

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

RESIDENTIAL SERVICE RATE

Applicable to gas service to all residential customers as defined in Section I.H. of Company's Rules and Regulations. As indicated in Section IX., Resale of Service of Company's Rules and Regulations, this service may not be resold.

1. Monthly Customer and Volumetric Meter Reading Rates.

Customer Charge	\$17.00 per month
Delivery Charge	31.73¢ per Ccf

2. Minimum Monthly Charge. The Customer Charge.

3. Purchased Gas Adjustment. Applicable to all metered and/or billed Ccf, pursuant to the provisions of Rider A - Purchased Gas Adjustment Clause.

4. Yard Light Service. Any customer with an unmetered gas yard light will have 18 Ccf per month of gas added per light to each month's metered Ccf usage, for billing purposes. This unmetered yard light service is one of limited application. No new such unmetered service will be offered after February 18, 1998.

5. Seasonal Use. This schedule is a continuous service schedule. If service is disconnected at the request of the customer, and thereafter restored at the same location for the same occupant(s) within a six (6) month period following the date of the service disconnection, a reconnection charge will become due and payable when service is restored. The charge shall be computed by multiplying the Customer Charge by the number of months and fractions of months that service is disconnected, plus the Reconnection Charge as indicated in Section D. Miscellaneous Charges, Sheet No. 19. Customer shall not be billed the Customer Charge portion of Seasonal Use charge where a successor account for a Customer has been established at the premises during the interim period; however, the Reconnection Charge shall be applicable unless the premises was not subject to disconnection and reconnection during the entire interim period.

6. Payments. Bills will be rendered at monthly intervals, are due and payable within ten (10) days from their date of rendition and become delinquent after twenty-one (21) days from their date of rendition. The date of rendition is the date of mailing by the Company. Late payment charges shall be determined pursuant to Section VIII.F. of Company's Rules and Regulations.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

RESIDENTIAL SERVICE RATE (Con't.)

7. Term of Contract. Gas service will be provided under this rate for a period of not less than one year.
8. Tax Adjustment. Any license, franchise, gross receipts, occupation or similar charge or tax levied by any taxing authority on the amounts billed hereunder will be so designated and added as a separate item to bills rendered to customers under the jurisdiction of the taxing authority.
9. Rules and Regulations. Service will be rendered in accordance with the Company's Rules and Regulations for Gas Service on file with the Missouri Public Service Commission.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

GENERAL SERVICE RATE

Applicable to gas service to non-residential customers. As indicated in Section IX., Resale of Service of Company's Rules and Regulations, this service may not be resold.

1. Monthly Customer and Volumetric Meter Reading Rates.

Customer Charge	\$ 32.50	per month
Delivery Charge		
First 7,000 Ccf	33.10¢	Per Ccf
Over 7,000 Ccf	21.92¢	Per Ccf

2. Minimum Monthly Charge. The Customer Charge.

3. Purchased Gas Adjustment.

Applicable to all metered and/or billed Ccf, pursuant to the provisions of the Rider A - Purchased Gas Adjustment Clause.

4. Payments.

Bills will be rendered at monthly intervals and are due and payable within ten (10) days from their date of mailing and become delinquent after twenty-one (21) days from their date of mailing. Pursuant to Section VIII.F. of Company's Rules and Regulations, any portion of any bill, other than deposit arrears, remaining unpaid after the delinquent date will have a late payment charge added thereto.

5. Term of Contract.

Gas service will be provided under this rate for a period of not less than one year.

6. Tax Adjustment.

Any license, franchise, gross receipts, occupation or similar charge or tax levied by any taxing authority on the amounts billed hereunder will be so designated and added as a separate item to bills rendered to customers under the jurisdiction of the taxing authority.

7. Rules and Regulations.

Service will be rendered in accordance with the Company's Rules and Regulations for Gas Service on file with the Missouri Public Service Commission.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

INTERRUPTIBLE SERVICE RATE WITH AN ASSURANCE GAS OPTION

1. Availability.

Whenever, in Company's sole judgment, gas is available for interruptible service, Company will make such service available to any qualified non-residential customer. To qualify, customer shall either provide adequate standby facilities and fuel for its use during periods when gas service is interrupted or shall give Company satisfactory evidence of its ability and willingness to curtail or cease operations during interruption. Gas service under other rates cannot be used for the same process, facility or equipment served under this rate. As indicated in Section IX. Resale of Service of Company's Rules and Regulations, this service may not be resold.

2. Character of Service.

All gas delivery under this rate will be subject to interruption under Section 9. hereof and all gas consumed by customer during periods of non-interruption will be billed at the Interruptible Gas Delivery Charge, except for Assurance volumes as provided below. As a part of the contract for interruptible service, customer may request the Company to provide a specified daily quantity of firm sales gas to be available during periods of interruption, to be categorized as Assurance Gas and billed by Company at the Interruptible Gas Delivery Charge plus the Assurance Gas Surcharge and the firm Purchased Gas Adjustment (PGA) factor rate. For billing purposes Assurance Gas volumes shall be considered the first through the meter. Customer will be required to contract with Company, by June 1 of the initial contract year, for the daily quantity of Assurance Gas desired. Customer must notify Company of any changes in such Assurance Gas Level by June 1 of subsequent contract extension years. All other gas consumed by customer during any period of interruption shall be considered and billed by Company as Unauthorized Gas.

3. Monthly Customer and Volumetric Meter Reading Rates.

Customer Charge:	\$319.00	per month
Interruptible Gas Delivery Charge:		
First 7,000 Ccf	33.10¢	Per Ccf
Over 7,000 Ccf	19.13¢	Per Ccf
Assurance Gas Surcharge:		
First 250 Ccf per day	1.17¢	Per Ccf
All Over 250 Ccf per day	1.63¢	Per Ccf

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to _____ MISSOURI SERVICE AREA _____

INTERRUPTIBLE SERVICE RATE WITH AN ASSURANCE GAS OPTION

Unauthorized Gas Use Charge:

All volumes of natural gas taken by a customer in excess of the level of contracted daily Assurance Gas, during any period of curtailment called by the Company, is "unauthorized use" and will be assessed "Unauthorized Gas Use Charges". This charge shall be applicable to customers that are impacted by Critical Day and/or curtailment provisions. Company will provide customer no less than two (2) hours advance notification before assessing Unauthorized Gas Use Charges. Unauthorized Gas Use Charges shall be billed as follows:

Unauthorized Gas Use Charges:

- 1) \$6.00 (six dollars) for each Ccf of unauthorized use, plus
- 2) 150% (one hundred fifty percent) of the highest cost of gas purchased by the Company during the Unauthorized Gas Use Charge period (period of interruption), plus
- 3) all intrastate and/or interstate pipeline penalties and other charges incurred by the Company which are attributable to a customer's unauthorized use.

All intrastate and interstate pipeline penalties and other charges shall be attributed and assigned to the unauthorized gas used by the specific Interruptible Service customer.

All Unauthorized Gas Use Charge revenues billed to customers will be considered as gas cost recovery and will be used in the development of the Actual Cost Adjustment (ACA) factor of the Company's Purchased Gas Adjustment (PGA) Clause.

4. Minimum Monthly Charge. The Customer Charge.

5. Purchased Gas Adjustment.

Applicable to all metered and/or billed Ccf, pursuant to the provisions of Rider A - PGA Clause. The difference between the Interruptible Sales Total PGA factor and the Firm Sales Total PGA factor of Rider A shall apply to the monthly billed Assurance Gas Ccf. The Interruptible Sales Total PGA factor of Rider A shall apply to all of the monthly billed Ccf.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

INTERRUPTIBLE SERVICE RATE WITH AN ASSURANCE GAS OPTION

6. Payments.

Bills will be rendered at monthly intervals and are due and payable within ten (10) days from their date of mailing and become delinquent after twenty-one (21) days from their date of mailing. Pursuant to Section VIII.F. of Company's Rules and Regulations, any portion of any bill, other than deposit arrears, remaining unpaid after the delinquent date will have a late payment charge added thereto.

7. Term of Contract.

Gas will be provided under this rate for a term of not less than one (1) year. Said term shall continue on a year-to-year basis thereafter unless cancelled by either customer or Company in writing at least sixty (60) days prior to contract termination.

8. Tax Adjustment.

Any license, franchise, gross receipts, occupation or similar charge or tax levied by any taxing authority on the amounts billed hereunder will be so designated and added as a separate item to bills rendered to customers under the jurisdiction of the taxing authority.

9. Rate Application.

Gas delivery under this rate shall be interrupted when in the Company's sole judgment it is necessary to limit the Company's system sendout or when the gas supply is limited by other system operating restrictions. Any interruption of service will be performed in accordance with the Curtailment of Service Schedule contained in the Company's Rules and Regulations.

Assurance Gas will be billed by Company during all months of the year as the first gas through the meter up to the Assurance Gas level. All additional gas consumed each day shall be considered as Interruptible Gas during non-interruptible periods and as Unauthorized Gas during periods of interruption.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

INTERRUPTIBLE SERVICE RATE WITH AN ASSURANCE GAS OPTION

10. Rules and Regulations. Service will be rendered in accordance with the Company's Rules and Regulations for Gas Service on file with the Missouri Public Service Commission.
11. Critical Day
- A. Critical Day Declaration
A Critical Day may be declared by the Company for a specific area or the Company's entire gas system whenever, in the Company's sole judgment, one of the following conditions occurs or is anticipated to occur:
1. Company experiences failure of transmission, distribution, or gas storage facilities
 2. Transmission or distribution system pressures or other unusual conditions that may jeopardize the operation of Company's gas system
 3. Company's transportation, storage, or supply resources are being used at or near their maximum rated, tariff, or contractual limits
 4. Any of Company's transporters or suppliers declares the functional equivalent of a Critical Day or force majeure conditions.
- B. Unauthorized Use Related to Critical Days
Unauthorized Use Related to Critical Days shall mean the unauthorized use of Company-supplied gas on a critical day. If such unauthorized use of gas occurs, the Company shall charge the customer, and the customer shall pay a penalty for all unauthorized use as set forth in Section 3 herein.
12. Discontinuation of Service
Regardless of the assessment of the aforementioned Unauthorized Gas Use Charge, the Company retains the right to terminate such unauthorized use by disconnecting the customer's service if necessary, including any Assurance Gas, to protect the reliability of service to other customers.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

NATURAL GAS TRANSPORTATION SERVICE

1. Availability

This service schedule is available: 1) to all non-residential customers on a per meter basis and 2) to the premises of "Eligible School Entities," which are the eligible school entities as defined in Section 393.310 RSMo, 3) to the premises of eligible school entities as defined in Section 393.310 RSMo which were on sales service during the immediately preceding twelve (12) months ("New Eligible School Entities"). Such service is applicable to individual customers that can individually secure and arrange for the delivery of sufficient supplies of natural gas to the Company's designated city gate and to the Eligible School Entities and New Eligible School Entities that can do so through aggregate contracts negotiated by and through a not-for-profit school association. The Company will not provide this service to any customer who uses such gas primarily to heat premises that provides temporary or permanent living quarters for individuals, unless the customer demonstrates to the Company that it has contracted for primary firm capacity with the upstream supplying intrastate and/or interstate pipelines to meet the customer's peak needs, or unless the customer demonstrates to the Company that the customer has adequate and usable alternative fuel facilities to meet the customer's energy needs.

The "transportation customer" shall be responsible for the purchase and transportation of its gas needs to the Company's city gate which serves such customer.

The Company shall not sell gas to any of its transportation customers except as specifically provided for in this service classification.

