Final determination

Cost thresholds review for the regulatory investment test

November 2015

AUSTRALIAN
ENERGY
REGULATOR

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: AERInquiry@aer.gov.au
AER Reference: 49538 - D15/165684

Contents

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 applies 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 2015 we commenced the 2015 cost thresholds review. In accordance with NER requirements, this review looked at:

- changes in capital input costs for transmission network projects since 31 July 2012 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 1 January 2013 to determine whether the RIT-D cost thresholds should be amended to maintain their appropriateness

On 2 September 2015 we published a draft determination for the 2015 cost thresholds review. We received three submissions on the draft determination.

Consistent with the NER requirements, this document sets out the AER's final determination of the 2015 cost threshold review for the RIT-T and RIT-D.

Our final determination for the RIT-T cost thresholds is that:

- the $5 million cost thresholds referred to in clauses 5.15.3(b)(1),(2),(3),(4) and (6) of the NER be increased to $6 million, and
- the $35 million cost threshold referred to in clause 5.15.3(b)(5) of the NER, which was increased to $38 million in the 2012 cost thresholds review be increased to $41 million

Our final determination for the RIT-D cost thresholds is that:

- the $5 million cost thresholds referred to in clauses 5.15.3(d)(1) and (2) remain unchanged
- the $10 million cost threshold referred to in clause 5.15.3(d)(3) remain unchanged
- the $20 million cost threshold referred to in clause 5.15.3(d)(4) be increased to $21 million, and
- the $2 million cost thresholds referred to in clause 5.15.3(d)(5) remain unchanged

The revised cost thresholds will take effect on 1 January 2016.

1 Introduction

The Australian Energy Regulator (AER) is 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, National Electricity Rules and National Gas Rules.

Every three years we are required to review the appropriateness of the cost thresholds set out in chapter five of the National Electricity Rules (NER). These cost thresholds primarily provide full or partial exemptions to network businesses from undertaking a cost benefit test known as the regulatory investment test (RIT) and the associated consultation procedures.

On 31 July 2015, in accordance with clause 5.15.3 of the NER, we initiated a review of the cost thresholds associated with the regulatory investment test for transmission (RIT-T) and regulatory investment test for distribution (RIT-D) (2015 cost thresholds review). This also includes cost thresholds used in the definition of replacement transmission network asset, the definition of a potential transmission project and distribution annual planning reporting requirements for committed investments to address a refurbishment or replacement need or an urgent and unforeseen network issue.

The RIT is a cost benefit test which network businesses may be required to undertake when they have to augment their network to address an identified need. The RIT is known as the RIT-T in transmission and the RIT-D in distribution. 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.

On 2 September 2015 we published our draft determination on the 2015 cost thresholds review. We received three submissions on the draft determination. Consistent with the requirements of clause 5.15.3(j), this document sets out our final determination on the 2015 cost thresholds review.

2 Background

2.1 Rules requirements

Clause 5.15.3 of the NER states:

Regulatory investment test for transmission thresholds

(a) Every 3 years the *AER* must undertake a review of the changes in the input costs used to calculate the estimated capital costs in relation to:

1. replacement transmission network assets; and
2. transmission investment as referred to in paragraphs (b)(2) to (6),

for the purposes of determining whether the cost thresholds specified in paragraph (b) need to be changed to maintain the appropriateness of the cost thresholds over time by adjusting those cost thresholds to reflect any increase or decrease in the input costs since:

3. July 2009 in respect of the first cost threshold review; and
4. the date of the previous review in respect of every subsequent cost threshold review.

(b) For the purposes of paragraph (a), the cost thresholds for review are the following amounts:

1. in excess of $5 million in relation to replacement transmission network assets;
2. of less than $5 million referred to in clause 5.16.3(a)(2);
3. of less than $5 million referred to in clause 5.16.3(a)(4);
4. of less than $5 million referred to in clause 5.16.3(a)(5);
5. of less than $35 million referred to in clause 5.16.4(z1)(1); and
6. in excess of $5 million in relation to investment in transmission assets of the type referred to in the definition of potential transmission project in clause 5.10.2.

Regulatory investment test for distribution costs thresholds

(c) Subject to paragraph (f)(2), every 3 years, and at the same time as it undertakes its review of the cost thresholds for *regulatory investment test for transmission* under paragraph (a), the *AER* must undertake a review of the changes in the input costs used to calculate the estimated capital costs in relation to:

1. projects subject to the *regulatory investment test for distribution*; and
2. the cost threshold for committed investments that are to address a refurbishment or replacement need, or an urgent and unforeseen *network* need subject to the *Distribution Annual Planning Report*,

for the purposes of determining whether the costs thresholds specified in paragraph (d) need to be changed to maintain the appropriateness of the cost thresholds over time by adjusting those cost thresholds to reflect any increase or decrease in the input costs since:

3. 1 January 2013 in respect of the first cost threshold review; and
4. the date of the previous review in respect of every subsequent cost threshold review.

