

PRELIMINARY DECISION

Powercor distribution determination

2016 to 2020

Attachment 2 – Regulatory asset base

October 2015

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1. Note
2. This attachment forms part of the AER's preliminary decision on Powercor's revenue proposal 2016–20. It should be read with all other parts of the preliminary decision.
3. The preliminary decision includes the following documents:
4. Overview

Attachment 1 - Annual revenue requirement

Attachment 2 - Regulatory asset base

Attachment 3 - Rate of return

Attachment 4 - Value of imputation credits

Attachment 5 - Regulatory depreciation

Attachment 6 - Capital expenditure

Attachment 7 - Operating expenditure

Attachment 8 - Corporate income tax

Attachment 9 - Efficiency benefit sharing scheme

Attachment 10 - Capital expenditure sharing scheme

Attachment 11 - Service target performance incentive scheme

Attachment 12 - Demand management incentive scheme

Attachment 13 - Classification of services

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Attachment 16 - Alternative control services

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1. Shortened forms

| 1. Shortened form | 1. Extended form |
| --- | --- |
| 1. AEMC | 1. Australian Energy Market Commission |
| 1. AEMO | 1. Australian Energy Market Operator |
| 1. AER | 1. Australian Energy Regulator |
| AMI | Advanced metering infrastructure |
| 1. augex | 1. augmentation expenditure |
| 1. capex | 1. capital expenditure |
| 1. CCP | 1. Consumer Challenge Panel |
| 1. CESS | 1. capital expenditure sharing scheme |
| 1. CPI | 1. consumer price index |
| 1. DRP | 1. debt risk premium |
| 1. DMIA | 1. demand management innovation allowance |
| 1. DMIS | 1. demand management incentive scheme |
| 1. distributor | 1. distribution network service provider |
| 1. DUoS | 1. distribution use of system |
| 1. EBSS | 1. efficiency benefit sharing scheme |
| 1. ERP | 1. equity risk premium |
| 1. Expenditure Assessment Guideline | 1. expenditure forecast assessment Guideline for electricity distribution |
| 1. F&A | 1. framework and approach |
| 1. MRP | 1. market risk premium |
| 1. NEL | 1. national electricity law |
| 1. NEM | 1. national electricity market |
| 1. NEO | 1. national electricity objective |
| 1. NER | 1. national electricity rules |
| 1. NSP | 1. network service provider |
| 1. opex | 1. operating expenditure |
| 1. PPI | 1. partial performance indicators |
| 1. PTRM | 1. post-tax revenue model |
| 1. RAB | 1. regulatory asset base |
| 1. RBA | 1. Reserve Bank of Australia |
| 1. repex | 1. replacement expenditure |
| 1. RFM | 1. roll forward model |
| 1. RIN | 1. regulatory information notice |
| 1. RPP | 1. revenue and pricing principles |
| 1. SAIDI | 1. system average interruption duration index |
| 1. SAIFI | 1. system average interruption frequency index |
| 1. SLCAPM | 1. Sharpe-Lintner capital asset pricing model |
| 1. STPIS | 1. service target performance incentive scheme |
| 1. WACC | 1. weighted average cost of capital |

# Regulatory asset base

1. We are required to make a decision on Powercor's opening regulatory asset base (RAB) as at 1 January 2016.[[1]](#footnote-1) 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 preliminary decision on the opening RAB value as at 1 January 2016 for Powercor and roll forward of the forecast RAB over the 2016–20 regulatory control period.

## Preliminary decision

1. We do not accept Powercor's proposed opening RAB of $3362.9 million ($ nominal) as at 1 January 2016.[[2]](#footnote-2) We instead determine an opening RAB value of $3344.4 million ($ nominal) at 1 January 2016. This is because we have amended Powercor's proposed roll forward model (RFM) to correct a number of input errors and other adjustments. These amendments include:

* correcting the annual actual inflation rates for RAB indexation
* amending the proposed approach to the indexation adjustment required in the RAB
* adjusting allowed equity raising costs to the correct dollar terms.

