

2024 RIT and APR cost thresholds review Final determination

Cost thresholds review

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, the National Electricity Rules (NER) require us to review cost thresholds applicable to the regulatory investment tests for transmission and distribution. This objective of the review is to ensure the cost thresholds that are applied by network businesses to determine their network planning obligations remain appropriate.

On 31 July 2024, in accordance with clause 5.15.3 of the NER, we initiated a review of those cost thresholds (2024 cost thresholds review). Consistent with the requirements of clause 5.15.3(j), this document sets out our final determination on the 2024 cost thresholds review. The revised cost thresholds set out in this decision will take effect on 1 January 2025.

On 29 August 2024, the AER published a draft determination on the 2024 cost threshold review for the regulatory investment test for transmission (RIT-T) and the regulatory investment test for distribution (RIT-D) (collectively RITs). As per that draft determination, the AER decided to increase the threshold in line with the *Producer Price Index for Heavy and Civil Engineering Construction* (*PPIconstruction*) published by the Australian Bureau of Statistics (ABS). The decision to use this index is set out in pages 6-8 of this determination. The final determination confirms the proposed thresholds from the draft determination.

Therefore, the AER's final determination is that if the estimated capital cost of the investment option:

- Exceeds \$8 million, a RIT-T applies
- Falls below \$54 million, a RIT-T proponent can skip the 'project assessment draft report' consultation step
- Exceeds \$7 million, a RIT-D applies
- Falls below \$14 million, a RIT-D proponent can skip the 'draft project assessment report' consultation step
- Falls below \$28 million, a RIT-D proponent can include its 'final project assessment report' as part of its 'distribution annual planning report'
- Exceeds \$3 million, a distribution network business is required to include committed investments that address an urgent or unforeseen network issue in its distribution annual planning report.
- Exceeds \$300,000, a network business can combine information in its annual planning report for assets it expects to retire or de-rate
- Exceeds \$103 million, a RIT-T or RIT-D proponent must include reopening triggers applying to the RIT-T or RIT-D project.



The NER requires us to complete this review within specific time periods, as set out in Table 1.

Table 1 Timeline for 2024 RIT and APR cost threshold review

Task	Published date	Statutory deadline	Rule requirement
Commence review	31 July 2024	31 July 2024	5.15.3 (e) requires the review to be "commenced by 31 July of the relevant year"
Publish draft determination	3 September 2024	11 September 2024	5.15.3 (g) requires the AER to publish a draft " <i>within six weeks</i> " from commencement
Submissions close	8 October 2024	8 October 2024	5.15.3 (h) requires the close of submissions " <i>no less than 5 weeks</i> " from the publication of the draft determination
Publish final determination	12 November 2024	12 November 2024	5.15.3 (j) requires publication " <i>within 5 weeks</i> " from the end of consultation

Submissions in response to the draft determination

We received three submissions in response to our draft determination, which are published on the AER website.

These submissions highlighted that network service providers (NSPs) have experienced input cost increases over the period since the cost thresholds were introduced in 2009 that are not reflected in the current cost thresholds. These submissions request that the AER review the RIT thresholds and make an increase to the cost thresholds that better reflects the increasing costs that have been experienced further back than the three-year period that is prescribed in the NER for our threshold review.

The NER requires the AER to undertake a review of the cost thresholds that apply to the RIT-T and RIT-D every three years to reflect changes to the input costs of transmission and distribution investments since the date of the previous review¹. The AER notes that, while the scope of this review does not allow us to review cost thresholds for cost increases prior to 2021, we will consider feedback raised in these submissions for future processes.

Table 2 outlines other issues raised in submissions as well as the AER's proposed response to these issues. In summary, we have not made changes to our approach outlined in the draft determination response to stakeholder submissions.

