DRAFT DECISION

SA Power Networks Distribution Determination 2020 to 2025

Attachment 2 Regulatory asset base

October 2019

AUSTRALIAN ENERGY REGULATOR

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Note

This attachment forms part of the AER's draft decision on the distribution determination that will apply to SA Power Networks for the 2020–2025 regulatory control period. It should be read with all other parts of the draft decision.

The draft decision includes the following attachments:

Overview

Attachment 1 – Annual revenue requirement

Attachment 2 – Regulatory asset base

Attachment 3 – Rate of return

Attachment 4 – Regulatory depreciation

Attachment 5 – Capital expenditure

Attachment 6 – Operating expenditure

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Shortened forms

Shortened form	Extended form
AER	Australian Energy Regulator
capex	capital expenditure
CCP 14	Consumer Challenge Panel, sub-panel 14
CESS	capital expenditure sharing scheme
CPI	consumer price index
distributor	distribution network service provider
F&A	framework and approach
NEL	national electricity law
NEM	national electricity market
NER or the rules	national electricity rules
NSP	network service provider
opex	operating expenditure
PTRM	post-tax revenue model
RAB	regulatory asset base
RFM	roll forward model
RIN	regulatory information notice
WACC	weighted average cost of capital

2 Regulatory asset base

As part of our distribution determination, we make a decision on SA Power Networks' opening regulatory asset base (RAB) as at 1 July 2020.[1] The RAB is the value of those assets that are used by SA Power Networks to provide standard control services. We use the RAB at the start of each regulatory year to determine the return of capital (regulatory depreciation) and return on capital building block allowances.

This attachment presents our draft decision on the opening RAB value as at 1 July 2020 for SA Power Networks and roll forward of the forecast RAB over the 2020–25 regulatory control period. It also presents our draft decision on whether depreciation for establishing the RAB as at the commencement of the 2025–30 regulatory control period is to be based on actual or forecast capital expenditure.[2]

2.1 Draft decision

We determine an opening RAB value of $4393.3 million as at 1 July 2020 for SA Power Networks. This value is $24.4 million (or 0.6 per cent) lower than SA Power Networks' proposed opening RAB of $4417.7 million ($ nominal) as at 1 July 2020.[3] While we largely accept the proposed methodology for calculating the opening RAB, we made the following revisions to SA Power Networks' proposed inputs to the roll forward model (RFM):

- Corrected the actual consumer price index (CPI) input for 2014–15.
- Corrected the adjustment for movements in capitalised provisions over the 2015–20 regulatory control period.
- Reversed the 2017–18 actual capex inputs for 'Land' and 'Easements' asset classes so they matched the allocations set out in the annual reporting regulatory information notice.
- Updated inputs as newer information has become available since SA Power Networks submitted its proposal. These updates include:
    - actual CPI input for 2018–19 and updated inflation estimate for 2019–20
    - weighted average cost of capital (WACC) input for 2019–20 following the return on debt update for that year in the 2015–20 post-tax revenue model (PTRM)
    - forecast straight-line depreciation for 2019–20 following the return on debt update for that year in the 2015–20 PTRM

1 NER, cl. 6.12.1(6).
2 NER, cl. 6.12.1(18).
3 SA Power Networks, *2020–25 Regulatory proposal – Attachment 2 – Regulatory asset base*, 31 January 2019, p. 9.

- equity raising cost input for 2015–16 following the 2019–20 return on debt update in the 2015–20 PTRM.

To determine the opening RAB as at 1 July 2020, we have rolled forward the RAB over the 2015–20 regulatory control period to determine a closing RAB value at 30 June 2020 in accordance with our RFM.[4] This roll forward includes an adjustment at the end of the 2015–20 regulatory control period to account for the difference between actual 2014–15 capex and the estimate approved in the 2015–20 determination.[5]

Table 2.1 sets out our draft decision on the roll forward of SA Power Networks' RAB over the 2015–20 regulatory control period.

Table 2.1 AER's draft decision on SA Power Networks' RAB for the 2015–20 regulatory control period ($ million, nominal)

	2015–16	2016–17	2017–18	2018–19[a]	2019–20[b]
Opening RAB	3778.4	3884.9	3931.8	4088.9	4246.4
Capital expenditure[c]	251.7	274.3	374.2	388.3	400.7
Inflation indexation on opening RAB[d]	63.8	57.3	75.1	73.0	84.9
Less: straight-line depreciation[e]	208.9	284.8	292.2	303.7	318.3
Interim closing RAB	3884.9	3931.8	4088.9	4246.4	4413.7
Difference between estimated and actual capex in 2014–15					–15.7
Return on difference for 2014–15 capex					–4.7
Closing RAB as at 30 June 2020					**4393.3**

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 SA Power Networks. 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) Net of disposals and capital contributions, and adjusted for actual CPI and half-year WACC.