2. Monthly Customer, EGM and Volumetric Meter Reading Rates(4)

	<u>Standard Transportation(1)</u>	<u>Large Volume Transportation(2)</u>
Customer Charge:	\$32.50	\$1,651.00 per month
Electronic Gas Meter (EGM) Charges(3):		
Administrative Charge:	\$45.96	\$45.96 per month
Meter Equipment Charge:	Section G. Misc Charges Sheet No. 20.1, as applicable.	
Transportation Charge:		
First 7,000 Ccf	33.10¢ per Ccf	33.10¢ per Ccf
All Over 7,000 Ccf	13.98¢ per Ccf	14.77¢ per Ccf
Aggregation and Balancing Charge:		
Eligible School Entities and New Eligible School Entities Only	0.47¢ per Ccf	0.47¢ per Ccf

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

NATURAL GAS TRANSPORTATION SERVICE

- (1) A customer, at the date of its contract, whose annual transportation requirements are expected to be 600,000 Ccf or less.
- (2) A customer, at the date of its contract, whose annual transportation requirements are expected to be greater than 600,000 Ccf.
- (3) Not applicable, to the individual meters of Eligible School Entities, and New Eligible School Entities as defined in paragraph 1. above, using less than one hundred thousand Ccfs annually.
- (4) In addition to the charges contained herein all Eligible School Entities and New Eligible School Entities shall pay all costs necessary to ensure that the Company, its other customers and local taxing authorities will not have or incur any negative financial impact as a result of the natural gas aggregation program established by Section 393.310, RSMo.

Authorized Gas Use Charge:

All Ccf of Company-owned gas consumed by customer with authorization from Company during periods of non-interruption of any sales service will be billed at the applicable service area's firm sales service Purchased Gas Adjustment (PGA) factor plus 40%. The payment of the Authorized Gas Use Charge will be in addition to the above Customer, EGM and Transportation Charges. Company will not actively market the sale of Company-owned gas to transportation customers and will sell such gas only in response to the transportation customer's request. Authorized Use gas shall not be available to a transportation customer for more than twenty (20) days out of any calendar month.

Unauthorized Gas Use Charge:

All Ccf of Company-owned gas consumed by customer without authorization from Company, will be billed at the "Unauthorized Gas Use Charge". This charge shall be applicable to customers that are impacted by Critical Day and/or curtailment provisions. Company will provide Customer no less than two (2) hours advance notification before assessing Unauthorized Gas Use Charges. The payment of the Unauthorized Gas Use Charge will be in addition to all other charges specified in this rate. Regardless of the assessment of the Unauthorized Gas Use Charge, the Company retains the right to terminate such unauthorized use by disconnecting the customer's service if necessary to protect the reliability of service to other customers. Unauthorized Gas Use Charges shall be billed as follows:

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to _____ MISSOURI SERVICE AREA _____

NATURAL GAS TRANSPORTATION SERVICE

Unauthorized Gas Use Charge:

- 1) \$6.00 (six dollars) for each Ccf of unauthorized use, plus
- 2) 150% (one hundred fifty percent) of the highest cost of gas purchased by the Company during the Unauthorized Gas Use Charge Period, plus
- 3) all intrastate and/or interstate pipeline penalties and other charges incurred by the Company which are attributable to a customer's unauthorized use.

All intrastate and interstate pipeline penalties and other charges shall be attributed and assigned to the unauthorized gas used by the specific transportation customer.

All Unauthorized Gas Use Charge revenues billed to customers will be considered as gas cost recovery and will be used in the development of the Actual Cost Adjustment (ACA) factor of the Company's Purchased Gas Adjustment (PGA) Clause.

3. Minimum Monthly Charge

The Customer Charge, EGM Administrative Charge and, as applicable, the EGM Meter Equipment Charge.

4. Purchased Gas Adjustment

All customers receiving transportation service will be subject to the provisions of the Company's PGA clause, Rider A. The ACA component of the Company's PGA clause shall be applicable to New Eligible School Entities for the first twelve (12) months of their participation in the gas aggregation program.

5. Payments

Bills will be rendered at monthly intervals and are due and payable within ten (10) days from their date of mailing and become delinquent after twenty-one (21) days from their date of mailing. Pursuant to Section VIII.F. of Company's Rules and Regulations, any portion of any bill, other than deposit arrears, remaining unpaid after the delinquent date will have a late payment charge added thereto.

6. Term of Contract

Service hereunder shall be for a minimum period of one (1) year.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

NATURAL GAS TRANSPORTATION SERVICE

7. Tax Adjustment

Any license, franchise, gross receipts, occupation or similar charge or tax levied by any taxing authority on the amounts billed hereunder will be so designated and added as a separate item to bills rendered to the customers under the jurisdiction of the taxing authority. For New Eligible School Entities participating in aggregate purchasing contracts, all applicable taxes shall be computed based on billed revenues determined under paragraph 2. above. Additional applicable taxes shall also be levied and computed based upon the total actual gas supply and capacity release costs incurred on behalf of each of the accounts within the group of individual New Eligible School Entities. Such additional taxes applicable to the latter accounts will be paid each month directly to the appropriate taxing authority by each school or by the school's agent.

8. Terms and Conditions

- A. Transportation service under this schedule will be made available to customers upon request when the Company has sufficient distribution capacity to supply such service. If the Company determines that it does not have sufficient distribution capacity to provide the requested service it will, within 30 days of receiving a request for transportation service, provide to the customer requesting said service a written explanation of its capacity determination including a preliminary indication of changes to facilities necessary to effectuate such service, approximate cost to customer and time required to provide the requested service.
- B. Service under this schedule shall require execution of a Gas Transportation Service Contract ("Contract") between the Company and the customer requesting transportation service in a form similar to that contained in Section 11 below.
- C. Service will be provided only after requisite contracts and authority have been obtained by the customer to transport gas to the Company's facilities. Eligible School Entities or New Eligible School Entities participating in the school natural gas aggregation program must make a written request for pipeline capacity release to the Company on or before close of business May 31, to be effective July 1, of each year, except where said entities have switched from Standard Transportation Service. The Company will release its firm interstate pipeline transportation capacity, at its actual capacity cost, from the applicable interstate pipeline directly to the school or to the agent acting on behalf of the school for this program. Such release will be for a minimum term of one year and will be performed in accordance with the capacity release procedures and policies contained in the applicable interstate pipeline's Federal Energy Regulatory Commission approved tariff. Such release will be provided on a recallable basis, but the Company will not recall such capacity unless requested by the school or by the school's agent.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

NATURAL GAS TRANSPORTATION SERVICE

- D. All volumes of gas transported hereunder shall be of compatible pipeline quality
- E. Gas delivered under this schedule shall not be resold by the customer.
- F. Except as otherwise provided herein, gas transported for all current and future customers hereunder shall be metered by an electronic recording device with remote monitoring features for the recording of the customer's daily gas usage and real time flow data. The Company will install and the customer will pay for said meter at the monthly charge indicated in Section G. Miscellaneous Charges, Sheet No. 20.1. In addition, the customer shall arrange and pay for the installation and monthly costs of a commercial telephone line and 120 volt AC electrical power source, at a location designated by the Company, to facilitate the remote interrogation of the electronic recording meter by the Company.
- G. In addition to collection of the rates and charges provided for in Section 2. above, the Company shall retain two percent (2%) of the quantities of natural gas received from the customer for reimbursement in kind from the customer for shrinkage or line losses.
- H. Nominations
The following provisions shall be utilized by customers for nomination of customer owned gas:
- (a) Customer's deliveries for any day shall not exceed one hundred fifty percent (150%) of customer's peak daily usage in the past 12 months.
- (b) Customer may appoint a nominating agent, but customer retains responsibility for nominations as described herein.
- (c) Nomination Deadlines
1. Month Ahead: The customer or their designee shall enter each month's nomination in the Company's gas transportation system by no later than 11:30 a.m. CCT on the first business day prior to the first day of the calendar month for which gas is being nominated.
2. Day Ahead: The customer or their designee shall enter changes to nominations in the Company's gas transportation system by no later than 11:30 a.m. on the business day prior to the effective date of any subsequent change in the nomination. Such change in nomination shall be subject to approval by the Company.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

NATURAL GAS TRANSPORTATION SERVICE

3. Intra-Day: Customer desiring a change of nomination for transportation of customer-owned gas after the day-ahead deadline specified in 2) above shall notify Company by 4:00 p.m. CCT of the day, subject to confirmation by the pipeline. Company may accept such change to nomination if the Company determines in its sole discretion that such change to nomination will not adversely impact the operation of Company's gas system or adversely impact Company's purchase and receipt of gas for other service classifications. Intra-day nominations shall conform to Company's current gas transportation nomination form and must include customer's name, account number, MMBtu per day, nomination effective date, pipeline, pipeline contract number, shipper and contact information.

I. Balancing Provisions

Daily Balancing and Cash-out of Customer-Owned Gas - Daily transportation gas receipts and deliveries shall be maintained in balance by the customer to the maximum extent practicable. Any daily imbalance which does occur, not related to a Critical Day, shall be subject to the terms and conditions of this Section. Should one of the interstate/intrastate pipelines serving the Company, elect to allow balancing on their system for any of the Company's transportation customers, the customer's actual metered volumes grossed up for system losses will be allocated by the Company directly to the applicable interstate/intrastate pipeline company.

Group Balancing of Customer-Owned Gas - On or after October 1, 2004, Group Balancing will be available to an entity ("Group Manager"), under contract with the Company, who represents one or more Natural Gas Transportation Service customer accounts ("Customer Group") on Company's Natural Gas Transportation Service tariffs. Group Balancing is a service provided by the Company that allows a Group Manager to deliver gas to the Company, on an aggregated basis, for two or more accounts that comprise the membership in a Customer Group. The Customer Groups' metered locations must all be served by the same interstate pipeline.

Customer shall provide written notification, no later than ten (10) business days prior to the beginning of the month in which service is to begin, to the Company, of its intent that its account be managed by a Group Manager. Customer must also provide written notification, no later than ten (10) business days prior to the end of the month in which service is intended to be terminated, of its intent to terminate participation in a Customer Group. Notwithstanding the foregoing notifications, a Customer's account must stay in a Customer Group for a minimum of one (1) billing cycle.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to _____ MISSOURI SERVICE AREA

NATURAL GAS TRANSPORTATION SERVICE

The Group Manager shall enter into a contract with Company for service hereunder on a form, prescribed by Company, which shall include without limitation, terms and provisions addressing contract term, customer account information, nomination and curtailment, procedures, billing and payment, security/creditworthiness assurances, assignment limitations, and notices.

The Customer Group will be considered as one customer for purposes of calculating the daily balancing and cash-out provisions of this Section I. The Group Manager will be billed and is responsible for any such imbalance, Unauthorized Use Charges, and all intrastate and/or interstate pipeline penalties and other charges incurred by the Company which are attributable to a Customer Group's unauthorized use. All other transportation service tariff charges will be billed to the individual customer accounts, including but not limited to Customer Charges, Transportation Charges, Administrative Charges, and where applicable, Meter Equipment Charges and Transportation Charge Adder.

Eligible School Entities or New Eligible School Entities, using less than one hundred thousand Ccfs annually, positive and negative imbalances will be netted and cashed-out on a monthly basis in accordance with the appropriate pricing provision under this Section I with the monthly PGA and the monthly average of the daily midpoint prices being used as the base for the determination of the cash-out imbalances.

A negative imbalance is created when the customer's gas nominated to the Company as adjusted by the loss factor is less than the quantities of gas used by the customer. A negative imbalance during periods of a Company Critical Day Notification will be considered unauthorized use and billed at the Unauthorized Gas Use Charge set forth in Section 2. herein.

A negative imbalance during other times will be considered balancing use and will be billed at the following tiers and referred to as the "Balancing Gas Use Charge":

Daily negative imbalances of 5% or less of nominations as adjusted by the loss factor will be billed at the greater of the applicable service area's firm sales service PGA factor or at the daily midpoint indexed commodity price as quoted in the publication "Platt's Gas Daily" for that date plus a transportation charge of \$0.150 per Ccf. Daily negative imbalances greater than 5% of nominations as adjusted by the loss factor will be billed at the greater of the applicable service area's firm sales service PGA factor plus 10% or at the daily midpoint indexed commodity price as quoted in the publication "Platt's Gas Daily" for that date plus a transportation charge of \$0.150 per Ccf.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to _____ MISSOURI SERVICE AREA

NATURAL GAS TRANSPORTATION SERVICE

A positive imbalance is created when the customer's gas nominated to the Company as adjusted by the loss factor exceeds the quantities of gas used by the customer. The Company will purchase positive imbalances at the following tiers:

Daily positive imbalances of 5% or less of nominations as adjusted by the loss factor will be purchased at the daily midpoint index commodity price as quoted in the publication "Platt's Gas Daily" for that date. Daily positive imbalances greater than 5% of nominations as adjusted by the loss factor will be purchased at ninety percent (90%) of the daily midpoint indexed commodity price as quoted in the publication "Platt's Gas Daily" for that date.