Table 2 AER responses to issues identified in stakeholder submissions					
AER response					
As noted by the stakeholder, the AER does not currently have RIN data for the period of this review and would need to request draft 2023-24 RIN data from NSPs in order to determine cost thresholds for the 2024 cost thresholds review. The AER would not be able to request draft 2023-24 RIN data from all NSPs before the statutory deadline for this decision.					
The AER notes that while RIN data would provide some useful insights to cost increases experienced by network businesses, there are drawbacks to this approach because:					
 expenditure data is confidential and does not align with our data principle of transparency 					
 requesting draft replacement expenditure (repex) data from NSPs will increase regulatory burden 					





Topic raised in submission	AER response
	 the category makeup of each RIT may be very different, and categories have widely different cost increases, which leads to a large range of possible project cost increases using this method
	 the input data for RINs is a smaller dataset than the economy wide indicators, which results in high variability when assessing cost increases using RIN data categories.
	The AER has examined RIN data in assessing whether it could be used as an indicator of cost increases for these projects and has retained the decision that PPI _{construction} is the most appropriate indicator of cost increases that better aligns with the data principles in the RIT.
The AER could calculate the cost thresholds using the rounded 2021 thresholds because using the unrounded figures adds unnecessary complexity for little gain.	The AER believes that using the unrounded 2021 figures is the most accurate approach to determining cost thresholds, as it limits the volatility of thresholds and any divergence between thresholds and indices that may occur over time as a consequence of rounding.
After using the unrounded thresholds, the AER could round up the cost thresholds to the next increment to better reflect cost increases experienced by Ergon and Energex.	While using rounded 2021 RIT and APR thresholds will result in higher 2024 thresholds, there is no adequate public data to justify a further increase in cost thresholds beyond what has been determined using PPI _{construction} .
The AER should consider increasing the cost threshold by at least 200% from the 2009 cost thresholds as this more representative of cost increases experienced by Transgrid.	The NER requires us to only consider the three-year period from the previous cost thresholds review. There is no adequate public data to justify a further increase in cost thresholds beyond what has been determined using PPI _{construction} .
The AER should consider separate cost thresholds for repex RITs. When the thresholds were first introduced in 2009, repex projects were not in the scope of the RIT. Transgrid has	The AER recognises that some repex RITs have resulted in valuable consultation, such as Transgrid's Maintaining compliance with performance standards applicable to Broken Hill substation secondary systems.
received 4 submissions on repex RITs since they were introduced to the scope in 2017.	However, the AER also recognises that repex RITs may be less contested and are resource intensive.
	The AER notes that separate cost thresholds for repex RITs would require a rule change.
Asset replacement programs that are designed to fulfill separate network needs should not be treated as the same program for the purpose of the RIT thresholds.	The requirement to apply the RIT to replacement programs was introduced as part of AEMC's final rule determination and final rule in 2017 in relation to repex planning arrangements for electricity network service providers.
	The AER believes it is appropriate to require replacement programs to undertake a regulatory investment test over the cost threshold, as the NSP may determine that there are credible options to address the identified need other than like-for-like replacement.
	The AEMC's rule change determination also stated that the regulatory burden of undertaking a regulatory investment test may not be significant where multiple assets across more than one location are replaced.



What are the RIT and APR cost thresholds?

The cost thresholds that we must review relate to the regulatory investment test for transmission and distribution (RIT-T and RIT-D, or collectively 'the RITs') and annual planning reports (APRs). Investments over these thresholds are subject to higher levels of consultation and higher standards of stakeholder engagement, reflecting their impact.

The RIT-T and RIT-D are cost benefit tests that network service providers (network businesses) must apply before making major investments in the network. The purpose of the RITs is to identify the investment in the network which maximises the present value of the net economic benefit.

The cost thresholds related to the RIT-T and RIT-D determine whether:

- A network business must undertake a RIT
- A network business may skip the draft report stage of the RIT process
- A distribution business can include its final project assessment report as part of its Distribution Annual Planning Report (DAPR) (rather than needing to produce a separate report)
- A network business must include RIT reopening triggers in its draft RIT assessment reports.

