



Jemena Gas Networks (NSW) Ltd

Tariff Variation Notice

2022-23 reference tariffs



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Tariff Variation Notice

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Appendix B	JGN gas quantity statement
Appendix C	Core verification of JGN gas quantity statement
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Abbreviations

2020 AA	Access arrangement, JGN's NSW gas distribution networks, 1 July 2020-30 Jun 2025, published by the AER in June 2020.
ABS	Australian Bureau of Statistics
AER	Australian Energy Regulator
AER Final Decision	AER Final Decision - JGN access arrangement 2020 - Approved Access Arrangement for Jemena Gas Networks (NSW) Ltd 2020-25 - Clean
A_t	Automatic Adjustment Factor
CPI	Consumer Price Index
C_t	Carbon Cost Factor
DC	Demand Capacity
DCFR	Demand Capacity – First Response
DMT	Demand Major End Customer Throughput
DMTFR	Demand Major end Customer Throughput – First Response
DT	Demand Throughput
JGN	Jemena Gas Networks (NSW) Ltd
L_t	Licence Fee Factor
PT_t	Pass through Factor
T_t	Relevant Tax Factor
TVN	Tariff Variation Notice
UAG	Unaccounted for Gas
VB	Volume Boundary
VI	Volume Individual
VRT	Volume Residential Distributed Generation Technology

1. Introduction

1.1 Overview

On 5 June 2020 the Australian Energy Regulator (**AER**) approved revisions to Jemena Gas Networks (NSW) Ltd (**JGN**) access arrangement (**2020 AA**) to apply for the period from 1 July 2020 to 30 June 2025.¹ The 2020 AA describes the reference services that JGN offers, sets out (in Schedule 2) the initial reference tariffs that apply to those services from 1 July 2020, and includes a mechanism for variation of tariffs annually, effective 1 July.

The 2020 AA requires that JGN submit its proposed reference tariffs to the AER for approval on or before 15 April each year. As 15 April this year falls on a non-business day, the 2020 AA requires submission by the following business day, 19 April.² Unless it extends the time in accordance with the 2020 AA, the AER then has 30 Business Days to assess whether JGN's proposed reference tariffs are compliant.³

This Tariff Variation Notice (**TVN**):

- provides JGN's proposed reference tariffs for the 2022-23 financial year (effective from 1 July 2022)
- demonstrates how these proposed 2022-23 reference tariffs comply with the tariff variation mechanism in clause 3.2 of the 2020 AA, including the side constraint
- sets out the calculation of the 2022-23 automatic adjustment factor in accordance with schedule 3 of the 2020 AA, and applies this factor in calculating 2022-23 proposed reference tariffs—this includes licence fee and unaccounted for gas (**UAG**) true-ups for 2020-21
- contains no determined pass through amounts or automatic adjustments for relevant tax or carbon costs.

1.2 Submission structure and 2020 AA compliance

JGN has structured this submission to demonstrate compliance with each relevant part of clause 3 and 4 of the 2020 AA:

- section 2—tariff classes (section 4 of the 2020 AA)
- section 3—variation notice (section 3.6 of the 2020 AA)
- section 4—annual tariff variation mechanism (section 3.2 of the 2020 AA).

1.2.1 Pricing model

JGN's reference tariff model (**Appendix A**) provides the mathematical proof that JGN's proposed 2022-23 reference tariffs comply with relevant aspects of the 2020 AA.

The model demonstrates that for 2022-23, JGN has updated its reference tariffs using:

- CPI of 3.50% (2 decimal places)
- an X factor of 1.39% (2 decimal places), which incorporates an updated cost of debt value
- verified gas quantity inputs for financial year t-2 (2020-21)
- The automatic adjustment factor, that reflects cost true-ups for licence fees and UAG costs.

¹ The Access Arrangement: JGN's NSW gas distribution networks, 1 July 2020 – 30 June 2025, published 5 June 2020. The 2020 AA is available at <http://www.aer.gov.au/> or <http://www.jemena.com.au/>.

² JGN 2020 AA, clause 3.6.

³ JGN 2020 AA, clause 3.8.

1.3 Submission values and terminology

This submission employs the following standards:

- unless otherwise indicated, all prices are expressed in \$2022-23.
- for the purpose of relevant clauses and formulae in the 2020 AA as applicable to this TVN:
 - *financial year t* is the 2022-23 financial year ending on 30 June 2023
 - *financial year t-1* is the 2021-22 financial year ending on 30 June 2022
 - *financial year t-2* is the 2020-21 financial year ending on 30 June 2021
- a reference to the AA or a clause in the AA is a reference the 2020 AA (or a clause within the 2020 AA).

2. Tariff classes

This section sets out the tariff classes for JGN for 2022-23.

2.1 JGN tariff classes

JGN's tariff classes for its reference service is set out below. The tariff classes within the reference service are unchanged from those in 2021-22.

