

State of Florida



Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD
TALLAHASSEE, FLORIDA 32399-0850

-M-E-M-O-R-A-N-D-U-M-

DATE: July 26, 2018

TO: Office of Commission Clerk (Stauffer) *EDD*

FROM: Division of Economics (Guffey, Merryday, Coston) *HM*
Office of the General Counsel (Schrader, Crawford) *SKG WEC Pd JSH*

RE: Docket No. 20180117-GU – Petition for approval of tariff modifications for use of natural gas for gas heat pumps by customers, by Peoples Gas System.

AGENDA: 08/07/18 – Regular Agenda – Tariff Filing – Interested Persons May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Administrative

CRITICAL DATES: 01/09/19 (8-Month Effective Date)

SPECIAL INSTRUCTIONS: None

2018 JUL 26 AM 10:35
RECEIVED-FPSC
COMMISSION CLERK

Case Background

On May 9, 2018, Peoples Gas System (Peoples or utility) filed a petition for approval of tariff modifications for the use of natural gas for gas heat pumps. The proposed tariff modifications would provide new tariff provisions and charges applicable to residential and commercial customers utilizing gas heat pump (GHP) systems. A GHP system heats and cools a building using natural gas. The legislative version of the proposed tariffs is shown as Attachment A to this recommendation.

Staff issued two data requests to Peoples on May 22 and on June 12, 2018, for which responses were received on June 5 and on June 26, 2018, respectively. During the review period, Peoples submitted revised tariff sheet Nos. 7.201, 7.405, and 7.405-1 to correct certain errors. Peoples waived the 60-day file and suspend provision of Section 366.06(3), Florida Statutes (F.S.). The Commission has jurisdiction over this matter pursuant to Section 366.04, F.S.

Discussion of Issues

Issue 1: Should the Commission approve Peoples' petition to modify its tariffs shown in Attachment A for the use of natural gas for GHP systems?

Recommendation: Yes. The Commission should approve Peoples' petition to modify its tariffs shown in Attachment A for the use of natural gas for GHP systems. The proposed tariffs should become effective on August 7, 2018. (Guffey, Merryday)

Staff Analysis: Peoples' proposed tariff modifications provide new residential and commercial tariff provisions and charges for the use of GHP systems. The proposed new GHP charges are based upon the cost of providing service and anticipated GHP customer gas usage. The GHP technology and proposed charges are discussed below.

Gas Heat Pump Technology

Peoples explained that the GHP technology is new to Florida and that there is a growing interest in the use of GHPs, particularly from commercial customers. There are two types of GHP systems: (1) a basic GHP system that utilizes a natural gas powered engine to drive the compressor for either cooling or heating a building and (2) a power producing GHP system that includes internal back-up electric generation ability and can fully operate during electric power loss. Peoples stated that it had communications with GHP manufacturers and inquiries from residential and commercial customers, prompting Peoples to develop the proposed tariffs to serve GHP load.

Peoples stated that the GHP technology provides for increased energy efficiency when compared to traditional electric heating, ventilation, and air conditioning (HVAC) systems. The GHP systems can be installed during construction or as a retrofit to existing buildings. Peoples currently offers a Commission-approved gas space conditioning program which offers piping and venting allowances to reduce the generally higher cost of installing gas space conditioning equipment. However, Peoples' Energy Conservation Cost Recovery (ECCR) clause docket filings from 2009 to 2017 indicate that no customers have utilized the allowance.

In response to staff's first data request, Peoples explained that the installed cost for a GHP system ranges between \$4,400 and \$8,000 per ton, based on individual design and manufacturer. Peoples stated that an 8-ton system is expected to satisfy the heating and cooling needs of a 4,000-4,800 square foot house, and expects that customers with larger houses are more likely to install a GHP system. Peoples stated that currently three GHP manufacturers are available Peoples' customers: M Trigen, Yanmar, and Blue Mountain.