1. These amendments reduced the opening RAB as at 1 January 2016 by $18.4 million (or 0.5 per cent) compared to that proposed.
2. To determine the opening RAB as at 1 January 2016, we have rolled forward the RAB over the 2011–15 regulatory control period to determine a closing RAB value at 31 December 2015. This roll forward includes an adjustment at the end of the 2011–15 regulatory control period to account for the difference between actual 2010 capex and the estimate approved at the 2011–15 determination.[[3]](#footnote-3)

Table 2.1 sets out our preliminary decision on the roll forward of the RAB values for the 2011–15 regulatory control period.

Table . AER's preliminary decision on Powercor's RAB for the 2011–15 regulatory control period ($ million, nominal)

|  | 2011 | 2012 | 2013 | 2014 | 2015a |
| --- | --- | --- | --- | --- | --- |
| Opening RAB | 2212.8 | 2415.0 | 2600.1 | 2815.6 | 3073.1 |
| Capital expenditureb | 243.6 | 268.9 | 302.3 | 348.0 | 375.7 |
| Inflation indexation on opening RAB | 77.9 | 48.4 | 56.2 | 65.0 | 70.9 |
| Less: straight-line depreciation | 119.3 | 132.2 | 143.0 | 155.5 | 171.6 |
| Closing RAB | 2415.0 | 2600.18 | 2815.6 | 3073.1 | 3348.1 |
| Difference between estimated and actual 2010 capex (1 January 2010 to 31 December 2010) |  |  |  |  | –18.7 |
| Return on difference for 2010 capex |  |  |  |  | –10.5 |
| Six months CPI adjustment |  |  |  |  | 25.5 |
| **Closing RAB as at 31 December 2015** |  |  |  |  | **3344.4** |

Source: AER analysis.

(a): Based on estimated capex. We will update the RAB roll forward in the substitute decision.

(b): Net of disposals and capital contributions, and adjusted for CPI.

1. We determine a forecast closing RAB value at 31 December 2020 of $4605.8 million ($ nominal). This is $480.5 million (or 9.4 per cent) lower than the amount of $5086.3 million ($ nominal) proposed by Powercor. Our preliminary decision on the forecast closing RAB reflects the amended opening RAB as at 1 January 2016, and our preliminary decisions on forecast capex (attachment 6), forecast regulatory depreciation (attachment 5), and forecast inflation (attachment 3).

Table 2.2 sets out our preliminary decision on the forecast RAB values for Powercor over the 2016–20 regulatory control period.

Table 2.2 AER's preliminary decision on Powercor's RAB for the 2016–20 regulatory control period ($ million, nominal)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 2016 | 2017 | 2018 | 2019 | 2020 |
| Opening RAB | 3344.4 | 3585.0 | 3836.4 | 4093.4 | 4340.6 |
| Capital expenditurea | 342.8 | 341.0 | 353.5 | 353.0 | 374.1 |
| Inflation indexation on opening RAB | 83.6 | 89.6 | 95.9 | 102.3 | 108.5 |
| Less: straight-line depreciation | 185.9 | 179.2 | 192.5 | 208.1 | 217.4 |
| Closing RAB | 3585.0 | 3836.4 | 4093.4 | 4340.6 | 4605.8 |

Source: AER analysis.

(a): Net of forecast disposals and capital contributions.

1. We accept Powercor's proposal that a forecast depreciation approach is to be used to establish the opening RAB at the commencement of the 2021–25 regulatory control period.[[4]](#footnote-4)

## Powercor's proposal

1. Powercor used our RFM to establish an opening RAB as at 1 January 2016 and our PTRM to roll forward the RAB over the 2016–20 regulatory control period.
2. Powercor proposed an opening RAB value as at 1 January 2011 of $2244.8 million ($ nominal). [[5]](#footnote-5) Rolling forward this RAB and using depreciation based on actual capex, Powercor proposed a closing RAB as at 31 December 2015 of $3362.9 million ($ nominal). Table 2.3 presents Powercor's proposed roll forward of its RAB during the 2011–15 regulatory control period.

