration, but those are simple engineering issues to resolve.

Q. In your experience how long should the engineering and construction work take from application to installation?

A. We can do the project in 120 days from start to finish.

Q. Are you familiar with the sequence of events concerning the attempts by PCC Airfoils to obtain subtransmission service from CEI to qualify for the GSUB?

A. Yes, I consulted for EPCO to assist PCC Airfoils in its efforts to obtain subtransmission service from CEI.

Q. When did PCC Airfoils first apply to CEI for subtransmission service?

A. June 26, 2015.

Q. How did that application come about?

A. Initially, I consulted with EPCO and provided a preliminary GS to GSUB proposal, showing it would save PCC Airfoils substantial money. With the approval of
PCC Airfoils, we contacted CEI and made an application on June 15, 2016 to switch PCC Airfoils to General Service Subtransmission service.

Q. How did CEI respond?

A. On June 30, 2015, we had a telephone conference with CEI engineering staff. CEI told us that they did not have any need to put PCC Airfoils on the General Service Subtransmission service. CEI told us they would allow migration to the General Service Primary (GP), but would deny PCC Airfoils access to continue under the Business Distribution Credit Rider if PCC Airfoils made that GS to GP change.

Q. How did matters proceed from that point?

A. As I explained previously we worked with CEI to obtain a refund of charges that had been caused by the non-application of the BDC Rider. Throughout this time, EPCO had continued to consult with PCC Airfoils about changing to the GSUB service.

Q. What happened after March 28, 2016 with respect to the GSUB service?

A. Working with PCC Airfoils, we renewed pursuit of the General Service Subtransmission rate structure with the engineering changes needed. I asked Mike Hrdy for the relevant information on the existing subtransmission line.

Q. What happened next?

A. On July 27, 2016, I called CEI to get a new work order for the changeover for the subtransmission service.

Q. What happened after seeking that work order?

On August 17, 2016, Jenny Haldi refused our request to change over to GSUB.

Q. What did you do next?

A. Mike Capek wrote an email on August 25, 206 questioning MS Haldi. I assisted Mike in writing the message. I questioned the decision with Ms. Haldi. On

August 29, 2016, Ms. Haldi told Mike Capek that she would reevaluate the refusal and the request for GSUB rate service.

Q. What happened next?

A. On September 12, 2016, Ms. Haldi told PCC, via email, that CEI would refuse PCC Airfoils access to the subtransmission system.

Q. Has CEI given you any reason why PCC Airfoils should not be permitted to migrate to the GSUB service?

A. In her August 17, 2016, email, Ms. Haldi stated that PCC Airfoils is adequately served from the distribution circuit and a transfer to the subtransmission circuit is not required for engineering reasons. In her September 12, 2016, email, she reiterates, "There is not a valid engineering reason that would necessitate moving your current load onto our subtransmission system. In addition, the tariff indicates that the voltage level of service is at the discretion of the company." Exhibits 6 and 7 attached to this testimony are copies of those emails.

Q. Is Ms. Hall these statement about the voltage level of service consistent with the tariff?

A No. The tariff limits the company's discretion. The company must specify voltage "based upon the availability of lines in the vicinity of the customers premises and commensurate with the size of the customer's load." The tariff states that customers with demands exceeding 2500 kW will generally be served at Transmission service. There is no question that a 36 kV line is available the vicinity of PCC Airfoils' premises. Allowing CEI absolute discretion in dictating a voltage despite other lines being available would be like a gas station dictating your octane selection at the pump.

Q. Did CEI give you any other reasons for the denial of sub transmission service?

A. CEI told us in emails that allowing customers to migrate as the tariff permits would set a bad precedent and "open the floodgates."

Q. Is that a valid basis for denial based upon the tariff?

A. There is nothing in the tariff to justify CEI's denial based upon a fear of opening the floodgates. If a customer qualifies for a particular service under the tariff, the customer should have the right to receive it.

Q. Are you aware of any physical reason that would prevent PCC Airfoils from migrating to the GSUB service?

A. No.

Q. In your many communications with CEI on the GSUB issue, Has CEI suggested to you any physical reason whatsoever engineering or otherwise that would prevent PCC Airfoils from migrating to the GSUB service.

A. CEI communicated nothing of the sort to me.

Q. As you sit here today, what is your recommendation with respect to electrical service to PCC Airfoils?

A. I recommend that we do the necessary work in consultation with CEI to design and install the necessary facilities to cause PCC Airfoils to be served by CEI with general subtransmission service. PCC Airfoils qualifies under tariff and CEI acknowledges that it has the necessary capacity and facilities adjacent to the PCC Airfoils property.

Q. How much would PCC Airfoils save in energy costs over the course of a year?

A. We estimate the savings to be in the neighborhood of \$220,000-\$230,000 per year, or in the neighborhood of \$18,500-\$19,000 per month.

Q. If CEI had not denied the initial application, when would PCC Airfoils have begun to be serviced by GSUB rates?

A. The initial application was made June 26 2015, so PCC Airfoils should have been receiving service at GSUB rates since about October 26, 2015.

Q. How much money has PCC Airfoils lost so far as a result of CEI's denial of the June 25, 2015, application?

A. Through April 26, 2017, that would be 18 months at conservatively \$18,500 per month or \$333,000. Of course, the loss continues.

Q. In your opinion as a long time manager of utility customer accounts, has CEI provided adequate service to PCC Airfoils with respect to the GSUB issue?

A. No. PCC Airfoils clearly qualifies under the tariff; CEI has adequate capacity and adjacent facilities, and PCC Airfoils has the right to select the tariff under which it is served. CEI has no reasonable basis to deny PCC Airfoils the more favorable service treatment for which PCC Airfoils applied.

# **BDC Rider Issue**

Q. How is PCC Airfoils currently served?

A. PCC is currently served from CEI via GS with the BDC Rider.

Q. Explain how the BDC Rider works.

A. All process heating services separately metered. The BDC Rider provides a \$0.015/kWh discount for qualified electric process heating during off-peak months, from October 1 through May 31 every year.

Q. What did PCC Airfoils proposed to do if it could not go on the GSUB rate schedule?

A. Presently, all of PCC Airfoils except the process heating is served on the General Service (GS) rate and the process heating is billed on the GS rate schedule during the peak months from June through September every year. PCC Airfoils proposed to shift from the GS rate schedule to the GP rate schedule without losing the benefit of the separately metered BDC Rider for its process heating service. In addition, PCC Airfoils wanted its process heating to be billed under the GP rate schedule during the peak months when the BDC Rider is not in effect.

Q. Were you pursuing this initiative on behalf of PCC Airfoils when CEI denied PCC Airfoils the opportunity to go on GSUB?

A. Yes. I was working through EPCO. We continued to seek to change PCC Airfoils from the GS rates to the GP rates while retaining the BDC Rider for the service for the process heating.

Q. Who were you communicating with about that issue?

A. Jenny Haldi as well.

Q. Did you receive any answers from Jenny Haldi regarding that proposed change?

A. Yes. On September 30, 2016, Jenny Haldi told me that BDC requires two meters and GP does not allow for that. Then on October 17, 2016, Jenny Haldi told me that CEI would not allow the BDC Rider to follow with migration GP rate schedule. It was our understanding from her that if PCC Airfoils shifted to the GP Schedule, CEI would not allow PCC Airfoils to retain its BDC Rider.

Q. Did you have any further communications with Jenny Haldi on that issue?A. No.

Q. Is that currently your understanding?

A. No. We have since learned from CEI that there must've been some misunderstanding of our position. We now understand that PCC Airfoils may shift to the GP Schedule, retain the BDC Rider, and have the process heating billed on the GP rate schedule during the peak months when the BDC Rider does not apply. This will require an engineering change that PCC Airfoils would work with CEI's engineering staff to achieve. I believe that CEI agrees that the schematic we submitted during discovery provides a solution satisfactory to CEI under its tariff requirements. However, in any event, PCC Airfoils stands ready to work with CEI to engineer the changes in a logical and economical manner satisfactory to CEI's engineering department.

Q. Is the change from the GS to the GP rate schedule a satisfactory solution for PCC Airfoils at this point?

A. Not really. A shift to the General Subtransmission Service, with appropriate engineering, is the best solution for PCC Airfoils. That is why we propose a change from the GS to the GP rate schedule only as an alternative if the Commission fails to agree that the tariff permits the customer to choose the right to go on the General Subtransmission Service given that the CEI facilities for subtransmission service are adequate and adjacent to the property.

Q. No further questions at this time.

# CERTIFICATE OF SERVICE

I certify that on May 5, 2017, I served a true copy of the foregoing Testimony of Mike Spacek upon Carrie M Dunn, First Energy Service Company, 76 S. Main St., Akron, OH 44308, cdunn@firstenergycorp.com and Joshua R. Eckert, FirstEnergy Service Company, 76 South Main Street, Akron, Ohio 44308, jeckert@firstenergycorp.com.

/s/ David W. T. Carroll

# MICHAEL D. SPACEK

PO Box 471, Huron, OH 44839 • 419-433-7048 • mike@bestuseofenergy.com

# SUMMARY OF QUALIFICATIONS

Certified Energy Manager Distributed Generation Certified Professional Certified Energy Auditor Registered Professional Engineer – Ohio and Pennsylvania

# WORK EXPERIENCE

Wilkes & Company Engineered Process Systems, Huron, Ohio Director of Energy Services Effective Utility Services, Huron, Ohio Managing Partner

Provide electrical design, energy efficiency and utility rate integration consulting. Major customers include PCC Airfoils, Sherwin Williams, Windsor Mold Group, Brecksville Broadview Schools, City of Huron CertainTeed. Conceived, managed and implemented projects in Windsor, Canada, Fort Erie Canada, Queretaro, Mexico, Juarez, Mexico and 11-states. Projects included complete electrical, mechanical systems design-build and natural gas, electric and water utility acquisition consulting and rate optimization and implementation Founded Effective Utility Services to design, build, own, operate and maintain cost effective systems that lower our customers' energy costs

FirstEnergy Corp. Akron, Ohio Substation Maintenance, Division Engineering, Environmental and Special Projects Corporate Distribution Engineering National Account Executive

1980-1983 – Youngstown Substation Maintenance and Distribution Engineering 1983-1987 – Akron Corporate Office Environmental and Special Projects, EPA Air Quality Compliance and Distribution Design 1987 -1990 – Marion – Distribution Engineering Supervisor

1990 - 2001 - Sandusky - Energy Application Engineer and National Account Executive

In the early years, learned the physical operation of an electric utility system

In the mid-80's acquired corporate operation skills

In the late 80's to retirement, managed customer relations from local services to national account sales and innovation strategies including tariff implementation and special rates and projects

United States Navy Electricians Mate, USS Spiegel Grove, LSD 32

# EDUCATION

B.S. Electrical Engineering Technology, Youngstown State University

### LANGUAGES

English: Native language Spanish: Novice Listener & Speaker. Self-pacing via Rosetta Stone

# **ACTIVITIES AND AFFILIATIONS**

Boy Scout assistant leader, Milan, Ohio. Lead troop to Philmont Youth baseball coach Association of Energy Engineers, Cleveland Chapter, Board Member. Chairman for annual GlobalCon Conference scheduled for 2020 in Cleveland City of Huron Economic Development Committee member

REFERENCES

Available upon request

2001 to Present

2015 to Present

1980 to 2001

1974 to 1978

May 1987

P.U.C.O. No. 13

# ELECTRIC SERVICE REGULATIONS

# TABLE OF CONTENTS

	<u>ITEM</u>	PAGE
<b>I</b> .	GENERAL PROVISIONS	2
<b>N</b> .	APPLICATIONS AND CONTRACTS	2
111.	CREDITWORTHINESS AND DEPOSITS	3
IV.	CHARACTERISTICS OF SERVICE	3
V.	RATE SCHEDULE ALTERNATIVES	4
VI.	BILLING AND PAYMENT	4
VII.	SERVICE CONNECTIONS AND LINE EXTENSIONS	6
VIII.	USE OF SERVICE	9
IX.	METERS, TRANSFORMERS AND SPECIAL FACILITIES	11
Х.	CUSTOMER'S WIRING, EQUIPMENT AND SPECIAL SERVICES	12
XI.	COLLECTION OF PAST DUE BILLS AND DISCONNECTION OF SERVICE	13
XII.	CERTIFIED SUPPLIERS - CHANGE OF SUPPLIER	14
XIII.	RETURN TO STANDARD SERVICE OFFER SUPPLY	14
XIV.	CERTIFIED SUPPLIERS - BILLING AND PAYMENT	15
XV.	CERTIFIED SUPPLIERS - CUSTOMER AGGREGATION	16
XVI.	EMERGENCY ELECTRICAL PROCEDURES	17

### I. GENERAL PROVISIONS

- A. Filing: The Schedule of Rates and the Electric Service Regulations for the supply of electric service throughout the territory served by the Company are filed with The Public Utilities Commission of Ohio ("PUCO" or "Commission").
- **B. Revisions:** The Company's Schedule of Rates and the Electric Service Regulations as herein contained may be terminated, amended, supplemented or otherwise changed from time to time in accordance with law and the rules promulgated thereunder by The Public Utilities Commission of Ohio.
- **C. Applicability:** These Electric Service Regulations, together with the provisions of the applicable rate schedule, are a part of every service contract entered into by the Company.

# II. APPLICATIONS AND CONTRACTS

- A. Service Application: For each class of service requested by an individual or an entity, before such service is supplied by the Company, the individual or entity must apply for service following the process required by the Company or enter into another form of contract between the Company and the individual or entity. Service will not be supplied by the Company until the Company accepts the application or supplies service according to the provisions of the application. This requirement generally applies to, but is not limited to, new installations, installations where service is to be re-established, a change in the class of service to be provided to the customer, or to a change in the identity of the customer to be served.
- **B.** Acceptance Of Application: When the application for service is accepted by the Company or service is supplied according to the provisions of the application, the application constitutes a service contract between the Company and the customer for the supply of electric service subject to these Electric Service Regulations. Additional contracts may be required by tariff, which shall be incorporated in the service contract. Upon acceptance of the application or contract, the individual or entity is now a customer.
- C. Service Contract: The service contract shall constitute the entire agreement between the customer and the Company and no promise, agreement, or representation of any agent, representative or employee of the Company shall be binding upon it unless the same shall be incorporated in the service contract.
- D. Refusal Of Application: The Company may refuse to provide electric service, consistent with Ohio law, including without limitation, for those reasons specified in Chapters 4901:1-10 and 4901:1-18 of the Ohio Administrative Code. Specifically among these reasons, the Company may refuse to furnish electricity to a customer's premises on account of arrearages due it for electricity furnished to persons or entities formerly receiving services at the same premises as customers of the Company, provided the former customers are continuing to reside or do business at such premises.
- E. Same Day Connection: If the customer requests service for the same day on which the request has been made and the service is presently not connected, the Company will charge the customer pursuant to the Company's Tariff Sheet 75, Miscellaneous Charges, Same Day Connection Charge. This fee may be charged at the time of the request or charged with the customer's next monthly billing, at the Company's discretion, and only if the Company provides the service on the date requested. (The Same Day Connection Charge does not apply to requests for reconnection after nonpayment which are governed by Electric Service Regulations, Sheet 4, Section XI, Paragraph D).

Filed pursuant to Orders dated January 21, 2009 and March 31, 2016, in Case Nos.07-551-EL-AIR and

14-1297-EL-SSO, before

#### Cleveland, Ohio

P.U.C.O. No. 13

# ELECTRIC SERVICE REGULATIONS

- F. Seasonal Or Temporary Discontinuance Of Service: When service has been disconnected at the customer's request because of seasonal occupancy of the premises or when the same customer has moved in and out of the same premise within a 12 month period without another party signing for service during that 12 month period, the Company will charge the customer pursuant to the Company's Tariff Sheet 75, Miscellaneous Charges, Reconnection Charge, to reconnect the service.
- **G.** Large Capacity Arrangements: Existing customers who seek to substantially (by at least 1,000 kW) increase or decrease (including the effects of the addition of onsite generation) their existing capacity requirements and new customers who seek to purchase substantial capacity (at least 1,000 kW) from the Company shall negotiate agreements with the Company containing equitable arrangements both as to the term of the contract and other terms and conditions requiring special consideration, in recognition that serving such increases in capacity may require changes in area facilities or rearrangement of facilities owned by the Company and/or the customer. These arrangements may be subject to the approval of The Public Utilities Commission of Ohio.

# III. CREDITWORTHINESS AND DEPOSITS

- A. Establishment Of Creditworthiness: Applicants are required to establish creditworthiness, which may include providing a cash deposit, as a condition to furnishing or continuing to furnish service.
- **B. Deposits:** For those applicants making a cash deposit to establish creditworthiness, interest will be paid on the deposit as prescribed by Chapter 4901:1-17 of the Ohio Administrative Code. Deposits plus accrued interest will be returned to the customer in accordance with the provisions of the Ohio Administrative Code.

# IV. CHARACTERISTICS OF SERVICE

- A. Type: Except as otherwise provided in the Company tariffs, electric service supplied by the Company will be 60-Hz alternating current delivered at the standard voltages available adjacent to the premises where the customer is located.
- **B. Continuity:** The Company will endeavor, but does not guarantee, to furnish a continuous supply of electric energy and to maintain voltage and frequency within reasonable limits. The Company shall not be liable for damages which the customer may sustain due to variations in service characteristics or phase reversals. If supply voltage is unsatisfactory for particular customer applications or for special apparatus requiring close regulation, then the customer shall install regulative apparatus at the customer's own expense.

