



DRAFT DECISION

TasNetworks Transmission Determination 2019 to 2024

Attachment 2 Regulatory asset base

September 2018

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Note

This attachment forms part of the AER's draft decision on TasNetworks' 2019–24 transmission determination. It should be read with all other parts of the draft decision.

The draft decision includes the following attachments:

Overview

Attachment 1 – maximum allowed revenue

Attachment 2 – Regulatory asset 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 – Efficiency benefit sharing scheme

Attachment 9 – Capital expenditure sharing scheme

Attachment 10 – Service target performance incentive scheme

Attachment 11 – Pricing methodology

Attachment 12 – Pass through events

Contents

Note	2-2
Contents	2-3
Shortened forms	2-4
2 Regulatory asset base	2-6
2.1 Draft decision	2-6
2.2 TasNetworks' proposal	2-8
2.3 Assessment approach	2-9
2.3.1 Interrelationships.....	2-11
2.4 Reasons for draft decision	2-14
2.4.1 Opening RAB at 1 July 2019	2-14
2.4.2 Forecast closing RAB at 30 June 2024	2-16
2.4.3 Application of depreciation approach in RAB roll forward for next reset	2-17

Shortened forms

Shortened form	Extended form
AARR	aggregate annual revenue requirement
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
ASRR	annual service revenue requirement
augex	augmentation expenditure
capex	capital expenditure
CCP	Consumer Challenge Panel
CCP13	Consumer Challenge Panel, sub panel 13
CESS	capital expenditure sharing scheme
CPI	consumer price index
DRP	debt risk premium
DMIAM	demand management innovation allowance (mechanism)
DMIS	demand management incentive scheme
EBSS	efficiency benefit sharing scheme
ERP	equity risk premium
F&A	framework and approach
MAR	maximum allowed revenue
MRP	market risk premium
NEL	national electricity law
NEM	national electricity market
NEO	national electricity objective
NER	national electricity rules
NSP	network service provider
opex	operating expenditure

Shortened form	Extended form
PTRM	post-tax revenue model
RAB	regulatory asset base
RBA	Reserve Bank of Australia
repex	replacement expenditure
RFM	roll forward model
RIN	regulatory information notice
RPP	revenue and pricing principles
SLCAPM	Sharpe-Lintner capital asset pricing model
STPIS	service target performance incentive scheme
TNSP	transmission network service provider
TUoS	transmission use of system
WACC	weighted average cost of capital

2 Regulatory asset base

The regulatory asset base (RAB) is the value of the assets used by TasNetworks to provide prescribed transmission services.¹ Our revenue determination specifies the RAB as at the commencement of the regulatory control period and the appropriate method for the indexation of the RAB.² The indexation of the RAB is one of the building blocks that form the annual building block revenue requirement for each year of the 2019–24 regulatory control period.³ We set the RAB as the foundation for determining a TNSP's revenue requirements, and use the opening RAB for each regulatory year to determine the return on capital and return of capital (regulatory depreciation) building block allowances.⁴

This attachment presents our draft decision on the opening RAB value as at 1 July 2019 for TasNetworks and our forecast RAB values for TasNetworks over the 2019–24 regulatory control period. It also presents our draft decision on whether depreciation for establishing the RAB as at the commencement of the 2024–29 regulatory control period is to be based on actual or forecast capital expenditure.

2.1 Draft decision

We determine an opening RAB value of \$1459.4 million (\$nominal) as at 1 July 2019 for TasNetworks. This value is \$8.0 million (or 0.5 per cent) lower than TasNetworks' proposed opening RAB of \$1467.4 million (\$nominal) as at 1 July 2019.⁵ While we largely accept the proposed opening RAB, we made the following revisions:

- Corrected minor input issues in TasNetworks' proposed roll forward model (RFM).
- Updated inputs to the RFM as newer information has become available since TasNetworks submitted its proposal. These updates include:
 - actual CPI for 2017–18
 - WACC input for 2018–19 following the return on debt update for that year in the 2014–19 PTRM
 - forecast straight-line depreciation for 2018–19 following the return on debt update for that year in the 2014–19 PTRM.

To determine the opening RAB as at 1 July 2019, we have rolled forward the RAB over the 2014–19 regulatory control period to determine a closing RAB value at 30 June 2019 in accordance with our RFM.⁶

¹ NER, cl. 6A.6.1(a).

² NER, cl. 6A.4.2(3A) and (4).

³ NER, cl. 6A.5.4(a)(1) and (b)(1).

⁴ NER, cl. 6A.5.4(a)(2) and (3).

⁵ TasNetworks, *Transmission and Distribution Regulatory Proposal 2019-2024*, January 2018, p. 159; This RAB value is based on as-incurred capex.

⁶ AER, *Electricity transmission network service providers: Roll forward model (version 3)*, 23 October 2015.