Table . Powercor's proposed RAB for the 2011–15 regulatory control period ($million, nominal)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2011 | 2012 | | 2013 | | 2014 | | 2015a |
| Opening RAB | 2244.8 | 2431.5 | | 2656.9 | | 2868.1 | | 3121.5 |
| Capital expenditureb | 243.4 | 270.9 | | 302.1 | | 347.8 | | 375.7 |
| Inflation indexation on opening RAB | 62.6 | 85.6 | | 53.2 | | 62.0 | | 72.0 |
| Less: straight-line depreciation | 119.2 | 131.2 | | 144.2 | | 156.4 | | 172.3 |
| Closing RAB | 2431.5 | 2656.9 | | 2868.1 | | 3121.5 | | 3396.9 |
| Difference between estimated and actual 2010 capex (1 January 2010 to 31 December 2010) |  | | | | –21.6 | | | |
| Return on difference for 2010 capex |  | |  | |  | | –12.4 | |
| **Opening RAB as at 1 January 2016** |  |  | |  | |  | | **3362.9** |

Source: Powercor, Regulatory proposal, April 2015, Attachment PAL 2016-20 RFM.

(a) Based on estimated capex.

(b) Net of disposals and capital contributions, and adjusted for CPI.

1. Powercor proposed a closing forecast RAB as at 31 December 2020 of $5086.3 million ($ nominal). This value reflects its proposed opening RAB, forecast capex, forecast inflation, and depreciation (based on forecast capex) over the 2016–20 regulatory control period. Its projected RAB over the 2016–20 regulatory control period is shown in Table 2.4.

Table . Powercor's proposed RAB for the 2016–20 regulatory control period ($million, nominal)

|  | 2016 | 2017 | 2018 | 2019 | 2020 |
| --- | --- | --- | --- | --- | --- |
| Opening RAB | 3362.9 | 3696.2 | 4041.8 | 4393.4 | 4733.4 |
| Capital expenditurea | 421.1 | 429.6 | 448.6 | 450.5 | 477.1 |
| Inflation indexation on opening RAB | 87.4 | 96.1 | 105.1 | 114.2 | 123.1 |
| Less: straight-line depreciation | 175.1 | 180.1 | 202.2 | 224.7 | 247.3 |
| Closing RAB | 3696.2 | 4041.8 | 4393.4 | 4733.4 | 5086.3 |

Source: Powercor, Regulatory Proposal, April 2015, p. 255, Table 13.2.

(a) Net of disposals and capital contributions.

1. Powercor proposed to apply a forecast depreciation approach to establish the RAB at the commencement of 2021–25 regulatory control period, consistent with the approach set out in our final framework and approach paper.[[6]](#footnote-6)

## AER’s assessment approach

1. We are required to roll forward the service provider's RAB during the 2011–15 regulatory control period to establish the opening RAB at 1 January 2016. This value can be adjusted for any differences in the forecast and actual capex, disposals and capital contributions. It may also be adjusted to reflect any changes in the use of the assets, with only assets used in the provision of standard control services to be included in the RAB.[[7]](#footnote-7)
2. To determine the opening RAB, we developed an asset base RFM in accordance with the requirements of the NER[[8]](#footnote-8) a service provider must use the RFM in preparing its regulatory proposal.[[9]](#footnote-9) The RFM rolls forward the RAB from the beginning of the final year of the 2006–10 regulatory control period, through the 2011–15 regulatory control period, to the beginning of the next period.[[10]](#footnote-10) The roll forward occurs for each year by:

* Adding an inflation (indexation) adjustment to the opening RAB for the relevant year. This adjustment must be consistent with the inflation factor used in the control mechanism.[[11]](#footnote-11)
* Adding capex to the RAB for the relevant year.[[12]](#footnote-12) In future determinations, the NER allows us to review a service provider's past capex and exclude inefficient past capex from being rolled into the RAB where total capex exceeds the regulatory allowance.[[13]](#footnote-13) The details of our assessment approach for inefficient capex are set out in the Capital expenditure incentive guideline.[[14]](#footnote-14) We note that under the transitional rules, the review of past capex does not apply to Powercor prior to 1 January 2016.[[15]](#footnote-15) Therefore, for the purposes of this preliminary decision, we will add Powercor's actual or estimated capex in the 2011–15 regulatory control period to the RAB. 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. However, there may be instances where adjustments are required to the annual reporting RIN data. This would include where it is not fit for purpose.
* Subtracting depreciation from the RAB for the relevant year, calculated in accordance with the relevant distribution determination for that year.[[16]](#footnote-16) Depreciation based on forecast or actual capex can be used to roll forward the RAB.[[17]](#footnote-17) By default the RFM applies the depreciation approach based on actual capex, although this can be modified to apply a depreciation approach based on forecast capex when necessary. For this preliminary decision, we use depreciation based on actual capex for rolling forward Powercor's RAB values over the 2011–15 regulatory control period.[[18]](#footnote-18) However, depreciation based on forecast capex will be used for the 2016–20 regulatory control period at the next reset.[[19]](#footnote-19)
* Subtracting any disposals from the RAB for the relevant year.[[20]](#footnote-20) 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 2011–15 regulatory control period. The PTRM used to calculate the annual revenue requirement for the 2016–20 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.

1. We are required to decide whether depreciation for establishing the service provider's RAB as at the commencement of the 2021–25 regulatory control period is to be based on actual or forecast capex.[[21]](#footnote-21)
2. The opening RAB for the 2021–25 regulatory control period can be determined using depreciation based either on forecast or actual capex incurred during the 2016–20 period. To roll forward the RAB using depreciation based on forecast capex, we would use the forecast depreciation contained in the PTRM for the 2016–20 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 2016–20 regulatory control period.
3. Our decision on whether to use actual or forecast depreciation must be consistent with the capex incentive objective. We must have regard to:[[22]](#footnote-22)

* 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.

### Interrelationships

1. The RAB is an input into the determination of the return on capital and depreciation (return of capital) building block allowances.[[23]](#footnote-23) 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.
2. 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[[24]](#footnote-24)
* 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) 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 and the forecast net capex. By convention, the indexation adjustment is also offset against depreciation to prevent double counting of inflation in the RAB and rate of return, which are both presented in nominal terms. This reduces the apparent depreciation building block that feeds into the annual revenue requirement.

Figure 2.1 shows the key drivers of the change in the RAB over the 2016–20 regulatory control period as proposed by Powercor. Overall, the closing RAB at the end of the 2016–20 regulatory control period would be 50 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 65 per cent, while inflation increases it by about 15 per cent. Forecast depreciation, on the other hand, reduces the RAB by about 30 per cent.

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



Source: Powercor, Regulatory proposal, April 2015, Attachment PAL 2016-20 PTRM.

Maintaining the RAB in real terms by adding inflation is required by the NER[[25]](#footnote-25) and generally helps to promote smoother prices over the life of an asset. If the RAB was unindexed for inflation, the offsetting indexation adjustment applied to depreciation would also have to be removed. On balance, this means more depreciation would be returned to the business resulting in higher prices early in an asset life and lower prices later in its life.[[26]](#footnote-26)

The RAB would rise in real terms over the 2016–20 regulatory control period based on Powercor's proposal. We consider the depreciation amount to be generally reasonable and satisfy the requirements of the NER in terms of the assigned asset lives.[[27]](#footnote-27) The depreciation amount also largely depends on the opening RAB (which in turn depends on capex in the past). However, we do have concerns with the size of the forecast net capex. Figure 2.1 shows forecast net capex is the largest driver of the increase in the RAB and we have considered whether it is appropriate that the forecast net capex exceeds depreciation as Powercor has proposed. Refer to attachment 6 for the discussion on forecast capex.

1. A ten per cent increase in the opening RAB causes revenues to increase by about 5.2 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.[[28]](#footnote-28)

## Reasons for preliminary decision

We determine an opening RAB value for Powercor of $3344.4 million ($ nominal) as at 1 January 2016, a decrease of $18.4 million ($ nominal) or 0.5 per cent from the proposed value. We forecast a closing RAB value of $4605.8 million by 31 December 2020. This represents a reduction of $480.5 million, or 9.4 per cent compared to the proposal. The reasons for our decision are discussed below.