Table 2–1: JGN tariff classes

Customer Type	Tariff Class
Volume Individual (VI)	VI – Coastal VI - Country
Volume Boundary (VB)	VB – Coastal VB - Country
Volume Residential Distributed Generation Technology (VRT)	VRT-03 VRT-04 VRT-06 VRT-10
Demand Capacity (DC)	DC-1 to DC-11 DC Country
Demand Throughput (DT)	DT
Demand Capacity - First Response (DCFR)	DCFR-1 and DCFR-6
Demand Major End Customer Throughput (DMT)	DMT-01 to DMT-05
Demand Major End Customer Throughput - First Response (DMTFR)	DMTFR-3

3. Variation notice compliance

This section sets out key details of how JGN will vary 2022-23 reference tariffs in accordance with section 3.6 of the 2020 AA.

3.1 Proposed revised reference tariff schedule

Appendix D provides JGN's proposed reference tariff schedule for 1 July 2022 to 30 June 2023.⁴

3.2 Effective date of variation

The effective date of variation for JGN's 2022-23 reference tariffs is 1 July 2022.⁵

3.3 Compliance with annual tariff variation mechanism

JGN's compliance with the variation mechanism set out in section 3.2 of the 2020 AA is described in section 4 below and evidenced in JGN's reference tariff model at **Appendix A**.⁶

3.4 Gas quantity inputs

JGN has included a statement to support the gas quantity inputs used in the reference tariff variation mechanism, with the quantity input reflecting the most recent actual financial year quantity available.⁷ This statement is at **Appendix B**.

JGN's tariff variation mechanism relies upon actual haulage reference tariff quantity inputs from two years prior to the financial year in which the proposed tariffs will apply. For the 2022-23 variation notice, JGN must use the actual quantities that correspond to financial year t-2 (i.e. 2020-21), which is the most recent financial year actual quantity inputs available at this time.

Core Energy has verified JGN's gas quantity inputs (see **Appendix C**). Note that when Core Energy refers to "Attachment 2" in its verification, it is referring to our statement that we provide at Appendix B.

3.5 Determined pass through amount

There are no determined pass through amounts for the year or the 2020 AA period (as defined in the AA and for the purposes of 3.6(a)(v) and 3.6(a)(vi) of the AA).

That is, for this 2022-23 TVN, the cost pass through factor (PT_t) value in the tariff basket price control formula of clause 3.2(b) of the AA is zero.

⁴ As required under clause 3.6(a)(i) of the AA.

⁵ As required under clause 3.6(a)(ii) of the AA.

⁶ As required under clause 3.6(a)(iii) of the AA.

⁷ As required under clause 3.6(a)(iv) of the AA.

4. Annual tariff variation mechanism

This section explains how JGN has varied its tariffs in accordance with section 3.2 of the AA and sets out its proposed 2022-23 reference tariffs.

4.1 Variation mechanism

JGN's annual tariff variation mechanism as set out in clause 3.2(b) of the AA includes two formulae:

- weighted average price cap (tariff basket price control formula)
- side constraint.

JGN's reference tariff model, at **Appendix A**, provides the mathematical proof that JGN's proposed 2022-23 reference tariffs comply with both elements.

4.2 Weighted average price cap formula

The weighted average price cap formula is:

$$(1 + CPI_t)(1 - X_t)(1 + A_t)(1 + PT_t) \geq \frac{\sum_{x=1}^n \sum_{y=1}^m p_t^{xy} q_{t-2}^{xy}}{\sum_{x=1}^n \sum_{y=1}^m p_{t-1}^{xy} q_{t-2}^{xy}}$$

This ensures the expected change in JGN revenues (right-hand side of the formula) are constrained by movements in:

- CPI (CPI_t)
- the allowed X factor (X_t)
- the automatic adjustment factor that reflects cost true-ups from certain cost categories (A_t)
- costs arising with approved cost pass through events (PT_t)

The right hand side of the formula uses verified gas quantity inputs for financial year t-2 (2020-21) to calculate notional revenues. These quantities have been externally verified by Core Energy (see **Appendix C**).

Each element of the left hand side of the formula is discussed in the following sections.

4.2.1 CPI adjustment

This section shows how JGN has calculated the annual CPI adjustment.

JGN has calculated CPI_t in accordance with clause 3.2(b) of the AA. This is also set out in the 'Input I General' worksheet of **Appendix A**. The value of CPI_t in 2022-23 is:

- 3.50% (2 decimal places).⁸

⁸ For the avoidance of doubt, JGN used the unrounded CPI in its reference tariff model at Appendix A.

The calculation for 2022-23 involved JGN obtaining the CPI: all groups index for the eight state capitals as published by the Australian Bureau of Statistics (**ABS**) for the December quarter in each of 2021 and 2020. JGN then divided the CPI December 2021 index value of 121.3 by the CPI December 2020 index value of 117.2 and subtracted one.

The value of $(1+CPI_t)$ is therefore 1.0350 (rounded to four decimal places).

4.2.2 X factor adjustment

The X factor for 2022-23 is 1.39 per cent. This is the X factor updated to give effect to the latest return on debt observation as required by the AA and is used in **Appendix A** to demonstrate JGN has varied its 2022-23 reference tariffs in accordance with the tariff basket price control formula in clause 3.2(b) of the AA.

The value of $(1-X_t)$ is 0.9861 (rounded to four decimal places).

