



# Final determination

## Cost thresholds review

November 2018

© Commonwealth of Australia 2018

This work is copyright. In addition to any use permitted under the Copyright Act 1968, all material contained within this work is provided under a Creative Commons Attributions 3.0 Australia licence, with the exception of:

- the Commonwealth Coat of Arms
- the ACCC and AER logos
- any illustration, diagram, photograph or graphic over which the Australian Competition and Consumer Commission does not hold copyright, but which may be part of or contained within this publication. The details of the relevant licence conditions are available on the Creative Commons website, as is the full legal code for the CC BY 3.0 AU licence.

Requests and inquiries concerning reproduction and rights should be addressed to the Director, Corporate Communications,  
Australian Competition and Consumer Commission,  
GPO Box 4141,  
Canberra ACT 2601  
or [publishing.unit@acc.gov.au](mailto:publishing.unit@acc.gov.au).

Inquiries about this publication should be addressed to:

Australian Energy Regulator  
GPO Box 520  
Melbourne Vic 3001

Tel: (03) 9290 1444  
Fax: (03) 9290 1457

Email: [RIT@aer.gov.au](mailto:RIT@aer.gov.au)  
AER Reference: 63054

# Contents

1	Executive Summary .....	4
2	Introduction.....	6
3	Background.....	7
	3.1. NER requirements.....	7
	3.2. Previous cost thresholds reviews .....	7
4	Draft determination.....	10
	4.1. Submissions .....	13
5	Final determination.....	14

# 1 Executive Summary

The regulatory investment test for transmission (RIT-T) and regulatory investment test for distribution (RIT-D) are cost benefit tests that network businesses are required to apply prior to augmenting the network. The RIT-T and RIT-D only apply to investments which are above certain cost thresholds. The National Electricity Rules (NER) require us to review changes in input capital costs every three years and adjust the RIT-T and RIT-D cost thresholds to reflect these changes (cost thresholds review).

On 31 July 2018 we commenced the 2018 cost thresholds review. In accordance with NER requirements, this review looked at:

- changes in capital input costs for transmission network projects since 31 July 2015 to determine whether the RIT-T cost thresholds should be amended to maintain their appropriateness; and
- changes in capital input costs for distribution network projects since 31 July 2015 to determine whether the RIT-D cost thresholds should be amended to maintain their appropriateness.

On 11 September 2018 we published a draft determination for the 2018 cost thresholds review. We received two submissions on the draft determination.

Consistent with the NER requirements, this document sets out the AER's final determination of the 2018 cost threshold review for the RIT-T and RIT-D.

Our final determination for the transmission cost thresholds is that:

- The \$6 million capital cost threshold referred to in NER clauses 5.15.3(b)(2),(4) and (6) remains unchanged. This is the cost threshold over which a RIT-T applies.
- The \$35 million capital cost threshold referred to in NER clause 5.15.3(b)(5), which was increased to \$41 million in the 2015 cost thresholds review, will be increased to \$43 million. A RIT-T proponent can skip publishing a 'project assessment draft report' for projects below this threshold.
- The \$200,000 asset cost threshold referred to in NER clause 5.15.3(b)(1A) remains unchanged. For assets below this threshold, transmission network service providers (transmission businesses) can aggregate the asset replacement costs they report on in their transmission annual planning reports (TAPRs).

Our final determination for the distribution cost thresholds is that:

- The \$5 million capital cost threshold referred to in NER clause 5.15.3(d)(1) be increased to \$6 million. This is the cost threshold over which a RIT-D applies.

- The \$10 million capital cost threshold referred to in NER clause 5.15.3(d)(3) be increased to \$11 million. A RIT–D proponent can skip publishing a 'draft project assessment report' for projects below this threshold.
- The \$20 million capital cost threshold referred to in NER clause 5.15.3(d)(4), which was increased to \$21 million in the 2015 cost thresholds review, be increased to \$22 million. This is the cost threshold under which a RIT–D proponent can publish its 'final project assessment report' as part of its distribution annual planning report (DAPR).
- The \$2 million capital cost threshold referred to in NER clause 5.15.3(d)(5) remains unchanged. This is the cost threshold, over which a distribution network service provider (distribution business) must report on committed investments to meet an urgent and unforeseen issue in their DAPRs.
- The \$200,000 asset cost threshold referred to in NER clause 5.15.3(d)(4A) remains unchanged. For assets below this threshold, distribution businesses can aggregate the asset replacement costs they report on in their DAPRs.

