



FINAL DECISION
TransGrid transmission
determination
2018 to 2023

Attachment 5 – Regulatory
depreciation

May 2018

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Note

This attachment forms part of the AER's final decision on TransGrid's transmission determination for 2018–23. It should be read with all other parts of the final decision.

The final decision includes the following documents:

Overview

TransGrid transmission determination 2018–23

Attachment 1 – Maximum allowed revenue

Attachment 2 – Regulatory asset base

Attachment 5 – Regulatory depreciation

Attachment 6 – Capital expenditure

Attachment 8 – Corporate income tax

Attachment 9 – Efficiency benefit sharing scheme

Attachment 10 – Capital expenditure sharing scheme

Attachment A – Negotiating framework

Attachment B – Pricing methodology

Contents

| | |
|--------------------------------|-----|
| Note | 5-2 |
| Contents | 5-3 |
| Shortened forms | 5-4 |
| 5 Regulatory depreciation..... | 5-6 |
| 5.1 Final decision | 5-6 |
| 5.2 Assessment approach..... | 5-9 |

Shortened forms

| Shortened form | Extended form |
|----------------|--|
| AARR | aggregate annual revenue requirement |
| AEMC | Australian Energy Market Commission |
| AEMO | Australian Energy Market Operator |
| AER | Australian Energy Regulator |
| ASRR | annual service revenue requirement |
| augex | augmentation expenditure |
| capex | capital expenditure |
| CCP | Consumer Challenge Panel |
| CESS | capital expenditure sharing scheme |
| CPI | consumer price index |
| DMIA | demand management innovation allowance |
| DRP | debt risk premium |
| EBSS | efficiency benefit sharing scheme |
| ERP | equity risk premium |
| MAR | maximum allowed revenue |
| MRP | market risk premium |
| NEL | national electricity law |
| NEM | national electricity market |
| NEO | national electricity objective |
| NER | national electricity rules |
| NSCAS | network support and control ancillary services |
| NSP | network service provider |
| NTSC | negotiated transmission service criteria |
| 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 |

| Shortened form | Extended form |
|----------------|---|
| RIN | regulatory information notice |
| RPP | revenue and pricing principles |
| SLCAPM | Sharpe-Lintner capital asset pricing model |
| STPIS | service target performance incentive scheme |
| TNSP | transmission network service provider |
| TUoS | transmission use of system |
| WACC | weighted average cost of capital |

5 Regulatory depreciation

Depreciation is the allowance provided so capital investors recover their investment over the economic life of the asset (return of capital). In deciding whether to approve the depreciation schedules submitted by TransGrid, we make determinations on the indexation of the RAB and depreciation building blocks for TransGrid's 2018–23 regulatory control period.¹ The regulatory depreciation allowance is the net total of the straight-line depreciation less the inflation indexation adjustment of the RAB.

5.1 Final decision

Our final decision is to determine a regulatory depreciation allowance of \$630.5 million (\$nominal) for TransGrid over the 2018–23 regulatory control period. This amount represents a reduction of \$4.5 million (or 0.7 per cent) on the \$635.1 million (\$nominal) in TransGrid's revised proposal.² It represents a slight increase in the regulatory depreciation allowance in our draft decision. In coming to this decision:

- We accept TransGrid's revised proposed straight-line method to calculate the regulatory depreciation allowance.
- We largely accept TransGrid's revised proposed asset classes and standard asset lives. However, we did not retain the standard asset life of 36 years associated with the asset class for 'NSCAS assets' in the PTRM.
- We accept TransGrid's revised proposal to apply the weighted average method to calculate the remaining asset lives as at 1 July 2018. In accepting the weighted average method, we have updated TransGrid's remaining asset lives as at 1 July 2018 to reflect the 2017–18 CPI update in the RFM (attachment 2).
- We made determinations on other components of TransGrid's revised proposal, which affects the RAB and in turn impacts the forecast regulatory depreciation allowance. The decrease to the regulatory depreciation allowance from the revised proposal reflects our adjustments to the opening RAB as at 1 July 2018 (attachment 2), expected inflation rate (section 2.2 in the Overview) and forecast capital expenditure (attachment 6).

Table 5.1 sets out our final decision on the forecast regulatory depreciation allowance for TransGrid over the 2018–23 regulatory control period.

¹ NER, cl. 6A 5.4(a)(1) and (3).

² TransGrid, *Revised Revenue proposal*, December 2017, p. 143.

Table 5.1 AER's final decision on TransGrid's forecast regulatory depreciation for the 2018–23 regulatory control period (\$million, nominal)

| | 2018–19 | 2019–20 | 2020–21 | 2021–22 | 2022–23 | Total |
|---|--------------|--------------|--------------|--------------|--------------|--------------|
| Straight-line depreciation | 257.3 | 278.0 | 294.7 | 300.9 | 316.2 | 1447.1 |
| Less: inflation indexation on opening RAB | 156.1 | 159.1 | 163.0 | 166.8 | 171.6 | 816.6 |
| Regulatory depreciation | 101.2 | 118.9 | 131.7 | 134.1 | 144.6 | 630.5 |

Source: AER analysis.

Standard and remaining asset lives as at 1 July 2018

For this final decision, we accept TransGrid's revised proposal to use the weighted average method in the RFM to calculate the remaining asset lives as at 1 July 2018 for its existing asset classes.³ This is consistent with TransGrid's initial proposal and our draft decision. In accepting this method, we have updated the remaining asset lives to reflect the actual inflation value for 2017–18 that we made in the RFM, which became available after TransGrid submitted its revised proposal.

