

PRELIMINARY DECISION

Energex determination 2015−16 to 2019−20

Attachment 2 − Regulatory asset base

April 2015

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1. Note
2. This attachment forms part of the AER's preliminary decision on Energex's 2015–20 distribution determination. It should be read with all other parts of the preliminary decision.
3. The preliminary decision includes the following documents:
4. Overview
5. Attachment 1 – Annual revenue requirement
6. Attachment 2 – Regulatory asset base
7. Attachment 3 – Rate of return
8. Attachment 4 – Value of imputation credits
9. Attachment 5 – Regulatory depreciation
10. Attachment 6 – Capital expenditure
11. Attachment 7 – Operating expenditure
12. Attachment 8 – Corporate income tax
13. Attachment 9 – Efficiency benefit sharing scheme
14. Attachment 10 – Capital expenditure sharing scheme
15. Attachment 11 – Service target performance incentive scheme
16. Attachment 12 – Demand management incentive scheme
17. Attachment 13 – Classification of services
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1. Shortened forms

| Shortened form | Extended form |
| --- | --- |
| ABS | Australian Bureau of Statistics |
| ACS | alternative control services |
| AEMC | Australian Energy Market Commission |
| AEMO | Australian Energy Market Operator |
| AER | Australian Energy Regulator |
| augex | augmentation expenditure |
| capex | capital expenditure |
| CCP | Consumer Challenge Panel |
| CESS | capital expenditure sharing scheme |
| CPI | consumer price index |
| DRP | debt risk premium |
| DMIA | demand management innovation allowance |
| DMIS | demand management incentive scheme |
| distributor | distribution network service provider |
| DUoS | distribution use of system |
| EBSS | efficiency benefit sharing scheme |
| ERP | equity risk premium |
| Expenditure Assessment Guideline | expenditure forecast assessment Guideline for electricity distribution |
| F&A | framework and approach |
| 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 |
| PPI | partial performance indicators |
| 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 |
| SAIDI | system average interruption duration index |
| SAIFI | system average interruption frequency index |
| SCS | standard control services |
| SLCAPM | Sharpe-Lintner capital asset pricing model |
| STPIS | service target performance incentive scheme |
| WACC | weighted average cost of capital |

# Regulatory asset base

1. We are required to make a decision on Energex's opening regulatory asset base (RAB) as at 1 July 2015.[[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 July 2015 for Energex and roll forward of the forecast RAB over the 2015–20 regulatory control period.

## Preliminary decision

1. We do not accept Energex's proposed opening RAB of $11 313.1 million ($ nominal) as at 1 July 2015.[[2]](#footnote-2) We instead determine an opening RAB value of $11 333.7 million ($ nominal) as at 1 July 2015. This is because of input errors in the remaining asset lives used to roll forward the RAB and adjustments for capitalised provisions. Meters were also reclassified as ACS and we removed certain load control assets (associated with newer meter types) and certain unregulated assets from the RAB.[[3]](#footnote-3) These amendments result in a net increase to the opening RAB as at 1 July 2015 by $20.6 million (or 0.2 per cent) compared to that proposed.
2. To determine the opening RAB as at 1 July 2015, we have rolled forward the RAB over the 2010–15 regulatory control period to determine a closing RAB value at 30 June 2015. This roll forward includes an adjustment at the end of the 2010–15 regulatory control period to account for the difference between actual 2009–10 capex and the estimate approved at the 2010 determination.[[4]](#footnote-4)

Table 2.1 sets out our preliminary decision on the roll forward of the RAB values for the 2010–15 regulatory control period.

1. We determine a forecast closing RAB value at 30 June 2020 of $13 329.9 million ($ nominal). This is $925.2 million (or 6.5 per cent) lower than the amount of $14 255.2 million ($ nominal) proposed by Energex. Our preliminary decision on the forecast closing RAB reflects the amended opening RAB as at 1 July 2015, and our preliminary decisions on forecast capex (attachment 6) and forecast regulatory depreciation (attachment 5).

Table 2.2 sets out our preliminary decision on the forecast RAB values for Energex over the 2015–20 regulatory control period.