Table 2.1 sets out our draft decision on the roll forward of the RAB values for TasNetworks over the 2014–19 regulatory control period.

Table 2.1 AER's draft decision on TasNetworks' RAB for the 2014–19 regulatory control period (\$million, nominal)

	2014–15	2015–16	2016–17	2017–18 ^a	2018–19 ^b
Opening RAB	1410.3	1407.2	1399.3	1410.9	1430.9
Capital expenditure ^c	26.0	25.5	52.3	54.4	56.3
Inflation indexation on opening RAB ^d	24.2	23.8	20.7	26.9	35.1
Less: straight-line depreciation ^e	53.2	57.2	61.3	61.4	62.8
Interim closing RAB	1407.2	1399.3	1410.9	1430.9	1459.4
Closing RAB as at 30 June 2019					1459.4^f

Source: AER analysis.

- (a) Based on estimated capex. We will update the RAB roll forward for actual capex in the final decision.
- (b) Based on estimated capex provided by TasNetworks. We expect to update the RAB roll forward with a revised capex estimate in the final decision, and true-up the RAB for actual capex at the next reset.
- (c) As-incurred, net of disposals, and adjusted for actual CPI and half-year WACC.
- (d) We will update the RAB roll forward for actual CPI for 2018–19 in the final decision.
- (e) Adjusted for actual CPI. Based on forecast as-commissioned capex.
- (f) There is no true-up required for 2013–14 capex as the approved opening RAB value of \$1410.3 million at 1 July 2014 does not include any estimated capex. This is because 2014–15 was a transitional year for TasNetworks and we were able to include the actual capex values for 2013–14 in our final decision for the 2014–19 regulatory control period.

We determine a forecast closing RAB value at 30 June 2024 of \$1578.6 million (\$nominal). This is \$48.2 million (or 3.0 per cent) lower than the amount of \$1626.8 million (\$nominal) proposed by TasNetworks. Our draft decision on the forecast closing RAB reflects the amended opening RAB as at 1 July 2019, and our draft decisions on the forecast depreciation (attachment 4) and forecast capex (attachment 5).

Table 2.2 sets out our draft decision on the forecast RAB values for TasNetworks over the 2019–24 regulatory control period.

Table 2.2 AER's draft decision on TasNetworks' RAB for the 2019–24 regulatory control period (\$million, nominal)

	2019–20	2020–21	2021–22	2022–23	2023–24
Opening RAB	1459.4	1479.4	1518.8	1554.3	1568.4
Capital expenditure ^a	38.1	61.5	59.9	41.8	41.5
Inflation indexation on opening RAB	35.8	36.2	37.2	38.1	38.4
Less: straight-line depreciation ^b	53.9	58.3	61.6	65.9	69.6
Closing RAB	1479.4	1518.8	1554.3	1568.4	1578.6

Source: AER analysis.

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

We determine that the forecast depreciation approach is to be used to establish the opening RAB at the commencement of the 2024–29 regulatory control period for TasNetworks.⁷ We consider this approach is consistent with the capital expenditure incentive objective in that it will provide sufficient incentives for TasNetworks to achieve capex efficiency gains over the 2019–24 regulatory control period.

2.2 TasNetworks' proposal

TasNetworks used our RFM to establish an opening RAB as at 1 July 2019 and our post-tax revenue model (PTRM) to roll forward the RAB over the 2019–24 regulatory control period.

TasNetworks proposed an opening RAB value as at 1 July 2014 of \$1410.3 million (\$nominal). Rolling forward this RAB and using depreciation based on forecast capex (approved for the 2014–19 regulatory control period), TasNetworks proposed a closing RAB as at 30 June 2019 of \$1467.4 million (\$nominal). Table 2.3 sets out TasNetworks' proposed roll forward of its RAB during the 2014–19 regulatory control period.⁸

Table 2.3 TasNetworks' proposed RAB for the 2014–19 regulatory control period (\$million, nominal)

	2014–15	2015–16	2016–17	2017–18 ^a	2018–19 ^a
Opening RAB	1410.3	1407.2	1399.3	1410.9	1438.7
Capital expenditure ^b	26.0	25.5	52.3	54.6	56.3
CPI indexation on opening RAB	24.2	23.8	20.7	34.6	35.2
Less: straight-line depreciation ^c	53.2	57.2	61.3	61.4	63.1
Interim closing RAB	1407.2	1399.3	1410.9	1438.7	1467.1
Difference between estimated and actual capex in 2013–14 ^d					0.3
Return on difference for 2013–14 capex ^d					0.1
Closing RAB as at 1 July 2019					1467.4

Source: TasNetworks, *Roll Forward Model (RFM) Transmission*, January 2018.

- (a) Based on estimated capex.

⁷ AER, *Final framework and approach for TasNetworks distribution and transmission*, July 2017, p. 71.

⁸ TasNetworks, *Transmission and Distribution Regulatory Proposal 2019-2024*, January 2018, p. 159.

