

# **Final amendments**

# **Cost benefit analysis guidelines and RIT application guidelines**

Explanatory Statement

October 2023

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## Summary

We are required to update the Regulatory Investment Test (RIT) application guidelines and RIT instruments as a result of the AEMC's *Material change in network infrastructure project costs* (MCC) rule change.<sup>1</sup> This rule change requires us to update:

- the RIT for transmission (RIT-T) guidelines for actionable Integrated System Plan (ISP) projects (which are housed within the Cost Benefit Analysis (CBA) Guidelines)<sup>2</sup>
- the application guidelines for RITs for transmission (non-actionable ISP projects)<sup>3</sup> and distribution.<sup>4</sup>

In this explanatory statement we refer to all three documents together as the **Guidelines**. This explanatory statement sets out our reasons for the final amendments we have made to the Guidelines, taking into account stakeholder submissions we received in response to:

- our consultation paper that was published in May 2023
- our draft amendments that were published in July 2023.

The final rule requires, amongst other things, RIT proponents to consider whether there has been a material change in circumstances that requires the re-application of the RIT<sup>5</sup>. This requires amendment to the RIT guidelines. The final rule also allows us to amend the Guidelines:

- to consider any acceptable cost accuracy classification systems that should be used for the RIT and any role of contingency allowances<sup>6</sup>
- to consider guidance that may strengthen the robustness of the estimated costs of credible options<sup>7</sup>
- to specify binding obligations within the RIT-D application guidelines, and within the RIT-T application guidelines for non-actionable ISP projects (noting that we can already specify binding aspects of the CBA guidelines).<sup>8</sup>

We have also taken the opportunity to seek stakeholder views on the AEMC's Transmission Planning Investment Review stage 2 report recommendation that greater certainty be provided about early works activities undertaken by transmission networks for actionable ISP projects in advance of constructing a project.

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<sup>1</sup> AEMC, *Material change in network infrastructure project costs – Final Determination*, Summary point 9

<sup>2</sup> NER, cl. 5.22.5(a)

<sup>3</sup> NER, cl. 5.16.2(e)

<sup>4</sup> NER, cl. 5.17.2(e)

<sup>5</sup> AEMC, *Material change in network infrastructure project costs – Final Determination*, Summary point 5

<sup>6</sup> AEMC, *Material change in network infrastructure project costs – Final Determination*, section 5.2

<sup>7</sup> AEMC, *Material change in network infrastructure project costs – Final Determination*, section 5.2

<sup>8</sup> AEMC, *Material change in network infrastructure project costs – Final Determination*, section 5.2

Our final amendments to the Guidelines apply a principles-based approach rather than a prescriptive approach to guidance and promotes greater transparency to enable stakeholders to engage more effectively with these aspects of the RIT.

The amended Guidelines:

- establish obligations for RIT proponents to develop reopening triggers for projects of over \$100 million
- provide guidance on how RIT proponents should respond when a material change in circumstances occurs
- establish cost transparency requirements by specifying what information must be provided as part of a RIT assessment
- require RIT proponents to, where the estimated capital cost of the preferred option exceeds \$100 million, undertake sensitivity analysis on all credible options and for all credible options either:
  - apply the cost estimate classification system published by the Association for the Advancement of Cost Engineering (AACE), or
  - if it does not apply the AACE cost estimate classification system, identify the alternative cost estimation system or cost estimation arrangements it intends to apply, and provide reasons to explain why applying that alternative system or arrangements is more appropriate or suitable than applying the AACE cost estimate classification system in producing an accurate cost estimate.

The final amendments build on the approach adopted in the draft with changes to cost accuracy requirements and additional clarity about the \$100 million threshold, the reopening triggers, and responses to a material change in circumstances event.

# 1 Background

## 1.1. The AER's regulatory investment test and cost benefit assessment guidelines

Our Guidelines set out the cost-benefit tests that network businesses (RIT proponents) must undertake before building electricity network infrastructure. The purpose of the tests is to assess options that could address an identified need in the electricity network, and then identify the credible option that maximises the net economic benefits in the National Electricity Market (NEM).