Proposed Residential and Commercial GHP Tariffs and Charges

Residential Customers

For residential customers utilizing a GHP system, the proposed new GHP charges are shown on tariff sheet No. 7.201 (Attachment A, page 4). Current residential customer charges are based on annual usage, with a \$20 customer charge applying to large residential customers (RS-3 billing class using 250-1,999 therms per year). The current distribution charge is \$0.26782 per therm.

Residential customers in the proposed new RS-GHP billing class will pay a monthly customer charge of \$20 and a distribution charge of \$0.0999 per therm. The lower RS-GHP distribution charge reflects the increased natural gas consumption of a GHP customer compared to a residential customer who consumes natural gas for traditional gas appliances only. In addition to the customer and distribution charges, all residential customers pay Commission-approved ECCR and Cast Iron Bare Steel Replacement Rider clause charges.

Residential customers who have traditional gas appliances and a GHP system would be billed for all their natural gas usage at the GHP rate. Peoples explained that by not metering and billing residential GHP usage separately, the utility can reduce unnecessary metering costs.

The derivation of the proposed new RS-GHP \$0.0999 per therm distribution charge is shown in response to staff's first data request No. 17.¹ The RS-GHP distribution charge is formulated using a weighted average of (1) the projected cost to provide service to customers who only have a GHP system and (2) the currently approved cost to provide service to customers with only traditional gas appliances. This ensures that GHP customers pay the costs associated with natural gas service, since the RS-GHP distribution charge would apply to GHP usage and any other natural gas appliance(s) the customer may have.

To develop the projected cost to provide service to GHP systems, Peoples utilized the cost of service study approved in the utility's 2008 rate case² (the utility's most recent rate case) and projected residential GHP usage. Based on information provided by GHP manufacturers, Peoples projects that a residential 8-ton GHP system would use 160 therms per month. Average monthly residential consumption for Peoples' customers without a GHP system is approximately 18 therms.

Currently, residential customers with consumption in excess of 1,999 therms per year are eligible for gas transportation service. Under transportation service, the customer purchases the natural gas commodity from a pool manager (third party marketer). Residential customers taking service under the GHP rate will also qualify for transportation service if they use more than 1,999 therms per year.

Commercial Customers

For commercial GHP customers, Peoples proposed a new Commercial Gas Heat Pump Service (CS-GHP) rate schedule as shown on tariff sheet Nos. 7.405 and 7.405-1 (Attachment A, pages 6-7). The proposed CS-GHP monthly customer charge is \$35 and the proposed per therm distribution charge is \$0.2063. In comparison, the current the GS-1 distribution charge is \$0.2680 per therm. The derivation of the proposed CS-GHP charges is shown in Exhibit B to the petition.

The proposed CS-GHP customer charge is set at the same level as the currently approved GS-1 customer charge (\$35). To calculate the CS-GHP distribution charge, Peoples utilized the cost of

¹ The calculation was included in Exhibit A to the petition; however, Peoples submitted a revised calculation to correct a minor error in response to staff's first data request No. 17.

² Order No. PSC-10-0208-S-GU, issued April 5, 2010, in Docket No. 080318-GU, *In re: Petition for rate increase by Peoples Gas System*.

service study approved in the utility's 2008 rate case and projected commercial GHP natural gas usage. Based on the information provided by GHP manufacturers, Peoples projects that a commercial GHP system would use 627 therms per month.

Under the CS-GHP rate schedule, the gas provided for GHP usage will be separately metered from other natural gas usage and will be a separate item on customer bills. The utility proposes separate GHP metering for commercial customers to ensure that the reduced GHP distribution charge is applied only to GHP consumption, as non-GHP natural gas usage varies significantly for commercial customers. In addition, GHP use by commercial customers could vary depending on the type of customer and size of GHP equipment installed.

