



FINAL DECISION
Amadeus Gas Pipeline
Access Arrangement
2016 to 2021

Attachment 2 – Capital base

May 2016

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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

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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

2 Capital base

The capital base roll forward accounts for the value of APTNT's regulated assets over the access arrangement period. The opening capital base value for a regulatory year within the access arrangement period is rolled forward by indexing it for inflation, adding any conforming capex, and subtracting depreciation and other possible factors (for example, disposals or customer contributions).¹ Following this process, the AER arrives at a closing value of the capital base at the end of the relevant year. The opening value of the capital base is used to determine the return of capital (regulatory depreciation) and return on capital building block allowances.

We are required to make a decision on APTNT's opening capital base as at 1 July 2016 for the 2016–21 access arrangement period. We are also required to make a decision on APTNT's projected capital base for the 2016–21 access arrangement period. This attachment presents our final decision on these matters.

2.1 Final decision

We determine an opening capital base value of \$115.8 million (\$nominal) as at 1 July 2016 for APTNT. This value is \$3.7 million (or 3.1 per cent) lower than APTNT's revised proposed value of \$119.5 million. This is because we have updated the capital base roll forward for the recently available 2015–16 actual inflation input and amended the conforming capex estimate for 2015–16 (section 2.4.1).

We determine a closing capital base of \$128.2 million (\$nominal) as at 30 June 2021. This is \$18.2 million (or 12.4 per cent) lower than APTNT's revised proposal of \$146.4 million. Our final decision on the closing capital base reflects our adjustments to forecast capex (attachment 6) and depreciation (attachment 5).

Table 2.1 summarises our final decision on the roll forward of APTNT's capital base during the 2011–16 access arrangement period.

We have revised the access arrangement having regard to our reasons for refusing to approve APTNT's proposal and the further matters identified in the NGR section 64(2). Our revisions are reflected in the *Approved Access Arrangement for the Amadeus Gas Pipeline 1 July 2016 to 30 June 2021*, May 2016, which gives effect to this decision.

¹ The term 'rolled forward' means the process of carrying over the value of the capital base from one regulatory year to the next.

Table 2.1 AER's final decision on APTNT's capital base roll forward for the 2011–16 access arrangement period (\$million, nominal)

	2011–12	2012–13	2013–14	2014–15	2015–16
Opening capital base	92.1	92.7	106.1	107.6	107.4
Net capex	4.3	16.5	4.0	4.2	13.1
Indexation of capital base	1.5	2.3	3.1	1.4	1.4
Depreciation	–5.1	–5.4	–5.6	–5.9	–3.4
Closing capital base	92.7	106.1	107.6	107.4	118.5
Adjustment for difference between estimated and actual capital expenditure in 2010–11 ^a					–2.7
Opening capital base at 1 July 2016					115.8

Source: AER analysis.

(a) Comprising the difference between the actual and estimated capex for 2010–11 and the return on that difference.

Table 2.2 sets out the projected roll forward of the capital base during the 2016–21 access arrangement period.

Table 2.2 AER's final decision on projected capital base roll forward for the 2016–21 access arrangement period (\$million, nominal)

	2016–17	2017–18	2018–19	2019–20	2020–21
Opening capital base	115.8	123.0	124.7	126.0	127.1
Net capex	7.9	2.7	2.4	2.5	2.6
Indexation of capital base	2.8	2.9	3.0	3.0	3.0
Depreciation	–3.5	–3.9	–4.1	–4.3	–4.6
Closing capital base	123.0	124.7	126.0	127.1	128.2

Source: AER analysis.

2.2 APTNT's revised proposal

APTNT's revised proposal submitted an opening capital base at 1 July 2016 of \$119.5 million (\$nominal).² APTNT did not adopt our draft decision to reduce the conforming capex estimate for 2015–16.

² APTNT, *Revised proposed PTRM*, January 2016.

APTNT's revised proposed capital base roll forward during the 2011–16 access arrangement period is shown in Table 2.3.