(d) We will update the RAB roll forward for actual CPI for 2019–20 in the final decision.

(e) Adjusted for actual CPI. Based on forecast capex.

We determine a forecast closing RAB value of $4558.9 million ($ nominal) as at 30 June 2025 for SA Power Networks. This is $500.7 million (or 9.9 per cent) lower than SA Power Networks' proposed closing RAB value of $5059.6 million.[6] Our draft decision on the forecast closing RAB value reflects the amended opening RAB as at 1

[4] AER, *Electricity distribution network service providers: Roll forward model (version 2),* 15 December 2016.

[5] The end of period adjustment will be positive (negative) if actual capex is higher (lower) than the estimate approved at the 2015–20 determination.

[6] SA Power Networks, *2020–25 Regulatory proposal – Support document – SAPN - 1.1 - PTRM Model - Public,* 31 January 2019.

July 2020, and our draft decisions on the expected inflation rate (attachment 3), forecast depreciation (attachment 4) and forecast capex (attachment 5).[7]

Table 2.2 sets out our draft decision on the forecast RAB values for SA Power Networks over the 2020–25 regulatory control period.

Table 2.2 AER's draft decision on SA Power Networks' RAB for the 2020–25 regulatory control period ($ million, nominal)

	2020–21	2021–22	2022–23	2023–24	2024–25
Opening RAB	4393.3	4447.5	4502.9	4528.4	4542.8
Capital expenditure[a]	274.6	287.6	269.2	264.0	258.1
Inflation indexation on opening RAB	107.6	109.0	110.3	110.9	111.3
Less: straight-line depreciation	327.9	341.1	354.0	360.6	353.3
Closing RAB	**4447.5**	**4502.9**	**4528.4**	**4542.8**	**4558.9**

Source: AER analysis.

(a) Net of forecast disposals and capital contributions. In accordance with the timing assumptions of the 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.

We accept SA Power Networks' proposal that the forecast depreciation approach is to be used to establish the opening RAB at the commencement of the 2025–30 regulatory control period.[8] We consider this approach is consistent with our Framework and approach paper.[9] It is also consistent with the capital expenditure incentive objective in that it will provide sufficient incentives for SA Power Networks to achieve capex efficiency gains over the 2020–25 regulatory control period.

2.2 SA Power Networks' proposal

SA Power Networks used our RFM to establish the opening RAB as at 1 July 2020 and our PTRM to roll forward the RAB over the 2020–25 regulatory control period.

SA Power Networks proposed an opening RAB value as at 1 July 2015 of $3778.4 million ($ nominal). Rolling forward the RAB and using depreciation based on forecast capex approved for the 2015–20 regulatory control period, SA Power Networks proposed a closing RAB value of $4417.7 million ($ nominal) as at 30 June 2020.

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7 Capex enters the RAB net of forecast disposals. It includes equity raising costs (where relevant) and the half-year WACC to account for the timing assumptions in the PTRM. Therefore, our draft decision on the forecast RAB also reflects our amendments to the rate of return for the 2020–25 regulatory control period (attachment 3).

8 NER, cl. 6.12.1(18).
SA Power Networks, *2020–25 Regulatory proposal – Attachment 2 – Regulatory asset base*, 31 January 2019, p. 10.

9 AER, *Final framework and approach for SA Power Networks – Regulatory control period commencing 1 July 2020, July 2018*, p. 83.

Table 2.3 sets out SA Power Networks' proposed roll forward of its RAB during the 2015–20 regulatory control period.

Table 2.3 SA Power Networks' proposed RAB for the 2015–20 regulatory control period ($ million, nominal)

	2015–16	2016-17	2017-18	2018–19[a]	2019–20[a]
Opening RAB	3778.4	3881.9	3933.1	4093.2	4260.1
Capital expenditure[b]	248.7	278.7	377.3	388.7	401.3
Inflation indexation on opening RAB	63.8	57.3	75.1	81.9	95.9
Less: straight-line depreciation[c]	208.9	284.8	292.3	303.7	319.0
Interim closing RAB	3881.9	3933.1	4093.2	4260.1	4438.3
Difference between estimated and actual capex in 2014–15					–15.7
Return on difference for 2014–15 capex					–4.8
Closing RAB as at 30 June 2020					**4417.7**

Source: SA Power Networks, *2020–25 Regulatory proposal – Attachment 2 – Regulatory asset base,* 31 January 2019, p. 9.