Peoples explained that the types of commercial customers who could take gas service under the CS-GHP tariff would include senior living facilities, nursing homes, convenience stores, restaurants, or office buildings. In addition to customer and distribution charges, CS-GHP customers would pay all other Commission-approved cost recovery clause charges (Purchased Gas Adjustment, ECCR, Swing Service Charge, Competitive Rate Adjustment, and Cast Iron Bare Steel Replacement Rider). CS-GHP customers would pay the same cost recovery clause charges as those approved for the commercial GS-1 rate schedule.³

Customer Notification

The utility proposes to inform its customers of the availability of the new heating/cooling options via public relations outreach, advertising, bill inserts, and on the utility's website. Peoples' sales team will communicate with specific commercial and industrial customers and with distributors, installers, and service contractors to inform them of the availability of the GHP technology. Peoples stated that the utility will provide a copy of its customer notifications to staff prior to use.

Conclusion

Based on the petition and responses to staff's data request, staff believes the proposed GHP tariffs are cost-based. Therefore, the Commission should approve Peoples' petition to modify its tariffs shown in Attachment A for the use of natural gas for GHP systems. The proposed tariffs should become effective on August 7, 2018.

³ Proposed tariff sheet No. 7.101-3 also adds the Swing Service Charge for the Commercial Standby Generator rate class, which was approved in Order PSC-07-0530-TRF-GU. The utility states that this charge was inadvertently left off of the tariff sheet, therefore, the utility is including it at this time.

Issue 2: Should this docket be closed?

Recommendation: Yes. If Issue 1 is approved, the tariffs should become effective on August 7, 2018. If a protest is filed within 21 days of the issuance of the order, the tariffs should remain in effect, with any revenues held subject to refund, pending resolution of the protest. If no timely protest is filed, the docket should be closed upon the issuance of a consummating order. (Schrader, Crawford)

Staff Analysis: Yes. If Issue 1 is approved, the tariffs should become effective on August 7, 2018. If a protest is filed within 21 days of the issuance of the order, the tariffs should remain in effect, with any revenues held subject to refund, pending resolution of the protest. If no timely protest is filed, the docket should be closed upon the issuance of a consummating order.

Peoples Gas System ~~Eighth-Ninth~~ Revised Sheet No. 7.000
 a Division of Tampa Electric Company Cancels ~~Seventh-Eighth~~ Revised Sheet No. 7.000
 Original Volume No. 3

INDEX OF RATE SCHEDULES

	<u>SHEET NO.</u>
GENERAL APPLICABILITY PROVISIONS:	
A. Character of Service	7.101
B. Purchased Gas Adjustment Clause	7.101-1
C. Energy Conservation Cost Recovery Adjustment Clause	7.101-2
D. Swing Service Charge	7.101-3
E. RESERVED FOR FUTURE USE	7.101-4
F. Tax and Fee Adjustment Clause	7.101-5
G. Competitive Rate Adjustment Clause	7.101-5
H. Conditions for Transportation of Customer-Owned Gas	7.101-7
I. Main Extension Program	7.101-7

RATE SCHEDULES

RESIDENTIAL RATES:	
Residential Service (RS)	7.201
GENERAL SERVICE RATES:	
Small General Service (SGS)	7.301
General Service - 1 (GS-1)	7.302
General Service - 2 (GS-2)	7.303
General Service - 3 (GS-3)	7.303-2
General Service - 4 (GS-4)	7.303-4
General Service - 5 (GS-5)	7.304
Commercial Street Lighting Service (CSLS)	7.306
SPECIAL FIRM GAS RATES:	
Natural Gas Vehicle Service-1 (NGVS-1)	7.401
Natural Gas Vehicle Service-2 (NGVS-2)	7.401-2
Natural Gas Vehicle Service-3 (NGVS-3)	7.401-4
Residential Standby Generator Service (RS-SG)	7.402-1
Commercial Standby Generator Service (CS-SG)	7.403
Renewable Natural Gas Service (RNGS)	7.404
<u>Commercial Gas Heat Pump Service Rate Schedule (CS-GHP)</u>	<u>7.405</u>
WHOLESALE RATES:	
Wholesale Service - Firm (WHS)	7.501
INTERRUPTIBLE RATES:	
Small Interruptible Service (SIS)	7.601
Interruptible Service (IS)	7.603
Interruptible Service - Large Volume (ISLV)	7.605
Contract Interruptible Service (CIS)	7.607

