Draft Decision

Roma to Brisbane Pipeline Access Arrangement 2022 to 2027

Attachment 8 Efficiency carryover mechanism

November 2021

AUSTRALIAN ENERGY REGULATOR

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Note

This attachment forms part of the AER's draft decision on the access arrangement that will apply to APT Petroleum Pipelines Pty Limited's (APTPPL) Roma to Brisbane Pipeline (RBP) for the 2022–2027 access arrangement period. It should be read with all other parts of the draft decision.

The draft decision includes the following documents:

Overview

Attachment 1 – Services covered by the access arrangement

Attachment 2 – Capital base

Attachment 3 – Rate of return

Attachment 4 – Regulatory depreciation

Attachment 5 – Capital expenditure

Attachment 6 – Operating expenditure

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8 Efficiency carryover mechanism

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

This attachment sets out our draft decision on the ECM carryover amounts accrued over the 2017–22 access arrangement period (2017–22 period) for the Roma to Brisbane Pipeline (RBP), and the ECM we will apply in the 2022–27 period.

8.1 Draft decision

8.1.1 ECM carryover amounts

Our draft decision is to approve carryover amounts totalling –$6.6 million ($2021–22) from the application of the ECM in the 2017–22 period for the RBP. This is $0.3 million ($2021–22) less than the proposal APTPPL submitted to us in July 2021, which was –$6.3 million ($2021–22).[1]

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

- adjusted forecast opex to reflect the change in capitalisation policy for leases
- updated inflation figures to convert amounts into 2021–22 dollars
- updated estimated opex for 2020–21
- included opex inputs for 2015–16 and 2016–17 in the ECM model in order to calculate the incremental efficiency gain (or loss) for 2017–18 consistent with clause 8.1(c) of the current access arrangement
- corrected minor input and formula errors in the ECM model.

We set out our draft decision on the carryover amounts APTPPL accrued from the operation of the ECM during the 2017–22 period in Table 8.1.

[1] APTPPL, *Roma to Brisbane Pipeline 2022–27, Final RIN Workbook 3 opex incentive mechanism*, July 2021.

Table 8.1 AER's draft decision on APTPPL's RBP carryover amounts ($million, 2021–22)

	2022–23	2023–24	2024–25	2025–26	2026–27	Total
APTPPL's proposal	–2.6	–2.6	–0.8	–0.0	–0.2	–6.3
AER's draft decision	–3.3	–3.0	–1.1	–	0.8	–6.6
Difference	**–0.6**	**–0.3**	**–0.3**	**0.0**	**1.0**	**–0.3**

Source: APTPPL, *Roma to Brisbane Pipeline 2022–27, Final RIN Workbook 3 opex incentive mechanism*, July 2021; AER analysis.
Note: Numbers may not add up due to rounding.

8.1.2 Application of the ECM for the 2022–27 period

Our draft decision is to approve the application of an ECM to APTPPL's RBP in the 2022–27 period, subject to minor amendments that we discuss in section 8.4.2. Our revisions to APTPPL's proposed ECM are set out in section 8.5.

In applying the ECM to the 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 efficiency carryover mechanism because we are satisfied it would not promote the National Gas Objective (NGO).[2]

We have revised APTPPL's proposed opex incentive mechanism for the RBP to make it consistent with the efficiency benefit sharing scheme (EBSS) we released in November 2013 for electricity service providers.[3]

We set out in Table 8.2 the forecast opex we will use to calculate efficiency gains and losses for the 2022–27 period, including forecast debt raising costs.

[2] National Gas Law (NGL), s. 23 states that the National Gas Objective 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".
[3] AER, *Efficiency Benefit Sharing Scheme for Electricity Network Service Providers*, November 2013, pp. 7–9.

Table 8.2 AER's draft 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	15.7	15.6	18.8	18.8	18.8	18.9	18.8
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	**15.1**	**15.0**	**18.6**	**18.6**	**18.6**	**18.6**	**18.6**

Source: AER analysis.

Note: Numbers may not add up due to rounding.

8.2 APTPPL's proposal

8.2.1 Carryover amounts from the 2017–22 period

In its initial proposal, APTPPL calculated carryover amounts totalling –$6.3 million ($2021–22) for the RBP from the application of the ECM in the 2017–22 period.[4]

8.2.2 Application in the 2022–27 period

APTPPL proposed the same opex incentive mechanism would apply to the RBP in the 2022–27 period as applied in the current period.

8.2.3 Stakeholder submissions

We have not received any submissions from stakeholders on APTPPL's RBP proposal for the 2022–27 period that have raised issues on the ECM.

8.3 Assessment approach

An ECM is a form of incentive mechanism. A full access arrangement may include (and we may require it to include) one or more incentive mechanisms to encourage efficiency in the provision of services by the service provider.[5] An incentive mechanism must be consistent with the revenue and pricing principles.[6]

[4] APTPPL, *Roma to Brisbane Pipeline 2022–27, Final RIN Workbook 3 opex incentive mechanism*, July 2021.