4.2.3 Automatic adjustment factor

The automatic adjustment factor (A_t) provides for administrative true-ups for costs incurred in areas outside of JGN's control. This section shows how JGN has calculated the 2022-23 automatic adjustment factor in accordance with schedule 3 of the AA. Via the definitions of licence fee (L_{t-2}) and UAG (U_{t-2}) the 2022-23 automatic adjustment includes adjustments for 2020-21.

The automatic adjustment is calculated using the following formula in schedule 3 of the 2020 AA:

$$A_t = \frac{(1 + A'_t)}{(1 + A'_{t-1})} - 1$$

A_t is calculated as:

$$A'_t = \frac{(L_{t-2} + U_{t-2} + C_{t-2} + T_{t-2})[(1 + \text{realWACC}_{t-1})(1 + \text{realWACC}_t)(1 + \text{CPI}_{t-1})]}{(1 - X_t) \sum_{x=1}^n \sum_{y=1}^m p_{t-1}^{xy} q_{t-2}^{xy}}$$

A'_{t-1} is the value of A'_t in Financial Year $t-1$ (2021-22), which is 3.91%.

As shown in the above formulas, the automatic adjustment factor (A_t) relies on the values for L_{t-2} , U_{t-2} , C_{t-2} and T_{t-2} .

Table 4-1 summarises these values with an outline of the calculations provided in the following sections (and also set out in **Appendix A**).

Table 4–1: Automatic adjustment factor

Automatic adjustment variable	Value (\$2020-21)
Licence fee factor (L_{t-2})	(\$931,212) – refund to customers, see section 4.2.3.1
UAG factor (U_{t-2})	(\$6,339,559) – refund to customers, see section 4.2.3.2
Carbon Cost factor (C_{t-2})	0
Relevant Tax factor (T_{t-2})	0
Total adjustments	(\$7,270,771) – refund to customers

In accordance with the automatic adjustment formula in schedule 3 of the 2020 AA, JGN has adjusted for the time value of money to account for the period which elapses from when the costs were incurred and when these will be recovered from/returned to customers. For this calculation, JGN has used:

- the real vanilla WACC of:
 - 2.162% for financial year $t-2$ (2020-21)
 - 2.042% for financial year $t-1$ (2021-22)
 - 2.018% for financial year t (2022-23), noting this has been updated to incorporate the cost of debt update.
- CPI as set out in section 4.2.1
- X factor as set out in section 4.2.2
- The notional revenues for $t-1$ ($\sum p_{t-1} * q_{t-2}$).

JGN has applied the automatic adjustment to the reference tariffs consistent with the tariff basket price control formula in clause 3.2(b) of the AA.

Using the above values JGN has calculated a value for:

- A_t of -1.73%
- A_t of -5.42% (rounded to two decimal places). The value of $(1+A_t)$ is therefore 0.9458 (rounded to four decimal places).

The next subsections explain the calculations for licence fee factor, UAG factor, carbon factor and relevant tax factor.

4.2.3.1 Licence fee factor

JGN has calculated its licence fee adjustment in accordance with schedule 3 of the AA.

The licence fee factor (L_{t-2}) calculates the difference between JGN's actual licence fee costs for financial year 2020-21 and the AER allowance in the 2020 AA (L_{2021}).

In total, this results in a licence fee factor amount for $t-2$ (L_{t-2}) of \$931,212 (\$2020-21). This is a refund to customers and has been added to the Automatic Adjustment formula, where it is escalated into \$2022-23.

Table 4-2 sets out the calculations and relevant data sources for each year of Licence fee true-up.

Table 4–2: Calculating the Licence Fee Factor amount, L_{t-2} (\$2020-21 unless otherwise stated)

	Allowance (\$ in year stated)	Actual cost (\$ in year stated)	Refund to customers (\$ in year stated)	Refund to customers
L_{2021}	\$4,695,195 (\$2019-20), which escalates to \$4,781,610	Pipeline fees: \$83,072	\$931,212	\$931,212
		IPART fees: \$0		
		Mains tax: \$3,767,326		
		<i>Total: \$3,850,398</i>		
Total (L_{t-2})				\$931,212

This calculation is provided in the 'Inputs I General' worksheet of JGN's proposed reference tariff model in **Appendix A**.

4.2.3.2 UAG factor

JGN has calculated its UAG adjustment in accordance with schedule 3 of the AA.

Schedule 3 of the 2020 AA sets out that when $t-2$ is financial year 2020-21, the UAG factor (U_{t-2}) includes an amount from financial year 2020-21 (U_{2021}).

JGN has calculated its UAG adjustment (U_{2021}) for 2020-21 by calculating the difference between its recoverable UAG costs and the amount allowed in the 2020 AA.

Recoverable UAG cost

Clause 2.2 of schedule 3 of the 2020 AA provides that JGN's recoverable UAG cost is calculated as the product of:

- gas receipts in gigajoules for each financial year, and
 - the UAG Cost⁹ for each financial year in \$/gigajoule, and
 - UAG target rate gas receipts of 5.593% for volume market and 0.665% for the demand market in 2020-21.
- Minus the allowed UAG amount.

Table 4-3 provides JGN's calculation of the UAG recoverable cost.