The index to be used will be specific for each transportation customer account as follows:

"Panhandle Eastern Pipe Line Co. - Panhandle, Tx.-Okla."
"Texas Eastern Transmission Corp. - Texas Eastern, ELA"
"Natural Gas Pipeline Co. of America - NGPL, Texok Zone"

In the absence of such published "Platt's Gas Daily" index, the Company will determine, subject to Commission's review in Company's Actual Cost Adjustment (ACA) filing, a suitable replacement source for such daily market price information.

The daily negative and positive imbalance billings so calculated will be applied to the customer's monthly bill. Net payments to customer will be included in the Company's PGA Clause ACA computation as purchased gas costs and net payments to Company will be included as revenue recovery.

- J. Except as specifically provided for herein, all of the Company's Rules and Regulations for natural gas service which are not in conflict herewith shall apply to service rendered hereunder.
- K. A contract existing between the Company and a customer on February 18, 1998 may continue in effect as an executed transportation contract, to the extent its provisions are not superseded by or in conflict with the provisions of this tariff, until such contract expires by its terms or is replaced by an executed transportation contract. Such existing contracts will be assigned to the Standard Transportation Rate if deliveries to the customer during the preceding calendar year totalled 600,000 Ccf or less and to the Large Volume Transportation Rate if deliveries during such period totalled in excess of 600,000 Ccf. For customers who do not have gas usage history for the preceding calendar year, such existing contracts will be assigned the applicable transportation rate based on estimated or projected deliveries.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

NATURAL GAS TRANSPORTATION SERVICE

- L. The Company shall have the right to interrupt, curtail or discontinue transportation service, in whole or in part at any time for reasons of force majeure or when in the Company's sole judgment, capacity or operating conditions so require, or it is desirable or necessary to make modifications, repairs or operating changes to its system. The Company shall provide customer such notice of the interruption, curtailment or discontinuance of service as is reasonable under the circumstances. The Company shall not discriminate between transportation and sales customers for purposes of determining the order and priority of interruption. The Company shall not be liable for and the customer shall indemnify the Company against and hold the Company harmless from any and all damages, claims, suits, actions or proceedings whatsoever threatened or initiated as a result of any interruption, curtailment or discontinuance of transportation service invoked by the Company.
- M. All transportation service is firm in nature. If the Company's local distribution system capacity is inadequate to meet all of its demands for service, the services supplied under this schedule will be curtailed in accordance with the Curtailment of Service Schedule contained in the Company's Rules and Regulations.

9. Rules and Regulations

Service will be rendered in accordance with the Company's Rules and Regulations for Gas Service on file with the Missouri Public Service Commission.

10. Critical Day

A. Critical Day Declaration:

A Critical Day may be declared by the Company for a specific area or the Company's entire gas system whenever, in the Company's sole judgement, one of the following conditions occurs or is anticipated to occur.

1. Company experiences failure of transmission, distribution, or gas storage facilities
2. Transmission or distribution system pressures or other unusual conditions that may jeopardize the operation of Company's gas system
3. Company's transportation, storage, or supply resources are being used at or near their maximum rated, tariff, or contractual limits
4. Any of Company's transporters or suppliers declares the functional equivalent of a Critical Day or force majeure conditions

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

NATURAL GAS TRANSPORTATION SERVICE

B. Unauthorized Use Related to Critical Days:

Unauthorized Use Related to Critical Days shall mean the unauthorized use of Company-supplied gas on a Critical Day. If such unauthorized use of gas occurs, the Company shall charge the customer, and the customer shall pay a penalty for all unauthorized use as indicated below.

If the Company declares a Critical Day for its gas system or for a specific area of its gas system and Customer or Customer Group has an imbalance on such Critical Day in the same direction as an imbalance for Company's gas system or area thereof that results in the Company incurring penalties or fees for the day from one or more pipelines, customer or Customer Group may be billed Unauthorized Gas Use charges set forth in Section 2 herein.

C. Critical Day Notification:

The Company shall give notice to all Natural Gas Transportation Service customers impacted by the Critical Day of all Critical Day periods. Where feasible, notice shall be provided to the customer once Company receives such notice from the pipeline. The notice shall specify the expected duration of the Critical Day period. The means by which notification is given, whether by phone, fax, electronic mail, or some other means, shall be at the Company's option. Each holder of a Contract shall provide notification information, which may include but is not limited to a telephone number, fax number, or e-mail address, by which to receive notice on a 24-hour basis. The customer shall be deemed to have received notice upon issuance of the notice to the customer by the Company. The customer shall be deemed to have received notice if the telephone is not answered when called by the Company, or in the event of a mechanical breakdown or interruption of telephone service which prevents the call from being received.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

NATURAL GAS TRANSPORTATION SERVICE

11. Form of Natural Gas Transportation Agreement

THIS AGREEMENT, made and entered into this ____ day of _____, 20____, by and between *UNION ELECTRIC COMPANY*, a Missouri corporation, its successors or assigns, hereinafter referred to as "Company," and the Transportation Customer, _____, a _____ corporation with a facility in _____, Missouri, its successors or assigns, hereinafter referred to as "Customer,"

WITNESSETH:

WHEREAS, Company owns and operates facilities for the distribution and sale of natural gas to Customer's premises; and

WHEREAS, Customer is entering into contracts for the purchase of natural gas for its own use from producers, marketers or from other suppliers and is arranging for the delivery of said gas to Company at one of its city gate stations; and

WHEREAS, Customer desires to contract with Company for the transportation of said gas through the distribution mains and pipes of Company to Customer's premises; and

WHEREAS, Company has agreed to the said request for transportation and Customer has agreed to transportation service from Company, subject to the terms and conditions of Company's Missouri Public Service Commission (Commission) approved Natural Gas Transportation Service tariffs.

NOW, THEREFORE, in consideration of the mutual covenants and agreements as herein set forth, both Company and Customer agree as follows:

ARTICLE I - SERVICE AND RATES

Company agrees to receive and transport for Customer's account quantities of natural gas up to a Maximum Daily Quantity (MDQ) of ____ Ccfs per day, plus a quantity of gas for Shrinkage or Line Losses as provided for in Article III below. Customer agrees to pay Company for all services provided under this Agreement at the applicable rate and other charges specified in Company's Commission approved Natural Gas Transportation Service tariffs, as the same may be revised from time to time.

DATE OF ISSUE December 3, 2018

DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn
Name of Officer

President
Title

St. Louis, Missouri
Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

NATURAL GAS TRANSPORTATION SERVICE

ARTICLE II - TERMS AND CONDITIONS

This Agreement in all respects shall be and remain subject to the terms and conditions of Company's Commission approved tariffs, including without limitation its applicable rates, service classifications, riders and general rules and regulations, all of which are by this reference made a part hereof. This Agreement, including Company's Commission approved tariffs, shall be subject at all times to review, control, modification and regulation by the Commission in accordance with law.

Customer agrees that Company shall have the unilateral right to file with the Commission or any other appropriate regulatory authority and make changes effective in Company's Commission approved tariffs applicable to the service rendered hereunder. Company agrees that Customer may protest or contest such filings, and Customer does not waive any rights it may have with respect to such filings.

ARTICLE III - LINE LOSSES

In addition to collection of the rates and charges provided for in Article I above, Company shall retain the applicable percentage provided pursuant to Company's Commission approved tariffs of the quantities received from Customer hereunder, for reimbursement in kind from Customer for shrinkage or line losses.

ARTICLE IV - TERM

This Agreement shall be effective for one (1) year and shall be automatically renewed in increments of one (1) year. Termination of this agreement is subject to the Company's Commission approved tariffs.

Any portions of this Agreement necessary to correct or cash-out imbalances under this Agreement as required by Company's Commission approved tariffs shall survive the other parts of this Agreement until such time as such balancing has been accomplished.

ARTICLE V - DELIVERY POINTS

Customer will provide for delivery to Company of the volumes of natural gas to be transported at the city gate station on the distribution system of Company which serves Customer's premises, and Company shall deliver said volumes of gas to the outlet side of the Company meter at Customer's premises. In cases where Customer is served from a "Main Line Tap," the outlet of the city gate meter and Company delivery to Customer may be one and the same. Gas transported hereunder will be delivered to Company in the state of Missouri.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to _____ MISSOURI SERVICE AREA

NATURAL GAS TRANSPORTATION SERVICE

ARTICLE VI - BILLING

All matters relating to billing, including, but not limited to, late payment charges and termination of service for nonpayment, shall be governed by Company's Commission approved tariffs regarding transportation service and applicable sales service.

ARTICLE VII - VOLUME OF GAS AND MEASURING EQUIPMENT

The volume of gas delivered to Customer will be that measured by the Company's meter at Customer's premises. It is Customer's responsibility to purchase or otherwise have delivered to its upstream transporter(s) sufficient quantities of gas to provide for the delivery through Company's meter. For all transport gas passing through Company's meter, 1000 CF and 1 dekatherm shall be considered equal.

Company will not be a party to solving disputes which arise between Customer, its upstream transporter(s), producers, marketers, or others, or agents of any of the above parties. Customer will be responsible for providing Customer's upstream transporter(s), producers, marketers, or others, any notices which are required by their contract for gas and delivery service.

Company reserves the right to provide a billing based on estimated quantities of gas delivered to Customer if a breakdown or other difficulty with metering equipment should occur.

Company is not in any way responsible for quality or quantity of gas delivered by a producer, marketer or other supplier to Customer's upstream transporter(s), and makes no warranties of any kind, express or implied, in such regard.

ARTICLE VIII - QUALITY AND PRESSURE OF GAS DELIVERED FOR TRANSPORTATION

The gas delivered by a producer or supplier to Company for transportation to Customer shall at all times be merchantable gas continuously conforming to the specifications applicable to gas delivered to Company by Customer's upstream transporter(s). Company shall have the right to refuse delivery of any gas not conforming to those specifications.

Delivery pressures to Customer shall be consistent with those presently provided for in Company's Commission approved tariffs. The maintenance of delivery pressure shall be subject to the demands of firm sales customers of Company being served at any particular time.

Company recognizes that the gas delivered to Customer will be commingled with other gas owned by Company. Therefore, to the extent gas delivered to Customer is not the same gas received by Company for transportation hereunder, the Company warrants that such gas will meet the Company's quality standards for gas sold to Customer under the Company's applicable Commission approved rate tariffs.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

NATURAL GAS TRANSPORTATION SERVICE

ARTICLE IX - TITLE TO GAS

It is understood and agreed by the parties that in the performance of this Agreement, Company is engaged in a transportation service only and that ownership of the gas transported will at all times remain vested in Customer.

Customer hereby warrants its title to all gas delivered to Company hereunder and that such gas shall be free and clear from all liens, claims, and encumbrances whatsoever.

Company shall have no liability or responsibility for control of the gas to be transported until it is received by the Company from Customer's upstream transporter(s) at the point of interchange between the Company and Customer's upstream transporter(s). From such point, said gas shall be in the exclusive control of Company until redelivered to Customer's premises and Company shall be solely responsible for loss of (except as otherwise provided herein with respect to line losses or shrinkage), and damage caused by said gas.

ARTICLE X - LIABILITIES

Each party hereto assumes full responsibility and liability for its negligence in the operation of facilities owned by it or otherwise in connection with the purchase and/or transportation of gas. If gas service is discontinued by Customer's supplier for whatever reason, Customer agrees to waive with respect to Company any loss, claim, damage, or expense that Customer may incur by reason of such discontinuance.