(a) Based on estimated capex.

(b) Net of disposals and capital contributions, and adjusted for CPI and half-year WACC.

(c) Adjusted for actual CPI. Based on forecast capex.

SA Power Networks proposed a forecast closing RAB value as at 30 June 2025 of $5059.6 million ($ nominal). This value reflects its proposed opening RAB value, forecast capex, expected inflation, and depreciation (based on forecast capex) over the 2020–25 regulatory control period. Its projected RAB over the 2020–25 regulatory control period is shown in Table 2.4.

Table 2.4 SA Power Networks' proposed RAB for the 2020–25 regulatory control period ($ million, nominal)

	2020–21	2021–22	2022–23	2023–24	2024–25
Opening RAB	4417.7	4571.9	4732.1	4844.8	4951.8
Capital expenditure[a]	371.5	394.0	364.7	371.6	373.4
Inflation indexation on opening RAB	109.1	112.9	116.9	119.7	122.3
Less: straight-line depreciation	326.4	346.7	368.9	384.3	387.9
Closing RAB	**4571.9**	**4732.1**	**4844.8**	**4951.8**	**5059.6**

Source: SA Power Networks, *2020–25 Regulatory proposal – Attachment 2 – Regulatory asset base*, 31 January 2019, p. 10.

(a) Net of forecast disposals and capital contributions. Inclusive of the half-year WACC to account for the timing assumptions in the PTRM.

SA Power Networks proposed to apply a forecast depreciation approach to establish the RAB at the commencement of the 2025–30 regulatory control period, consistent with the approach set out in our Framework and approach paper.[10]

2.3 Assessment approach

We roll forward SA Power Networks' RAB over the 2015–20 regulatory control period to establish the opening RAB at 1 July 2020. This value can be adjusted for any differences in estimated and actual capex.[11] It may also be adjusted to reflect any changes in the use of the assets, with only assets used to provide standard control services to be included in the RAB.[12]

To determine the opening RAB, we developed an asset base RFM that a DNSP must use in preparing its regulatory proposal.[13] We used the RFM to roll forward SA Power Networks' RAB from the beginning of the final year of the 2010–15 regulatory control period,[14] through the 2015–20 regulatory control period, to the beginning of the 2020–25 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 control mechanism.[15]
- Adding actual or estimated capex to the RAB for the relevant year.[16] We review a DNSP's past capex and may exclude past capex from being rolled into the RAB where total capex exceeds the regulatory allowance.[17] The details of our assessment approach for capex overspending are set out in the Capital expenditure incentive guideline.[18] We note that under the transitional rules, our review of past capex does not apply to SA Power Networks prior to 1 July 2014.[19]

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10 SA Power Networks, *2020–25 Regulatory proposal – Attachment 2 – Regulatory asset base,* 31 January 2019, p. 10.
AER, *Final framework and approach for SA Power Networks – Regulatory control period commencing 1 July 2020, July 2018*, p. 82.

11 NER, cl. S6.2.1(e)(3).

12 NER, cl. S6.2.1(e)(7).

13 NER, cll. 6.5.1(b), 6.5.1(e), S6.1.3(7); AER, *Electricity distribution network service providers: Roll forward model (version 2)*, 15 December 2016.

14 NER, cl. S6.2.1(e)(3). The roll forward commences in the final year of the 2010–15 regulatory control period to allow us to adjust for the difference between actual 2014–15 capex and the estimated 2014–15 capex used in our 2015 distribution determination. The end of period adjustment related to 2014–15 capex will be positive (negative) if actual capex is higher (lower) than the estimate approved at the 2015–20 determination.

15 NER, cl. 6.5.1(e)(3).

16 NER, cl. S6.2.1(e)(4).

17 NER, cl. S6.2.2A. Under the NER, cl. S6.2.2A(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 cll. S6.2.2A (c), (d) and (e) of the NER.