- (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.
- (d) TasNetworks' proposal has included an adjustment for the difference between actual capex and estimated capex for the final year of the 2009–14 regulatory period. However, this adjustment should not be required for the reasons discussed at sections 2.3 and 2.4.1.

TasNetworks proposed a forecast closing RAB as at 30 June 2024 of \$1626.8 million (\$nominal). This value reflects its proposed opening RAB, forecast capex, expected inflation, and depreciation (based on forecast capex) over the 2019–24 regulatory control period. Its projected RAB over the 2019–24 regulatory control period is shown in Table 2.4.

Table 2.4 TasNetworks' proposed RAB for the 2019–24 regulatory control period (\$million, nominal)

	2019–20	2020–21	2021–22	2022–23	2023–24
Opening RAB	1467.4	1489.7	1536.2	1583.6	1609.1
Capital expenditure ^a	40.9	68.6	71.8	53.4	49.5
Inflation indexation on opening RAB	36.0	36.5	37.6	38.8	39.4
Less: straight-line depreciation ^b	54.6	58.6	62.0	66.7	71.2
Closing RAB	1489.7	1536.2	1583.6	1609.1	1626.8

Source: TasNetworks, *Transmission and Distribution Regulatory Proposal 2019-2024*, January 2018, p. 161.

- (a) As-incurred, and net of forecast disposals. Inclusive of the half-year WACC to account for the timing assumptions in the PTRM.
- (b) Based on as-commissioned capex.

2.3 Assessment approach

We roll forward TasNetworks' RAB during the 2014–19 regulatory control period to establish the opening RAB at 1 July 2019. This value can be adjusted for any differences in estimated and actual capex.⁹ It may also be adjusted to reflect any changes in the use of the assets, with only assets used to provide prescribed transmission services to be included in the RAB.¹⁰

To determine the opening RAB, we developed an asset base RFM that a TNSP must use in preparing its revenue proposal.¹¹ The RFM rolls forward TasNetworks' RAB from the beginning of the final year of the 2009–14 regulatory control period, through the 2014–19 regulatory control period, to the beginning of the 2019–24 regulatory control period. Our approach to rolling forward the RAB generally involves an adjustment to

⁹ NER, cl. S6A.2.1(f)(3).

¹⁰ NER, cl. S6A.2.1(f)(7)–(8) and S6A.2.3.

¹¹ NER, cl. 6A.6.1(b), 6A.6.1(e) and S6A.1.3(5).

account for the difference between the actual capex and the estimate approved for the final year of the previous regulatory control period.¹² However, this adjustment is not required for establishing TasNetworks' opening RAB as at 1 July 2019 as the approved opening RAB value of \$1410.3 million at 1 July 2014 does not include any estimated capex. This is because 2014–15 was a transitional year for TasNetworks and we were able to include the actual values for 2013–14 in our final decision for the 2014–19 regulatory control period.

The roll forward for each year of the above period occurs by:

- Adding actual inflation (indexation) adjustment to the opening RAB for the relevant year. This adjustment is consistent with the inflation factor used in the annual indexation of the maximum allowed revenue (MAR).¹³
- Adding actual or estimated capex to the RAB for the relevant year.¹⁴ We review a TNSP's past capex and may exclude past capex from being rolled into the RAB where total capex exceeds the regulatory allowance.¹⁵ The details of our assessment approach for capex overspend are set out in the *Capital expenditure incentive guideline*.¹⁶ We note that under the transitional rules, our review of past capex does not apply to TasNetworks prior to 1 July 2015.¹⁷ Also, the review of past capex does not include the last two years of the 2014–19 regulatory control period—these will instead be reviewed at the next reset.¹⁸ We check actual capex amounts against audited regulatory accounts data and generally accept the capex reported in those accounts in rolling forward the RAB.¹⁹ However, there may be instances where adjustments are required to the annual regulatory accounts data.²⁰
- Subtracting depreciation from the RAB for the relevant year, calculated in accordance with the rates and methodologies allowed (if any) in the transmission determination for TasNetworks' 2014–19 regulatory control period.²¹ Depreciation based on forecast or actual capex can be used to roll forward the RAB.²² For this draft decision, we use depreciation based on forecast capex for rolling forward the

¹² The end of period adjustment will be positive (negative) if actual capex is higher (lower) than the estimate approved at the 2014–18 determination.

¹³ NER, cl. 6A.6.1(e)(3).

¹⁴ NER, cl. S6A.2.1(f)(4).

¹⁵ NER, cl. S6A.2.2A. Under the NER, cl S6A.2.2A(b), the exclusion of inefficient capex could only come from three areas: overspend in capex, margin paid to third party and capitalisation of opex as defined in cl. S6A.2.2A (c), (d) and (e) of the NER.

¹⁶ AER, *Capital expenditure incentive guideline*, November 2013, pp. 12–20.

