



Jemena Gas Networks (NSW) Ltd

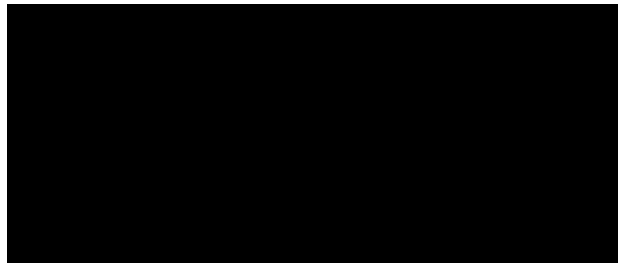
Tariff Variation Notice

2024-25 reference tariffs



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Tariff Variation Notice



Jemena Gas Networks (NSW) Ltd

ABN 87 003 004 322
Level 9-15, 99 Walker Street
North Sydney NSW 2060

Postal Address

PO Box 1220
North Sydney NSW 2060
Ph: (02) 9867 7000
Fax: (02) 9867 7010

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Attachment 4: JGN Reference tariff schedule for 1 July 2023 to 30 June 2024

Abbreviations

2020-25 AA	JGN access arrangement – 1 July 2020 to 30 June 2025
ABS	Australian Bureau of Statistics
AER	Australian Energy Regulator
AER Final Decision	AER Final Decision - JGN access arrangement 2020
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 (**2020-25 AA**) to apply for the period from 1 July 2020 to 30 June 2025.¹ The 2020-25 AA describes the reference services that JGN offers, sets out the initial reference tariffs that apply to those services from 1 July 2020 (in Schedule 2) and includes an annual tariff mechanism, effective 1 July each year of the 2020-25 AA period.

The 2020-25 AA requires that JGN submit its proposed reference tariffs to the AER for approval on or before 15 April each year. Unless it extends the time in accordance with the 2020-25 AA, the AER then has 30 business days to assess whether JGN's proposed reference tariffs are compliant.²

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

- provides JGN's proposed reference tariffs for the 2024-25 financial year (effective from 1 July 2024)
- demonstrates how these proposed 2024-25 reference tariffs comply with the tariff variation mechanism in clause 3.2 of the 2020-25 AA, including the side constraint
- sets out the calculation of the 2024-25 automatic adjustment factor in accordance with Schedule 3 of the 2020-25 AA and applies this factor in calculating the proposed 2024-25 reference tariffs, including licence fee and unaccounted for gas (**UAG**) true-ups for 2022-23
- contains no determined pass-through amounts or automatic adjustments for relevant tax or carbon costs.

1.2 Submission structure and 2020-25 AA compliance

JGN has structured this submission to demonstrate compliance with each relevant part of clauses 3 and 4 of the 2020-25 AA:

- section 2 – tariff classes (section 4 of the 2020-25 AA)
- section 3 – variation notice (section 3.6 of the 2020-25 AA)
- section 4 – annual tariff variation mechanism (section 3.2 of the 2020-25 AA).

1.2.1 Reference tariff model

JGN's reference tariff model (**Attachment 1**) provides mathematical proof that JGN's proposed 2024-25 reference tariffs comply with relevant aspects of the 2020-25 AA.

The model demonstrates that for 2024-25, JGN has updated its reference tariffs using:

- CPI of 4.05%
- an X factor of -6.15%, which incorporates an updated cost of debt value
- verified gas quantity inputs for financial year t-2 (2022-23)
- the automatic adjustment factor, which reflects licence fee and UAG cost true-ups for financial year t-2 (2022-23).

¹ The Access Arrangement: JGN's NSW gas distribution networks, 1 July 2020 – 30 June 2025, published 5 June 2020. The 2020-25 AA is available at <http://www.aer.gov.au/> or <http://www.jemena.com.au/>.

² JGN 2020-25 AA, clause 3.8.

1.3 Submission values and terminology

This submission employs the following standards:

- unless otherwise indicated, all prices are expressed in \$2024-25
- for relevant clauses and formulae in the 2020-25 AA as applicable to this TVN:
 - *financial year t* is the 2024-25 financial year ending on 30 June 2025
 - *financial year t-1* is the 2023-24 financial year ending on 30 June 2024
 - *financial year t-2* is the 2022-23 financial year ending on 30 June 2023
- a reference to the AA or a clause in the AA is a reference to the 2020-25 AA or a clause within the 2020-25 AA.

2. Tariff classes

This section sets out the tariff classes for JGN for 2024-25.

2.1 JGN tariff classes

JGN's tariff classes for its reference service are set out below. The tariff classes within the reference service are unchanged from those in 2023-24. Refer to **Attachment 4** for further details.

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 its 2024-25 reference tariffs in accordance with section 3.6 of the 2020-25 AA.

3.1 Proposed revised reference tariff schedule

Attachment 4 provides JGN's proposed reference tariff schedule for 1 July 2024 to 30 June 2025.³

3.2 Effective date of variation

The effective date of variation for JGN's 2024-25 reference tariffs is 1 July 2024.⁴

3.3 Compliance with the annual tariff variation mechanism

JGN's compliance with the variation mechanism set out in section 3.2 of the 2020-25 AA is described in section 4 and evidenced in JGN's reference tariff model in **Attachment 1**.⁵

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.⁶ This statement is provided in **Attachment 2**.

JGN's tariff variation mechanism relies upon actual haulage reference tariff quantity inputs from two years before the financial year in which the proposed tariffs will apply. For the 2024-25 variation notice, JGN must use the actual quantities that correspond to financial year t-2 (i.e. 2022-23), which is the most recent financial year actual quantity inputs available at this time.

