

# Bill components

December 1, 2018 Prices – Southern Zone

## Rate D<sub>4</sub> (Stable Service) – Monthly volume of 590,000 m<sup>3</sup>

Natural Gas Supply and Transportation Services from Énergir

<b>NATURAL GAS SUPPLY</b>	Natural gas supplied to the appliances at the service address			
590 000 m <sup>3</sup>	X	15,762 ¢/m <sup>3</sup>	=	\$92 996
<b>TRANSPORTATION</b>	Transportation of natural gas up to Énergir's territory			
590 000 m <sup>3</sup>	X	2,907 ¢/m <sup>3</sup>	=	\$17 151
<b>LOAD-BALANCING</b>	Management of variations between winter and summer loads			
590 000 m <sup>3</sup>	X	5,169 ¢/m <sup>3</sup>	=	\$30 499
<b>INVENTORY-RELATED ADJUSTMENTS</b>	Price fluctuations and costs incurred to maintain inventories			
590 000 m <sup>3</sup>	X	0,012 ¢/m <sup>3</sup>	=	\$71
<b>DISTRIBUTION</b>	Transportation of natural gas through Énergir's network up to the service address			
590 000 m <sup>3</sup>	X	5,637 ¢/m <sup>3</sup>	=	\$33 257
<b>CAP-AND-TRADE EMISSION ALLOWANCE SYSTEM</b>	Emission allowance cost for natural gas combustion			
590 000 m <sup>3</sup>	X	4,015 ¢/m <sup>3</sup>	=	\$23 689
<b>TOTAL</b>				
590 000 m <sup>3</sup>	X	33,502 ¢/m <sup>3</sup>	=	\$197 663

**NOTE :**

A customer who supplies his natural gas without transfer of ownership will not be billed the supply of natural gas.

# Rate D<sub>4</sub> (Stable Service) with Daily Readings

Customers with Natural Gas Supply Service from a Supplier Other than Énergir

## CONSUMPTION HISTORY <sup>(1)</sup>

PERIOD	WITHDRAWN VOLUMES		DELIVERED VOLUMES		TRANSPosed VOLUMES
	Number of Days	Monthly Volumes (m <sup>3</sup> )	DCV <sup>(2)</sup> (m <sup>3</sup> )	TUD <sup>(3)</sup> (m <sup>3</sup> )	Monthly Volumes (m <sup>3</sup> )
		①	②	③	① - ② + ③
OCT 2017	31	240 000	300 000	314 247	254 247
NOV 2017	30	370 000	220 000	304 110	454 110
DEC 2017	31	450 000	200 000	314 247	564 247
JAN 2018	31	590 000	200 000	314 247	704 247
FEB 2018	28	390 000	200 000	283 836	473 836
MAR 2018	31	340 000	200 000	314 247	454 247
APR 2018	30	300 000	240 000	304 109	364 109
MAY 2018	31	200 000	430 000	314 247	84 247
JUN 2018	30	200 000	490 000	304 110	14 110
JUL 2018	31	200 000	470 000	314 247	44 247
AUG 2018	31	200 000	380 000	314 247	134 247
SEP 2018	30	220 000	370 000	304 110	154 110
<b>ANNUAL TOTAL</b>	<b>365</b>	<b>3 700 000</b>	<b>3 700 000</b>	<b>3 700 004</b> <small>ROUNDED VALUE</small>	<b>3 700 004</b>
<b>WINTER TOTAL</b>	<b>151</b>				<b>2 650 687</b>

- (1) For each month, calculations are the result of the sum of daily data.
- (2) Daily Contract Volume
- (3) Theoretical Uniform Delivery = Sum of DCVs / Number of days with DCVs X Number of days of the month

## CALCULATION OF PARAMETERS (according to transposed volumes)

<b>A</b> Annual Average Daily Load	=	$\frac{\text{m}^3}{\text{days}}$	=	$\frac{\text{m}^3/\text{day}}$
		$\frac{3\,700\,000}{365}$		$\frac{10\,137}{\text{day}}$
<b>W</b> Winter Average Daily Load	=	$\frac{2\,650\,687}{151}$	=	$\frac{17\,554}{\text{day}}$
<b>P</b> Daily Peak Load (maximum daily volume of winter)			=	$\frac{28\,000}{\text{day}}$