¹⁷ NER, cl.11.58.5 (a); AER, *Explanatory statement – capital expenditure incentive guideline*, November 2013, p. 58.

¹⁸ NER, cl. S6A.2.2A(a1). The two year lag ensures that actual capex (instead of estimated capex) is available when the review of past capex commences.

¹⁹ We will update any estimated capex with actual capex at the time of the next reset.

²⁰ For example, we make adjustment for movements in provisions if the actual capex amounts reported in the RIN include capitalised provisions.

²¹ NER, cl. S6A.2.1(f)(5).

²² NER, cl. 6A.4.2(a1).

RAB for TasNetworks' 2014–19 regulatory control period.²³ Depreciation based on forecast capex will also be used for the 2019–24 regulatory control period RAB roll forward at the next reset.²⁴

- Subtracting any gross proceeds for asset disposals for the relevant year from capex to be added to the RAB.²⁵ We check these amounts against audited regulatory accounts data.

These annual adjustments give the closing RAB for any particular year, which then becomes the opening RAB for the following year. Through this process, the RFM rolls forward the RAB to the end of the 2014–19 regulatory control period. The PTRM used to calculate the annual building block revenue requirement for the 2019–24 regulatory control period generally adopts the same RAB roll forward approach as the RFM although the adjustments to the RAB are based on forecasts, rather than actual amounts.²⁶

The opening RAB for the 2024–29 regulatory control period can be determined using depreciation based either on forecast or actual capex incurred during the 2019–24 regulatory control period.²⁷ To roll forward the RAB using depreciation based on forecast capex, we would use the forecast depreciation contained in the PTRM for the 2019–24 regulatory control period, adjusted for actual inflation. If the approach to roll forward the RAB using depreciation based on actual capex was adopted, we would recalculate the depreciation based on actual capex incurred during the 2019–24 regulatory control period.

Our decision on whether to use actual or forecast depreciation must be consistent with the capex incentive objective. We have regard to:²⁸

- the incentives the service provider has to undertake efficient capex
- substitution possibilities between assets with different lives and the relative benefits of each
- the extent of overspending and inefficient overspending relative to the allowed forecast
- the capex incentive guideline
- the capital expenditure factors.

2.3.1 Interrelationships

²³ The use of forecast depreciation is consistent with the depreciation approach established in the transmission determination for the 2014–19 regulatory control period for TasNetworks. See AER, *TasNetworks transmission determination 2015–19*, April 2015, p. 14.

²⁴ Refer to section 2.4.3 for the reasons.

²⁵ NER, cl. S6A.2.1(f)(6).

²⁶ NER, cl. S6A.2.4(c).

²⁷ NER, cl. S6A.2.2B(a).

²⁸ NER, cl. S6A.2.2B(b) and (c).

The RAB is an input into the determination of the return on capital and depreciation (return of capital) building block allowances.²⁹ Factors that influence the RAB will therefore flow through to these building block components and the annual building block revenue requirement. Other things being equal, a higher RAB increases both the return on capital and depreciation allowances.

The RAB is determined by various factors, including:

- the opening RAB (meaning the value of existing assets at the beginning of the regulatory control period)
- net capex³⁰
- depreciation
- indexation adjustment – so the RAB is presented in nominal terms, consistent with the rate of return.

The opening RAB depends on the value of existing assets and will depend on actual net capex, actual inflation outcomes and depreciation in the past.

The RAB when projected to the end of the regulatory control period increases due to both forecast new capex and the indexation adjustment. The size of the indexation adjustment depends on expected inflation (which also affects the nominal rate of return or WACC) and the size of the RAB at the start of each year.

Depreciation reduces the RAB. The depreciation allowance depends on the size of the opening RAB, the forecast net capex and depreciation schedules applied to the assets. By convention, the indexation adjustment is also offset against depreciation to prevent double counting of inflation in the RAB and WACC, which are both presented in nominal terms. This reduces the depreciation building block that feeds into the annual building block revenue requirement.

We maintain the RAB in real terms by indexing for inflation.³¹ A nominal rate of return (WACC) is multiplied by the opening RAB to produce the return on capital building block.³² To prevent the double counting of inflation through the nominal WACC and indexed RAB,³³ the regulatory depreciation building block has an offsetting reduction for indexation of the RAB.³⁴ Indexation of the RAB and the offsetting adjustment made

²⁹ The size of the RAB also impacts the benchmark debt raising cost allowance. However, this amount is usually relatively small and therefore not a significant determinant of revenues overall.

³⁰ Net capex is gross capex less disposals. The rate of return or WACC also influences the size of the capex. This is because capex is not depreciated in the year it is first incurred, but added to the RAB at the end of the year. Instead, the capex amount is escalated by half a WACC to arrive at an end of year value. It then begins depreciating the following year.

³¹ NER, cl. 6A.5.4(b)(1) and 6A.6.1(e)(3).