[5] National Gas Rules (NGR), r. 98(1).

[6] NGR, r. 98(3).

We consider the following revenue and pricing principle is most relevant for assessing APTPPL's proposed efficiency carryover mechanism:

> A service provider should be provided with effective incentives in order to promote economic efficiency with respect to reference services the service provider provides.
>
> The economic efficiency that should be promoted includes:
>
> (a) efficient investment in, or in connection with, a pipeline with which the service provider provides reference services; and
>
> (b) the efficient provision of pipeline services; and
>
> (c) the efficient use of the pipeline.[7]

8.3.1 Interrelationships

The ECM is intrinsically linked to our opex revealed cost forecasting approach.

Our opex forecasting method typically relies on using the 'revealed costs' of the service provider in a chosen base year to develop a total opex forecast if the chosen base year opex is not considered to be 'materially inefficient'. Under this approach, a service provider would have an incentive to spend more opex in the expected base year. Also, a service provider would have less incentive to reduce opex towards the end of the access arrangement period, where the benefit of any efficiency gains is retained for less time.

The application of the ECM serves two important functions:

1. It removes the incentive for a service provider to inflate opex in the expected base year in order to gain a higher opex forecast for the next access arrangement period.
2. It provides a continuous incentive for a service provider to pursue efficiency improvements across the access arrangement period.

The ECM does this by allowing a service provider to retain efficiency gains (or losses) for a total of six years, regardless of the year in which the service provider makes them. Where we do not propose to rely on the single year revealed costs of a service provider in forecasting opex, this has consequences for the service provider's incentives and our decision on how we apply the ECM.

When a business makes an incremental efficiency gain, it receives a reward through the ECM, and consumers benefit through a lower revealed cost forecast for the subsequent access arrangement period. This is how efficiency improvements are shared between consumers and the business. If we subject costs to the ECM that are not forecast using a revealed cost approach, a business would in theory receive a reward for efficiency gains through the ECM (at a cost to consumers), but consumers

[7] NGL, s. 24(3).

would not benefit through a lower revealed cost forecast in the subsequent access arrangement period. Therefore, we typically exclude costs that we do not forecast using a single year revealed cost forecasting approach.

For these reasons, our decision on how we will apply the ECM has a strong interrelationship with our decision on a business' opex (see Attachment 6). We have careful regard to the effect of our ECM decision when making our opex decision, and our ECM decision is made largely in consequence of (and takes careful account of) our past and current decisions on opex.

8.4 Reasons for draft decision

8.4.1 Carryover amounts from the 2017–22 period

Our draft decision is to approve carryover amounts totalling –$6.6 million ($2021–22) from the application of the ECM in the 2017–22 period for the RBP.

The carryover amounts we calculated (–$6.6 million) are lower than the carryover amounts APTPPL proposed (–$6.3 million). The difference is primarily driven by our adjustment for capitalisation of lease costs in our draft decision.

APTPPL proposed, under the new accounting standard AASB16, to treat leases as capex rather than opex from 1 July 2019 onwards. In APTPPL's proposed opex model, it removed lease costs ($0.4 million, $2021–22) from its 2019–20 base year for the purpose of calculating its opex forecast for the 2022–27 period.[8] However, APTPPL did not amend the ECM to account for the revised forecast opex amount.[9]

Clause 8.1(j) of the RBP access arrangement states that:[10]

> "Where the Service Provider changes its approach to classifying costs as either capital expenditure or operating expenditure during the Access Arrangement Period, the Service Provider will adjust the forecast operating expenditure in the Access Arrangement so that the forecast expenditures are consistent with the capitalisation policy changes."

Consistent with the RBP access arrangement, we have reduced forecast opex by $0.3 million ($2021–22) in years 2019–20, 2020–21 and 2021–22 to account for the classification change. Our adjustment is slightly lower than the value in APTPPL's initial proposal as APTPPL found an error in its opex model for the base adjustment for lease costs[11] and subsequently submitted the correct lease amount to be adjusted

8 APTPPL, *Roma to Brisbane Pipeline 2022–27, Attachment 5 – Opex model*, July 2021.

9 APTPPL, *Roma to Brisbane Pipeline 2022–27, Final RIN Workbook 3 opex incentive mechanism*, July 2021.

10 AER, *Approved access arrangement for the RBP 2017-22 - final decision revisions marked*, November 2017, p. 44.

11 APTPPL, Response to information request AER IR002, 3 August 2021, p. 4.

from the ECM calculation.[12] We have reviewed APTPPL's response and are satisfied with the information provided.

In addition to the adjustment for leases, we have also made the following amendments to APTPPL's proposed ECM calculation for the RBP:

- updated the inflation input for 2020–21 using the actual June Consumer Price Index (CPI) figure published by the Australian Bureau of Statistics (ABS), which became available after APTPPL submitted its proposal[13]
- 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[14]
- updated the estimated opex for 2020–21 with the latest available estimates as provided by APTPPL in response to our information request;[15] we expect APTPPL will provide actual opex for 2020–21 in its revised proposal
- included opex inputs for 2015–16 and 2016–17 in the ECM model in order to calculate the incremental efficiency gain (or loss) for 2017–18, consistent with clause 8.1(c) of the current access arrangement[16]
- corrected minor input and formula errors in the ECM model.