Table 2.1 AER's preliminary decision on Energex's RAB for the 2010–15 regulatory control period ($ million, nominal)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|   | 2010–11 | 2011–12 | 2012–13 | 2013–14 | 2014–15a |
| Opening RAB |  7867.3  |  8856.5  |  9645.6  |  10462.1  |  11178.3  |
| Capital expenditureb |  1004.9  |  965.7  |  921.9  |  789.0  |  848.5  |
| Inflation indexation on opening RAB | 277.7 | 316.5 | 346.6 | 379.3  | 403.7  |
| Less: straight-line depreciation |  262.0  |  139.9  |  241.1  |  306.5  |  251.5  |
| Closing RAB |  8856.5 |  9645.6 |  10462.1  |  11178.3  |  11874.6  |
| Difference between estimated and actual 2009–10 capex (1 July 2009 to 30 June 2010) |  |  |   |   | –32.7 |
| Return on difference for 2009–10 capex |  |  |  |  | –19.3 |
| Closing RAB as at 30 June 2015 |  |  |  |  | 11822.6 |
| Assets moved to ACS and unregulated assets removed |  |  |  |  | –488.9 |
| **Opening RAB as at 1 July 2015** |  |  |  |  | **11333.7** |

Source: AER analysis.

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

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

Table 2.2 AER's preliminary decision on Energex's RAB for the 2015–20 regulatory control period ($ million, nominal)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|   | 2015–16 | 2016–17 | 2017–18 | 2018–19 | 2019–20 |
| Opening RAB | 11333.7 | 11767.5 | 12201.6 | 12584.9 | 12956.5 |
| Capital expenditurea | 499.4 | 512.5 | 476.4 | 474.2 | 489.2 |
| Inflation indexation on opening RAB | 289.0 | 300.1 | 311.1 | 320.9 | 330.4 |
| Less: straight-line depreciation | 354.6 | 378.4 | 404.3 | 423.6 | 446.1 |
| **Closing RAB** | **11767.5** | **12201.6** | **12584.9** | **12956.5** | **13329.9** |

Source: AER analysis.

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

1. We accept Energex's proposal that a forecast depreciation approach be used to establish the opening RAB at the commencement of the 2020–25 regulatory control period.[[5]](#footnote-5)

## Energex’s proposal

1. Energex used our RFM to establish an opening RAB as at 1 July 2015 and our PTRM to roll forward the RAB over the 2015–20 regulatory control period.
2. Energex proposed an opening RAB value as at 1 July 2010 of $7867.3 million ($ nominal).[[6]](#footnote-6) Rolling forward this RAB and using depreciation based on actual capex, Energex proposed a closing RAB as at 30 June 2015 of $11 791.9 million ($ nominal). Table 2.3 presents Energex's proposed roll forward of its RAB during the 2010–15 regulatory control period.

Table 2.3 Energex's proposed RAB for the 2010–15 regulatory control period ($million, nominal)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|   | 2010–11 | 2011–12 | 2012–13 | 2013–14 | 2014–15a |
| Opening RAB | 7867.3 | 8854.4 | 9662.6 | 10460.1 | 11164.0 |
| Capital expenditureb | 1006.1 | 991.2 | 910.2 | 784.6 | 848.5 |
| Inflation indexation on opening RAB | 262.2 | 140.3 | 241.8 | 306.4 | 251.2 |
| Less: straight-line depreciation | 281.3 | 323.3 | 354.5 | 387.2 | 419.7 |
| Closing RAB | 8854.4 | 9662.6 | 10460.1 | 11164.0 | 11844.0 |
| Difference between estimated and actual 2009–10 capex (1 July 2009 to 30 June 2010) |  | –32.8 |
| Return on difference for 2009–10 capex |  |  |  | –19.3 |
| Closing RAB as at 30 June 2015 |  |  |  |  | 11791.9 |
| Meters moved to ACS and unregulated assets removed |  |  |  |  | –478.8 |
| **Opening RAB as at 1 July 2015** |  |  |  |  | **11313.1** |

Source: Energex, Regulatory proposal, October 2014, p. 148, Table 12.1.

(a) Based on estimated capex.

(b) Net of disposals and adjusted for CPI.