³² NER, cl. 6A.6.2(a) and 6A.6.2(d)(2).

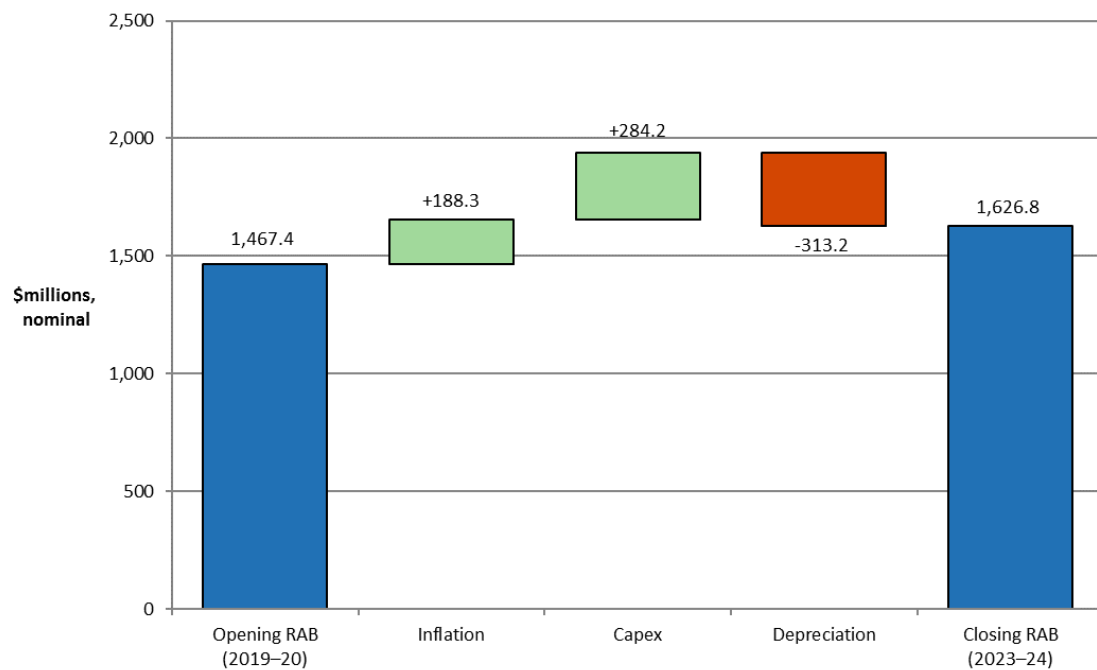
³³ NER, cl. 6A.5.4(b)(1)(ii).

³⁴ If the asset lives are extremely long, such that the RAB depreciation rate is lower than the inflation rate, then negative regulatory depreciation can emerge. The indexation adjustment is greater than the RAB depreciation in

to depreciation results in smoother revenue recovery profile over the life of an asset than if the RAB was un-indexed. If the RAB was un-indexed, there would be no need for an offsetting adjustment to the depreciation calculation of total revenue. This alternative approach provides for overall revenues being higher early in the asset's life (as a result of more depreciation being returned to the TNSP) and lower in the future—producing a steeper downward sloping profile of total revenue.³⁵ The implications of an un-indexed RAB are discussed further in attachment 4.

Figure 2.1 shows the key drivers of the changes in the RAB over the 2019–24 regulatory control period as proposed by TasNetworks. Overall, the closing RAB at the end of the 2019–24 regulatory control period would be 10.9 per cent higher than the opening RAB at the start of that period based on the proposal, in nominal terms. The proposed forecast net capex increases the RAB by 19.4 per cent, while expected inflation increases it by 12.8 per cent. Forecast depreciation, on the other hand, reduces the RAB by 21.3 per cent.

Figure 2.1 Key drivers of changes in the RAB (\$million, nominal)



Source: TasNetworks - *Post Tax Revenue Model (PTRM) Transmission*, January 2018.

TasNetworks' proposed forecast depreciation for the 2019–24 regulatory control period is \$313.2 million (\$nominal). We have largely accepted TasNetworks' depreciation proposal, subject to some input updates and minor modelling corrections, as it satisfies

such circumstances. Please also refer to section 4.3.1 of attachment 4 of this draft decision for further explanation of the offsetting adjustment to the depreciation.

³⁵ A change of approach from an indexed RAB to an un-indexed RAB would result in an initial step change increase in revenues to preserve NPV neutrality.

the requirements of the NER in terms of the assigned asset lives. This is discussed in attachment 4. The depreciation amount largely depends on the opening RAB, which in turn depends on capex in the past.³⁶

However, we do have concerns with the size of the forecast capex, the largest driver of the increase in the RAB over the 2019–24 regulatory control period, proposed by TasNetworks. In this draft decision, we have reduced TasNetworks' proposed forecast capex by \$37.5 million (\$2018–19), or 14.4 per cent over the 2019–24 regulatory control period.³⁷ Submissions from CCP13 and Tasmanian Small Business Council raised concerns over the potential size of the RAB should TasNetworks' proposed contingent projects trigger.³⁸ Our review of TasNetworks' forecast capex (including contingent projects) is set out in attachment 5 of this draft decision.