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') that network businesses must publish each year. 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 ten years for transmission).

The cost thresholds that relate to the APRs determine whether:

- a network business can combine information in its APR for assets it expects to retire or de-rate;
- a distribution business is required to include, in its DAPR, committed investments that address an urgent or unforeseen network issue.

The regulatory investment test (RIT) and annual planning report (APR) cost thresholds effectively determine the level of stakeholder engagement that is required of network service providers (network businesses) in the RIT and APR processes.

These thresholds ensure that an appropriate range of projects are subject to a robust economic assessment while recognising the resources required from NSPs to conduct this assessment.

Our approach to determining updated cost thresholds

In accordance with the requirements of NER clause 5.15.3(a), we have assessed how input costs for transmission and distribution projects have changed since our 2021 review.

Our assessment entailed:

- comparing changes in price indexes, including measures of the consumer price index (CPI), producer price index (PPI) and gross domestic product (GDP)²
- assessing how accurate each index is in reflecting changes to the input costs of transmission and distribution projects subject to the RIT in previous threshold reviews
- determining the cost thresholds on the basis of an appropriate escalation factor.

In previous cost threshold reviews, we determined an appropriate escalation factor to reflect increases in input costs for transmission and distribution projects based on a selection of economy-wide indicators.

² Consistent with the 2021 cost threshold review, changes in GDP_{IPD} indices are from March 2021 to March 2024 due to unavailability of June 2024 data at the time of the review



For this review, we have adopted an alternative approach to determining the escalation factor that uses a single index to:

- apply an objective approach to determining cost increases;
- best capture the increase in construction inputs costs these costs appear to have increased at a rate faster than economy-wide indicators (see Table 3);
- facilitate stakeholders providing perspectives on objective measures of input costs; and
- ensure our data is transparent, relevant and from verifiable sources.

The indices that we included in our analysis of input cost changes along with the changes in those indices since June 2021 are set out in Table 3.

Table 3 Changes to indices assessed in 2024 determination

Index	Change from June 2021 to June 2024 (%)
Consumer price index: trimmed mean (CPI _{trimmed})	15.36
Producer price index: final demand (PPI _{final})	15.05
Producer price index: Heavy and Civil Engineering Construction (PPIconstruction)	18.77
Gross domestic product: seasonally adjusted, implicit price deflator ² (GDP _{IPD})	14.80

Note 1: Consistent with the 2021 cost threshold review, changes in GDP_{IPD} are from March 2021 to March 2024 due to unavailability of June 2024 data at the time of the review

Data source: Australian Bureau of Statistics Consumer Price Index, June 2024; ABS Producer Price Index, June 2024; Australian National Accounts: National Income, Expenditure and Product, March 2024.

Tables 4 and 5 show the change in thresholds from July 2021 to July 2024 that would result from each cost index identified in Table 3.

We note that the choice of PPI_{construction} compared to CPI_{trimmed} or PPI_{final} results in a change for the RIT draft report thresholds, as well as the reopening trigger thresholds (highlighted rows in Tables 4 and 5).

Table 4 Transmission cost thresholds under various indices

Cost threshold	Published 2021 thresholds (\$m)	2024 thresholds using PPI _{construction} (\$m)	2024 thresholds using PPI _{final} (\$m)	2024 thresholds using CPI _{trimmed} (\$m)	2024 thresholds using GDP _{IPD} (\$m)
The threshold under NER cl. 5.15.3(b)(1A) for an asset's replacement costs, under which a transmission business can combine the information in its TAPR for assets it expects to retire or de-rate.	0.2	0.3	0.3	0.3	0.3
The thresholds under NER cl. 5.15.3(b)(2),(4) and (6) for capital costs, over which a RIT-T applies.	7	8	8	8	8
The 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.	46	54	53	53	53
The threshold under NER cl. 5.16.4(j)(10) for the proposed preferred option's capital costs, above which must include RIT reopening triggers applying to the RIT-T project.	100	103	103	103	102