The standard secondary voltages are 120/240 volt three wire single phase, 208Y/120 volt four wire three phase and 480Y/277 volt four wire three phase. The Company designs its system so that under normal operating conditions the sustained service voltage is within a range of plus or minus 5% of the normal voltage level for that service. Whenever voltages shall be known to exist outside of such ranges, the Company will take steps to promptly initiate corrective action to restore the sustained voltage level within said ranges.

For primary, subtransmission and transmission voltage services, the Company provides standard voltages that are available from existing facilities. The Company designs its system so that under normal operating conditions the sustained service voltage is within a range of plus or minus 10% of the normal voltage level for that service.

Filed pursuant to Orders dated January 21, 2009 and March 31, 2016, in Case Nos.07-551-EL-AIR and 14-1297-EL-SSO, before

P.U.C.O. No. 13

### ELECTRIC SERVICE REGULATIONS

- C. Delivery Voltage: Subject to the provisions of paragraph IV.B above, and after the Company determines that facilities of adequate capacity are available and adjacent to the premises to be served, the types of service available with the nominal voltages are:
  - 1. Secondary Service Less than or equal to 600 volts
  - 2. Subtransmission Service 11,000 volts three wire and 36,000 volts three wire
  - 3. Transmission Service Greater than or equal to 69,000 volts
  - 4. Primary Service All other available voltages

Delivery voltage will be specified by the Company and will be based upon the availability of lines in the vicinity of the customer's premises and commensurate with the size of the customer's load. Customers with demands in excess of twenty-five hundred (2,500) kW will generally be served at Transmission Service

# V. RATE SCHEDULE ALTERNATIVES

- A. Selecting Rate Schedule: Where two or more alternative rate schedules are applicable to the same class of service, the Company, upon request, will assist a customer in selecting an appropriate rate schedule to be applied. The customer, however, shall select from the alternative rate schedules and such selection shall be the basis for the application or contract for service. No refund will be made representing the difference in charges under different rate schedules applicable to the same class of service except as required by law.
- B. Changing Rate Schedule: Subject to limitations in the service contract or applicable rate schedule, the customer may change to an alternative applicable rate schedule, except that a customer contracting for a specified capacity served at available primary or transmission voltage shall not be eligible to recontract for service at secondary voltage, unless a secondary voltage circuit of adequate capacity is available adjacent to the premises and the customer complies with all of the provisions of the applicable secondary rate schedule.

# VI. BILLING AND PAYMENT

- A. Billing Periods: Bills for electric service will be rendered monthly or at the Company's option at other regular intervals. Bills rendered monthly shall typically cover a period of approximately 30 days.
- B. Due Dates: For residential customers, bills are due and payable to the Company on or before fourteen (14) days from the date the bill is mailed to said customer. Governmental customers' bills are due and payable to the Company on or before thirty (30) days from the date the bill is mailed to said customer. All other customers' bills are due and payable to the Company on or before twenty-one (21) days from the date the bill is mailed to said customer. When the due date for payment falls on Saturday, Sunday or a holiday the due date for payment is extended to the next business day. Remittances mailed by the customer for the amount(s) due shall be accepted by the Company as tendered within the period to avoid late payment charges if such payment is received by the Company no more than five (5) days after the due date of the bill.

- C. Late Payment Charges: If remittances are received by the Company offices more than five (5) days after the due date of the bill, an additional amount equal to 1.5% may be charged on any unpaid balance existing after the due date. This provision is not applicable to unpaid account balances of customers enrolled on income payment plans pursuant to 4901:1-18 of the Ohio Administrative Code.
- D. Transfer Of Final Bill: If the customer fails to pay in full any final bill for service rendered by the Company at one location, and if the customer is receiving Like Service at a second Company location, the Company may transfer such unpaid balance of the final bill to the service account for such second location. "Like Service" refers to an end use within the broad categories of residential, commercial or industrial service, without regard to whether the customer is receiving generation service from the Company. Such transferred amount shall maintain its original due date at such second location and be subject to collection and disconnection action in accordance with Ohio law, which includes without limitation Chapter 4901:1-18 of the Ohio Administrative Code.
- E. Meter Readings Not To Be Combined: Even if used by the same person, firm or corporation, electricity delivered and metered separately or at different locations will not be combined for bill calculation purposes, except that under the following conditions meter registrations of two or more installations on the same premises may be combined for billing purposes:
  - 1. Where the applicable schedule of rates specifically authorizes the combination of meter registrations, or
  - 2. Where the Company elects, for administrative reasons or engineering reasons affecting the supply of its service, to install or maintain at one or more locations on one premises two or more service connections with separate metering equipment for furnishing service at the same or different voltage levels or number of phases.
- F. Equal Payment Plan: The Company has available for residential customers a plan providing for equal monthly payments for electric service. The equal payment plan amount will be reviewed quarterly and will be adjusted if the customer's recent bills indicate a significant change from past history.
- **G. Estimated Bills:** The Company attempts to read meters on a regular basis but there are occasions when it is impractical or impossible to do so. In such instances the Company will render an estimated bill based upon past use of service. Where the customer has a load meter and the actual load reading when obtained is less than the estimated load used in billing, the account will be recalculated using the actual load reading.
- H. Returned Payment: When the Company reverses the customer's payment because the payment transaction has been dishonored, the Company shall charge the customer pursuant to the Company's Tariff Sheet 75, Miscellaneous Charges, Returned Payment Charge. This charge shall be rendered with the customer's next monthly billing.
- I. Rate Pricing Changes:
  - 1. Seasonal Price Changes: For billing purposes, unless otherwise specified the winter rates shall be applicable beginning with service rendered September 1 through service rendered for May 31. The summer rates unless otherwise specified shall apply in all other billing periods.
  - 2. Non-Seasonal Price Changes: For billing purposes, non-seasonal price changes will begin with service rendered on the effective date of the price change.

14-1297-EL-SSO, before

Filed pursuant to Orders dated January 21, 2009 and March 31, 2016, in Case Nos. 07-551-EL-AIR and

# ELECTRIC SERVICE REGULATIONS VII. SERVICE CONNECTIONS AND LINE EXTENSIONS

#### A. Secondary Voltage Service Connection

- 1. Overhead Connection: Where overhead distribution facilities are available, the Company will install a suitable overhead service drop to a point of attachment on the customer's premises as designated by the Company.
- 2. Underground General Service Network Connection: Where underground distribution facilities are available in commercial areas where network service is available, the Company will install underground service connections from its mains to a point, as designated by the Company, located immediately inside the customer's building wall except where, because of the distance between the customer's building and the Company's mains, an equitable arrangement for prorating the cost of installing these facilities may be required. Where underground service cable and conduit are required within the building to reach a customer's service terminals, the customer will be required to pay the cost of these facilities. Such underground service connection facilities paid for by the customer shall be owned by the customer and maintained at the customer's expense and, when required, replaced by the customer.

Customers requiring underground service from overhead or underground distribution facilities shall at their own expense install and maintain the underground facilities in accordance with the Company's specifications from the meter location on the customer's premises to the Company's distribution wires to which connections are to be made by the Company. The customer shall own such underground facilities and maintain and replace such facilities when required.

- 3. Change In Service Connection Facilities: Should any change in the Company's service connection facilities be necessary due to the erection of, remodeling of or change in any structure on the premises of the customer, or the condition of the customer's premises, or due to any ordinance, governmental action, or any other cause beyond the Company's control, the entire cost of the change in the service connection facilities shall be borne by the customer.
- 4. Temporary Service Drop Connection: When requested by a customer, the Company may provide a Temporary Service Drop Connection. A Temporary Service Drop Connection shall mean the installation of single-phase service up to 200 amps from existing secondary conductors. The charge for a Temporary Service Drop Connection shall be that set forth in the Company's Tariff Sheet 75, Miscellaneous Charges, Temporary Service Drop Connection.
- 5. Temporary Facilities: Temporary Facilities are any separate installations that the Company does not expect to be permanent or where a substantial risk exists that the Company's facilities will be used and useful for a period substantially shorter than their normal expected life, or in which the customer or consumer has no substantial permanent investment. When Temporary Facilities are required for any purpose, the applicant shall deposit with the Company the total estimated cost of construction, plus the total estimated cost of removal, minus the estimated salvage value of all equipment and materials. The amount of the deposit shall be adjusted by a refund or an additional payment when the cost of construction and removal, less the salvage value is determined. No interest will be paid on deposits covering the cost of constructing facilities for temporary electric service. (Temporary Facilities shall not include Temporary Service Drop Connections as defined in paragraph 4 above.)

Filed pursuant to Orders dated January 21, 2009 and March 31, 2016, in Case Nos. 07-551-EL-AIR and 14-1297-EL-SSO, before The Public Utilities Commission of Ohio

# B. Line Extensions

#### 1. Definitions:

<u>Contribution in aid of construction -</u> any amount of money or property contributed to the Company to the extent that the purpose of the contribution is to provide for Line Extensions for new or expanded customer loads.

<u>Cost estimate</u> - the detailed projected expenditure, including material costs and overhead, equipment costs and overhead, labor costs and overhead, and all taxes associated with each major material and service component, required for a Line Extension.

<u>General service installation</u> - any Line Extension request by a commercial or industrial customer, builder, or developer, or any other Line Extension that is not a Residential installation. Customers in a development may be required to have their own General service installation in order to be connected to the Company's distribution system.

<u>Line Extension</u> - the provision of facilities (including, but not limited to, poles, fixtures, wires and appurtenances) necessary for delivering electrical energy from the point where a Line Extension connects with and receives energy from any existing transmission or distribution equipment (the nearest practical point to the customer(s) to be served by the Line Extension at which the appropriate voltage level is available) to one of a customer's points of delivery.

<u>Multi-family installation</u> - any Line Extension to a new residential dwelling that will have two or more dwelling units, where each unit has a separate account for electric service with the Company.

<u>Non-standard multi-family installation</u> - any Line Extension to a new residential dwelling that will have two or more dwelling units, where each unit has a separate account for electric service with the Company where the Company's cost to build the Line Extension is greater than \$2,500, excluding any Premium installation cost.

<u>Non-standard single family installation</u> - any Line Extension to a new home (or home site) with one account for electric service with the Company where the Company's cost to build the Line Extension is greater than \$5,000, excluding any Premium installation cost.

<u>Premium installation</u> - any Line Extension that is in excess of the standard construction and requirements necessary to provide electric service to the customer, including, but not limited to, customer-requested oversizing of facilities, underground construction, Residential Installations exceeding 200 amps and three phase Residential installations.

<u>Premium installation cost</u> - the sum of the Company's cost to provide Premium installation minus the sum of the Company's cost of the standard construction and requirements necessary to provide electric service to the customer.

<u>Residential installation</u> - a Standard single family installation, a Non-standard single family installation, a Standard multi-family installation, or a Non-standard multi-family installation for a single phase Line Extension.

<u>Standard multi-family installation</u> - any Line Extension to a new residential dwelling that will have two or more dwelling units, where each unit has a separate account for electric service with the Company where the Company's cost to build the Line Extension is less than or equal to \$2,500 excluding any Premium installation cost.

Filed pursuant to Order dated December 2, 2009, in Case No. 09-895-EL-ATA, before

<u>Standard single family installation</u> - any Line Extension to a new home (or home site) with one account for electric service with the Company where the Company's cost to build the Line Extension is less than or equal to \$5,000, excluding any Premium installation cost.

### 2. Terms And Conditions:

#### Residential installations:

a. Non-standard single family installation:

The customer shall make arrangements with the Company for the payment to the Company of the Company's cost to build the Non-standard single family installation that exceeds \$5,000, excluding any Premium installation cost. The individual homeowner (non-developer) has the option of paying such costs, plus carrying costs based on the rate of return approved in the Company's then most recent distribution rate case, on a prorated monthly basis for up to fifty months.

b. Non-standard multi-family installation:

The customer shall make arrangements with the Company for the payment to the Company of the Company's cost to build the Non-standard multi-family installation that exceeds \$2,500, excluding any Premium installation cost.

#### General service installations:

A customer requesting a General service installation shall make an up-front payment to the Company equal to 40% of the Company's estimated cost for construction of the Line Extension, plus any and all Premium installation cost.

### Premium installation:

For any Premium installation the customer shall make an up-front payment to the Company equal to the estimated Premium installation cost for the project. If a project is cancelled after the customer has made the up-front payment for the Premium installation costs, any costs incurred by the Company up to and including the date of cancellation, including without limitation material, labor, design, overheads, taxes, and restocking of materials returned to stock shall be deducted from the premium payment amount, and any remaining funds returned to the customer.

#### Future customers:

A customer may be entitled to a refund of a portion of the amounts such customer paid for a Line Extension, other than for Premium Installation. Any amounts refunded shall be paid in accordance with the following:

If a new customer ("Customer 2"), utilizes, within fifty months of the completion of a Line Extension project, all or part of the Line Extension facilities for which contribution in aid of construction ("CIAC") has been paid by a previous customer (the "Original customer"), then the Original customer who paid the CIAC may be entitled to a refund which represents a pro rata portion of the original CIAC, calculated to equitably share the CIAC responsibility for the Line Extension facilities used in service by both Customer 2 and the Original customer. If any new additional customer ("Customer 3"), utilizes, within fifty months of the completion of the Line Extension project, all or part of the Line Extension facilities for which CIAC has been paid by

14-1297-EL-SSO, before

Filed pursuant to Orders dated December 2, 2009 and March 31, 2016, in Case Nos. 09-895-EL-ATA and

the Original customer and Customer 2, then Customer 2 who paid an equitable portion of the CIAC may also be entitled to a refund.

- 3. Line Extensions On Private Property: Customers that require Line Extensions to be constructed on their private property shall, in all cases, provide, without cost to the Company, land clearance, trenching and backfilling (including excavation for and installation of vaults), and an easement for right-of-way in a form acceptable to the Company before the Company's construction is started. The expectation that property will be dedicated to the public use at the conclusion of construction shall not preclude such property from being deemed the customer's private property for purposes of this subsection 3. All Line Extensions shall be the property of and shall be operated and maintained by the Company. The Company shall have the right to use such Line Extension in furnishing service to any applicant located adjacent to such Line Extension and the further right to construct other extensions from the distribution facilities so constructed. Except as provided herein, no customer or third party installation of Line Extension facilities will be permitted on private property or public right-of-way.
- 4. Relocation For Residential, Commercial Or Industrial Customer: A change in location of an overhead or underground service for the customer's convenience shall be made at the customer's expense.
- 5. Relocation For Highway, Street Or Public Works Project: A change in location of an overhead or underground service to provide space necessary for highway, street, or public works projects shall be made in accordance with the contractual agreement with the government entity involved.

### 6. Other Items:

- a. The Company shall not be required to begin construction on any Line Extension until all required applications have been made by the customer, developer, or builder, as applicable.
- b. The Company shall not be required to install Line Extensions using rear lot line construction. The Company may elect, however, to use rear lot line construction at no additional cost to the customer.
- c. Line Extension cost estimates should not include costs normally incurred by the utility to maintain, protect, or upgrade its distribution system. Nor should system improvements required for the general distribution system that serves multiple customers, which are driven by the customer's load addition, be factored into the Line Extension calculations.

### VIII. USE OF SERVICE

- A. Increased Loads: The customer shall notify the Company of any significant additions or modifications to the customer's facilities that will affect the customer's load characteristics so that the Company may provide facilities sufficient to maintain adequate service.
- **B.** Individual Customer Metering: Service will be supplied under the appropriate rate schedule, to each separate dwelling (single or part of a multiple unit), apartment, farm, commercial or industrial establishment as one customer through one meter or one unified set of meters for each rate schedule.

14-1297-EL-SSO, before

### C. Resale:

- 1. Electric service is provided for the sole use of the customer, who shall not sell any of such service to any other person, or permit any other person to use the same, without the written consent of the Company.
- 2. The above provision does not apply to service provided to a landlord for resale or redistribution to tenants where such resale or redistribution takes place only upon property owned by the landlord and where the landlord is not otherwise operating as a public utility.
- D. Parallel Operation: The Company shall provide service in parallel with a customer's generating facilities if the customer has adequate protective and regulating equipment and has sufficient trained personnel to perform the necessary operations, and further, at the Company's option, if the customer provides electronic communications with the offices of the Company's load dispatcher. Net Energy Metering Rider customers shall not be required to provide electronic communications or install a telephone line. The Company will not furnish service in parallel with a customer's generating facilities when, in the opinion of the Company, such parallel operation may create a hazard or disturb, impair or interfere with the Company's service to other customers.
- E. Regulation Of Power Factor: The Company may require the customer to maintain a power factor in the range of 85% to 100% for secondary, primary and subtransmission service and 90% to 100% for transmission service, coincident with the customer's maximum monthly peak demand and to provide, at the customer's expense, any corrective equipment necessary in order to do so. The Company may inspect the customer's installed equipment and/or place instruments on the premises of the customer in order to determine compliance with this requirement, as deemed appropriate by the Company. The Company may charge the customer the Company's installation cost incurred for corrective devices necessary for compliance with this provision. The Company is under no obligation to serve, or to continue to serve, a customer who does not maintain a power factor consistent with the parameters set forth in this provision.
- F. Unbalanced Loads: The customer shall not use three phase electric service in such a manner as to impose an unreasonable unbalance between phases.
- **G. Interference:** The Company reserves the right to discontinue service to any customer if the service is used in a manner that disturbs or impairs the operation of the Company's system, or interferes with the service to other customers. When such interference occurs due to the use of any apparatus installed upon a customer's premises, the customer must either remove said apparatus, or provide the equipment necessary to alleviate such interference. The Company may discontinue service until such adverse conditions are alleviated.