1. Energex proposed a closing forecast RAB as at 30 June 2020 of $14 255.2 million ($ nominal). This value reflects its proposed opening RAB, forecast capex, forecast inflation and depreciation (based on forecast capex) over the 2015–20 regulatory control period. Its projected RAB over the 2015–20 regulatory control period is shown in table 2.4.

Table 2.4 Energex's proposed RAB for the 2015–20 regulatory control period ($million, nominal)

|   | 2015–16 | 2016–17 | 2017–18 | 2018–19 | 2019–20 |
| --- | --- | --- | --- | --- | --- |
| Opening RAB | 11313.1 | 11923.9 | 12543.1 | 13102.5 | 13656.2 |
| Capital expenditurea | 684.4 | 705.3 | 661.0 | 667.2 | 725.8 |
| Inflation indexation on opening RAB | 285.1 | 300.5 | 316.1 | 330.2 | 344.1 |
| Less: straight-line depreciation | 358.7 | 386.6 | 417.7 | 443.6 | 471.0 |
| **Closing RAB** | **11923.9** | **12543.1** | **13102.5** | **13656.2** | **14255.2** |

Source: Energex, Proposed PTRM, October 2014.

(a) Net of disposals and capital contributions.

1. Energex proposed to apply a forecast depreciation approach to establish the RAB at the commencement of 2020–25 regulatory control period, consistent with the approach set out in our final framework and approach paper.[[7]](#footnote-7)

## AER’s assessment approach

1. We are required to roll forward the service provider's RAB during the 2010–15 regulatory control period to establish the opening RAB at 1 July 2015. 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.[[8]](#footnote-8)
2. To determine the opening RAB, we developed an asset base RFM in accordance with the requirements of the NER.[[9]](#footnote-9) A service provider must use the RFM in preparing its regulatory proposal.[[10]](#footnote-10) The RFM rolls forward the RAB from the beginning of the final year of the 2005–10 regulatory control period, through the 2010–15 regulatory control period, to the beginning of the next period. 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 (including capital contributions[[12]](#footnote-12)) to the RAB for the relevant year.[[13]](#footnote-13) 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.[[14]](#footnote-14) The details of our assessment approach for inefficient capex are set out in the Capital expenditure incentive guideline.[[15]](#footnote-15) We note that under the transitional rules, the review of past capex does not apply to Energex prior to 1 July 2015.[[16]](#footnote-16) Therefore, for the purposes of this preliminary decision, we will add Energex's actual or estimated capex in the 2010–15 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.[[17]](#footnote-17) Depreciation based on forecast or actual capex can be used to roll forward the RAB.[[18]](#footnote-18) 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 Energex's RAB values over the 2010–15 regulatory control period.[[19]](#footnote-19) However, depreciation based on forecast capex will be used for the 2015–20 regulatory control period at the next reset.[[20]](#footnote-20)
* Subtracting any disposals from the RAB for the relevant year.[[21]](#footnote-21) 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 2010–15 regulatory control period. The PTRM used to calculate the annual revenue requirement for the 2015–20 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 2020–25 regulatory control period is to be based on actual or forecast capex.[[22]](#footnote-22)
2. The opening RAB for the 2020–25 regulatory control period can be determined using depreciation based either on forecast or actual capex incurred during the 2015–20 period. To roll forward the RAB using depreciation based on forecast capex, we would use the forecast depreciation contained in the PTRM for the 2015–20 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 2015–20 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:[[23]](#footnote-23)
* 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.[[24]](#footnote-24) 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[[25]](#footnote-25)
* 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 2015–20 regulatory control period as proposed by Energex. Overall, the closing RAB at the end of the 2015–20 regulatory control period would be 26 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 30 per cent, while inflation increases it by about 14 per cent. Forecast depreciation, on the other hand, reduces the RAB by about 18 per cent.

Maintaining the RAB in real terms by adding inflation is required by the NER[[26]](#footnote-26) 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.[[27]](#footnote-27) A number of submissions raised concerns with indexation of the RAB[[28]](#footnote-28), but we consider that they may not fully appreciate the impact it has on other building blocks such as depreciation. Even if allowed under the NER, moving to an unindexed RAB would lead to a price increase over the short to medium term and when new lumpy assets are added to the RAB.[[29]](#footnote-29)

1. The RAB would rise in real terms over the 2015–20 regulatory control period based on Energex'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.[[30]](#footnote-30) 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 Energex has proposed. Refer to attachment 6 for the discussion on forecast capex.