Issued By: T. J. Szelistowski, President
 Issued On: ~~September 19, 2017~~ **16**

Effective: ~~December 12, 2017~~

Peoples Gas System
a Division of Tampa Electric Company Cancels ~~Twentieth~~ Twenty-First Revised Sheet No. 7.101-2
Original Volume No. 3

GENERAL APPLICABILITY PROVISIONS (Continued)

C. ENERGY CONSERVATION COST RECOVERY ADJUSTMENT CLAUSE

The bill for Gas and transportation service supplied to a retail Customer in any Billing Period shall be adjusted as follows:

Except as otherwise provided herein, each rate schedule shall be increased or decreased to the nearest \$0.00001 per therm and include the tax factor of 1.00503 for each Therm of consumption or transportation to recover the conservation related expenditures by the Company. The Company shall record both projected and actual expenses and revenues associated with the implementation of the Company's Energy Conservation Plan as authorized by the Commission. The procedure for the review, approval, recovery and recording of such costs and revenues is set forth in the Commission Rule 25-17.015, F.A.C.

The cost recovery factors for the period from meter readings taken on or after January 1, 2018 through the last billing cycle for December 2018 are as follows:

<u>Rate Class</u>	<u>Recovery Factor</u>
Residential	\$0.09921 per Therm
Residential Standby Generator	\$0.09921 per Therm
Residential Gas Heat Pump Service	\$0.09921 per Therm
Small General Service	\$0.05982 per Therm
Commercial Standby Generator	\$0.02985 per Therm
Commercial Gas Heat Pump Service	\$0.02985 per Therm
General Service - 1	\$0.02985 per Therm
General Service - 2	\$0.02174 per Therm
General Service - 3	\$0.01806 per Therm
General Service - 4	\$0.01336 per Therm
General Service - 5	\$0.00980 per Therm
Commercial Street Lighting	\$0.01577 per Therm
Natural Gas Vehicle Service	\$0.01844 per Therm

Pursuant to FPSC Order No. 23576, no conservation cost recovery factor shall be applied to Therms consumed or transported for use in a cogeneration facility, regardless of the rate schedule under which such Therms are consumed or transported by Company.

Issued By: T. J. Szelistowski, President
Issued On: ~~November 16, 2017~~

Effective: January 1, 2018

Peoples Gas System ~~Fourth-Fifth~~ Revised Sheet No. 7.101-3
a Division of Tampa Electric Company Cancels ~~Third-Fourth~~ Revised Sheet No. 7.101-3
Original Volume No. 3

GENERAL APPLICABILITY PROVISIONS (Continued)

D. SWING SERVICE CHARGE

The Pool Manager of a Customer receiving aggregated transportation service from Company under the Natural Choice Transportation Service Rider (Rider NCTS) provides a fixed daily quantity of Gas supply and interstate pipeline transportation capacity throughout each month. The Company must increase or reduce the system's Gas supply and use of interstate pipeline capacity in an effort to balance the actual daily consumption of a Rider NCTS Customer as it differs from the fixed daily quantity of Gas being delivered by the Customer's Pool Manager during the month. The Swing Service Charge is assessed to firm Rider NCTS Customers to cover the costs incurred by the Company to maintain the above-described balance and distribution system integrity.

