Final Decision

APA Victorian Transmission System (VTS)

Access Arrangement 2023 to 2027

(1 January 2023 to 31 December 2027)

Attachment 2
Capital base

December 2022

AUSTRALIAN ENERGY REGULATOR

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1	9 December 2022	14

Note

This attachment forms part of the AER's final decision on the access arrangement that will apply to APA's Victorian Transmission System (VTS) for the 2023–27 access arrangement period. It should be read with all other parts of the final decision.

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.

The final decision includes the following documents:

Overview

Attachment 2 – Capital base

Attachment 3 – Rate of return

Attachment 4 – Regulatory depreciation

Attachment 5 – Capital expenditure

Attachment 6 – Operating expenditure

Attachment 7 – Corporate income tax

Attachment 8 – Operating expenditure incentive mechanism

Attachment 10 – Reference tariff variation mechanism

Attachment 12 – Demand

Contents

2 Capital base

The capital base roll forward accounts for the value of the regulated assets in APA's Victorian Transmission System (VTS) 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 capital expenditure (capex), and subtracting depreciation and other possible factors (for example, disposals).[1] Following this process, we arrive 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 blocks.

This attachment sets out our final decision on the VTS's opening capital base as at 1 January 2023 for the 2023–27 access arrangement period (2023–27 period). It also sets out our final decision on the VTS's projected capital base over the 2023–27 period.

2.1 Final decision

Opening capital base as at 1 January 2023

Our final decision approves an opening capital base value of $1262.8 million ($nominal) as at 1 January 2023 for the VTS. This amount is $19.2 million (1.5%) higher than the revised proposed value of $1243.5 million ($nominal), and $36.5 million (3.0%) higher than our draft decision.[2] The key driver of the difference is our decision on the estimated inflation for 2022 and capex updates. This is discussed further below.

To determine the opening capital base as at 1 January 2023, we have rolled forward the capital base over the 2018–22 period to determine a closing capital base value at 31 December 2022, in accordance with the RFM. This roll forward includes an adjustment at the end of the 2018–22 period to account for the difference between actual 2017 capex and the estimate approved in our 2018–22 decision.[3]

In the draft decision, we determined an opening capital base of $1226.2 million ($ nominal) as at 1 January 2023 for VTS. Our draft decision made the following changes to APA's proposed RFM for calculating the opening capital base as at 1 January 2023:

- amended the value of the 2017 actual CPI rate used for the capital base remaining asset lives calculations
- amended the 2017 as-commissioned capex for the 'Other' asset class to be consistent with the value reported in the annual RIN for that year
- amended the proposed estimated value for 2022 capex based on our capex assessment.

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

2 APA, *APA VTS Revised proposal, Roll Forward Model*, 10 August 2022.

3 The end of period adjustment will be positive (negative) if actual capex is higher (lower) than the estimate approved at the 2018–22 decision; NGR, r. 77(2)(a).

- re-allocated the 2021 and 2022 as-incurred capex associated with the Western outer ring main (WORM) project to existing asset classes approved for the 2018–22 period
- updated the proposed estimated value for 2021 capex with the actual 2021 capex sourced from the annual RIN for that year
- updated the proposed estimated value for 2021 CPI rate of 2.0% with the actual 2021 CPI rate of 3.5%
- updated the proposed estimated value for 2022 CPI rate of 2.0% with the latest estimate of 6.0% from the May 2022 Statement on Monetary Policy by the Reserve Bank of Australia (RBA)
- updated the value of the 2022 nominal vanilla WACC to be consistent with the approved 2022 return on debt update for the 2018–22 PTRM.

Our draft decision also noted that the capex and CPI inputs for 2022 were estimates. We expected APA to revise these inputs in its revised proposal.

APA's revised proposal adopted most of our draft decision amendments to the RFM but proposed three further changes:

- re-allocated $4.9 million of 2021 capex related to the WORM project from the 'Pipelines' asset class to the 'Compressors', 'City gates & Field regulators', 'Other' and 'Buildings' asset classes[4]
- updated the estimated capex amount for 2022
- added $3.3 million as an end of period adjustment to the opening capital base as at 1 January 2023 to account for the re-allocation of historical costs for assets related to linepack and spares inventory from operating expenditure (opex) to capex.