⁹ 'UAG Cost' is defined in the 2020 AA and means 'the cost incurred by the Service Provider to procure Replacement Gas to make up for unaccounted for gas (UAG) in the Network during a Financial Year, including costs for transportation and other direct costs reasonably incurred by the Service Provider in connection with that UAG'.

The average gas price for financial year ending 30 June 21 is the weighted (by gas purchased) average of the successful tender prices during the financial year.

Table 4–3: Calculating the UAG recoverable cost

	Volume market gas receipts (GJ)	Demand market gas receipts (GJ)	UAG cost (\$)	Target rate ¹⁰ (Volume)	Target rate (Demand)	Recoverable cost ¹¹ (\$ stated)
U ₂₀₂₁	██████████	██████████	██████████	5.593%	0.665%	\$22,927,126 (\$2020-21)

Calculating the UAG factor

Table 4-4 provides JGN's calculation of U_{t-2}.

Table 4–4: Calculating the UAG Factor amount U_{t-2} (\$2020-21 unless otherwise stated)

	UAG Allowance	Recoverable UAG	Difference (refund to customers)	Refund to customers
U ₂₀₂₁	\$ 28,737,769 (\$2019-20), which escalates to \$29,266,685	\$ 22,927,126	(\$6,339,559)	(\$6,339,559)
Total (U_{t-2})				(\$6,339,559)

Therefore, in 2022-23 the UAG factor amount from financial year t-2 involves a refund to customers of \$6,339,559 (\$2020-21). This is added to the Automatic Adjustment formula, where it is escalated into \$2022-23.

This calculation is provided in the 'Inputs I General' worksheet of JGN's proposed reference tariff model at **Appendix A**.

4.2.3.3 Carbon cost factor

As there was no carbon scheme operational in 2020-21 and JGN had no forecast allowance as part of its 2020 AA, the carbon cost factor (C_t) amount is zero.

4.2.3.4 Relevant tax factor

The relevant tax factor (T_t) seeks to capture any new and unforeseen tax liability that JGN becomes subject to. The 2020 AA defines a Relevant Tax (see Schedule 1 of the 2020 AA) and this, for example, excludes income taxes, capital gains taxes, stamp duties, and penalties related to late tax payments.

JGN has not sought any adjustment in respect of any relevant tax amounts in this TVN. Accordingly, the relevant tax factor (T_t) is zero.

4.2.4 Determined pass through amount

The cost pass through factor (PT_t) value in the tariff basket price control formula of clause 3.2(b) of the AA is zero. The value of (1+PT_t) is therefore 1.

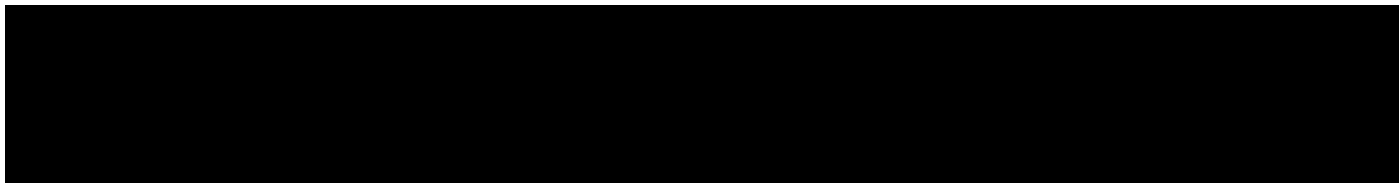
¹⁰ Target rates are a defined term in JGN's 2020 AA for U₂₀₂₁.

¹¹ Product of gas receipts target rate and UAG cost.

4.3 Proposed 2022-23 reference tariffs

JGN's proposed 2022-23 reference tariffs are set out in its proposed 2022-23 reference tariff schedule in **Appendix D**.

JGN has also made the following adjustments to prudent discounts:



Appendix A

JGN proposed reference tariff model

A1. JGN proposed reference tariff model (confidential)

Attached as separate document.

Appendix B

JGN gas quantity statement

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B1. JGN statement to support the Gas Quantity in the annual reference tariff variation mechanism

Jemena Gas Networks (**JGN**) considers the 2020-21 gas quantities suitable for the 2022-23 annual reference tariff variation mechanism to be as set out in the tables below.

These are presented as four quarters of gas quantity data that reconcile to the annual total gas quantity.

JGN has sourced data from its systems, the data is set out in the following spreadsheets:

- Volume Market 2020-21.xlsx

Summary of volume market customers consumption in 2020-21.

- Demand Market 2020-21.xlsx

Summary of demand market customers consumption in 2020-21 by station ID.

- Ancillary 2020-21.xlsx

Summary of number of disconnections, meter readings, and decommissions in 2020-21.

These gas quantities represent the most recent actual Financial Year quantity available at the time of submitting JGN's tariff variation notice (19 April 2022).