ARTICLE XI - REPRESENTATIONS

Customer represents and warrants that if it uses natural gas primarily to heat a premise that provides temporary or permanent living quarters for individuals that: (i) it has contracted for primary firm capacity with the upstream supplying intrastate and/or interstate pipelines to meet Customer's peak needs or (ii) it has adequate and usable alternative fuel facilities to meet Customer's energy needs. In connection with representation (i) above, Customer agrees to provide Company copies of all of its contract(s) for primary firm upstream transportation capacity. Customer agrees to permit Company to inspect Customer's premises to verify its compliance with representation (ii) above. These representations and warranties shall survive the execution and delivery of this Agreement and shall continue in force throughout the term of this Agreement.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to _____ MISSOURI SERVICE AREA

NATURAL GAS TRANSPORTATION SERVICE

ARTICLE XII - NOTICES

Any notice or notices given by either party under the terms of this Agreement shall be sent by certified mail to the following addresses:

To Company: Union Electric Company

Attn: _____
Customer Services-Advisor

Customer: _____

or to such other addresses as either party may from time to time designate in writing.

The parties agree to notify the other of the name and address of the person or persons authorized to act for the party in respect to the routine operating matters under this Agreement and routine operating requests, reports, billings, and other matters of a routine nature shall, upon such notification, be directed to the persons so designated.

IN WITNESS WHEREOF, the parties hereto, in consideration of the agreements contained herein, have caused this Agreement to be executed by their duly authorized officials as of the day and year first above written.

UNION ELECTRIC COMPANY

CUSTOMER

By _____

By _____

Title: _____

Title: _____

DATE OF ISSUE December 3, 2018

DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn
Name of Officer

President
Title

St. Louis, Missouri
Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to _____ MISSOURI SERVICE AREA

THIS SHEET IS RESERVED FOR FUTURE USE

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019
ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to _____ MISSOURI SERVICE AREA

THIS SHEET IS RESERVED FOR FUTURE USE

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019
ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

MISCELLANEOUS CHARGES

A. Service Pipe Charges

Sheet No. 50 Paragraph B -

1. Service lines less than 2" - \$260.00 per connection (tap), plus \$6.00 per foot for all footage in excess of sixty (60) feet on customer's property.
2. Service lines 2" and greater will utilize the approach set forth in Section V.B. in the Rules and Regulations

If for engineering reasons, the Company selects a route which results in more footage than the normal route to customer's meter, then the lesser distance shall be utilized for footage charges, if any. Service pipe installations are based on normal pre-development and unobstructed conditions. Additional costs due to changes in surface conditions, unanticipated subsurface conditions or anticipated subsurface conditions (rock and underground conflicts) will be charged to the customer.

B. Service and Meter Relocations(1)

Sheet No. 51 Paragraph E and Sheet No. 55.1-

1. Meter relocation only - \$260.00
2. Service lines less than 2" - \$260.00 per connection (tap), plus \$8.50 per foot
3. Service lines 2" and greater will estimate individual project cost

C. Meter Testing Charges

Sheet No. 54 Paragraph F - Meters less than 500 cfh. (at ½ inch water column pressure drop) \$65.00 per meter. Meters greater than 500 cfh. (at ½ inch water column pressure drop) \$150.00 per meter

D. Reconnection Charges per Connection Point

Sheet Nos. 5 and 68, Par. H-1 (Disconnection & Reconn.) \$70.00

E. Returned Check Charge

A charge of \$15.00 shall be assessed for any check submitted to the Company for payment for each occurrence where such check has been returned to the Company unpaid.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

MISCELLANEOUS CHARGES

F. Excess Flow Valve (EFV) Charges

1. Installation of an EFV shall be made by the Company in the case of a new service line or a scheduled replacement of a service line, without charge to the following customers:
 - Single family residences
 - Multi-family residences
 - Small commercial entities consuming natural gas volumes not exceeding 1,000 Standard Cubic Feet per Hour
2. Where customer requests an EFV on an existing service line without said device and where such service line is not otherwise scheduled for replacement, an EFV will be installed provided customer pays \$1200.00 to the Company in advance of such installation.
3. Installation of an EFV shall only be available where service is provided to a customer served from a delivery system with a pressure of ten (10) pounds per square inch or greater throughout the year, where the service line is connected directly to the gas distribution main, and where the Company has no engineering or other valid reasons for not installing the EFV.

G. Electronic Gas Meter (EGM) Equipment Charge

Sheet No. 10 Paragraph 2, Sheet No. 12 Paragraph 3 and Sheet No. 13 Paragraph F. - This EGM Meter Equipment Charge shall apply to transportation customers who enter into contracts with the Company for transportation service to be provided under the Company's Natural Gas Transportation Service tariff commencing after November 1, 2000.

Gas transported under the Natural Gas Transportation Service tariff shall be metered by an electronic recording device with remote monitoring features for the recording of the customer's daily gas usage and real time flow data. The transportation customer will pay the Company a monthly per meter charge for said metering as follows:

EGM Meter Equipment Charge.....\$21.00 per meter per month

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

MISCELLANEOUS CHARGES

H. Daily Usage Information Charge

Applicable to Customers who enter into contracts with the Company for transportation service to be provided under the Company's Natural Gas Transportation Service tariff:

In order to facilitate remote interrogation of interval metering by the Company and provide daily usage information to Customer, the Company will install a remote monitoring device at each meter location where Customer receives Transportation Service. For each remote monitoring device, the Customer, at Customer's expense, shall provide access to a commercial telephone line and 120 volt AC electric power at a location designated by the Company. The telephone line shall be dedicated for Company's use. If a Customer does not provide access to a commercial telephone line and 120 volt AC electric power at a location designated by the Company, or, if interrogation is not possible due to a telephone service outage, Company will dispatch technicians each month with specialized equipment to capture the daily usage information necessary to bill Customer.

The charge to the Customer will be \$170.00 for each occurrence.

If phone line is installed and Company is unable to retrieve daily usage information it will be the Customer's responsibility to verify that the Customer's phone line is in working condition. In addition, Company reserves the right to charge Customers for each service call to investigate the remote monitoring device if such service call is the sole result of telephone service outage.

I. Customer Benefit Projects

Where work is done by Company on Company and/or customer facilities for the benefit and/or convenience of the customer/customer designees, the costs of such nonstandard service shall be billed to customer on the basis of Company's cost quotation agreed to by customer prior to starting project. Such "Customer Benefit" work shall include, but not be limited to, temporary service for construction sites, service calls and cost estimates for new business extensions which in the Company's determination will require excessive time to prepare for the customer. When any advance payments are collected prior to starting a project to be based on actual costs, any over payment will be refunded to payee.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

TABLE OF CONTENTS

RIDERS

<u>RIDER</u>		<u>SHEET NO.</u>
A	Purchased Gas Adjustment Clause	22
WCAR	Weather & Conservation Adjustment Rider	32
ISRS	Infrastructure Replacement Surcharge	34

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

RIDER A
PURCHASED GAS ADJUSTMENT CLAUSE

APPLICABILITY

The Purchased Gas Adjustment (PGA) Clause applies to all sales and transportation services provided under all natural gas rate schedules and contracts, including sales to transportation customers. For purposes of this clause, the term "cost of gas" shall be as defined under Section I.B.

Any increase or decrease in any PGA factor, including the Actual Cost Adjustment (ACA) factor, resulting from the application of this Rider A, shall be applied prorata to customers' bills for service rendered on and after the effective date of the change. Bills which contain multiple PGA rate changes, including the ACA component of such rate changes, during a customer's billing period shall be prorated between the old and new rates in proportion to the number of days in the customer's billing period that such rates were in effect.

I. PURCHASED GAS COST ADJUSTMENT

A. Filing of the PGA

The Company shall be allowed to make up to four (4) PGA filings during each calendar year. One such filing will be effective in November of each year, but no more than one PGA filing shall become effective in any two consecutive calendar months unless specifically ordered by the Commission. Such PGA filings shall be made at least ten (10) business days prior to their effective dates.

All PGA filings shall be accompanied by detailed work-papers supporting the filing in an electronic format. Sufficient detail shall be provided so the level of hedging that is used to develop the gas supply commodity charge for the PGA factor can be determined.

B. Contents of PGA Filings

When proposing revisions to its filed PGA factors, the Company shall file PGA tariff sheets with the Commission for approval which consist of:

The Regular Purchased Gas Adjustment (RPGA) Factor - A ¢/Ccf factor to reflect the current estimate of the annualized cost of various natural gas services purchased by the Company, including but not limited to firm and interruptible gas supply, gathering services, firm and interruptible transportation service, storage services, gas price volatility mitigation instruments, including but not limited to, financial instruments, and any service which bundles or aggregates these various services. The RPGA factor for the Residential Service Rate will vary depending on customer usage.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

RIDER A
PURCHASED GAS ADJUSTMENT CLAUSE

The Actual Cost Adjustment (ACA) Factor - A ¢/Ccf factor to reflect the annual reconciliation of actual purchased gas and pipeline service costs with the actual recovery of such costs through the application of this Rider A. Revised ACA factors shall be filed with the PGA filing to be effective in November of each year.

In addition, in any PGA filing, the Company may include a rate adjustment, hereinafter referred to as the "PGA Filing Adjustment Factor (FAF)", not to exceed five cents (5.0¢) per Ccf which is designed to refund to, or recover from customers any over or under recoveries of gas costs that have accumulated since the Company's last ACA filing.

The Residential Service Rate PGA shall be calculated based on customer's usage with the applicable PGA factors as noted in this Schedule.

For the purpose of the computations herein, the cost of gas recoverable through the RPGA and ACA shall include:

- a) The cost of any liquid or gaseous hydrocarbons purchased for injection into the gas stream;
- b) Gathering, transportation and storage costs related to such liquid or gaseous hydrocarbons;
- c) Costs associated with mitigating price volatility in the Company's gas supply portfolio, including but not limited to, financial instruments; and
- d) All other costs associated with the purchase, transportation and/or storage of natural gas under a rate, tariff or contract subject to regulation by the Federal Energy Regulatory Commission (FERC) or successor agency including, but not limited to, costs billed as take-or-pay and transition charges.

As used in this Rider, the following definitions shall apply:

"filing month" - the month in which a RPGA or ACA is determined by the Company and filed with the Commission;

"base period" - the first twelve (12) of the thirteen (13) months immediately preceding the filing month;

"firm sales" - the sales associated with the Company's Residential, General Service, and Interruptible (Assurance Gas) rate classifications;

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

RIDER A
PURCHASED GAS ADJUSTMENT CLAUSE

II. DETERMINATION OF REGULAR PURCHASED GAS ADJUSTMENT (RPGA)

The RPGA will be determined in accordance with the following:

A. Commodity-Related Charges

The commodity-related charges shall include but not be limited to producer gas supply commodity charges, pipeline transmission and gathering commodity charges, expected costs or cost reductions to be realized for the entire applicable period, storage withdrawals, gas purchases under fixed-price contracts, and the Company's cost of gas price volatility mitigation instruments, including but not limited to, financial instruments, except for call options for which only cost reductions expected to be realized during the months covered by the Company's PGA filing shall be reflected. A commodity-related per unit ¢/Ccf factor shall be determined by dividing commodity-related costs by total sales volumes during the base period.

B. Demand-Related (Capacity, Reservation, Space, Deliverability) Charges

For the purpose of the computations herein "demand-related" shall mean gas costs relating to fixed pipeline transportation and storage charges, fixed gas supply charges, and other FERC-authorized fixed charges.

1. Purchased Gas

For each natural gas supply purchased during the base period multiply the number of units of demand purchased during the base period by their respective charge(s) in effect on the first day of the filing month and divide by firm sales volumes during the base period.

2. Supplemental Gas

For each supplemental (temporary and emergency) gas supply purchased during the base period multiply the number of units purchased each month of the base period by the charge(s) in effect on the first day of the filing month and divide by firm sales volumes during the base period; in the case of a supply initially accounted for as an inventory item, multiply the number of units taken from inventory each month of the base period by the most current inventory unit price for such supply and divide by firm sales volumes during the base period.