In accordance with the National Electricity Rules (NER), we are responsible for publishing the RIT-T and RIT-D guidelines. The guidelines set out:<sup>9</sup>

- The purpose of RITs.
- Which projects are subject to RITs.
- The cost benefit assessment required as part of a RIT, including guidance on the selection of reasonable scenarios, selection of credible options and the preferred option, and treatment of uncertainty risks and externalities.
- The process to follow in applying the RITs including stakeholder consultation steps.
- The process for reapplying a RIT following a material change in circumstances.
- Calculating different classes of market benefits, using worked examples. This includes benefits associated with voluntary load curtailment, involuntary load shedding, costs to other parties, timing of expenditure, option value and energy losses.
- Calculating different classes of market benefits, using worked examples. This includes benefits associated with voluntary load curtailment, involuntary load shedding, costs to other parties, timing of expenditure, option value and energy losses.
- The dispute resolution process. This includes guidance on the requirements and procedure for making a RIT dispute, along with guidance on what we take into account in making a determination.

We also provide guidance to the Australian Energy Market Operator (AEMO) on how to undertake cost-benefit assessments for new transmission investments considered in its ISPs, and to network businesses on how to undertake cost-benefit assessments for Actionable ISP projects. This guidance is provided in our CBA guideline.

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<sup>9</sup> AER, *RIT-T application guidelines*, September 2017; AER, *RIT-D application guidelines*, September 2017.

## 1.2. AEMC transmission reviews and rule changes

In May 2023, the Australian Energy Market Commission (AEMC) completed a review of the regulatory framework for transmission planning and investment.<sup>10</sup> The objective of the review was to support timely and efficient delivery of major transmission projects, while continuing to require rigorous cost benefit assessments of proposed projects.<sup>11</sup>

The context for the review was the shift to ‘net zero’ carbon emissions. In the electricity sector reducing carbon emissions requires replacing centralised coal and gas generation with decentralised renewable generation supplemented by firming capacity such as hydro-electricity generation. Significant new transmission investments are required to accommodate the transition. As noted by the AEMC:<sup>12</sup>

...the scale of transmission investment required, coupled with the speed of the energy transition, presents unique opportunities and challenges for the existing regulatory framework. This framework was developed and has evolved over a period of incremental growth of the grid where the framework was weighted to minimise the risk of overbuilding, rather than the current required pace of step-change growth set out in the Australian Energy Market Operator’s Integrated System Plan.

The AEMC’s review is being delivered in stages. Stage 2, released in October 2022, focuses on improving transmission investment outcomes with recommendations that can be implemented in the short-term. By contrast stage 3 focuses on issues that are more complex and that need more time to develop.

The stage 2 recommendations, amongst other things:

- set out the timing requirements for RIT-T proponents to seek confirmation from AEMO as to whether the preferred option aligns with the most recent ISP<sup>13</sup>
- provide greater clarity around social licence outcomes in the national framework<sup>14</sup>
- improve certainty over the regulatory treatment of early works.<sup>15</sup>

When it released its stage 2 report, the AEMC also released a rule change determination, the MCC rule change. The rule change responded to user concerns about changes in project costs and their implications for cost-benefit assessments already undertaken for a completed RIT. In considering the MCC rule change request, the AEMC drew on the objectives and principles used to guide the stage 2 review. The AEMC aimed to promote timely investment, improve the

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<sup>10</sup> AEMC, Transmission Planning and Investment Review – Stage 3, Final Report, Summary point 3, May 2023

<sup>11</sup> AEMC, Transmission Planning and Investment Review – Stage 3, Final Report, section 1.1, May 2023

<sup>12</sup> AEMC, Transmission Planning and Investment Review – Stage 2, Summary point 3, October 2022

<sup>13</sup> AEMC, Transmission Planning and Investment Review – Stage 2, Summary point 16, October 2022

<sup>14</sup> AEMC, Transmission Planning and Investment Review – Stage 2, Summary point 11, October 2022