For this final decision, we accept the updates to capex for 2021 and 2022. However, we do not accept the revised proposed addition of $3.3 million to the opening capital base. We discuss our reasons in detail below.

We have assessed APA's revisions to its 2021 and 2022 capex. Our final decision is to accept the proposed re-allocation of WORM related 2021 capex between asset classes as the new allocation better reflects the cost break down of the project and is based on the most recent information. We also accept the revised 2022 estimated capex value as it is more up to date compared to the estimated value adopted in the draft decision. The details of our assessment and reasons are set out in attachment 5 of this final decision.[5] Compared to the draft decision, the revision to the 2022 capex value resulted in an increase to the opening capital base as at 1 January 2022 by $14.0 million.

We accept APA's proposed actual capex for 2018–2021 as conforming capex during the 2018–22 period. As the 2022 capex is currently an estimate, we will assess whether actual capex is conforming for this year in the next access arrangement review for the 2028–32

[4] The majority of the proposed re-allocation of 2021 capex is from the 'Pipelines' asset class with a 30 year standard life (for the 2023–27 access arrangement period) to the 'Compressor' asset class, also with a 30 year standard life. The re-allocation does not impact the total value of 2021 capex.

[5] Please see section 5.4.2 of attachment 5 of this final decision.

period.[6] We will also account for the financial impact of any difference between actual and estimated capex for 2022 at the next access arrangement review. With the amendments to the 2021 and 2022 capex, we consider that conforming capex has been properly accounted for in the capital base roll forward, consistent with the requirements of the NGR.[7]

We do not accept APA's revised proposed adjustment to the opening capital base as at 1 January 2022 to account for the historical costs of linepack and spares inventory. These issues were considered in the draft decision as part of our opex assessment, and our conclusion is that no adjustment is required.[8] We maintain this view in the final decision. Therefore, our final decision is to remove the $3.3 million adjustment to the opening capital base as at 1 January 2022 made by APA in its revised proposal. Our detailed assessment of these issues is set out in section 2.3 below.

We have also updated the estimated inflation input for 2022 in the final decision RFM based on the latest forecast from the November 2022 *Statement on Monetary Policy* by the RBA. The updated estimate of 8.0% is higher than the 6.0% set out in the revised proposal. This results in a $22.5 million ($ nominal) increase to the opening capital base as at 1 January 2023 compared to the revised proposal, all else being equal.

Table 2.1 sets out our final decision on the roll forward of APA's capital base during the 2018–22 period to determine the opening capital base as at 1 January 2022.

Table 2.1 AER's final decision on APA's capital base roll forward for the 2018–22 period ($million, nominal)

	2018	2019	2020	2021	2022[a]
Opening capital base	971.1	976.3	998.4	996.2	1045.2
Net capex[b]	24.4	44.4	32.8	62.0	181.5
Indexation of capital base[c]	17.3	18.0	8.6	34.9	83.6
Less: straight-line depreciation[d]	36.5	40.3	43.6	47.8	44.0
Interim closing capital base	976.3	998.4	996.2	1045.2	1266.4
Difference between estimated and actual capex in 2017					–2.7
Return on difference for 2017 capex					–1.0
Closing capital base as at 31 December 2022					**1262.8**