3. Purchased Seasonal/Peaking Storage

For each seasonal/peaking type storage service purchased during the base period multiply the units of demand purchased during the base period by their respective charge(s) in effect on the first day of the filing month and divide by firm sales volumes during the base period; if there is no purchase of a specific storage service for the filing month, the last charge(s) paid for such storage service purchased in the base period shall be used.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

RIDER A
PURCHASED GAS ADJUSTMENT CLAUSE

4. Purchased Balancing Storage

For each balancing type storage service purchased during the base period multiply the units of demand purchased during the base period by their respective charge(s) in effect on the first day of the filing month and divide by total sales volumes during the base period; if there is no purchase of a specific storage service for the filing month, the last charge(s) paid for such storage service purchased in the base period shall be used.

5. Transportation Service

For each separate related transportation service purchased during the base period multiply the number of units of demand purchased during the base period by their respective charge(s) in effect on the first day of the filing month, less 1.25¢ per Ccf times the units of interruptible sales, and divide the resulting balance of demand costs by firm sales volumes during the base period; if there is no purchase of a specific transportation service for the filing month, the last charge(s) paid for such transportation service purchased during the base period shall be used.

C. Other Costs of Gas

The total amounts of any costs, different from those referred to above, associated with the supply, transportation and/or storage service of natural gas during the base period under a rate, tariff or contract subject to regulation by the FERC or successor agency, divided by total sales and/or transported volumes, as applicable, during the base period. These costs include, but are not limited to, costs billed as take-or-pay and transition charges.

D. Determination of Class RPGA Factors

The RPGA factor for the firm sales rate classifications of natural gas service shall be calculated by summing the factors determined in Sections II.A. through II.C. above.

The RPGA factor for the interruptible sales rate classification of natural gas service shall be calculated by summing the factors determined in Sections II.A., II.B.4., and II.C. above plus 1.25¢ per Ccf.

The RPGA factor for the transportation rate classification shall be as calculated in Section II.C. above.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

RIDER A
PURCHASED GAS ADJUSTMENT CLAUSE

III. ACTUAL COST ADJUSTMENT (ACA) ACCOUNT:

An ACA account shall be maintained for the Company's service area to which natural gas is transported. Said account shall be credited by the amount of any gas costs recovered through the action of this Rider in excess of actual gas costs incurred by the Company, and debited by the amount of any such recovered gas costs which is less than actual gas costs incurred by the Company. Such reconciliation of gas costs incurred and recovered shall be for the twelve (12) month period ending with August of each year, as defined herein.

Such excess or deficiency in total gas cost recovery for each sales rate classification and transportation rate classification shall be determined by a monthly comparison of the actual cost of gas for each month, including the prior period's ACA balance to the gas cost revenues recovered for the corresponding revenue month.

1. Demand-related costs applicable to "Purchased Gas" supply service, "Purchased Seasonal/Peaking Storage" service, "Supplemental Gas" service and "Transportation" of peaking storage service shall be allocated to the firm sales rate classifications.
2. Demand-related costs applicable to pipeline "Transportation" service and "Purchased Balancing Storage" service shall be allocated to firm sales and interruptible sales rate classifications. The interruptible sales customers will be allocated a portion of such "Transportation" demand costs. The balance of demand costs will then be allocated to the firm sales rate classification.
3. Commodity-related costs applicable to "Purchased Gas" supply service, "Purchased Seasonal/Peaking Storage" service, "Purchased Balancing Storage" service and "Transportation" service shall be allocated to each sales rate classification based on the ratio of each such classes' respective actual sales to the sum of total sales for the related revenue month.
4. "Other Cost of Gas" incurred shall be allocated as applicable to each sales rate classification and transportation rate classification based on the ratio of each such classes' respective actual sales and transported volumes to the sum of such sales and transported volumes for the related revenue month.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

RIDER A
PURCHASED GAS ADJUSTMENT CLAUSE

5. Any refunds which the Company receives in connection with natural gas services purchased, together with any interest included in such refunds, will be refunded to the Company's applicable customers unless otherwise ordered by the Commission. Such refunds shall be credited to the ACA account in the month received and shall be a part of the overall ACA interest calculation.

The refund amount will be allocated to each firm sales, interruptible sales and transportation rate classification based upon the same allocation of such costs as calculated during the base period in Section II. herein.

6. The total gas cost recovered each month shall be equal to the product of the billed Ccf of each rate classification times the sum of the applicable RPGA and ACA factors. The RPGA factor will include, if applicable, the FAF factor.
7. For the ACA period ending with August of each year, the aggregate excess or deficiency in gas cost recovery as described above shall be accumulated to produce a cumulative balance of excess or deficiency of gas cost recovery by sales and transportation rate classifications. ACA factors shall be computed by dividing these cumulative balances by the estimated sales and transportation volumes during the subsequent twelve-month billing period of November - October, for each of the sales and transportation rate classifications. All actual ACA revenue recovered shall be debited or credited to the appropriate monthly balance of the ACA account.
8. For each month during the ACA period and for each month thereafter interest, at a simple rate equal to the prime bank lending rate (as published in the Wall Street Journal on the first business day of the following month), minus two (2) percentage points (but not less than zero) shall be credited to customers for any over-recovery of gas costs or credited to the Company for any under-recovery of gas costs. Interest shall be computed based upon the average of the accumulated beginning and ending monthly ACA account balances. The Company shall maintain detailed work-papers that provide the interest calculation on a monthly basis.
9. These ACA factors shall be rounded to the nearest 0.01¢/Ccf and applied to billings of each applicable sales and transportation rate classification, commencing in November of each year, and shall remain in effect until superseded by subsequent ACA factors calculated according to this provision.

DATE OF ISSUE December 3, 2018

DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn
Name of Officer

President
Title

St. Louis, Missouri
Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

RIDER A
PURCHASED GAS ADJUSTMENT CLAUSE

10. The Company concurrently with its annual ACA filing, shall:
- (a) Provide all documentation necessary to reconcile the Company's actual gas costs with its billed revenue. Provide all documentation of all natural gas purchases (commodity, demand or reservation charges or other charges) to support that the claimed costs are properly attributed to the ACA period and that the pipelines, natural gas suppliers, and any other vendors have charged or invoiced the Company for the volumes nominated and received at the proper rates.
 - (b) Provide all documentation to support decisions made at the time of the Company's natural gas supply planning, capacity planning, purchasing practices, and operating decisions for the ACA period.
 - (c) Provide documentation of the financial impact on customers of the Company's decisions regarding its gas supply, transportation and storage contracts.
 - (d) Provide copies of all contracts in effect at any time during the ACA period. Include copies of all contracts related to the procurement of natural gas including but not limited to transportation, storage, and supply contracts and all schedules and exhibits and letter agreements related to gas procurement, gas costs and/or gas constraints.
 - (e) Provide all documentation to support the impact of discontinuing the transition mechanism.
 - (f) The documentation provided shall include fully functioning electronic spreadsheets. The term "document(s)" includes publication of any format, workpapers, letters, memoranda, notes, reports, analyses, computer analyses, test results, studies or data, recordings, transcriptions and printed, typed electronic or written materials of every kind in Company's possession, custody or control or within Company's knowledge.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

THIS SHEET IS RESERVED FOR FUTURE USE

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

THIS SHEET IS RESERVED FOR FUTURE USE

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

RIDER A
PURCHASED GAS ADJUSTMENT CLAUSE

PGA Statement

The PGAs (in ¢/Ccf) to be applied to the Company's basic rate schedules on and after the effective date of this tariff for gas sold or delivered to customers in the Company's service area, are as follows:

	<u>RPGA</u>	<u>ACA</u>	<u>TOTAL PGA</u>
Residential	53.39¢/Ccf	(6.72)¢/Ccf	46.66¢/Ccf
General Service	53.39¢/Ccf	(6.72)¢/Ccf	46.66¢/Ccf
Interruptible Service	33.08¢/Ccf	(1.21)¢/Ccf	31.87¢/Ccf
Transportation Service	0.00¢/Ccf	0.00¢/Ccf	0.00¢/Ccf

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

RESERVED FOR FUTURE USE

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019
ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

WEATHER & CONSERVATION ADJUSTMENT RIDER (WCAR)

APPLICABILITY

The Weather and Conservation Adjustment Rider (WCAR) is applicable to all Ccf of gas delivered to all customers served under all of the Company's service classifications. The Rider will be applied as a separate line item on a customer's bill.

FILING

The Company shall make a WCAR filing each calendar year to be effective for the November billing month at least thirty (30) days prior to the effective date.

WEATHER & CONSERVATION ADJUSTMENT RATE

$$WCR = TWA + CR + OA$$

Where:

- WCR = Weather and Conservation Rate to be calculated independently for each of the Company's service classes, including both the Conservation and Weather adjustment where applicable
- TWA = Total Weather Adjustment rate equaling the sum of the effective AWNA and ARR from the Weather Adjustment Calculation
- CR = Conservation Rate equaling the Net Conservation divided by the expected retail sales for each Service Classification
- OA = Ordered Adjustment is the amount of any adjustment to the WCAR ordered by the Commission as a result of prudence reviews and/or corrections under this Rider. Such amounts shall include monthly interest at the Company's monthly short-term borrowing rate.

WEATHER ADJUSTMENT CALCULATION

$$TWA = AWNA + ARR$$

Where:

Annual WNA ("AWNA") = the sum of the Monthly WNA_i for the billing months in the applicable twelve month period, divided by the expected retail sales in the twelve month recovery period for each applicable service classification.

Annual Reconciliation Rate ("ARR") = Prior to the end of the twelve months of billing of each AWNA, the over- or under-billing of the numerator of the AWNA shall be calculated based on twelve months of actual sales, consisting of the last two months of the recovery period related to the prior AWNA and the first 10 months of the recovery period related to the currently effective AWNA. The amount of over- or under-billing shall be adjusted as ordered by the Commission. The resulting amount shall be divided by the expected retail sales in the twelve month recovery period for each applicable service classification.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to _____

MISSOURI SERVICE AREA

WEATHER & CONSERVATION ADJUSTMENT RIDER (WCAR)

The WNA Factor will be calculated for each billing month as follows:

$$WNA_i = \sum_{j=1}^{21} ((CWA * C\beta) + (MWA * M\beta)) * C_{ij}$$

Where:

WNA_i = Weather Normalization Adjustment

i = the applicable billing month

j = billing cycle

CWA = the cold weather adjustment is the difference between actual HDD's and Normal HDD's that occur equal to or over 200 HDD's, calculated as $NDD_{ij} - ADD_{ij}$, except when either or both of these is below 200 HDD. Where only ADD_{ij} are less than 200, CWA shall be $NDD_{ij} - 200$. Where only NDD_{ij} are less than 200, CWA shall be $200 - ADD_{ij}$. Where both ADD_{ij} and NDD_{ij} are less than 200, CWA is zero.

MWA = the mild weather adjustment is $NDD_{ij} - ADD_{ij} - CWA$

$C\beta$ = applicable coefficient:

Residential ≥ 200 HDD 0.110762135

General Service ≥ 200 HDD 0.452443315

$M\beta$ = applicable coefficient:

Residential < 200 HDD 0.068751507

General Service < 200 HDD 0.178076149

C_{ij} = the total number of customer charges charged in billing cycle j and billing month i

NDD_{ij} = the total normal heating degree days for the days in the applicable billing month and billing cycle. A weighted average was calculated based on 85.5% of heating degree days observed at the Columbia, MO Airport weather station and 14.5% of the heating degree days observed at the Cape Girardeau, MO Airport weather station for the Residential class. The weightings for the General Service class are 79.3% for the Columbia, MO Airport weather station and 20.7% for the Cape Girardeau, MO Airport weather station.