The bill for aggregated transportation service provided by Company to a firm Customer pursuant to Rider NCTS in any Billing Period shall be adjusted as follows:

The monthly consumption of each Rider NCTS Customer shall be multiplied by the Swing

Service Charge factors listed below, each factor being increased or decreased to the nearest \$0.0001 per therm and include the regulatory assessment tax factor of 1.00503:

<u>Rate Class</u>	<u>Recovery Factor</u>
Residential Gas Heat Pump Service	\$0.0388 per Therm
Small General Service	\$0.0388 per Therm
Commercial Street Lighting	\$0.0071 per Therm
Natural Gas Vehicle Service	\$0.0435 per Therm
Commercial Standby Generator	\$0.0208 per Therm
Commercial Gas Heat Pump Service	\$0.0208 per Therm
General Service 1	\$0.0208 per Therm
General Service 2	\$0.0217 per Therm
General Service 3	\$0.0234 per Therm
General Service 4	\$0.0079 per Therm
General Service 5	\$0.0058 per Therm

Revenues derived from the Swing Service Charge are credited to the Purchased Gas Adjustment Clause to the extent applicable.

Issued By: ~~Gordon L. Gillette~~ T. J. Szelistowski, President Effective: ~~December 3, 2015~~
Issued On: ~~December 3, 2015~~ 18

PEOPLES GAS SYSTEM
DOCKET NO. 20180117-GU
STAFF'S FIRST DATA REQUEST
REQUEST NO. 17
PAGE 8 OF 8
FILED: JUNE 5, 2018

Peoples Gas System ~~Seventh-Eighth~~ Revised Sheet No. 7.201
a Division of Tampa Electric Company Cancels ~~Sixth-Seventh~~ Revised Sheet No. 7.201
Original Volume No. 3

**RESIDENTIAL SERVICE
Rate Schedule RS**

Availability:

Throughout the service areas of the Company.

Applicability:

Gas Service for residential purposes in individually metered residences and separately metered apartments. Also, for Gas used in commonly owned facilities of condominium associations, cooperative apartments, and homeowners associations, (excluding any premise at which the only Gas-consuming appliance or equipment is a standby electric generator), subject to the following criteria:

1. 100% of the Gas is used exclusively for the co-owner's benefit.
2. None of the Gas is used in any endeavor which sells or rents a commodity or provides service for a fee.
3. Each Point of Delivery will be separately metered and billed.
4. A responsible legal entity is established as the Customer to whom the Company can render its bills for said services.

5. RS-GHP refers to any Residential Customer utilizing a gas heat pump ("GHP") for heating and cooling.

Customers receiving service under this schedule will be classified for billing purposes according to annual usage as follows:

<u>Billing Class</u>	<u>Annual Consumption</u>
RS-1	0 – 99 Therms
RS-2	100 – 249 Therms
RS-3	250 – 1,999 Therms
<u>RS-GHP</u>	<u>All Therms</u>

Monthly Rate:

<u>Billing Class</u>	<u>Customer Charge</u>
RS-1	\$12.00 per month
RS-2	\$15.00 per month
RS-3	\$20.00 per month
<u>RS-GHP</u>	<u>\$20.00 per month</u>

Distribution Charge: \$0.26782 per Therm for RS-1, RS-2, and RS-3
\$0.0999 per Therm for RS-GHP

Minimum Bill: The Customer charge.

Issued By: ~~William N. Cantrell~~ T. J. Szelistowski, President **Effective:** ~~June 18, 2009~~
Issued On: ~~May 19, 2009~~

Peoples Gas System ~~Fourth-Fifth~~ Revised Sheet No. 7.201-1
a Division of Tampa Electric Company Cancels ~~Third-Fourth~~ Revised Sheet No. 7.201-1
Original Volume No. 3

RESIDENTIAL SERVICE (Continued)

Note 1 – Company's BudgetPay plan is available to eligible Customers receiving Gas Service pursuant to this rate schedule (See Sheet No. 5.401-3).

The bill for the Therms billed under this schedule shall be increased in accordance with the provisions of the Company's Purchased Gas Adjustment Clause set forth on Sheet No. 7.101-1.

