

Bill components

December 1, 2021

Rate D₁ (General Service) – For a Monthly Volume of 47,000 m³

NATURAL GAS SUPPLY	Natural gas supplied to the appliances at the service address					
	47 000	m³	X	19,930 ¢/m³	=	\$9 367
TRANSPORTATION	Transportation of natural gas up to Énergir's territory					
	47 000	m³	X	3,115 ¢/m³	=	\$1 464
LOAD-BALANCING	Management of variations between winter and summer loads					
<u>D₁ General Distribution Service Customers</u>	47 000	m³	X	2,349 ¢/m³	=	\$1 436
INVENTORY-RELATED ADJUSTMENTS	Price fluctuations and costs incurred to maintain inventories					
<u>D₁ General Distribution Service Customers</u>	An average price, varying monthly, is applicable for all D ₁ customers.					
	47 000	m³	X	(1,275) ¢/m³	=	-\$599
DISTRIBUTION	Transportation of natural gas through Énergir's network up the the service address					
D1 General Distribution Service Customers						
	47 000	m³	X	12,946 ¢/m³	=	\$6 085
CAP-AND-TRADE EMISSION ALLOWANCE SYSTEM	Emission allowance cost for natural gas combustion					
	47 000	m³	X	5,424 ¢/m³	=	\$2 549
TOTAL						
<u>D₁ General Distribution Service Customer</u>	47 000	m³	X	42,489 ¢/m³	=	19 970 \$

Rate D₁ (General Service)

Customers with Natural Gas Supply Service from Énergir

CONSUMPTION HISTORY

PERIOD	WITHDRAWN VOLUMES		WINTER VOLUMES		
	Number of Days	Monthly Volumes (m ³)	Number of Days	Monthly Volumes (m ³)	Average Daily Volumes (m ³ /day)
OCT 2020	31	24 000			
NOV 2020	30	37 000	30	37 000	1 233
DEC 2020	31	47 000	31	47 000	1 516
JAN 2021	31	49 000	31	49 000	1 581
FEB 2021	28	43 000	28	43 000	1 536
MAR 2021	31	38 000	31	38 000	1 226
APR 2021	30	30 000			
MAY 2021	31	20 000			
JUN 2021	30	20 000			
JUL 2021	31	20 000			
AUG 2021	31	20 000			
SEP 2021	30	22 000			
ANNUAL TOTAL	365	370 000			
WINTER TOTAL			151	214 000	
MAXIMUM AVERAGE DAILY VOLUME (ADV max)					1 581

CALCULATION OF PARAMETERS

$$\begin{aligned}
 \text{A Annual Average Daily Load} &= \frac{370\,000 \text{ m}^3}{365 \text{ days}} = 1\,014 \text{ m}^3/\text{day} \\
 \text{W Winter Average Daily Load} &= \frac{214\,000}{151} = 1\,417 \\
 \text{P Daily Peak Load} &= \text{ADV max} \times \text{Multiplier} \\
 \text{Multiplier} &= \frac{2,1 - (1,1 \times \text{A} / \text{ADV max})}{2,1 - (1,1 \times 1\,014 / 1\,581)} = 1,394 \\
 \text{Daily Peak Load} &= 1\,581 \times 1,394 = 2\,204
 \end{aligned}$$

CALCULATION OF THE LOAD-BALANCING PRICE, FROM OCTOBER 1, 2020 TO SEPTEMBER 30, 2021

$$\begin{aligned}
 & \frac{434,0 \text{ ¢/m}^3 \times (\text{P} - \text{W}) + 1\,309,5 \text{ ¢/m}^3 \times (\text{W} - \text{A})}{\text{A} \times \# \text{ days of 12 months}} \\
 & \frac{419,0 \text{ ¢/m}^3 \times (2\,204 - 1\,417) + 1\,309,5 \text{ ¢/m}^3 \times (1\,417 - 1\,014)}{1\,014 \times 365} = 2,349 \text{ ¢/m}^3
 \end{aligned}$$

Rate D₁ (General Service)

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

CONSUMPTION HISTORY

PERIOD	WITHDRAWN VOLUMES		DELIVERED VOLUMES		TRANSPosed VOLUMES	
	Number of Days	Monthly Volumes (m ³)	DCV ⁽¹⁾ (m ³)	TUD ⁽²⁾ (m ³)	Monthly Volumes (m ³)	Average Daily Volumes (m ³ /day)
		①	②	③	① - ② + ③	
OCT 2020	31	24 000	30 000	31 425	25 425	
NOV 2020	30	37 000	22 000	30 411	45 411	1 514
DEC 2020	31	47 000	20 000	31 425	58 425	1 885
JAN 2021	31	49 000	20 000	31 425	60 425	1 949
FEB 2021	28	43 000	20 000	28 384	51 384	1 835
MAR 2021	31	38 000	20 000	31 425	49 425	1 594
APR 2021	30	30 000	24 000	30 411	36 411	
MAY 2021	31	20 000	43 000	31 425	8 425	
JUN 2021	30	20 000	49 000	30 411	1 411	
JUL 2021	31	20 000	47 000	31 424	4 424	
AUG 2021	31	20 000	38 000	31 424	13 424	
SEP 2021	30	22 000	37 000	30 411	15 411	
ANNUAL TOTAL	365	370 000	370 000	370 001	370 001	
WINTER TOTAL	151			ROUNDED VALUE	265 070	
MAXIMUM AVERAGE DAILY VOLUME (ADV max)						1 949