ADD_{ij} = the total actual heating degree days for the days in the applicable billing month and billing cycle. A weighted average was calculated based on 85.5% of heating degree days observed at the Columbia, MO Airport weather station and 14.5% of the heating degree days observed at the Cape Girardeau, MO Airport weather station for the Residential class. The weightings for the General Service class are 79.3% for the Columbia, MO Airport weather station and 20.7% for the Cape Girardeau, MO Airport weather station.

DATE OF ISSUE December 3, 2018DATE EFFECTIVE January 2, 2019ISSUED BY Michael Moehn

President

St. Louis, Missouri

Name of Officer

Title

Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

WEATHER & CONSERVATION ADJUSTMENT RIDER (WCAR)

Monthly $WNA_i = WNA_i * \text{Weighted Volumetric Rate ("WVR")}$

Where:

WVR(Residential) = the WVR will be equal to the Residential Distribution Delivery Rate established at the conclusion of each gas general rate case. For Case No. GR-2019-0077, the amount is \$0.3173.

WVR(General Service) = the WVR will be equal to the General Service Distribution Delivery Rate established at the conclusion of each gas general rate case. For Case No. GR-2019-0077, the amount is \$0.3265.

There shall be a limit of \$0.05 per Ccf on upward adjustments for the WNA, and no limit on downward adjustments. Any WNA adjustment amounts in excess of \$0.05 per Ccf will be deferred for recovery from customers in the next WNA adjustment and applicable to part a. below.

Each month, carrying costs, at a simple rate of interest equal to the prime bank lending rate (as published in The Wall Street Journal on the first business day of such month), minus two percentage points, shall be applied to the Company's average beginning and ending monthly WNA balances. In no event shall the carrying cost rate be less than 0%. Corresponding interest income and expense amounts shall be recorded on a net cumulative basis for the WNA deferral period.

CONSERVATION ADJUSTMENT CALCULATION

DEFINITIONS

As used in this Rider WCA, the following definitions shall apply:

Deemed Savings Table

A list of Measures derived from the Company's Technical Resource Manual that characterizes associated gross energy and demand savings with Company-specific Measure parameters where available.

End Use Category

The unique summary category of end-use load shapes. The list of End Use Categories is included in this Rider.

Measure

An end-use measure, energy-efficiency measure, and energy-management measure as defined in 4 CSR 240-22.020(18), (20), and (21).

Programs

Programs listed in tariff sheet nos. 81.1 and 81.2.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

WEATHER & CONSERVATION ADJUSTMENT RIDER (WCAR)

CR DETERMINATION

The CR during each applicable recovery period is a dollar amount per Ccf rate for each applicable Service Classification calculated as follows:

$$CR = NC/PRS$$

Where:

NC = Net Conservation for the applicable recovery period as defined below,

$$NC = PC + CCR$$

PC = Projected Conservation is the Company's C projected by the Company to be incurred during the applicable recovery period. For the detailed method for calculating the C, reference the C Determination section below.

CCR = Cumulative Conservation Reconciliation is equal to the cumulative difference, if any, between the PC revenues billed during the previous recovery period resulting from the application of the NC component of the CR and the Company's C through the end of the previous recovery period (which will reflect projections through the end of the previous recovery period due to timing of adjustments). Such amounts shall include monthly interest charged at the Company's monthly short-term borrowing rate.

PRS = Projected Retail Sales in Ccf expected for the recovery period for each applicable Service Classification

C DETERMINATION

The C for each End Use Category shall be determined by the following formula:

$$C = [MS * NMR]$$

Where:

C = Conservation, in dollars, to be collected for a given month, for a given Service Classification.

MS = Monthly Savings, is the sum of all Programs' monthly savings, in Ccf, for a given month, for a given Service Classification. The MS for each End Use Category shall be determined by the following formula:

$$MS = \left(\frac{MAS_{CM}}{2} \right) + CAS - RB) * LS * UCF_{CM}$$

Where:

MAS_{CM} = The sum of (MC x ME) for all Measures in a Program in the current calendar month.

MC = Measure Count. MC for a given month, for a given Service Classification, for each Measure, is the number of each Measure installed in the current calendar month.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

WEATHER & CONSERVATION ADJUSTMENT RIDER (WCAR)

ME = Measure Energy. ME will be determined as follows, for each Measure:

- a. For Measures in the Statewide Deemed Savings Table, the ME is the annual total of normalized savings for each Measure at customer meter per Measure defined in the current Statewide Deemed Savings Table.
- b. For Measures not in the Statewide Deemed Savings Table, the ME will be the annual value attributable to the installations following the Statewide Technical Resource Manual.

CM = Current calendar month.

CAS = Cumulative sum of MAS of all prior calendar months for each End Use Category beginning with the effective date rates are set in case GR-2019-0077

RB = Rebasing Adjustment. The RB shall equal the CAS applicable as of the date used for billing determinants when base rates are adjusted in any general gas rate case or otherwise resulting in new retail gas rates. The RB is cumulative and therefore shall include each and every prior RB calculation.

LS = Load Shape. The LS is the monthly load shape percent (%) for each End-Use Category. (See below)

UCF = Unit Conversion Factor. The UCF is the conversion factor to convert the Measure Energy from therms to Ccf. The source for the UCF will be the Company's general accounting system.

NMR = Net Margin Revenue. NMR values for each applicable Service Classification are defined in the Margin Rates Table within this Rider

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to _____

MISSOURI SERVICE AREA

WEATHER & CONSERVATION ADJUSTMENT RIDER (WCAR)

Margin Rates by Customer Class

Month	Res \$/Ccf	GS \$/Ccf	Interrupt \$/Ccf	Std Trans \$/Ccf	LVT \$/Ccf
January	0.317300	0.314552	0.228676	0.195079	0.147700
February	0.317300	0.315242	0.195353	0.190357	0.147700
March	0.317300	0.319994	0.205380	0.195301	0.147700
April	0.317300	0.319379	0.200280	0.190580	0.147951
May	0.317300	0.321755	0.195342	0.192629	0.148422
June	0.317300	0.317024	0.192881	0.175280	0.147700
July	0.317300	0.315998	0.193838	0.174418	0.147700
August	0.317300	0.316751	0.193342	0.175024	0.147700
September	0.317300	0.313833	0.192195	0.171408	0.147700
October	0.317300	0.316863	0.198594	0.178455	0.147700
November	0.317300	0.318937	0.197375	0.186872	0.147960
December	0.317300	0.318987	0.200412	0.196419	0.147700

End-Use Category Energy Load Shapes

Month	Residential			Business		
	Heating	Water Heating	Misc.	Heating	Water Heating	Misc.
January	21.7905%	10.3527%	8.4893%	21.0397%	10.8255%	8.5109%
February	18.2135%	9.0720%	7.7366%	17.7436%	9.1078%	7.7715%
March	13.4833%	9.5543%	8.4863%	13.1924%	8.5240%	8.6136%
April	5.8486%	8.4799%	8.2144%	5.9718%	7.2980%	7.9796%
May	1.7144%	8.3600%	8.4847%	2.6769%	7.9849%	8.5335%
June	0.0510%	7.7065%	8.2122%	0.4295%	7.2721%	8.1995%
July	0.0006%	6.7712%	8.4883%	0.2895%	7.4930%	8.4099%
August	0.0009%	6.3688%	8.4840%	0.3432%	7.5862%	8.4199%
September	0.8809%	6.9373%	8.2136%	0.9402%	7.5734%	8.2512%
October	5.4962%	7.9644%	8.4869%	5.5497%	8.2808%	8.5277%
November	11.5899%	8.4752%	8.2122%	11.5452%	8.6345%	8.2589%
December	20.9301%	9.9577%	8.4915%	20.2781%	9.4200%	8.5238%

DATE OF ISSUE December 3, 2018DATE EFFECTIVE January 2, 2019ISSUED BY Michael Moehn
Name of OfficerPresident
TitleSt. Louis, Missouri
Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

WEATHER & CONSERVATION ADJUSTMENT RIDER (WCAR)

The WCR (in \$/Ccf) to be applied to the Company's general rate schedules for the November 2019 through October 2020 billing months for gas sold or delivered to customers in the Company's service area.

	<u>Weather Adjustment</u>		<u>Conservation Adjustment</u>		<u>OA</u>	<u>WCR</u>
	<u>WNA</u>	<u>ARR</u>	<u>PC</u>	<u>CCR</u>		
Residential	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Service	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Interruptible	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Standard Transport	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LV Transport	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

RULES & REGULATIONS

Table of Contents

	<u>Sheet Numbers</u>
I. <u>Definitions</u>	39
II. <u>Characteristics of Service Supplied</u>	41
III. <u>General Provisions</u>	
A. Application for Service	42
B. Form of Service Provided	42.1
C. Customer's Equipment	43
D. Company Access to Customer Premises	43
E. Customer Obligations	43
F. Company Obligations	44
G. Regulatory Authorities	44
H. Penalty Charges from Interstate Pipelines	44.1
I. Request for Conversion Between Company Supplied Gas Service and Gas Transportation Service	44.2
IV. <u>Extension of Distribution Mains</u>	
A. Length of Extension	45
B. Cost of Extension	45
C. Extensions Not Exceeding 160 Feet Per Customer	46
D. Extensions Exceeding 160 Feet Per Customer	46
E. Advance Refundable Contributions	47
F. Guarantee Agreement	48
G. Supplementary Extensions of Mains or Services	49
V. <u>Installation of Service Pipe</u>	
A. Specifications	50
B. Customer Payment	50
C. Customer Owned Service Pipe	50
D. Company Liability	50
E. Service Relocations	51
F. Excess Facilities Installations	51

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

	<u>Sheet Numbers</u>
VI. <u>Customer's Installation</u>	
A. Installation Standards	52
B. Customer Responsibility	52
C. Unsafe Conditions	52
VII. <u>Measurement of Service</u>	
A. Specifications	53
B. Number of Meters	53
C. Multiple Occupancy Buildings	53
D. Company Property Restrictions	53
E. Customer Liability	53
F. Meter Testing	54
G. Billing Adjustments	54
H. Minimum Billing Adjustment	55.1
I. Meter Relocations at Customer Request	55.1
VIII. <u>Billing Practices</u>	
A. Monthly Billing Periods	56
B. Inaccessible Meters	56
C. Estimated Bills For Full Billing Periods	56
D. Estimated Initial and Final Bills	57.1
E. Budget Billing Plan	57.1
F. Late Payment Charge	59
G. Abnormal Operations	59
H. Partial Payments	59
IX. <u>Resale of Service</u>	60
X. <u>Deposit Practices</u>	
A. Residential Customers	61
B. Non-residential Customers	62
C. General Provisions	63
XI. <u>Disconnection and Reconnection of Service</u>	
A. Reasons for Denial or Disconnection of Service	64

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

	<u>Sheet Numbers</u>
XI. <u>Disconnection and Reconnection of Service (Cont'd.)</u>	
B. Notice of Intent to Disconnect Service	65
C. Residential Customer Contact and Notice of Disconnection	66
D. Disconnection Hours	66
E. Delay of Disconnection for Medical Reasons	66
F. Avoidance of Disconnection of Service	66
G. Disconnection of Service Without Prior Notice	67
H. Reconnection of Service	68
XII. <u>Curtailment of Service Schedule</u>	
A. Priorities of Service	69
B. Unauthorized Use Charges	69.2
C. Relief From Liability	69.2
D. Right to Purchase Gas Owned by Transportation Customers	69.3
XIII. <u>Integrity of Service</u>	
A. Detrimental Customer Loads	70
B. Intermittent or Fluctuating Customer Loads	70
C. Installation of Corrective Equipment by Company	70
XIV. <u>Regulatory Authorities</u>	71
XV. <u>Pilot Programs</u>	72
XVI. <u>Promotional Practices</u>	
Weatherization Program	75
Energy Efficient Natural Gas Rebate Program	78
Energy Efficient Natural Gas Co-Delivery Program	82
Energy Efficient Natural Gas Low Income Program	84
Red Tag Repair Program	85
XVII. <u>Variances</u>	
A. Voluntary Electronic Bill Rendering and Payment Program	90

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

V. Installation of Service Pipe

A. Specifications

Company will specify the connection point to its distribution main, the route of the service pipe and the point of delivery for the requested service, and will furnish, install and maintain such facilities. Where in Company's judgment an existing service pipe meets the requirements for the service being requested, Company will use the existing service.