Cleveland, Ohio

#### P.U.C.O. No. 13

# ELECTRIC SERVICE REGULATIONS

#### IX. METERS, TRANSFORMERS AND SPECIAL FACILITIES

A. Installation: The Company will furnish and maintain one meter or one unified set of meters and metering equipment capable of producing data necessary to bill the customer under Company tariffs. Service will normally be metered at the Company's supply voltage. The customer shall provide, at no cost to the Company and close to the point of service entrance, suitable space for the installation of meters, transformers, protective equipment, and other equipment required by the Company shall be placed at locations in accordance with Company standards and such locations shall be maintained by the customer at the customer's expense consistent with reasonable Company standards. Additional or special transformers required by the customer for the customer's convenience shall be furnished and maintained by the customer at the customer to accommodate requirements of a Certified Supplier will be installed, owned and maintained by the Company and paid for by the customer.

When a transformer vault, customer substation mat, or similar facility is necessary, said vault, mat or other facility shall be furnished and maintained by the customer at the customer's expense consistent with reasonable Company standards.

- **B.** Equipment Ownership: Unless otherwise agreed between the Company and the customer, all equipment furnished by the Company shall remain its exclusive property and the Company shall have the right to remove the same after termination of service for any reason whatsoever.
- C. Meter Testing: The Company tests its meters for accuracy and mutual protection consistent with Chapter 4901:1-10 of the Ohio Administrative Code.

In addition, the Company will test a meter at the request of the customer. If the accuracy of the meter is found to be within the tolerances specified in Chapter 4901:1-10 of the Ohio Administrative Code, the Company may charge the customer a meter test fee as provided in the Company's Tariff Sheet 75, Miscellaneous Charges, Meter Test Charge, except that the customer shall not be charged for the first test at the customer's request within the period specified in Chapter 4901:1-10 of the Ohio Administrative Code.

- D. Meter Failure: If it is determined that a meter, transformer, or any equipment or wiring associated therewith fails for any reason to operate correctly or accurately measure a customer's electricity use, the customer shall pay for the service furnished during such period an estimated amount based upon: (1) the results of a test, or (2) energy usage during a comparable period, or (3) a combination of both of these methods. For residential customers, the estimated amount determined by the Company shall be billed consistent with Chapter 4933.28 of the Ohio Revised Code. For non-residential customers the estimated amount determined by the Company shall be billed consistent with Chapter 4901:1-10 of the Ohio Administrative Code.
- E. Customer Responsibility: The customer shall permit only Company employees, other authorized agents of the Company, or other persons authorized by law, to inspect, test or remove Company equipment located on the customer's premises. If this equipment is damaged or destroyed due to the negligence or willful act of the customer or tampered with by the customer, the cost of repairs or replacement shall be payable by the customer. The Company may also bill the customer for the costs of electric service that was utilized, but not billed for, as a result of the tampering.

- F. Special Facilities: All costs (including, without limitation, any government imposed fees) for any special services, facilities, or instrumentation which may be rendered or furnished by the Company for a customer at the customer's request or at the direction of any governmental authority, and not provided for in the Company's rate schedules and not ordinarily necessary or directly involved in the furnishing of electric service, shall be paid for by the customer for whom such services, facilities, or instrumentation are furnished, or by the customers residing within the boundaries of the governmental entity for whom such services, facilities, or instrumentation to the charges for electric service provided for in the applicable rate schedule, and may be itemized on the electric bill to such customer(s) or billed separately by the Company. Upon request by the customer and in the sole discretion of the Company, such special services, facilities, or instrumentation may be supplied and maintained by the customer at the customer's expense.
- **G.** Access To Premises: The customer or, if applicable, the landlord, property manager or owner, shall grant Company's employees and authorized agents access to the customer's premises at all reasonable hours for the purpose of reading, inspecting, testing, repairing, maintaining, replacing, installing, analyzing or removing meters or other Company property. In the event of an emergency, the Company's employees and authorized agents shall have access to customer's premises at any time.

If a customer, landlord, property manager or owner fails to grant access for reasons described above, and judicial or legal redress is necessary to secure such access, the Company may collect from the customer, landlord, property manager or owner any and all costs incurred to secure such access.

# X. CUSTOMER'S WIRING, EQUIPMENT AND SPECIAL SERVICES

- A. Installation: The customer shall supply all wiring on the customer's side of the point of attachment as designated by the Company. All of the customer's wiring and electrical equipment should be installed so as to provide not only for immediate needs but for reasonable future requirements and shall be installed and maintained by the customer to meet the provisions of the National Electrical Code, the regulations of the governmental authorities having jurisdiction over such installations and the reasonable requirements of the Company. As required by Chapter 4901:1-10 of the Ohio Administrative Code, before the Company connects service for any new installations, such installation must be inspected and approved by the local inspection authority or, when there is no local inspection authority, by a licensed electrician. An inspection is also necessary for any changes in wiring on the customer's premises.
- B. Limitation Of Liability: The Company shall not be liable for any loss, cost, damage or expense that the customer may sustain by reason of damage to or destruction of any property, including the loss of use thereof, arising out of, or in any manner connected with, interruptions in service, variations in service characteristics, high or low voltage, phase failure, phase reversal, the use of electrical appliances or the presence of the Company's property on the customer's premises whether such damages are caused by or involve any fault or failure of the Company or otherwise except such damages that are caused by or due to the willful and wanton misconduct of the Company. The Company shall not be liable for damage to any customer or to third persons resulting from the use of the service on the customer's premises or from the presence of the Company's appliances or equipment on the customer's premises.

The PUCO approval of the above tariff language does not constitute a determination that such limitation language should be upheld in a court of law. Approval by the Commission merely recognizes that since it is a court's responsibility to adjudicate consequent damage claims, it should be also the court's responsibility to determine the validity of the exculpatory clause.

Filed pursuant to Orders dated January 21, 2009 and March 31, 2016, in Case Nos. 07-551-EL-AIR and

14-1297-EL-SSO, before

#### Cleveland, Ohio

# ELECTRIC SERVICE REGULATIONS

Any customer desiring protection against interruptions in service, variations in service characteristics, high or low voltage, phase failure, phase reversal, the use of electrical appliances or the presence of the Company's property on the customer's premises, shall furnish, at the customer's expense, any equipment desired by the customer for such purpose. Interruptions in service shall not relieve the customer from any charges provided in the rate schedule.

C. Special Customer Services: The Company may furnish customers special customer services as identified in this section. No such special customer service shall be provided except where the Company has informed the customer that such service is available from and may be obtained from other suppliers. A customer's decision to receive or not receive special customer services from the Company will not influence the delivery of competitive or non-competitive retail electric service to that customer by the Company. Such special customer services shall be provided at a rate negotiated with the customer, but in no case at less than the Company's fully allocated cost. Such special customer services shall only be provided when their provision does not unduly interfere with the Company's ability to supply electric service under the Schedule of Rates and Electric Service Regulations.

Such special customer services include: design and construction of customer substations; resolving power quality problems on customer equipment; providing training programs for construction, operation and maintenance of electrical facilities; performing customer equipment maintenance, repair or installation; providing service entrance cable repair; providing restorative temporary underground service; providing upgrades or increases to an existing service connection at customer request; performing outage or voltage problem assessment; disconnecting a customer owned transformer at customer request; loosening and refastening customer owned equipment; determining the location of underground cables on customer premises; disconnecting or reconnecting an underground pedestal at customer request; covering up lines for protection at customer request; making a generator available to customer during construction to avoid outage; providing pole-hold for customer to perform some activity; opening a transformer at customer request for customer to install an underground elbow, providing a "service saver" device to provide temporary service during an outage; resetting a customer-owned reclosure device; providing phase rotation of customer equipment at customer request; conducting an evaluation at customer request to ensure that customer equipment meets standards; or upgrading the customer to three phase service.

# XI. COLLECTION OF PAST DUE BILLS AND DISCONNECTION OF SERVICE

- A. **Procedures:** The Company's procedures for collecting past due bills and disconnecting service are set forth in the Ohio Administrative Code, except as permitted by the Order in Case No. 02-1944-EL-CSS.
- **B.** Field Collection: When a customer has a delinquent bill, as defined in Chapter 4901:1-18 of the Ohio Administrative Code, the Company may make a field collection visit to attempt to collect the delinquent amount.

Whenever a field collection visit is made by a Company employee or authorized agent of the Company, the Field Collection Charge included in the Company's Tariff Sheet 75, Miscellaneous Charges, shall either be collected during the field collection visits, or assessed on the customer's next bill. Such Field Collection Charges shall be limited to once per billing cycle.

- C. Disconnection Of Service: Employees or authorized agents of the Company who actually perform the disconnection of service at the meter shall be authorized to accept payment in lieu of disconnection. If payment is made prior to disconnection, service that otherwise would have been disconnected shall remain connected. Any such payment shall include a Field Collection Charge consistent with Field Collection procedures described above. In the event that the Company employee or authorized agent is unable to gain access or is denied access to the meter and it becomes necessary to disconnect service at the pole, the employee or authorized agent disconnecting service shall not accept payment in lieu of disconnection.
- **D. Reconnection:** When service has been disconnected pursuant to any of these Electric Service Regulations, a charge for reconnection pursuant to the Company's Tariff Sheet 75, Miscellaneous Charges, Reconnection Charge, will be required.
- E. Unauthorized Use Of Service: In the event of fraudulent practice, tampering, or theft of service by the customer, consumer or other person, the Company will comply with the provisions of Chapters 4901:1-10 and 4901:1-18 of the Ohio Administrative Code. In these instances, the Company will assess a charge pursuant to the Company's Tariff Sheet 75, Miscellaneous Charges, Unauthorized Use Investigation Charge.

# XII. CERTIFIED SUPPLIERS - CHANGE OF SUPPLIER

Certified Supplier shall mean all of the entities set forth in Ohio Revised Code, Section 4928.08(A) and (B) which have received certification from the Public Utilities Commission of Ohio under Ohio Revised Code, Section 4928.08 and have otherwise complied with the requirements set forth in the Company's Supplier Tariff. The Company shall change the customer's Certified Supplier only upon receipt of notice instructing such change with respect to the individual customer from a Certified Supplier.

Such notice to the Company will be as provided in the Supplier Tariff and customer instructions that the Certified Supplier is designated to provide services for a minimum time period of one month.

The Company shall develop, update, and maintain a list of Certified Suppliers that offer electric service within the Company's service territory and shall publish such list on the Company's website. All applicants for new service, customers returning from a Certified Supplier and any customer upon request will be directed to the location of this list on the Company's website.

The timing of the change of a customer to a different Certified Supplier shall occur only at the end of a customer's billing month based on and determined by the Company's meter reading schedule.

A customer may have only one Certified Supplier per account for any billing month. A customer may not split non-interruptible generation supply between two Certified Suppliers or between the Company's standard-offer service and service by a Certified Supplier during a billing month.

Except in the event of the default of the customer's Certified Supplier, the Company shall not be obligated to process a change of the customer's selected Certified Supplier more frequently than once every billing month. For purposes of these Electric Service Regulations, default by a Certified Supplier shall mean a failure to deliver services as defined in the Ohio Revised Code, Section 4928.14.

# XIII. RETURN TO STANDARD SERVICE OFFER SUPPLY

A. If a customer that has been receiving service from a Certified Supplier subsequently seeks to have the Company resume providing generation service, the Company will provide service at standard offer rates provided that sufficient notice of such return has been provided to the Company.

14-1297-EL-SSO before

Filed pursuant to Orders dated January 21, 2009 and March 31, 2016, in Case Nos. 07-551-EL-AIR and

- **B.** There shall be no minimum stay requirements for customers electing to return to the Company's standard service offer.
- **C.** For all customers, return to the Company's standard service offer may only occur on regularly scheduled meter reading dates, unless otherwise agreed by the Company and subject to the Company's Supplier Tariff. In the event of default of a Certified Supplier, this provision shall not apply.
- **D.** Subject to the other terms of this Section XIII and the Company's Supplier Tariff, there shall be no notice requirement for customers electing to return to the Company's standard service offer.
- E. Customers returning to the Company's standard service offer as a result of either Certified Supplier Non-Compliance or default on the part of the customer's Certified Supplier are eligible for standard service offer per Revised Code Section 4928.14. Any costs incurred by the Company as a result of either Certified Supplier Non-Compliance or default on the part of the customer's Certified Supplier shall be recoverable under the appropriate recovery mechanism.

# XIV. CERTIFIED SUPPLIERS - BILLING AND PAYMENT

A. Billing: The Company will bill the customer directly for services provided by a Certified Supplier unless the Company receives electronic notice from such supplier that it will bill the customer directly for services provided by the Certified Supplier. If the Company bills the customer for the services provided by a Certified Supplier, the Company will collect the funds from the customer and remit the same to the Certified Supplier.

The Company shall not be liable for the Certified Supplier's default or failure to provide service to a customer, nor shall it be responsible for a customer's failure to pay for its services received from a Certified Supplier as a consequence of the Company performing this role.

- B. Payments To The Company: Payments to the Company will be applied to the customer's account in accordance with Ohio Administrative Code, except as permitted by the Order in Case No. 02-1944-EL-CSS. The payment hierarchy specified by this Order is available on the Company website.
- C. Disputes: If the Company bills for services provided by the Certified Supplier, such bills will be based on information supplied to the Company by the Certified Supplier. The Company will have no responsibility to verify the appropriateness of such information, or to resolve any disputes or disagreements over the amount, timing or any other aspect of the billing or payment of charges, other than to confirm amounts billed to the customer, amounts received from the customer and amounts remitted to the Certified Supplier.
- D. Non-Payment Or Partial Payment: Regardless of whether the Company bills customers for the services provided by the Certified Supplier, any failure by the customer to pay any and all charges due the Company in a timely manner shall be subject to any and all applicable provisions of these Electric Service Regulations, including, without limitation, collection, late fees, and termination of service.
- E. Late Payment Fees: The Company may impose late payment fees on that portion of a customer's bill that pertains to services provided by the Company. Pursuant to the Order in Case No. 02-1944-EL-CSS, the Company may also charge late fees on past due amounts due and owing the Certified Supplier.

Filed pursuant to Orders dated January 21, 2009 and March 31, 2016, in Case Nos. 07-551-EL-AIR and 14-1297-EL-SSO before

F. Collection Activity: Except as set forth in the Order in Case No. 02-1944-EL-CSS, the Company shall not be responsible for collection of amounts due from a customer to a Certified Supplier. Pursuant to the Order in Case No. 02-1944-EL-CSS, in situations where a customer is dropped by a Certified Supplier or the customer drops the Certified Supplier, the Certified Supplier's past due amounts will remain on the Company's bill, when applicable, for at least nine billing cycles or until the customer is disconnected or terminated by the Company, whichever occurs first.

#### XV. CERTIFIED SUPPLIERS - CUSTOMER AGGREGATION

Customers may be aggregated for purposes of purchasing services from a Certified Supplier. Aggregation of customers is not restricted by the number or class of customers within an aggregated group. Accordingly, any customer may be represented by an aggregator. However, an aggregator is not a customer of the Company by virtue of its position as an aggregator. Each customer that is a member of an aggregated group shall remain an individual customer of the Company for purposes of billing under each customer's applicable rate schedule. The consumption of individual members of an aggregated group shall not be combined for billing purposes. No charge of a tariffed service will be affected by a customer's aggregation status, and aggregation of load cannot be used for qualification under a tariff.

#### XVI. EMERGENCY ELECTRICAL PROCEDURES

#### A. General

Emergency electrical procedures are deemed necessary if there is a shortage in the electrical energy supply to meet the demands of the Company's customers. It is recognized that such deficiencies can be short term (up to a few days) or long term (a few days or more) in duration; and in view of the difference in nature between short and long term deficiencies, different and appropriate procedures should be adopted for each.

The systems of the Company and its electric utility affiliates are fully integrated and operated as a single electric system to the mutual advantage of the companies and their customers. Each company endeavors to operate and maintain its electric facilities in accordance with accepted utility practices. Because of the method of operating the companies' systems, an emergency arising on the system of one of those companies may affect the system of the others. Should this occur, a company may from time to time be providing assistance to one or more of the others in order to continue to operate most effectively as a single electric system.

- Procedures related to short-term capacity shortages shall, insofar as the situation permits, give special consideration to the following types of customers and such other customers or types of customers which the Commission may subsequently identify for the protection of the public's health and safety:
  - a. "Hospitals" and other institutions which provide medical care to patients and where surgical procedures are performed.
  - "Governmental detention institutions" which shall be limited to those facilities used for detention of persons.
  - c. "Police and fire stations" which shall be limited to publicly owned, attended facilities.
  - d. "Federal facilities" essential to national defense.
  - e. "Water pumping facilities" essential to the supply of potable water to a community.
  - f. "Radio, television and newspaper facilities" utilized for transmittal of emergency messages and public information relating to these procedures.
  - g. "Sewage treatment facilities" essential to the collection, treatment or disposal of a community's sewage.
  - h. "Life support equipment," such as a kidney machine or respirator, used to sustain the life of a person.
  - i. "Air terminal facilities" essential to the control of aircraft in flight.