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

19 NER, cll.11.60.5 and 11.62.

Further, the review of past capex does not include the last two years of the 2015–20 regulatory control period—these will instead be reviewed at the next reset.[20] We check actual capex amounts against audited annual reporting RIN data and generally accept the capex reported in those RINs in rolling forward the RAB.[21] However, there may be instances where adjustments are required to the annual reporting RIN data.[22]

- Subtracting depreciation from the RAB for the relevant year, calculated in accordance with the relevant distribution determination for the previous regulatory control period.[23] Depreciation based on forecast or actual capex can be used to roll forward the RAB.[24] For this draft decision, we use depreciation based on forecast capex for rolling forward SA Power Networks' RAB over the 2015–20 regulatory control period.[25] Depreciation based on forecast capex will also be used to roll forward the RAB over the 2020–25 regulatory control period at the next reset.[26]
- Subtracting any gross proceeds for asset disposals for the relevant year from capex to be added to the RAB.[27] We check these amounts against audited annual reporting RIN 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 2015–20 regulatory control period. The PTRM used to calculate the annual revenue requirement for the 2020–25 regulatory control period generally adopts the same RAB roll forward approach as the RFM, although the annual adjustments to the RAB are based on forecasts, rather than actual amounts.[28]

The opening RAB for the 2025–30 regulatory control period can be determined using depreciation based either on forecast or actual capex incurred during the 2020–25 regulatory control period.[29] To roll forward the RAB using depreciation based on forecast capex, we would use the forecast depreciation contained in the PTRM for the 2020–25 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 2020–25 regulatory control period.

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20 NER, cl. S6.2.2A(a1). The two year lag ensures that actual capex (instead of estimated capex) is available when the review of past capex commences.

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

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

23 NER, cl. S6.2.1(e)(5).

24 NER, cl. 6.12.1(18).

25 The use of forecast depreciation is consistent with the depreciation approach established in the 2015–20 distribution determination for SA Power Networks. See AER, *SA Power networks distribution determination preliminary Decision 2015−20 Attachment 2 – Regulatory asset base,* p. 7.

26 Refer to section 2.4.3 for the reasons.

27 NER, cl. S6.2.1(e)(6).

28 NER, cl. S6.2.3.

29 NER, cl. S6.2.2B.

Our decision on whether to use actual or forecast depreciation must be consistent with the capex incentive objective.[30] We have regard to:[31]

- 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

The RAB is an input into the determination of the return on capital and depreciation (return of capital) building block allowances.[32] Factors that influence the RAB will therefore flow through to these building block components and the annual 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 capex[33]
- 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.

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30 AER, *Final framework and approach for SA Power Networks – Regulatory control period commencing 1 July 2020, July 2018*, p. 82.

31 NER, cl. S6.2.2B(b) and (c)

32 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.

33 Net capex is gross capex less disposals and capital contributions. The rate of return or WACC also influences the size of the capex. This is because the 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-year WACC to arrive at an end of year value. It then begins depreciating the following 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 revenue requirement.

We maintain the RAB in real terms by indexing for inflation.[34] A nominal rate of return (WACC) is multiplied by the opening RAB to produce the return on capital building block.[35] To prevent the double counting of inflation through the nominal WACC and indexed RAB,[36] the regulatory depreciation building block has an offsetting reduction for indexation of the RAB.[37] Indexation of the RAB and the offsetting adjustment made 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 distributor) and lower in the future—producing a steeper downward sloping profile of total revenue.[38] 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 2020–25 regulatory control period as proposed by SA Power Networks. Overall, the closing RAB at the end of the 2020–25 regulatory control period would be 14.5 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 about 42.4 per cent. Expected inflation increases it by about 13.1 per cent. Forecast depreciation, on the other hand, reduces the RAB by about 41.1 per cent.

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34 NER, cll. 6.3.2(a)(2) and 6.5.1(e)(3).