(d) For the purposes of paragraph (c), the cost thresholds for review are the following amounts:

1. $5 million referred to in clause 5.17.3(a)(2);
2. $5 million referred to in clause 5.17.3(a)(6);
3. $10 million referred to in clause 5.17.4(n)(2);
4. $20 million referred to in clause 5.17.4(s);
5. $2 million referred in S5.8(g).

Cost threshold reviews

(e) Each cost threshold review is to be commenced by the *AER* by 31 July of the relevant year.

(f) The first review of the cost thresholds for:

1. the *regulatory investment test for transmission* under paragraph (a) must be initiated in 2012; and
2. the *regulatory investment test for distribution* under paragraph (c) must be initiated in 2015.

(g) Within six weeks following the commencement of a cost threshold review, the *AER* must *publish* a draft determination outlining:

1. whether the *AER* has formed the view that any of the cost thresholds need to be amended to reflect increases or decreases in the input costs to ensure that the appropriateness of the cost thresholds is maintained over time;
2. its reasons for determining whether the cost thresholds need to be varied to reflect increases or decreases in the input costs;
3. 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
4. its reasons for determining the amount of the new cost threshold.

(h) At the same time as it *publishes* the draft determination under paragraph (f), the AER must *publish* a notice seeking submissions on the draft determination. The notice must specify the period within which written submissions can be made (the cost threshold consultation period) which must be no less than 5 weeks from the date of the notice.

(i) The *AER* must consider any written submissions received during the cost threshold consultation period in making its final determination in respect of the matters outlined in paragraph (g).

(j) The final determination on cost thresholds must be made and *published* by the *AER* within 5 weeks following the end of the cost threshold consultation period

(k) The *AER* may *publish* a draft determination under paragraph (g), a notice under paragraph (h), or a final determination under paragraph (j) for any cost threshold reviews under paragraphs (a) and (c) as a single document.

2.2 2012 cost thresholds review

In 2012 the AER undertook the first cost thresholds review for the RIT-T in accordance with the requirements set out in old clause 5.6.5E (now renumbered as clause 5.13.5) of the NER (2012 cost thresholds review). The cost thresholds review did not include a review of the thresholds associated with the RIT-D as those requirements had not yet been introduced in the NER.

In the 2012 cost thresholds review, we considered that rather than be precise, it was appropriate to use available indexes as an approximate guide to ascertain the range of cost variations and make a determination on the change in input costs. Thus, we examined a range of industry and broader economy wide indexes to determine whether any of the cost thresholds set out in old clause 5.6.5E(a) (now renumbered as clause 5.13.5(b)) needed to be amended to reflect increases or decreases in input costs since the introduction of the RIT-T in June 2009. We considered that it was appropriate to give greater weight to broader economy wide indexes as they are arguably good 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 over the period.

This approach was favoured over a more full scale review of precise changes in transmission network project costs given the regulatory burden it would impose on both network businesses and the regulator.

Following an examination of a range of broader economy wide indexes and some industry indexes, we considered that capital input costs had likely increased by approximately 10 per cent. Given this, we considered that the cost thresholds should be increased to account for the change in input costs. For administrative simplicity, we considered that changes should be rounded to the nearest million and that unless it was inappropriate, where the increase in input costs resulted in a pre-rounded variation figure of approximately halfway between two rounded figures (i.e. $1.5 million), then the cost threshold should be rounded down rather than up. We considered that this approach to rounding reflected the importance of the RIT-T in ensuring transparency and competitive neutrality vis-a-vis non-network options.

We decided that the cost thresholds should be increased to reflect the 10 per cent change in capital input costs. On this basis:

- the $5 million cost thresholds referred to in old clauses 5.6.5C(a)(2),(4) and (5) (now renumbered as clauses 5.16.3(a)(2),(4) and (5)), in relation to replacement transmission network assets and in relation to transmission investment as referred to in the definition of new network investment (now known as investment in transmission assets of the type referred to in the definition of potential transmission project in clause 5.10.2) would move to $5.5 million. However, given the approach taken to rounding these cost thresholds would be rounded down and remain unchanged at $5 million.

- the $35 million cost threshold referred to in old clause 5.6.6(y) (now renumbered as clause 5.16.4(z1)(1)) would move to $38.5 million. Given the proposed approach to rounding, the cost threshold would be rounded down to $38 million.

At the time, we noted that when the next cost thresholds review takes place we will consider changes to the cost thresholds using the un-rounded cost threshold figures of $5.5 million and $38.5 million as a starting point rather than the rounded cost thresholds.

3 Final determination

Consistent with the requirements of clause 5.15.3(j), this section sets out our final determination on the 2015 cost thresholds.