B. Customer Payment

Service Lines less than 2": The service pipe charges indicated on Sheet No. 19, Miscellaneous Charges, will be billed to the customer upon Company's completion of the installation of the specified service facilities.

Service Lines 2" and greater: The projected 3 year revenues to be received from the customer (excluding PGA and billing tax revenues) will be applied against the total cost of the customer's service extension, net of any revenue applied under Section IV to offset main extension cost, if applicable. Any service extension cost that remains after applying net projected revenues will be billed to the customer upon Company's completion of the installation of the specified service facilities. Where feasible, service extension cost may be combined with the main extension cost for determining total customer contribution, if applicable, as described in section IV.

C. Customer Owned Service Pipe

When Company becomes aware of the need to do so, Company will repair or replace as necessary customer owned service pipe installed by customers prior to April 1, 1977 in former Missouri Utilities Company's Central and Mid-Mo Districts and prior to December 1, 1979 in former Missouri Utilities Company's Southeast and Ozark Districts, but will not assume ownership responsibility for such service facilities until their replacement by Company, which will be done based upon Company's sole judgment and discretion.

D. Company Liability

Company will not be liable for and customer will indemnify and save Company harmless from all claims for trespass, injury to persons, or damage to lawn, trees, shrubs, buildings, or other property that may be caused by the installation or replacement of service pipe and other necessary facilities to serve customer unless the injury to persons or damage to property has been caused by negligence of the Company or its employees.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

V. Installation of Service Pipe (Cont'd.)

E. Service Relocations

Company will, upon request, relocate customer's service pipe following the payment by customer of the service pipe charges indicated on Sheet No. 19, Miscellaneous Charges and any additional cost associated with disconnecting and removing the existing service pipe, as applicable.

For relocation of lines 2" and greater where an incremental increase in revenue is expected to accompany the service relocation, the provisions under this section V shall apply.

F. Excess Facilities Installations

Where customers request and Company agrees to provide facilities the Company does not normally provide during the course of business (excess facilities) customer shall be able to receive such non-standard facilities pursuant to this Section. Customers that request excess facilities shall pay a non-refundable contribution equal to 1.9 times the installation cost. This non-refundable contribution will cover the installation costs, ongoing operation and maintenance costs, replacement costs, and any removal costs associated with the facilities. A revenue test will not be used in the determination of the customers non-refundable contribution, nor will it be used as an offset to any amounts due as a non-refundable contribution.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

WEATHERIZATION PROGRAM

PURPOSE

This voluntary Weatherization Program (Program) is intended to assist qualified residential gas customers in reducing their use of energy through weatherization and conservation.

AVAILABILITY

This voluntary Program is available to customers receiving service under the Company's Residential Service Rate and who meet the customer eligibility requirements.

TERMS AND CONDITIONS

- a. Pursuant to the Order issued by the Missouri Public Service Commission (MPSC) in Case No. GR-2019-0077, the Company will provide \$238,000 annually (the Program funds) for a residential weatherization grant program, including energy education, for primarily lower income customers. The Program is administered by the Missouri Division of Economic Development (MDED).
- b. The Program funds will be forwarded to the State Environmental Improvement and Energy Resources Authority (EIERA) for administration by MDED.
- c. The Program offers grants for weatherization services to eligible customers and will be primarily directed to lower income customers.
- d. The total amount of grants offered to an individual customer for improvements that can be made to their residence will be determined by using the National Energy Audit Tool (NEAT) software or other MDED approved audit tool. The grants and improvements offered will be consistent with the federal weatherization assistance program administered by MDED.
- e. The Company will retain at least two years of post-weatherization usage and payment history for each customer's residence that is weatherized.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2018

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

MISSOURI ENERGY EFFICIENT NATURAL GAS EQUIPMENT AND BUILDING SHELL MEASURE REBATE PROGRAMS

APPLICATION

The Missouri Energy Efficient Natural Gas Equipment and Building Shell Measure Rebate Programs (Program) is designed to encourage more effective utilization of natural gas by encouraging cost effective energy efficiency improvements through the replacement of less efficient natural gas equipment with high efficient ENERGY STAR® Qualified natural gas equipment and other high efficiency equipment and building shell measures.

Rebates are being offered on a limited basis for a portion of the cost of Measures purchased by Participants.

DEFINITIONS

ACH - Air Changes per Hour: ACH represents how many times per hour the air volume inside the living space is naturally replaced by outside air due to air leaks. ACH measurements vary according to the "air-tightness" of the building shell.

Administrator - Company will administer the Program through a contractor experienced in energy efficiency rebate programs.

AFUE - Annual Fuel Utilization Efficiency: Energy efficiency rating measure determined, under specific testing conditions, by dividing the energy output by the energy input. It is a measure of the heat actually delivered by a furnace to the structure compared to the heat potential in amount of fuel supplied to the furnace. For example, a furnace that has a 92% AFUE rating converts 92% of the fuel supplied as heat to the structure - the other 8% is lost as exhaust. This information is available on every furnace sold in the United States.

CUSTOM REBATE - The rebate program will make available custom rebates to business customers for the installation of any natural gas related energy efficiency improvement that does not qualify for a prescriptive rebate. All custom rebates will be individually determined and analyzed prior to installation to ensure that the Total Resource Cost Test is 1.0 or higher. The maximum allowable rebate per customer is \$25,000.

EEAG - Energy Efficiency Advisory Group: Includes representatives from the Company, the Commission Staff, Office of the Public Counsel (OPC), and the Division of Energy. The EEAG will function as an advisory group for this Program.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

**MISSOURI ENERGY EFFICIENT NATURAL GAS
EQUIPMENT AND BUILDING SHELL MEASURE REBATE PROGRAMS (cont'd)**

DEFINITIONS (cont'd)

ENERGY STAR® - A voluntary labeling program designed to identify and promote energy efficient products to reduce energy expenses and greenhouse gas emissions. ENERGY STAR® is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy.

Measure - The replacement of less efficient natural gas equipment with high efficient ENERGY STAR® Qualified natural gas equipment and other high efficiency equipment and building shell measures.

Participant - A customer who is being served under either the Company's Residential, General, or Transportation Service natural gas rate class, is located in Missouri, and elects to either purchase or agrees to receive energy efficient gas saving equipment as described in the Measures. For purposes of receiving rebates under this Program, a Participant is defined as a person, firm, organization, association, corporation, landlord, contractor or other entity that implements Measure(s) and submits a rebate form(s) and documentation.

Qualified Auditor - A nationally recognized contractor trained in natural gas equipment utilization systems and commercial and/or residential structures as an integrated whole building system. Residential training, certification, and accreditation are provided by the Building Performance Institute (BPI) and Residential Energy Services Network's (RESNET®). Commercial training and certification are provided by nationally-respected energy auditor certification organizations. Approved Energy Auditors are found by calling the Company at 1-800-552-7583 or on the internet at <http://www.ded.mo.gov/asp/energy/auditors.htm> or <http://www.bpi.org/locator-tool/find-a-contractor>.

Rebate Range Sheet - The list of Measures to be offered to Participants along with the minimum and maximum rebate level permitted for each Measure.

Retailer - Any retailer which has agreed to sell ENERGY STAR® Qualifying or other high efficient natural gas equipment, or provider of energy efficiency services, associated with the Measures.

AVAILABILITY

The Program is voluntary. A Participant may receive rebates, for the quantities listed for each Measure, each calendar year. Rebates must be redeemed through the Administrator. High Efficiency and ENERGY STAR® Equipment availability may vary by each Participating Retailer throughout the Company's territory.

Residential rebates apply only to Residential customers, or their landlords purchasing Measures listed as Residential in the Rebate Range Sheet.

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

**MISSOURI ENERGY EFFICIENT NATURAL GAS
EQUIPMENT AND BUILDING SHELL MEASURE REBATE PROGRAMS (cont'd)**

AVAILABILITY (cont'd)

General Service and Transportation Service rebates apply only to General Service and Transportation Service customers purchasing Measures listed as Business in the Rebate Range Sheet.

Program details regarding the interaction between the Company or Program Administrators and Participants in the Program, such as available Measures, Measure ranges, availability of the Program, eligibility, and application and completion requirements may be adjusted through the change process as presented below. Those details, additional details on each Measure, and other details such as process flows, application instructions, and application forms will be provided on the Company's website AmerenMissouri.com/naturalgas, or by calling toll free 1-800-552-7583

CHANGE PROCESS

The change process is applicable to changes in a Measure detail regarding the interaction between the Company or Program Administrators and Participants in the Measures.

1. Identify need for Measure detail change regarding the interaction between the Company or Program Administrators and Participants in the Measures;
2. Discuss proposed change with implementer;
3. Analyze impact on Program and portfolio (Cost effectiveness, goal achievement, etc.);
4. Inform the Staff, Office of the Public Counsel, and the Missouri Department of Economic Development - Division of Energy (DE) of the proposed change, the time within which it needs to be implemented, provide them the analysis that was done and consider recommendations from them that are received within the implementation timeline (the implementation timeline shall be no less than five business days from the time that the Staff, Office of the Public counsel, and the DE are informed and provided the above-referenced analysis);
5. Take timely received recommendations into account and incorporate them where the Company believes it is appropriate to do so;
6. Notify and train customer contact personnel (Contact Center, Energy Advisors, Business Center, Key Account Executives, Customer Service Advisors) of the changes;
7. Make changes to forms and promotional materials;
8. Update Program website;
9. Provide updated web pages and, if appropriate, updated list of Measures and rebate amounts to Staff; and
10. Inform Participants, Trade Allies, etc. Company will also continue to discuss and provide information on ongoing Program and portfolio progress at quarterly regulatory stakeholder update meetings.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

MISSOURI ENERGY EFFICIENT NATURAL GAS EQUIPMENT AND BUILDING SHELL MEASURE REBATE PROGRAMS (cont'd)

CHANGES IN MEASURES OR REBATES

Company may offer the Measures contained in Company's Rebate Range Sheet. The offering of Measures not contained within Company's Rebate Range Sheet must be approved by the Commission. Not all Measures listed in the Rebate Range Sheet will be offered at all times. The actual Measures being offered, and rebates available to Participants, will be listed on Company's website, AmerenMissouri.com/naturalgas. The Measures and rebates being offered are subject to change - Participants must consult AmerenMissouri.com/naturalgas for the list of currently available Measures. The website will expressly state in conspicuous language that the Measures and rebates are subject to change.

REBATES

Each Participant will receive a rebate check from the Administrator within six (6) to eight (8) weeks after the completed Rebate Form is submitted with proper documentation. Rebate Forms, applications and protocols are available on the Company's Website AmerenMissouri.com/naturalgas or by calling Ameren Missouri at 314-342-1111 or 800-552-7583.