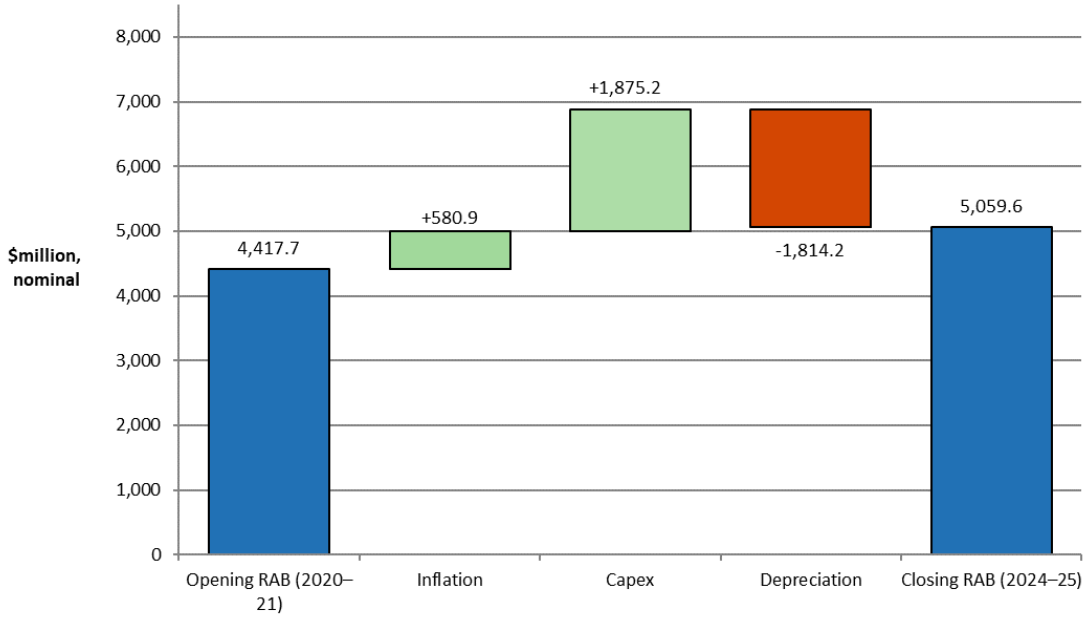
35 NER, cll. 6.5.2(a) and 6.5.2(d)(2).

36 NER, cl. 6.4.3(b)(1)(ii).

37 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 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.

38 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.

Figure 2.1 Key drivers of changes in the RAB proposed by SA Power Networks ($ million, nominal)



Source: SA Power Networks, *2020–25 Regulatory proposal – Support document – SAPN - 1.1 - PTRM Model - Public*, January 2019.

Note: Capex is net of forecast disposals and capital contributions. It is Inclusive of the half-year WACC to account for the timing assumptions in the PTRM.

SA Power Networks' proposed forecast regulatory depreciation for the 2020–25 regulatory control period is $1233.3 million ($ nominal). Our draft decision is to accept $1187.7 million of the proposed depreciation. This is discussed in attachment 4. The depreciation amount largely depends on the opening RAB, which in turn depends on capex in the past, and the assigned asset lives.[39]

However, we do have concerns with the size of the forecast capex, the largest driver of the increase in the RAB over the 2020–25 regulatory control period, proposed by SA Power Networks. Two stakeholder submissions also raised concerns with the projected size of the RAB proposed by SA Power Networks.[40] In this draft decision, we have reduced SA Power Networks' proposed forecast capex by $472.8 million ($2019–20),

[39] At the time of this draft decision, the roll forward of SA Power Networks' RAB includes estimated capex values for 2018–19 and 2019–20. We will update the 2018–19 estimated capex with actuals in the final decision. We may also update the 2019–20 estimated capex with a revised estimate in the final decision.

[40] Business SA, *Submission to AER on SA Power Networks 2020-25 Regulatory Proposal, May 2019.* pp. 5, 9; CCP14, *Advice to the AER on the SA Power Networks 2020-25 Regulatory Proposal, May 2019,* pp. 12–14.

or 27.5 per cent over the 2020–25 regulatory control period.[41] Our review of SA Power Networks' forecast capex is set out in attachment 5 of this draft decision.

A ten per cent increase in the opening RAB at 1 July 2020 causes revenues to increase by about 1.7 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.[42]

2.4 Reasons for draft decision

We determine an opening RAB value for SA Power Networks of $4393.3 million ($ nominal) as at 1 July 2020, a reduction of $24.4 million ($ nominal) or 0.6 per cent from the proposed value. We forecast a closing RAB value of $4558.5 million by 30 June 2025. This represents a reduction of $500.7 million, or 9.9 per cent compared with SA Power Networks' proposal. The reasons for our draft decision are discussed below.

2.4.1 Opening RAB at 1 July 2020

We determine an opening RAB value of $4393.3 million ($ nominal) as at 1 July 2020 for SA Power Networks. This value is $24.4 million (or 0.6 per cent) lower than SA Power Networks' proposed opening RAB of $4417.7 million ($ nominal) as at 1 July 2020.[43]

To determine the opening RAB for SA Power Networks as at 1 July 2020 we have rolled forward the RAB over the 2015–20 regulatory control period to determine a closing RAB value as at 30 June 2020. In doing so, we reviewed the key inputs of SA Power Networks' proposed RFM, such as actual inflation, rate of return, gross capex values, capital contribution values, forecast depreciation amounts and asset lives. We found many of these inputs were correct and reconcile with relevant data sources such as ABS data, regulatory accounts and the 2015–20 decision models.[44] However, we have identified some of the proposed inputs required corrections and updates. Therefore, we have made the following amendments to SA Power Networks' proposed RFM inputs:

- Removed the rounding applied to actual March to March CPI for 2014–15 to reflect the approved RFM. This amendment had a minor impact on the closing RAB value

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41 This amount is net of asset disposals, customer contributions and excludes half-year WACC adjustment.