* this threshold was introduced as part of the 2023 RIT and CBA guidelines review and has been escalated from SQ23



Table 5 Distribution cost thresholds under various indices

Cost threshold	Published 2021 thresholds (\$m)	2024 thresholds using PPI _{construction} (\$m)	2024 thresholds using PPI _{final} (\$m)	2024 thresholds using CPI _{trimmed} (\$m)	2024 thresholds using GDP _{IPD} (\$m)
The threshold under NER cl. 5.15.3(d)(4A) for an asset's replacement costs, under which a distribution business can combine the information in its DAPR for assets it expects to retire or de-rate.	0.2	0.3	0.3	0.3	0.3
The threshold under NER cl. 5.15.3(d)(1) for capital costs, over which a RIT-D applies.	6	7	7	7	7
The 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.	12	14	14	14	14
The threshold NER cl. 5.15.3(d)(4) for the proposed preferred option's capital costs, over which a RIT-D proponent includes its 'final project assessment report' as part of its DAPR.	24	28	27	27	27
The 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.	2	3	3	3	3
The threshold under NER cl. 5.17.4(j)(13) for the proposed preferred option's capital costs, above which must include RIT reopening triggers applying to the RIT-D project.*	100	103	103	103	102

* this threshold was introduced as part of the 2023 RIT and CBA guidelines review and has been escalated from SQ23

We consider PPI_{construction} to be the best estimate of the change in input costs for transmission and distribution projects from June 2021 to June 2024. It best captures the observed higher increase in construction costs when compared to the wider economy. The inputs to calculating PPI_{construction} are goods/services for large engineering construction projects such as electricity transmission and distribution lines, rather than the standard basket of goods reflecting general consumption expenditure that underpins the CPI. Similarly, input costs for electricity projects should more closely follow costs for large engineering construction projects the price of all new goods produced in the economy. We have therefore adopted a cost escalator of 18.77% in our draft decision.

In choosing PPI_{construction} we have been guided by the data principles recommended in the AER's cost benefit analysis guidelines³:

- Internal consistency: the Australian Bureau of Statistics (ABS) applies the same methodology across subseries
- **Plausibility**: the ABS performs meaningful quality control to minimise outliers and explain figures
- <u>Verifiable sources</u>: While not all ABS data inputs are publicly available, they publish a quality declaration for these releases.
- **<u>Relevance</u>**: the ABS publishes relevant and up-to-date figures
- <u>Transparency</u>: the ABS has a clear methodology and data sources

Figure 1 indicates that PPI_{construction} has been produced since at least 2009 (these cost thresholds were introduced in July 2009) and has exhibited a similar level of volatility to other price indices. Figure 1 also shows that PPI_{construction} has steadily remained above other price indices for the period of this review,

³ AER, cost benefit analysis guidelines – Guidelines to make the Integrated System Plan actionable, section 3.2.1 Inputs and assumptions



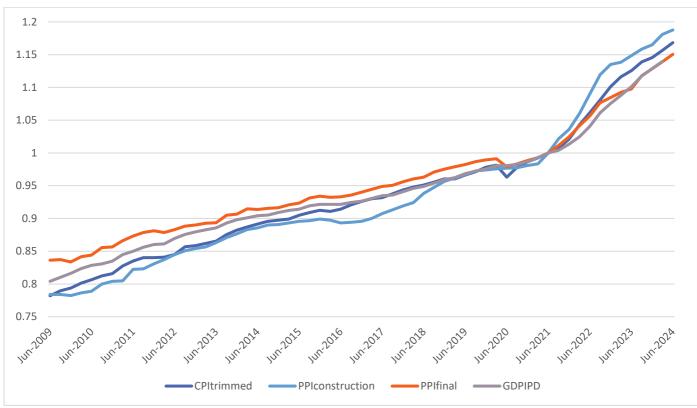


Figure 1 Change in key indices compared since June 2009

ABS Figures have been rebased to June Quarter 2021

AER analysis has indicated that if the thresholds were escalated by the largest escalation factor calculated from changes in key indices shown in Figure 1, of the projects which published a final report in the 2023–24 financial year:

- 1 RIT-D out of 16 would not have been required, and 2 RIT-Ds would not have required a draft report
- 4 RIT-Ts out of 30 would not have been required, and one RIT-T would not have required a draft report.