⁽¹⁾ Daily Contract Volume
⁽²⁾ 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)

$$\begin{aligned}
 \text{A Annual Average Daily Load} &= \frac{370\,000 \text{ m}^3}{365 \text{ days}} = 1\,014 \text{ m}^3/\text{day} \\
 \text{W Winter Average Daily Load} &= \frac{265\,070}{151} = 1\,755 \\
 \text{P Daily Peak Load} &= \text{ADV max} \times \text{Multiplier} \\
 \text{Multiplier} &= \frac{2,1 - (1,1 \times \text{A} / \text{ADV max})}{2,1 - (1,1 \times 1\,014 / 1\,949)} = 1,528 \\
 \text{Daily Peak Load} &= 1\,949 \times 1,528 = 2\,978
 \end{aligned}$$

CALCULATION OF THE LOAD-BALANCING PRICE, FROM OCTOBER 1, 2020 TO SEPTEMBER 30, 2021

$$\begin{aligned}
 & \frac{434,0 \text{ ¢/m}^3 \times (\text{P} - \text{W}) + 1\,309,5 \text{ ¢/m}^3 \times (\text{W} - \text{A})}{\text{A} \times \# \text{ days of 12 months}} \\
 & \frac{434,0 \text{ ¢/m}^3 \times (2\,978 - 1\,755) + 1\,988,6 \text{ ¢/m}^3 \times (1\,755 - 1\,014)}{1\,014 \times 365} = 4,057 \text{ ¢/m}^3
 \end{aligned}$$

Rate D₁ (General Service)

Natural Gas Supply and Transportation Services

CALCULATION HYPOTHESIS

CUSTOMER'S DATA

WINTER VOLUME

214 000 m³

151 days

ANNUAL VOLUME

370 000 m³

365 days

ÉNERGIR'S DATA

SUPPLIED GAS

TOTAL INVENTORY AMOUNT

1 987 000 \$

TOTAL INVENTORY VOLUME

3 056 352 000 m³

TRANSPORTATION

TOTAL INVENTORY AMOUNT

3 675 000 \$

TOTAL INVENTORY VOLUME

5 970 276 000 m³

CALCULATION OF CUSTOMER'S INVENTORY VOLUME

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

$$\left[\frac{214\,000 \text{ m}^3}{151 \text{ days}} - \frac{370\,000 \text{ m}^3}{365 \text{ days}} \right] \times 151 \text{ days} = 60\,932 \text{ m}^3$$

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

$$\frac{60\,932 \text{ m}^3}{370\,000 \text{ m}^3} \times \frac{1\,987\,000 \$}{3\,056\,352\,000 \text{ m}^3} = 0,011 \text{ ¢/m}^3$$

TRANSPORTATION INVENTORY

$$\frac{60\,932 \text{ m}^3}{370\,000 \text{ m}^3} \times \frac{3\,675\,000 \$}{5\,970\,276\,000 \text{ m}^3} = 0,010 \text{ ¢/m}^3$$

TOTAL OF THE INVENTORY-RELATED ADJUSTMENT RATES

0,021 ¢/m³

Rate D₁ (General Service)

CALCULATION HYPOTHESIS

CUSTOMER

Commercial

NUMBER OF METERING DEVICES

1

VOLUME WITHDRAWN IN DECEMBER

47 000 m³

NUMBER OF DAYS IN DECEMBER

31 days

GENERAL SERVICE - CALCULATION

BASIC FEE

metering device	days	φ/metering device/day	\$
1	x 31	x 192,147	59,57

PRICE BY VOLUME WITHDRAWN

m ³ /day		days	=	m ³	x	φ/m ³	=	\$
30	first	x 31	=	930	x	28,594	=	265,92
70	next	x 31	=	2 170	x	19,530	=	423,80
200	next	x 31	=	6 200	x	16,879	=	1 046,50
700	next	x 31	=	21 700	x	12,786	=	2 774,56
2 000	next	x 31	=	16 000	x	9,465	=	1 514,40
7 000	next	x 31	=	0	x	6,649	=	0,00
20 000	next	x 31	=	0	x	5,352	=	0,00
70 000	next	x 31	=	0	x	4,441	=	0,00
1 000 000	and over	x 31	=	0	x	3,676	=	0,00

Subtotal Price of Withdrawals 6 025,18

TOTAL DISTRIBUTION PRICE

	m ³	x	φ/m ³	=	\$
	47 000	x	12,946	=	6 084,75