A ten per cent increase in the opening RAB causes revenues to increase by about 7.4 per cent. However, the impact on revenues of the annual change in RAB depends on the source of the RAB change, as some drivers affect more than one building block cost.³⁹

2.4 Reasons for draft decision

We determine an opening RAB value for TasNetworks of \$1459.4 million (\$nominal) as at 1 July 2019, a reduction of \$8.0 million (\$nominal) or 0.5 per cent from the proposed value. We forecast a closing RAB value of \$1578.6 million by 30 June 2024. This represents a reduction of \$48.2 million, or 3.0 per cent compared with TasNetworks' proposal. The reasons for our draft decision are discussed below.

2.4.1 Opening RAB at 1 July 2019

We determine an opening RAB value of \$1459.4 million (\$nominal) as at 1 July 2019 for TasNetworks. This value is \$8.0 million (or 0.5 per cent) lower than TasNetworks' proposed opening RAB of \$1,467.4 million (\$nominal) as at 1 July 2019.⁴⁰

³⁶ At the time of this draft decision, the roll forward of TasNetworks' RAB includes estimated capex values for 2017–18 and 2018–19. We will update the 2017–18 estimated capex with actuals in the final decision. We may also update the 2018–19 estimated capex with a revised estimate in the final decision.

³⁷ This amount is net of asset disposals and equity raising costs and excludes half-year WACC adjustment.

³⁸ Consumer Challenge Panel, CCP Sub-Panel No. 13, *Advice to the AER, Response to proposals from TasNetworks for a revenue reset for the 2019–24 regulatory period*, 16 May 2018, p. 29; Tasmanian Small Business Council, *TasNetworks transmission revenue and distribution regulatory proposal*, May 2018, p. 70.

³⁹ If capex causes the RAB increase—return on capital, depreciation, and debt raising costs all increase too. If a reduction in depreciation causes the RAB increase, revenue could increase or decrease. In this case, the higher return on capital is offset (perhaps more than offset) by the reduction in depreciation allowance. Inflation naturally increases the RAB in nominal terms. However, the real impact from changing the inflation forecast is inconsequential as revenues are updated annually by actual inflation and the X factor, which is generally unaffected by the assumed forecast inflation rate.

⁴⁰ TasNetworks, *Transmission and Distribution Regulatory Proposal 2019-2024*, January 2018, p. 159; This RAB value is based on as-incurred capex.

To determine the opening RAB for TasNetworks as at 1 July 2019 we have rolled forward the RAB over the 2014–19 regulatory control period to determine a closing RAB value as at 30 June 2019. In doing so we reviewed the key inputs of TasNetworks' proposed RFM, such as actual inflation, rate of return, gross capex values, asset disposal values, forecast depreciation amounts and asset lives. We found these were generally correct and they reconcile with relevant data sources such as ABS data, regulatory accounts and the 2014–19 decision models.⁴¹ However, we identified a number of the proposed inputs for asset disposals required corrections. We also consider some of TasNetworks' proposed RFM inputs require updating with newly available data.

Therefore, we have made the following amendments to TasNetworks' proposed RFM inputs:

- Accounted for and removed the difference in actual and estimated capex for 2013–14 by correcting the asset disposals for 'Other – short life (9)', 'Other – short life (4)' and 'Land and Easements' for that year to be consistent with the values approved in the RFM for the 2014–19 determination. As 2014–15 was a transitional year for TasNetworks, we had accounted for actual values for that year and so there should not have been any adjustments arising from the difference in actual and estimated capex in the proposed RFM. This is discussed further in section .⁴²
- Corrected 'as de-commissioned' asset disposals for the 'Other – short life (9)' asset class for 2014–15 to 2016–17 to be consistent with 'as incurred' asset disposal values.⁴³
- Updated the inflation input for 2017–18 using the actual December 2017 consumer price index (CPI) published by the Australian Bureau of Statistics.⁴⁴
- Updated the WACC input and forecast straight-line depreciation for 2018–19 following the return on debt update for that year in the 2014–19 PTRM.

We also consider the extent to which our roll forward of the RAB to 1 July 2019 contributes to the achievement of the capital expenditure incentive objective.⁴⁵ TasNetworks proposed that our review of past capex applies from 2014–15.⁴⁶ However, we note that under the transitional rules, in making this transmission determination, the review of past capex does not apply to TasNetworks prior to 1 July

⁴¹ At the time of this draft decision, the roll forward of TasNetworks' RAB includes estimated capex values for 2017–18 and 2018–19. We will update the 2017–18 estimated capex with actuals in the final decision. We may also update the 2018–19 estimated capex with a revised estimate in the final decision.