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Volume Market

VI ANNUAL VOLUME THROUGHPUT | MJ

REGION	PERIOD	BLOCK_1	BLOCK_2	BLOCK_3	BLOCK_4	BLOCK_5	BLOCK_6	Total	Customer numbers
VI-COASTAL	2020-21	8,647,371,259	5,885,994,522	6,408,568,366	11,202,548,176	3,088,518,372	1,159,894,300	36,392,894,995	1,381,718
VI-COUNTRY	2020-21	612,222,515	455,214,863	701,652,761	2,014,899,492	384,694,916	230,738,605	4,399,423,152	102,605
Total	2020-21	9,259,593,774	6,341,209,385	7,110,221,127	13,217,447,668	3,473,213,288	1,390,632,905	40,792,318,147	1,484,323

Q1 VI VOLUME THROUGHPUT | MJ

REGION	PERIOD	BLOCK_1	BLOCK_2	BLOCK_3	BLOCK_4	BLOCK_5	BLOCK_6	Total	Customer numbers
VI-COASTAL	Jul-Sept	2,240,348,686	1,735,405,234	2,344,814,847	3,773,339,389	960,458,719	394,901,768	11,449,268,643	1,371,896
VI-COUNTRY	Jul-Sept	164,648,296	141,784,685	266,181,535	864,236,227	136,297,110	83,081,312	1,656,229,165	101,848
Total	Jul-Sept	2,404,996,982	1,877,189,919	2,610,996,382	4,637,575,616	1,096,755,829	477,983,080	13,105,497,808	1,473,744

Q2 VI VOLUME THROUGHPUT | MJ

REGION	PERIOD	BLOCK_1	BLOCK_2	BLOCK_3	BLOCK_4	BLOCK_5	BLOCK_6	Total	Customer numbers
VI-COASTAL	Oct- Dec	2,133,387,663	1,344,861,802	1,191,788,219	2,118,282,136	635,621,263	205,419,624	7,629,360,707	1,379,290
VI-COUNTRY	Oct- Dec	148,089,743	98,594,748	119,314,515	245,560,997	70,194,077	37,486,281	719,240,361	102,400
Total	Oct- Dec	2,281,477,406	1,443,456,550	1,311,102,734	2,363,843,133	705,815,340	242,905,905	8,348,601,068	1,481,690

Q3 VI VOLUME THROUGHPUT MJ									
REGION	PERIOD	BLOCK_1	BLOCK_2	BLOCK_3	BLOCK_4	BLOCK_5	BLOCK_6	Total	Customer numbers
VI-COASTAL	Jan-Mar	2,047,229,942	1,175,257,617	861,270,380	1,867,967,251	578,203,466	185,892,956	6,715,821,612	1,385,080
VI-COUNTRY	Jan-Mar	136,610,352	80,533,671	79,508,044	172,782,887	61,945,669	39,820,368	571,200,991	102,837
Total	Jan-Mar	2,183,840,294	1,255,791,288	940,778,424	2,040,750,138	640,149,135	225,713,324	7,287,022,603	1,487,917

Q4 VI VOLUME THROUGHPUT | MJ

REGION	PERIOD	BLOCK_1	BLOCK_2	BLOCK_3	BLOCK_4	BLOCK_5	BLOCK_6	Total	Customer numbers
VI-COASTAL	Apr-Jun	2,226,404,968	1,630,469,869	2,010,694,920	3,442,959,400	914,234,924	373,679,952	10,598,444,033	1,390,779
VI-COUNTRY	Apr-Jun	162,874,124	134,301,759	236,648,667	732,319,381	116,258,060	70,350,644	1,452,752,635	103,349
Total	Apr-Jun	2,389,279,092	1,764,771,628	2,247,343,587	4,175,278,781	1,030,492,984	444,030,596	12,051,196,668	1,494,128

VB Annual VOLUME THROUGHPUT | MJ

REGION	PERIOD 2020-21	BLOCK_1	BLOCK_2	BLOCK_3	BLOCK_4	BLOCK_5	BLOCK_6	Total	Customer numbers
VB-COASTAL	2020-21	142,214,195	105,173,703	124,346,811	190,935,654	-	-	562,670,366	695
VB-COUNTRY	2020-21	225,731	9,682	-	-	-	-	235,413	1
Total	2020-21	142,439,929	105,183,385	124,346,811	190,935,654	-	-	562,905,779	696

Q1 VB VOLUME THROUGHPUT | MJ

REGION	BLOCK 1	BLOCK2	BLOCK 3	BLOCK 4	BLOCK 5	BLOCK 6	TOTAL	Customer No.
Coastal	33,479,333	25,602,514	32,264,091	58,965,275	-	-	150,511,213	637
Country	56,597	-	-	-	-	-	56,597	1
TOTAL	33,535,930	25,602,514	32,264,091	58,965,275	-	-	150,567,810	638

Q2 VB VOLUME THROUGHPUT | MJ

REGION	BLOCK 1	BLOCK2	BLOCK 3	BLOCK 4	BLOCK 5	BLOCK 6	TOTAL	Customer No.
Coastal	35,292,325	25,302,017	29,124,278	41,063,190	-	-	130,761,810	653
Country	55,117	-	-	-	-	-	55,117	1
TOTAL	35,347,442	25,302,017	29,124,278	41,063,190	-	-	130,836,927	654

