FINAL DECISION
Amadeus Gas Pipeline
Access Arrangement
2016 to 2021

Attachment 9 – Efficiency carryover mechanism

May 2016

AUSTRALIAN
ENERGY
REGULATOR

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Note

This attachment forms part of the AER's final decision on the access arrangement for the Amadeus Gas Pipeline for 2016–21. It should be read with all other parts of the final decision.

The final 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 - Value of imputation credits

Attachment 5 - Regulatory depreciation

Attachment 6 - Capital expenditure

Attachment 7 - Operating expenditure

Attachment 8 - Corporate income tax

Attachment 9 - Efficiency carryover mechanism

Attachment 10 - Reference tariff setting

Attachment 11 - Reference tariff variation mechanism

Attachment 12 - Non-tariff components

Attachment 13 - Demand

Contents

Shortened forms

Shortened form	Extended form
AA	Access Arrangement
AAI	Access Arrangement Information
APTNT	APT Pipelines (NT) Pty Limited (APTNT)
AER	Australian Energy Regulator
AGP	Amadeus Gas Pipeline
ATO	Australian Tax Office
capex	capital expenditure
CAPM	capital asset pricing model
CPI	consumer price index
DRP	debt risk premium
ECM	Efficiency carryover mechanism
ERP	equity risk premium
Expenditure Guideline	Expenditure Forecast Assessment Guideline
gamma	value of imputation credits
GTA	Gas Transport Services Agreement
MRP	market risk premium
NGP	Northern Gas Pipeline (formerly North East Gas Interconnector/NEGI)
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
RFM	roll forward model
RIN	regulatory information notice
RPP	revenue and pricing principles
SLCAPM	Sharpe-Lintner capital asset pricing model
TAB	tax asset base
UAFG	unaccounted for gas

Shortened form	Extended form
WACC	weighted average cost of capital
WPI	Wage Price Index

9 Efficiency carryover mechanism

An efficiency carryover mechanism (ECM) provides an additional incentive for service providers to pursue efficiency improvements in operating expenditure (opex).

To encourage a service provider to become more efficient during the access arrangement period, it is allowed to keep any difference between its approved forecast and its actual opex during an access arrangement period. This is supplemented by the ECM, which allows the service provider to retain efficiency savings and efficiency losses for a longer period of time.

Together, these rewards and penalties work to provide a continuous incentive for a service provider to pursue efficiency gains over the access arrangement period. The ECM also discourages a service provider from incurring opex in the expected base year in order to receive a higher opex allowance in the following access arrangement period.

APTNT's current access arrangement (for 2011–16) does not include an ECM. APTNT did not propose to apply an ECM to its opex in the 2016–21 access arrangement period.

9.1 Final decision

Our final decision is to apply an ECM to APTNT in the 2016–21 access arrangement period. The ECM we approve is the same mechanism in our draft decision, and is consistent with version two of the Efficiency Benefit Sharing Scheme (EBSS) which we published for electricity distributors in November 2013.

We have revised the access arrangement having regard to our reasons for refusing to approve APTNT's revised proposal and the further matters in rule 64(2) of the NGR. Our revisions are reflected in sections 1.4 and 8 of the Approved Access Arrangement for the Amadeus Gas Pipeline for 2016–21, which gives effect to this decision.

9.2 APTNT's revised proposal

APTNT did not include an ECM (which it refers to as an EBSS) in its revised access arrangement proposal. APTNT reiterated its argument that its existing commercial arrangements provide it with adequate incentives, and the application of the efficiency carryover mechanism introduces a regulatory burden without offsetting benefits. APTNT stated:[1]

> [it] already faces strong incentives to:
>
> - improve its ongoing efficiency;

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[1] APTNT, *Amadeus Gas Pipeline Access Arrangement Revised Proposal, Response to Draft Decision*, Submission, January 2016, p. 101.

- defer or avoid capital expenditure;

- increase the utilisation of the pipeline.

It also reiterated that:[2]

> … its revenue under the long term contract is not linked to regulatory outcomes. The EBSS would not provide a cash incentive to the business to improve its efficiency … Similarly, an EBSS would also not share any efficiency gains with shippers.

APTNT submitted that the inclusion of the ECM appeared to reflect AER policy, and did not appear to take into account existing incentive mechanisms.[3]

APTNT requested that should the AER impose an ECM, that we address the impact of the trigger event occurring on the ECM. APTNT stated the ECM set out in our draft decision did not adequately deal with the circumstance of a constrained (less than 5 years) access arrangement period.[4] This trigger is discussed in Attachment 12 to this final decision.

9.3 AER's assessment approach

Our assessment approach is the same as in the draft decision.[5] In the draft decision we also discuss the interrelationships between the ECM, our forecasting approach and other incentive schemes.

9.4 Reasons for final decision

Our decision is to apply an ECM to APTNT for the 2016–21 access arrangement period.[6]

Table 7.1 in Attachment 7 sets out our final decision on the forecast opex against which we will calculate efficiency gains (or losses) under the ECM in the 2016–21 access arrangement period.

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[2] APTNT, *Amadeus Gas Pipeline Access Arrangement Revised Proposal, Response to Draft Decision*, Submission, January 2016, p. 101.