The revised cost thresholds will take effect on 1 January 2019.

## 2 Introduction

We, the Australian Energy Regulator (AER), are responsible for the economic regulation of electricity transmission and distribution services in the National Electricity Market (NEM), as well as some gas transportation services. We also monitor compliance with, and are responsible for enforcement of the National Electricity Law and National Gas Law.

Every three years, we review a specific set of cost thresholds, as set out in NER clause 5.15.3. This adjustment aims to reflect changes in input costs so that the cost thresholds in the NER remain appropriate.

The majority of the cost thresholds under NER clause 5.15.3 relate to the regulatory investment test for transmission and distribution (the RIT–T and RIT–D, or collectively 'the RITs'). The RITs are cost benefit tests that network service providers (network businesses) must apply before making major investments in the network. The purpose of the RIT is to identify the investment in the network which maximises the present value of the net economic benefit for all those who produce, consume and transport electricity in the NEM. The RITs only apply to investments that are above certain cost thresholds. We are considering those cost thresholds as part of this review.

Other cost thresholds under NER clause 5.15.3 relate to the transmission and distribution annual planning reports (the TAPRs and DAPRs, or collectively 'the APRs'). An APR highlights opportunities and limitations in parts of a specific network for which the network business is responsible, as well as forecasting possible developments over the minimum planning period (five years for distribution and 10 years for transmission). APRs allow network businesses to aggregate the asset replacement costs they must report on for assets under a certain cost threshold. Moreover, distribution network service providers (distribution businesses) only need to report on committed investments to meet an urgent and unforeseen issue in their DAPRs if those investments are over a certain cost threshold.

On 31 July 2018, in accordance with NER clause 5.15.3, we initiated a review of the cost thresholds associated with the RITs and APRs (2018 cost thresholds review). On 11 September 2018 we published our draft determination on the 2018 cost thresholds review.

Consistent with the requirements of NER clause 5.15.3(j), this document sets out our final determination on the 2018 cost thresholds review. We propose that the revised cost thresholds set out in this review take effect on 1 January 2019.

## 3 Background

This section provides background on:

- the NER requirements underpinning this review; and
- previous cost threshold reviews.

### 3.1 NER requirements

NER clause 5.15.3(a) requires that we undertake a cost threshold review every three years. This clause specifies that we are to review changes in input costs for estimating capital costs, so that we can determine whether to adjust the cost thresholds to reflect any changes in input costs. The purpose of this is to ensure the cost thresholds specified in NER clauses 5.15.3(b) and (d) remain appropriate over time.

NER clauses 5.15(e) to (k) prescribe how we will run this cost threshold review. This entails:

- Commencing a review every three years by 31 July of the relevant year;
- Within six weeks of commencement, publishing a draft determination and a notice seeking submissions for a specified period of not less than five weeks. The draft determination must outline:
  - whether we consider any of the cost thresholds need to be amended to reflect changes in the input costs to ensure that the appropriateness of the cost thresholds is maintained over time;
  - our reasons for determining whether the cost thresholds need to be varied to reflect changes in the input costs;
  - if there is to be a variation in a cost threshold, the amount of the new cost threshold and the date the new cost threshold will take effect; and
  - our reasons for determining the amount of the new cost threshold.
- Considering any written submissions received during the submission period in making a final determination within five weeks after the submission period.

### 3.2 Previous cost thresholds reviews

In 2012, we undertook our first cost thresholds review. This entailed reviewing cost thresholds that applied to the RIT–T exclusively, since the RIT–D and provisions to report on asset retirements in the APRs were yet to be introduced in the NER. In 2015, we undertook the first cost thresholds review for the RIT–D and the second cost thresholds review for the RIT–T.