Q3 VB VOLUME THROUGHPUT | MJ

REGION	BLOCK 1	BLOCK2	BLOCK 3	BLOCK 4	BLOCK 5	BLOCK 6	TOTAL	Customer No.
Coastal	35,661,026	25,366,666	27,555,140	33,660,961	-	-	122,466,015	716
Country	52,756	-	-	-	-	-	52,756	1
TOTAL	35,933,784	25,388,888	27,555,140	33,660,961	-	-	122,538,773	717

Q4 VB VOLUME THROUGHPUT | MJ

REGION	BLOCK 1	BLOCK2	BLOCK 3	BLOCK 4	BLOCK 5	BLOCK 6	TOTAL	Customer No.
Coastal	37,561,514	28,689,966	35,403,302	57,246,228	-	-	158,962,269	746
Country	61,259	9,682	-	-	-	-	70,941	1
TOTAL	37,622,773	28,689,966	35,403,302	57,246,228	-	-	158,962,269	747

Quarterly

Q1	Demand Capacity (GJ of CD)						Demand Capacity Distance (GJ of CD)					Pressure Reduction (GJ of CD)					Demand Throughput - DT (GJ)			Demand Major End Customer Throughput - DMT (GJ)			Metering - Single Meter					Metering Double Meter									
VRT-10	-	-	-	-	-	-																															
DC1	1,583	3,759	5,186	5,123	685	-																															
DC2	3,584	6,636	6,652	4,936	-	1,669																															
DC3	5,050	10,848	10,193	6,709	2,050	2,604																															
DC4	2,340	3,806	1,823	650	-	-																															
DC5	67	192	3	-	-	-																															
DC6	1,350	3,404	3,769	5,116	8,000	31,292																															
DC7	800	1,826	1,705	1,385	105	-																															
DC8	181	367	257	-	-	-																															
DC9																																					
DC10	550	1,189	1,157	764	-	-																															
DC11	-	-	-	-	-	-																															
DC country							8,975	21,873	20,049	11,785	644	-	2,150	5,131	6,164	3,343	1,401	-							3	6	1	0	-	-	1	-	-	-	-	-	
Demand Throughput - DT													63,651	31,145	127,279							1	2	1	0	-	-	1	-	-	-	-	-				
DMT-01																																					
DMT-02																																					
DMT-03																																					
DMT-04																																					
DMT-05																																					
Demand Capacity - First Response																																					
DCFR-1																																					
DCFR-2																																					
DCFR-3																																					
DCFR-4																																					
DCFR-5																																					
DCFR-6																																					
DCFR-7																																					
DCFR-8																																					
DCFR-9																																					
DCFR-10																																					
DCFR-11																																					
Demand Throughput - First Response																																					
DMTFR-01																																					
DMTFR-02																																					
DMTFR-03																																					
DMTFR-04																																					
DMTFR-05																																					
Total	15,857	32,966	33,086	29,682	20,840	91,322	8,975	21,873	20,049	11,785	644	-	2,150	5,131	6,164	3,343	1,401	-	63,651	31,145	127,279	3	375,003	313,493	622,331	23	47	9	6	1	-	14	31	6	4	1	-

APPENDIX B

Q2	Demand Capacity (GJ of CD)						Demand Capacity Distance (GJ of CD)						Pressure Reduction (GJ of CD)						Demand Throughput - DT (GJ)			Demand Major End Customer Throughput - DMT (GJ)				Metering - Single Meter					Metering Double Meter								
	Demand Capacity	Block 1	Block2	Block 3	Block 4	Block 5	Block 6	Block 1	Block2	Block 3	Block 4	Block 5	Block 6	Block 1	Block2	Block 3	Block 4	Block 5	Block 6	Block 1	Block2	Block 3	Fixed (Num)	Block 1	Block2	Block 3	MHQ < 10 GJ/hr	10 to < 50 GJ/hr	50 to < 100 GJ/hr	100 to < 1000 GJ/hr	1000GJ/hr and greater	MHQ < 10 GJ/hr	10 to < 50 GJ/hr	50 to < 100 GJ/hr	100 to < 1000 GJ/hr	1000GJ/hr and greater			
VRT-03	-	-	-	-	-	-																																	
VRT-04	50	150	340	-	-	-																																	
VRT-06	-	-	-	-	-	-																																	
VRT-10	-	-	-	-	-	-																																	
DC1	1,583	3,760	5,190	5,123	685	-																																	
DC2	3,584	6,636	6,652	4,936	-	1,724																																	
DC3	5,050	10,848	10,193	6,709	2,050	2,604																																	
DC4	2,340	3,806	1,823	650	-	-																																	
DC5	67	192	3	-	-	-																																	
DC6	1,350	3,404	3,769	5,116	8,000	30,864																																	
DC7	800	1,826	1,705	1,385	105	-																																	
DC8	484	928	568	-	-	-																																	
DC9	-	-	-	-	-	-																																	
DC10	550	1,189	1,157	764	-	-																																	
DC11	-	-	-	-	-	-																																	
DC country	-	-	-	-	-	-	8,975	21,873	28,049	11,785	644	-	2,150	5,131	6,164	3,343	1,401	-																					
Demand Throughput - DT																			59,859	25,421	154,265																		
DMT-01																																							
DMT-02																																							
DMT-03																																							
DMT-04																																							
DMT-05																																							
Demand Capacity - First Response																																							
DCFR-1																																							
DCFR-2																																							
DCFR-3																																							
DCFR-4																																							
DCFR-5																																							
DCFR-6																																							
DCFR-7																																							
DCFR-8																																							
DCFR-9																																							
DCFR-10																																							
DCFR-11																																							
Demand Throughput - First Response																																							
DMTFR-01																																							
DMTFR-02																																							
DMTFR-03																																							
DMTFR-04																																							
DMTFR-05																																							
Total	15,857	32,969	33,092	29,682	20,840	90,949	8,975	21,873	28,049	11,785	644	-	2,150	5,131	6,164	3,343	1,401	-	59,859	25,421	154,265	3	372,826	290,822	607,673	25	51	10	6	1	16	34	7	4	1				