Special Conditions:

1. The rates set forth under this schedule shall be subject to the operation of the Energy Conservation Cost Recovery Adjustment Clause set forth on Sheet No. 7.101-2.
2. Service under this schedule shall be subject to the Rules and Regulations set forth in this tariff.
3. Service under this schedule is subject to annual volume review by the Company or any time at the Customer's request. If reclassification to another billing class is appropriate such classification will be prospective.
4. The rates set forth under this schedule shall be subject to the operation of the Company's Tax and Fee Adjustment Clause set forth on Sheet No. 7.101-5.
5. The rates set forth under this schedule shall be subject to the operation of the Cast Iron Bare Steel Replacement Rider Surcharge set forth on Sheet Nos. 7.806 through 7.806-3.
6. A RS-GHP Customer with an annual consumption in excess of 1,999 Therms shall be eligible for transportation service under Rider NCTS.
7. When the Customer receives service under the Company's Natural Choice Transportation Service Rider (Rider NCTS), the rates set forth above shall be subject to the operation of the Company's Swing Service Charge set forth on Sheet No. 7.101-3.

Issued By: G. L. Gillette, T. J. Szelistowski, President
Issued On: December 14, 2014

Effective: January 1, 2013

REVISED: 06/26/2018

Peoples Gas System
a Division of Tampa Electric Company
Original Volume No. 3

Original Sheet No. 7.405

COMMERCIAL GAS HEAT PUMP SERVICE
RATE SCHEDULE CS-GHP

Availability:

Throughout the service areas of the Company.

Applicability:

Gas delivered to any Commercial Customer utilizing a Gas Heat Pump for heating and cooling.

Monthly Rate:

Customer Charge: \$35.00 per month
Distribution Charge: \$0.2063 per Therm
Minimum Bill: The Customer charge

Special Conditions:

1. The gas provided for GHP would be separately metered and would appear separately on Customer bills.
2. The bill for the Therms billed at the above rates shall be increased in accordance with the provisions of the Company's Purchased Gas Adjustment Clause set forth on Sheet No. 7.101-1, unless the customer receives transportation service under the Company's Rider NCTS.
3. The rates set forth above shall be subject to the operation of the Energy Conservation Cost Recovery Adjustment Clause set forth in Sheet No. 7.101-2.
4. When the Customer receives service under the Company's Natural Choice Transportation Service Rider (Rider NCTS), the rates set forth above shall be subject to the operation of the Company's Swing Service Charge set forth on Sheet No. 7.101-3.
5. The rates set forth under this schedule shall be subject to the operation of the Company's Tax and Fee Adjustment Clause set forth on Sheet No. 7.101-5.
6. A contract for an initial term of one year may be required as a condition precedent to service under this schedule, unless an extension of facilities is involved, in which case the term of the contract shall be the term required under the agreement for the facilities extension.
7. The rates set forth in this schedule shall be subject to the operation of the Company's Competitive Rate Adjustment Clause set forth on Sheet No. 7.101-5.

Issued By: T. J. Szelistowski, President

Effective:

Issued On:

21

Peoples Gas System Original Sheet No. 7.405-1
a Division of Tampa Electric Company
Original Volume No. 3

COMMERCIAL GAS HEAT PUMP SERVICE (Continued)

8. Service under this schedule shall be subject to the Rules and Regulations set forth in this tariff.
9. Service under this schedule is subject to annual volume review by the Company or any time at the Customer's request. If reclassification to another schedule is appropriate such classification will be prospective.
10. The rates set forth under this schedule shall be subject to the operation of the Cast Iron Bare Steel Replacement Rider Surcharge set forth on Sheet Nos. 7.806 through 7.806-3.

Issued By: T. J. Szelistowski, President Effective:
Issued On:

30A

Peoples Gas System
a Division of Tampa Electric Company
Original Volume No. 3

~~Fifth-Sixth~~ Revised Sheet No. 7.803
Cancels ~~Fourth-Fifth~~ Revised Sheet No. 7.803

NATURAL CHOICE TRANSPORTATION SERVICE Rider NCTS

Availability:

Available to all Customers receiving service from Company (except Customers receiving service under Rate Schedule RS) and (a) for which service hereunder is requested as a part of an NCTS Customer Pool (as herein defined), (b) for which the Customer's total consumption of Gas is purchased from or through a Pool Manager (as herein defined), (c) which would otherwise qualify for service under Rate Schedule ~~RS-GHP, CS-GHP~~, SGS, GS-1, GS-2, GS-3, GS-4, GS-5, CSLS or NGVS and (d) for which the Company has received a request for service hereunder in compliance with Special Condition 3. Service pursuant to this Rider is available when such service can be made available without detriment to the Company's other Customers.