For these reviews, our assessment approach entailed:

1. Examining changes in several indexes, including several:

- Measures of the consumer price index (CPI).
  - Producer price indexes (PPIs). This included broader measures, such as the total PPI for imports and domestic production. This also included examining PPIs that would measure types of inputs that network businesses would use, such as the PPI for primary metal and metal product manufacturing, fabricated metal product manufacturing, and machinery and equipment manufacturing.
  - Gross domestic product (GDP) implicit price deflators.
2. Using the changes in these indexes to ascertain the range of cost variations and using our regulatory judgement to make a determination on the change in input costs.
  3. Applying our judgement to give greater consideration to broader economy wide indexes as opposed to industry-specific indexes. This was on the basis that broader economy wide indexes:
    - are better measures of overall price movements across the entire economy;
    - are commonly used and understood; and
    - in the absence of precise measures, provide a reasonable proxy for changes in input costs.

We favoured this approach over a more full scale review of precise changes in transmission and distribution network project costs given the regulatory burden it would impose on both network businesses and us. For administrative simplicity, we rounded changes to the nearest million. We also rounded down where the increase in input costs resulted in a pre-rounded variation figure of approximately halfway between two rounded figures (for example, \$1.5 million would be rounded down to \$1 million).

Table 1 summarises how the different cost thresholds have changed over time with the cost threshold reviews in 2012 and 2015, leading to changes taking effect in 2013 and 2016 respectively.

**Table 1: Cost threshold values over time (\$ million)**

Cost threshold	2010	2013	2016
The \$5 million threshold under NER cl. 5.15.3(b)(2),(4),(6) for capital costs, over which a RIT-T applies.	5	5	6
The \$35 million threshold under NER cl. 5.15.3(b)(5) for the proposed preferred option's capital costs, under which a RIT-T proponent can skip the 'project assessment draft report' consultation step.	35	38	41
The \$5 million threshold for capital costs under NER cl. 5.15.3(d)(1), over which a RIT-D applies.	N/A*	5	5



The \$10 million threshold under NER cl. 5.15.3(d)(3) for the proposed preferred option's capital costs, under which a RIT-D proponent can skip the 'draft project assessment report' consultation step.	N/A*	10	10
The \$20 million threshold under NER cl. 5.15.3(d)(4) for the estimated preferred option's capital costs, over which a RIT-D proponent includes its 'final project assessment report' as part of its DAPR.	N/A*	20	21
The \$2 million estimated capital cost threshold under NER cl. 5.15.3(d)(5), over which committed investments to address an urgent and unforeseen network issue must be included in the DAPR.	N/A*	2	2

\* The predecessor of the RIT-D, the regulatory test, was in effect in 2010. The RIT-D came into effect in 2013.

Table 1 does not include the \$200,000 threshold for an asset's replacement costs, under which network businesses can combine the information in its APRs for assets they expect to retire or de-rate.<sup>1</sup> This cost threshold was introduced following the repex rule change in 2017.

<sup>1</sup> That is, NER clauses 5.15.3(b)(1A) and 5.15.3(d)(4A).

## 4 Draft determination

On 11 September 2018 we published our draft determination on the 2018 cost thresholds review.

The draft determination used the same approach to the variation of cost thresholds that was done in the 2015 cost thresholds review. That is, our approach involved reviewing the cost inputs and rounding any changes in the cost threshold to the nearest million, unless it was inappropriate to do (for example, we will round any changes to the \$200,000 cost threshold to the nearest \$100,000). Where the increase in input costs results in a pre-rounded variation figure approximately halfway between two rounded figures (for example, \$1.5 million), then we would round the cost threshold down rather than up.

We used the same indexes for transmission and distribution cost thresholds because changes in capital input costs for transmission and distribution should be sufficiently similar.

We considered a broad range of possible indexes to obtain a range of values that represent a reasonable approximation of changes in capital costs since:

- 17 July 2017, when the new cost thresholds under the repex rule change came into effect. Since the Australian Bureau of Statistics updates the majority of indexes we have considered quarterly, we applied linear interpolation to approximate input cost changes since 17 July 2017.
- 30 June 2015, which was the period up to which we measured input cost changes in our last cost threshold review.<sup>2</sup>

Consistent with the 2015 cost thresholds review, we gave greater reliance to economy-wide indexes. **Error! Reference source not found.** below sets out the indexes we considered and the percentage change of those indexes since the 2015 cost thresholds review and since the 2017 repex rule change. The indexes considered are consistent with the indexes considered in the 2015 cost thresholds review.