### Opening RAB as at 1 January 2016

To determine the opening RAB at 1 January 2016 we have rolled forward the RAB over the 2011–15 regulatory control period to determine a closing RAB value as at 31 December 2015. In doing so we reviewed the key inputs of Powercor's proposed RFM, such as asset lives, actual gross capex, capital contributions and rate of return. We found these were correct and they reconcile with relevant data sources such as annual reporting RIN data and the 2011–15 decision models.[[29]](#footnote-29) However, we consider there should be adjustments made to Powercor's proposed RFM inputs for actual inflation and equity raising costs. We also do not consider Powercor's proposed approach to indexing the RAB for an additional half year to be appropriate. These adjustments are discussed below.

Actual inflation inputs

Powercor did not apply the established approach for recording actual CPI inflation rates in its proposed RFM. Our approach to RAB indexation in the template RFM is to apply a one year lagged inflation rate to net capex and straight-line depreciation consistent with the method of indexation used in the control mechanism.[[30]](#footnote-30) The actual CPI rate for each year is used to index the opening RAB in the RFM. In order to do this, the RFM requires each actual CPI rate measured for a year to be recorded in that specific year (un-lagged).[[31]](#footnote-31) These actual observations are converted as part of coding within the RFM into a one year lagged index for use in the RAB roll forward process. This approach is consistent with the current RFM template developed in accordance with the NER and applied for other service providers.[[32]](#footnote-32)

Powercor’s proposed RFM contained actual inflation inputs that were already one year lagged observations. This results in the RAB being adjusted by a two year lagged inflation index.[[33]](#footnote-33) This is not consistent with the NER.[[34]](#footnote-34) Our preliminary decision is to apply our standard approach to RAB indexation, consistent with the template RFM and the NER.[[35]](#footnote-35) As such, we have replaced Powercor’s one year lagged CPI observations so that they are recorded in the year related to their measure. We have adopted Powercor’s use of an estimate of CPI for 2015, as the actual inflation is not yet known. Our final decision will update this estimate for actual 2015 inflation.

Equity raising costs

We do not accept Powercor's proposed value of equity raising costs included in 2011 capex of $5.9 million ($ nominal). The 2011–15 determination PTRM recognised equity raising cost capex at end of year value in real 2010 dollar terms. The RFM requires the input of capex in nominal mid-year dollar terms. Powercor's proposed value of equity raising costs includes an incorrect adjustment of inflation which converts the value from real 2010 dollar terms to nominal dollars in 2011 terms.[[36]](#footnote-36) We consider that only six months of inflation is required to convert the equity raising costs to a nominal mid-year value (as required by the RFM). We are satisfied the revised equity raising costs of $5.2 million ($ nominal) correctly reflects the value approved in the 2011–15 determination.

Indexation of the opening RAB

The opening RAB value as at 1 January 2011 approved in the 2011–15 determination was obtained by escalating the opening RAB value as at 1 January 2006 (expressed in July 2004 dollars) using inflation data for six years. This resulted in the opening RAB value as at 1 January 2011 effectively being expressed in July 2010 dollars instead of January 2011 dollars. Jemena Electricity Networks and AusNet Services appealed this aspect of our 2011–15 determinations before the Australian Competition Tribunal (Tribunal). The Tribunal concluded that there was an error in the valuation of the indexation of the 2011 RAB.[[37]](#footnote-37) Although Powercor was not party to the appeal on this issue, we consider that the underlying reasoning is applicable to all Victorian distributors. We accept that there remains a discrepancy of 6 months indexation with the RAB valuation of the Victorian distributors who were not party to the appeal on this issue.[[38]](#footnote-38) We therefore consider that an adjustment to the RAB should be made to account for this discrepancy. However, we do not agree with Powercor’s proposed approach for making this adjustment.