Although these types of customers will be given special consideration in the application of the manual load shedding provisions of this procedure, the Company cannot assure that service to such customers will not be interrupted, and accordingly they should install emergency generation equipment if continuity of service is essential. In case of customers supplied from two Company sources, only one source will be given special consideration. Other customers who, in their opinion, have critical equipment should install emergency battery or auxiliary generating equipment.

2. Procedures related to long-term capacity or fuel shortages shall, insofar as the situation permits, give special consideration to "priority uses of electricity", which shall mean the amount of electrical energy necessary for protection of the public's health and safety and to prevent unnecessary or avoidable damage to buildings and facilities, for the customers identified in Section (A)(1) and at:

Filed pursuant to Orders dated January 21, 2009 and March 31, 2016, in Case Nos. 07-551-EL-AIR and

14-1297-EL-SSO, before

- a. Residences (homes, apartments, nursing homes, institutions and facilities for permanent residents or transients);
- b. Electric power generating facilities, telephone central office and central heating plants serving the public;
- c. Local, intrastate and interstate transportation facilities;
- d. Production and refining or processing facilities for fuels;
- e. Pipeline transmission and distribution facilities for fuels;
- f. Production, processing, distribution and storage facilities for dairy products, meat, fish, poultry, eggs, produce, bread, livestock and poultry feed;
- g. Buildings and facilities limited to uses protecting the physical plant and structure, appurtenances, product inventories, raw materials, livestock, and other personal or real property; and
- h. Other similar uses as may be determined by the Commission.

The Company shall promptly advise the Commission of the nature, time and probable duration of all implemented emergency conditions and procedures which affect normal service to customers. The Commission may order the implementation of additional procedures or the termination of the procedures previously employed when circumstances so require.

In addition, each year before March 1, the Company will apprise the Commission of the state of electric supply in its service area.

As may be appropriate in accordance with the nature of the occurring anticipated emergency and of the Company's load and generating, transmission and distribution facilities, the Company shall initiate the following procedures.

### B. Short-Term Capacity Shortages:

As may be appropriate in accordance with the nature of the occurring emergency, the Company shall initiate the following procedures:

1. Sudden or Unanticipated Short-Term Capacity Shortages.

In the event of a sudden decline of frequency on all or a portion of the Company's system caused by a significant imbalance of load and generation, whether such imbalance occurs in the Company's system or on another system:

- a. Automatic load shedding will take place if the decline in frequency is of the magnitude such as to jeopardize the entire affected area. Ten percent of the load in the affected area will be shed automatically at a frequency of 58.9 hertz. In the event such action does not restore the frequency to a proper level, manual load shedding will be employed. Service so interrupted shall be of selected distribution circuits and lines serving customers throughout the affected area. Such interruptions shall be, where practical, for short periods of time. When the frequency in the affected area recovers to 59.0 hertz or above any action necessary will be taken in the affected area to permit resynchronization to the main network. Such action may include additional manual load shedding.Such automatic and manual load shedding and restoration will be as set forth in ECAR Document No. 3, dated October 31, 1968 as amended.
- 2. Anticipated or predictable Short Term Capacity Shortages.

As soon as it is determined that a critical situation exists on the Company's system which may require implementation of any of the emergency procedures listed below, the Company shall confer by telephone with the Commission Staff. Also, the Commission Staff shall be kept informed when any such emergency procedures are implemented.

In the event an emergency condition of short term duration is anticipated or predicted which cannot be relieved by sources of generation available to the Company within the interconnected area, the following steps will be taken at the appropriate time and in the order appropriate to the situation.

- a. The internal demand of premises owned by the Company will be reduced to the largest extent consistent with the continuity of service.
- b. Voluntary load reductions will be requested of major commercial and industrial customers by procedures established in their respective load reduction plans;
- c. Voluntary load reductions will be requested of all other customers through appropriate media appeals.
- d. Manual load shedding of customer loads will be initiated. Service so interrupted shall, be to customers supplied from (1) selected distribution circuits throughout the area affected by the emergency, and (2) transmission and subtransmission circuits that can be directly controlled from the Company's dispatching offices. Such interruptions shall be consistent with the criteria established in section (A)(1) to protect the public health and safety and shall, insofar as practicable, be alternated among circuits. The length of an interruption of any selected distribution circuit should not exceed two hours and the total interruption should not exceed four hours in any 24 hour period without prior notification to the Commission. Records will be maintained to ensure that, during subsequent capacity shortages, service interruptions may be rotated throughout the area in an equitable manner.

### C. Long Term Capacity Shortages:

The following actions shall be implemented until it is determined by the Company that any or all actions may be terminated. The public shall be immediately advised through appropriate media sources of the implementation of these procedures.

1. Long Term Capacity Shortages.

If an emergency situation of long term duration arises out of a long term capacity shortage on the Company's system, the following actions shall be taken, as required:

- a. Curtail, during hours of maximum system demand, non-priority electric use on premises controlled by the Company including parking, large area and interior lighting, except lighting required for security and safety.
- b. Initiate voluntary load reduction by all customers during the hours of maximum system demand as specified by the Company by:
  - i Direct contact of customers with an electric demand of 500 kW or higher requesting them to implement their voluntary electric load reduction plans.

- ii Requesting, through mass communication media, voluntary curtailment of electric use by all other customers by suggesting actions to be taken such as: lowering thermostat settings for electric heating in the winter; discontinuing the use of air conditioning in the summer; shutting off electric water heaters; discontinuing use of dishwashers, outside lights, electric clothes dryers and entertainment appliances; reducing the use of interior lighting; reducing the use of refrigeration; discontinuing sign lighting and decorative lighting; reducing the use of elevators and poker ventilation equipment; and rescheduling hours of operation for stores and factories.
- c. Implement procedures for interruption of selected distribution circuits during the period of maximum system demand on a rotational basis minimizing interruption to facilities which are essential to the public health and safety. The length of an interruption of any selected circuit should not exceed two hours, and the total interruption should not exceed four hours in any 24 hour period without prior notification to the Commission.
- d. Notify customers with an electric demand of 500 kW or higher to curtail non-priority use of electricity during hours of maximum system demand as specified by the Company to levels not less than 70 percent of the customer's "monthly base period demand." The Company will establish an adjusted curtailment level when the customer can document that their priority use of electricity exceeds the curtailment level as specified. The Company will notify the Commission prior to such notification of customers.

"Monthly base period demand" is the customers billing demand established during the same month of the preceding year provided, however, that if:

- i. The "monthly base period demand" of a customer was abnormal due to such things as strikes or breakdown of major equipment, upon application by the customer and agreement by the Company, "monthly base period demand" for such customer shall be adjusted to reflect the abnormality.
- ii. A customer has experienced a major change in load or in load use pattern between the same month of the preceding year and the month of notification of curtailment, the "monthly base period demand" shall be multiplied by an adjustment factor equal to the sum of the billing demands of the three consecutive months prior to the month of notification of curtailment divided by the sum of the billing demands of the corresponding months in the prior 12 month period. If the load change occurred within the three monthly billing periods prior to the notification, only the months which include the changed load condition and the corresponding months of the previous year shall be used to calculate the adjustment factor.
- iii. A customer has recently been connected or has received a commitment from the Company to supply a new load or a major load addition expected to be connected subsequent to the initiation of the curtailment, the "monthly base period demand" will be negotiated between the customer and the Company.

Upon prior arrangement and mutual agreement with the Company, customers may effect their electric demand reduction on a corporate basis.

e. Upon notification to the Commission, increase the total hours of interruption of selected distribution circuits during the hours of maximum system demand from four hours to a maximum of eight hours.

 Customers who do not curtail service during long term capacity shortages within 30 days after notification by the Company pursuant to (C)(1)(d) may, following notification to the Commission, be wholly disconnected from service until the emergency is past.

# D. Short Term Capacity Shortages in Neighboring Control Areas:

Service to the Company's customers shall not be interrupted in order to provide emergency service to suppliers of electric energy in neighboring interconnected control areas. Emergency assistance to such suppliers will not be given unless agreed to be provided on a reciprocal basis by such supplier to the Company.

The neighboring control area seeking assistance shall be requested to reduce its takings of electric energy if such takings endanger the reliability of bulk power supply in the Company area. If such neighboring control area fails to reduce its takings and the reliability of bulk power supply in the Company's area is endangered, steps shall be taken to relieve the burden on the Company area including, as a last resort, opening of appropriate interconnections.

# E. Emergency Procedures for Municipal Wholesale Customers:

The Company also provides electric service to certain municipal Wholesale customers. In order to distribute fairly the burden of an electrical emergency between the Company's retail customers and the retail consumers served by its municipal wholesale customers, each such municipal wholesale customer shall adopt emergency electric procedures designed to curtail service to its consumers to the same extent as service to the Company's consumers would be curtailed under the Emergency Electrical Procedures contained herein. Such procedures shall be implemented by each wholesale customer when notified to do so by the Company.

P.U.C.O. No. 13

# **RESIDENTIAL SERVICE - (RATE "RS")**

# AVAILABILITY:

Available for residential service to installations served through one meter for each family unit in a residence or apartment.

When service is used through the same meter for both residential and commercial purposes the applicable general service rate schedule shall apply.

This rate schedule is not available for service to a commercial, institutional or industrial establishment. The hallways and other common facilities of an apartment building or apartment complex are to be billed on the appropriate general service rate.

# **SERVICE:**

Service is provided per the Electric Service Regulations at a secondary voltage.

# RATE:

All charges under this rate schedule shall be calculated as described below and charged on a monthly basis.

Distribution Charges:	
Service Charge:	\$4.00
Energy Charges:	
All kWh, per kWh	2.9510¢

# SPECIAL METERS:

Time-Of-Day Metering is available from the Company. Charges for such service are specified in the Miscellaneous Charges, Tariff Sheet 75.

# APPLICABLE RIDERS:

The charges included with the applicable riders as designated on the Summary Rider, Tariff Sheet 80 shall be added to the Rates and charges set forth above.

# ELECTRIC SERVICE REGULATIONS:

The Company's Electric Service Regulations shall apply to the installation and use of electric service.

# Case No. 16-2213-EL-CCS In The Matter Of The Complaint of PCC Airfoils, LLC v. The Cleveland Electric Illuminating Company

# **RESPONSE TO REQUEST**

- PCC Set 1 -CEI has adequate capacity via adjacent facilities to service PCC Airfoils, LLC with sub<br/>transmission service at Rate GSU.
- **Response:** Objection. This request is vague and ambiguous as to the information it seeks. Subject to and without waiving the foregoing objection, and assuming the term "adjacent facilities" is referring to Circuit R-16&17-LY-G-X, and assuming the term "adequate capacity" is referring to The Cleveland Electric Illuminating Company's Electric Service Regulations, Part IV, C, Delivery Voltage, The Cleveland Electric Illuminating Company admits that it has subtransmission facilities of adequate capacity available adjacent to PCC Airfoils premises.

# PCC Airfoils, LLC v. The Cleveland Electric Illuminating Company Public Utilities Commission of Ohio, Case No. 16-2213-EL-CSS

# PCC Set 2

# Answered by: Dean Philips As to Objections: Carrie M. Dunn

- PCC Set 2 -How many CEI customers receive subtransmission service where the customersINT-015have a demand:
  - a. less than 2500 kW.
  - b. Less than 3000 kW.
  - c. Less than 3500 kW.
  - d. Less than 4000 kW.
- **Response:** Objection. This request is overbroad and unduly burdensome and seeks information that is neither relevant nor reasonably calculated to lead to the discovery of admissible evidence. Moreover, this request is vague and ambiguous as to the information it seeks. Subject to and without waiving the foregoing objections, and assuming this question is requesting how many CEI customers are on Rate GSU:
  - a. 489
    b. 502
    c. 514
    d. 519

# Exhibit 5 PCC Set 1

# Case No. 16-2213-EL-CCS In The Matter Of The Complaint of PCC Airfoils, LLC v. The Cleveland Electric Illuminating Company

1

# **RESPONSE TO REQUEST**

- PCC Set 1 –
   Except for the transformer which would be provided at PCC Airfoils' cost, the facilities

   RFA-4
   necessary to provide PCC Airfoils with sub transmission service at Rate GSU are adjacent to the PCC Airfoils property.
- **Response:** Objection. This request is vague and ambiguous as to the information it seeks. Subject to and without waiving the foregoing objection, The Cleveland Electric Illuminating admits that Circuit R-16&17-LY-G-X is adjacent to PCC Airfoils property.

Exhibit 6

# **Mike Spacek**

From:	Haldi, Jennie M. <jmhaldi@firstenergycorp.com></jmhaldi@firstenergycorp.com>
Sent:	Wednesday, August 17, 2016 8:47 AM
To:	aberger@mkcinc.com
Cc:	Capek, Mike; Hrdy, Michael R.; Delligatti, Ralph N.; Becks, Jean A.; Mike Spacek
Subject:	WR #58219736 - PCC Airfoils @29501 Clayton Ave., Wickliffe
Attachments:	pri mtr-10-347.pdf; pri mtr-10-340.pdf

Al, After consulting with our Planning Engineers it was determined that the existing load at PCC Airfoils, 29501 Clayton Ave., is adequately served from the distribution circuit and a transfer to the sub-transmission circuit is not warranted. The customer does have the option to switch to the GP(General Primary) rate. Please see the attached specs for a new primary meter pole. Customer to install the primary meter pole. CEI to furnish, wire and assemble the CT's and PT's. Customer to install the PT's on the primary meter pole.

Mike Capek, please let me know if you would like us to pursue the GP installation.

Fam still waiting for the arc flash hazard analysis you had requested and as soon as I receive the information I will send it to you.

Any questions? Please call ..

Thanks, have a great day..

Jennie M. Haldi Account Manager The Illuminating Company 7755 Auburn Rd., Concord, Ohio 44057

O: 440-358-4989 M: 216-346-1942 F: 330-436-8083

imhaldi@firstenergycorp.com https://www.firstenergycorp.com

Illuminating Company Energyline: A unique service for our business customers. Find out more!



From:	Capek, Mike <mike.capek@pccairfoils.com></mike.capek@pccairfoils.com>
Sent time:	Wednesday, October 26, 2016 8:42:30 AM
To:	Haldi, Jennie M.
Cc:	Mike Spacek: Eli Auerbach; Hrdy, Michael R.
Subject	RE: *EXTERNAL* RE: WR #58219736 - PCC Airfolls @29501 Clayton Ave., Wickliffe
Attachments:	image002.png image003.jpg

Jennie,

I finally had some time to get back to this issue.

Your message states that there were no "engineering reasons" to change service. It's an "accounting reason". We want the lower rate.

So I would like to meet with your engineers to discuss any perceived obstacles to my goal and how we will work together to overcome them.

As was stated previously, "The customer, however, shall select from the alternative rate schedules...."

I will include Mike Spacek and AI Berger on my side of the table.

Let me know who to include from your team and I will schedule a meeting.

Mike

From: Haldi, Jennie M. [mailto:jmhaldi@firstenergycorp.com] Sent: Monday, September 12, 2016 12:09 PM To: Capek, Mike Cc: Mike Spacek; Eli Auerbach; Hrdy, Michael R. Subject: RE: \*EXTERNAL\* RE: WR #58219736 - PCC Airfoils @29501 Clayton Ave., Wickliffe

#### Mike

After careful consideration, The Illuminating Company will stand by our original response to deny your request to change your rate schedule to rate GSU. There is not a valid engineering reason that would necessitate moving your current load onto our sub-transmission system. In addition, the tariff indicates that the voltage level of service is at the discretion of the Company. You do however have the ability to make the necessary changes in transformer ownership to change your rate to rate GP. We will continue to work with Mike Spacek and Al Berger on this project.

Thanks

Jennie M. Haldi Account Manager The Illuminating Company 7755 Auburn Rd., Concord, Ohio 44057

O: 440-358-4989 M: 216-346-1942 F: 330-436-8083

imhaldi@firstenergycorp.com https://www.firstenergycorp.com

Illuminating Company Energyline. A unique service for our business customers. Find out more!



From: Capek, Mike [mailto:Mike.Capek@PCCAIRFOILS.COM] Sent: Thursday, August 25, 2016 4:08 PM To: Haldi, Jennie M. <<u>imhaldi@firstenergycorp.com</u>> Cc: Mike Spacek <<u>Mike@bestuseofenergy.com</u>>; Eli Auerbach <<u>eauerbach@energyplanners.com</u>> Subject: \*EXTERNAL\* RE: WR #58219736 - PCC Airfoils @29501 Clayton Ave., Wickliffe

#### Jennie,

Thank you for the response. We do not agree with your assessment that PCC does not have the right to change rates to GSUB. It is a filed and available tariff and your facilities are in the vicinity. Our request is for GSUB and that is what we want. Please provide more specifics in regard to your refusal to allow our company access to a filed tariff.

Based on your new meters, our plant load is greater than 4,000-kW. Your Sheet 4 of 21 Section C states that, "Customers with demands in excess of twenty five hundred (2,500) kW will generally be served at Transmission Service." Also Section C, Item 2 defines Subtransmission Service voltages as 11,000 volts three wire and 36,000 volts three wire. We believe this is the voltage you would select. Since only 33,000 volts is in the vicinity, that is the selected voltage.

Also on page 4 Section V. discusses Rate Schedule Alternatives. The below Clearly states, .... "the company will assist a customer in selecting an appropriate rate schedule to be applied. The customer, however, shall select from the alternative rate schedules..."