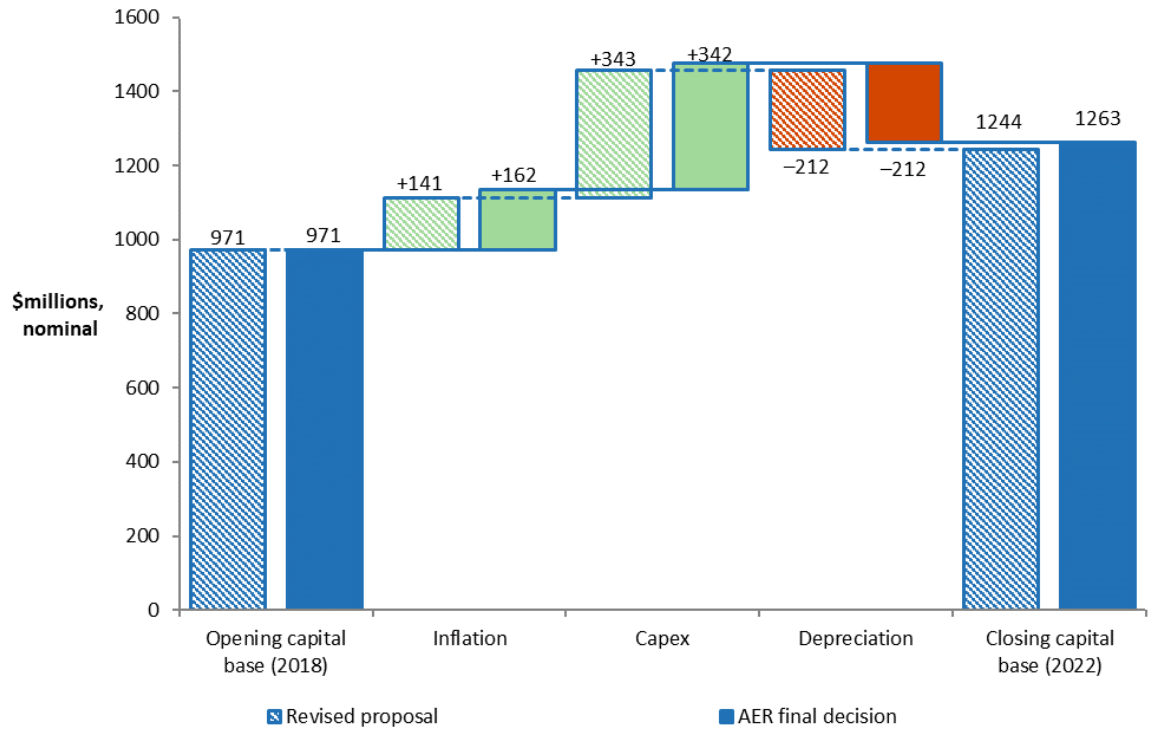
Source: AER analysis.
(a) Based on estimated capex provided by APA. We will true-up the capital base for actual capex at the next access arrangement review.
(b) As-incurred, net of disposals, and adjusted for actual CPI and half-year WACC.
(c) Includes actual CPI for 2018–2021 and estimated CPI for 2022
(d) Adjusted for actual CPI. Based on forecast as-commissioned capex.

Figure 2.1 shows the key drivers of the change in the value of APA's capital base over the 2018–22 period for this final decision. Overall, the closing capital base at the end of the 2018–22 period is 30.0% higher than the opening capital base at the start of that period, in

6 NGR, rr. 77(2)(b), 79(1).
7 NGR, rr. 77(2)(b), 79(1).
8 AER, Draft Decision, *APA Victorian Transmission System (VTS), Access Arrangement 2023 to 2027 (1 January 2023 to 31 December 2027)*, *Attachment 2, Capital base*, June 2022, pp 9–10.

nominal terms. The net capex increases the capital base by 35.2%, while inflation indexation increases it by 16.7%. Depreciation,[9] on the other hand, reduces the capital base by 21.9%.

Figure 2.1 Key drivers of changes in the capital base over the 2018–22 period—APA's revised proposal compared with AER's final decision ($ million, nominal)



Source: AER analysis.
Note: Capex is net of disposals. It is inclusive of the half-year WACC to account for the timing assumptions in the RFM.

Forecast closing capital base as at 31 December 2027

We approve a forecast closing capital base value of $1402.2 million ($nominal) as at 31 December 2027 for APA.[10] This is $4.2 million (or 0.3%) lower than the $1404.4 million ($nominal) in APA's revised proposal. This is mainly driven by our final decision to reduce APA's revised proposed capex forecast. Our final decision on the projected closing capital base reflects our changes to the opening capital base as at 1 January 2023, and our final decisions on forecast capex (attachment 5), expected inflation (attachment 3) and forecast depreciation (attachment 4).

Table 2.2 sets out our final decision on the projected roll forward of the capital base for APA over the 2023–27 period.

9 This refers to straight-line depreciation. Regulatory depreciation is straight-line depreciation less the inflation indexation of the capital base.