Table 2.3 APTNT's revised proposed capital base roll forward during the 2011–16 access arrangement period (\$million, nominal)

	2011–12	2012–13	2013–14	2014–15	2015–16
Opening capital base	92.1	92.7	106.1	107.6	107.4
Net capex	4.3	16.5	4.0	4.2	15.5
Indexation of capital base	1.5	2.3	3.1	1.4	2.7
Depreciation	–5.1	–5.4	–5.6	–5.9	–3.4
Closing capital base	92.7	106.1	107.6	107.4	122.2
Adjustment for 2010–11 capex ^a					–2.7
Opening capital base at 1 July 2016					119.5

Source: APTNT, *Revised proposed RFM*, January 2016.

(a) Comprising the difference between the actual and estimated capex for 2010–11 and the return on that difference.

APTNT did not adopt our draft decision on the projected closing capital base at 30 June 2021. Instead, APTNT's revised proposal submitted a projected closing capital base at 30 June 2021 of \$146.4 million (\$nominal). This value reflects its revised proposed opening capital base at 1 July 2016, forecast capex and depreciation over the 2016–21 access arrangement period. The projected roll forward of the capital base during the 2016–21 access arrangement period is shown in Table 2.4.

Table 2.4 APTNT's revised proposed projected capital base roll forward during the 2016–21 access arrangement period (\$million, nominal)

	2016–17	2017–18	2018–19	2019–20	2020–21
Opening capital base	119.5	140.0	142.0	143.5	145.0
Net capex	21.1	2.7	2.4	2.5	2.6
Indexation of capital base	3.0	3.5	3.5	3.6	3.6
Depreciation	–3.6	–4.1	–4.4	–4.6	–4.8
Closing capital base	140.0	142.0	143.5	145.0	146.4

Source: APTNT, *Revised proposed PTRM*, January 2016.

2.3 AER's assessment approach

We have not changed our assessment approach for the capital base from our draft decision. Section 2.3 of our draft decision details that approach.³

In its response to our draft decision, APTNT suggested that the AER does not have the power to undertake a further review of conforming capex in the final years of the access arrangement preceding the earlier access arrangement (in this case 2010–11).⁴ The AER assessed conforming capex for the final year of the earlier access arrangement. However, capex in this final year is only an estimate and a full assessment of the conforming capex is undertaken in the following access arrangement period once actual capex for that year is known.

2.4 Reasons for final decision

We determine APTNT's opening capital base at 1 July 2016 to be \$115.8 million (\$nominal). This value is \$3.7 million (or 3.1 per cent) lower than APTNT's revised proposed value of \$119.5 million. This difference is due to our update of the input for 2015–16 actual inflation and an amendment to the 2015–16 conforming capex estimate in the capital base roll forward.

We do not approve APTNT's projected closing capital base of \$146.4 million (\$nominal) as at 30 June 2021. We instead determine a closing capital base of \$128.2 million (\$nominal) as at 30 June 2021, a reduction of \$18.2 million (\$nominal) or 12.4 per cent from the proposed value. The main reasons for the reduction are our adjustments to the opening capital base as at 1 July 2016 (section 2.4.1), forecast net capex (attachment 6) and forecast depreciation (attachment 5).

2.4.1 Roll forward of capital base during the 2011–16 access arrangement period

We determine APTNT's opening capital base value as at 1 July 2016 to be \$115.8 million (\$nominal). This amount is \$3.7 million (or 3.1 per cent) lower than APTNT's revised value of \$119.5 million. This is because:

- We updated the inflation input for 2015–16 using actual March 2015 consumer price index (CPI) published by the Australian Bureau of Statistics.⁵
- We amended the conforming capex estimate for 2015–16.

³ AER, *Draft decision, Amadeus Gas Pipeline Access Arrangement 2016–21, Attachment 2 – Capital base*, November, 2015, pp. 9-12.

⁴ APTNT, *Amadeus Gas Pipeline, Access Arrangement Revised Proposal Response to Draft Decision Submission*, January 2016, pp. 44-45.

⁵ The March quarter CPI is used as a proxy for the June financial year in the 2011–16 access arrangement period.

