Final Decision

Roma to Brisbane Pipeline Access Arrangement 2022 to 2027

(1 July 2022 to 30 June 2027)

Attachment 12 Demand

May 2022

AUSTRALIAN ENERGY REGULATOR

Inquiries about this publication should be addressed to:

Australian Energy Regulator
GPO Box 3131
Canberra ACT 2601

Tel: 1300 585 165
Email: AERInquiry@aer.gov.au

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Note

This attachment forms part of the AER's final decision on the access arrangement that will apply to APT Petroleum Pipelines Pty Limited's (APTPPL) Roma to Brisbane Pipeline for the 2022–27 access arrangement period. It should be read with all other parts of the final decision.

The final decision includes the following documents:

Overview

Attachment 3 – Rate of return

Attachment 5 – Capital expenditure

Attachment 6 – Operating expenditure

Attachment 9 – Reference tariff setting

Attachment 12 – Demand

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12 Demand

This attachment sets out our assessment of the demand forecasts for APTPPL's Roma to Brisbane Pipeline (RBP) for the 2022–27 access arrangement period (2022–27 period).

Under price cap regulation, demand is an important input into the derivation of APTPPL's reference tariffs for the RBP.[1] In simple terms, tariff prices are determined by cost divided by total demand (TJ/day), such that an increase in forecast demand has the effect of reducing the tariff price and vice versa. It also affects operating expenditure (opex) and capital expenditure (capex), which are linked to network growth via new connections.[2]

12.1 Final decision

We are satisfied that APTPPL's revised demand forecasts for the RBP comply with rule 74(2) of the National Gas Rules (NGR).

Based on all the information before us, we consider that APTPPL's total bi-directional average demand forecast of 200.0 TJ/day for the RBP's long-term firm service (LTFS) for the 2022–27 period was arrived at on a reasonable basis and is the best estimate in the circumstances.

12.2 APTPPL's revised proposal

APTPPL's RBP revised proposal includes two reference tariffs corresponding to two reference services; the eastbound LTFS, and the westbound LTFS. The LTFS are services for the receipt, transportation and delivery of gas to a delivery point along the RBP for a term of one year or more. Importantly, the reference tariffs are based on the amount of capacity reserved each day, rather than the amount used each day.

APTPPL proposes an average annual eastbound demand forecast of 108.9 TJ/day, and an average annual westbound demand forecast of 91.1 TJ/day, for a total average demand of 200.0 TJ/day over the 2022–27 period for the RBP. Table 12.1 below outlines the forecast demand for each user group.

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1 Appendix A discusses the differences between price cap regulation and revenue cap regulation in more detail and sets out our considerations around the current form of price regulation applied to regulated gas transmission and distribution pipelines.

2 Our final decisions on APTPPL's capex and opex for the RBP are respectively at Attachments 5 and 6.

Table 12.1 Summary of APTPPL's revised demand forecast for the RBP (TJ/day)

User group	2022–23	2023–24	2024–25	2025–26	2026–27	Average
Eastbound	126.2	105.7	104.2	104.2	104.2	108.9
Westbound	93.7	93.7	92.7	87.7	87.7	91.1
Total	219.9	199.4	196.9	191.9	191.9	200.0

12.3 Assessment approach

The NGR requires access arrangement information for a full access arrangement proposal for a transmission pipeline to include:

- Usage of the pipeline over the earlier access arrangement period showing minimum, maximum and average demand for each receipt or delivery point; and user numbers for each receipt or delivery point.[3]
- To the extent that it is practicable to forecast pipeline capacity and utilisation of pipeline capacity over the access arrangement period, a forecast of pipeline capacity and utilisation of pipeline capacity over that period and the basis on which the forecast has been derived.[4]

The NGR also require that forecasts and estimates: [5]

- are arrived at on a reasonable basis
- represent the best forecast or estimate possible in the circumstances.

We consider that there are two important considerations in assessing whether demand forecasts are arrived at on a reasonable basis and whether they represent the best forecasts possible in the circumstances. [6] These are:

- the appropriateness of the forecast methodology – this involves consideration of how the demand forecast has been developed; and
- whether or not relevant factors have been taken into account in developing the demand forecasts.

To determine whether APTPPL's proposed demand forecasts for the RBP are arrived at on a reasonable basis and are the best possible forecasts in the circumstances, we reviewed the data inputs used to implement the forecasting methodology.

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3 NGR, r. 72(1)(a)(iii).

4 Ibid, r. 72(1)(d).

5 NGL, s. 28(2)(a); NGR, r. 74(2). The revenue and pricing principles of particular relevance to our assessment of demand are those specified at NGL, ss. 24(2), 24(3), 24(6) and 24(7).

6 NGR, r. 74(2).

In making our final decision, we relied on:

- information provided by APTPPL as part of its initial and revised proposals
- information provided in response to the regulatory information notice (RIN)
- responses to information requests
- stakeholder submissions
- Australian Energy Market Operator's (AEMO) 2021 Gas Statement of Opportunities (GSOO) report[7]
- Projected assessment of system adequacy (PASA) information[8]
- The National Gas Infrastructure Plan – 2021 Interim Report.[9]

12.3.1 Interrelationships

Tariff prices depend on estimates on forecast total demand (TJ/day). To set transmission tariffs, the demand forecast is expressed in terms of the capacity reserved by the user (maximum daily quantity). Changes in these forecasts will translate into changed tariff prices. In simple terms, tariff prices are determined by cost divided by total demand (TJ/day), such that an increase in forecast demand has the effect of reducing the tariff price and vice versa. Attachment 9 sets out our final decision on the reference tariff.