Core Energy has verified JGN's gas quantity inputs (see **Attachment 3**).

3.5 Determined pass-through amount

There are no determined pass-through amounts for the year (as defined in the 2020-25 AA and for the purposes of 3.6(a)(v) and 3.6(a)(vi) of the AA). That is, for this 2024-25 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.

³ As required under clause 3.6(a)(i) of the AA.

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

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

⁶ 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 2020-25 AA and sets out its proposed 2024-25 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) and
- side constraint.

JGN's reference tariff model, provided in **Attachment 1**, provides the mathematical proof that JGN's proposed 2024-25 reference tariffs comply with both elements.

4.2 Weighted average price cap formula

The weighted average price cap formula is:

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

The weighted average price cap formula ensures the expected change in JGN's prices (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 (2022-23) to calculate notional revenue. These quantities have been externally verified by Core Energy (see **Attachment 3**).

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 2024-25 of 4.05% in accordance with clause 3.2(b) of the 2020-25 AA based on the December to December quarter movement between 2022 and 2023 as published by the Australian Bureau of Statistics (**ABS**). This is set out in the 'Input I General' worksheet of **Attachment 1**. The value of $(1+CPI_t)$ is 1.0405.

4.2.2 X factor adjustment

The X factor for 2024-25 updated for the latest return on debt observation is -6.15 per cent. It reflects the real change in prices and is used in **Attachment 1** in accordance with the tariff basket price control formula in clause 3.2(b) of the AA. The value of $(1-X_t)$ is 1.0615.

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. JGN has calculated the 2024-25 automatic adjustment factor in accordance with the following formula in schedule 3 of the 2020-25 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 $t-1$ (2023-24), which is -0.86%.

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 **Attachment 1**).

Table 4–1: Automatic adjustment factor

Automatic adjustment variable	Value (\$2022-23)
Licence fee factor (L_{t-2})	(\$1,009,452) – see section 4.2.3.1
UAG factor (U_{t-2})	\$61,057,676 – see section 4.2.3.2
Carbon Cost factor (C_{t-2})	0
Relevant Tax factor (T_{t-2})	0
Total adjustments	\$60,048,224

In accordance with the automatic adjustment formula in schedule 3 of the 2020-25 AA, JGN has adjusted for the time value of money to account for the period that 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:
 - 2.134% for financial year $t-1$ (2023-24)
 - 2.225% for financial year t (2024-25), which has been updated to incorporate the cost of debt update.
- CPI_{t-1} (2023-24) of 7.83%
- X factor as set out in section 4.2.2

- the notional revenue 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 12.43%
- A_t of 13.41%. The value of $(1+A_t)$ is therefore 1.1341.

The next subsections explain the calculations for the 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 the financial year 2022-23 and the AER allowance in the 2020-25 AA (L_{2023}).

In total, this results in a licence fee factor amount for L_{t-2} of $-\$1,009,452$ (\$2022-23), which is a refund to customers. 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} (\$2022-23)

	Allowance	Actual cost	Difference
L ₂₀₂₃	\$4,695,195 (\$2019-20), which escalates to \$4,991,474	Pipeline fees: \$83,072	(\$1,009,452)
		IPART fees: \$0	
		Mains tax: \$3,898,950	
Total (L_{t-2})	\$4,991,474	\$3,982,022	(\$1,009,452)

This calculation is provided in the 'Calc I General' worksheet of JGN's proposed reference tariff model of **Attachment 1**.

4.2.3.2 UAG factor

JGN has calculated its UAG adjustment in accordance with Schedule 3 of the AA. JGN has calculated its UAG adjustment (U_{2023}) for 2022-23 by calculating the difference between its recoverable UAG costs and the amount allowed in the 2020-25 AA.

Recoverable UAG cost

Clause 2.2 of schedule 3 of the 2020-25 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 costs⁷ for each financial year in \$/gigajoule, and
 - UAG target rate gas receipts of 5.593% for the volume market and 0.665% for the demand market in 2022-23.
- minus the allowed UAG amount for 2022-23.

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

Table 4–3: Calculating the UAG recoverable cost

	Volume market gas receipts (GJ)	Demand market gas receipts (GJ)	UAG cost (\$)	Target rate ⁸ (Volume)	Target rate (Demand)	Recoverable cost ⁹ (\$2022-23)
2023				5.593%	0.665%	\$91,915,548

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} (\$2022-23)

	UAG Allowance	Recoverable UAG	Difference
U_{2023}	\$29,026,243 (\$2019-20), which escalates to \$30,857,872	\$91,915,548	\$61,057,676
Total (U_{t-2})	\$30,857,872	\$91,915,548	\$61,057,676

Therefore, in 2024-25 the UAG factor amount from financial year t-2 is \$61,057,676 (\$2022-23).

This calculation is provided in the 'Calc I General' worksheet of JGN's proposed reference tariff model of **Attachment 1**.

4.2.3.3 Carbon cost factor

As there was no carbon scheme operating in 2022-23 and JGN had no forecast allowance as part of its 2020-25 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 2020-25 AA defines a Relevant Tax (see Schedule 1 of the 2020-25 AA). 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.

⁷ 'UAG costs' are defined in the 2020-25 AA as '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 2023 is the weighted (by gas purchased) average of the successful tender prices during the financial year.

⁸ Target rates are a defined term in JGN's 2020-25 AA.

⁹ Product of gas receipts target rate and UAG cost.

4.2.4 Determined pass-through amount

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

4.3 Proposed 2023-24 reference tariffs

JGN's proposed 2024-25 reference tariffs are set out in its proposed 2024-25 reference tariff schedule in **Attachment 4**.

JGN has also made the following adjustments to prudent discounts:

