Final Decision

Roma to Brisbane Pipeline Access Arrangement 2022 to 2027

(1 July 2022 to 30 June 2027)

Overview

May 2022

AUSTRALIAN ENERGY REGULATOR

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AER reference: AER201614

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.

Our revisions are reflected in the approved access arrangement, *Roma to Brisbane Pipeline access arrangement 2022–27 – Approved access arrangement – May 2022*, which gives effect to this final decision.[1,2] Our decisions under the National Gas Rules (NGR) are: under rule 62, we refuse to approve the Roma to Brisbane Pipeline access arrangement proposal; under rule 64, we propose to substitute the approved access arrangement, *Roma to Brisbane Pipeline access arrangement 2022–27 – Approved access arrangement – May 2022*, and we further decide to give effect to that proposal.

As a number of issues were settled at the draft decision stage or required only minor updates, we have not prepared all attachments. The final decision attachments have been numbered consistently with the equivalent attachments to our draft decision. In these circumstances, our draft decision reasons form part of this final decision.

In addition to this Overview, our final decision includes the following documents:

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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1 Under rule 62 of the NGR: (1) after considering the submissions made in response to the access arrangement draft decision within the time allowed in the notice, and any other matters the AER considers relevant, the AER must make an access arrangement final decision; (2) an access arrangement final decision is a decision to approve, or to refuse to approve, an access arrangement proposal; and (3) if the access arrangement proposal has been revised since its original submission, the access arrangement final decision relates to the proposal as revised; and (4) an access arrangement final decision must include a statement of the reasons for the decision.

2 NGR, r. 64(2) provides that the AER's proposal for an access arrangement or revisions is to be formulated with regard to (a) the matters that the Law requires an access arrangement to include, (b) the service provider's access arrangement proposal, and (c) the AER's reasons for refusing to approve that proposal.

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Executive summary

The Australian Energy Regulator (AER) exists to ensure energy consumers are better off, now and in the future. Consumers are at the heart of our work, and we focus on ensuring a secure, reliable and affordable energy future for Australia. The regulatory framework governing gas transmission and distribution networks is the National Gas Law and Rules (NGL and NGR). Our work under this framework is guided by the National Gas Objective (NGO).[3]

A regulated gas network business must periodically apply to us for a ruling on network charges. We use our insights and expertise to determine how much money the network business can recover. We generally regulate gas networks using a price cap form of price control, whereby the forecast for gas demand is a key factor in setting network charges over the access arrangement period. We have done this for APT Petroleum Pipelines Pty Limited's (APTPPL) Roma to Brisbane Pipeline (RBP) in Queensland for the 2022–27 access arrangement period, starting 1 July 2022 to 30 June 2027.[4]

Our final decision allows APTPPL to set gas network charges for the RBP which are expected to result in the recovery of $240.7 million ($ nominal, smoothed) in revenue in the 2022–27 period from consumers. Our final decision is $27.1 million (12.7%) higher than our draft decision of $213.5 million. This reflects changes in forecast gas demand and operating expenditure (opex), and updating our final decision for the latest market data. In this case, base interest rates and estimates of inflation have increased between our draft decision and now, also leading to a higher revenue allowance than our draft decision. Consumers will see a small increase in bills over the coming five years, rather than a small decrease as indicated by our qualified preliminary estimates in our draft decision.

The expected revenue APTPPL may recover from RBP consumers comprises 3.4% of a typical bill for both residential and small business consumers.[5] We do not set network charges for each consumer. The transmission network cost is one of a number of components of the overall retail gas bill that end-consumers pay. Other key components of the bill include wholesale gas, distribution and retail costs. Hence the estimated consumer bill impacts are indicative only. We estimate that, compared to current levels, our final decision,[6] will:

- Increase retail prices by $2 (0.3%) for residential consumers and $10 (0.3%) for small business consumers, in the first year of the 2022–27 period.[7]

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3 The NGO is set out under the National Gas Law (NGL), s. 23 which is: "...to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas."

4 APTPPL, *Roma to Brisbane Pipeline 2022–27 Proposed revised access arrangement, 1 July 2022–30 June 2027*, July 2021.

5 APTPPL, *Roma to Brisbane Pipeline 2022–27 access arrangement, Reset RIN Workbook 5 Indicative bill impacts*, July 2021.

6 As at 30 June 2022.

7 As at 30 June 2023.

- Increase retail prices by $1 (0.1%) for residential consumers and $4 (0.1%) for small business consumers, in each of the next four years of the 2022–27 period.[8]

Residential and small business consumer bills are estimated to be $4 (0.7%) and $26 (0.7%) higher, respectively, by the end of the 2022–27 period.[9]

APTPPL's initial proposal was developed against a backdrop of ageing infrastructure, with inspections identifying cracks and corrosion along its older DN250 portion of the pipeline. The challenges of forecasting long-term gas demand have been a key issue in this review. On 8 November 2021, one of the RBP's large gas consumers, Incitec Pivot, announced its intention to cease manufacturing at its Gibson Island plant six months into the 2022–27 period.[10] APTPPL responded to this development in its January 2022 RBP revised proposal by lowering its 2022–27 forecast for gas demand.

Our draft decision largely accepted APTPPL's initial RBP proposal, pending further information on the proposed opex step changes, forecast gas demand, and the proposed prudent discount for westbound gas flows. We also recognised that Incitec Pivot's forthcoming closure may lead to materially different outcomes in our final decision for demand, tariffs, revenue and retail bills as compared to our draft decision.

We acknowledge the additional analysis and information provided by APTPPL to further inform its revised proposal on the issue of forecast gas demand, opex step changes and the westbound prudent discount. Our final decision accepts the RBP revised demand forecast of 108.9 TJ/day for eastbound services and 91.1 TJ/day for westbound services.

We also acknowledge that APTPPL has revised its pricing strategy to include a single prudent discount in its revised proposal – for the westbound service only.[11] The NGR allows network service providers to propose prudent discounts[12] in limited circumstances. [13] Based on the information before us, we do not consider that the proposed westbound prudent discount is in the long term interest of consumers.

Compared to our draft decision, our final decision for the 2022–27 period includes a higher opex forecast, a lower demand forecast, higher inflation and a higher rate of return.

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8 As at 30 June of each of the last four years of the 2022–27 period.

9 Compares 30 June 2027 (for the 2022–27 period) to 30 June 2022 (for the 2017–22 period).

10 Incitec Pivot, *Gibson Island manufacturing operations to cease at end of 2022*, 8 November 2021 (media release): available at https://www.incitecpivot.com.au/about-us/about-incitec-pivot-limited/media/gibson-island-manufacturing-operations-to-cease-at-end-of-2022.

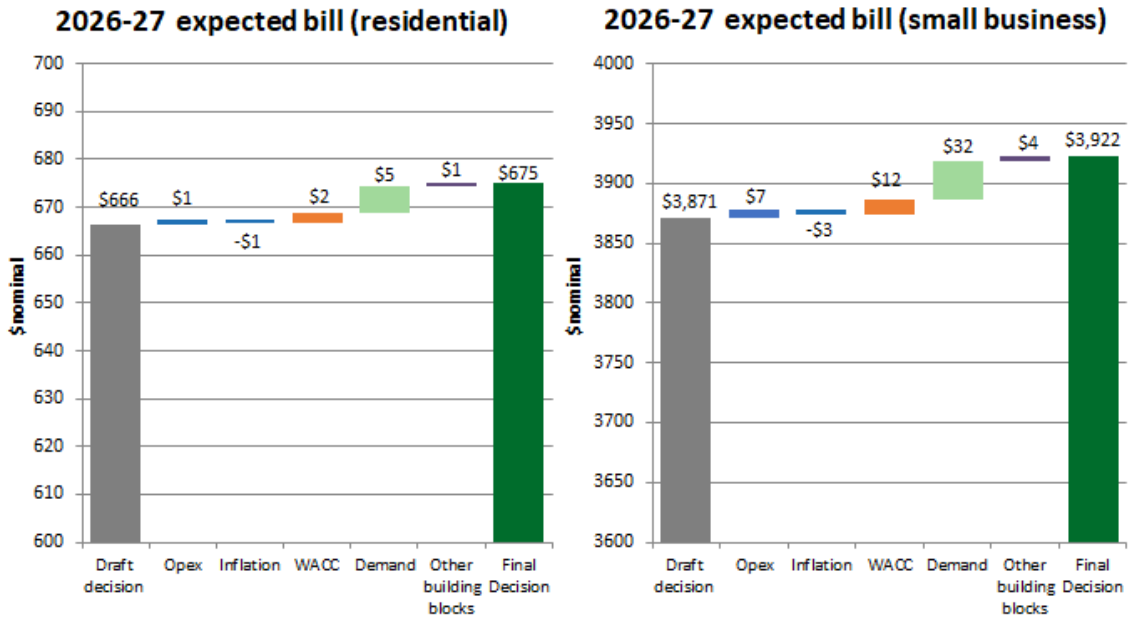
11 The RBP revised proposal withdrew the application of eastbound prudent discount and retained the proposed westbound prudent discount.

12 Under the NGR prudent discount mechanism, a network service provider may offer a specific consumers, or consumers, a tariff lower than the reference tariff but recover its foregone revenue through tariffs offered to other consumers. This allows the benefiting consumer(s) to contribute to the network service provider's fixed costs, thereby reducing the reference tariff that is applicable to other consumers relative to if the prudent discount was not applied.

13 NGR, r 96(2)(a).

Figure 1 shows what variables contribute to the estimated overall increase in retail gas bills in the 2022–27 period and compares our final decision to our draft decision. The increase in estimated bills for all consumer categories is largely influenced by the higher opex forecast, lower demand forecast and updates to market data to estimate the rate of return as required by the binding 2018 Rate of Return Instrument (2018 Instrument)[14] for the 2022–27 period. The estimated bill impact is partially offset by a higher expected inflation rate.

Figure 1 Drivers of residential and small business consumers bills ($ nominal)



Source: AER analysis.
Note: Bill impact drivers reflect net aggregate changes to the total smoothed revenues which may contain impacts on more than one building block. They are based on final decision updates to each PTRM inputs.

In the RBP revised proposal, APTPPL proposed an expected total revenue of $235.6 million (nominal, smoothed) for the 2022–27 period. This is $2.1 million (0.9%) higher than approved expected revenue for the 2017–22 period, and $91.0 million (27.9%) lower than actual/estimated expected revenue for the same period.[15] It is also $22.1 million (10.4%) higher than our draft decision.

Our final decision total revenue reflects expected higher inflation and the higher weighted average cost of capital (WACC), which have been driven by underlying economic conditions, including economic recovery from COVID-19, a tightening labour market and international supply disruptions to a range of commodities. The offsetting

[14] AER, *Rate of Return Instrument*, December 2018.

[15] In real terms ($2021–22), the revised proposed revenue is $23.5 million (9.6%) lower than approved expected revenue, and $127.4 million (36.6%) lower than actual/estimated expected revenue for 2017–22.

impacts on total approved unsmoothed revenue from the higher expected inflation (which has reduced revenue) and higher WACC (which has increased revenue) largely explains the $5.0 million increase in expected total revenue between our final decision and APTPPL's RBP revised proposal.

In making this final decision, we have had regard to information including the RBP initial and revised proposals, stakeholder submissions, our draft decision and additional analysis undertaken by us.

Overall, we are satisfied that our final decision on the RBP 2022–27 access arrangement takes a prudent approach to the key issues under review and is in the long term interests of consumers.

Key themes throughout this review have been:

- opportunity for improved consumer and pre-lodgement engagement
- ensuring consumers pay no more than necessary for safe and reliable gas services
- demand forecast uncertainty

Opportunity for improved consumer and pre-lodgement engagement

Consumer engagement helps network businesses determine how best to provide services that align with consumers' long term interests.

Our overall assessment of APTPPL's consumer engagement approach, based on the RBP 2022–27 initial and revised proposals, stakeholder submissions and our observations of APTPPL's engagement, is that APTPPL would benefit from greater investment in its pre-lodgement processes. This includes an earlier and sharper focus on planning its approach to consumer engagement, and providing supporting information in its proposal to allow consumers to better understand the key issues to allow for more meaningful and deeper engagement on its proposals prior to lodgement.

Our draft decision identified opportunities for improved engagement on the revised proposal. This included identifying the magnitude and nature of the impact of Incitec Pivot's Gibson Island plant closure on forecast gas demand and tariffs, as well as the proposed approach to its westbound prudent discount. Provision of up to date and high-quality information provides consumers and the AER with increased confidence in forecasts put forward by network businesses.

Since then, APTPPL held two RBP stakeholder meetings in late-December 2021 and February 2022. We consider consumers had limited opportunity to meaningfully engage on the issues and influence the revised proposal in this period, as evidenced by the short notice provided of the meeting, and the timing of the meeting only a few days before the Christmas/new year holiday period when many stakeholders were on leave.

The revised proposal outlines APTPPL's engagement approach and notes that all elements of the RBP proposal were raised with consumers prior to its lodgement.[16] However, our assessment is that APTPPL's consumer engagement did not reflect a collaborative approach. For instance, the late-December 2021 engagement was informative in nature and did not consider the impact of the revised approach on reference tariffs.[17] Consequently, consumer preferences on how the price impacts should be reflected over the five-year period have not been considered.

Our Better Resets Handbook (the Handbook) sets out the range of considerations that can demonstrate whether consumers have been genuinely engaged in the development of a proposal.[18] We consider that APTPPL's consumer engagement approach does not meet the expectations set out in the Handbook and is not in line with the high standard set by some of its industry peers in recent AER determinations.

Genuine, high quality consumer engagement is essential to ensuring that proposals are driven by consumer preferences. We consider there is opportunity for APTPPL's parent company, the APA Group, to invest more in pre-lodgement engagement processes to further improve the consumer engagement approach it undertakes to inform the development of future regulatory proposals.

Ensuring consumers pay no more than necessary for safe and reliable gas services

Ensuring consumers pay no more than they need for the safe and reliable gas services that they want is a cornerstone of the access arrangement decision process. We assess whether the RBP proposal represents a reasonable and realistic forecast of how much money APTPPL needs for the safe and reliable operation of its gas transmission network. We encourage and promote better consumer outcomes over multiple access arrangement periods.

In its initial proposal, APTPPL informed us that energy prices are a key concern for consumers and businesses[19] and included a regulatory depreciation approach that aimed to minimise consumer price volatility, which we accepted in our draft decision. They proposed to reduce maintenance costs associated with its DN250 pipeline by decommissioning the line and transferring affected consumers' gas loads to the larger capacity DN400 pipeline over a two-year period.[20] Given the uncertainty about the longer-term outlook for the energy sector and gas transmission pipelines, APTPPL proposed reducing the standard lives for pipelines and compressors. The RBP revised proposal maintains this regulatory depreciation approach, with a revised regulatory depreciation of $20.7 million. This is $4.5 million (27.6%) higher than our draft decision,

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16 APTPPL, *Roma to Brisbane Pipeline 2022–27 access arrangement, Revised proposal,* January 2022, pp. 11 and 13.

17 APTPPL, *Presentation on RBP access arrangement – AER draft determination and outstanding issues*, December 2021, slide 9.

18 AER, *Better Resets Handbook – Towards Consumer Centric Network Proposals*, December 2021.

19 APTPPL, *Roma to Brisbane Pipeline Access arrangement Overview,* July 2021*,* p. 4.

20 APTPPL, *Roma to Brisbane Pipeline Access arrangement Overview,* July 2021*,* pp. 28–29.

reflecting increased forecast capital expenditure (capex) for IT assets with relatively shorter lives.

Our final decision accepts APTPPL's RBP revised total opex forecast of $103.6 million ($2021–22) for the 2022–27 period, which is $0.9 million (0.9%) lower and not materially different from our alternative opex estimate of $104.5 million, but $9.4 million (9.9%) higher than our draft decision. The increase compared to our draft decision is due to proposed step changes to replace existing IT systems with cloud-based services and meeting obligations under new cyber and critical infrastructure security legislation.

We also accept APTPPL's RBP revised total net capex forecast of $37.5 million for the 2022–27 period, which we have updated to $39.0 million to include minor adjustments to account for updated information. The revised capex forecast is $8.3 million (28.4%) higher than the initial proposal of $29.2 million, which we accepted in our draft decision. This increase is driven by information and communications technology related capex,[21] in particular additional cyber security requirements.

We have assessed the RBP revised proposal at the component level to satisfy ourselves of the robustness of proposed expenditures within the control of the business (such as opex and capex), as well as more holistically to confirm its alignment with APTPPL's business priorities over the near and longer term.

Demand forecast uncertainty

Under a price cap, forecast gas demand is an important input in deriving reference tariffs over the five-year access arrangement period, with a decrease in forecast demand leading to an increase in tariffs, and vice versa. Forecast demand also affects the opex and capex forecasts, which inform our decision on the total revenue requirement.

We recognise the challenges in forecasting gas demand as a result of changes in contractual positions with consumers, the closure of Incitec Pivot's Gibson Island plant and as renewable energy becomes cheaper and increasingly the choice of consumers.

Our draft decision included a higher alternative demand forecast of 260.7 TJ/day (26% higher than the initial proposal's average forecast of 206.7 TJ/day). We were not satisfied that the demand forecasts for the RBP's gas-powered generation users and its westbound service were arrived at on a reasonable basis and represented the best possible forecast in the circumstances. In particular, we cited the lack of sensitivity analysis and quantitative basis for the adjustments made to the base forecasts, as well as a lack of information to support the exclusion of certain contractual capacities.

The RBP revised proposal included updated demand forecasts for eastbound and westbound services of 108.9 TJ/day and 91.1 TJ/day, respectively. The revised eastbound demand forecast reflects the current contracted capacity and updated

contract information. We consider the RBP's revised eastbound demand forecast is reasonable as it is driven by changes in contracts with industrial, retail and gas-powered generation users and market conditions.

APTPPL also sought to address the concerns outlined in our draft decision regarding its westbound demand forecasting methodology. For instance, the RBP revised proposal westbound demand forecast is based on four years of historical data and contains sensitivity testing on the key assumptions relating to increased gas supply. APTPPL also provided further information for the removal of 35 TJ/day from its demand forecast, which would otherwise result in double counting for calculating the annual reference tariff.

Based on the additional information provided in the RBP revised proposal, we consider that APTPPL has addressed our concerns and the revised total demand forecast of 200.3 TJ/day is the best estimate in the circumstances.

1 Our final decision

Our final decision allows APTPPL to set gas network tariffs which are expected to result in the recovery of $240.7 million ($ nominal, smoothed) in revenue from its consumers from 1 July 2022 to 30 June 2027.

APTPPL's RBP is regulated using a price cap.[22] Incentives are provided to it to reduce costs, improve service quality and undertake efficient investments.

Gas pipelines that are subject to full regulation, like the RBP, are regulated by us under an approved access arrangement.[23] An access arrangement specifies certain pipeline services (reference services) and the price and non-price terms and conditions on which those reference services will be offered over a five-year period.

To approve an access arrangement, we make regulatory decisions on the network tariffs that pipeline operators, such as APTPPL, can charge users of its reference services.

For this final decision, our assessment is based on the revised RBP access arrangement proposal that APTPPL submitted to us on 14 January 2022.[24] The revised proposal, in response to our draft decision,[25] sets out APTPPL's view of expected costs, demand and required revenues for the RBP for the 2022–27 period.

1.1 How our final decision would affect gas bills

Gas transmission network tariffs that will be set by reference to our final decision are one contributor to consumers' total retail gas bills. Retail gas bills are made up of the cost of purchasing gas (wholesale energy cost), the cost of pipelines used to transport gas (transmission and distribution networks) and other infrastructure such as metering costs, and the retailer's costs and profit margin. Each of these costs contribute to the retail prices charged to consumers by their chosen retailer.

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22 This is an average price. This approach is consistent with APTPPL's RBP current period access arrangement. See Attachment 10 of our draft decision for additional information: AER, *Draft decision, Roma to Brisbane Pipeline 2022–27, Attachment 10 – Reference tariff variation mechanism*, November 2021.

23 The NGL provides for different types of regulation to apply to gas pipelines, based on competition and significance criteria. A 'full regulation' pipeline must periodically submit an access arrangement to the AER, setting out pricing for a reference service sought by a significant part of the market. 'Light regulation' pipelines are not subject to upfront price regulation. The light regulation model is a negotiate-arbitrate approach, placing greater emphasis on commercial negotiation and information disclosure. The AER plays a role only if dispute resolution mechanisms are triggered.

24 APTPPL, *Roma to Brisbane Pipeline 2022–27, Attachment 1 – Proposed revised access arrangement, 1 July 2022–30 June 2027 – revised proposal*, January 2022; NGR, r. 62(3).

25 AER, *Draft decision*, *Roma to Brisbane Pipeline 2022–27*, *Overview*, November 2021.

Our RBP final decision affects the bill component relating to gas transmission tariffs, representing approximately 3.4% on average of a Queensland retail gas consumer's annual bill.[26]

We estimate the expected bill impact by varying the transmission tariffs in accordance with our final decision, while holding all other components constant. This isolates the effect of our final decision on transmission tariffs only. However, this does not imply that other components of the bill will remain unchanged over the 2022–27 period.

Table 1 shows the estimated average annual impact of our final decision for the 2022–27 period on retail gas bills for consumers compared with the RBP revised proposal.

We do not set network charges for each consumer. The transmission network cost is one of a number of components of the overall retail gas bill that end-consumers pay. We estimate that under this final decision, compared to current levels, average annual bills for consumers would:[27]

- increase by $2 (0.3%) for residential consumers and $10 (0.3%) for small business consumers, in the first year of the 2022–27 period[28]
- increase by $1 (0.1%) for residential consumers and $4 (0.1%) for small business consumers, in each of the next four years of the 2022–27 period.[29]

Residential and small business consumer bills are estimated to be $4 (0.7%) and $26 (0.7 %) higher, respectively, by the end of the 2022–27 period.[30]

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[26] APTPPL, *Roma to Brisbane Pipeline 2022–27 access arrangement, Reset RIN Workbook 5 Indicative bill impacts*, July 2021.

[27] As at 30 June 2022.

[28] As at 30 June 2023.

[29] As at 30 June of each of the last four years of the 2022–27 period.

[30] Compares 30 June 2027 (for the 2022–27 period) to 30 June 2022 (for the 2017–22 period).

Table 1 Estimated impact of AER's final decision and APTPPL's RBP proposal on average annual gas bills for the 2022–27 period ($ nominal)

	2021–22	2022–23	2023–24	2024–25	2025–26	2026–27
AER's final decision						
Residential annual bill[a]	671[a]	672	673	674	674	675
Annual change[c]		2 (0.3%)	1 (0.1%)	1 (0.1%)	1 (0.1%)	1 (0.1%)
Small business annual bill[b]	3,896[b]	3907	3910	3914	3918	3922
Annual change[c]		10 (0.3%)	4 (0.1%)	4 (0.1%)	4 (0.1%)	4 (0.1%)
APTPPL's RBP revised proposal						
Residential annual bill[a]	671[a]	672	673	673	674	674
Annual change[c]		1 (0.2%)	1 (0.1%)	1 (0.1%)	1 (0.1%)	1 (0.1%)
Small business annual bill[b]	3,896[b]	3905	3908	3911	3915	3918
Annual change[c]		9 (0.2%)	3 (0.1%)	3 (0.1%)	3 (0.1%)	3 (0.1%)

Source: AER analysis; APTPPL, *Roma to Brisbane Pipeline 2022–27 Access arrangement, Reset RIN Workbook 5 Indicative bill impacts*, July 2021.

(a) Annual bill for 2021–22 reflects the average annual consumption of 7,873 MJ for APTPPL's residential consumers.

(b) Annual bill for 2021–22 reflects the average annual consumption of 100,000 GJ for APTPPL's small business consumers.

(c) Annual change amounts and percentages are indicative. They are derived by varying the network tariff contribution to the 2021–22 bill amounts in proportion to the change in the tariff path. Actual bill impacts will vary depending on gas consumption and tariff class.

1.2 What is driving revenue

To compare revenue from one period to the next on a like-for-like basis we use 'real' values based on a common year, which have been adjusted for the impact of inflation ($2021–22).[31]

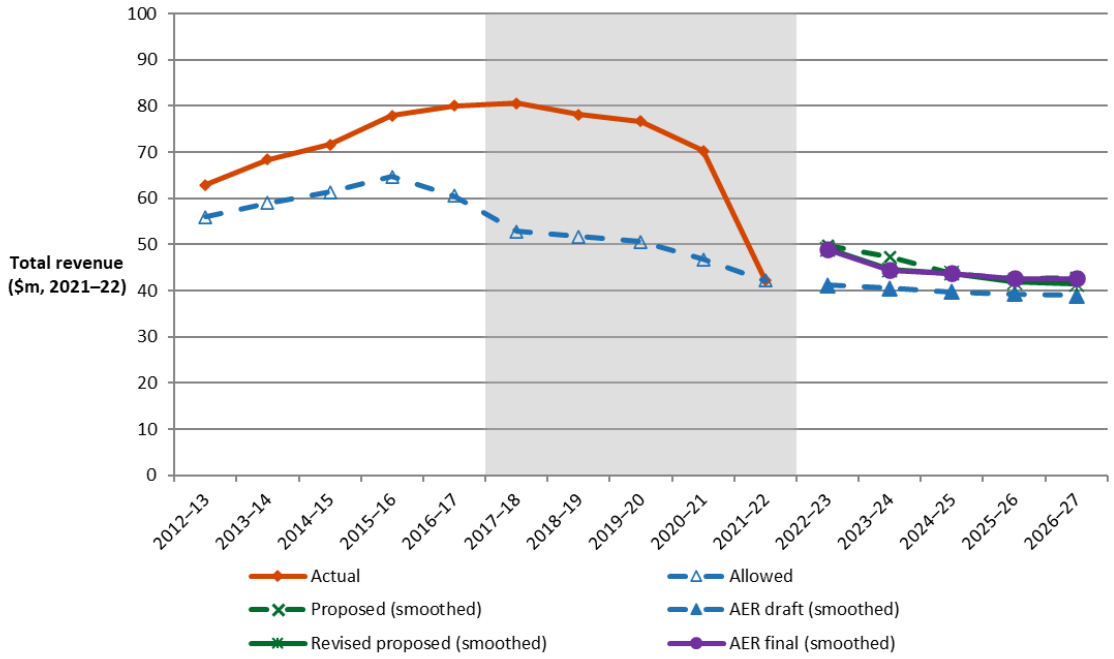
This final decision approves a total revenue for the 2022–27 period that is $21.5 million (8.8%) lower than we approved in our 2017–22 decision.[32]

Figure 2 shows our final decision for APTPPL's smoothed revenue for the 2022–27 period, and its allowed revenues over the years between 2012–22.

[31] That is, 30 June 2022 dollar terms based on APTPPL's estimated actual revenue for 2021–22.

[32] The comparison of total revenue between 2022–27 and 2017–22 periods is based on smoothed revenues. In nominal dollar terms, our final decision total revenue for the 2022–27 period is $7.1 million (3.0%) higher than the total revenues approved for the 2017–22 period.

Figure 2 Revenue over time ($ million, 2022–27)



Source: AER analysis.

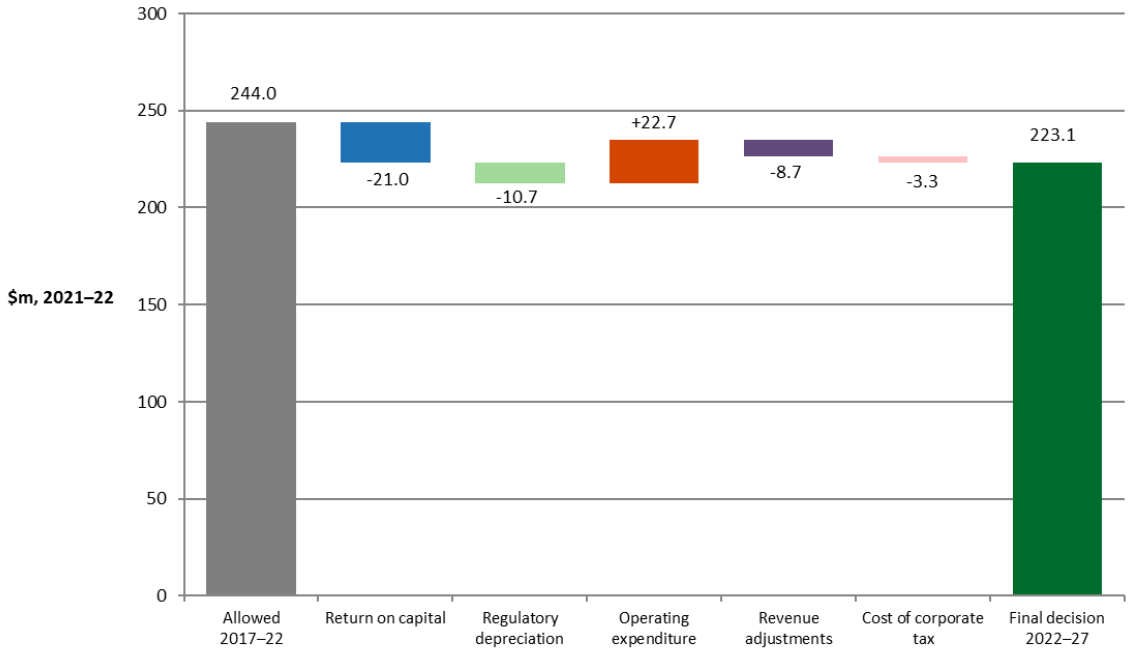
Figure 3 shows the key drivers for the change in APTPPL's approved revenue from the 2017–22 period compared to what we expect in the 2022–27 period. It shows that our final decision provides for decreases in the building blocks for:

- return on capital, which is $21.0 million (15.3%) lower than 2017–22, driven by decreases in the nominal weighted average cost of capital (WACC)[33]
- regulatory depreciation, which is $10.7 million (50.3%) lower than 2017–22, driven by the residual values of some short-lived assets being fully depreciated in the 2017–22 period and a higher expected inflation increasing the capital base indexation
- revenue adjustments, which are $8.7 million lower than 2017–22, reflecting the efficiency carryover mechanism (ECM) amounts accrued over the 2017–22 period.
- cost of corporate income tax, which is $3.3 million lower than 2017–22, due to zero tax being forecast for the 2022–27 period.

Figure 3 also shows that our final decision provides for an increase in the opex building block for the 2022–27 period, which is $22.7 million (28.1%) higher than the 2017–22 period. This is driven by higher actual opex in 2019–20, which APTPPL has used as the base year for the 2022–27 period.

[33] We compare first year values because the nominal WACC is annually updated each year to reflect changes in the cost of debt.

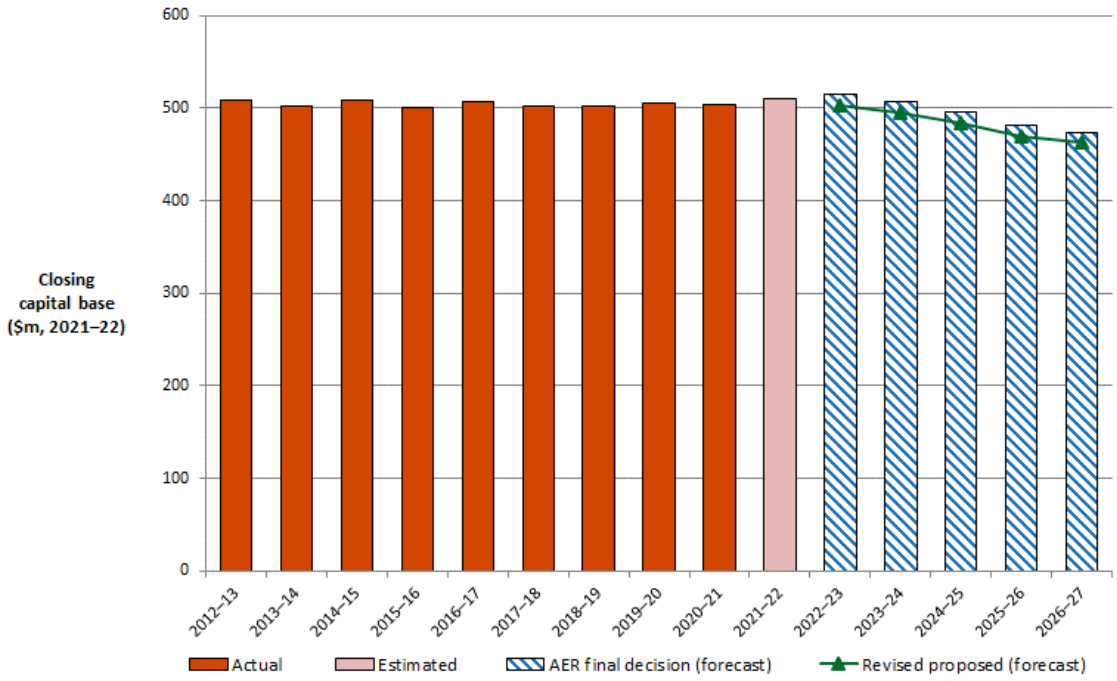
Figure 3 AER's final decision for the 2022–27 period and APTPPL's RBP 2017–22 allowed building block costs ($ million, 2021–22)



Source: AER analysis.

Figure 4 compares our final decision on the RBP forecast capital base, to APTPPL's actual and proposed RBP forecast capital base. It shows that the RBP capital base is forecast to decrease by 7.0% by the end of the 2022–27 period.

Figure 4 Value of APTPPL's RBP capital base over time ($ million, 2021–22)



Source: AER analysis.

1.3 Key differences between our final decision and the revised proposal

In its revised proposal, APTPPL proposed total forecast revenue of $235.6 million ($ nominal) for the 2022–27 period for the RBP.[34] Our final decision of $240.7 million allows $5.0 million (2.1%) more revenue than APTPPL sought to recover through the RBP revised proposal.

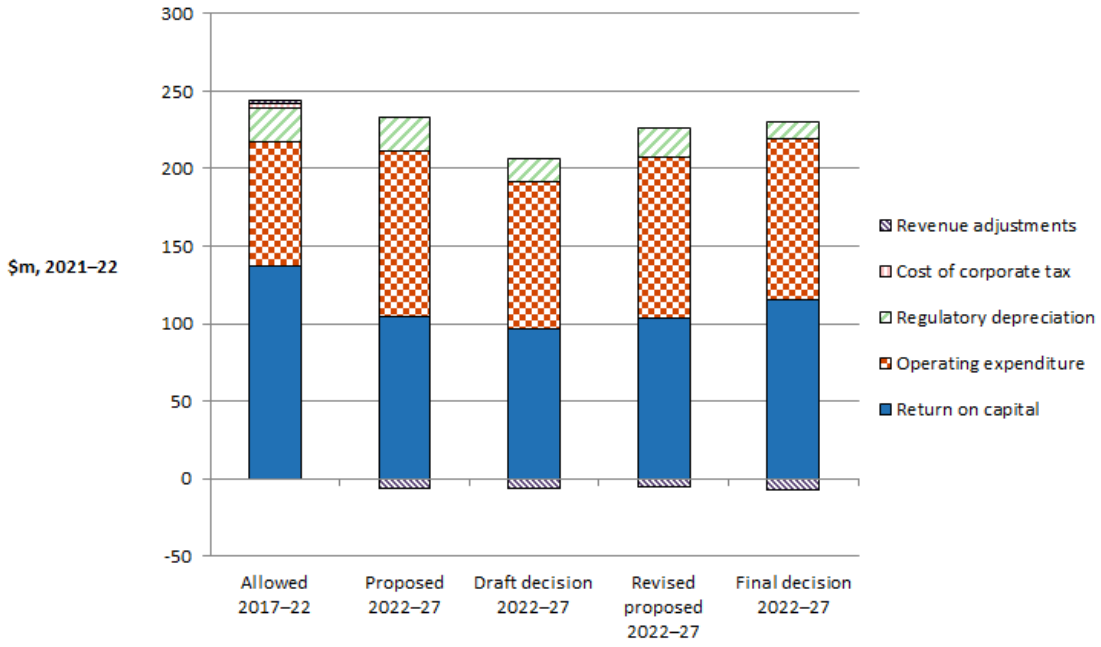
Figure 5 compares the building block revenue from our final decision to the RBP revised proposal for the 2022–27 period, and to approved revenue for the 2017–22 period.

The biggest contributors to the revenue difference between our final decision and the RBP revised proposal are the return on capital building and regulatory depreciation building blocks. The return on capital is $14.4 million (13.0%) higher than the RBP revised proposal. This is mainly driven by a higher WACC of 4.82%, which in turn is driven by a higher nominal risk-free rate of 2.12% and a return on equity of 5.78%.

[34] APTPPL, *Roma to Brisbane Pipeline 2022–27, Attachment 3 – Post-tax revenue model – revised proposal,* January 2022.

Our final decision regulatory depreciation is 9.2 million (44.5%) lower compared to the RBP revised proposal. This reduction is driven mainly by higher expected inflation, which increases the indexation of the RBP's projected capital base.[35]

Figure 5 AER's final decision on components of total revenue ($ million, 2021–22)



Source: AER analysis.

1.4 APTPPL's consumer engagement

The National Gas Objective (NGO) focuses our work on the long term interest of consumers[36] and we think including consumers in the development of access arrangement proposals is the best way to deliver this.

In the regulatory process, we determine if the expected revenue APTPPL will recover over the 2022–27 period for the RBP is in the long term interests of consumers. The AER's framework for considering consumer engagement at the time of the RBP initial and revised proposals was first developed for the Victorian 2021–26 electricity distribution networks.[37] That consumer engagement framework is now reflected in the recently published Better Resets Handbook. The framework includes considering the

[35] Under the building block framework, regulatory depreciation consists of the net total of the straight-line depreciation less the indexation of the capital base. Therefore, all things being equal, the higher the amount of indexation of the capital base is subtracted from straight-line depreciation means a lower regulatory depreciation building block.

[36] NGL, section 23.

[37] This framework, sometimes referred to as 'Table 7' was considered in: AER, *Draft decision, Jemena distribution determination 2021–26, Overview*, September 2020, p. 43.

nature, breadth and depth of engagement, and clearly evidencing the impact that the engagement had on the proposal and assessing the proposed expenditure outcomes.

In a rapidly changing environment, consumer preferences should drive outcomes throughout the access arrangement process and allow consumers to 'set the agenda'. We want consumers to be partners in forming proposals, rather than simply being asked for feedback. We look for genuine commitment from network businesses extending down from their Boards and Executives to giving effect to consumer preferences, and for openness to new ideas and a willingness to change. Consumer engagement should be a continuous business-as-usual process and not only undertaken in preparing for proposals.

A high-quality proposal that has been designed collaboratively with consumers and clearly represents their long-term interests, increases the likelihood that more issues can be settled at the draft decision stage or that proposals may be fully accepted. The network business can then focus its resources on meeting the needs of their consumers, rather than extended engagement with the regulator.[38]

Our draft decision noted that APTPPL would have benefitted from greater investment in its pre-lodgement processes with consumers and the AER. We also indicated possible opportunities on how its engagement can be improved, such as considering the timeframe for stakeholders to provide informed feedback and partnering with stakeholders to develop options and solutions together.[39]

APTPPL sought to address elements of our draft decision by outlining its transparent engagement with stakeholders and noting that all elements of the RBP proposal were raised with consumers prior to its lodgement.[40]

While we welcome APTPPL's commitment to understanding RBP stakeholders' needs,[41] we have observed little improvement in its approach to consumer engagement. For instance, since our draft decision there have been two RBP stakeholder engagement sessions: on 22 December 2021 and 8 February 2022. The first session outlined the AER's draft decision and APTPPL's initial considerations for its revised proposal, and the second session provided an overview of the revised proposal that it had submitted to us. Based on our observations, the two stakeholder engagement sessions were at the 'inform' level of the International Association for Public Participation (IAP2) Spectrum of Public Participation. We also consider the one week's notice given to stakeholders of the December 2021 meeting and its closeness to the Christmas/new year public holiday period would have provided limited opportunity for stakeholders to effectively engage with the issues and influence the outcome.

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38 AER, *Better Resets Handbook*, December 2021, p. 3.

39 AER, *Draft decision, Roma to Brisbane Pipeline 2022–27, Overview,* November 2021, pp. 20–23.

40 APTPPL, *Roma to Brisbane Pipeline 2022–27 access arrangement, Revised proposal,* January 2022, pp. 11 and 13.

41 APTPPL, *Roma to Brisbane Pipeline 2022–27 access arrangement, Revised proposal,* January 2022, pp. 11–14.

We encourage APTPPL to take advantage of opportunities that early engagement provides. Early engagement and consumer driven engagement in other decisions is linked to the success of a proposal. Examples include:

- Investing in consumer engagement and nurturing stakeholder capability early on. For instance, in Powerlink's 2022–27 revenue determination process, the AER's Consumer Challenge Panel (CCP23) observed the "Customer Panel and Revenue Proposal Reference Group comprise a well-established, informed and dedicated group of people as any in the nation and so are a valuable group with whom to engage. Powerlink's process to build and support this capability over years is worth noting by other Australian network businesses."[42]
- Engaging consumers on the development of a stakeholder engagement plan, including the scope, level and timing of engagement, and ensuring engagement includes different levels of participation ranging from 'inform' to 'collaborate'. We note the RBP Stakeholder Engagement Plan does not appear to have been updated to reflect stakeholder feedback following consultation, nor does it provide adequate information on the timeframe for further engagement.[43] We also note engagements with stakeholders between the AER receiving the RBP initial proposal and our final decision is listed as "TBA". [44]
- Providing opportunities for more in-depth engagement with consumers, including opportunities to influence the proposal. As noted in our draft decision, earlier and deeper consumer engagement would have helped APTPPL develop a more coherent justification for the proposed westbound prudent discount.[45] This includes information on at-risk volumes, number of consumers that could potentially defect from the RBP to the Darling Downs Pipeline and accompanying costing analysis.
- Continuing to engage consumers once the initial proposal is submitted, particularly if circumstances have changed. For instance, it would have been useful for APTPPL to update stakeholders on changes to its forecast opex and proposed step changes relating to compliance with the Security of Critical Infrastructure framework and changes to gas demand and reference tariffs following Incitec Pivot's announcement of its Gibson Island plant closure. An example of this was the AusNet Services' 2022–27 revised proposal, which included a series of stakeholder engagement workshops regarding potential changes to its expenditure forecasts. Both the CCP23 and the Energy Users Association of Australia (EUAA)

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42 Consumer Challenge Panel CCP23, *Advice to the AER on the Powerlink transmission revised regulatory proposal and AER draft determination for the regulatory period 1 July 2022 to 30 July 2027*, 14 January 2022, pp. 2 and 6.

43 APTPPL, Roma to Brisbane Pipeline 2022–27 Access arrangement – Engagement plan, December 2020, p. 13 available at https://www.apa.com.au/globalassets/about-apa/our-projects/roma-brisbane-pipeline-access-arrangement/rbp-stakeholder-engagement-plan.pdf.

44 Ibid.

45 AER, *Draft decision, Roma to Brisbane Pipeline Access Arrangement 2022–27*, *Overview*, November 2021, p. 23.

observed a high level of trust with a common purpose and open debate and transparency in discussing issues at these workshops.[46]

- Developing material that is clear and accessible by consumers, providing sufficient context and supporting information in a timely manner and consistent with AER's expectations to allow consumers to better understand the key issues.

We encourage APTPPL's ongoing work to embed meaningful consumer engagement into its business-as-usual functions, in addition to its new Stakeholder Engagement Forums. Going forward, we consider there is opportunity for APTPPL's parent company, the APA Group, to invest more in pre-lodgement engagement processes to further improve the consumer engagement approach it undertakes to inform the development of future regulatory proposals.

[46] Consumer Challenge Panel CCP23, *Submission to AER on the Draft Decision and AusNet Services Transmission 2022–27 Revised Proposal*, October 2021, p. 8; EUAA, *Submission to AER on the Draft Decision and AusNet Services Transmission 2022–27 Revised Proposal*, October 2021, p. 2.

2 Reference services and tariffs

This section summarises our 2022–27 final decision on the services covered by the RBP access arrangement, the reference tariff setting and variation mechanism, and forecast demand.

2.1 Services covered by the access arrangement

The RBP access arrangement must specify the pipeline services APTPPL proposes to be reference services, having regard to the reference service factors.[47] For each reference service, including services ancillary to the reference services, the access arrangement specifies the reference tariff and other terms and conditions on which these services will be provided.[48]

APTPPL is to provide access to its reference services on the terms set out in the RBP access arrangement, but may negotiate alternative terms and conditions at alternative prices with users. APTPPL may also offer other non-reference services (negotiated services) which are not subject to regulation under the access arrangement. We may be called upon to determine the tariff and other conditions of access to services if an access dispute arises.

APTPPL's revised proposal is consistent with our draft decision on reference services[49] and our earlier decision on the reference service proposal.[50] Two reference services will be offered for the RBP for the 2022–27 period:[51]

- eastbound firm transportation service
- westbound firm transportation service.

2.2 Reference tariff setting and variation mechanism

Reference tariff setting requires APTPPL to explain how it allocates revenues and costs between RBP reference services and other services, and how it determines different tariffs. This involves setting and applying the formula by which APTPPL can recover costs for the RBP. Our final decision includes decisions on the structure and levels of RBP reference tariffs (reference tariff setting) and the mechanism by which those tariffs can vary over the access arrangement period (reference tariff variation mechanism).

Our final decision accepts most of APTPPL's proposed reference tariffs and the reference tariff variation mechanism for the RBP for the 2022–27 period.

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47 NGR, rr. 48(1)(c) and 47A(15).

48 NGR, r. 48(1)(d).

49 AER, *Draft decision, Roma to Brisbane Pipeline access arrangement 2022–27, Overview*, November 2021, p. 25.

50 AER, *Final decision, APT Petroleum Pipelines Pty Ltd (APTPPL) – Roma to Brisbane Pipeline gas transmission determination 2022 to 2027 – Reference services*, November 2020.

51 APTPPL, *Roma to Brisbane Pipeline 2022–27 Access arrangement, Overview,* July 2021, p. 6.

In its initial proposal, APTPPL proposed a prudent discount related to the eastbound service. This was withdrawn from the revised proposal and the outcome is reflected in the calculation of eastbound tariffs.[52]

Our final decision does not accept APTPPL's proposed prudent discount on the westbound service as, based on the information provided, we do not consider the discount is in the long term interest of consumers.

APTPPL adopted our draft decision on cost pass through events, including amendments to definitions of the 'Insurer credit risk', 'Natural Disaster', and 'Terrorism' events. Our final decision accepts the cost pass through events that APTPPL included in its revised proposal, which remains unchanged from our draft decision.

2.3 Forecast demand

Under an average price cap, demand is an important input into the derivation of reference tariffs. In simple terms, tariffs are determined by dividing cost (forecast revenue) by total demand (TJ/day). This means that a decrease in forecast demand leads to an increase in tariffs, and vice versa. Forecast demand also affects the forecasts for opex and capex (new connections), which inform our decision on the total revenue requirement.

Our final decision accepts APTPPL's revised demand forecast for the RBP for the 2022–27 period. Based on the information before us, we are satisfied that the revised demand forecast of an average of 200.0 TJ/day for the long-term firm service (LTFS) for the RBP for the 2022–27 period was arrived at on a reasonable basis and represents the best forecast possible in the circumstances (see Table 2).

Table 2 AER's final decision on APTPPL's RBP forecast demand for the 2022–27 period (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

Source: APTPPL, AER analysis.

[52] APTPPL, *Roma to Brisbane Pipeline 2022–27 access arrangement, Revised proposal,* January 2022, p. 53.

3 Total revenue requirement

The total revenue requirement is a forecast of the efficient cost of providing gas transmission services over the 2022–27 period. We determine annual revenue, and the total revenue requirement, in nominal terms. To do this, we take into account expected future inflation to determine nominal price levels in future periods. Our final decision uses five-year inflation expectations to convert revenues to nominal values.

Tariffs are derived from the total revenue requirement after consideration of demand for each tariff category. Our final decision is that APTPPL will continue to operate under an average price cap. This means the tariffs we determine (including the means of varying the tariffs from year-to-year) are the binding constraint across the 2022–27 period, rather than the total revenue requirement set in our decision.[53]

Tariffs are adjusted each year using 'X factors' (the percentage changes in real weighted average tariffs from year-to-year) as explained further in section 3.3.

3.1 The building block approach

We employ a building block approach to determine APTPPL's total revenue requirement for the RBP. That is, we base the total revenue requirement on our estimate of the efficient costs that APTPPL is likely to incur in providing RBP reference services. The building block costs, as shown in Figure 6, include:[54]

- return on the projected capital base (or return on capital) — to compensate investors for the opportunity cost of funds invested in the business[55]
- depreciation of the projected capital base (or return of capital) — to return the initial investment to investors over time[56]
- forecast opex — the operating, maintenance and other non-capital expenses incurred in the provision of network services
- revenue adjustments — including revenue increments/decrements resulting from the application of incentive schemes
- estimated cost of corporate income tax.

We use an incentive approach where, once regulated revenues are set for a five-year period, networks that keep actual costs below the regulatory forecast of costs retain part of the benefit. This incentive framework is a foundation of our regulatory approach and promotes the delivery of the NGO. Service providers have an incentive to become

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53 Where 2022–27 actual demand varies from the 2022–27 demand forecast, APTPPL's actual revenue will vary from the revenue allowance determined in our RBP decision. In general, if actual demand is above forecast demand, APTPPL's actual revenue will be above forecast revenue, and vice versa.

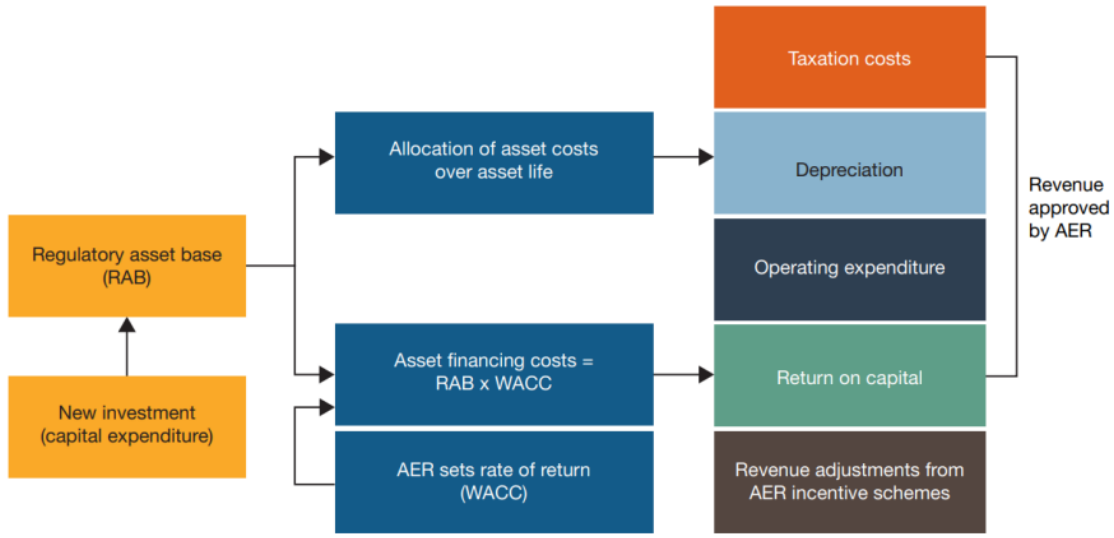
54 NGR, r. 76.

55 Note that forecast capex approved in our decision affects the projected size of the capital base and, therefore, the revenue generated from the return on capital and depreciation building blocks.

56 Ibid.

more efficient over time, as they retain part of the financial benefit from improved efficiency. Consumers also benefit when efficient costs are revealed, and a lower cost benchmark is set in subsequent regulatory periods.

Figure 6 The building block approach to determining total revenue



Source: AER, *State of the Energy Market 2021*, June 2020, p. 134.

Our 2022–27 final decision on the RBP proposal, by building block, is summarised in the next section, including high-level reasons and analysis.

3.2 Final decision on total revenue

Our final decision sets out a number of amendments to the building block inputs making up APTPPL's total revenue requirement revised proposal of $235.6 million ($ nominal, smoothed) for the RBP. We expand on these in section 4.

Based on our assessment of the building block costs,[57] our final decision determines a higher total revenue requirement of $240.7 million ($ nominal, smoothed).[58]

Our total revenue requirement compared to APTPPL's revised proposal is $5.0 million higher in nominal terms and $2.0 million higher in real terms. Therefore, our final decision is for a real increase in 2022–23 weighted average tariffs of 5.1% for both eastbound and westbound reference services, followed by flat real tariffs in each of the remaining four years of the 2022–27 period. Section 3.3 discusses our approach to revenue smoothing and tariffs.

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[57] Using the building block approach set out in the NGR, r. 76.

[58] This is calculated by smoothing the unsmoothed building block revenue for the 2022–27 period, as set in this decision.

Table 3 sets out our final decision on APTPPL's total revenue requirement (by building block) for the RBP for each year of the 2022–27 period, the total revenue after equalisation (smoothing), and the X factors for use in the tariff variation mechanism.

Table 3 AER's final decision on APTPPL's RBP smoothed total revenue and X factors for the 2022–27 period ($ million, nominal)

Building block	2022–23	2023–24	2024–25	2025–26	2026–27	Total
Return on capital	24.6	25.3	25.3	25.2	24.9	125.2
Regulatory depreciation	0.6	2.0	3.3	4.5	1.1	11.5
Operating expenditure	21.4	22.4	22.3	22.6	23.3	112.1
Revenue adjustments	–3.4	–3.2	–1.3	0.0	0.8	–7.1
Net tax allowance	0.0	0.0	0.0	0.0	0.0	0.0
Building block revenue – unsmoothed	43.2	46.5	49.6	52.3	50.1	241.7
Building block revenue – smoothed	**50.2**	**46.9**	**47.4**	**47.4**	**48.7**	**240.7**
X factors[a]	–5.11%	0.00%	0.00%	0.00%	0.00%	n/a
Inflation forecast	2.65%	2.65%	2.65%	2.65%	2.65%	n/a
Nominal price change[b]	7.90%	2.65%	2.65%	2.65%	2.65%	n/a

Source: AER analysis.
n/a: not applicable.
(a) Under the CPI–X form of control, a positive X factor is a decrease in price (and, therefore, in revenue). The X factor for 2022–23 is indicative only. Our decision establishes 2022–23 tariffs directly, rather than referencing a change from 2021–22 tariffs. The X factors in the table are for both the eastbound and westbound reference services.
(b) The formula for a nominal price change under the CPI–X form of control is: [(1+CPI)*(1–X factor)]–1. The nominal price path values in the table are for both the eastbound and westbound reference services.

3.3 Revenue smoothing and tariffs

After our assessment of APTPPL's total building block revenue (unsmoothed) for the RBP, we determine the forecast revenue profile (smoothed) across the 2022–27 period.[59]

APTPPL operates under an average price cap[60] as its tariff variation mechanism for the RBP. This means we must determine the weighted average tariff change each year such that the net present value (NPV) of unsmoothed and smoothed revenue is equal across the 2022–27 period.[61] This average tariff change is known as the 'X factor'.

[59] This process of smoothing revenues is described in the NGR as 'revenue equalisation'. See NGR, r. 92.

[60] An average price cap is where the total revenue is divided by forecast energy capacity to establish the average price. For 2022–23, the established average price becomes the reference tariff which forms the starting point for adjusting the price path under the CPI–X tariff variation mechanism.

[61] See section 2.2 for information on the mechanics of the tariff variation mechanism.

As part of the annual reference tariff variation process for the RBP, we combine the X factors we have determined in our decision with actual inflation to create reference tariffs for the coming year. This means that the average prices paid by consumers, and therefore the revenues received by APTPPL, change with the X factor plus actual inflation.[62]

Table 4 presents our final decision X factors compared to the revised proposal.

Table 4 Weighted average tariff change (X factors) across the 2022–27 period — AER's final decision and APTPPL's RBP revised proposal

	2022–23	2023–24	2024–25	2025–26	2026–27
AER's final decision					
X factor – eastbound and westbound[a]	-5.11%	0.00%	0.00%	0.00%	0.00%
Nominal price change - eastbound	7.90%	2.65%	2.65%	2.65%	2.65%
APTPPL's RBP revised proposal					
X factor - eastbound[b]	-4.20%	0.00%	0.00%	0.00%	0.00%
Nominal price change - eastbound	6.54%	2.25%	2.25%	2.25%	2.25%
X factor - westbound	-7.51%	0.00%	0.00%	0.00%	0.00%
Nominal price change - westbound	9.93%	2.25%	2.25%	2.25%	2.25%

Source: AER analysis; APTPPL, *Roma to Brisbane Pipeline 2022–27, Attachment 3 – Post-tax revenue model – revised proposal (Public),* January 2022.

(a) Our final decision has the same X factor profile for eastbound and westbound services due to our decision not to accept APTPPL's revised proposed westbound prudent discount (Attachment 9), The presence of a prudent discount impacts the reference tariffs for that service. APTPPL's revised proposal contained a westbound prudent discount and therefore its revised proposed westbound reference tariffs were different to the eastbound reference tariffs.

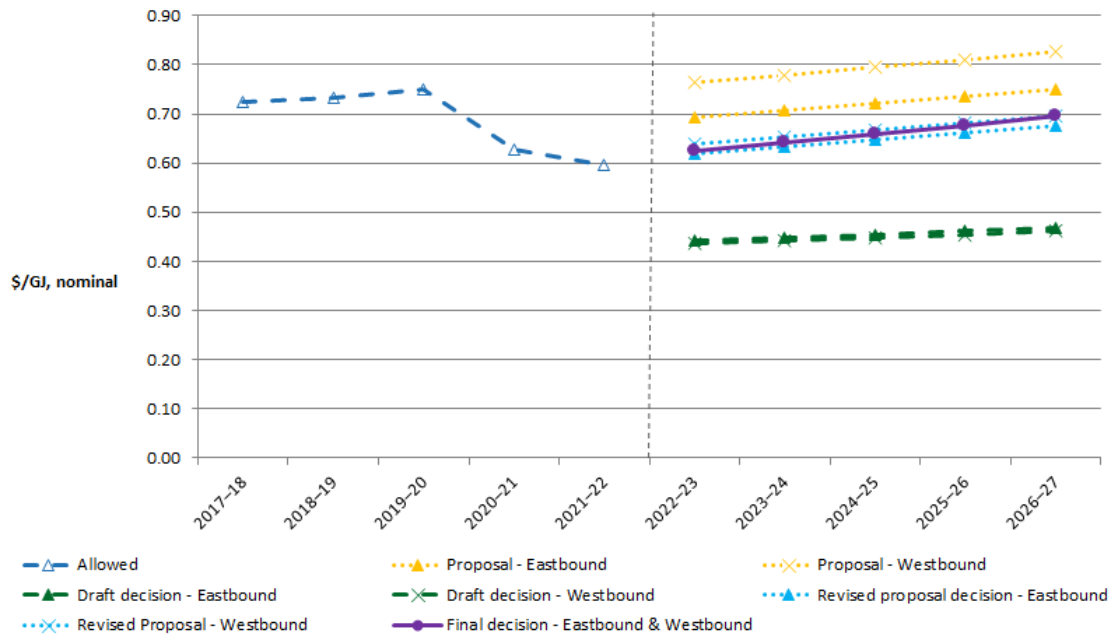
(b) Under the CPI–X form of control, a positive X factor is a real decrease in price (and, therefore, in revenue). For example, in the table above, an X factor of 0% in 2023–24, as proposed by APTPPL, means a constant real price for this year; after consideration of inflation, this becomes a nominal price increase of 2.25%. The X factor for 2022–23 is indicative only. The final decision establishes 2022–23 tariffs directly, rather than referencing a change from 2021–22 tariffs.

Figure 7 shows indicative tariff paths for APTPPL's RBP reference services across the 2022–27 period. It compares APTPPL's revised proposed tariff path with that approved previously for the 2017–22 period, and with this final decision.[63] This provides a broad, overall indication of the average movement in RBP tariffs across the 2022–27 period.

[62] Under the CPI–X form of control, a positive X factor represents a real decrease in price (and, therefore, in revenue). Conversely, a negative X factor represents a real increase in price (and, therefore, in revenue).

[63] The tariff path for 2017–27 uses actual inflation outcomes for 2017–22 and expected inflation for 2022–27.

Figure 7 Indicative reference tariff paths for APTPPL's RBP reference services from 2017 to 2027 ($/GJ, nominal)



Source: AER analysis; APTPPL, *Roma to Brisbane Pipeline 2022–27, Attachment 3 – Post-tax revenue model – revised proposal (Public),* January 2022.

Note: Our final decision has the same X factor profile for eastbound and westbound services due to our decision not to accept APTPPL's revised proposed westbound prudent discount (Attachment 9), The presence of a prudent discount impacts the reference tariffs for that service. APTPPL's revised proposal contained a westbound prudent discount and therefore its revised proposed westbound reference tariffs were different to the eastbound reference tariffs. Similarly, in our draft decision and APTPPL's initial proposal the eastbound reference tariffs were different to the westbound reference tariffs due to the presence of prudent discounts.

Our final decision provides for higher forecast smoothed revenue for the 2022–27 period than the revised proposal, in line with our amendments to total unsmoothed revenue. Our final decision accepts APTPPL's revised proposed forecast demand for the 2022–27 period, as discussed in section 2.3. For this final decision, we set the same tariff path for both eastbound and westbound services.[64] As such, an increase of 7.90% is required in the first year (2022–23) of the 2022–27 period to reflect the change in smoothed revenue from the 2017–22 period, followed by increases of 2.65% in each of the remaining four years of the 2022–27 period.

More information on our approach to revenue smoothing can be found in Appendix A.

[64] This is due to our decision not to accept APTPPL's revised proposed westbound prudent discount (Attachment 9), The presence of a prudent discount impacts the reference tariffs for that service. APTPPL's revised proposal contained a westbound prudent discount and therefore its revised proposed westbound reference tariffs were different to the eastbound reference tariffs. Similarly, in our draft decision and APTPPL's initial proposal the eastbound reference tariffs were different to the westbound reference tariffs due to the presence of prudent discounts.

4 Key elements of our final decision on revenue

The components of our draft decision include the building blocks we use to determine the revenue that APTPPL may recover from RBP users. The following sections summarise our revenue decision by building block. The attachments to this final decision provide a more detailed explanation of our analysis and findings.

4.1 Capital base

The capital base roll forward accounts for the value of APTPPL's RBP regulated assets over the access arrangement period. The opening value of the capital base is used to determine the return on capital and return of capital (depreciation) building blocks. To calculate the capital base for a regulatory year within an access arrangement period, the opening value of the capital base is rolled forward by indexing it for inflation, adding any conforming capex, and subtracting depreciation and other possible factors (such as disposals).[65] Following this process, we also arrive at a closing value of the capital base at the end of each regulatory year of an access arrangement period.

4.1.1 Opening capital base as at 1 July 2022

Our final decision approves an RBP opening capital base value of $509.9 million ($ nominal) as at 1 July 2022. This amount is $12.0 million (2.4%) higher than the RBP revised proposal opening capital base value of $497.8 million ($ nominal) as at 1 July 2022.[66] This reflects our updates to the roll forward model (RFM) for:[67]

- 2021–22 actual consumer price index (CPI) that is now available
- a correction to 2021–22 as-incurred capex.

To determine the RBP opening capital base as at 1 July 2022, we have rolled forward the capital base over the 2017–22 period to determine a RBP closing capital base value at 30 June 2022, in accordance with the RFM. This roll forward includes an adjustment at the end of the 2017–22 period to account for the difference between actual 2016–17 capex and the estimate approved in our 2017–22 decision.[68]

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65 The term 'rolled forward' means the process of carrying over the value of the capital base from one regulatory year to the next.

66 APTPPL, *Roma to Brisbane Pipeline 2022–27, Attachment 6 – Transmission roll forward model – revised proposal (Public)*, January 2022.

67 For our final decision we have amended the 2016-17 actual consumer price index (CPI) to be rounded to two decimal places consistent with our RFM for the 2017–22 access arrangement. We made this same amendment in the draft decision. This amendment reduces the opening capital base by less than $0.01 million.

68 The end of period adjustment will be positive (negative) if actual capex is higher (lower) than the estimate approved at the 2017–22 decision.

In the draft decision, we accepted APTPPL's proposed RBP opening capital base of $498.2 million ($ nominal) as at 1 July 2022.[69] APTPPL had submitted an updated proposed RFM[70] which reflected our suggested amendments to the nominal WACC, forecast straight-line capital base depreciation and actual capex inputs.[71] We also noted that the proposed capex for 2020–21 and 2021–22 were estimates.

APTPPL's revised proposed RBP opening capital base is $497.8 million ($ nominal).[72] This is $0.4 million (0.1%) lower than our draft decision. This reduction is mainly due to APTPPL updating its 2020–21 capex with actuals and updating its estimate for 2021–22 capex.[73]

We have assessed APTPPL's revisions to the RBP capex. In particular, we have checked the 2020–21 actual as-incurred capex in the revised proposal RFM and note that the values are inconsistent with those presented in the annual reporting regulatory information notice (RIN) for that year. Following an information request, APTPPL confirmed that the annual reporting RIN contains the correct information.[74] We have therefore updated the RFM for 2020–21 actual capex to be consistent with the annual reporting RIN. This amendment reduces the opening capital base by $1.0 million (0.2%) from the revised proposal, all else being equal.

APTPPL's revised proposed estimate of gross capex for 2021–22 is $16.0 million and is $0.3 million ($ nominal) lower than its initial proposal estimate of $16.3 million, which we accepted in the draft decision.[75] We accept this revision for the final decision. We will account for the financial impact of any difference between actual and estimated capex for 2021–22 at the next access arrangement review.

For the reasons discussed in section 4.4.1, we accept APTPPL's updates to 2017–21 capex in the RBP revised proposal as conforming capex for the 2017–22 period. As capex in 2021–22 is currently an estimate, we will assess whether actual capex is conforming for this year in the next review. We also consider that actual conforming capex has been properly accounted for in the capital base roll forward, consistent with the requirements of the NGR.[76]

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69 Subject to minor updates for the 2016–17 actual inflation rate input in APTPPL's RFM to be consistent with the value in the approved roll forward model for the 2017–22 period.

70 Compared to the initial proposal submitted on 1 July 2021.

71 In its updated proposed RFM, APTPPL also amended actual capex in 2018–19 and 2019–20, and updated estimated capex for 2020–21 with actual (unaudited) capex. APTPPL, *Roma to Brisbane Pipeline 2022–27 – Updated transmission roll forward model*, 30 September 2021.

72 APTPPL, *Roma to Brisbane Pipeline 2022–27, Attachment 6 – Transmission roll forward model – revised proposal (Public)*, January 2022.

73 APTPPL amended as-incurred gross capex for 2021–22, as–commissioned gross capex for 2020–21 and disposals for both as–incurred and as–commissioned capex in 2020–21.

74 APTPPL, *Response to information request AER IR018*, 18 February 2022.

75 Comparison is for gross capex on an as incurred basis and excluding half year WACC adjustment.

76 NGR, rr. 77(2)(b) and 79(1).

We have also updated the actual inflation input for 2021–22 with actual CPI in the RFM which became available after APTPPL submitted the RBP revised proposal.[77] This update increases the opening capital base value by about $13.0 million (2.6%) from the revised proposal, all else being equal.

Table 5 sets out our final decision on the RBP capital base roll forward during the 2017–22 period to determine the opening capital base as at 1 July 2022.

Table 5 AER's final decision on APTPPL's RBP capital base roll forward for the 2017–22 period ($ million, nominal)

	2017–18	2018–19	2019–20	2020–21	2021–22[a]
Opening capital base	452.1	456.8	462.0	475.9	480.1
Net capex[b]	12.7	17.1	22.2	11.6	16.6
Indexation of capital base	8.6	6.1	10.1	5.3	24.4
Less: straight-line depreciation[c]	16.7	17.9	18.5	12.7	10.7
Interim closing capital base	456.8	462.0	475.9	480.1	510.4
Difference between estimated and actual capex in 2016–17 capex					–0.4
Return on difference for 2016–17 capex					–0.1
Closing capital base as at 30 June 2022					**509.9**

Source: AER analysis.
(a) Based on estimated capex provided by APTPPL. We will true-up the capital base for actual capex at the next access arrangement review.
(b) As-incurred, net of disposals, and adjusted for actual CPI and half year WACC.
(c) Adjusted for actual CPI. Based on forecast as-commissioned capex.

4.1.2 Forecast closing capital base as at 30 June 2027

We approve a forecast RBP closing capital base value of $540.1 million ($ nominal) at 30 June 2027 for APTPPL.[78] This is $23.2 million (4.5%) higher than the $517.0 million in APTPPL's RBP revised proposal. Our final decision on the projected closing capital base reflects our changes to the opening capital base as at 1 July 2022, and our final decisions on expected inflation (section 4.2.2), forecast depreciation (section 4.3) and forecast capex (section 4.4).

Table 6 sets out our final decision on the projected roll forward of the capital base for the RBP over the 2022–27 period.

[77] Based on March quarter 2022 CPI published by the Australian Bureau of Statistics.

[78] NGR, r. 78.

Table 6 AER's final decision on APTPPL's RBP projected capital base roll forward for the 2022–27 period ($ million, nominal)

	2022–23	2023–24	2024–25	2025–26	2026–27
Opening capital base	509.9	529.0	533.5	535.4	534.7
Net capex[a]	19.8	6.5	5.3	3.7	6.5
Indexation of opening capital base	13.5	14.0	14.1	14.2	14.2
Less: straight-line depreciation[b]	14.2	16.0	17.4	18.6	15.2
Closing capital base	**529.0**	**533.5**	**535.4**	**534.7**	**540.1**

Source: AER analysis.
(a) As-incurred, and net of forecast disposals. In accordance with the timing assumptions of the post-tax revenue model, the capex includes a half-year WACC allowance to compensate for the six-month period before capex is added to the capital base for revenue modelling.
(b) Based on as-commissioned capex.