PROGRAM TERM

The Program will conclude on December 31, 2022 or at the time new rates go into effect as a result of a general rate proceeding, whichever occurs first. All installations of Measures must occur before the conclusion date of the Program to qualify for a rebate. All rebate forms for this Program must be submitted and post-marked not later than one month after the conclusion date of the Program.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019
ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

**MISSOURI ENERGY EFFICIENT NATURAL GAS
EQUIPMENT AND BUILDING SHELL MEASURE REBATE PROGRAMS (cont'd)**

REBATE RANGE SHEET - RESIDENTIAL & LANDLORD MEASURES

<u>Measure</u>	<u>Max Number of Rebates</u>	<u>Minimum Rebate Level (\$/Measure)</u>	<u>Maximum Rebate Level (\$/Measure)</u>
Programmable Thermostat	2	\$0	\$50
Learning Thermostat	2	\$25	\$125
Natural Gas Furnace (Tier 1) AFUE rated 92% to 95.9%	2 (Note 1)	\$100	\$300
Natural Gas Furnace (Tier 2) AFUE rated 96% or higher	2 (Note 1)	\$200	\$450
Natural Gas Boiler (Tier 1) AFUE rated 85% to 89.9%	2 (Note 1)	\$50	\$300
Natural Gas Boiler (Tier 2) AFUE rated 90% or higher	2 (Note 1)	\$200	\$450
Natural Gas Tank Storage Water Heater, 20-55 gal, EF rating .67 or higher	2	\$100	\$300
Natural Gas Tankless water heater EF rating .9 or higher	2	\$200	\$400
Ceiling Insulation R30 to R49	\$200	\$.004 per sf x ΔR	\$.02 per sf x ΔR
Wall Insulation, minimum rating or R11	\$400	\$.04 per sf x ΔR	\$.07 per sf x ΔR
Hot Water Measure Kit (1-shower head, 2-aerators, 10 ft pipe wrap)	2	\$0	\$25
Ceiling Insulation R30 to R49 w/Audit	\$400	\$.004 per sf x ΔR	\$.02 per sf x ΔR
Wall Insulation, minimum rating or R11 w/Audit	\$800	\$.04 per sf x ΔR	\$.07 per sf x ΔR
Air Sealing Measure w/Audit	\$200	\$150	\$350
Duct Sealing Measure w/Audit	\$200	\$150	\$350
Low Flow Faucet Aerator	1/faucet	\$0	\$15
Low Flow Showerhead	1/shower	\$0	\$15
Pipe Wrap	No Limit	\$0	\$10
Hot Water Measure Kit w/Audit	2	\$0	\$40
H.E. Boiler (side-arm tank)	2	\$300	\$600
Furnace Tune-up	2	25% of Incremental Cost	75% of Incremental Cost
Boiler Tune-up	2	25% of Incremental Cost	75% of Incremental Cost

Note (1): For Landlords a maximum of ten (10) units or 10% of the total units whichever is greater

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

**MISSOURI ENERGY EFFICIENT NATURAL GAS
EQUIPMENT AND BUILDING SHELL MEASURE REBATE PROGRAMS (cont'd)**

REBATE RANGE SHEET - BUSINESS MEASURES

<u>Measure</u>	<u>Max Number of Rebates</u>	<u>Minimum Rebate Level (\$/Measure)</u>	<u>Maximum Rebate Level (\$/Measure)</u>
Programmable Thermostat	2	\$1	\$50
Learning Thermostat	2	\$25	\$125
Natural Gas Furnace (Tier 1) AFUE rated 92% to 95.9%	10	\$100	\$300
Natural Gas Furnace (Tier 2) AFUE rated 96% or higher	10	\$200	\$450
Steam Trap Replacement	25	\$25	\$100
Natural Gas Food Service Steam Cookers - 5 pan	2	\$1,500	\$1,950
Natural Gas Food Service Steam Cookers - 6 pan	2	\$1,500	\$1,950
Natural Gas Food Service Double Oven	2	\$2,000	\$2,750
Natural Gas Tank Storage Water Heater, 20-55 gal, EF rating .67 or higher	10	\$100	\$300
Natural Gas Tankless Water Heater	10	\$200	\$400
Hot Water Measure Kit (1-shower head, 2-aerators, 10 ft pipe wrap)	3	\$0	\$25
Ceiling Insulation R18	\$250	\$.02 per sf x ΔR	\$.04 per sf x ΔR
Wall Insulation, minimum rating or R20	\$400	\$.035 per sf x ΔR	\$.06 per sf x ΔR
Ceiling Insulation R18 to R49 w/Audit	\$500	\$.02 per sf x ΔR	\$.04 per sf x ΔR
Wall Insulation, R20-R49 w/Audit	\$800	\$.035 per sf x ΔR	\$.06 per sf x ΔR
Air Sealing Measure w/Audit	\$800	\$300 per 0.5 ACH reduction	\$500 per 0.5 ACH reduction
Hot Water Measure Kit w/Audit	2	\$0	\$25
Pre-Rinse Spray Valve (less than 1.5 GPM)	2	\$25	\$175
Natural Gas Large Vat Fryer	2	\$700	\$1,200
Natural Gas Boiler AFUE rated 90% or higher	2	\$200	\$450
Furnace Tune-up	10	25% of Incremental Cost	75% of Incremental Cost
Boiler Tune-up	2	25% of Incremental Cost	75% of Incremental Cost
Custom Rebate	1	\$5/MCF	\$8/MCF

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

MISSOURI ENERGY EFFICIENT NATURAL GAS CO-DELIVERY PROGRAM

APPLICATION

The Missouri Energy Efficient Natural Gas Co-Delivery Program is designed to deliver energy savings to customers receiving service under the Residential Service Rate, the General Service Rate, or a Transportation Service Rate that also receive electric service from Ameren Missouri. The program will be co-delivered through electric one or more energy efficiency programs offered by Ameren Missouri.

Incentives are being offered on a limited basis for all or a portion of the cost of Measures provided to Participants.

DEFINITIONS

Administrator - Company will administer the Program through a contractor experienced in energy efficiency programs.

Measure - The replacement of less efficient natural gas equipment with high efficiency natural gas equipment and other high efficiency equipment and building shell measures.

Participant - A customer who is being served under either the Company's Residential Service, General Service, or Transportation Service natural gas rate class, is located in Missouri, and elects to either purchase or agrees to receive energy efficient gas saving equipment as described in Measures And Incentives. For purposes of receiving incentives under this Program, a Participant is defined as a person, firm, organization, association, corporation, landlord, contractor or other entity that implements Measure(s).

AVAILABILITY

The Program is available to Ameren Missouri gas customers that also receive electric service from Ameren Missouri and may be offered through various channels such as direct install, direct mail, secondary education schools, community based organization, and market-rate and low-income multifamily properties.

PROGRAM DESCRIPTION

The Company will partner with the Ameren Missouri electric utility and a program Administrator to implement this Program. The Administrator will provide the necessary services to effectively implement the Program. The Program incorporates various Program partners, products, incentive mechanisms and Program delivery strategies.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

**MISSOURI ENERGY EFFICIENT NATURAL GAS
CO-DELIVERY PROGRAM (cont'd)**

MEASURES AND INCENTIVES

Energy Efficiency Measures are delivered through the Program at no cost to Participants and may include but are not limited to thermostats, low flow faucet aerators, low flow showerheads, pipe wrap, and furnace tune-ups. Eligible measures and incentive ranges can be found on the REBATE RANGE SHEET - RESIDENTIAL & LANDLORD MEASURES list in the Missouri Energy Efficient Natural Gas Equipment and Building Shell Measure Rebate Programs tariff.

PROGRAM TERM

The Program will conclude on December 31, 2022 or at the time new rates go into effect as a result of a general rate proceeding, whichever occurs first. All installations of Measures or delivery of Measures for self-install must occur before the conclusion date of the Program.

DATE OF ISSUE December 3, 2018

DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

MISSOURI ENERGY EFFICIENT NATURAL GAS RESIDENTIAL LOW INCOME PROGRAM

APPLICATION

The Missouri Energy Efficient Natural Gas Residential Single Family Low Income Program is designed to deliver energy savings to customers receiving service under the Residential Service Rate who meet income qualifications specified in the Availability section of this tariff.

Incentives are being offered on a limited basis for all or a portion of the cost of Measures provided to Participants.

DEFINITIONS

Administrator - Company will administer the Program through a contractor experienced in energy efficiency programs.

Measure - The replacement of less efficient natural gas equipment with high efficiency natural gas equipment and other high efficiency equipment and building shell measures.

Participant - A customer who is being served under the Company's Residential Service natural gas rate class, is located in Missouri, and elects to either purchase or agrees to receive energy efficient gas saving equipment as described in Measures And Incentives.

AVAILABILITY

The Program is available to qualifying low-income customers receiving service under the Residential Service Rate residing in single family detached housing, duplexes, mobile homes (wood-frame bolted to steel chassis, designed to be transported) and owners and operators of any multi-family properties of three(3) or more dwelling units with eligible customers receiving service under the Residential Service Rate.

In order to qualify for participation, low-income Participants must meet one of the following income eligibility requirements:

1. Reside in federal, state, or local subsidized housing and fall within that program's income guidelines.
2. Reside in non-subsidized housing with proof of income levels at or below 80% of area median income (AMI).
3. Fall within a census tract that indicates at least 85% of customers are at or below 80% of AMI.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

**MISSOURI ENERGY EFFICIENT NATURAL GAS
RESIDENTIAL LOW INCOME PROGRAM (cont'd)**

MEASURES AND INCENTIVES

Measures to be installed in this Program are the same as the list of residential measures in the Missouri Energy Efficient Natural Gas Equipment and Building Shell Measure Rebate Program, however the incentives could be as high as 100% of the installed cost of the measure. No single premise can receive incentives more than \$3,500 in a thirty-six month period.

PROGRAM TERM

The Program will conclude on December 31, 2022 or at the time new rates go into effect as a result of a general rate proceeding, whichever occurs first. All installations of Measures or delivery of Measures for self-install must occur before the conclusion date of the Program.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019
ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

RED TAG REPAIR PROGRAM

APPLICATION

The Red Tag Repair Program is an experimental program for customers receiving service on Companys Residential Service Rate to receive funding towards minor repairs or replacements of their gas appliances and piping in order to obtain or retain gas service. The Program has two components: (i) Heating Only for Lower Income, and (ii) Avoid Red Tags.

AVAILABILITY

1. Heating Only for Lower Income provides payment assistance to eligible residential customers of the Company, with a household income equal to or less than 80% of Area Median Income, who require repairs or replacement of natural-gas appliances and/or piping that have been red- tagged. If the customer is renting the premises, approval of the landlord will be required. Customers receiving natural gas service to operable permanent space heating equipment ("PSHE"), i.e. furnaces and boilers, do not qualify; this program is designed to assist only those lower income customers who would otherwise be eligible to commence or maintain service, but whose facilities are "red-tagged," that is, whose service will be or is disconnected at the meter or to the PSHE, and are without space heating, due to unsafe PSHE, unsafe piping or unsafe non-space heating appliance where there is no shut off valve to the non-space heating appliance.
2. Avoid Red Tags permits Company's field service representatives ("FSR") who are already on-site to spend a nominal amount of time to perform minor repairs of the customer's gas appliances and piping when doing so would result in the customer gaining or keeping use of service rather than having the piping or appliance "red-tagged" as unsafe.

MEASURES AND INCENTIVES

1. Heating Only for Lower Income - The program provides up to \$25,000 annually to credit customers or reimburse qualified social service agencies within its service territory that can provide or arrange to provide and pay for such emergency service work consistent with the terms set forth herein and at an administrative cost not to exceed 10% of the funds provided. No customer shall receive assistance greater than \$1,000.00 under this Program, with no more than \$700 going towards a PSHE and no more than \$450 going toward each other gas appliance or piping. To the extent repairs are not cost effective, such customers should be referred to the Company's low-income energy efficiency program. In the event customer incentives from the Company's low-income energy efficiency program do not cover the full cost of PSHE replacement, eligible funds from this program can be put towards the energy efficient replacement PSHE equipment.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address

UNION ELECTRIC COMPANY GAS SERVICE

Applying to MISSOURI SERVICE AREA

RED TAG REPAIR PROGRAM (cont'd)

MEASURES AND INCENTIVES (cont'd)

2. Avoid Red Tags - If an FSR determines that any gas appliance should be "red-tagged" as unsafe or out of compliance with applicable codes, but the FSR believes that the problem can be repaired in no more than 15 minutes using parts that cost \$20 or less, the FSR may, with the customer's consent, attempt to affect such repairs in conjunction with utility service at no cost to the customer. At any time that the FSR determines that the repair will fall outside of these parameters, the FSR shall cease the repair effort and proceed in accordance with the Company's safety practices and the Utility Promotional Practices.

DATE OF ISSUE December 3, 2018 DATE EFFECTIVE January 2, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
Name of Officer Title Address