42 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.

43 SA Power Networks, *2020–25 Regulatory proposal – Support document – SAPN - 1.1 - PTRM Model - Public*, 31 January 2019.

44 At the time of this draft decision, the roll forward of SA Power Networks' RAB includes estimated capex values for 2018–19 and 2019–20. We will update the 2018–19 estimated capex with actuals in the final decision. We may also update the 2019–20 estimated capex with a revised estimate in the final decision.

as at 30 June 2020. SA Power Networks supported this amendment in its response to our information request.[45]

- Corrected the adjustments for movements in capitalised provisions over the 2015–20 regulatory control period. This amendment had a minor impact on the closing RAB value as at 30 June 2020. SA Power Networks supported this amendment in its response to our information request.[46]
- Reversed the reported actual 2017–18 capex between 'Land' and 'Easements' asset classes so they matched the allocations set out in the annual reporting RIN. This amendment had no dollar impact on the closing RAB value as at 30 June 2020. SA Power Networks supported this amendment in its response to our information request.[47]
- Updated the inflation input for 2018–19 using the actual December 2018 CPI published by the ABS. This amendment had a minor impact on the closing RAB value as at 30 June 2020. SA Power Networks supported this amendment in its response to our information request.[48]
- Updated the December to December inflation estimate for 2019–20.[49] This amendment had a minor impact on the closing RAB value as at 30 June 2020. SA Power Networks supported this amendment in its response to our information request.[50]
- Updated the 2019–20 nominal vanilla WACC input following the return on debt update for that year in the 2015–20 PTRM. This amendment had a minor impact on the closing RAB value as at 30 June 2020. SA Power Networks supported this amendment in its response to our information request.[51]
- Updated the forecast straight-line depreciation for 2019–20 following the return on debt update for that year in the 2015–20 PTRM. This amendment had a minor impact on the closing RAB value as at 30 June 2020.
- Updated the equity raising cost input for 2015–16 following the 2019–20 return on debt update in the 2015–20 PTRM.

We also consider the extent to which our roll forward of the RAB to 1 July 2020 contributes to the achievement of the capital expenditure incentive objective.[52] We note

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45 SA Power Networks, *Information request 029,* 15 May 2019.

46 SA Power Networks, *Information request 061,* 11 July 2019

47 SA Power Networks, *Information request 029,* 15 May 2019

48 SA Power Networks, *Information request 029,* 15 May 2019.

49 In our final decision, we will update the estimate for 2019–20 expected inflation with actual CPI.

50 SA Power Networks, *Information request 029,* 15 May 2019.

51 A key input for the calculation of the nominal vanilla WACC is the rate of return on debt. The return on debt approach for SA Power Networks' 2015–20 distribution determination involves annual updates to this parameter. The 2019–20 return of debt update is the latest update for the 2015–20 regulatory control period. This update was finalised after the submission of SA Power Networks' regulatory proposal.
SA Power Networks, *Information request 029,* 15 May 2019.

52 NER, cl. 6.12.2(b).

that under the transitional rules, in making this distribution determination, the review of past capex does not apply to SA Power Networks prior to 1 July 2014.[53] Given this, the review period for this distribution determination is limited to 2014–15, 2015–16, 2016–17 and 2017–18 capex.[54]

SA Power Networks' actual capex incurred for 2014–15 to 2017–18 are below the forecast allowance set at the previous distribution determinations. Therefore, the overspending requirement for an efficiency review of past capex is not satisfied.[55] For the reasons discussed in attachment 5, we consider the capex incurred in those years is consistent with the capital expenditure criteria and can therefore be included in the RAB.[56]

Further, for the purposes of this draft decision, we have included SA Power Networks' estimated capex for 2018–19 and 2019–20 in the RAB roll forward to 1 July 2020. At the next reset, the 2018–19 and 2019–20 capex will form part of the review period for whether past capex should be excluded for inefficiency reasons.[57] Our RAB roll forward applies the incentive framework approved in the previous distribution determination, which included the use of a forecast depreciation approach in combination with the application of the capital expenditure sharing scheme (CESS).[58] As such, we consider that the 2015–20 RAB roll forward contributes to an opening RAB (as at 1 July 2020) that includes capex that reflects prudent and efficient costs, in accordance with the capital expenditure criteria.[59]