#### V. RATE SCHEOULE ALTERNATIVES

- Selecting Rate Schedule: Where two or more alternative rate schedules are applicable to the same class of service the Company, upon request will assist a customer is selecting an appropriate rate schedules to be applied. The outcomer however, shall select from the alternative rate schedules and such selection shall be the basis for the application or contract for service. No refund will be made representing the difference in charges under different rate schedules applicable.
- Changing Rate Schedule: Subject to limitations in the service contract or applicable rate schedule, the customer may change to an alternative applicable rate tunedule, except that a customer contracting for a specified capacity service at available rate unexport transmission votage shall not be engineer to contract for service at secondary unlass a secondary votage crucit of adequate capacity is available adjuent to the premise and the customer complex such as a the provisions of the applicable adjuent to the premise and the customer complex such as of the provisions of the applicable execondary rate shellow.

Furthermore, the distribution circuit is exposed to more nuisance events such as animal contact and vehicular accidents than the subtransmission circuit. We understand that protecting our system from your system's momentary voltage excursions is our responsibility and expense. We would like to spend our money by reducing the number of events and use the savings to harden our system further.

In the interim we request two things to keep this project moving forward:

 We will pursue to GP since our utilization voltage off the sub-transmission will be 13.2-kV, we can continue in this realm.

a. We expect our BDC to continue if we use GP service. We understand BDC is reduced to \$0.005/kWh with GP.

 Our engineering experts in this project are Effective Utility Services and Engineered Process Systems, in particular Mike Spacek and Al Berger. We expect you to work with them and treat them with same deference you would treat the CEO of PCC. This group will keep PCC informed of the project's status. We have a plant to run. EPS and EUS will take care of our high voltage needs.

Mike Capek

From: Haldi, Jennie M. [<u>mailto:jmhaldi@firstenergycorp.com</u>] Sent: Wednesday, August 17, 2016 8:47 AM To: <u>aberger@mkcinc.com</u> Cc: Capek, Mlke; Hrdy, Michael R.; Delligatti, Raiph N.; Becks, Jean A.; Mike Spacek Subject: WR #58219736 - PCC Airfoils @29501 Clayton Ave., Wickliffe

Al, After consulting with our Planning Engineers it was determined that the existing load at PCC Airfoils, 29501 Clayton Ave., is adequately served from the distribution circuit and a transfer to the sub-transmission circuit is not warranted. The customer does have the option to switch to the GP(General Primary) rate. Please see the attached specs for a new primary meter pole.
Customer to install the primary meter pole. CEI to furnish, wire and assemble the CT's and PT's. Customer to install the PT's and CT's on the primary meter pole.

Mike Capek, please let me know if you would like us to pursue the GP installation.

I am still waiting for the arc flash hazard analysis you had requested and as soon as I receive the Information I will send it to you.

Any questions? Please call..

Thanks, have a great day...

Jennie M. Haldi Account Manager The Illuminating Company 7755 Auburn Rd., Concord, Ohio 44057

O: 440-358-4989 M: 216-346-1942 F: 330-436-8083

jmhaldi@firstenergycorp.com https://www.firstenergycorp.com

Illuminating Company Energyline: A unique service for our business customers. Find out more!



The ental and any attachments may contain confidential and prophetary information and must be treated as such im addition, export or relexport of the information contained in or attached to this email may be prohibited under export control lows.

The information contained in this message is intended only for the personal and confidential use of the recipient(s) named above. If the reader of this message is not the intended recipient or an agent responsible for delivering it to the intended recipient, you are hereby notified that you have received this document in error and that any review, dissemination, distribution, or copying of this message is strictly prohibited. If you have received this communication in error, please notify us immediately, and delete the original message.

This email and any attachments may contain contrations and progrimmation and must be treated as such to admourn export or re-export of the information works need in or attach, displat a leman may no prohibited under export control acts

**CAPEK 0066** 

#### BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

....

PCC AIRFOILS, LLC,	)
Complainant,	)
v.	)
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY,	) )
Respondent.	) ) )

.

'.

Case No. 16-2213-EL-CSS

#### DIRECT TESTIMONY OF PETER BLAZUNAS ON BEHALF OF THE CLEVELAND ELECTRIC ILLUMINATING COMPANY



1		<b>INTRODUCTION</b>
2	Q.	PLEASE INTRODUCE YOURSELF.
3	A.	My name is Peter Blazunas. My business address is 76 South Main Street, Akron, OH
4		44308. I am employed by FirstEnergy Service Company as a State Regulatory Analyst in
5		the Rates and Regulatory Affairs Department – Ohio. This department provides regulatory
6		support for Ohio Edison Company ("Ohio Edison"), The Cleveland Electric Illuminating
7		Company ("CEI" or "Company") and The Toledo Edison Company ("Toledo Edison")
8		(collectively, "FirstEnergy" or the "Companies").
9	Q.	PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND WORK
10		EXPERIENCE.
11	A.	I received a Bachelor of Arts degree in Economics from the University of Dayton and a
12		Master of Arts degree in Economics from the University of Akron. I have been employed
13		by FirstEnergy Service Company since 2012. Further, I have served as Adjunct Faculty in
14		the Department of Economics at the University of Akron since August 2012.
15	Q.	WHAT ARE YOUR CURRENT JOB RESPONSIBILITIES?
16	A.	My primary responsibility is to serve as the lead analyst for the preparation of various riders
17		as well as to prepare the Companies' annual Significantly Excessive Earnings Test
18		("SEET") filing. I also serve as the primary Rates and Regulatory Affairs contact for CEI
19		as it relates to rate and regulatory matters, as well as the interpretation and implementation
20		of the Commission-approved tariffs. Beyond these primary responsibilities, I also provide
21		support in various regulatory proceedings and analyses, including Electric Security Plans
22		and regulatory audits.
•••		

••

23

~

- **1 O. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE COMMISSION?**
- 2 A. Yes.

#### **3 O. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS CASE?**

- As a part of this proceeding, PCC Airfoils, LLC ("PCC Airfoils"), a customer of the 4 A. Company, requests that the Commission order the Company to supply PCC Airfoils with 5 sub-transmission service at General Service - Sub-transmission ("Rate GSU"). Should the 6 Commission deny this request, however, PCC Airfoils proposes an alternative whereby its 7 service be changed from its current service, General Service - Secondary ("Rate GS"), to 8 9 General Service - Primary ("Rate GP") while retaining application of the Business 10 Distribution Credit Rider ("Rider BDC"). The purpose of my testimony is to explain under 11 what circumstances this alternative is consistent with the Company's tariff and the 12 continued application of Rider BDC.
- 13

#### **RIDER BDC**

14 Q.

#### PLEASE DESCRIBE RIDER BDC.

Rider BDC provides a credit to distribution charges for qualifying electric consumption. 15 Α. 16 Rider BDC is applicable to any customer taking service under Rate Schedules GS or GP 17 who on April 30, 2009, took service from the Company under one of a specified list of rate 18 schedules and has not had a change of service address or a change to qualifying conditions 19 subsequent to April 30, 2009. Qualifying conditions are those in effect in the specified rate 20 schedules listed in the rider as they existed on April 30, 2009. A customer must continue 21 to comply with the requirements of the previously applicable rate schedule in order for 22 Rider BDC to apply. I have attached a copy of the Company's tariff, PUCO No. 13, 23 Original Sheet 86, "Rider BDC," as Attachment PRB-1.

#### 1 Q. DOES PCC AIRFOILS CURRENTLY RECEIVE RIDER BDC?

2 A. Yes.

### 3 Q. UNDER WHAT PREVIOUSLY APPLICABLE RATE SCHEDULE DOES PCC 4 AIRFOILS QUALIFY FOR RIDER BDC?

A. PCC Airfoils was previously served on Original Sheet No. 39, "Optional Electric Process
Heating and Electric Boiler Load Management Schedule." I have attached a copy of
Original Sheet No. 39 as Attachment PRB-2.

### 8 Q. WHAT ARE THE QUALIFYING CONDITIONS INCLUDED IN THE ORIGINAL 9 SHEET NO. 39 WITH WHICH A CUSTOMER MUST COMPLY TO QUALIFY 10 FOR RIDER BDC?

11 First, the customer must have Process Heating or Electric Boiler installations of 20 Kw or Α. greater where the customer's wiring permits separate metering of the Electric Process 12 13 Heating and/or Electric Boiler and ancillary equipment's load. Second, the customer must 14 furnish a separate circuit (or equivalent) to which the approved Process Heating and/or 15 Electric Boiler and ancillary equipment shall be permanently connected and of such a 16 design and construction that no other electric devices can be connected thereto. Third, all 17 electric requirements of the customer must be supplied at a single point of delivery. 18 Finally, the customer's ancillary equipment load must not exceed twenty percent of the 19 total connected kW load of the equipment served under this schedule.

20

#### Q. DOES PCC AIRFOILS CONTINUE TO MEET THE QUALIFYING CONDITIONS

- 21 INCLUDED IN THE ORIGINAL SHEET NO. 39?
- A. The Company is not aware of any changes to PCC Airfoils' service that would put it in
   violation of the qualifying conditions outlined in the previously applicable rate schedule.

4

1	Q.	FOR HOW LONG HAS PCC AIRFOILS QUALIFIED FOR RIDER BDC?
2	A.	PCC Airfoils has qualified to receive Rider BDC since its inception on May 1, 2009.
3		PCC AIRFOILS' ALTERNATIVE CHANGE TO SERVICE
4	Q.	WOULD PCC AIRFOILS CONTINUE TO RECEIVE RIDER BDC UNDER ITS
5		ALTERNATIVE PROPOSAL TO TAKE SERVICE UNDER RIDER BDC?
6	A:	It depends on the customer's configuration. If, for example, the alternative proposal was a
7		single Rate GP service under one meter then it would not qualify for Rider BDC. This is
8		because it would violate the qualifying conditions of the previously applicable rate
9		schedule, namely the requirement for the heating load to be metered separately. If,
10		however, PCC Airfoils continues to meet the qualifying conditions of the former Sheet No.
11		39, as discussed above, then PCC Airfoils could continue to receive Rider BDC under its
12		alternative proposal.
13	Q.	HAS PCC AIRFOILS PROVIDED A PROPOSED CONFIGURATION FOR RATE
14		GP SERVICE?
15	A.	Yes, PCC Airfoils provided the Company with a schematic of the proposed configuration,
16		which I have attached as Attachment PRB-3.
17	Q.	WOULD PCC AIRFOILS QUALIFY FOR RIDER BDC UNDER THE PROPOSED
18		CONFIGURATION?
19	A.	Yes.
20	Q.	DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?
21	А.	Yes; however, I reserve my right to supplement my testimony.

-

4.

The Cleveland Electric Illuminating Company

Cleveland, Ohio

P.U.C.O. No. 13

#### RIDER BDC Business Distribution Credit Rider

#### **APPLICABILITY:**

Applicable to any customer taking service under Rate Schedules GS or GP who on April 30, 2009 took service from the Company under one of the following rate schedules and has not had a change of service address or a change to qualifying conditions subsequent to April 30, 2009. Qualifying conditions are those in effect in the below rate schedules as they existed on April 30, 2009 and continues to comply with the requirements of the previously applicable rate schedule set forth below:

Electric Space Conditioning All Electric Large General Service Optional Electric Process Heating and Electric Boiler Load Management Original Sheet No. 31 Original Sheet No. 34

Original Sheet No. 39

#### RATE:

A customer's distribution charges as set forth in Rate Schedule GS shall be reduced by 1.50¢ per kWh for all kWhs consumed by the customer during winter billing periods, as defined in the Electric Service Regulations, Tariff Sheet 4, Section VI.I.1., Seasonal Price Changes.

A customer's distribution charges as set forth in Rate Schedule GP shall be reduced by 0.50¢ per kWh for all kWhs consumed by the customer during winter billing periods, as defined in the Electric Service Regulations, Tariff Sheet 4, Section VI.I.1., Seasonal Price Changes.

Page 1 of 1

Original Sheet No. 39 2<sup>nd</sup> Revised Page 1 of 3

#### OPTIONAL ELECTRIC PROCESS HEATING AND ELECTRIC BOILER LOAD MANAGEMENT SCHEDULE

This Rate Sheet is in the process of elimination and is withdrawn except for the present customers receiving service hereunder at premises served as of June 9, 2004.

Available on an optional basis to any Full Service customer for Process Heating or Electric Boiler installations of 20 kW or greater where the Customer's wiring permits separate metering of the Electric Process Heating and/or Electric Boiler and ancillary equipment's load. All other requirements of the Customer will be billed under the rate appropriate for that service. This schedule will not be available to residential applications in single family homes. A Full Service customer is one that receives all retail electric services from the Company.

#### MONTHLY RATE:

Monthly charges per customer for all customers served under this schedule shall include Distribution Charges, Rate Stabilization Charges, Regulatory Transition Charges, and Generation Charges, as shown below. Customers who receive Generation Services from a Certified Supplier may not be served under this schedule; therefore no Shopping Credit applies to this schedule.

Applicable only to separately metered Electric Process Heating or Electric Boiler Installations

#### **Distribution Charges:**

	<u>SUMMER</u>	<u>WINTER</u>
Energy Charge:		
First 140 kWh per kW of Monthly Billing Demand	1.329¢	1.184¢
For all kWh, per kWh	0.433¢	0.433¢

#### Transmission and Ancillary Services Charges:

The Transmission and Ancillary Services Charges will be applied pursuant to the Industrial Transmission and Ancillary Service Rider, Tariff Sheet No. 98.

#### **Rate Stabilization Charges:**

Energy Charge:		
First 140 kWh per kW of Monthly Billing Demand	2.814¢	2.509¢
For all excess kWh, per kWh	0.917¢	0.917¢
Regulatory Transition Charges:		
Energy Charge:		
First 140 kWh per kW of Monthly Billing Demand	3.416¢	3.045¢
For all excess kWh, per kWh	1.114¢	1.114¢

#### OPTIONAL ELECTRIC PROCESS HEATING AND ELECTRIC BOILER LOAD MANAGEMENT SCHEDULE

Generation Charges:	<u>SUMMER</u>	<u>WINTER</u>	
Energy Charge:			
First 140 kWh per kW of Monthly Billing Demand	0.723¢	0.784¢	
For all excess kWh, per kWh	1.093¢	1.093¢	

۰.

#### TERMS OF PAYMENT:

All bills for service shall be payable on or before the due date shown on the bill. The due date for non-residential bills shall not be less than twenty-one days after the mailing of the bill. Interest, at the rate of 1.5 percent (1.5%) per month, shall be charged on any unpaid balance existing at the next billing date for all Customers.

The Winter Rates specified above shall be applicable in eight consecutive monthly billing periods beginning with the October bills each year. The Summer Rates shall apply in all other billing periods.

#### **APPLICABLE RIDERS:**

Rates and charges specified above shall be modified in accordance with provisions of the following applicable Riders in the order shown.