3.1 Draft determination

On 2 September 2015 we published our draft determination on the 2015 cost thresholds review.

The draft determination used the same methodology as in the 2012 cost thresholds review, for both the RIT-T and RIT-D cost thresholds, to assess whether there has been a change in input costs and make adjustments to the cost thresholds to reflect those changes. Further, as changes in capital input costs for both transmission and distribution projects[1] were considered sufficiently similar, the same indexes were used for both the review of both transmission capital input costs and distribution capital input costs.

We considered the range of indexes listed in **Appendix A** to obtain a range of values that represent a reasonable approximation of changes in capital costs since:

- the 2012 cost thresholds review for the RIT-T cost thresholds set out in clause 5.15.3(b), and
- 1 January 2013 for the RIT-D cost thresholds set out in clause 5.15.3(d).

Based on an inspection of indexes, we estimated that economy wide indexes increased by approximately 5-7 per cent since the 2012 cost thresholds review and approximately 4-6 per cent since 1 January 2013. On this basis, we considered it was reasonable to infer that:

- capital input costs for the types of transmission projects set out in clause 5.15.3(a) had increased by 6 per cent since the 2012 cost thresholds review, and
- capital input costs for the types of distribution projects set out in clause 5.15.3(c) had increased by 5 per cent since 1 January 2015.

Accordingly, the draft determination proposed that:

- the RIT-T cost thresholds set out in clause 5.15.3(b) should be increased by 6 per cent, and
- the RIT-D cost thresholds set out in clause 5.15.3(d) should be increased by 5 percent

to maintain the appropriateness of those cost thresholds.

On this basis, for the RIT-T cost thresholds:

- the un-rounded $5.5 million cost thresholds referred in clauses 5.15.3(b)(1), (2), (4) and (6) would move to $5.83 million. Given the approach to rounding, this cost threshold will be rounded to $6 million

[1] set out in clause 5.15.3(a),(c).

- the un-rounded $38.5 million cost threshold referred to in clause 5.15.3(b)(5) would move to $40.81 million. Given the approach to rounding, the cost threshold will be rounded to $41 million.

On this basis, for the RIT-D cost thresholds:

- the $5 million cost thresholds referred to in clauses 5.15.3(d)(1) and (2) would move to $5.25 million. Given the approach to rounding, the cost threshold will be rounded down and remain unchanged at $5 million.
- the $10 million cost threshold referred to in clause 5.15.3(d)(3) would move to $10.5 million. Given the approach to rounding, the cost threshold will be rounded down and remain unchanged at $10 million.
- the $20 million cost threshold referred to in clause 5.15.3(d)(4) would move to $21 million.
- the $2 million cost thresholds referred to in clause 5.15.3(d)(5) would move to $2.1 million. Given the approach to rounding, the cost threshold will be rounded down and remain unchained at $2 million.

We proposed in the draft determination that the revised cost thresholds take effect on 1 January 2016.

3.2 Stakeholder submissions

Interested parties were invited to submit written submissions on the draft determination. Submissions closed on 9 October 2015. Submissions were received from CitiPower & Powercor, Energy Networks Association (ENA) and Grid Australia.

Grid Australia supported the proposed increases to the RIT-T cost thresholds proposed by the AER, noting that they had been derived using the same methodology used in the 2012 cost thresholds review.

ENA supported the methodology used to establish the updated RIT-T and RIT-D cost thresholds, considering that this approach avoided unnecessary regulatory burden, and on this basis agreed with the proposed change to the RIT-D cost threshold set out in clause 5.15.3(d)(4) to $21 million.

All three submissions considered that the cost thresholds for projects to be subject to the RIT-T[2], which the draft determination proposed to increase to $6 million, should be aligned with the cost threshold for projects to be subject to the RIT-D[3], which the draft determination proposed to maintain at $5 million. All noted that the divergence between the two cost thresholds was due to the timing of the introduction of the RIT-D.

Both CitiPower & Powercor and Grid Australia noted that it was important that the cost threshold between the RIT-T and RIT-D be aligned for joint planning purposes. CitiPower & Powercor noted that a having consistent threshold is necessary for joint planning projects where the identified need may be addressed by potential solutions either on the distribution

[2] specifically the cost thresholds referred to in clauses 5.16.3(a)(2),(4) and (5) of the NER.
[3] specifically the cost thresholds referred to in clauses 5.17.3(a)(2) and (6) of the NER.

or transmission network (or a combination of both). Grid Australia considered that a consistent threshold would encourage a more integrated approach between transmission and distribution, simplify consultation with stakeholders, and reduce confusion among non-network proponents.