2.4.2 Forecast closing RAB as at 30 June 2025

We forecast a closing RAB value of $4558.9 million by 30 June 2025 for SA Power Networks. This represents a reduction of $500.7 million (9.9 per cent) compared to SA Power Networks' proposal. In real terms, we forecast the value of the RAB will decline by $354.0 million ($2019–20) or 8.1 per cent over the 2020–25 regulatory control period. This reduction reflects our draft decision on the inputs for determining the forecast RAB in the PTRM.

The submissions from Business SA and the CCP14 on SA Power Networks' proposal raised concerns regarding the increase to the size of SA Power Networks' RAB over the 2020–25 regulatory control period.[60] Our draft decision projects the RAB to

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53 NER, cll. 11. 60.5 and 11.62.

54 NER, cl. S6.2.2A(a1).

55 NER, cl. S6.2.2A(c).

56 Please see appendix E of attachment 5 of this draft decision.

57 Here, 'inefficiency' of past capex refers to three specific assessments (labelled the overspending, margin and capitalisation requirements) detailed in NER, cl. S6.2.2A. The details of our ex post assessment approach for capex are set out in AER, *Capital expenditure incentive guideline*, November 2013, pp. 12–20.

58 AER, *SA Power Networks distribution determination final Decision 2015−16 to 2019–20 Attachment 2 – Regulatory asset base*, October 2015, p. 6.

59 NER, cll. 6.4A(a), 65.7(a), 6.5.7(c) and 6.12.2(b).

60 Business SA, *Submission: to AER on SA Power Networks 2020-25 Regulatory Proposal*, 16 May 2019, p. 5, 9; CCP 14, *Advice to the AER on the SA Power Networks 2020-25 Regulatory Proposal,* 16 May 2019, pp. 12–14.

decrease by 8.1 per cent in real terms over the 2020–25 regulatory control period.[61] This compares to the historical increase of 12.4 per cent for the 2010–15 regulatory control period, and the estimated increase of 6.5 per cent over the current 2015–20 period. Such movements in the RAB were driven largely by the higher capex spend in previous periods.[62] The other drivers of the change in the size of the RAB depends on our assessment of its various components including expected inflation (attachment 3), forecast depreciation (attachment 4) and forecast capex (attachment 5). Inflation and capex increase the RAB, while depreciation and disposals reduce it.

To determine the forecast RAB value for SA Power Networks, we amended the following PTRM inputs:

- We reduced SA Power Networks' proposed opening RAB value by $24.4 million ($ nominal) as at 1 July 2020 (section 2.4.1).
- We reduced SA Power Networks' proposed forecast capex for the 2020–25 regulatory control period by $521.8 million ($ nominal) or 27.8 per cent (attachment 5).[63]
- We reduced SA Power Networks' proposed forecast straight-line depreciation for the 2020–25 regulatory control period by $77.3 million ($ nominal) or 4.3 per cent (attachment 4).
- We updated SA Power Networks' proposed expected inflation rate of 2.47 per cent per annum for the 2020–25 regulatory control period to 2.45 per cent per annum (attachment 3). This results in a decrease to the indexation of the RAB component for the 2020–25 regulatory control period by $4.9 million ($ nominal) or 0.8 per cent.[64]

Figure 2.2 shows the key drivers of the change in SA Power Networks' RAB over the 2020–25 regulatory control period for this draft decision. Overall, the closing RAB at the end of the 2020–25 regulatory control period is forecast to be 3.8 per cent higher than the opening RAB at the start of that period in nominal terms. The approved forecast net capex and expected inflation increase the RAB by about 12.5 per cent and 30.8 per cent respectively. Forecast depreciation, on the other hand, reduces the RAB by about 39.5 per cent.

Energy Consumer Australia, *AER Issues Paper: SA Power Networks Electricity distribution determination 2020 to 2025 Submission*, 16 May 2019, pp. 9–10.