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

1. 

Source: Energex's proposed PTRM, October 2014.

1. A ten per cent increase in the opening RAB causes revenues to increase by about 6.8 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.[[31]](#footnote-31)

## Reasons for preliminary decision

We have determined an opening RAB value for Energex of $11 333.7 million ($ nominal) as at 1 July 2015, an increase of $20.6 million ($ nominal) or 0.2 per cent from the proposed value. We forecast a closing RAB value of $13 329.9 million by 30 June 2020. This represents a reduction of $925.2 million, or 6.5 per cent compared to the proposal. The reasons for our decision are discussed below.

### Opening RAB as at 1 July 2015

1. To determine the opening RAB as at 1 July 2015 we have rolled forward the RAB over the 2010–15 regulatory control period to determine a closing RAB value at 30 June 2015. We then adjusted this closing RAB to account for the reclassification of metering assets as ACS. We reviewed the key inputs of Energex's proposed RFM, such as CPI, rate of return, asset lives and disposal values. We found these were correct and they reconcile with relevant data sources such as ABS data, annual reporting RIN data and the 2010–15 decision models.[[32]](#footnote-32) However, we consider there should be adjustments made to Energex's proposed RFM inputs for remaining asset lives and capitalised provisions. These adjustments are discussed below. But first we provide some comments in response to general concerns raised over the size of the opening RAB.

Size of the RAB

A number of submissions had concerns with the size of the opening RAB.[[33]](#footnote-33) Some suggested a write down of the RAB.[[34]](#footnote-34) Others had concerns with customer contributions being included in the RAB.[[35]](#footnote-35)

The opening RAB reflects the capex incurred during the previous regulatory control periods. In the previous two regulatory control periods there was a significant increase in capex that only began to tail off in more recent years. As discussed in section 2.3 we have no ability to adjust for past capex or to optimise/write down the opening RAB. However, with rule changes in 2012, we will have the ability to exclude inefficient capex incurred during the 2015–20 regulatory control period in future resets if it exceeds the approved forecast and if we consider it does not reasonably reflect the capital expenditure criteria.[[36]](#footnote-36) The details of our assessment approach for inefficient capex are set out in the Capital expenditure incentive guideline.[[37]](#footnote-37)

The treatment of customer contributions is also changing in Queensland from 1 July 2015. The opening RAB includes customer contributions in the past, which partly explains the relatively higher RABs in Queensland than other states.[[38]](#footnote-38) Double counting of customer contributions was prevented by including an offsetting revenue adjustment equal to the customer contribution included in the RAB.[[39]](#footnote-39) Given these revenue adjustments, the past customer contributions remain in the RAB until they are fully depreciated. Customer contributions in the future will no longer be added to the RAB, commencing in this determination from 1 July 2015. In the PTRM the forecast customer contributions are deducted from gross capex over the 2015–20 regulatory control period.

The CCP submitted that the Queensland distributors benefited (in terms of additional return on capital and depreciation) over the 2010-15 regulatory control period due to actual capex and customer contributions being less than forecast.[[40]](#footnote-40) The CCP submitted that these benefits be reversed by the AER. In terms of depreciation, the CCP thought the AER had discretion to choose between forecast and actual depreciation in rolling forward the RAB.[[41]](#footnote-41) This is true, however, it cannot be done in the ex post way the CCP proposed. In the 2010 determinations for the Queensland distributors the AER approved an actual depreciation approach to roll forward the RAB when establishing the opening value at 1 July 2015.[[42]](#footnote-42) It would be inconsistent and retrospective now to change to a forecast depreciation approach to roll forward the RAB for the 2010–15 regulatory control period as proposed by the CCP.[[43]](#footnote-43)

The true up mechanism for customer contributions was also set out as part of the control mechanism in the 2010 determinations for the Queensland distributors.[[44]](#footnote-44) We consider making further adjustments now to also be retrospective and inconsistent with those control mechanisms. More generally, the incentive regime rests on the principle that the business tries to outperform the forecasts approved by the regulator. In certain cases, there may be external factors that influence whether the business does better/worse than forecast. We do not attempt to control for these factors beyond the requirements of any specific incentive schemes that were in operation. Accordingly, we have not applied adjustments of the sort the CCP proposed to the RAB for actual capex and customer contributions being less than forecast over the 2010–15 regulatory control period.