⁴² TasNetworks, *Response to information request #012 – Transmission RFM, PTRM & depreciation models*, April 2018.

⁴³ TasNetworks, *Response to information request #012 – Transmission RFM, PTRM & depreciation models*, April 2018.

⁴⁴ In our final decision we will update the estimate for 2018–19 expected inflation with actual CPI.

⁴⁵ NER, cl. 6A.14.2(b).

⁴⁶ TasNetworks, *Transmission and Distribution Regulatory Proposal 2019-2024*, January 2018, p. 158.

2015.⁴⁷ Given this, the review period for this transmission determination is limited to 2015–16 and 2016–17 capex.⁴⁸ TasNetworks' actual capex incurred in 2015–16 and 2016–17 is below the forecast allowance set at the previous transmission determination. Therefore, the overspending requirement for an efficiency review of past capex is not satisfied.⁴⁹ For the reasons discussed in attachment 5, the capex incurred in those years is consistent with the capital expenditure criteria and can therefore be included in the RAB.

Further, for the purposes of this draft decision, we have included TasNetworks' estimated capex in 2017–18 and 2018–19 in the RAB roll forward to 1 July 2019. At the next reset, the 2017–18 and 2018–19 capex will form part of the review period for whether past capex should be excluded for inefficiency reasons.⁵⁰ Our RAB roll forward applies the incentive framework approved in the previous transmission determination, which included the use of a forecast depreciation approach in combination with the application of the CESS.⁵¹ As such, we consider that the 2014–19 RAB roll forward contributes to an opening RAB (as at 1 July 2019) that includes capex that reflects prudent and efficient costs, in accordance with the capital expenditure criteria.⁵²

2.4.2 Forecast closing RAB at 30 June 2024

We forecast a closing RAB value of \$1578.6 million by 30 June 2024 for TasNetworks, which represents a reduction of \$48.2 million (or 3.0 per cent) to TasNetworks' proposal. This reduction reflects our draft decision on the inputs for determining the forecast RAB in the PTRM.

The submissions from the CCP13 and Tasmanian Small Business Council on TasNetworks' proposal raised concerns with the potential increase to the size of TasNetworks' RAB over the 2019–24 regulatory control period should its contingent projects trigger.⁵³ The change in the size of the RAB depends on our assessment of its various components. Inflation and capex increase the RAB, while depreciation reduces it.

To determine the forecast RAB value for TasNetworks, we amended the following PTRM inputs:

⁴⁷ NER, cl. 11.58.5(a).

⁴⁸ NER, cl. S6A.2.2A(a1).

⁴⁹ NER, cl. S6A.2.2A(c).

⁵⁰ Here, 'inefficiency' of past capex refers to three specific assessments (labelled the overspending, margin and capitalisation requirements) detailed in NER, cl. S6A.2.2A. The details of our ex post assessment approach for capex are set out in AER, *Capital expenditure incentive guideline*, November 2013, pp. 12–20.

⁵¹ AER, *Final decision: TasNetworks transmission determination 2015-19*, April 2015, p. 14.

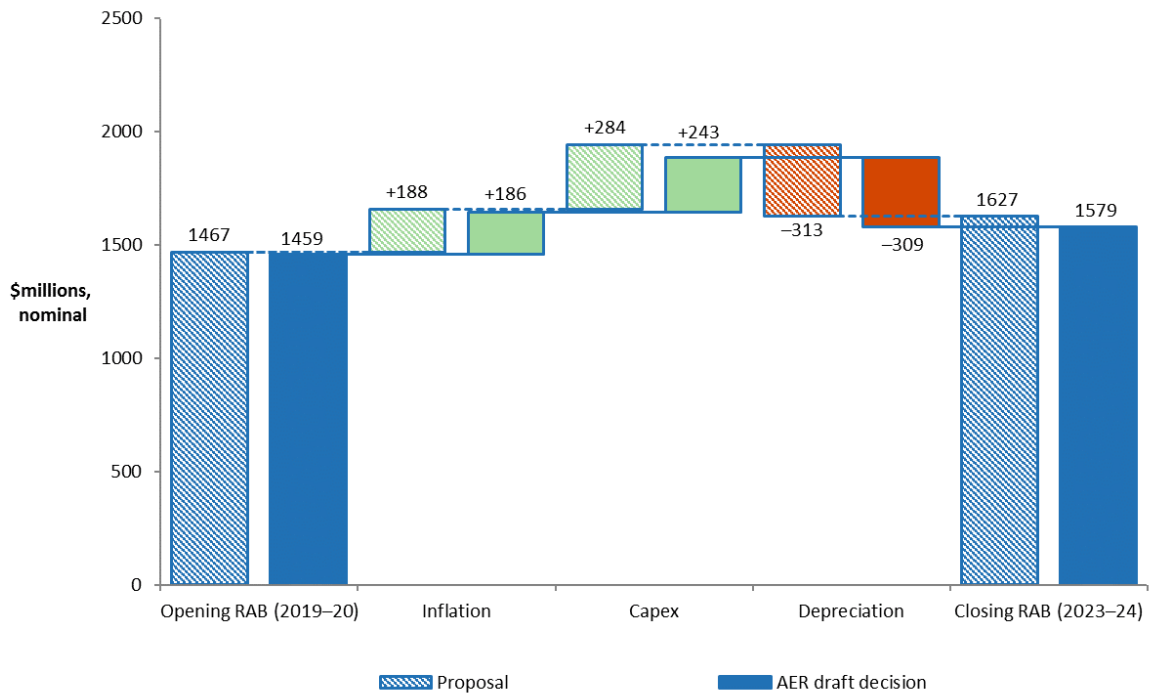
⁵² NER, cll. 6A.5A(a), 6A.6.7(a), 6A.6.7(c) and 6A.14.2(b).