10 NGR, r. 78.

Table 2.2 AER's final decision on APA's projected capital base roll forward for the 2023–27 access arrangement period ($million, nominal)

	2023	2024	2025	2026	2027
Opening capital base	1262.8	1391.3	1414.2	1410.0	1400.5
Net capex[a]	140.2	44.9	22.9	20.1	22.8
Indexation of capital base	41.0	45.2	45.9	45.8	45.5
Less: straight-line depreciation	52.7	67.1	73.0	75.4	66.6
Closing capital base	**1391.3**	**1414.2**	**1410.0**	**1400.5**	**1402.2**

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

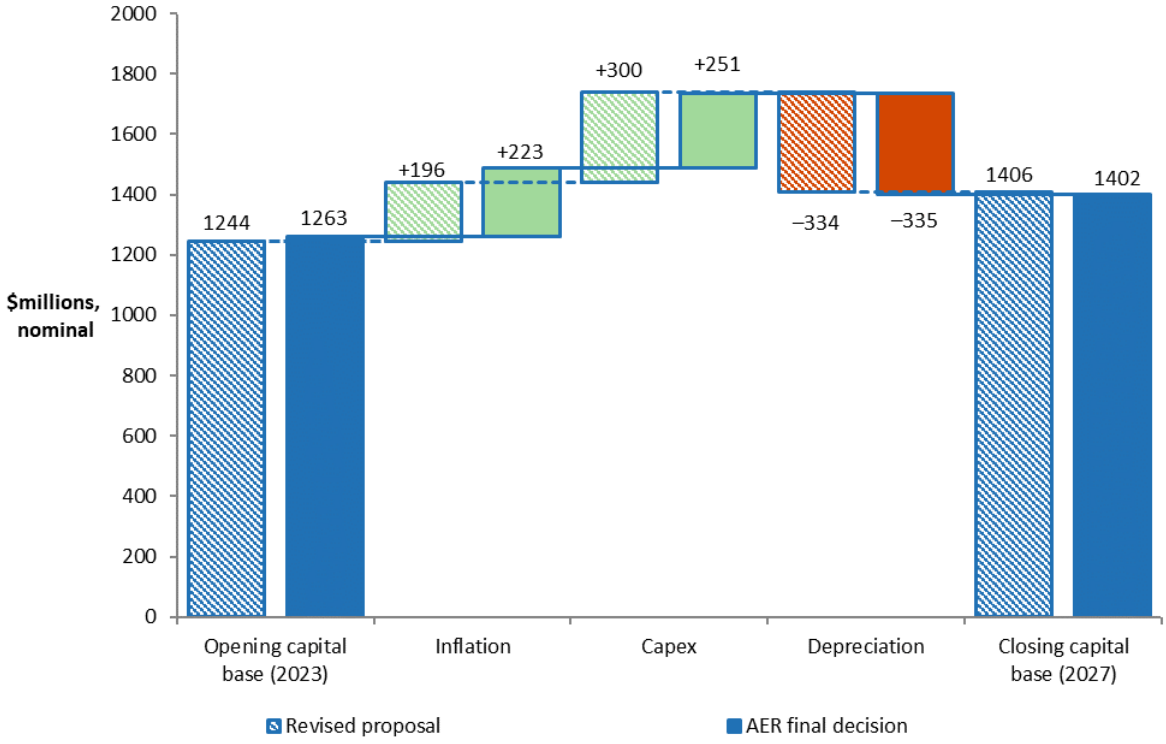
For this final decision, we confirm our draft decision position that the opening capital base as at 1 January 2028 is to be established using the approved depreciation schedules (straight-line) based on forecast capex at the asset class level.[11]

Figure 2.2 shows the key drivers of the change in APA's projected capital base over the 2023–27 period for this final decision. Overall, the closing capital base at the end of the 2023–27 period is forecast to be 11.0% higher than the opening capital base at the start of that period, in nominal terms. The approved forecast net capex increases the capital base by 19.9%, while expected inflation increases it by 17.7%. Forecast depreciation,[12] on the other hand, reduces the capital base by 26.5%.

[11] NGR, r. 90.

[12] This refers to straight-line depreciation. Regulatory depreciation is straight-line depreciation less the inflation indexation of the capital base.

Figure 2.2 Key drivers of changes in the capital base over the 2023–27 period—APA's revised proposal compared with AER's final decision ($ million, nominal)



Source: AER analysis.
Note: Capex is net of forecast disposals. It is inclusive of the half-year WACC to account for the timing assumptions in the PTRM.