ELECTRIC FUEL COMPONENTRider No. 1Sheet No. 79PRIMARY METERING DISCOUNTRider No. 2Sheet No. 80OFF-PEAK DEMAND FORGIVENESSRider No. 7Sheet No. 85UNIVERSAL SERVICERider No. 14Sheet No. 90TEMPORARY RIDER FOR EEFRider No. 15Sheet No. 91STATE AND LOCAL TAX RIDERRider No. 16Sheet No. 92NET ENERGY METERINGRider No. 17Sheet No. 93GREEN RESOURCE RIDERRider No. 27Sheet No. 104FUEL COST RECOVERY RIDERRider No. 30Sheet No. 105FUEL COST RECOVERY RIDERRider No. 30Sheet No. 107DISTRIBUTION UNCOLLECTIBLESheet No. 108Sheet No. 108PIPP UNCOLLECTIBLE RECOVERYSheet No. 109NON- DISTRIBUTION UNCOLLECTIBLESheet No. 110CEI DELTA REVENUE RECOVERYSheet No. 112Sheet No. 112	INDUSTRIAL TRANSMISSION AND ANCILLARY SERVICE	Rider No. 21	Sheet No. 98
PRIMARY METERING DISCOUNTRider No. 2Sheet No. 80OFF-PEAK DEMAND FORGIVENESSRider No. 7Sheet No. 85UNIVERSAL SERVICERider No. 14Sheet No. 90TEMPORARY RIDER FOR EEFRider No. 15Sheet No. 91STATE AND LOCAL TAX RIDERRider No. 16Sheet No. 92NET ENERGY METERINGRider No. 17Sheet No. 93GREEN RESOURCE RIDERRider No. 27Sheet No. 104FUEL RIDERRider No. 28Sheet No. 105FUEL COST RECOVERY RIDERRider No. 30Sheet No. 107DISTRIBUTION UNCOLLECTIBLESheet No. 108PIPP UNCOLLECTIBLE RECOVERYNON- DISTRIBUTION UNCOLLECTIBLESheet No. 109NON- DISTRIBUTION UNCOLLECTIBLECEI DELTA REVENUE RECOVERYSheet No. 110CEI DELTA REVENUE RECOVERYSheet No. 112	ELECTRIC FUEL COMPONENT	Rider No. 1	Sheet No. 79
OFF-PEAK DEMAND FORGIVENESSRider No. 7Sheet No. 85UNIVERSAL SERVICERider No. 14Sheet No. 90TEMPORARY RIDER FOR EEFRider No. 15Sheet No. 91STATE AND LOCAL TAX RIDERRider No. 16Sheet No. 92NET ENERGY METERINGRider No. 17Sheet No. 93GREEN RESOURCE RIDERRider No. 27Sheet No. 104FUEL RIDERRider No. 28Sheet No. 105FUEL COST RECOVERY RIDERRider No. 30Sheet No. 107DISTRIBUTION UNCOLLECTIBLESheet No. 108Sheet No. 108PIPP UNCOLLECTIBLE RECOVERYSheet No. 109NON- DISTRIBUTION UNCOLLECTIBLENON- DISTRIBUTION UNCOLLECTIBLESheet No. 109NON- DISTRIBUTION UNCOLLECTIBLESheet No. 109NON- DISTRIBUTION UNCOLLECTIBLESheet No. 109NON- DISTRIBUTION UNCOLLECTIBLESheet No. 110CEI DELTA REVENUE RECOVERYSheet No. 112	PRIMARY METERING DISCOUNT	Rider No. 2	Sheet No. 80
UNIVERSAL SERVICERider No. 14Sheet No. 90TEMPORARY RIDER FOR EEFRider No. 15Sheet No. 91STATE AND LOCAL TAX RIDERRider No. 16Sheet No. 92NET ENERGY METERINGRider No. 17Sheet No. 93GREEN RESOURCE RIDERRider No. 27Sheet No. 104FUEL RIDERRider No. 28Sheet No. 105FUEL COST RECOVERY RIDERRider No. 30Sheet No. 107DISTRIBUTION UNCOLLECTIBLESheet No. 99DELIVERY SERVICE IMPROVEMENTSheet No. 108PIPP UNCOLLECTIBLE RECOVERYSheet No. 109NON- DISTRIBUTION UNCOLLECTIBLESheet No. 110CEI DELTA REVENUE RECOVERYSheet No. 112Sheet No. 112	OFF-PEAK DEMAND FORGIVENESS	Rider No. 7	Sheet No. 85
TEMPORARY RIDER FOR EEFRider No. 15Sheet No. 91STATE AND LOCAL TAX RIDERRider No. 16Sheet No. 92NET ENERGY METERINGRider No. 17Sheet No. 93GREEN RESOURCE RIDERRider No. 27Sheet No. 104FUEL RIDERRider No. 28Sheet No. 105FUEL COST RECOVERY RIDERRider No. 30Sheet No. 107DISTRIBUTION UNCOLLECTIBLESheet No. 99Sheet No. 108PIPP UNCOLLECTIBLE RECOVERYSheet No. 108Sheet No. 109NON- DISTRIBUTION UNCOLLECTIBLESheet No. 110CEI DELTA REVENUE RECOVERY	UNIVERSAL SERVICE	Rider No. 14	Sheet No. 90
STATE AND LOCAL TAX RIDERRider No. 16Sheet No. 92NET ENERGY METERINGRider No. 17Sheet No. 93GREEN RESOURCE RIDERRider No. 27Sheet No. 104FUEL RIDERRider No. 28Sheet No. 105FUEL COST RECOVERY RIDERRider No. 30Sheet No. 107DISTRIBUTION UNCOLLECTIBLESheet No. 99Sheet No. 108PIPP UNCOLLECTIBLE RECOVERYSheet No. 108Sheet No. 109NON- DISTRIBUTION UNCOLLECTIBLESheet No. 109Sheet No. 109NON- DISTRIBUTION UNCOLLECTIBLESheet No. 110CEI DELTA REVENUE RECOVERY	TEMPORARY RIDER FOR EEF	Rider No. 15	Sheet No. 91
NET ENERGY METERINGRider No. 17Sheet No. 93GREEN RESOURCE RIDERRider No. 27Sheet No. 104FUEL RIDERRider No. 28Sheet No. 105FUEL COST RECOVERY RIDERRider No. 30Sheet No. 107DISTRIBUTION UNCOLLECTIBLESheet No. 99Sheet No. 108DELIVERY SERVICE IMPROVEMENTSheet No. 108PIPP UNCOLLECTIBLE RECOVERYSheet No. 109NON- DISTRIBUTION UNCOLLECTIBLESheet No. 110CEI DELTA REVENUE RECOVERYSheet No. 112	STATE AND LOCAL TAX RIDER	Rider No. 16	Sheet No. 92
GREEN RESOURCE RIDERRider No. 27Sheet No. 104FUEL RIDERRider No. 28Sheet No. 105FUEL COST RECOVERY RIDERRider No. 30Sheet No. 107DISTRIBUTION UNCOLLECTIBLESheet No. 30Sheet No. 107DELIVERY SERVICE IMPROVEMENTSheet No. 108PIPP UNCOLLECTIBLE RECOVERYSheet No. 109NON- DISTRIBUTION UNCOLLECTIBLESheet No. 110CEI DELTA REVENUE RECOVERYSheet No. 112	NET ENERGY METERING	Rider No. 17	Sheet No. 93
FUEL RIDERRider No. 28Sheet No. 105FUEL COST RECOVERY RIDERRider No. 30Sheet No. 107DISTRIBUTION UNCOLLECTIBLESheet No. 99Sheet No. 99DELIVERY SERVICE IMPROVEMENTSheet No. 108PIPP UNCOLLECTIBLE RECOVERYSheet No. 109NON- DISTRIBUTION UNCOLLECTIBLESheet No. 110CEI DELTA REVENUE RECOVERYSheet No. 112	GREEN RESOURCE RIDER	Rider No. 27	Sheet No. 104
FUEL COST RECOVERY RIDERRider No. 30Sheet No. 107DISTRIBUTION UNCOLLECTIBLESheet No. 99DELIVERY SERVICE IMPROVEMENTSheet No. 108PIPP UNCOLLECTIBLE RECOVERYSheet No. 109NON- DISTRIBUTION UNCOLLECTIBLESheet No. 110CEI DELTA REVENUE RECOVERYSheet No. 112	FUEL RIDER	Rider No. 28	Sheet No. 105
DISTRIBUTION UNCOLLECTIBLESheet No. 99DELIVERY SERVICE IMPROVEMENTSheet No. 108PIPP UNCOLLECTIBLE RECOVERYSheet No. 109NON-DISTRIBUTION UNCOLLECTIBLESheet No. 110CEI DELTA REVENUE RECOVERYSheet No. 112	FUEL COST RECOVERY RIDER	Rider No. 30	Sheet No. 107
DELIVERY SERVICE IMPROVEMENTSheet No. 108PIPP UNCOLLECTIBLE RECOVERYSheet No. 109NON-DISTRIBUTION UNCOLLECTIBLESheet No. 110CEI DELTA REVENUE RECOVERYSheet No. 112	DISTRIBUTION UNCOLLECTIBLE		Sheet No. 99
PIPP UNCOLLECTIBLE RECOVERYSheet No. 109NON-DISTRIBUTION UNCOLLECTIBLESheet No. 110CEI DELTA REVENUE RECOVERYSheet No. 112	DELIVERY SERVICE IMPROVEMENT		Sheet No. 108
NON- DISTRIBUTION UNCOLLECTIBLESheet No. 110CEI DELTA REVENUE RECOVERYSheet No. 112	PIPP UNCOLLECTIBLE RECOVERY		Sheet No. 109
CEI DELTA REVENUE RECOVERY Sheet No. 112	NON-DISTRIBUTION UNCOLLECTIBLE		Sheet No. 110
	CEI DELTA REVENUE RECOVERY		Sheet No. 112

#### **BILLING DEMAND:**

The billing demand shall be the separately metered demand actually registered, subject to the provisions of Rider No. 7, if appropriate.

#### OPTIONAL ELECTRIC PROCESS HEATING AND ELECTRIC BOILER LOAD MANAGEMENT SCHEDULE

#### SPECIAL RULES:

- 1. The Customer shall furnish a separate circuit (or equivalent) to which the approved Process Heating and/or Electric Boiler and ancillary equipment shall be permanently connected. Such circuit shall be of a design and construction that no other electrical devices can be connected thereto.
- 2. All electrical requirements will be supplied at a single point of delivery.
- 3. Ancillary equipment load will not exceed twenty (20) percent of the total connected kWc load of the equipment served under this schedule.
- 4. This schedule is applicable for Customers with existing idle facilities (unused for the past six months or longer) or for Customers desiring to add new facilities (purchased or otherwise acquired within the past six months or less).
- 5. To receive service under this schedule, the Customer must execute a written application agreeing that service hereunder (1) shall be for five years, and for successive periods of two years each, unless written notice of termination is given one year before expiration of the five-year period, or any two-year renewal period; and (2) such service shall be supplied solely by the Company during the initial and renewal periods.

#### ATTACHMENT PRB-3



....

P.U.C.O. No. 13

Original Sheet 4

Page 4 of 21

#### ELECTRIC SERVICE REGULATIONS

- C. Delivery Voltage: Subject to the provisions of paragraph IV.B above, and after the Company determines that facilities of adequate capacity are available and adjacent to the premises to be served, the types of service available with the nominal voltages are:
  - 1. Secondary Service Less than or equal to 600 volts
  - 2. Subtransmission Service 11,000 volts three wire and 36,000 volts three wire
  - 3. Transmission Service Greater than or equal to 69,000 volts
  - 4. Primary Service All other available voltages

Delivery voltage will be specified by the Company and will be based upon the availability of lines in the vicinity of the customer's premises and commensurate with the size of the customer's load. Customers with demands in excess of twenty-five hundred (2,500) kW will generally be served at Transmission Service

#### V. RATE SCHEDULE ALTERNATIVES

- A. Selecting Rate Schedule: Where two or more alternative rate schedules are applicable to the same class of service, the Company, upon request, will assist a customer in selecting an appropriate rate schedule to be applied. The customer, however, shall select from the alternative rate schedules and such selection shall be the basis for the application or contract for service. No refund will be made representing the difference in charges under different rate schedules applicable to the same class of service except as required by law.
- B. Changing Rate Schedule: Subject to limitations in the service contract or applicable rate schedule, the customer may change to an alternative applicable rate schedule, except that a customer contracting for a specified capacity served at available primary or transmission voltage shall not be eligible to recontract for service at secondary voltage, unless a secondary voltage circuit of adequate capacity is available adjacent to the premises and the customer complies with all of the provisions of the applicable secondary rate schedule.

#### VI. BILLING AND PAYMENT

- A. Billing Periods: Bills for electric service will be rendered monthly or at the Company's option at other regular intervals. Bills rendered monthly shall typically cover a period of approximately 30 days.
- B. Due Dates: For residential customers, bills are due and payable to the Company on or before fourteen (14) days from the date the bill is mailed to said customer. Governmental customers' bills are due and payable to the Company on or before thirty (30) days from the date the bill is mailed to said customer. All other customers' bills are due and payable to the Company on or before twenty-one (21) days from the date the bill is mailed to said customer. When the due date for payment falls on Saturday, Sunday or a holiday the due date for payment is extended to the next business day. Remittances mailed by the customer for the amount(s) due shall be accepted by the Company as tendered within the period to avoid late payment charges if such payment is received by the Company no more than five (5) days after the due date of the bill.

#### BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

4.

PCC AIRFOILS, LLC,	)
Complainant,	)
v.	)
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY,	)
Respondent.	)

Case No. 16-2213-EL-CSS

#### DIRECT TESTIMONY OF DEAN E. PHILIPS, P.E. ON BEHALF OF THE CLEVELAND ELECTRIC ILLUMINATING COMPANY



1		<b>INTRODUCTION</b>
2	Q.	PLEASE INTRODUCE YOURSELF.
3	A.	My name is Dean E. Philips. My business address is 76 South Main Street, Akron, OH
4		44308. I am the Manager of Distribution Planning and Protection for FirstEnergy Service
5		Company.
6	Q.	PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND WORK
7		EXPERIENCE.
8	A.	I have a Bachelor of Science in Electrical Engineering ("BSEE") from The University of
9		Akron. I am also a Registered Professional Engineer in the State of Ohio. I have been
10		working as an engineer for FirstEnergy Service Company ("FirstEnergy") and its affiliates
11		for over 35 years. My work experience is outlined in Attachment DEP-1.
12	Q.	WHAT ARE YOUR CURRENT JOB RESPONSIBILITIES?
13	A.	I manage the distribution planning and protection group for all of FirstEnergy Corp.'s
14		electric distribution utilities which in Ohio includes: The Cleveland Electric Illuminating
15		Company ("CEI" or "Company"), Ohio Edison Company and The Toledo Edison
16		Company. This group serves as a technical resource for special projects and provides
17		regional and corporate technical support with regard to a number of areas including:
18		distribution system planning, protection and reliability; distribution capital budget
19		preparation; distributed generation interconnection; distribution automation; power
20		quality; and National Electrical Safety Code ("NESC") and National Electric Code
21		("NEC") interpretations and issues. I have also served as FirstEnergy's program council
22		representative for Electric Power Research Institute's ("EPRI's") Power Quality,
23		Distribution, Distributed Generation and Grid Resiliency Programs.

÷.

2

I have been in my current position at FirstEnergy, as Manager of Distribution Planning and
 Protection, since 2011.

#### **3 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS CASE?**

A. The purpose of my testimony is to describe the factors CEI considers in choosing service
voltage for a customer, to describe CEI's 36 kV sub-transmission system, and to provide
the rationale for CEI's response to the request of PCC Airfoils, LLC ("PCC Airfoils") to
switch service from the 13.2 kV distribution system to the 36kV sub-transmission system.

#### 8 Q. WHAT DID YOU REVIEW TO PREPARE YOUR TESTIMONY IN THIS CASE?

9 A. I reviewed the Complaint, discovery responses from PCC Airfoils, outage history for PCC
10 Airfoils' premises, and correspondence between PCC Airfoils and CEI. I also reviewed
11 PCC Airfoils' request to be served from the 36 kV sub-transmission system under the
12 General Service – Sub-transmission (Rate GSU) tariff with CEI's customer support team
13 and regional planning and protection engineers.

#### 14 RATE SCHEDULES AND DELIVERY VOLTAGE

#### 15 Q. IN YOUR ROLE AS A MANAGER IN THE DISTRIBUTION PLANNING AND

#### 16 PROTECTION DEPARTMENT, ARE YOU FAMILIAR WITH THE DIFFERENT

- 17 DELIVERY VOLTAGES AND RATE SCHEDULES OFFERED BY CEI?
- 18 A. Yes.

#### 19 Q. WHAT ARE THE DIFFERENT RATE SCHEDULES?

A. For non-residential customers, CEI's Commission approved tariffs include four rate
 schedules, which are based on delivery voltage:

- General Service Secondary (Rate GS): available to general service
   installations requiring secondary service as defined in the Company's
   Electric Service Regulations;
- General Service Primary (Rate GP): available to general service
  installations requiring primary service as defined in the Company's Electric
  Service Regulations;
- General Service Sub-transmission (Rate GSU): available to general
   service installations requiring sub-transmission service as defined in the
   Company's Electric Service Regulations; and
- General Service Transmission (Rate GT): available to general service
   installations requiring transmission service as defined in the Company's
   Electric Service Regulations.

13 Each rate schedule has associated delivery voltages outlined in the Company's tariff. True 14 and accurate copies of the aforementioned rate schedules are attached as Attachment DEP-15 2. PCC Airfoils is currently served under Rate GS and has requested sub-transmission 16 service under Rate GSU. In the alternative, PCC Airfoils has requested primary service 17 under Rate GP while retaining application of the Business Distribution Credit Rider 18 ("Rider BDC"). As discussed in the Direct Testimony of Peter Blazunas, PCC Airfoils is eligible to take service under Rate GP while retaining application of Rider BDC if certain 19 20 conditions in the tariff are met.

### Q. WHO CHOOSES WHICH DELIVERY VOLTAGE A CUSTOMER WILL RECEIVE WHEN ESTABLISHING SERVICE?

A. CEI does, pursuant to its Commission approved tariffs. As I stated above, each rate
schedule has a certain delivery voltage. As indicated in CEI's Electric Service Regulations,
Section IV (C), "Delivery voltage will be specified by the Company and will be based upon
the availability of lines in the vicinity of the customer's premises and commensurate with
the size of the customer's load." A true and accurate copy of the applicable section is
attached as Attachment DEP-3. Moreover, the Rate GS, Rate GP, Rate GSU and Rate GT
tariffs all indicate that "[c]hoice of voltage shall be at the option of the Company."

10

#### Q. HOW DOES CEI CHOOSE THE APPROPRIATE SERVICE VOLTAGE?

- A. In determining the appropriate delivery voltage, the Company evaluates each request on a
  case-by-case basis. The Company seeks to balance several factors:
- Load Characteristics and Power Requirements: A customer's load and power
   requirements may be beyond the levels that can be served from a secondary service
   voltage, which may require the Company to serve those customers at a primary voltage
   level or even a sub-transmission or transmission voltage level if the primary
   distribution system is also inadequate. In these cases, the customer is responsible for
   the costs and liability of operating its own transformation and electrical system
   connected at a higher voltage.
- Power Quality: A customer's load characteristics may necessitate that they be moved
   to a higher-voltage system where they are less likely to cause objectionable power
   quality impacts, such as flicker, to other customers.