[3] APTNT, *Amadeus Gas Pipeline Access Arrangement Revised Proposal, Response to Draft Decision*, Submission, January 2016, p. 102.

[4] APTNT, *Amadeus Gas Pipeline Access Arrangement Revised Proposal, Response to Draft Decision*, Submission, January 2016, p. 102.

[5] AER, *Draft decision, Amadeus Gas Pipeline Access Arrangement 2016–21 - Attachment 9 - Efficiency carryover mechanism*, November 2015, p. 9-7.

[6] The efficiency carryover mechanism we have applied in this decision is identical to the Efficiency Benefit Sharing Scheme we apply to electricity network service providers under the NER. For further information explaining the reasons why we apply such a scheme, see: AER, *Efficiency benefit sharing scheme - explanatory statement*, November 2013.

Commercial arrangements

APTNT did not agree with the AER's draft decision to apply an opex efficiency carryover mechanism to it on the grounds that the existing long term contract already imposed incentives on it to improve its ongoing efficiency.

While APTNT submitted its existing long term contract already imposes incentives upon it to improve its ongoing efficiency, it has not provided any evidence to support its assertion. Further, while APTNT has reduced its opex over the current access arrangement period, we have no ability to judge whether commercial arrangements will incentivise APTNT to continue to make efficiency gains over future access arrangement periods.

We have established APTNT's opex for the next access arrangement period using our top-down revealed cost methodology. The ECM is intrinsically linked to this methodology. This is because the ECM provides us with greater confidence that the base year is efficient and can be used to forecast opex for a future access arrangement period. It also provides confidence that a service provider has a continuous incentive to make efficiency gains.[7] For these reasons we consider it is necessary to apply an ECM to APTNT in the 2016–21 period.

Regulatory burden

APTNT argued there were no benefits associated with the imposition of an ECM.[8] However we consider that benefits will accrue from the application of an ECM in the long term.

In a regulatory framework that includes an ECM, cost shifting to inflate base year opex is penalised through negative carryover amounts. In such an environment, the efficiency of base year opex to be used for forecasting opex in future periods is a less intrusive top-down process, reducing regulatory burden in future years.

Further, the presence of an ECM increases transparency. It provides AGP users and future users with information which should assist the negotiation of future contracts with APTNT.

We are also confident that the costs likely to be incurred due to the application of an ECM will be negligible. This is because the information used to calculate efficiency carryover amounts is already captured by APTNT. We also note that APTNT has not provided any information on the expected costs arising from the imposition of an ECM.

Any marginal increase in the regulatory burden facing APTNT is likely to be offset by the savings arising from the use of a non-intrusive top-down assessment of opex by us and APTNT in future regulatory periods.

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[7] Further information is available in section 9.3.1 of our draft decision.

[8] APTNT, *Amadeus Gas Pipeline Access Arrangement Revised Proposal, Response to Draft Decision*, Submission, January 2016, p. 101.

Early review trigger

The Northern Territory Government has commenced a process to enable gas from the Northern Territory to reach south eastern gas markets. The new pipeline, Northern Gas Pipeline (NGP, formerly NEGI), is expected to be completed in 2018.[9] The interconnection of the AGP with south-eastern gas markets via the NGP has potential to impact on APTNT's opex requirements due to increased demand for gas through the AGP.

In our draft decision, to recognise the uncertainty around the timing and potential impact of the NGP on the AGP, we incorporated a trigger event to allow the access arrangement to be reviewed prior to the end of the 2016–21 access arrangement period should this become necessary.[10] APTNT, while not supporting the application of the ECM, submitted that the ECM set out in our draft decision did not adequately address the impact of the trigger event occurring.

Should it become clear that the implications of the NGP for this access arrangement are substantial, the trigger event may be employed to require an early review of APTNT's access arrangement. If an early review does occur, one possible result is an access arrangement period that is less than the five years approved in this final decision. APTNT may also incur opex associated with interconnection to the NGP. Both of these factors potentially impact on the operation of the ECM.

The ECM approved in this final decision explicitly excludes opex not forecast using the single-year revealed cost method. Therefore, any opex associated with the new pipeline interconnection would be excluded from the operation of the ECM.

The ECM already provides flexibility for the equations used to determine carryover amounts to be amended to take into account changes in the length of the access arrangement period, where this differs from that expected at the time of our decision.[11] As a result, we do not consider there is any need to amend the ECM to specifically address potential changes to the length of the access arrangement period that may result from the trigger event.

For these reasons we remain satisfied that the ECM set out in our draft decision is compatible with the trigger for early review.

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9 ICN Gateway, Northern Gas Pipeline (NGP, previously (NEGI), http://gateway.icn.org.au/project/3680/north-east-gas-interconnector-negi-pipeline, (accessed 16 February 2016).

10 The NEGI trigger event has been retained in our final decision, see AER, *Amadeus Gas Pipeline Final Decision 2016–21*, *Attachment 12 - Non tariff components*, May 2016.

11 See for example, AER, *Draft decision ActewAGL Distribution Access Arrangement 2016 21 - Attachment 9 - Efficiency carryover mechanism*, November 2015, section 9.4.1.