Demand forecasts also affect capex and opex linked to increased network capacity. APTPPL submits that the role of the load and demand forecast in its current proposal is limited to supporting the calculation of the reference tariff as no augmentation expenditure is proposed.[10]

The demand forecast may also have a relationship where a business proposes a prudent discount. Attachment 9 sets out our final decision on the prudent discount.

12.3.2 Minimum, maximum and average demand

Under the NGR, the RBP access arrangement information must include minimum, maximum and average demand for each receipt or delivery point for the earlier access

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7 Australian Energy Market Operator, *Gas Statement of Opportunities*, March 2021.

8 PASA is the principal method of forecasting the adequacy of the power system to stay within the reliability standard. Each week participants must submit forecasts of availability to AEMO for the next 36 months. These forecasts form the basis of the medium term PASA that will be produced the following week.

9 Department of Industry, Science, Energy and Resources, *National Gas Infrastructure Plan – Interim Report*, May 2021.

10 APTPPL, *Roma to Brisbane Pipeline, Access arrangement submission - Load and demand forecast*, June 2021, p. 2.

arrangement period.[11] APTPPL's RBP access arrangement information did not provide this information; however its annual RINs satisfy these requirements.[12]

12.3.3 Forecast pipeline capacity and utilisation

The NGR require that to the extent practicable, the access arrangement information should include forecast pipeline capacity and utilisation of pipeline capacity over the access arrangement period.[13]

While the RBP access arrangement information did not include this information, it included forecast pipeline capacity in response to information requests. APTPPL explained that it did not provide utilisation information for the RBP as it does not possess the forecast of gas throughput required to calculate utilisation. [14]

The information APTPPL provided for the RBP satisfies rule 72(1)(d) of the NGR. We have formed this view on the basis that the capacity forecast has taken into account aggregated contracted demand on the pipeline.

12.4 Reasons for final decision

Based on all the information before us, we are satisfied that APTPPL's RBP revised demand forecast of an average of 200.0 TJ/day for the LTFS for the 2022–27 period was arrived at on a reasonable basis and represents the best forecast possible in the circumstances. The reasons for our final decision are discussed below.

12.4.1 Eastbound users

We are satisfied that APTPPL's revised demand forecast for the RBP eastbound service at an average of 108.9 TJ/day is the best estimate in the circumstances.

The revised eastbound demand forecast is comprised of three user groups: retail, industrial, and gas-fire powered generators. APTPPL's demand forecast for retail and industrial users is based on the current contracted capacity adjusted for any future changes that APTPPL expects to occur. APTPPL's demand forecast for gas-powered generation users is a combination of forecasts provided by its consultant, ACIL Allen, and updated contract information since the draft decision.

Based on the information before us, we are satisfied that APTPPL's revised eastbound demand forecast for the RBP is reasonable and driven by changes in contracts and market conditions since our draft decision.

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11 NGR r. 72(1)(a)(iii)(A).

12 APTPPL, Response to information request AER IR013, 29 September 2021, p. 3.

13 NGR, r. 72(1)(d).

14 APTPPL, Response to information request AER IR013, 29 September 2021, p. 3.

12.4.2 Westbound users

We are satisfied that APTPPL's revised demand forecast for the RBP westbound service of an average of 91.1 TJ/day is the best estimate in the circumstances.

APTPPL relied on its consultant, ACIL Allen, to estimate demand by an assessment of the broader east coast gas market.

Our draft decision noted concerns with the forecast methodology used in the RBP initial proposal, particularly that the forecast appeared to have no quantitative basis and did not undergo sensitivity testing. We also encouraged APTPPL to provide additional supporting information on why 35 TJ/day should be excluded over 2019 to 2021.

APTPPL has addressed the concerns set out in the draft decision:

- The revised forecast for the first year of the 2022–27 period is the average of the four years of historical data. In the initial proposal, the forecast for the first year was partially driven by two years of historical data but appeared to have no quantitative basis.
- The revised forecast contains sensitivity testing around key assumptions relating to increased gas supply.
- APTPPL has explained that the 35 TJ/day should be removed from the forecast as it is a 'park and loan' service, and therefore included in the rebateable revenue for the calculation of the annual reference tariff. We agree with APTPPL that including the 35 TJ/day into the demand forecast would result in a double count for the purposes of calculating the annual reference tariff.

In making our final decision to accept APTPPL's revised demand forecast for the RBP, we have considered potential adjustments.

- APTPPL's revised forecast for the RBP westbound demand included a minor increase in demand due to the assumption that the Port Kembla gas import terminal (PKGT) will not be online in the 2022–27 period.[15] New information suggests that PKGT will likely be online in the 2022–27 period.
- Since submitting its revised proposal, APTPPL has stated that its revised forecast for the RBP westbound demand should be increased due to an error in which a minor contract was excluded.

As the two adjustments in this instance are small in magnitude and offset each other, we are satisfied that the revised forecast for the RBP for the 2022–27 period is within a reasonable range, considering the uncertainty surrounding future gas market conditions.

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[15] APTPPL, *Roma Brisbane Pipeline 2022–27 access arrangement, Revised proposal*, January 2022, p. 40; ACIL Allen, *Roma to Brisbane Pipeline Update of western haul demand forecasts,* January 2022, pp. 26–28.

A. Shortened forms

Shortened form	Extended form
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
APTPPL	Australian Petroleum Pipelines Pty Limited
Capex	Capital expenditure
RBP	Roma to Brisbane Pipeline
LTFS	Long-term firm service
NGL	National Gas Law
NGR	National Gas Rules
Opex	Operating expenditure
PASA	Projected assessment of system adequacy
PKGT	Port Kembla gas import terminal
RIN	Regulatory Information Notice
SWQP	South West Queensland Pipeline
TJ	Terajoule