5

- Impact to Reliability: As discussed further below, adding customers to the sub transmission and transmission systems is generally avoided due to the importance of
   providing reliable service to other customers.
- System Expansion: The Company evaluates whether the existing facilities, voltages
   and capacities in the area are adequate to serve the customer.
- Impact to Operations: The sub-transmission and transmission systems are complex
   systems, often with multiple sources. Additionally, these systems are operated at
   voltages that may not be safely worked while energized. This necessitates complex
   and time consuming switching operations to perform line work and to restore the
   system to its normal operating condition after work is complete.
- Based on these factors, the majority of CEI's non-residential customers are served at secondary voltage. In general, to protect system integrity and the reliability of service to all customers, the Company will recommend service from the lowest voltage level available to the site that meets the customer's needs, unless there is an engineering reason requiring connection to a higher voltage circuit. I will discuss these factors with respect to PCC Airfoils below.

### 17 Q. FROM AN ENGINEERING AND PLANNING PERSPECTIVE, WHY IS IT VITAL 18 THAT THE COMPANY CHOOSE THE DELIVERY VOLTAGE FOR EACH 19 CUSTOMER?

A. As I mentioned, in order to provide adequate, reliable and safe electric service to its
 customers, the Company must have the discretion to choose the appropriate delivery
 voltage for each customer. Adding customers to the sub-transmission and transmission
 systems is generally avoided because the additional facilities (poles, wires, transformers)

6

- increase the exposure of these systems. This increased exposure results in decreased
   reliability to the many customers ultimately served by these systems.
- 3

#### CEI'S 36 kV SYSTEM AND SERVICE TO PCC AIRFOILS

4

#### Q. DESCRIBE CEI'S 36 kV SUB-TRANSMISSION SYSTEM.

5 A. CEI's 36 kV sub-transmission system(s) are found throughout the bulk of the CEI service 6 territory with the exception of downtown Cleveland and southwest Cuyahoga County. 7 This system is typically a dual-circuit system. This means that the circuit pair is installed 8 on a dual-circuit wood-pole line allowing for planned and emergency maintenance on these 9 facilities. This is necessary because there must be an appropriate switching configuration 10 at each load point, or connection to the circuit pair, to allow the load to be served from 11 either of these two circuits. CEI's 36 kV sub-transmission system is critical to the operation 12 of the entire distribution system.

#### 13 Q. WHY IS THE 36 kV SUB-TRANSMISSION SYSTEM SO IMPORTANT?

14 The Company's transmission and sub-transmission circuits provide a critical backbone A. 15 function necessary to deliver reliable service to almost all distribution customers. A section 16 of the sub-transmission system can serve a dozen or more distribution substations, each 17 serving two to eight distribution circuits, and ultimately tens of thousands of customers. 18 Because the sub-transmission system impacts the reliability of so many customers, the 19 Company limits the extent and exposure of this system in order to maximize reliability for 20 all customers. Accordingly, the Company exercises appropriate caution when it evaluates 21 any customer's request to connect to the sub-transmission system, especially requests made 22 without a justifiable engineering reason. The evaluation criteria outlined above 23 appropriately considers the integrated nature of the transmission, sub-transmission and distribution systems and the corresponding effect connections to these systems have on all
 customers.

#### 3 Q. DESCRIBE THE CONFIGURATION OF PCC AIRFOILS' ELECTRIC SERVICE.

4 A. PCC Airfoils is a General Service-Secondary customer receiving service under Rate GS. 5 PCC Airfoils' electric service, at 29501 Clayton Ave, is comprised of four general-service secondary (GS) accounts. Three accounts are served from CEI facilities along Rockefeller 6 7 road (south-west of property), as follows: two three-phase services at 480-volt delta from 8 two separate CEI-owned mat-mounted 1500 kVA transformers (one transformer for each 9 service); and one single-phase service at 120/240 volts from a CEI-owned 167 kVA mat-10 mounted transformer. The remaining account is a three-phase service served at 480-volt 11 delta from a CEI owned 1500 kVA pad-mounted transformer located to the north-west of 12 the property. All four transformers are fed from the Company's L-2-LI-G 13.2/7.62 kV 13 distribution circuit.

### 14 Q. ARE THERE 36 kV FACILITIES WITH ADEQUATE CAPACITY ADJACENT 15 TO PCC AIRFOILS' PREMISES?

A. Yes. The 36kV facilities with adequate capacity located adjacent to PCC Airfoils'
 premises are the R-16-LY-G and R-17-LY-G circuits.

## 18 Q. IS THE FACT THAT THERE ARE 36kV FACILITIES WITH ADEQUATE 19 CAPACITY ADJACENT TO PCC AIRFOILS' PREMISES DETERMINATIVE 20 WITH RESPECT TO PCC AIRFOILS' REQUEST?

A. No. As discussed above, the choice of voltage is at the option of the Company. Due to the
 importance of the sub-transmission system, the Company must exercise appropriate

1		caution and evaluate the request in light of the factors outlined above, even if facilities with
2		adequate capacity adjacent to PCC Airfoils' premises are already present.
3	Q.	IS THE FACT THAT THERE ARE ALREADY CUSTOMERS ON CEI'S SUB-
4		TRANSMISSION SYSTEM DETERMINATIVE WITH RESPECT TO PCC
5		AIRFOILS'S REQUEST?
6	А.	No. The number of customers on CEI's sub-transmission system is not relevant to PCC
7		Airfoils' request. The reasons a customer may or may not be served from the sub-
8		transmission system can vary depending on the facts and circumstances at the time the
9		customer's delivery voltage was determined by CEI. As indicated above, each request is
10		evaluated on a case-by-case basis and is dependent on the facts and circumstances at the
11		time the request is made.
12		PCC AIRFOILS' REQUEST
13	Q.	DID PCC AIRFOILS GIVE ANY REASON FOR WANTING TO BE SWITCHED
14		FROM RATE GS TO RATE GSU?
15	А.	Yes. From reviewing correspondence and PCC Airfoils' discovery responses, it appears
16		the sole driver for the request was economic reasons.
17	Q.	WHAT DID CEI DO UPON RECEIVING THE REQUEST FROM PCC
18		AIRFOILS?
19	A.	CEI engineers reviewed the request and determined that there was no technical,
20		engineering, or reliability reasons to switch PCC Airfoils' delivery voltage from the
21		secondary to the sub-transmission system.

-

1.

9

### Q. WHAT DETERMINATION, IF ANY, WAS MADE BY CEI REGARDING PCC AIRFOILS' REQUEST FOR SUB-TRANSMISSION SERVICE?

3 Α. CEI determined that it was unnecessary to switch PCC Airfoils' delivery voltage to sub-4 transmission service as adequate capacity exists on the distribution system currently 5 serving PCC Airfoils under Rate GS. Regarding the factors described above, PCC Airfoils 6 was not increasing its load and its needs for power and quality continued to be sufficiently 7 met by its current service, as it has been for years. CEI determined that there was no 8 engineering reason to change PCC Airfoils' delivery voltage to the sub-transmission 9 system as such a change would unnecessarily add complexity and exposure to the 36 kV 10 sub-transmission system, potentially degrading the service reliability to other customers as 11 I discussed above.

#### 12 Q. WAS THIS DECISION COMMUNICATED TO PCC AIRFOILS?

13 A. Yes. Company records indicate that on August 17, 2016, Jennie Haldi, Account Manager, 14 CEI, communicated with Al Berger, Mike Capek (Facilities Manager, PCC Airfoils) and 15 others via e-mail. The e-mail stated that "after consulting with our Planning Engineers it 16 was determined that the existing load at PCC Airfoils, 29501 Clayton Ave, is adequately 17 served from the distribution circuit and a transfer to the sub-transmission circuit is not 18 warranted." Ms. Haldi did advise the customer that it has the option to switch to Rate GP 19 and provided the customer with specifications and requirements for the customer to make 20 such a switch.

1 **CONCLUSION** 2 Q. IN YOUR OPINION, WAS CEI REASONABLE IN ITS RESPONSE TO PCC 3 **AIRFOILS' REQUEST TO SWITCH IT SERVICE FROM GENERAL SERVICE-**4 SECONDARY TO SUB-TRANSMISSION? 5 Α. As I discussed in this testimony, the Company made prudent choices and Yes. 6 recommendations with regard to this customer's request. The Company's response was in 7 accordance with the Company's Commission approved tariffs. The customer's current 8 service is more than adequate to serve the customer's existing load and there is no proposed 9 load increase that would cause this situation to change. Further, the switch to sub-10 transmission service would increase the complexity and exposure of the 36 kV system, 11 contributing to a reduction in sub-transmission system reliability, and ultimately a 12 reduction in reliability to the many distribution customers also served by this system. 13 The Company also provided PCC Airfoils with the option to continue taking service from 14 its current circuit under Rate GP. This alternative would not increase the complexity and 15 exposure of the 36 kV sub-transmission system. 16 **Q**. **DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?** 17 A. Yes; however, I reserve my right to supplement my testimony.

76 South Main Street Akron, Ohio 44308

#### Dean E. Philips, P.E.

#### **BSEE from the University of Akron, 1982.**

Professional Engineer License, State of Ohio, September 1986.

#### Summary

Dean has been highly involved in all aspects of distribution engineering throughout the bulk of his career with Ohio Edison Company, The Cleveland Electric Illuminating Company, and FirstEnergy Service Company. Assignments have included: Distribution Practices; Distribution Standards, Specifications, and Materials; supervising field engineering; Regulatory Reporting; and Distribution Planning and Protection.

Dean is currently the FirstEnergy Service Company Manager of Distribution Planning and Protection with oversight over distribution planning, protection, distributed generation interconnections, power quality, automation, conservation voltage reduction; personal protective grounding assessments; and arc-flash hazard assessments.

#### Work History

#### FirstEnergy Service Company Energy Delivery Department, Distribution Planning and Protection <u>Manager, Distribution Planning and Protection</u> <u>April 10, 2011 - Present</u>

Major responsibilities include the management of the Company's Distribution Planning and Protection Group and direct participation on various high performance teams. This group serves as a technical resource for special projects and provides regional and corporate technical support with regard to a number of areas, including: distribution capital budget administration, distribution system planning, distribution protection, and distribution reliability; distributed generation interconnection; distribution automation; distribution system var support; interconnection of large customers; power quality; stray and contact voltage; engineering software; National Electrical Safety Code; and National Electrical Code interpretations and issues. Also, served as the Company program council representative for EPRI's Power Quality, Distribution, Distributed Generation, and Grid Resiliency Programs.

#### FirstEnergy Service Company Energy Delivery Department, Distribution Planning and Protection Supervisor, Distribution Protection and Power Quality Jan 6, 2008 – April 10, 2011

Major responsibilities included serving as a technical resource for a number of special projects and providing regional and corporate technical support with regard to a number of areas, including distribution system protection and reliability, distribution automation, power quality, stray voltage, engineering software, National Electrical Safety Code and National Electrical Code issues. Supervised the FirstEnergy team responsible for the distributed generation interconnection application process. Also, served as the Company program council representative for EPRI's Power Quality Program.

#### FirstEnergy Service Company Energy Delivery Department, Distribution Planning and Protection Senior Engineer Sept 30, 2007 – Jan 5, 2008

Major responsibilities included serving as a technical resource for a number of special projects and providing regional and corporate technical support with regard to a number of areas, including power quality, stray voltage, engineering software, National Electrical Safety Code and National Electrical Code issues. Also, served as the Company program council representative for EPRI's Power Quality Council.

Dean E. Philips, P.E.

#### **FirstEnergy Service Company Energy Delivery Department, Regulatory Reporting** Senior Engineer

Major responsibilities included the gathering and submitting of data and information in response to public commission data requests, reporting outage situations to the commissions, and assisting in the coordination of storm response. Other responsibilities included serving as a technical resource for a number of special projects and providing regional and corporate technical support with regard to a number of areas, including electrical code issues, power quality, reliability improvement reporting and plan development, and stray voltage.

#### **FirstEnergy Service Company IT Department, Business Unit Support - EMS Support IT/Consultant**

Major responsibility was system integration and support for the installation of a new Areva (Alstom) / ESCA Energy Management System (EMS), including focuses on system builds, source code management, database manipulation, ICCP coordination, technical support and communications support, Front-End Processors, Network Configuration, and system security and reliability. Responsibilities also included some ongoing support of an existing GEHarris EMS, being replaced.

#### **FirstEnergy Service Company IT Department, Business Unit Support - EMS Support Business Systems Manager**

Major responsibilities included: Managing and performing production support of the existing GEHarris Transmission/Distribution Energy Management System (see below). Coordination and support with Altsom/ESCA on an EMS replacement/upgrade project.

#### ATSI **Energy Management System (EMS) Support** (Adv.) Engineer

Major Responsibilities included: Managing and performing production support of the Transmission & Distribution EMS System, coordinating support with the system vendor and project support for the EMS replacement/upgrade project. This support included: implementing upgrades, enhancements, and changes to the system per the Customer's (Dispatching) request; recommending, justifying, & planning system enhancements & upgrades to meet the customer's expectations for system reliability & performance; Unix system & console hardware; operating systems, EMS software & configurations; and network infrastructure (routers, switches, firewalls, & VPN connections) associated with the EMS system and real-time data communications with external entities.

#### **Ohio Edison Company & The Cleveland Electric Illuminating Company Eastern Region Engineering Section** (Adv.) Engineer

Responsibilities included directing and supervising the new business and project engineering groups for the Eastern Region of FirstEnergy. This region encompasses approximately 2500 square miles, and includes the following major Ohio municipalities: Alliance, Ashtabula, Conneaut, Salem, Warren, and Youngstown and two Operating Companies - Ohio Edison and The Cleveland Electric Illuminating Company. Additional responsibilities included; managing the Region's distribution transformer stock and purchases; identifying and implementing cost savings opportunities in the new business process; interpreting Ohio Edison Company's and The Cleveland Electric Illuminating Company's filed rates to assure Regional compliance; resolving territorial boundary and PUCO complaints; coordinating & dispatching hazard responders during major storms; and training employees.

Feb 4, 2002 - Dec 25, 2004

Sept 1996 – Oct 2000

Oct 2000 - Feb 2002

Dec 26, 2004 – Mar 19, 2005

Dean E. Philips, P.E.

#### Ohio Edison Company Distribution Standards Section Distribution Design Engineer

Responsibilities included the specification, review, approval, and support of distribution line material for purchase and use by Ohio Edison Company, in accordance with corporate operating and construction philosophies, Company and union safety requirements, and Company and industry standards and codes. Support responsibilities included preparing and presenting training and informational material to Division Engineering and Line personnel. Major emphasis in the following products: distribution-line transformers, including single-phase pole-type, single-phase pad-mounted and three-phase pad-mounted units; wire and cable; URD splices, terminations, 200 ampere load-break connections, and 600 ampere dead-break connections; compression connectors; distribution switchgear; sectionalizers; reclosers; automated transfer switches; cutouts and fusing; and arresters. I also served as the Section computer support resource and liaison.

#### Ohio Edison Company Distribution Practices Department <u>Distribution Practices Engineer A</u>

Established and revised distribution operating practices and procedures, both as formal documents and as informal recommendations; coordinated the preparation, reporting, and monitoring of the distribution lines portion of the corporate construction budget and construction schedule; investigated neutral-to-earth voltage complaints; served as department computer support and liaison; coordinated Company construction activities associated with federal, state and local highway projects; and served as the Company O.E.U.I. Highway Subcommittee representative.

#### Ohio Edison Company Distribution Practices Department Distribution Practices Engineer B

Functioned as an engineering resource person for the operating divisions. Duties included: Establishing and revising distribution operating practices and procedures within Company & industry standards, practices & procedures as formal documents & as informal recommendations; coordinating division personal computer use; assisting divisions in the investigation & resolution of customer Neutral-to-Earth voltage complaints; and acting as a liaison between the division engineering sections and the General Office.

#### Ohio Edison Company Co-op Engineer

Thirty-six weeks of co-op experience in Ohio Edison Company's Marion Division, Transmission and Distribution Department, Engineering Section. Prepared distribution line work orders, performed load transfer calculations, located underground cables and secondary cable faults, and maintained various operating maps and records.

Eighteen weeks of experience in Ohio Edison Company's Systems Operations Department, Telecommunications Section. Prepared various microwave and telephone equipment rack drawings and interconnect tables, recommended method and frequencies for tone-encoded squelch for two-way FM truck radios, calculated microwave path losses and two-way radio coverage.

#### Sept 1986 - Sept 1996

#### <u>Dec 1984 – Sept 1986</u>

#### <u>June 1982 - Dec 1984</u>

Jan 1980 – Aug 1981 (various times)

#### 76 South Main Street Akron, Ohio 44308

.

#### Dean E. Philips, P.E.

1.

#### College, Summer, and Part-time Work Experience

College and summer work experience, other than co-op experience, included; dairy farm hired hand, new home construction and remodeling, drafting, college power lab assistant, security guard, retail sales, and computer consultant.

various

P.U.C.O. No. 13

Original Sheet 20

Page 1 of 3

#### GENERAL SERVICE - SECONDARY (RATE "GS")

#### AVAILABILITY:

Available to general service installations requiring Secondary Service. Secondary Service is defined in the Company's Electric Service Regulations. Choice of voltage shall be at the option of the Company.

#### SERVICE:

All service under this rate schedule will be served through one meter for each installation.

#### RATE:

All charges under this rate schedule shall be calculated as described below and charged on a monthly basis.