Remaining asset lives

Energex's proposed RFM did not apply the remaining asset lives as at 1 July 2010 as approved by the AER in the 2010 determination. We questioned Energex on the reason for the revised remaining asset lives it adopted. Energex stated the proposed remaining asset lives were taken from an incorrect version of the model.[[45]](#footnote-45) Accordingly, we have applied the AER approved remaining asset lives in the RFM as required for the proper function of the RAB roll forward process.

The correct remaining asset lives were generally longer than those in Energex's proposed RFM. This means depreciation for 2010–15 is lower than proposed, and Energex's closing RAB as at 30 June 2015 is consequently higher than proposed by about $41.9 million, other things being equal.

Capitalised provisions

The AER considers that the movement in capitalised provisions during the regulatory control period should be removed from actual capex in the RFM. This approach means capitalised costs related to these provisions are included in the RAB only when they are paid out by the business. This approach is consistent with adding capex as incurred and has been applied in other AER decisions.[[46]](#footnote-46)

This approach was not applied to the periods that the Queensland Competition Authority regulated the Queensland distributors. However, we will apply it going forward. In Energex's case, the movement in capitalised provisions is shown in Table 2.5.[[47]](#footnote-47) These amounts have been used to adjust the capex entering the RFM. The total adjustment for each year is pro-rated across asset classes based on the size of the capex in that asset class for the relevant year. Overall, this adjustment reduces Energex's proposed opening RAB by about $9.7 million, other things being equal.

Table 2.5 Energex's movement in capitalised provisions ($million, nominal)

|   | 2010–11 | 2011–12 | 2012–13 | 2013–14 | 2014–15 |
| --- | --- | --- | --- | --- | --- |
| Movement in capitalised provisions | 0.8 | 24.4 | –11.2 | –4.2 | 0.0 |

Asset class movements

In 2013–14 Energex reclassified assets that were in the low voltage asset class to the metering asset class in its annual reporting RIN. Energex explained this change was designed to prepare for the separation of meters as ACS by moving assets to the metering asset class that are better associated with metering.[[48]](#footnote-48)

The AER's usual practice is to make any adjustments to asset classes at the end of the regulatory control period. This means the depreciation schedules remain consistent with those approved at the last reset. However, in the present case we consider that the shift results in a small reduction in the RAB and it would be preferable to maintain consistency with the annual reporting RINs. We do have concerns with the impact of this reallocation on the remaining asset lives of the two asset classes in question. We consider that aspect does require amendment, as discussed in the depreciation and ACS attachments (5 and 16 respectively).

Separation of alternative control services and unregulated assets

Energex's proposal removed both metering assets and certain proportion of assets used to provide unregulated services. We have accepted the adjustment to the RAB proposed by Energex in relation to these assets and have made further adjustments related to load control assets which are associated with newer meter types.

Meters are to be reclassified as ACS from 1 July 2015. Energex removed certain metering assets from the RAB and included them in the metering asset base as at 1 July 2015. Because of the classification changes discussed in attachment 16, we have revised the proposed amount. We also removed from the RAB certain load control assets embedded with newer meter types.[[49]](#footnote-49) These embedded load control assets amount to $8.0 million as at 1 July 2015.[[50]](#footnote-50) In total, $448.8 million of metering assets have been removed from the RAB as at 1 July 2015.

In addition, other unregulated assets of $40.1 million have been removed from the RAB as at 1 July 2015.[[51]](#footnote-51) The unregulated assets removed from the RAB were a form of shared assets allowed under the Queensland transitional rules. They were included in the RAB during the 2010–15 regulatory control period in the 2010 determination and an offsetting revenue adjustment applied for the expected use of these assets for unregulated services. This approach will end going forward, commencing from 1 July 2015, with the unregulated proportion of the assets removed from the RAB.