In our draft decision we accepted APTNT's proposed methodology for calculating the opening capital base at 1 July 2016. However, we made a number of amendments to correct for input errors.⁶

APTNT's revised proposal adopted these amendments. APTNT also submitted that the value of the 'Return tariff payment' asset class at 1 July 2011 be set to zero and relegated to history.⁷ We accept the rounding of the input value to zero for this asset class at 1 July 2011 given the size of the amount involved (less than one cent).

Conforming capital expenditure in 2015–16

In determining the opening capital base as at 1 July 2016, we assessed whether APTNT's proposed capex amounts for the 2011–16 access arrangement are properly accounted for in the capital base roll forward. Our assessment of conforming capex is set out in attachment 6.

In our draft decision we did not accept APTNT's estimate of conforming capex for 2015–16, in particular that \$7.0 million of capex for the belowground station pipework recoating project should be deferred to the 2016–21 access arrangement period.

APTNT's revised proposal did not adopt our draft decision on this matter. Following review of the further information provided by APTNT, our final decision accepts that it is prudent to reinstate some of the amount removed from the estimate of 2015–16 conforming capex in the draft decision, as discussed in attachment 6. The final decision therefore includes \$12.6 million (\$ nominal) as the conforming capex estimate for 2015–16, which is \$2.3 million or 15.2 per cent lower than APTNT's revised proposal estimate of \$14.8 million. We will assess whether the 2015–16 actual capex is conforming as part of the next access arrangement review.

2.4.2 Projected capital base during the 2016–21 access arrangement period

We do not approve APTNT's projected capital base at 30 June 2021 in its revised proposal. Instead, we forecast APTNT's projected capital base at 30 June 2021 to be \$128.2 million (\$nominal), a reduction of \$18.2 million (\$nominal) or 12.4 per cent from APTNT's revised proposal. This results from our final decision on the inputs to the determination of the projected capital base. We have amended the inputs in the following ways:

- reduced APTNT's revised proposed opening capital base as at 1 July 2016 by \$3.7 million (\$nominal) or 3.1 per cent to reflect the changes required in this attachment

⁶ AER, *Draft decision, Amadeus Gas Pipeline Access Arrangement 2016–21, Attachment 2 – Capital base*, November, 2015, p. 13.

⁷ APTNT, *Amadeus Gas Pipeline, Access Arrangement Revised Proposal Response to Draft Decision Submission*, January 2016, pp. 47-48.

- reduced APTNT's revised proposed forecast net capex for the 2016–21 access arrangement period by \$13.1 million (\$nominal) or 42.1 per cent. Our assessment of the revised proposed forecast capex is set out in attachment 6.
- reduced APTNT's revised proposed forecast straight-line depreciation for the 2016–21 access arrangement period by \$1.1 million (\$nominal) or 5.1 per cent. Our assessment of the revised proposed forecast depreciation is set out in attachment 5.
- reduced APTNT's revised proposed forecast inflation to 2.39 per cent per annum for the 2016–21 access arrangement period from 2.5 per cent per annum. Our assessment of the revised proposed forecast inflation is set out in attachment 3. This results in a decrease to the indexation of the capital base component over the 2016–21 access arrangement period by \$2.5 million (\$nominal) or 14.5 per cent.

2.4.3 Capital base at the commencement of the 2021–26 access arrangement period

The capital base at the commencement of the 2021–26 access arrangement period will be subject to adjustments consistent with the NGR.⁸ The adjustments for APTNT include (but are not limited to) actual inflation and approved depreciation over the 2016–21 access arrangement period.

We note APTNT's revised proposal adopted our draft decision on the use of forecast depreciation (as approved in this final decision for the 2016–21 access arrangement period) for establishing the opening capital base at 1 July 2021.⁹ This approach is consistent with the approach outlined in the AER's *Access arrangement guideline*¹⁰. We therefore maintain our draft decision position on this issue for this final decision.

⁸ NGR, r. 77(2).

⁹ APTNT, *Access arrangement for the Amadeus Gas Pipeline - 1 July 2016–30 June 2021*, January 2016, p. 12.

¹⁰ AER, *Final access arrangement guideline*, March 2009, pp. 61–62.