Distribution Charges:		
Service Charge:	\$7.00	
Capacity Charge:		
Up to 5 kW of billing demand	\$13.6800	
For each kW over 5 kW of billing demand	\$7.4790	
Reactive Demand Charge applicable to three phase customers only		
For each rkVA of reactive billing demand	\$0.36	

#### **BILLING DEMAND:**

The billing demand for the month shall be the greatest of:

- 1. Measured Demand, being the highest thirty (30) minute integrated kW
- 2. 5.0 kW
- 3. The Contract Demand

Measured Demand shall be estimated for all customers not having a demand meter and using over 1,000 kWh per month by applying a factor of 200 by the following formula: Measured Demand = kWh / 200.

#### **REACTIVE BILLING DEMAND:**

For installations metered with reactive energy metering, the reactive billing demand in rkVA for the month shall be determined by multiplying the Measured Demand by the ratio of the measured lagging reactive kilovoltampere hours to the measured kilowatthours by the following formula: rkVA = Measured Demand X (measured lagging reactive kilovoltampere hours  $\div$  measured kilowatthours). For all other installations, the reactive billing demand shall be the integrated reactive demand occurring coincident with the Measured Demand.

P.U.C.O. No. 13

#### **GENERAL SERVICE - SECONDARY (RATE "GS")**

#### CUSTOMER TARIFF OPTION:

A customer qualifying for service under Rate GS may take distribution service under the terms and conditions of Rate GSU (including the Transformer Charge) if the transformer that directly serves such customer is: 1) located in the immediate vicinity; 2) is owned by the Company; and 3) has been directly fed by a Subtransmission voltage line since May 8, 2007.

#### APPLICABLE RIDERS:

The charges included with the applicable riders as designated on the Summary Rider, Tariff Sheet 80 shall be added to the Rates and charges set forth above.

#### ADJUSTMENT FOR PRIMARY METERING:

Where a transformer installation (regardless of ownership) is utilized solely to furnish service to a single customer, the Company may meter the service on the primary side of the transformers, and in such case all the demand and energy registrations shall each be reduced 2%.

#### SPECIAL METERS:

Time-Of-Day and Interval Metering is available from the Company. Charges for such service are specified in the Miscellaneous Charges, Tariff Sheet 75.

#### **UNMETERED SERVICE:**

Unmetered service is available to customers with loads of constant wattage such that the monthly use may be calculated accurately and where the Company and the customer agree to unmetered service. The Billing Load shall be the connected load in kilowatts. The monthly billing kilowatt-hours shall be the product of Hours of Use times connected load. Hours of Use shall be 730 hours for continuous operation mode and 350 hours for all other operation modes.

The customer shall notify the Company of the initial connected load and operation mode and shall provide advance notice of each subsequent change in such load or operation mode. The Company may make an inspection of the customer's equipment at any time to verify connected loads and operation mode. In the event of the customer's failure to notify the Company of an increase in load, the Company reserves the right to refuse to provide unmetered service at the delivery point thereafter and adjust prior billing amounts accordingly to reflect the increases in load.

#### DUPLICATE CIRCUIT SERVICE:

When service is furnished to provide redundancy to the Company's main service as requested by the customer, a contract demand shall be established by mutual agreement and shall be specified in the service contract. Such installations shall be considered a Premium Installation and shall be a separate account from the customer's main service.

P.U.C.O. No. 13

#### **GENERAL SERVICE - SECONDARY (RATE "GS")**

#### ELECTRIC SERVICE REGULATIONS:

The Company's Electric Service Regulations shall apply to the installation and use of electric service.

#### CONTRACT:

Electric service hereunder shall be furnished in accordance with a written contract, at the Company's discretion, which by its term shall be in full force and effect for a minimum period of one year and shall continue in force thereafter from year to year unless either party shall give to the other not less than 60 days notice in writing prior to the expiration date of any said yearly periods that the contract shall be terminated at the expiration date of said yearly period. When a contract is terminated in the manner provided herein, the service will be discontinued.

The Contract Demand shall be specified in the contract for electric service of customers establishing service after April 30, 2009 and of customers requiring or requesting a significant change in service. The Contract Demand shall be 60% of the customer's expected, typical monthly peak load. Customers with a Contract Demand on April 30, 2009 will remain at that existing Contract Demand level, until such time as they reestablish service or request or require a significant change in service. The Contract Demand based on actual usage upon customer request, no more than once per 12 month period.

If the Customer's capacity or service requirements increase, the Company, at its sole and exclusive judgement, may at any time require the Customer to enter into a new contract for electric service.
# **GENERAL SERVICE - PRIMARY (RATE "GP")**

## AVAILABILITY:

Available to general service installations requiring Primary Service. Primary Service is defined in the Company's Electric Service Regulations. Choice of voltage shall be at the option of the Company.

## SERVICE:

All service under this rate schedule will be served through one meter for each installation.

The customer will be responsible for all transforming, controlling, regulating and protective equipment and its operation and maintenance.

# RATE:

All charges under this rate schedule shall be applied as described below and charged on a monthly basis.

Distribution Charges:	
Service Charge:	\$150.00
Capacity Charge:	
For each kW of billing demand	\$2.4050
Reactive Demand Charge applicable to three phase customers only	
For each rkVA of reactive billing demand	\$0.36

## BILLING DEMAND:

The billing demand for the month shall be the greatest of:

- 1. Measured Demand, being the highest thirty (30) minute integrated kW
- 2. 30.0 kW
- 3. The Contract Demand

## **REACTIVE BILLING DEMAND:**

For installations metered with reactive energy metering, the reactive billing demand in rkVA for the month shall be determined by multiplying the Measured Demand by the ratio of the measured lagging reactive kilovoltampere hours to the measured kilowatthours by the following formula: rkVA = Measured Demand X (measured lagging reactive kilovoltampere hours + measured kilowatthours). For all other installations, the reactive billing demand shall be the integrated reactive demand occurring coincident with the Measured Demand.

P.U.C.O. No. 13

# GENERAL SERVICE - PRIMARY (RATE "GP")

## CUSTOMER TARIFF OPTION:

A customer qualifying for service under Rate GP may take distribution service under the terms and conditions of Rate GSU (including the Transformer Charge) if the transformer that directly serves such customer is: 1) located in the immediate vicinity; 2) is owned by the Company; and 3) has been directly fed by a Subtransmission voltage line since May 8, 2007.

A customer qualifying for service under Rate GP may take distribution service under the terms and conditions of Rate GT (including the Transformer Charge) if the transformer that directly serves such customer is: 1) located in the immediate vicinity; 2) is owned by the Company; and 3) has been directly fed by a Transmission voltage line since May 8, 2007.

## APPLICABLE RIDERS:

The charges included with the applicable riders as designated on the Summary Rider, Tariff Sheet 80 shall be added to the Rates and charges set forth above.

# ADJUSTMENT FOR SECONDARY METERING:

The Company reserves the right to install the metering equipment on either the primary or secondary side of the transformers serving the customer, and when installed on the secondary side, at the Company's option, the Company shall correct for transformer losses by one of the two following methods: 1.) by using compensating-metering equipment or 2.) by increasing all demand and energy registrations by 2% each.

## SPECIAL METERS:

Time-Of-Day and Interval Metering is available from the Company. Charges for such service are specified in the Miscellaneous Charges, Tariff Sheet 75.

## DUPLICATE CIRCUIT SERVICE:

When service is furnished to provide redundancy to the Company's main service as requested by the customer, a contract demand shall be established by mutual agreement and shall be specified in the service contract. Such installations shall be considered a Premium Installation and shall be a separate account from the customer's main service.

## ELECTRIC SERVICE REGULATIONS:

The Company's Electric Service Regulations shall apply to the installation and use of electric service.

P.U.C.O. No. 13

# GENERAL SERVICE - PRIMARY (RATE "GP")

# CONTRACT:

Electric service hereunder shall be furnished in accordance with a written contract, which by its term shall be in full force and effect for a minimum period of two years and shall continue in force thereafter from year to year unless either party shall give to the other not less than 60 days notice in writing prior to the expiration date of any said yearly periods that the contract shall be terminated at the expiration date of said yearly period. When a contract is terminated in the manner provided herein, the service will be discontinued.

The Contract Demand shall be specified in the contract for electric service of customers establishing service after April 30, 2009 and of customers requiring or requesting a significant change in service. The Contract Demand shall be 60% of the customer's expected, typical monthly peak load. Customers with a Contract Demand on April 30, 2009 will remain at that existing Contract Demand level, until such time as they reestablish service or request or require a significant change in service. The Contract Demand based on actual usage upon customer request, no more than once per 12 month period.

If the Customer's capacity or service requirements increase, the Company, at its sole and exclusive judgement, may at any time require the Customer to enter into a new contract for electric service.

#### P.U.C.O. No. 13

# **GENERAL SERVICE - SUBTRANSMISSION (RATE "GSU")**

## AVAILABILITY:

Available to general service installations requiring Subtransmission Service. Subtransmission Service is defined in the Company's Electric Service Regulations. Choice of voltage shall be at the option of the Company.

A customer qualifying for service under Rate GS may take distribution service under the terms and conditions of Rate GSU (including the Transformer Charge) if the transformer that directly serves such customer is: 1) located in the immediate vicinity; 2) is owned by the Company; and 3) has been directly fed by a Subtransmission voltage line since May 8, 2007.

A customer qualifying for service under Rate GP may take distribution service under the terms and conditions of Rate GSU (including the Transformer Charge) if the transformer that directly serves such customer is: 1) located in the immediate vicinity; 2) is owned by the Company; and 3) has been directly fed by a Subtransmission voltage line since May 8, 2007.

# SERVICE:

All service under this rate schedule will be served through one meter for each installation.

The customer will be responsible for all transforming, controlling, regulating and protective equipment and its operation and maintenance unless the Transformer Charge applies to the customer.

The Transformer Charge is applicable to a customer premise with existing transformation in the immediate vicinity having been provided by the Company for the customer's use since May 8, 2007, in addition to all other applicable tariff charges.

If an increase in capacity of existing transformation owned by the Company is necessary or if the customer requires a change in service voltage on or after January 1, 2009, all necessary transforming, controlling, regulating and protective equipment shall be provided by the customer.

# RATE:

All charges under this rate schedule shall be calculated as described below and charged on a monthly basis.

Distribution Charges:		
Service Charge:	\$180.00	
Capacity Charge:	<b>#0.0740</b>	
For Each KW of billing demand	\$0.9718	
Reactive Demand Charge applicable to three phase customers only		
For each rkVA of reactive billing demand	\$0.36	

The Cleveland Electric Illuminating Company

Cleveland, Ohio

P.U.C.O. No. 13

## **GENERAL SERVICE - SUBTRANSMISSION (RATE "GSU")**

#### BILLING DEMAND:

The billing demand for the month shall be the greatest of:

- 1. Measured Demand, being the highest thirty (30) minute integrated kW
- 2. 30.0 kW
- 3. The Contract Demand

# **REACTIVE BILLING DEMAND:**

For installations metered with reactive energy metering, the reactive billing demand in rkVA for the month shall be determined by multiplying the Measured Demand by the ratio of the measured lagging reactive kilovoltampere hours to the measured kilowatthours by the following formula: rkVA = Measured Demand X (measured lagging reactive kilovoltampere hours ÷ measured kilowatthours). For all other installations, the reactive billing demand shall be the integrated reactive demand occurring coincident with the Measured Demand.

## TRANSFORMER CHARGE:

A monthly Transformer Charge of 54 cents per kW of Measured Demand shall be charged for existing transformation, and the Company will continue to own, operate and maintain all such necessary transforming, controlling, regulating and protective equipment.

## **APPLICABLE RIDERS:**

The charges included with the applicable riders as designated on the Summary Rider, Tariff Sheet 80 shall be added to the Rates and charges set forth above.

## ADJUSTMENT FOR SECONDARY METERING:

The Company reserves the right to install the metering equipment on either the primary or secondary side of the transformers serving the customer, and when installed on the secondary side, at the Company's option, the Company shall correct for transformer losses by one of the two following methods: 1.) by using compensating-metering equipment or 2.) by increasing all demand and energy registrations by 2% each.

## SPECIAL METERS:

Time-Of-Day and Interval Metering is available from the Company. Charges for such service are specified in the Miscellaneous Charges, Tariff Sheet 75.

# **GENERAL SERVICE - SUBTRANSMISSION (RATE "GSU")**

## DUPLICATE CIRCUIT SERVICE:

When service is furnished to provide redundancy to the Company's main service as requested by the customer, a contract demand shall be established by mutual agreement and shall be specified in the service contract. Such installations shall be considered a Premium Installation and shall be a separate account from the customer's main service.

#### ELECTRIC SERVICE REGULATIONS:

The Company's Electric Service Regulations shall apply to the installation and use of electric service. The Company's general policy of supplying regulated voltages does not apply to this rate schedule.

## CONTRACT:

Electric service hereunder shall be furnished in accordance with a written contract, which by its term shall be in full force and effect for a minimum period of two years and shall continue in force thereafter from year to year unless either party shall give to the other not less than 60 days notice in writing prior to the expiration date of any said yearly periods that the contract shall be terminated at the expiration date of said yearly period. When a contract is terminated in the manner provided herein, the service will be discontinued.

The Contract Demand shall be specified in the contract for electric service of customers establishing service after April 30, 2009 and of customers requiring or requesting a significant change in service. The Contract Demand shall be 60% of the customer's expected, typical monthly peak load. Customers with a Contract Demand on April 30, 2009 will remain at that existing Contract Demand level, until such time as they reestablish service or request or require a significant change in service. The Contract Demand based on actual usage upon customer request, no more than once per 12 month period.

If the Customer's capacity or service requirements increase, the Company, at its sole and exclusive judgement, may at any time require the customer to enter into a new contract for electric service.

P.U.C.O. No. 13

## **GENERAL SERVICE - TRANSMISSION (RATE "GT")**

## AVAILABILITY:

Available to general service installations requiring Transmission Service. Transmission Service is defined in the Company's Electric Service Regulations. Choice of voltage shall be at the option of the Company.

A customer qualifying for service under Rate GP may take distribution service under the terms and conditions of Rate GT (including the Transformer Charge) if the transformer that directly serves such customer is: 1) located in the immediate vicinity; 2) is owned by the Company; and 3) has been directly fed by a Transmission voltage line since May 8, 2007.

#### SERVICE:

All service under this rate schedule will be served through one meter for each installation.

The customer will be responsible for all transforming, controlling, regulating and protective equipment and its operation and maintenance unless the Transformer Charge applies to the customer.

The Transformer Charge is applicable to a customer premise with existing transformation having been provided by the Company, including leased equipment, for the customer's exclusive use since May 8, 2007, in addition to all other applicable tariff charges.

If an increase in capacity of existing transformation owned by the Company is necessary or if the customer requires a change in service voltage on or after January 1, 2009, all necessary transforming, controlling, regulating and protective equipment shall be provided by the customer.

## RATE:

All charges under this rate schedule shall be calculated as described below and charged on a monthly basis.

Distribution Charges:	
Service Charge:	\$320.00
Capacity Charge:	
For Each kVA of billing demand	\$0.0010

#### **BILLING DEMAND:**

The billing demand for the month shall be the greatest of:

- 1. Measured Demand, being the highest thirty (30) minute integrated kVA.
- 2. 100.0 kVA
- 3. The Contract Demand

# **GENERAL SERVICE - TRANSMISSION (RATE "GT")**

# TRANSFORMER CHARGE:

A monthly Transformer Charge of 26 cents per kVA of Measured Demand shall be charged for existing transformation, and the Company will continue to own, operate and maintain all such necessary transforming, controlling, regulating and protective equipment. Any equipment costs incurred by the Company necessary to maintain or update such substation facilities shall be paid in full by the customer before such equipment is installed.

# APPLICABLE RIDERS:

The charges included with the applicable riders as designated on the Summary Rider, Tariff Sheet 80 shall be added to the Rates and charges set forth above.

# ADJUSTMENT FOR SECONDARY METERING:

The Company reserves the right to install the metering equipment on either the primary or secondary side of the transformers serving the customer, and when installed on the secondary side, at the Company's option, the Company shall correct for transformer losses by one of the two following methods: 1.) by using compensating-metering equipment or 2.) by increasing all demand and energy registrations by 2% each.

# SPECIAL METERS:

Time-Of-Day and Interval Metering is available from the Company. Charges for such service are specified in the Miscellaneous Charges, Tariff Sheet 75.

# ELECTRIC SERVICE REGULATIONS:

The Company's Electric Service Regulations shall apply to the installation and use of electric service. The Company's general policy of supplying regulated voltages does not apply to this rate schedule.

## CONTRACT:

Electric service hereunder shall be furnished in accordance with a written contract, which by its term shall be in full force and effect for a minimum period of one year and shall continue in force thereafter from year to year unless either party shall give to the other not less than 60 days notice in writing prior to the expiration date of any said yearly periods that the contract shall be terminated at the expiration date of said yearly period. When a contract is terminated in the manner provided herein, the service will be discontinued.

The Contract Demand shall be specified in the contract for electric service of customers establishing service after April 30, 2009 and of customers requiring or requesting a significant change in service. The Contract Demand shall be 60% of the customer's expected, typical monthly peak load. Customers with a Contract Demand on April 30, 2009 will remain at that existing Contract Demand level, until such time as they reestablish service or request or require a significant change in service. The Contract Demand based on actual usage upon customer request, no more than once per 12 month period.

.

# **GENERAL SERVICE - TRANSMISSION (RATE "GT")**

If the customer's capacity or service requirements increase, the Company, at its sole and exclusive judgement, may at any time require the customer to enter into a new contract for electric service.