### Forecast closing RAB as at 30 June 2020

We forecast a closing RAB value of $13 329.9 million by 30 June 2020 for Energex. This represents a reduction of $925.2 million, or 6.5 per cent to Energex'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 as at 1 July 2015, as discussed in section 2.4.1.
* We reduced the proposed forecast capex for the 2015–20 regulatory control period by $992.1 million or 28.8 per cent (attachment 6).
* We reduced the proposed forecast regulatory depreciation allowance by $46.3 million or 9.2 per cent (attachment 5).

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

Energex proposed a forecast depreciation approach be used to establish the RAB at the commencement of its 2020–25 regulatory control period, consistent with the AER's framework and approach paper.[[52]](#footnote-52)

1. As discussed in attachment 10, Energex is not currently subject to a capital expenditure sharing scheme (CESS) but we will apply the CESS to Energex over the 2015–20 regulatory control period. We consider this scheme will provide sufficient incentives for Energex to achieve capex efficiency gains over the 2015–20 regulatory control 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. [[53]](#footnote-53) We therefore accept Energex's proposed depreciation approach based on forecast capex (updated for actual inflation).
1. NER, cl. 6.12.1(6). [↑](#footnote-ref-1)
2. Energex, Regulatory proposal, October 2014, p. 148, Table 12.1. [↑](#footnote-ref-2)
3. The unregulated assets were a form of shared assets allowed under the Queensland transitional rules. They were included in the RAB during the 2010 distribution determination and an offsetting revenue adjustment applied for the expected use of these assets for unregulated services. This approach will end going forward with the unregulated proportion of the assets to be removed from the opening RAB in this distribution determination. [↑](#footnote-ref-3)
4. The end of period adjustment will be positive (negative) if actual capex is higher (lower) than the estimate approved at the 2010–15 determination. [↑](#footnote-ref-4)
5. NER, cl. 6.12.1(18). [↑](#footnote-ref-5)
6. Energex, Regulatory proposal, October 2014, p. 148, Table 12.1. [↑](#footnote-ref-6)
7. Energex, Regulatory proposal, October 2014, p. 143. [↑](#footnote-ref-7)
8. NER, cl. S6.2.1. [↑](#footnote-ref-8)
9. NER, cl. 6.5.1. [↑](#footnote-ref-9)
10. NER, cl.S6.1.3(7). [↑](#footnote-ref-10)
11. NER, cl. 6.5.1(e)(3). [↑](#footnote-ref-11)
12. Capital contributions are not usually included in the RAB. This is a unique situation in Queensland, allowed under transitional rules for the 2010–15 regulatory control period. At this stage the AER does not intend to include capital contributions in the RAB in subsequent regulatory control periods. [↑](#footnote-ref-12)
13. NER, cl. S6.2.1(e)(4). [↑](#footnote-ref-13)
14. NER, cl. S6.2.2A. [↑](#footnote-ref-14)
15. 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-15)
16. NER, cll. 11.60.5 and 11.62. [↑](#footnote-ref-16)
17. NER, cl. S6.2.1(e)(5). [↑](#footnote-ref-17)
18. NER, cl. 6.12.1(18). [↑](#footnote-ref-18)
19. The use of actual depreciation is consistent with the depreciation approach established in the 2010 distribution determination for Energex. [↑](#footnote-ref-19)
20. Refer to section 2.4.3 for the reasons. [↑](#footnote-ref-20)
21. NER, cl. S6.2.1(e)(6). [↑](#footnote-ref-21)
22. NER, cl. S6.2.2B. [↑](#footnote-ref-22)
23. NER, cl. S6.2.2B(c). [↑](#footnote-ref-23)
24. 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-24)
25. 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-25)
26. NER, cl. 6.5.1(e)(3). [↑](#footnote-ref-26)
27. Such an impact would also be reflected if we were to switch methods midway through an asset's life. [↑](#footnote-ref-27)
28. Central Highlands Cotton Growers and Irrigators Association & Darling Downs Cotton Growers, Submission to Energex's regulatory proposal, January 2015, p.1. EUAA, Submission to Energex's regulatory proposal, January 2015, p.31. [↑](#footnote-ref-28)