We had limited regard to the industry-specific PPI indexes and GDP deflators in Table 4 on the basis that these indexes are more volatile and less widely used and understood, without necessarily better reflecting the input costs of the network businesses.<sup>3</sup> However, we included these measures as a cross check on the

---

<sup>2</sup> This is with exception to our use of GDP price deflators. Consistent with our previous reviews, we have measured changes in these indexes from the end of March quarter rather than the end of June quarter. We use the March measurement because this has always been the most up-to-date measurement we have available when performing this review.

<sup>3</sup> In general, there is not a direct relationship between costs of materials and input costs that network businesses incur. We consider that there is a great deal of uncertainty where movements in producer price indexes of raw materials do not necessarily imply a movement of the same magnitude in the costs of inputs that the network businesses incur such as cables and transformers.

reasonableness of the broader economy-wide indexes. These indexes indicate that more specific cost input price changes fall both above and below the average of the economy-wide indexes.

Further, we had more regard to economy-wide indexes over industry indexes because broader indexes:

- are better measures of overall price movements across the entire economy;
- are commonly used and understood, including in how we account for inflation in setting regulated revenues (which entails using CPI);
- in the absence of precise measures, provide a reasonable proxy for changes in input costs.

**Table 2: Changes to indexes considered in draft determination (% rounded)**

Index	Change since June 2015	Change since 18 July 2017
Consumer price index (CPI)	5.1	1.7
CPI - trimmed mean	5.4	1.6
CPI - weighted mean	5.3	1.7
Producer Price Index (PPI) - total domestic and import	4.3	1.4
PPI - primary metal and metal product manufacturing	15.3	8.7
PPI - fabricated metal product manufacturing	11.9	6.6
PPI - machinery and equipment manufacturing	3.3	0.6
Gross Domestic Product (GDP) - implicit price deflator	6.1	1.7
GDP - chain price index	6.0	1.0
GDP - implicit price deflator - fixed capital formation	3.3	0.7
GDP - implicit price deflator - final consumption	3.3	0.9
GDP - implicit price deflator - private fixed capital formation - new engineering construction	3.7	1.3
<b>AER draft decision: Proposed cost escalator</b>	<b>6.0</b>	<b>2.0</b>

Source: ABS.<sup>4</sup>

Overall, we considered 6.0% and 2.0% to be reasonable estimates of the change in input costs since June 2015 and July 2017, respectively. We formed this view having considered the following factors:

- The average of the different CPI measures (headline, trimmed mean and weighted mean) and the economy-wide GDP deflators (the implicit price deflator and chain price index) are 5.6% and 1.7% since June 2015 and July 2017, respectively. When rounded to the nearest percentage point, this supported escalating the cost thresholds by 6.0% and 2.0% since June 2015 and July 2017, respectively.
- The industry-specific PPI indexes and GDP deflators in Table 4 did not suggest the economy-wide measures are unreasonable for forming a view on input cost changes for the capital costs of network investment. These indicators were not clearly lower or greater than the economy wide measures, but rather fall on either side. This was not indicative of a material and systematic difference between input cost changes for network investment and price changes in the broader economy, suggesting that our use of economy-wide measures was reasonable.

On this basis, for the RIT-T cost thresholds, the draft determination proposed that:

- The un-rounded \$5.83 million cost thresholds referred in clauses 5.15.3(b)(1), (2), (4) and (6) would increase to \$6.18 million. Given the approach to rounding, this cost threshold would remain unchanged at \$6 million
- The un-rounded \$40.81 million cost threshold referred to in clause 5.15.3(b)(5) would increase to \$43.26 million. Therefore, the cost threshold would be rounded to \$43 million.

Similarly, for the RIT-D cost thresholds, the draft determination proposed that:

- The un-rounded \$5.25 million cost thresholds referred to in clauses 5.15.3(d)(1) and (2) would increase to \$5.57 million. Therefore, the cost threshold would be rounded to \$6 million.
- The un-rounded \$10.5 million cost threshold referred to in clause 5.15.3(d)(3) would increase to \$11.13 million. Therefore, the cost threshold would be rounded to \$11 million.
- The \$21 million cost threshold referred to in clause 5.15.3(d)(4) would increase to \$22.26 million. Therefore, the cost threshold would be rounded to \$22 million.
- The un-rounded \$2.1 million cost threshold referred to in clause 5.15.3(d)(5) would increase to \$2.23 million. Therefore, the cost threshold would be rounded down to \$2 million.