For this final decision, we confirm our draft decision position that the RBP opening capital base as at 1 July 2027 is to be established using the approved depreciation schedules (straight-line) based on forecast capex at the asset class level.[79]

4.2 Rate of return and value of imputation credits

The return each business is to receive on its capital base (the 'return on capital') is a key driver of proposed revenues. We calculate the regulated return on capital by applying a rate of return to the value of the capital base.

We estimate the rate of return by combining the returns of two sources of funds for investment – equity and debt. The allowed rate of return provides the business with a return on capital to service the interest rate on its loans and give a return on equity to investors.

The estimate of the rate of return is important for promoting efficient prices in the long term interests of consumers. If the rate of return is set too low, the network business may not be able to attract sufficient funds to be able to make the required investments in the network and reliability may decline. Conversely, if the rate of return is set too high, the network business may seek to spend too much, and consumers will pay inefficiently high tariffs.

As required under the NGL, we apply the 2018 Instrument to estimate the rate of return for APTPPL's RBP.[80] This leads to a rate of return of 4.82% (nominal vanilla) for this final decision. This is 0.49 percentage points higher than our draft decision placeholder estimate of 4.33% (nominal vanilla).[81]

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79 NGR, r. 90.

80 AER, *Rate of return Instrument*, December 2018. See https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/rate-of-return-guideline-2018/final-decision.

81 AER, *Draft decision, Roma to Brisbane Pipeline Access arrangement 2022–27, Overview*, November 2021, p. 38.

Our calculated rate of return, as set out in Table 7, will apply to the first year of the 2022–27 period. A different rate of return will apply for the remaining regulatory years of the period. This is because we will update the return on debt component of the rate of return each year, in accordance with the 2018 Instrument, to use a 10-year trailing average portfolio return on debt that is rolled-forward each year. Hence, 10% of the return on debt is calculated from the most recent averaging period, with 90% from prior periods.

Table 7 AER's final decision on APTPPL's RBP rate of return (% nominal)

	AER draft decision (2022–27)	APTPPL's revised proposal (2022–27)	AER final decision (2022–27)	Allowed return over the access arrangement period
Nominal risk-free rate	1.14%[a]	1.14%	2.12%[b]	
Market risk premium	6.1%	6.1%	6.1%	
Equity beta	0.6	0.6	0.6	
Return on equity (nominal post–tax)	4.80%	4.80%	5.78%	Constant (%)
Return on debt (nominal pre–tax)	4.02%[a]	4.02%	4.17%[c]	Updated annually
Gearing	60%	60%	60%	Constant (60%)
Nominal vanilla WACC	4.33%	4.33%	4.82%	Updated annually for return on debt
Expected inflation	2.25%	2.25%	2.65%	Constant (%)

Source: AER analysis; APTPPL, *Roma to Brisbane Pipeline 2022–27, Attachment 11 – Rate of return calculations,* July 2021; APTPPL, *Roma to Brisbane Pipeline 2022–27 Access arrangement, Revised proposal, January 2022;* APTPPL, *Roma to Brisbane Pipeline 2022–27, Attachment 3 – Post-tax revenue model, January 2022.*

[a] Calculated using a placeholder averaging period of 20 business days ending 31 August 2021.

[b] Calculated using an averaging period of 20 business days ending 28 February 2022.

[c] We use the proposed debt averaging period. The return on debt has been updated for this averaging period.

We also note that APTPPL's proposed risk free rate[82] and debt averaging periods have been (and will be) used to estimate its rate of return because they comply with conditions set out in the 2018 Instrument.[83]

4.2.1 Imputation credits

Our final decision applies a value of imputation credits (gamma) of 0.585 as set out in the binding 2018 Instrument.[84] This was the result of extensive analysis and

[82] This is also known as the return on equity averaging period.

[83] AER, *Rate of return Instrument*, December 2018, cll. 7–8, 23–25 and 36.

[84] AER, *Rate of return Instrument*, December 2018, cl. 27.

consultation conducted as part of the 2018 rate of return review.[85] APTPPL's revised proposal has adopted the value of gamma set out in the 2018 Instrument.[86]

4.2.2 Expected inflation

Our estimate of expected inflation is 2.65%. It is an estimate of the average annual rate of inflation expected over a five-year period based on the outcome of our 2020 Inflation Review.[87]

4.3 Regulatory depreciation

When determining the total revenue for APTPPL, we include an amount for the depreciation (return of capital) of the projected capital base.[88] Regulatory depreciation is used to model the nominal asset values over the 2022–27 period and the depreciation amount in the total revenue requirement.

Our final decision determines a regulatory depreciation amount of $11.5 million ($ nominal) for APTPPL's RBP for the 2022–27 period. This represents a decrease of $9.2 million (44.5%) from APTPPL's revised proposed regulatory depreciation amount of $20.7 million.

The regulatory depreciation amount is the net total of the straight-line depreciation less the inflation indexation of the capital base:

- Our final decision straight-line depreciation for the APTPPL's RBP is $81.5 million ($ nominal), which is $3.2 million higher than the revised proposal. Straight-line depreciation is impacted by our decision on the RBP opening capital base as at 1 July 2022 (section 4.1), forecast capex (section 4.4) and asset lives.
- Our final decision indexation on APTPPL's RBP projected capital base is $70.0 million ($ nominal), which is $12.4 million higher than the revised proposal. This is largely due to the expected inflation rate of 2.65% per annum (section 4.2.2) for this final decision compared with 2.25% per annum in the revised proposal. The indexation on the capital base is also impacted by our decision on APTPPL's RBP opening capital base (section 4.1) and forecast capex (section 4.4).

The increase in indexation has more than offset the increase in straight-line depreciation, resulting in a lower regulatory depreciation amount compared to the revised proposal.

Table 8 sets out our final decision on RBP's regulatory depreciation amount over the 2022–27 period.

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85 AER, *Rate of return Instrument, Explanatory Statement*, December 2018, pp. 307–382.

86 APTPPL, *Roma to Brisbane Pipeline 2022–27, Attachment 3 – Post-tax revenue model – revised proposal,* January 2022.

87 AER, *Final position, Regulatory treatment of inflation*, December 2020.

88 NGR, r. 76(b).

Table 8 AER's final decision on APTPPL's RBP forecast regulatory depreciation for the 2022–27 period ($ million, nominal)

	2022–23	2023–24	2024–25	2025–26	2026–27	Total
Straight-line depreciation	14.2	16.0	17.4	18.6	15.2	81.5
Less: indexation on opening capital base	13.5	14.0	14.1	14.2	14.2	70.0
Regulatory depreciation	**0.6**	**2.0**	**3.3**	**4.5**	**1.1**	**11.5**

Source: AER analysis.

4.3.1 Remaining and standard asset lives

For this final decision, we accept APTPPL's existing asset classes and its straight-line depreciation method used to calculate the regulatory depreciation amount, which is consistent with our draft decision.

We confirm our draft decision position to accept APTPPL's revised proposed weighted average method to calculate the remaining asset lives as at 1 July 2022 for depreciating its existing assets. This method is a continuation of the approved approach used in the 2017–22 access arrangement and applies the approach as set out in our RFM. In accepting the weighted average method, we have updated the remaining asset lives to reflect our amendments to the opening capital base and a modelling amendment to APTPPL's revised proposed RFM.[89] We note that the updated remaining asset lives did not result in a material change to the regulatory depreciation amount.

In our draft decision, we accepted APTPPL's proposed approach for accelerated depreciation to reduce the remaining asset life for the 'Original pipeline' asset class (DN250 pipeline) to two years and merge this asset class with the 'Pipelines' asset class.[90] For this final decision, we determine a remaining asset life as at 1 July 2022 for the merged 'Pipelines' asset class of 49.8 years, consistent with the life in the revised proposal and our draft decision.[91]

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89 In APTPPL's revised proposed RFM, some nominal WACC formulae in the 'Capital base remaining lives' worksheet had been overwritten with hard coded values. Consistent with our draft decision, we have reinstated the formulae in these cells to correctly reference the nominal WACC values in the 'RFM input' worksheet consistent with our RFM template for gas transmission businesses. In response to our information request, APTPPL agreed with this amendment. APTPPL, Response to information request AER IR018, 18 February 2022; AER, *Draft decision, Roma to Brisbane Pipeline 2022–27, Attachment 4 – Regulatory depreciation*, November 2021, pp. 14–15.

90 This component of accelerated depreciation relates to the likely decommissioning of the DN250 pipeline and transfer of its current customers to the DN400 pipeline in the next two years. AER, *Draft decision, Roma to Brisbane Pipeline 2022–27, Attachment 4 – Regulatory depreciation*, November 2021, pp. 16–20.

91 The calculated life is consistent to 1 decimal place for the draft decision, RBP revised proposal and final decision.

For this final decision, we accept the majority of APTPPL's revised proposed standard asset lives for its asset classes in respect of the forecast capex to be incurred for the 2022–27 period, as they are consistent with the RBP initial proposal and our draft decision.

In our draft decision, we accepted APTPPL's proposed approach for accelerated depreciation by reducing the standard asset lives for its 'Pipelines' and 'Compressors' asset classes by setting them equal to their respective remaining asset lives.[92] However, we did not accept this same proposed approach for the 'Regulators and meters' asset class. For this asset class, we did not assign a standard asset life as it has zero capex forecast for the 2022–27 period. The revised proposal adopted our draft decision approach.[93]

In the draft decision, we noted that for the final decision, we would update the standard asset lives for the 'Pipelines' and 'Compressors' asset classes to reflect any updates to the respective remaining asset lives for these asset classes. Taking account of our other updates we have made in the RFM which affect the remaining asset lives, our final decision results in standard asset lives of:

- 49.8 years for the 'Pipelines' asset class
- 25.8 years for the 'Compressors' asset class

These lives are consistent with those in the revised proposal and our draft decision.[94] For the 'Regulators and meters' asset class, our final decision confirms our draft decision position to not assign a standard asset life.

Table 9 sets out our final decision on the standard and remaining asset lives for the RBP over the 2022–27 period. We are satisfied the standard and remaining asset lives approved in this final decision will result in a depreciation schedule that reflects the depreciation criteria of the NGR.[95]

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92 This component of accelerated depreciation relates to the types of capex works forecast for these asset classes and how their primary purpose is to maintain the pipeline's original technical life, rather than to extend the life. AER, *Draft decision, Roma to Brisbane Pipeline 2022–27, Attachment 4 – Regulatory depreciation*, November 2021, pp. 20–25.

93 APTPPL's revised proposal overview document did not reference our draft decision to not assign a standard life for the 'Regulators and meters' asset class. Its revised proposed PTRM, however, contained a standard asset life for this asset class of 30.3 years. In an information request we advised APTPPL that we intended to enter 'n/a' for this life in the final decision PTRM consistent with our draft decision to not assign this asset class a standard life. In response, APTPPL agreed with this amendment. We note there is zero capex forecast for this asset class and so the amendment has no revenue impact. APTPPL, Response to information request AER IR018, 18 February 2022.

94 There are slight differences, but the lives are consistent to 1 decimal place.

95 NGR, r. 89(1).

Table 9 AER's final decision on RBP's standard and remaining asset lives for the 2022–27 period (years)

Asset class	Standard asset life	Remaining asset life
Pipelines	49.8	49.8
Compressors	25.8	25.8
Regulators and meters	n/a	30.3
Easements	n/a	n/a
Communications	15.0	15.0
Capitalised AA costs	5.0	5.0
Group IT	5.0	4.1
SIB Capex	5.0	3.9
Equity raising costs[a]	n/a	n/a

Source: AER analysis.
a) For this final decision, the forecast capex determined for RBP does not meet a level to trigger any benchmark equity raising costs.
n/a Not applicable. We have not assigned a standard asset life and remaining asset life to some asset classes either because they have zero capex forecast or because the assets allocated to it are non-depreciating.

4.4 Capital expenditure

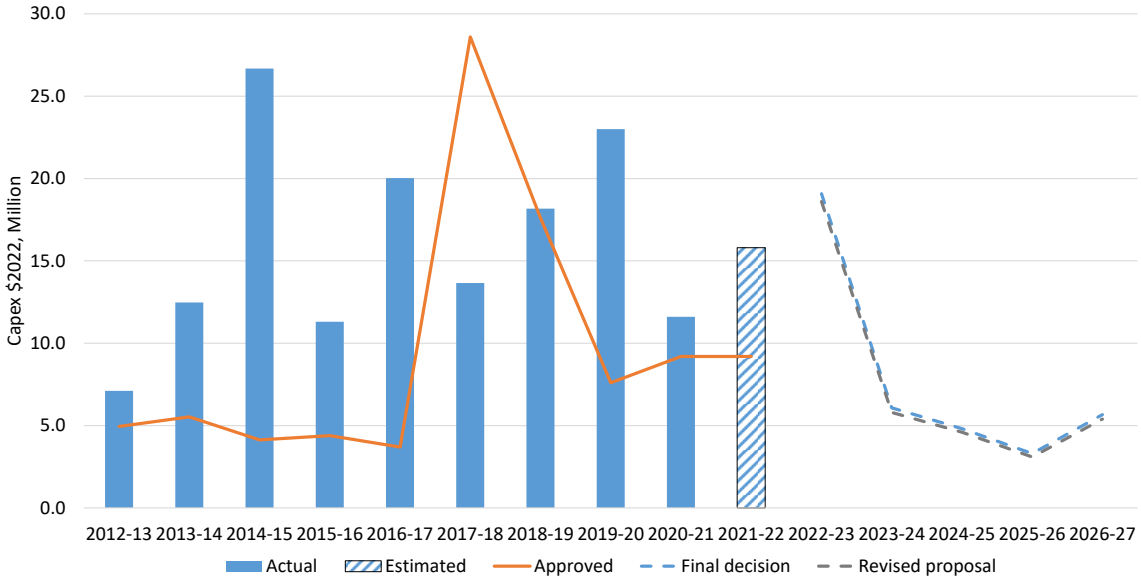
Capital expenditure (capex) refers to the capital costs and expenditure incurred in the provision of pipeline services.[96] This investment mostly relates to assets with long lives. APTPPL recovers the costs of these assets through the return on capital and depreciation building blocks. In this way, APTPPL recovers the financing cost and depreciation associated with these assets over the expected life of these assets.