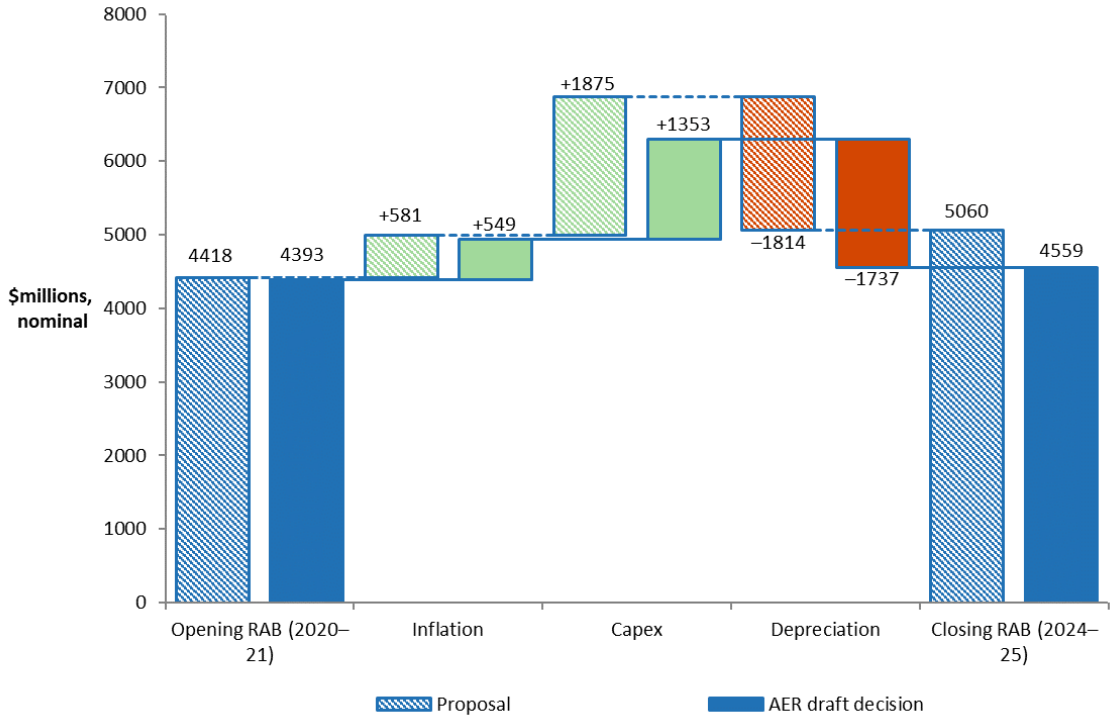
61 Real RAB change is calculated in $ 2019–20.

62 In nominal terms the RAB increased by 22.0 per cent over the 2010–15 regulatory control period and estimated to increase by 14.5 per cent over the 2015–20 regulatory control period.

63 Capex net of disposals and customer contributions, and inclusive of half-year WACC adjustment.

64 The calculated decrease to the RAB indexation component amount due to updating for expected inflation is based on input data provided in SA Power Networks' proposal PTRM.

Figure 2.2 Key drivers of changes in the RAB – SA Power Networks' proposal compared with AER's draft decision ($ million, nominal)



Source: AER analysis.

Note: Capex is net of forecast disposals and capital contributions. 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 accept SA Power Networks' proposal on the depreciation approach to be applied to establish its RAB at the commencement of the 2025–30 regulatory control period. We determine that the depreciation approach will be based on the depreciation schedules (straight-line) using forecast capex at the asset class level approved for the 2020–25 regulatory control period.[65]

SA Power Networks proposed to use the forecast depreciation approach to roll forward its RAB for the commencement of the 2025–30 regulatory control period,[66] consistent with our Framework and approach.[67]

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65 NER, cll. 6.12.1(18) and S6.2.2B.

66 SA Power Networks, *2020–25 Regulatory proposal – Attachment 2 – Regulatory asset base*, January 2019, p. 10.

67 AER, *Final framework and approach for SA Power Networks – Regulatory control period commencing 1 July 2020, July 2018*, p. 83.

We stated in the Framework and approach that depreciation used to roll forward the RAB in the next distribution determination could be based on either:[68]

- 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 2020–25 regulatory control period (section 2.4.1). The use of forecast depreciation to establish the opening RAB for the commencement of the 2025–30 regulatory control period at the next reset therefore maintains the current approach.

As discussed in attachment 9, SA Power Networks is currently subject to the CESS for the 2015–20 regulatory control period. We will continue to apply the CESS to SA Power Networks over the 2020–25 regulatory control period. We consider that the CESS will provide sufficient incentives for SA Power Networks 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.[69]

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[68] AER, *Final framework and approach for SA Power Networks – Regulatory control period commencing 1 July 2020, July 2018*, p. 73.

[69] 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.