---

<sup>4</sup> ABS Consumer Price Index Australia, March 2018, catalogue number 6401.0; Producer Price Index Australia, March 2018, catalogue number 6427.0; Australian National Income, Expenditure and Product, March 2018, catalogue number 5206.0.

We proposed in the draft determination that the revised cost thresholds would take effect on 1 January 2019.

## 4.1 Submissions

Interested parties were invited to submit written submissions on the draft determination. Submissions closed on 16 October 2018. Two submissions were received from CitiPower, Powercor and United Energy<sup>5</sup> (CPU) and Energy Queensland<sup>6</sup>.

CPU supported the updated draft cost thresholds and our approach to reviewing the cost thresholds. CPU submitted that the new cost thresholds more appropriately captured the increase in input costs over time. Further, they considered it beneficial that the new cost thresholds for the RIT-D would be consistent with the RIT-T. They considered this consistency would improve the ability to conduct a cost-benefit analysis of joint planning projects where the identified need may be addressed through potential solutions on a combination of transmission and distribution networks.

Energy Queensland supported our approach to the cost thresholds review and considered the indexes used and associated weightings remained appropriate. Energy Queensland supported the increases proposed for the thresholds for NER clauses 5.15.3(1),(3) and (4).

---

<sup>5</sup> CitiPower, Powercor and United Energy, *Submission to AER draft determination on cost threshold review*, 10 October 2018.

<sup>6</sup> Energy Queensland, *Submission to AER draft determination on cost threshold review*, 16 October 2018.

## 5 Final determination

Consistent with the requirements of NER clause 5.15.3(j), this section sets out our final determination for the 2018 cost thresholds review.

Our final determination is the same as that proposed in the draft determination and restated in section 4 of this final determination. The figures used for the calculation of changes in input costs in the draft determination (shown in table 4 of this final determination) have remained unchanged because ABS data has not been updated since the draft determination was published.

Written submissions were supportive of our approach outlined in the draft determination to estimate changes in capital input costs and adjust the RIT-T and RIT-D cost thresholds. Further, no written submissions opposed our findings in relation to capital input cost changes.

Our final determination for the transmission cost thresholds is that:

- The \$6 million capital cost threshold referred to in NER clauses 5.15.3(b)(2),(4) and (6) remains unchanged. This is the cost threshold over which a RIT–T applies.
- The \$35 million capital cost threshold referred to in NER clause 5.15.3(b)(5), which was increased to \$41 million in the 2015 cost thresholds review, will be increased to \$43 million. A RIT–T proponent can skip publishing a 'project assessment draft report' for projects below this threshold.
- The \$200,000 asset cost threshold referred to in NER clause 5.15.3(b)(1A) remains unchanged. For assets below this threshold, transmission network service providers (transmission businesses) can aggregate the asset replacement costs they report on in their transmission annual planning reports (TAPRs).

Our final determination for the distribution cost thresholds is that:

- The \$5 million capital cost threshold referred to in NER clause 5.15.3(d)(1) be increased to \$6 million. This is the cost threshold over which a RIT–D applies.
- The \$10 million capital cost threshold referred to in NER clause 5.15.3(d)(3) be increased to \$11 million. A RIT–D proponent can skip publishing a 'draft project assessment report' for projects below this threshold.
- The \$20 million capital cost threshold referred to in NER clause 5.15.3(d)(4), which was increased to \$21 million in the 2015 cost thresholds review, be increased to \$22 million. This is the cost threshold under which a RIT–D proponent can publish its 'final project assessment report' as part of its distribution annual planning report (DAPR).
- The \$2 million capital cost threshold referred to in NER clause 5.15.3(d)(5) remains unchanged. This is the cost threshold, over which a distribution network service

provider (distribution business) must report on committed investments to meet an urgent and unforeseen issue in their DAPRs.

- The \$200,000 asset cost threshold referred to in NER clause 5.15.3(d)(4A) remains unchanged. For assets below this threshold, distribution businesses can aggregate the asset replacement costs they report on in their DAPRs.

The revised cost thresholds will take effect on 1 January 2019.

Consistent with our approach to date, the next cost thresholds review will use the un-rounded estimates as the base from which to assess changes (for example, the percentage change in inputs will be applied to the un-rounded \$6.18 million RIT-T cost threshold rather than the rounded \$6 million RIT-T cost threshold).