Full details of our ECM calculations are set out in our draft decision ECM model, which is available on our website.[17]

8.4.2 Application in the 2022–27 period

Our draft decision is to approve the application of an ECM to APTPPL's RBP in the 2022–27 period.

We have made minor amendments to APTPPL's proposed ECM in this draft decision to be consistent with version 2 of the EBSS for electricity service providers.[18] 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. These revisions are set out in section 8.5.

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12 APTPPL, Response to information request AER IR007, 27 August 2021, pp. 4–5.

13 ABS, *Catalogue number 6401.0, Consumer price index – June 2021*, 28 July 2021.

14 RBA, *Statement on monetary policy, Appendix: Forecasts*, August 2021.

15 APTPPL, Response to information request AER IR002 – RBP Draft Regulatory Opex FY21, 11 August 2021.

16 AER, *Approved access arrangement for the RBP 2017-22 - final decision revisions marked*, November 2017, p. 42.

17 AER, *Draft decision, Roma to Brisbane Pipeline 2022–27, Efficiency carryover mechanism model*, November 2021.

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

Length of carryover 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.

Adjustments to forecast or actual opex when calculating carryover amounts

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 efficiency carryover mechanism because we are satisfied it would not promote the NGO.

8.5 Revisions

We require the following revisions set out in Table 8.3 to make the access arrangement proposal acceptable:

Table 8.3 APTPPL's efficiency carryover mechanism revisions

Revision	Amendment
Revision 8.1	Amend clause 8.1(c) so that it reads: To ensure the carryover amount in the first year of an Access Arrangement period is only for incremental efficiency gains made in that year, we will subtract any incremental efficiency gain made in the previous Access Arrangement period after the base year from the difference between actual opex and forecast opex in the first year of the new period. The incremental efficiency gain (or loss) for the Financial Year 2022–23 will be calculated as: $$(F_{2022-23} - A_{2022-23}) - [(F_{2021-22} - A_{2021-22}) - (F_{2019-20} - A_{2019-20})]$$ where: $F_{2022-23}$ is the forecast operating expenditure for Financial Year 2022–23; $A_{2022-23}$ is the actual operating expenditure for Financial Year 2022–23; $F_{2021-22}$ is the forecast operating expenditure for Financial Year 2021–22; $A_{2021-22}$ is the actual operating expenditure for Financial Year 2021–22; $F_{2019-20}$ is the forecast operating expenditure for Financial Year 2019–20; and $A_{2019-20}$ is the actual operating expenditure for Financial Year 2019–20.
Revision 8.2	Amend clause 8.1(d) so that it reads: The incremental efficiency gain (or loss) for the Financial Year 2023–24 to 2025–26 (inclusive) will be calculated as: $$E_t = (F_t - A_t) - (F_{t-1} - A_{t-1})$$

where:

E_t is the incremental efficiency gain (or loss) in Financial Year t;

F_t is the forecast operating expenditure in Financial Year t;

A_t is the actual operating expenditure in Financial Year t;

F_{t-1} is the forecast operating expenditure in Financial Year t–1; and

A_{t-1} is the actual operating expenditure in Financial Year t–1.

Revision 8.3

Amend clause 8.1(e) so that it reads:

The incremental efficiency gain (or loss) for Financial Year 2026–27 will be calculated as:

$$(F_{2026-27} - A^*_{2026-27}) - (F_{2025-26} - A_{2025-26})$$

where actual operating expenditure in the Financial Year 2026–27 is to be estimated using the following equation:

$$A^*_{2026-27} = F_{2026-27} - (F_b - A_b) + non-recurrent\ efficiency\ gain_b$$

and where:

$A^*_{2026-27}$ is the estimate of operating expenditure for Financial Year 2026–27;

$F_{2026-27}$ is the forecast operating expenditure for Financial Year 2026–27;

F_b is the forecast operating expenditure for the base year used to forecast operating expenditure in the access arrangement period commencing 1 July 2027;

A_b is the actual operating expenditure for the base year used to forecast operating expenditure in the access arrangement period commencing 1 July 2027; and

$non-recurrent\ efficiency\ gain_b$ is the adjustment made to A_b used to forecast operating expenditure in the access arrangement period commencing 1 July 2027 to account for operating expenditure associated with one-off factors.

A. Shortened forms

Shortened form	Extended form
ABS	Australian Bureau of Statistics
AER	Australian Energy Regulator
APTPPL	APT Petroleum Pipelines Pty Limited
CPI	Consumer Price Index
EBSS	Efficiency benefit sharing scheme
ECM	Efficiency carryover mechanism
NGL	National Gas Law
NGO	National Gas Objective
NGR	National Gas Rules
Opex	Operating expenditure
RBA	Reserve Bank of Australia
RBP	Roma to Brisbane Pipeline