Applicability:

To firm transportation of Gas delivered to Company by a Pool Manager for a Customer account pursuant to this Rider.

Monthly Rate:

The Monthly Rate for transportation service applicable to each individually billed Customer account shall be the Monthly Rate applicable to such individually billed account under Rate Schedule ~~RS-GHP, CS-GHP~~, SGS, GS-1, GS-2, GS-3, GS-4, GS-5, CSLS or NGVS based upon the annual therm usage of such separately metered account.

The Company's Purchased Gas Adjustment Clause set forth on Sheet No. 7.101-1 shall not apply to transportation service provided by Company to a Customer pursuant to this Rider.

Special Conditions:

1. For purposes of this Rider, "NCTS Customer Pool" means a group of Customer accounts for which Gas is delivered to Company by a Pool Manager for transportation service of the aggregated needs of the Customer accounts. The Company shall not be required to provide transportation service to more than forty (40) independent NCTS Customer Pools.

Issued By: ~~William N. Cantrell~~ T. J. Szelistowski, President
Issued On: ~~May 19, 2009~~

Effective: ~~June 18, 2009~~

Peoples Gas System
 a Division of Tampa Electric Company
 7.806
 Original Volume No. 3

~~Sixth-Seventh~~ Revised Sheet No. 7.806
 Cancels ~~Fifth-Sixth~~ Revised Sheet No.

**CAST IRON/BARE STEEL REPLACEMENT RIDER
 RIDER CI/BSR**

The monthly bill for Gas Service in any Billing Period shall be increased by the CI/BSR Surcharge determined in accordance with this Rider. CI/BSR Surcharges approved by the Commission for bills rendered for meter readings taken on or after January 1, 2017, are as follows with respect to Customers receiving Gas Service under the following rate schedules:

<u>Rate Schedule</u>	<u>CI/BSR Surcharge</u>
Residential/Residential Standby Generator /	
Residential Gas Heat Pump Service	\$0.05285 per therm
Small General Service	\$0.03337 per therm
General Service – 1/ Commercial Standby Generator Service /	
Commercial Gas Heat Pump Service	\$0.01819 per therm
General Service – 2	\$0.01695 per therm
General Service – 3	\$0.01465 per therm
General Service – 4	\$0.00921 per therm
General Service – 5	\$0.00470 per therm
Commercial Street Lighting	\$0.02376 per therm
Natural Gas Vehicle Service	\$0.03789 per therm
Wholesale	\$0.00642 per therm

The CI/BSR Surcharges set forth above shall remain in effect until changed pursuant to an order of the Commission.

CI/BSR Surcharges shall be determined in accordance with the provisions of this Rider set forth below.

Definitions

For purposes of this Rider:

"Eligible Replacements" means the following Company plant investments that (i) do not increase revenues by directly connecting new customers to the plant asset, (ii) are in service and used and useful in providing utility service and (iii) were not included in the Company's rate base for purposes of determining the Company's base rates in its most recent general base rate proceeding:

Mains and service lines, as replacements for existing materials recognized/identified by the Pipeline Safety and Hazardous Materials Administration as being obsolete and that present a potential safety threat to operations and the general public, including cast iron, wrought iron, bare steel, and specific polyethylene/plastic facilities, and regulators and other pipeline system components the installation of which is required as a consequence of the replacement of the aforesaid facilities.

"CI/BSR Revenues" means the revenues produced through CI/BSR Surcharges, exclusive of revenues from all other rates and charges.

Issued By: T. J. Szelistowski, President
 Issued On: ~~September 1, 2017~~ **23**

Effective: ~~January 1, 2018~~