Forecast net capex is the key driver for the increase in the capital base. In our final decision, we approve $233.2 million ($2022)[13] of APA's revised proposed $279.6 million ($2022) total net capex for the 2023–27 period as conforming capex under the NGR.[14] This is 16.6% lower than APA's revised proposed capex. Refer to Attachment 5 for the discussion on forecast capex.

2.2 Assessment approach

We have not changed our assessment approach to the capital base from our draft decision. Attachment 2 (section 2.3) of our draft decision details that approach.

2.3 Reasons for the final decision

In this section, we discuss our reasons for our final decision on not accepting APA's revised proposal to include historical costs for linepack and spares inventory in the opening capital base at 1 January 2023.

2.3.1 Linepack

APA's revised proposal included an adjustment of $2.6 million ($2022) to the opening capital base as at 1 January 2023 associated with the linepack in the VTS. Linepack is the base

13 This amount is net of disposals and excludes the half-year WACC adjustment.

14 NGR, r. 79.

amount of gas needed to be contained in a pipeline to maintain required pressure and operation of the pipeline and is a requirement in commissioning the pipeline.

We note that this base adjustment proposal stems from a linepack opex allowance that we have previously approved, which related to APA earning a return on this asset for both the 2013–17[15] and 2018–22[16] access arrangements. However, we also note that although linepack costs were originally proposed as a category specific forecast in APA's initial 2023–27 forecast opex proposal,[17] our draft decision did not accept this proposal.[18] APA's proposed base adjustment therefore relates to inventories and costs for linepack purchases associated with the historical opex linepack allowance.

In our draft decision, we noted that a return on capex is normally and more appropriately managed via a return on the relevant capital base, rather than through an opex allowance.[19] However, we also highlighted that our modelling shows that the opex allowances received historically by APA for linepack sufficiently compensate it for any returns that would have been received as a return on the capital base had the linepack been capitalised (as per the normal approach).[20] We did not, therefore, consider that a base adjustment was required as these costs had been sufficiently recovered.

In its response to our draft decision, APA stated that this is partially correct, and it has received, through the allowance treatment, a return on the capital invested in the linepack, but not a return of that invested capital. [21] APA further provided details of the inputs and calculation used to estimate the $2.6 million adjustment, including data that indicated there is 521 TJ of linepack.[22]

First, we highlight that our modelling was intentionally designed not to include the return of capital, as linepack is a non-depreciable asset and thus does not earn this return component.

Second, we have concerns with APA's method, or specifically an input, to estimate the value for inclusion in the opening capital base, and particularly the assumed volume of linepack. We note that APA assumed 462.1 TJ for the GasNet Transmission System, or 89% the total linepack volume.[23] Information provided in an information request response,[24] and specifically the Service Envelope Agreement with the AEMO, confirms that this 462.1 TJ

15 AER, *Access arrangement final decision – APA GasNet Australia (Operations) 2013–17 – Part 2: Attachment,* March 2013.

16 AER, *Draft Decision, APA VTS Australia Gas access arrangement 2018 to 2022 – Attachment 7 – Operating* expenditure, July 2017, pp. 15–16.

17 A PA VTS, *APA VTS – Access Arrangement 2023–27 – Forecast Opex Model, 1* December 2021.

18 AER, *Draft Decision, APA Victorian Transmission System (VTS) Access Arrangement 2023 to 2027 (1 January to 31 December 2027) – Attachment 6 Operating Expenditure,* June 2022, p. 29–30.

19 AER, *Draft Decision, APA Victorian Transmission System (VTS) Access Arrangement 2023 to 2027 (1 January to 31 December 2027) – Attachment 6 Operating Expenditure,* June 2022, p. 30.

20 AER, *Draft Decision, APA Victorian Transmission System (VTS) Access Arrangement 2023 to 2027 (1 January to 31 December 2027) – Attachment 6 Operating Expenditure,* June 2022, p. 30.

21 APA VTS, *APA Victorian Transmission System 2023–27 access arrangement. Revised proposal – Overview of Revised Proposal*, August 2022, p. 100.

22 APA VTS, *APA Victorian Transmission System 2023–27 access arrangement. Revised proposal – Overview of Revised Proposal*, August 2022, p. 100.

23 APA VTS, *APA Victorian Transmission System 2023–27 access arrangement. Revised proposal – Overview of Revised Proposal*, August 2022, p. 100.