## CALCULATION OF THE LOAD-BALANCING PRICE, FROM OCTOBER 1, 2017 TO SEPTEMBER 30, 2018

$$\frac{419,0 \text{ ¢/m}^3 \times (\text{P} - \text{W}) + 1\,988,6 \text{ ¢/m}^3 \times (\text{W} - \text{A})}{\text{A} \times \text{\# days of 12 months}} = \text{¢ / m}^3$$

$$\frac{419,0 \text{ ¢/m}^3 \times (28\,000 - 17\,554) + 1\,988,6 \text{ ¢/m}^3 \times (17\,554 - 10\,137)}{10\,137 \times 365} = 5,169$$

# Rate D<sub>4</sub> (Stable Service)

Natural Gas Supply and Transportation Services from Énergir

## CALCULATION HYPOTHESIS

### CUSTOMER'S DATA

#### WINTER VOLUME

2 650 687 m<sup>3</sup>

151 days

#### ANNUAL VOLUME

3 700 000 m<sup>3</sup>

365 days

### Énergir'S DATA

#### SUPPLIED GAS

TOTAL INVENTORY AMOUNT  
(14 673 000) \$

TOTAL INVENTORY VOLUME  
473 608 072 m<sup>3</sup>

#### TRANSPORTATION

TOTAL INVENTORY AMOUNT  
21 582 000 \$

TOTAL INVENTORY VOLUME  
687 930 420 m<sup>3</sup>

## CALCULATION OF CUSTOMER'S INVENTORY VOLUME

$$\left( \frac{\text{Customer's winter volume}}{\text{Number of winter days}} - \frac{\text{Customer's annual volume}}{\text{Number of days in the year}} \right) \times \text{Number of winter days}$$

$$\left( \frac{2\,650\,687 \text{ m}^3}{151 \text{ days}} - \frac{3\,700\,000 \text{ m}^3}{365 \text{ days}} \right) \times 151 \text{ days} = 1\,120\,002 \text{ m}^3$$

## CALCULATION OF INVENTORY-RELATED ADJUSTMENTS RATES

$$\frac{\text{Customer's inventory volume}}{\text{Customer's annual volume}} \times \frac{\text{Énergir's total inventory amount}}{\text{Énergir's total inventory volume}}$$

### SUPPLIED GAS INVENTORY

$$\frac{1\,120\,002 \text{ m}^3}{3\,700\,000 \text{ m}^3} \times \frac{(14\,673\,000) \$}{473\,608\,072 \text{ m}^3} = (0,938) \text{ ¢/m}^3$$

### TRANSPORTATION INVENTORY

$$\frac{1\,120\,002 \text{ m}^3}{3\,700\,000 \text{ m}^3} \times \frac{21\,582\,000 \$}{687\,930\,420 \text{ m}^3} = 0,950 \text{ ¢/m}^3$$

### TOTAL OF THE INVENTORY-RELATED ADJUSTMENT RATES

0,012 ¢/m<sup>3</sup>

#### NOTE :

A customer who supplies his natural gas without transfer of ownership will not be billed the inventory price of supplied gas.

# Rate D<sub>4</sub> (Stable Service)

CALCULATION HYPOTHESIS AND CONTRACTUAL PARAMETERS	
<b>VOLUME WITHDRAWN IN DECEMBER 2018</b>	
590 000	m <sup>3</sup>
<b>NUMBER OF DAYS IN DECEMBER</b>	
31	days
<b>SUBSCRIBED VOLUME</b>	
12 500	m <sup>3</sup> /day
<b>CONTRACTUAL TERM</b>	
60	months

VOLUME CALCULATION - Breakdown of November volume *	
<b>VOLUME WITHDRAWN UP TO 100% OF SUBSCRIBED VOLUME</b>	
Minimum of Volume withdrawn and (SV x Number of days of month)	
Min ( 590 000	, ( 12 500 x 31 ) ) = 387 500
	m <sup>3</sup>
<b>PEAK SHAVING (over 100% of SV x 30 days)</b>	
590 000 - ( 12 500 x 31 x 100% ) = 202 500	m <sup>3</sup>
<b>UNAUTHORIZED WITHDRAWALS (over 150% of SV x 30 days)</b>	
590 000 - ( 12 500 x 31 x 150% ) = 8 750	m <sup>3</sup>

\* A daily follow-up of consumption is required under Tariff D<sub>4</sub>

CALCULATION OF REDUCTION	
<b>CONTRACTUAL TERM</b>	
19,0% x $\frac{60 \text{ months} - 12 \text{ months}}{48 \text{ months}}$	= 19,0%
<b>TOTAL REDUCTION</b>	19,0%