Q3	Demand Capacity (GJ of CD)						Demand Capacity Distance (GJ of CD)						Pressure Reduction (GJ of CD)						Demand Throughput - DT (GJ)			Demand Major End Customer Throughput - DMT (GJ)			Metering - Single Meter					Metering Double Meter										
	Demand Capacity	Block 1	Block2	Block 3	Block 4	Block 5	Block 6	Block 1	Block2	Block 3	Block 4	Block 5	Block 6	Block 1	Block2	Block 3	Block 4	Block 5	Block 6	Block 1	Block2	Block 3	Fixed (Num)	Block 1	Block2	Block 3	MHQ < 10 GJ/hr	10 to < 50 GJ/hr	50 to < 100 GJ/hr	100 to < 1000 GJ/hr	1000GJ/hr and greater	MHQ < 10 GJ/hr	10 to < 50 GJ/hr	50 to < 100 GJ/hr	100 to < 1000 GJ/hr	1000GJ/hr and greater				
VRT-03	-	-	-	-	-	-																																		
VRT-04	50	150	340	-	-	-																																		
VRT-05	-	-	-	-	-	-																																		
VRT-10	-	-	-	-	-	-																																		
DC1	1,583	3,761	5,193	5,121	685	-																					2	3	1	1	-	0	1	1	-	-	-	-		
DC2	3,584	6,637	6,653	4,935	-	1,763																					6	9	2	1	-	1	1	0	-	-	-	-		
DC3	5,050	10,848	10,193	6,709	2,050	2,604																					6	14	3	1	-	1	2	-	-	-	-	-		
DC4	2,340	3,806	1,823	650	-	-																					4	5	0	0	-	1	1	0	-	-	-	-		
DC5	67	193	3	-	-	-																					0	-	-	-	-	-	-	-	-	-	-	-		
DC6	1,350	3,404	3,769	5,116	8,000	30,569																					1	3	0	0	0	0	0	1	1	1	-	-	-	
DC7	800	1,826	1,705	1,385	105	-																					0	3	1	-	-	-	1	-	-	-	-	-		
DC8	184	171	262	-	-	-																					0	1	-	-	-	-	0	-	-	-	-	-		
DC9	-	-	-	-	-	-																					0	-	-	0	-	-	-	-	-	-	-	0		
DC10	259	1,139	1,157	164	-	-																					1	1	-	-	-	-	1	-	0	-	-	-		
DC11	-	-	-	-	-	-																					-	-	-	-	-	-	-	-	-	-	-	-		
DC country	-	-	-	-	-	-	8,975	21,872	28,049	11,785	644	-	2,150	5,131	6,164	3,343	1,401	-									3	6	1	0	-	-	1	-	-	-	-	-		
Demand Throughput																																								
DT																			55,176	21,292	132,168																			
DMT-01																																								
DMT-02																																								
DMT-03																																								
DMT-04																																								
DMT-05																																								
Demand Capacity - First Response																																								
DCFR-1																																								
DCFR-2																																								
DCFR-3																																								
DCFR-4																																								
DCFR-5																																								
DCFR-6																																								
DCFR-7																																								
DCFR-8																																								
DCFR-9																																								
DCFR-10																																								
DCFR-11																																								
Demand Throughput - First Response																																								
DMTFR-01																																								
DMTFR-02																																								
DMTFR-03																																								
DMTFR-04																																								
DMTFR-05																																								
Total	15,859	32,975	33,098	29,680	20,840	90,692	8,975	21,872	28,049	11,785	644	-	2,150	5,131	6,164	3,343	1,401	-	55,176	21,292	132,168					3	375,003	285,568	596,877	23	47	9	6	1	3	9	2	2	1	