Our final decision includes an assessment of APTPPL's actual capex in the 2017–22 period (which forms part of the RBP's opening capital base)[97] and its forecast capex for the 2022–27 period (which forms part of the RBP's projected capital base).[98]

Figure 8 compares APTPPL's past and proposed forecast capex for the RBP, and the forecasts approved by us in our previous (2017–22) decision and this (2022–27) final decision.

96 NGR, r. 69.
97 NGR, r. 77.
98 NGR, r. 78(b).

Figure 8 AER's final decision and APTPPL's RBP past and proposed capex ($ million, 2021–22)



Source: AER analysis.

4.4.1 Conforming capex for the 2017–22 period

APTPPL expects to spend total net capex of $81.9 million for the RBP for the 2017–22 period. This is more than the approved forecast of $71.5 million.

In this final decision, we approve APTPPL's RBP forecast as conforming under the NGR subject to inflation updates. We will review APTPPL's RBP actual capex for 2021–22 in the 2027–32 RBP access arrangement review.

4.4.2 Conforming capex for the 2022–27 period

APTPPL proposes forecast net capex of $37.5 million ($2021–22) for the RBP for the 2022–27 period. We have accepted APTPPL's capex forecast but adjusted for modelling errors, inflation and real cost escalations for a final decision capex forecast of $39.0 million. Our final decision capex is $44.6 million (53.4%) lower than actual net capex for the 2017–22 period.[99]

The RBP revised proposal is $8.3 million higher than our draft decision of $29.2 million. This is driven by additional cyber security requirements and a shift from opex to capex for cloud IT. Although we have identified some concerns with APTPPL's cyber security forecast, we are satisfied that APTPPL's overall capex forecast is reasonable. This is because it is significantly lower than its current period capex as well as its long-term trend.

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[99] APTPPL's capex for 2021–22 is based on an estimate only.

4.5 Operating expenditure

Operating expenditure (opex) is the operating, maintenance and other non-capital expenses incurred in the provision of pipeline services. Forecast opex is one of the building blocks we use to determine a service provider's total revenue requirement.

Our final decision accepts APTPPL's revised proposed total opex forecast of $103.6 million ($2021–22), including debt raising costs.[100] This is because our alternative estimate of $104.5 million is not materially different ($0.9 million or 0.9% higher) from APTPPL's total opex forecast proposal. Therefore, we consider that APTPPL's total opex forecast satisfies the opex criteria,[101] and satisfies the criteria for forecasts and estimates.[102]

Table 10 sets out our 2022–27 opex final decision.

Table 10 AER's final decision on APTPPL's RBP total opex for the 2022–27 period ($ million, 2021–22)

	2021–22	2022–23	2023–24	2024–25	2025–26	Total
AER's final decision and APTPPL's RBP revised proposal	20.9	21.3	20.6	20.4	20.5	103.6

Source: APTPPL, *Roma to Brisbane Pipeline 2022–27, Attachment 8 – Forecast opex model – revised proposal*, January 2022; AER analysis.

Our final decision is:[103]

- $23.3 million (29.0%) higher than the opex forecast we approved for the 2017–22 period.
- $9.7 million (10.3%) higher than APTPPL's actual (and estimated) opex for the 2017–22 period.
- $9.4 million (9.9%) higher than our 2022–27 draft decision.

The key difference between our draft and final decision opex forecast is that we included a step change amount of $8.1 million in our alternative estimate for the final decision, compared to zero in our draft decision. APTPPL's updated initial proposal included a step change of $13.0 million ($2021–22) which included costs associated with replacing existing IT systems with cloud-based services along with cyber security and critical infrastructure security requirements resulting from the *Security Legislation Amendment (Critical Infrastructure) Bill 2020*. We did not include this step change in our draft decision as APTPPL's proposal did not provide sufficient information for us to assess the prudency and efficiency of the proposed costs.

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100 APTPPL, *Roma to Brisbane Pipeline 2022–27, Attachment 8 – Forecast opex model – revised proposal,* January 2022.

101 NGR, r. 91.

102 NGR, r. 74.

103 Adjusted to real dollar terms based on June quarter CPI.

Our alternative estimate for the final decision includes $5.6 million for an IT cloud step change. We consider that the proposed expenditure addresses a reasonable identified need and is, therefore, prudent given it relates to obsolete systems which need to be replaced with cloud-based services due to lack of ongoing vendor support. This is consistent with the industry wide move to cloud-based arrangements. We consider that APTPPL has demonstrated that the increase in opex is associated with a corresponding reduction to its capex.

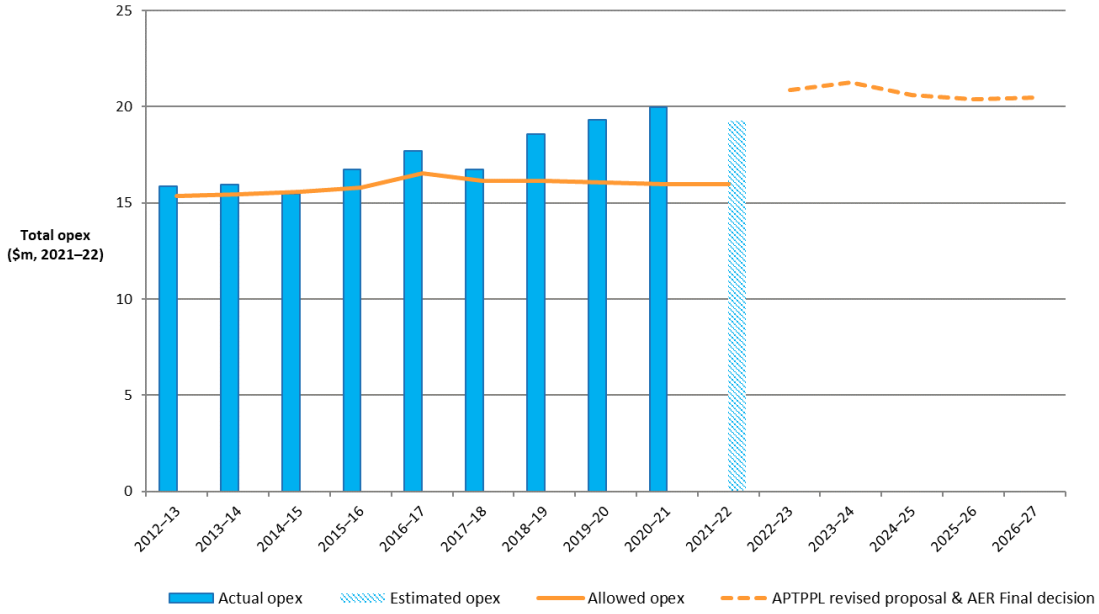
We have also included a step change of $2.5 million ($2021–22) for new cyber security obligations resulting from the *Security Legislation Amendment (Critical Infrastructure) Act 2021* in our alternative estimate. The cyber security requirements are legislated and impose new obligations in relation to the RBP.

APTPPL's proposed step change in its revised proposal also included $1.3 million in costs associated with the *Security Legislation Amendment (Critical Infrastructure Protection) Act 2022.* We did not include these costs in our alternative estimate as we consider that APTPPL did not demonstrate the prudency and efficiency of the proposed costs. However, as we have accepted APTPPL's total forecast opex for the 2022–27 period for the final decision, APTPPL's forecast costs for the future regulatory obligations associated with the *Security Legislation Amendment (Critical Infrastructure Protection) Act 2022* are included in our final decision.

Attachment 6 sets out our 2022–27 opex final decision in detail.

Figure 9 shows APTPPL's actual and estimated opex, our previous approved forecast opex, and APTPPL's RBP revised proposal.

Figure 9 APTPPL's RBP opex over time ($ million, 2021–22)



Source: AER analysis.
Note: Includes debt raising costs.

4.6 Revenue adjustments

We have applied one revenue adjustment to APTPPL's revenue for the 2022–27 period as presented below.

4.6.1 Efficiency carryover mechanism for the 2017–22 period

An efficiency carryover mechanism (ECM) is intended to provide a continuous incentive for service providers to pursue efficiency improvements in opex, and provide for a fair sharing of these between service providers and network users.

Our final decision is to approve carryover amounts totalling –$6.8 million ($2021–22) from the application of the ECM in the 2017–22 period for the RBP. This is $1.4 million less than APTPPL's revised proposal of –$5.4 million.[104]

Our calculated carryover amounts differ from APTPPL's amounts because we:

- adjusted forecast opex to reflect the change in capitalisation policy for leases, consistent with clause 8.1(j) of RBP's current access arrangement and our draft decision.[105]

[104] APTPPL, *Roma to Brisbane Pipeline 2022–27, Attachment 9 – Efficiency carryover model – revised proposal*, January 2022.

[105] AER, *Final decision, Roma to Brisbane Pipeline access arrangement 2017–22, Approved access arrangement (marked up)*, November 2017, p. 44; AER, *Draft decision, Roma to Brisbane Pipeline 2022–27, Attachment 8 – Efficiency carryover mechanism,* November 2021, p. 8.

- included opex inputs for 2015–16 and 2016–17 in the ECM model to calculate the incremental efficiency gain (or loss) for 2017–18 consistent with clause 8.1(c) of RBP's current access arrangement.[106] This ensures that the carryover amount in the first year of an access arrangement period is only for incremental efficiency gains made in that year.[107]
- corrected formula errors in the ECM template.
- updated the inflation estimate for 2021–22 with the latest inflation forecast published by the Reserve Bank of Australia (RBA), which became available at the time of our assessment.[108]

Table 11 shows our final decision on the carryover amounts APTPPL accrued during the 2017–22 period for the RBP.

Table 11 AER's final decision on carryover amounts compared to APTPPL's RBP proposal for the 2022–27 period ($ million, 2021–22)

	2022–23	2023–24	2024–25	2025–26	2026–27	Total
AER's final decision	–3.3	–3.0	–1.2	–	0.7	–6.8
APTPPL's RBP revised proposal	–2.7	–2.6	–0.8	–	0.7	–5.4
Difference	**–0.7**	**–0.4**	**–0.3**	–	**0.0**	**–1.4**

Source: APTPPL, *Roma to Brisbane Pipeline 2022–27, Attachment 11 – Efficiency carryover model – revised proposal*, January 2022; AER analysis.
Note: Numbers may not add up due to rounding. Differences of '0.0' and '–0.0' represent small variances and '–' represents no variance.

4.7 Corporate income tax

Our determination of the total revenue for APTPPL includes the estimated cost of corporate income tax for the RBP's 2022–27 period.[109] Under the post-tax framework, a corporate income tax amount is calculated as part of the building blocks assessment using our post-tax revenue model (PTRM).

Our final decision on RBP's estimated cost of corporate income tax is zero over the 2022–27 period. This is consistent with the revised proposal and our draft decision.

We expect RBP to incur a forecast tax loss over the 2022–27 period.[110] We have determined that $52.7 million in tax losses as at 30 June 2027 will be carried forward to

106 AER, *Final decision, Roma to Brisbane Pipeline access arrangement 2017–22, Approved access arrangement (marked up),* November 2017, p. 42.
107 AER, *Efficiency benefit sharing scheme for electricity network service providers*, November 2013, p. 6.
108 RBA, *Statement on monetary policy, Appendix: Forecasts*, February 2022.
109 NGR, r. 76(c).
110 A forecast tax loss occurs when the forecast assessable income is lower than the forecast tax expense. In this event no tax is payable. Any residual amount of tax loss will be carried forward over to future access arrangement periods to offset future taxable income until the tax loss is fully exhausted.

the 2027–32 period where it can be used to offset future tax liabilities. The forecast tax loss arises because RBP's forecast tax expenses will exceed its revenue for tax assessment purposes over the 2022–27 period. This is largely driven by our final decision, which is consistent with our draft decision, to accept APTPPL's proposed approach to reduce the remaining tax asset life of the existing 'Original pipeline' asset class to two years and to merge the two pipelines asset classes. This has the effect of significantly increasing forecast tax depreciation. Implementation of our findings from the 2018 *Review of the regulatory tax approach*, involving the introduction of immediate expensing of capex and diminishing value method of tax depreciation, have also resulted in an increase to forecast tax depreciation.[111]

For this final decision, we have:[112]

- increased the forecast of immediately expensed capex for tax purposes from $22.3 million to $23.4 million ($2021–22)
- accepted the revised proposed opening tax asset base (TAB) value as at 1 July 2022 of $127.2 million
- accepted APTPPL's RBP revised proposal on the standard and remaining tax asset lives for all of its asset classes, consistent with our draft decision.

APTPPL's RBP revised proposal includes a forecast immediately expensed capex of $22.3 million ($2021–22), which is an increase of $8.4 million (60.1%) compared to our draft decision. This increase is mainly driven by the increase in group IT forecast capex. As the immediate expensing forecast is a proportion of the capex forecast, our final decision reflects in part the increase of $1.5 million (4.0%) in forecast capex compared to the revised proposal. For this final decision, we determine the immediately expensed capex amount of $23.4 million ($2021–22). We will collect actual data relating to the immediate expensing of capex in our annual reporting RIN to further inform our decision for this type of expenditure in the RBP's next access arrangement.

4.7.1 Opening tax asset base as at 1 July 2022

For our final decision, we determine an opening TAB value as at 1 July 2022 of $127.2 million ($ nominal). This value is consistent with the revised proposal and is $0.2 million lower than our draft decision.

In our draft decision, we accepted APTPPL's proposed opening TAB for the RBP of $127.4 million ($ nominal) as at 1 July 2022. We noted that the opening TAB may be

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111 The third key finding from the 2018 tax review relates to capping tax lives for gas assets to 20 years. However, APTPPL has historically assigned tax asset lives of 20 years or less to its asset classes, hence this change does not affect the RBP.