24 APA VTS, *Information request 4 – Q5*, 2 February 2022, p. 5.

relates to linepack in the pipelines owned and operated immediately prior to 11 December 1997.[25] We do not consider this volume should therefore be included in APA's calculation, as this asset would have been valued and accounted for when the initial regulatory asset base was first established for privatisation in June 1999, including the regulation of the pipelines – GasNet Access Arrangement 1998–2002.[26] Including this volume again would therefore present a risk of double counting.

Consistent with our draft decision, we consider APA has been sufficiently compensated from past opex allowances when compared to any return on capital it would have received had linepack been capitalised (as a normal process).[27] An adjustment to the capital base is therefore not required as it would double count the linepack revenues.

2.3.2 Spares

APA's revised proposal proposed an adjustment of $0.7 million ($2022) to the opening capital base in the 'Other – short life' asset class associated with the purchase of spares. As with linepack, this relates to previous return on opex allowances for the 2013–17[28] and 2018–22[29] access arrangements for spares inventory. However, we again highlight that although spares costs were originally proposed in APA's initial opex as a category specific forecast,[30] our draft decision did not accept this category specific forecast.[31]

Consistent with our draft decision, we consider that accepting this adjustment to the capital base would create a risk of double counting.[32] As we noted in our draft decision, both the 2013–17 and the 2023–27 access arrangements' capex forecasts contained a spares allowance. For the current period, we highlighted that no spares were reported for the 2018–22 access arrangement period in capex,[33] and we also note that spares were not reported in APA's annual RINs.

APA also stated that spares are assumed to "turn over" a three-year cycle as they are used in normal operating activities.[34] Therefore, in the absence of auditable evidence supporting the purchase of spares in the current period, and discounting spares purchased in the

25 AEMO and APA GasNet (Operation & NSW), *Service Envelope Agreement*, December 2011, p. 40.

26 Final Decision, *Access Arrangement by Transmission Pipelines Australia Pty Ltd and Transmission Pipelines Australia (Assets) Pty Ltd for the Principal Transmission System –*

Access Arrangement by Transmission Pipelines Australia Pty Ltd and Transmission Pipelines Australia (Assets) Pty Ltd for the Western Transmission System –

Access Arrangement by Victorian Energy Networks Corporation for the Principal Transmission System, 6 October 1998.

27 AER, *Draft Decision, APA Victorian Transmission System (VTS) Access Arrangement 2023 to 2027 (1 January to 31 December 2027) – Attachment 6 Operating Expenditure,* June 2022, p. 30.

28 AER, *Access arrangement final decision – APA GasNet Australia (Operations) 2013–17 – Part 2: Attachment,* March 2013.

29 AER, *Draft Decision, APA VTS Australia Gas access arrangement 2018 to 2022 – Attachment 7 – Operating* expenditure, July 2017, pp. 15–16.

30 APA VTS, *APA VTS – Access Arrangement 2023–27 – Forecast Opex Model, 1* December 2021.

31 AER, *Draft Decision, APA Victorian Transmission System (VTS) Access Arrangement 2023 to 2027 (1 January to 31 December 2027) – Attachment 6 Operating Expenditure,* June 2022, p. 31.

32 AER, *Draft Decision, APA Victorian Transmission System (VTS) Access Arrangement 2023 to 2027 (1 January to 31 December 2027) – Attachment 6 Operating Expenditure,* June 2022, p. 31.

33 APA's revised proposal capex model indicates $0 expenditure for the 2018–22 period associated with spares.

34 APA VTS, *APA Victorian Transmission System 2023–27 access arrangement. Revised proposal – Overview of Revised Proposal*, August 2022, p. 102.

preceding period due to the risk of double counting the approved capex allowance, we do not consider a base adjustment is appropriate or required.

A Shortened forms

Shortened form	Extended form
AER	Australian Energy Regulator
APA / APA VTS	APA VTS Australia (Operations) Pty Ltd and APA VTS Australia (NSW) Pty Ltd
Capex	Capital Expenditure
NGL	National Gas Law
NGR	National Gas Rules
PTRM	Post-tax revenue model
RFM	Roll forward model
RIN	Regulatory Information Notice
VTS	Victorian Transmission System
WACC	Weighted average cost of capital