⁵³ Consumer Challenge Panel, CCP Sub-Panel No. 13, *Advice to the AER, Response to proposals from TasNetworks for a revenue reset for the 2019–24 regulatory period*, 16 May 2018, p. 29; Tasmanian Small Business Council, *TasNetworks transmission revenue and distribution regulatory proposal*, May 2018, p. 70.

- We reduced TasNetworks' proposed opening RAB as at 1 July 2019 by \$8.0 million (\$nominal) or 0.5 per cent (section).
- We reduced TasNetworks' proposed forecast capex for the 2019–24 regulatory control period by \$37.5 million (\$nominal) or 14.4 per cent (attachment 5).
- We reduced TasNetworks' proposed forecast straight-line depreciation for the 2019–24 regulatory control period by \$3.9 million or 1.2 per cent (attachment 4).

Figure 2.2 shows the key drivers of the change in TasNetworks' RAB over the 2019–24 regulatory control period for this draft decision. Overall, the closing RAB at the end of the 2019–24 regulatory control period is forecast to be 8.2 per cent higher than the opening RAB at the start of that period, in nominal terms. The approved forecast net capex increases the RAB by 16.6 per cent, while expected inflation increases it by 12.7 per cent. Forecast depreciation, on the other hand, reduces the RAB by 21.2 per cent.

Figure 2.2 Key drivers of changes in the RAB – TasNetworks' proposal compared with AER's draft 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.

2.4.3 Application of depreciation approach in RAB roll forward for next reset

We determine that the forecast depreciation approach using forecast capex is to be used to establish the opening RAB at the commencement of the 2024–29 regulatory control period for TasNetworks. We consider this approach will provide sufficient

incentives for TasNetworks to achieve capex efficiency gains over the 2019–24 regulatory control period.⁵⁴

TasNetworks has not specified in its proposal what depreciation approach to use in the roll forward of the RAB for the commencement of its 2024–29 regulatory control period. However, we consider that the forecast depreciation approach should be used to establish the opening RAB as at 1 July 2024. We note that this approach is consistent with the AER's *Framework and approach*.⁵⁵

We stated in the *Framework and approach* that depreciation used to roll forward the RAB could be based on either:⁵⁶

- actual capex incurred during the regulatory control period (actual depreciation). We roll forward the RAB based on actual capex less the depreciation on the actual capex incurred by the distributor, or
- the capex allowance forecast at the start of the regulatory control period (forecast depreciation). We roll forward the RAB based on actual capex less the depreciation on the forecast capex approved for the regulatory control period.

We have used forecast depreciation for this draft decision when rolling forward the opening RAB at the commencement of the 2019–24 regulatory control period (section 2.4.1). The use of forecast depreciation to establish the opening RAB for the commencement of the 2024–29 regulatory control period at the next reset therefore maintains the current approach.

As discussed in attachment 9, TasNetworks is currently subject to the CESS for the 2014–19 regulatory control period, but not in the transitional 2014–15 regulatory year. We will continue to apply the CESS to TasNetworks over the 2019–24 regulatory control period. We consider that the CESS will provide sufficient incentives for TasNetworks to achieve capex efficiency gains over that period. We are satisfied that the use of a forecast depreciation approach in combination with the application of the CESS and our other ex post capex measures are sufficient to achieve the capex incentive objective.⁵⁷

⁵⁴ NER, cl.6A.14.1(5F) and S6A.2.2B.

⁵⁵ AER, *Final framework and approach for TasNetworks distribution and transmission*, July 2017, p. 71.

⁵⁶ AER, *Final framework and approach for TasNetworks distribution and transmission*, July 2017, p. 70.

⁵⁷ Our ex post capex measures are set out in the capex incentives guideline, AER, *Capital expenditure incentive guideline for electricity network service providers*, November 2013, pp. 13–19, 20–21. The guideline also sets out how all our capex incentive measures are consistent with the capex incentive objective.