APPENDIX B

Q4	Demand Capacity (GJ of CD)						Demand Capacity Distance (GJ of CD)						Pressure Reduction (GJ of CD)						Demand Throughput - DT (GJ)			Demand Major End Customer Throughput - DMT (GJ)				Metering - Single Meter					Metering Double Meter								
	Demand Capacity	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6	Block 1	Block 2	Block 3	Fixed (Nom)	Block 1	Block 2	Block 3	MHD < 10 GJ/hr	10 to < 50 GJ/hr	50 to < 100 GJ/hr	100 to < 1000 GJ/hr	1000GJ/hr and greater	MHD < 10 GJ/hr	10 to < 50 GJ/hr	50 to < 100 GJ/hr	100 to < 1000 GJ/hr	1000GJ/hr and greater			
VRT-03	-	-	-	-	-	-																																	
VRT-04	50	150	340	-	-	-																																	
VRT-06	-	-	-	-	-	-																																	
VRT-10	-	-	-	-	-	-																																	
DC1	1,584	3,759	5,188	5,124	685	-																					2	3	1	1	-	0	1	1	-	-	-	-	
DC2	3,583	6,635	6,652	4,936	-	1,687																					6	9	2	1	-	1	1	0	-	-	-	-	
DC3	5,050	10,848	10,193	6,709	2,050	2,604																					6	14	3	1	-	1	2	-	-	-	-	-	
DC4	2,340	3,806	1,823	650	-	-																					4	5	0	0	-	1	1	0	-	-	-	-	
DC5	66	190	3	-	-	-																					-	0	-	-	-	-	-	-	-	-	-	-	
DC6	1,350	3,404	3,769	5,116	8,000	31,151																					1	3	0	0	0	0	1	1	1	1	-	-	-
DC7	800	1,826	1,705	1,385	105	-																					0	3	1	-	-	-	1	-	-	-	-	-	
DC8	183	366	256	-	-	-																					0	1	-	-	-	0	-	-	-	-	-	-	
DC9	-	-	-	-	-	-																					-	0	-	-	-	-	-	-	-	-	-	0	
DC10	550	1,189	1,157	764	-	-																					1	1	-	-	-	1	-	0	-	-	-	-	
DC11	-	-	-	-	-	-																					-	-	-	-	-	-	-	-	-	-	-	-	
DC country	-	-	-	-	-	-	8,975	21,874	28,049	11,785	644	-	2,150	5,131	6,164	3,343	1,401	-									3	6	1	0	-	1	-	-	-	-	-	-	
Demand Throughput																																							
DT																											56,712	32,847	127,719										
DMT-01																																							
DMT-02																																							
DMT-03																																							
DMT-04																																							
DMT-05																																							
Demand Capacity - First Response																																							
DCFR-1																																							
DCFR-2																																							
DCFR-3																																							
DCFR-4																																							
DCFR-5																																							
DCFR-6																																							
DCFR-7																																							
DCFR-8																																							
DCFR-9																																							
DCFR-10																																							
DCFR-11																																							
Demand Throughput - First Response																																							
DMTFR-01																																							
DMTFR-02																																							
DMTFR-03																																							
DMTFR-04																																							
DMTFR-05																																							
Total	15,856	32,964	33,086	29,684	20,840	91,199	8,975	21,874	28,049	11,785	644	-	2,150	5,131	6,164	3,343	1,401	-	56,712	32,847	127,719					3	375,003	306,472	506,691										
																											23	46	9	6	1	3	9	2	2	2	1	1	

RFS Hours – 2020-21

Demand Capacity	Q1	Q2	Q3	Q4
VRT-03				
VRT-04				
VRT-06				
VRT-10				
DC-1			9	1
DC-2	2	2	12	
DC-3	7		16	3
DC-4	1		4	1
DC-5				
DC-6	2		3	
DC-7			5	
DC-8				
DC-9				
DC-10	1		1	
DC-11				
DC-COUNTRY			5	
Demand Throughput				
DT			3	
DMT-01				
DMT-02				
DMT-03				
DMT-04				
DMT-05				
Demand Capacity - First Response				
DCFR-1				
DCFR-2				
DCFR-3				
DCFR-4				
DCFR-5				
DCFR-6				
DCFR-7				
DCFR-8				
DCFR-9				
DCFR-10				
DCFR-11				
Demand Throughput - First Response				
DMTFR-01				
DMTFR-02				
DMTFR-03				
DMTFR-04				
DMTFR-05				

Ancillary Services

Annual 2020-21

Request for Service	Disconnection - Volume customer delivery points	Disconnection Wasted Truck Visit	Abolishment large<=25m3/hr	Abolishment large>25m3/hr	Special Meter Reads	Special Meter Read Wasted Truck Visit (NEW)	Expedited reconnections (NEW)
78	14,822	13,975	2,731	1	501,533	20,299	3,805

Quarterly 2020-21

Qtr	Request for Service	Disconnection - Volume customer delivery points	Disconnection Wasted Truck Visit	Abolishment large<=25m3/hr	Abolishment large>25m3/hr	Special Meter Reads	Special Meter Read Wasted Truck Visit (NEW)	Expedited reconnections (NEW)
1	13	605	552	599	1	121,798	3,638	241
2	2	4,622	3,517	693	-	115,528	3,752	877
3	58	3,730	4,477	638	-	132,496	6,729	1,077
4	5	5,865	5,429	801	-	131,711	6,180	1,610

Appendix C

Core verification of JGN gas quantity statement

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C1. Core verification

Attached as separate document.

Appendix D

Reference tariff schedule for 1 July 2022 to 30 June 2023

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D1. Reference tariff schedule for 1 July 2022 to 30 June 2023

Attached as separate document.