Powercor proposed to apply an adjustment factor representing half a year of CPI indexation to the 2010 opening RAB.[[39]](#footnote-39) We do not consider that this approach is consistent with the adjustment that was applied by the Tribunal in its decision for Jemena Electricity Networks and AusNet Services.[[40]](#footnote-40) We consider that the appropriate approach to adjust the RAB is to calculate the opening RAB as at 1 January 2011 that would have resulted had Powercor’s RAB been adjusted at the previous determination process. The adjustment to the RAB value is the difference between the calculated RAB value and that approved at the previous determination. The value of this adjustment (adjusted for inflation) is $25.5 million ($ 2015) and is added to the closing RAB as at 31 December 2015.

### Forecast closing RAB as at 31 December 2020

We forecast a closing RAB value of $4605.8 million ($ nominal) by 31 December 2020 for Powercor. This represents a reduction of $480.5 million, or 9.4 per cent to Powercor's proposal. This reduction reflects our preliminary decision on the required inputs for determining the forecast RAB in the PTRM. To determine the forecast RAB value, we amended the following PTRM inputs:

* We adjusted the opening RAB at 1 January 2016, as discussed in section 2.4.1.
* We reduced the proposed forecast inflation rate of 2.60 per cent per annum to 2.50 per cent per annum (attachment 3).
* We reduced the proposed forecast capex for the 2016–20 regulatory control period by $462.4 million or 20.8 per cent (attachment 6).
* We reduced the proposed forecast regulatory depreciation for the 2016–20 regulatory control period by $0.3 million or 0.1 per cent (attachment 5).

A submission from the Victorian Energy Consumer and User Alliance raised concern about the substantial growth in the value of the RAB for the Victorian DNSPs in recent years.[[41]](#footnote-41) We have carefully reviewed the cost drivers of Powercor's forecast capex in terms of prudency and efficiency. We are not satisfied that Powercor's proposed augmentation capex reflects a realistic expectation of demand over the 2016–20 regulatory control period. Although a greater proportion of Powercor's network assets are nearing the end of their life—requiring an increased replacement capex to manage the deterioration in asset condition—our modelling estimates a lower amount of replacement expenditure than proposed is necessary to meet the capex objectives. Our preliminary decision is to reduce the proposed capex, a main driver of the increase in the value of Powercor's RAB, by $462.4 million. The details of our assessment of Powercor's capex are set out in attachment 6.

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

Powercor proposed to use forecast depreciation approach to roll forward the RAB for the commencement of its 2021–25 regulatory control period.

We accept Powercor's forecast depreciation approach to roll forward the RAB for the commencement of its 2021–25 regulatory control period. This approach was signalled in the AER's framework and approach.[[42]](#footnote-42) As discussed in attachment 10, Powercor is not currently subject to a capital expenditure sharing scheme (CESS) but we will apply the CESS to Powercor over the 2016–20 regulatory control period. We consider this scheme will provide sufficient incentives for Powercor 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.[[43]](#footnote-43)

1. NER, cl. 6.12.1(6). [↑](#footnote-ref-1)
2. Powercor, Regulatory proposal, April 2015, p. 154, Table 13.1. [↑](#footnote-ref-2)
3. The end of period adjustment will be positive (negative) if actual capex is higher (lower) than the estimate approved at the 2011–15 determination. [↑](#footnote-ref-3)
4. NER, cl. 6.12.1(18). [↑](#footnote-ref-4)
5. Powercor, Regulatory proposal, April 2015, Attachment ‘PAL 2016-20 RFM’. This includes adjustments to correct for the discrepancy of 6 months indexation on RAB valuation in the 2010–15 determination. This issue is discussed in more detail in section 2.4.1. [↑](#footnote-ref-5)
6. Powercor, Regulatory proposal, April 2015, p. 193. [↑](#footnote-ref-6)
7. NER, cl. S6.2.1. [↑](#footnote-ref-7)
8. NER, cl. 6.5.1. [↑](#footnote-ref-8)
9. NER, cl. S6.1.3(7). [↑](#footnote-ref-9)
10. NEL, s. 7A(4). [↑](#footnote-ref-10)
11. NER, cl. 6.5.1(e)(3). [↑](#footnote-ref-11)
12. NER, cl. S6.2.1(e)(4). [↑](#footnote-ref-12)
13. NER, cl. S6.2.2A. [↑](#footnote-ref-13)
14. AER, Capital expenditure incentive guideline, November 2013, pp. 12–20.