29. The indexation of the RAB was a matter discussed extensively in the AER's final decision on APA GasNet's access arrangement. This matter also went before the Australian Competition Tribunal, who found in favour of the AER's reasoning in that final decision. See AER, Access arrangement final decision, APA GasNet Australia (Operations) Pty Ltd, 2013–17, Part 2: Attachments, 15 March 2013, pp.102-116. [↑](#footnote-ref-29)
30. Refer to attachment 5 for the discussion on regulatory depreciation. [↑](#footnote-ref-30)
31. 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-31)
32. At the time of this preliminary decision, the roll forward of Energex's RAB includes estimated capex values for 2014–15. We will update the 2014–15 estimated capex values for the substitute decision. [↑](#footnote-ref-32)
33. EUAA, Submission to Energex's regulatory proposal, January 2015, pp.16-17. ETU, Submission to Energex's regulatory proposal, January 2015, p.5. Canegrowers, Submission to Energex's regulatory proposal, January 2015, p. 3. [↑](#footnote-ref-33)
34. EUAA, Submission to Energex's regulatory proposal, January 2015, pp.16-17. ETU, Submission to Energex's regulatory proposal, January 2015, p.5. Canegrowers, Submission to Energex's regulatory proposal, January 2015, p. 3. [↑](#footnote-ref-34)
35. UDIA, Submission to Energex's regulatory proposal, January 2015, p. 2. [↑](#footnote-ref-35)
36. 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-36)
37. AER, Capital expenditure incentive guideline, November 2013, pp. 12–20. [↑](#footnote-ref-37)
38. This approach was allowed under transitional rules for Queensland. [↑](#footnote-ref-38)
39. The forecast customer contributions were added to the forecast RAB and an equivalent amount removed from forecast revenues to prevent double counting. Each year during the price approval process adjustment were made to revenues for any difference between actual and forecast customer contributions. [↑](#footnote-ref-39)
40. CCP (Bruce Mountain), Submission on Energex, Ergon and SAPN revenues controls, 2 February 2015, pp. 4-9. [↑](#footnote-ref-40)
41. CCP (Bruce Mountain), Submission on Energex, Ergon and SAPN revenues controls, 2 February 2015, p. 4. [↑](#footnote-ref-41)
42. AER, Final decision: Queensland distribution determination 2010–11 to 2014–15, May 2010, pp. 33-34 and 37. [↑](#footnote-ref-42)
43. The depreciation approach for the 2015–20 regulatory control period is discussed in section 2.4.3 of this attachment. [↑](#footnote-ref-43)
44. The adjustment was referred to as the C factor in the control equation. See, AER, Final decision: Queensland distribution determination 2010–11 to 2014–15, May 2010, p.27. [↑](#footnote-ref-44)
45. Energex, E-mail: AER Energex 019, 27 January 2015. [↑](#footnote-ref-45)
46. AER, Final decision: ElectraNet transmission determination 2013–14 to 2017–18, April 2013, pp. 196–202. AER, Draft decision: Draft Distribution Determination Aurora Energy Pty Ltd, 2012–13 to 2016–17, November 2011, pp. 197-201. [↑](#footnote-ref-46)
47. Positive amounts are net increases in capitalised provisions, while negatives mean there has been a net payout by Energex in capitalised provisions. [↑](#footnote-ref-47)
48. Energex, E-mail: AER Energex 019, 27 January 2015. [↑](#footnote-ref-48)
49. See attachment 16 for a discussion on this classification issue. [↑](#footnote-ref-49)
50. This amount is based on the proportion of such load control assets in the residual meters asset class. Energex identified $9.6 million of load control assets in the residual asset class value of $60.2 million as at 1 July 2015 in an email to us on 25 March 2015. That is, those assets make up 15.9 percent of the metering asset class. We applied this percentage to the revised value of the metering asset class we determined after making the other adjustments above. [↑](#footnote-ref-50)
51. On page 148 of its regulatory proposal, Energex refers to $61.3 million being removed from the RAB for expiry of transitional arrangements. However, about $20 million related to non-system metering assets that have been included in the metering asset base. We have therefore included this amount in the total of metering assets adjustment discussed above. [↑](#footnote-ref-51)
52. AER, Final framework and approach paper for Energex and Ergon Energy, April 2014, pp. 89–92. [↑](#footnote-ref-52)
53. 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-53)