CitiPower & Powercor and ENA also noted that having aligned cost thresholds between the RIT-T and RIT-D was consistent with the AER's view stated in its submission to the Australian Energy Market Commission's (AEMC) consultation paper on the Distribution Network Planning and Expansion rule change which introduced the RIT-D.

CitiPower & Powercor and ENA also considered that a more holistic review of the RIT-T and RIT-D frameworks and cost thresholds should be undertaken in the next cost thresholds review in 2018.

3.3 AER final determination

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

In relation to the proposal to align the cost thresholds for projects to be subject to the RIT-T and the cost thresholds for projects to be subject to the RIT-D, while we agree that such an alignment may have some merit, we do not consider this approach is currently permitted under the NER. The RIT-T and RIT-D cost threshold review provisions require us to ascertain the changes in capital input costs since a specified point in time and adjust the cost thresholds to reflect those changes. There is no discretion provided in the NER for us to maintain the alignment of RIT-T cost thresholds and RIT-D cost thresholds in the event of a divergence between them should we consider it appropriate to do so.

In relation to the proposal by CitiPower & Powercor and ENA to undertake a holistic review of the RIT-T and RIT-D frameworks and cost thresholds in 2018, we consider that this would be beyond what we are currently allowed to do under the NER. As stated above, the role of the cost threshold review is limited to adjusting the RIT-T cost thresholds and RIT-D cost thresholds to maintain their real value. If the scope of the cost threshold review were expanded, we would be open to undertaking a more holistic review of the RIT-T and RIT-D frameworks and cost thresholds in 2018.

Accordingly, our final determination for the 2015 cost thresholds review is that capital input costs have likely increased by around 6 per cent since the 2012 cost thresholds review and 5 per cent since the 1 January 2013.

To maintain the appropriateness of the cost thresholds:

- the RIT-T cost thresholds set out in clause 5.15.3(b) should be increased by 6 per cent, and
- the RIT-D cost thresholds set out in clause 5.15.3(d) should be increased by 5 percent

On this basis, for the RIT-T cost thresholds:

- the un-rounded $5.5 million cost thresholds referred in clauses 5.15.3(b)(1), (2), (4) and (6) would move to $5.83 million. Given the approach to rounding, this cost threshold is rounded to $6 million
- the un-rounded $38.5 million cost threshold referred to in clause 5.15.3(b)(5) would move to $40.81 million. Given the approach to rounding, the cost threshold is rounded to $41 million.

On this basis, for the RIT-D cost thresholds:

- the $5 million cost thresholds referred to in clauses 5.15.3(d)(1) and (2) would move to $5.25 million. Given the approach to rounding, the cost threshold is rounded down and remains unchanged at $5 million.
- the $10 million cost threshold referred to in clause 5.15.3(d)(3) would move to $10.5 million. Given the approach to rounding, the cost threshold is rounded down and remains unchanged at $10 million.
- the $20 million cost threshold referred to in clause 5.15.3(d)(4) would move to $21 million.
- the $2 million cost thresholds referred to in clause 5.15.3(d)(5) would move to $2.1 million. Given the approach to rounding, the cost threshold is rounded down and remains unchained at $2 million.

The revised cost thresholds will take effect on 1 January 2016.

Consistent with our approach to date, in the next cost thresholds review we will use the un-rounded estimates as the base from which assess changes (i.e. the percentage change in inputs will be applied to the un-rounded $5.83 million RIT-T cost thresholds and $5.25 million RIT-D cost thresholds rather than the rounded $6 million RIT-T cost thresholds and $5 million RIT-D cost thresholds).

Appendix A - table of indexes considered in cost thresholds review

Table 1 - Indexes considered in determining the change in input costs

Index	% change since 2012 cost thresholds review	% change since 1 January 2013
Consumer price index (CPI)	7.07	5.39
CPI - trimmed mean	7.49	6.18
CPI - weighted mean	7.86	6.37
Producer Price Index (PPI) - total domestic and import	4.59	3.76
PPI - primary metal and metal product manufacturing	-12.56	-12.65
PPI - fabricated metal product manufacturing	8.83	9.26
PPI - machinery and equipment manufacturing	3.35	4.27
Gross Domestic Product (GDP) - implicit price deflator*	0.40	1.21
GDP - chain price index*	1.30	1.61
GDP - implicit price deflator - fixed capital formation*	4.62	4.52
GDP - implicit price deflator - final consumption*	5.16	4.21
GDP - implicit price deflator - private fixed capital* formation - new engineering construction	4.14	3.10

*At the time of this assessment, GDP data was only available up to the end of the first quarter of 2015 and so the table only measures the % change up to the first quarter of 2015.

Source: ABS[4]

[4] ABS Consumer Price Index Australia, June 2015, catalogue number 6401.0; Producer Price Index Australia, June 2015, catalogue number 6427.0; Australian National Income, Expenditure and Product, March 2015, catalogue number 5206.0.