    Under the NER, cl S6.2.2A(b), the exclusion of inefficient capex could only come from three areas including 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. [↑](#footnote-ref-14)
15. NER, cls. 11.60.5 and 11.62. [↑](#footnote-ref-15)
16. NER, cl. S6.2.1(e)(5). [↑](#footnote-ref-16)
17. NER, cl. 6.12.1(18). [↑](#footnote-ref-17)
18. The use of actual depreciation is consistent with the depreciation approach established in the 2010 distribution determination for Powercor. [↑](#footnote-ref-18)
19. Refer to section 2.4.3 for the reasons. [↑](#footnote-ref-19)
20. NER, cl. S6.2.1(e)(6). [↑](#footnote-ref-20)
21. NER, cl. S6.2.2B. [↑](#footnote-ref-21)
22. NER, cl. S6.2.2B(c). [↑](#footnote-ref-22)
23. 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. [↑](#footnote-ref-23)
24. 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 a WACC to arrive at an end of year value. It then begins depreciating the following year. [↑](#footnote-ref-24)
25. NER, cl. 6.5.1(e)(3). [↑](#footnote-ref-25)
26. Such an impact would also be reflected if we were to switch methods midway through an asset's life. [↑](#footnote-ref-26)
27. Refer to attachment 5 for the discussion on regulatory depreciation. [↑](#footnote-ref-27)
28. 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. [↑](#footnote-ref-28)
29. At the time of this preliminary decision, the roll forward of Powercor's RAB includes estimated capex values for 2015. We will update the 2015 estimated capex values for the final decision. [↑](#footnote-ref-29)
30. NER, cl. 6.5.1(e)(3). [↑](#footnote-ref-30)
31. AER, Victorian distribution determination final decision 2011-2015, 29 October 2010, p. 57. For Powercor, the September quarter CPI is used as a proxy for the calendar year in the 2011–15 regulatory control period. As discussed in attachment 14, the June quarter CPI will be used as a proxy for the calendar year for the 2016–20 regulatory control period. [↑](#footnote-ref-31)
32. NER, cls. 6.5.1(b)–(d). Model published at: http://www.aer.gov.au/node/6908. [↑](#footnote-ref-32)
33. Actual inflation from September 2008 to September 2009 is used to index the RAB from 2010 to 2011. [↑](#footnote-ref-33)
34. NER, cl. 6.5.1(e)(3). [↑](#footnote-ref-34)
35. NER, cl. 6.5.1(e). [↑](#footnote-ref-35)
36. Powercor, Regulatory proposal, attachment, PAL PUBLIC MOD 1.9 - PAL 2011-15 RFM, April 2015. [↑](#footnote-ref-36)
37. Australian Competition Tribunal, Application by United Energy Distribution Pty Limited (No 1) [2012] ACompT 1, 6 January 2012, para. 338–386. [↑](#footnote-ref-37)
38. Administratively, as only Jemena and AusNet were party to the 2011 appeal on this issue, we were only able to amend this error for those distributors at the time of the Tribunal decision process. However, as the RAB value is reviewed at each determination, the indexation of the RAB remains an issue at this determination. [↑](#footnote-ref-38)
39. Powercor, Regulatory proposal, April 2015, pp. 253–254. [↑](#footnote-ref-39)
40. Australian Competition Tribunal, Application by United Energy Distribution Pty Limited (No 1) [2012] ACompT 1, 6 January 2012, para. 379–383. [↑](#footnote-ref-40)
41. Victorian Energy Consumer and User Alliance, Submission to the AER Victorian distribution networks’ 2016-20 revenue proposals, 13 July 2015, pp.22–24. [↑](#footnote-ref-41)
42. AER, Final Framework and Approach for the Victorian Electricity Distributors, October 2014, pp. 121–126. [↑](#footnote-ref-42)
43. 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. [↑](#footnote-ref-43)