For administrative simplicity we have rounded the thresholds to the nearest million dollars (or hundred thousand dollars for the APR thresholds) but note that calculations have been performed using unrounded figures from the previous review.

We note that if we had chosen an index other than PPI_{construction} only two (rounded) thresholds would change from those determined using PPI_{construction}.

Final Determination

Consistent with the requirements of clause 5.15.3(j), this section sets out our determination on the 2024 cost thresholds. In making this determination, we have:

- Applied the percentage change in PPI_{construction} to the unrounded value of the cost thresholds in the 2021 cost threshold review (or a proportional percentage change in the case of the \$100 million thresholds which were introduced 9 October 2023)
- We then rounded to the nearest million (or nearest \$100,000 in the case of the \$300,000 thresholds).

The final column of Tables 6 and 7 sets out our determination on the cost thresholds for both transmission and distribution network service providers, respectively.



Transmission cost thresholds

Table 6 Final determination — Transmission cost threshold amendments

Cost threshold	Current threshold (\$m)	2021 unrounded threshold (\$m)	Escalator applied* (%)	2024 unrounded threshold (\$m)	2024 threshold (\$m)
The threshold under NER cl. 5.15.3(b)(1A) for an asset's replacement costs, under which a transmission business can combine the information in its TAPR for assets it expects to retire or de-rate.	0.2	0.20	18.77	0.26	0.3
The thresholds under NER cl. 5.15.3(b)(2),(4) and (6) for capital costs, over which a RIT-T applies.	6	6.18	18.77	7.78	8
The 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.	43	43.26	18.77	54.45	54
The threshold under NER cl. 5.15.3(b)(7) for the proposed preferred option's capital costs, above which the project assessment draft report must include RIT reopening triggers applying to the RIT-T project.	100	100	2.59**	102.52	103

*Escalator applied to the unrounded value of the cost thresholds determined in the 2021 Cost Threshold review

**This escalator represents a proportional increase in input cost, as this threshold came into effect 9 October 2023

Distribution cost thresholds

Table 7 Final determination — Distribution cost threshold amendments

Cost threshold	Current value (\$m)	2021 unrounded threshold (\$m)	Escalator applied* (%)	2024 unrounded threshold (\$m)	2024 threshold (\$m)
The threshold under NER cl. 5.15.3(d)(4A) for an asset's replacement costs, under which a distribution business can combine the information in its DAPR for assets it expects to retire or de-rate.	0.2	0.20	18.77	0.26	0.3
The threshold under NER cl. 5.15.3(d)(1) for capital costs, over which a RIT-D applies.	6	5.57	18.77	7.01	7
The 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.	11	11.13	18.77	14.01	14
The threshold NER cl. 5.15.3(d)(4) for the proposed preferred option's capital costs, over which a RIT-D proponent includes its 'final project assessment report' as part of its DAPR.	22	22.26	18.77	28.03	28
The 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.	2	2.23	18.77	2.80	3
The threshold under NER cl. 5.15.3(d)(6) for the proposed preferred option's capital costs, above which the draft project assessment report must include RIT reopening triggers applying to the RIT-D project.	100	100**	2.59**	102.52	103

*Escalator applied to the unrounded value of the cost thresholds determined in the 2021 Cost Threshold review

**This escalator represents a proportional increase in input cost, as this threshold came into effect 9 October 2023