For this final decision, we accept the majority of TransGrid's revised proposal standard asset lives for its asset classes in respect of forecast capex to be commissioned in the 2018–23 regulatory control period. However, we do not accept the standard asset life of 36 years for the asset class 'NSCAS assets' as shown in TransGrid's revised PTRM.

Our draft decision did not accept the standard asset life of 36 years for the proposed new asset class for 'NSCAS assets' because we did not approve the proposed roll-in amount of NSCAS assets.⁴ TransGrid's revised proposal did not adopt our draft decision to roll-in these assets at zero value to the RAB. It has kept the standard asset life of 36 years for this asset class in its revised proposed PTRM.⁵ As discussed in attachment 6, we maintain our position in this final decision that the NSCAS assets should be rolled into the RAB at a zero value. As we determined a roll-in amount of zero, we are not required to make a decision on the proposed standard asset life for the asset class 'NSCAS assets'. Therefore, consistent with our draft decision, we have not assigned a standard asset life for this asset class in this final decision.

³ TransGrid creates separate asset classes for each regulatory control period for depreciating its capex.³ This means that TransGrid's proposal adopts the weighted average method to calculate remaining asset lives as at 1 July 2018 for existing asset classes. A new set of asset classes is then applied for depreciating new capex over the 2018–23 regulatory control period. This approach is a continuation of that approved in TransGrid's previous determinations. It achieves a similar outcome as the 'year-by-year tracking' depreciation approach that we have approved in recent decisions for other network service providers.

⁴ AER, *Draft decision: TransGrid determination 2018–23, Attachment 5—regulatory depreciation*, September 2017, p. 6.

⁵ TransGrid, *Revised Revenue Proposal*, 1 December 2017, p. 142.

Our draft decision also did not accept TransGrid's proposed standard asset life of 25 years for the 'Transmission lines – life extension (2018–23)' asset class for depreciation purposes. Instead, we determined a standard asset life of 35 years, which reflected the weighted average of the technical lives of the assets used for the forecast transmission line life extension works for the 2018–23 regulatory control period.⁶ TransGrid's revised proposal adopted our draft decision on the standard asset life.

Table 5.2 sets out our final decision on the standard and remaining asset lives as at 1 July 2018 for TransGrid over the 2018–23 regulatory control period. We are satisfied the approved standard asset lives would lead to a depreciation schedule that reflects the nature of the assets over the economic lives of the asset classes. Further, the sum of the real value of the depreciation attributable to the assets would be equivalent to the value at which the assets were first included in the RAB for TransGrid.⁷

Table 5.2 AER's final decision on TransGrid's standard and remaining asset lives as at 1 July 2018 (years)

| Asset class | Standard asset life | Remaining asset life as at 1 July 2018 |
|--|---------------------|--|
| Transmission lines (pre 2004–05) | n/a | 14.1 |
| Underground cables (pre 2004–05) | n/a | 26.3 |
| Substations including buildings (pre 2004–05) | n/a | 12.5 |
| Transmission lines (2004–09) | n/a | 40.1 |
| Underground cables (2004–09) | n/a | 32.4 |
| Substations including buildings (2004–09) | n/a | 29.8 |
| SCADA and communications (2004–09) | n/a | 4.8 |
| Transmission lines & cables (2009–14) | n/a | 44.6 |
| Substations (2009–14) | n/a | 34.2 |
| Secondary systems (2009–14) | n/a | 29.5 |
| Communications (2009–14) | n/a | 29.4 |
| Minor plant, motor vehicles & mobile plant (2009–14) | n/a | 2.2 |
| Transmission lines (2014–18) | n/a | 49.6 |
| Underground cables (2014–18) | n/a | 43.1 |
| Substations (2014–18) | n/a | 38.3 |
| Secondary systems (2014–18) | n/a | 13.6 |
| Communications (short life) (2014–18) | n/a | 9.1 |

⁶ Please refer to section 5.4.1.2 of attachment 5 of our draft decision for detailed reasons.

⁷ NER, cl. 6A.6.3(b)(1)–(2).

| | | |
|--|------|------|
| Business IT (2014–18) | n/a | 3.1 |
| Minor plant, motor vehicles & mobile plant (2014–18) | n/a | 6.7 |
| Transmission line life extension (2014–18) | n/a | 24.0 |
| Residual - other | n/a | 1.0 |
| Transmission lines (2018–23) | 50.0 | n/a |
| Underground cables (2018–23) | 45.0 | n/a |
| Substations (2018–23) | 40.0 | n/a |
| Secondary systems (2018–23) | 15.0 | n/a |
| Communications (short life) (2018–23) | 10.0 | n/a |
| Business IT (2018–23) | 4.0 | n/a |
| Minor plant, motor vehicles & mobile plant (2018–23) | 8.0 | n/a |
| Transmission line life extension (2018–23) | 35.0 | n/a |
| Land and easements | n/a | n/a |
| NSCAS assets | n/a | n/a |
| Equity raising costs ^a | n/a | 32.6 |

Source: AER analysis

n/a: not applicable. We have not assigned a standard asset life to some asset classes because the assets allocated to those asset classes are not subject to depreciation. The asset classes ending with '(pre 2004–05)'; '(2004–09)'; '(2009–14)' and '(2014–18)' also do not have assigned standard asset lives because forecast capex is no longer allocated to them.

(a) For this final decision, TransGrid does not satisfy the requirements to incur benchmark equity raising costs associated with its forecast capex for the 2018–23 regulatory control period. Therefore, a standard asset life for equity raising costs (2018–23) is not required.

5.2 Assessment approach

We did not change our assessment approach for regulatory depreciation from our draft decision. Attachment 5 section 5.3 of our draft decision details that approach.