STABLE SERVICE - D <sub>4</sub> CALCULATION			
<b>MINIMUM DAILY OBLIGATION (MDO)</b>			
m <sup>3</sup> /day of SV	m <sup>3</sup> /day	¢/m <sup>3</sup> /day	\$
333 first	= 333 x	10,142	= 33,77
667 next	= 667 x	8,163	= 54,45
2 000 next	= 2 000 x	5,561	= 111,22
7 000 next	= 7 000 x	4,601	= 322,07
20 000 next	= 2 500 x	3,360	= 84,00
70 000 next	= 0 x	2,621	= 0,00
200 000 next	= 0 x	1,866	= 0,00
700 000 next	= 0 x	1,506	= 0,00
1 000 000 and over	= 0 x	1,019	= 0,00
<b>MDO</b>	12 500		605,51
	days	\$	
<b>MDO OF DECEMBER</b>	31	x 605,51	= 18 770,81
<b>PRICE BY VOLUME WITHDRAWN</b>			
Volume withdrawn up to subscribed volume	m <sup>3</sup>	¢/m <sup>3</sup>	\$
387 500	x	0,350	= 1 356,25
<b>Subtotal</b>			20 127,06
<b>REDUCTION TERM 19,0%</b>			
			3 824,14 CR
<b>SUBTOTAL BEFORE SUPPLEMENTS</b>			
	m <sup>3</sup>	¢/m <sup>3</sup>	\$
590 000	x	2,763	= 16 302,92
<b>SUPPLEMENTS</b>			
<b>Peak shaving</b>	202 500	x 5,500	= 1 113,750
<b>Unauthorized Withdrawals Penalty</b>	8 750	x 50,000	= 4 375,00
<b>Natural Gas Supply (*)</b>	8 750	x 16,480	= 1 442,00
*Price traded at Iroquois less gas supply, compressor fuel and transportation prices already billed, as the case may be.			
<b>TOTAL D<sub>3</sub> DISTRIBUTION PRICE</b>			
	m <sup>3</sup>	¢/m <sup>3</sup>	\$
590 000	x	5,637	= 33 257,42

(\*) The peak shaving price is determined according to the breakdown of the sum of the subscribed volume and the average monthly volume in excess of the subscribed volume among the prices levels of D<sub>1</sub> Tariff considering only the m<sup>3</sup> in excess of the subscribed volume.

Subscribed Volume	=	12 500	
Average Monthly Volume up to Subscribed Volume	=	6 532	(18 050 m <sup>3</sup> / 31 days)
		19 032	

## Rate D<sub>4</sub> (Stable Service)

Peak shaving average rate calculations

### VOLUME EXCEEDING 100% OF SUBSCRIBED VOLUME

#### PEAK SHAVING VOLUME

	Monthly	Daily Average
<b>TOTAL VOLUME</b>	<b>590 000</b>	<b>19 032</b>
<b>SUBSCRIBED VOLUME</b>	<b>387 500</b>	<b>12 500</b>
<b>PEAK SHAVING VOLUME</b>	<b>202 500</b>	<b>6 532</b>

#### VOLUME EXCEEDING 100% OF SUBSCRIBED VOLUME

m <sup>3</sup> /day of SV		m <sup>3</sup> /day		¢/m <sup>3</sup> /day		\$
333 first	=	0	x	16,251	=	0,00
667 next	=	0	x	12,310	=	0,00
2 000 next	=	0	x	9,110	=	0,00
7 000 next	=	0	x	6,402	=	0,00
20 000 next	=	6 532	x	5,150	=	336,41
70 000 next	=	0	x	4,270	=	0,00
200 000 next	=	0	x	3,537	=	0,00
700 000 next	=	0	x	3,537	=	0,00
1 000 000 and over	=	0	x	3,537	=	<u>0,00</u>

#### AVERAGE EXCEEDING

**DAILY VOLUME (\*)**                      **6 532**                      **336,41**

**EXCEEDING VOLUME**                      days                      \$  
**OF DECEMBER**                      **31** x                      **336,41** = **10 428,71**

#### PRICE BY VOLUME WITHDRAWN

	m <sup>3</sup>		¢/m <sup>3</sup>		\$
<b>Volume withdrawn price</b>	<b>202 500</b>	x	<b>0,350</b>	=	<b>708,75</b>
<b>Subtotal (*)</b>	<b>202 500</b>	x	<b>5,500</b>		<b>11 137,46</b>

(\*) Assuming the customer withdraws at least his daily subscribed volume for all the 31 days of the month.