112 Our final decision also amends the amount of carried forward forecast tax loss at 2021–22 from $1.7255 million to $1.7260 million consistent with our draft decision. APTPPL agreed with this amendment in its response to our information request. APTPPL, Response to information request AER IR018, 18 February 2022, p. 4.

updated to reflect actual capex for 2020–21 and any revised 2021–22 capex estimates as part of the final decision.[113]

APTPPL's RBP revised proposal updated the 2020–21 estimated as–commissioned capex with actuals.[114] As this revision is consistent with APTPPL's annual reporting RIN, we are satisfied with adopting this capex update for this final decision. We will update the 2021–22 estimated capex for actuals at the next access arrangement review.

Table 12 sets out our final decision on the roll forward of RBP's TAB values over the 2017–22 period.

Table 12 AER'S final decision on RBP's TAB roll forward for the 2017–22 period

	2017–18	2018–19	2019–20	2020–21	2021–22[a]
Opening TAB	122.7	122.8	130.4	124.9	125.5
Capital expenditure[b]	12.9	21.5	9.9	15.2	16.3
Less: tax depreciation	12.8	13.9	15.4	14.7	14.6
Closing TAB	**122.8**	**130.4**	**124.9**	**125.5**	**127.2**

Source: AER analysis.
(a) Based on estimated capex.
(b) As-commissioned, net of disposals.

4.7.2 Standard and remaining tax asset lives

For this final decision, we accept APTPPL's revised proposed standard and remaining tax asset lives for all of its asset classes for the RBP.[115] They are consistent with our draft decision, and we confirm our position that the standard asset lives are broadly

[113] AER, *Draft decision, Roma to Brisbane Pipeline 2022–27, Attachment 7 – Corporate income tax*, November 2021, p. 17.

[114] Capex enters the TAB on an as-commissioned basis while it enters the capital base on an as-incurred basis. We did not require any amendments to the 2020–21 as-commissioned capex in calculating the opening TAB at 1 July 2022. Conversely, we did require amendments to the 2020–21 as-incurred capex in determining the opening capital base at 1 July 2022 as discussed in section 4.1.

[115] Consistent with our draft decision, we have accepted APTPPL's revision to assign 10 years for the standard tax life of the 'Communications' asset class as it aligns with the ATO Taxation Ruling 2021/3. APTPPL, Response to information request AER IR008, 3 September 2021, p. 4.
APTPPL's revised proposal PTRM contained tax remaining asset lives for the 'Communications' and 'Regulators and meters' asset classes that were different from those in the draft decision PTRM. APTPPL subsequently confirmed that it agreed with the lives in the draft decision. These amendments did not affect the tax calculations as neither asset classes have capex forecast for the 2022–27 period. APTPPL, Response to information request AER IR018, 18 February 2022, p. 3.

consistent with the values prescribed by the Commissioner of Taxation in ATO ruling 2021/3 and the Income Tax Assessment Act (ITAA).[116]

Our draft decision accepted APTPPL's approach to reduce the remaining tax asset life for the 'Original pipelines' asset class to two years and to merge this asset class with the 'Pipelines' asset class. For this final decision, we determine a remaining tax asset life as at 1 July 2022 for the merged 'Pipelines' asset class of 6.6 years, consistent with the life in the revised proposal and our draft decision.[117]

Table 13 sets out our final decision on the standard and remaining tax asset lives for the RBP. We are satisfied that the standard and remaining tax asset lives provide an estimate of the tax depreciation amount that would be consistent with the tax expenses used to estimate the annual taxable income for a benchmark efficient service provider.[118]

Table 13 AER's final decision on APTPPL's RBP standard and remaining tax asset lives for the 2022–27 period (years)

Tax asset class[a]	Standard tax asset life	Remaining asset life[b]
Pipelines	20.0	6.6
Compressors	20.0	11.5
Regulators and meters	n/a	13.1
Easements	n/a	n/a
Communications	10.0	20.0
Capitalised AA costs	5.0	1.0
Group IT	5.0	4.1
SIB capex	5.0	4.0
Equity raising costs[c]	n/a	n/a

Source: AER analysis.
(a) All asset classes apply the diminishing value method of tax depreciation for new capex.
(b) Used for straight-line method of tax depreciation.
(c) For this final decision, the forecast capex determined for APTPPL does not meet a level to trigger any benchmark equity raising costs.
n/a Not applicable. We have not assigned a standard and remaining tax asset lives to some asset classes either because they have no new capex allocated to them for the 2022–27 period or because the assets are non-depreciating.

116 ATO, *Taxation Ruling TR2021/3 – Income tax: effective life of depreciating assets (applicable from 1 July 2021),* p. 177. They are also consistent with the statutory cap on the effective life of 20 years for gas pipeline assets under the ITAA.

117 The calculated life is consistent to 1 decimal place for the draft decision, RBP revised proposal and final decision.

118 NGR, r. 87A(1).

5 Incentive schemes to apply for 2022–27

Our incentive schemes encourage network businesses to make efficient decisions. They give network businesses an incentive to pursue efficiency improvements in forecast expenditures, and to share them with consumers. If network businesses reduce their costs to below our forecast of efficient costs, the savings are shared with their consumers in future access arrangement periods.

This final decision determines that one incentive scheme will apply to APTPPL's RBP for the 2022–27 period, as presented below.

5.1 Efficiency carryover mechanism

As noted in section 4.6.1, an efficiency carryover mechanism (ECM) is intended to provide a continuous incentive for service providers to pursue efficiency improvements in opex, and provide for a fair sharing of these between service providers and network users.

APTPPL accepted our revisions to the ECM in its revised proposal.[119] The ECM is set out in clause 8.1 of our approved 2022–27 access arrangement for APTPPL's RBP.

Our final decision is to approve the application of an ECM to APTPPL's RBP in the 2022–27 period. We made minor amendments to APTPPL's proposed ECM in our draft decision[120] to be consistent with version 2 of the efficiency benefit sharing scheme for electricity service providers.[121] In particular, we have revised the formula for calculating the incremental gain for 2022–23 to reflect that 2019–20 was used as the base year to forecast opex for the 2022–27 period.

To ensure continuous incentives, the length of the carryover period for the 2022–27 period will be the same as the length of the following access arrangement period. We expect the next RBP access arrangement period will be five years, starting from 1 July 2027.

In applying the ECM to APTPPL's RBP in the 2022–27 period, we will exclude:

- debt raising costs
- cost categories that are not forecast using a single year revealed cost approach in the access arrangement period commencing on 1 July 2027
- any cost that we determine, as part of a decision on revisions to apply to this access arrangement, to exclude from the operation of the ECM because we are satisfied it would not promote the NGO.

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119 APTPPL, *Roma to Brisbane Pipeline 2022–27, Attachment 1 – Proposed revised access arrangement, 1 July 2022–30 June 2027 – revised proposal (clean)*, January 2022, pp. 45–47.

120 AER, *Draft decision, Roma to Brisbane Pipeline access arrangement 2022–27, Approved access arrangement (tracked)*, November 2021, pp. 46–48.

121 AER, *Efficiency benefit sharing scheme for electricity network service providers*, November 2013.

We set out in Table 14 the RBP's forecast opex we will use to calculate efficiency gains and losses for the 2022–27 period, including forecast debt raising costs.

Table 14 AER's final decision on APTPPL's RBP forecast opex for the ECM for the 2022–27 period ($million, 2021–22)

	2019–20	2021–22	2022–23	2023–24	2024–25	2025–26	2026–27
Total forecast opex	16.0	16.0	20.9	21.3	20.6	20.4	20.5
Less debt raising costs	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Less capitalisation policy change	0.3	0.3	–	–	–	–	–
Forecast opex for the ECM	**15.4**	**15.4**	**20.6**	**21.0**	**20.3**	**20.1**	**20.2**

Source: AER analysis.
Note: Numbers may not add up due to rounding.

6 Non-tariff components

The non-tariff components of an access arrangement are: terms and conditions for the supply of reference services; queuing requirements;[122] extension and expansion requirements;[123] capacity trading requirements;[124] change of receipt or delivery point by the user;[125] a review submission date and a revision commencement date.[126]

Our draft decision accepted APTPPL's proposed amendments to the non-tariff components of the RBP 2022–27 access arrangement proposal. We also accepted the proposed amendments to the RBP terms and conditions on the basis that the clauses are largely unchanged in terms of operability and the amendments do not change the risk allocation between APTPPL and other parties.

This final decision confirms our draft decision position on the non-tariff components listed above.[127] This included accepting amendments to the terms and conditions for:[128]

- changing from a single reference service to two separate direction-based reference services – firm transportation eastbound and firm transportation westbound
- reducing the minimum term for the reference service from 3 years to 1 year
- simplifying the terms and conditions document and making it consistent with the NGR, such as standardising the definition of a gas day.

We did not receive any stakeholder submissions on the RBP non-tariff components.

We note that the terms and conditions remain subject to a continuous improvement process, whereby the document is formally reviewed and amended (as appropriate) at each access arrangement review.

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122 The process or mechanism for establishing an order of priority between prospective users of spare and/or developable capacity.

123 The method for determining whether an extension or expansion is a part of the covered pipeline and the effect this will have on tariffs.

124 The arrangements for users to assign contracted capacity and change delivery and receipt points.

125 The process or mechanism for changing a user's receipt or delivery point.

126 APTPPL proposes a review submission date for the RBP of 1 July 2026 and a review commencement date of 1 July 2027.

127 AER, *Draft decision, Roma to Brisbane Pipeline 2022–27, Attachment 11 – Non-tariff components*, November 2021.

128 APTPPL, *Roma to Brisbane Pipeline 2022–27 Proposed revised access arrangement, 1 July 2022–30 June 2027*, July 2021, cl. 2.3.1; APTPPL, *Roma to Brisbane Pipeline 2022–27 Access arrangement, Overview,* July 2021, pp. 12 and 34.

A. Revenue smoothing and tariffs

APTPPL's revised proposed RBP eastbound tariff path for the 2022–27 period is for an initial increase of 6.54% ($ nominal) in 2022–23, followed by increases of 2.25% in each of the remaining four years of the 2022–27 period. APTPPL's revised proposed RBP westbound tariff path is for an initial increase of 9.93% ($ nominal) in 2022–23, followed by increases of 2.25% in each of the remaining four years of the 2022–27 period.[129]

In choosing the smoothing profile, we have balanced a number of competing objectives:

- equalising (in NPV terms) unsmoothed and smoothed revenue
- providing price signals that reflect the underlying efficient costs
- minimising variability in tariffs from 2021–22 through to the 2022–27 period, and within that period
- minimising the likelihood of variability in tariffs at the start of the 2027–32 period

Each of these points is discussed in turn.

First, we are satisfied that our tariff path for RBP reference services across the 2022–27 period achieves revenue equalisation, as required under the Rules.[130] As we have increased the unsmoothed revenue proposed by APTPPL, we have set the tariff path so that it adjusts the smoothed revenue downward to equalise with the unsmoothed building block costs.

Second, and related to the first point, our smoothing allows closer alignment of tariffs and costs. This aids the achievement of the NGO and the revenue and pricing principles (RPP), including through providing a price signal that facilitates efficient use of natural gas services.[131] Our tariff path shows yearly increases of 2.65% from the second year (2023–24) to the final year (2026–27) of the 2022–27 period, which are higher than the yearly increases of 2.25% put forward in the revised proposal.[132] This reflects the higher unsmoothed building block costs compared to the revised proposal.

Third, in setting the tariff path, we aim to minimise tariff volatility from 2021–22 through to the 2022–27 period, and within that period. Our chosen tariff path reflects this objective, including the consideration we must give to other competing objectives. For instance, setting a flat tariff path from 2021–22 would better minimise within-period volatility, but would not achieve revenue equalisation.

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129 APTPPL's revised proposed nominal tariff paths reflect its proposed expected inflation of 2.25%.

130 NGR, r. 92(2). The revenue equalisation occurs in NPV terms, discounting the yearly cash flows at the rate of return to reflect the time value of money.

131 NGL, ss. 23 and 24.

132 APTPPL, *Roma to Brisbane Pipeline 2022–27, Attachment 3 – Post-tax revenue model – revised proposal (Public),* January 2022.

Fourth, in setting the tariff path, we also aim to minimise the likelihood of tariff volatility between the 2022–27 and 2027–32 periods. We do not know with certainty what APTPPL's efficient costs for the RBP will be in 2027–28, or across the 2027–32 period more generally. The unsmoothed building block costs for 2026–27 (the last year of the 2022–27 period) are the best available proxy. Hence, this objective requires minimising the divergence between smoothed and unsmoothed revenues for 2026–27. If there are no significant changes in forecast costs from 2026–27 to 2027–28, this final-year divergence provides an estimate of the size of the tariff change at the start of the 2027–32 period. For this final decision, this final year divergence is 2.9%, which is within our preferred target range of +/-3%. We note that if there are significant changes in costs at the start of the 2027–32 period, this might affect the required tariff change at that time.

We are satisfied that our final decision outlined in section 3.3 on the RBP tariff path reflects a balanced consideration of competing objectives.

B. Shortened forms

Shortened form	Extended form
2018 Instrument	2018 Rate of Return Instrument
AER	Australian Energy Regulator
APTPPL	Australian Petroleum Pipelines Pty Limited
ATO	Australian Tax Office
Capex	Capital expenditure
CPI	Consumer price index
ECM	Efficiency carryover mechanism
EUAA	Energy Users Association of Australia
GJ	Gigajoule
IT	Information technology
ITAA	Income Tax Assessment Act
LTFS	Long-term firm service
NGL	National Gas Law
NGO	National Gas Objective
NGR	National Gas Rules
NPV	Net Present Value
Opex	Operating expenditure
PTRM	Post-tax revenue model
RBA	Reserve Bank of Australia
RBP	Roma to Brisbane Pipeline
RFM	Roll forward model
RIN	Regulatory information notice
RPP	Revenue and pricing principles
TAB	Tax asset base
TJ	Terajoule
The Handbook	The Better Resets Handbook
WACC	Weighted average cost of capital