<sup>15</sup> AEMC, Transmission Planning and Investment Review – Stage 2, Summary point 13, October 2022

robustness of project costs estimates, and thereby reduce the likelihood that a RIT needs to be reapplied because of a change in circumstances.<sup>16</sup>

The MCC rule change requires us to amend parts of our existing Guidelines<sup>17</sup>, and allows us to consider amendments to other parts of the Guidelines to improve the accuracy of cost estimates used in the RIT.<sup>18</sup>

### 1.3. Required guideline amendments

The MCC rule changes require us to amend and consider whether to amend the RIT-T, RIT-D and CBA guidelines. The amendments fall into three categories:

#### 1. *Re-opening RIT assessments*

After a RIT assessment has been undertaken by a RIT proponent, new events, factors or circumstances may change outcomes of the RIT assessment. Examples include changes in project cost estimates, entry or exit of generators, and changes in demand projections.

The MCC rule change requires a RIT proponent to consider whether the new events, factors or circumstances are material enough to warrant reapplying the RIT.<sup>19</sup> If the RIT proponent considers there has been a material change in circumstances, it must notify us of the change and propose a course of action to identify if the preferred option previously identified through the RIT remains the most net beneficial option.<sup>20</sup> The AER is then required to assess the proposed course of action and approve or reject and modify it.

For projects where the preferred option is estimated to cost more than \$100 million, the MCC rule change requires a RIT proponent to develop RIT reopening triggers. Triggering a reopening trigger specified in a RIT constitutes a material change in circumstances. As mentioned above, a material change in circumstances requires the RIT proponent to notify us and propose a course of action. RIT reopening triggers will go some way to improving transparency about when a RIT should be reconsidered in light of new events, factors or circumstances.<sup>21</sup>

The MCC rule change also requires us to update the Guidelines, by 9 October 2023, to include:

- guidance on the purpose and appropriate approach to developing RIT reopening triggers, as well as examples of potential RIT reopening triggers

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<sup>16</sup> AEMC, Material change in network infrastructure project costs – Final Determination, Section 1.3, October 2022

<sup>17</sup> AEMC, Material change in network infrastructure project costs – Final Determination, Section 2.5, October 2022

<sup>18</sup> AEMC, Material change in network infrastructure project costs – Final Determination, Section 5.4.1, October 2022

<sup>19</sup> The MMC rule amends cl 5.16.4 of the NER, where a RIT proponent is only required to consider if there has been a material change in circumstances if more than six months have elapsed since the completion of analysis required to apply the RIT or analysis required for an reapplication of the RIT (in whole or in part).

<sup>20</sup> The credible option that maximises the present value of net economic benefit to all those who produce, consume and transport electricity in the market.

<sup>21</sup> Regardless of whether the \$100 million threshold is met, the NER requires all RIT proponents to consider if there has been a material change in circumstances.



- worked examples of actions that may be taken in response to a reopening trigger being triggered.<sup>22</sup>

The MCC rule change also allows us to specify the relevant parts of the RIT-T and RIT-D application guidelines that are binding on RIT proponents.<sup>23</sup> Making relevant aspects of the guidelines binding aims to promote stakeholder confidence in the RIT process.

## 2. *RIT cost estimates*

The MCC rule change allows us to provide guidance to RIT proponents on the information they provide to support their project cost estimates. In providing guidance, we can require proponents to provide cost estimate classification systems which specify the accuracy of cost estimates.<sup>24</sup> We can also provide guidance about the role and level of contingency allowances.<sup>25</sup> The objective here is to improve transparency and robustness of cost estimates. As well as improving RIT assessments, more robust cost estimates are less likely to result in a RIT being reopened.

## 3. *Guidance on early works*

The AEMC's stage 2 review includes changes to provide Transmission Network Service Providers (TNSPs) with additional certainty about recovery of efficient costs for preparatory activities and early works. It has made two recommendations.

The first is to clarify the meaning of 'early works' to help provide greater certainty about the activities that can be undertaken.

The second change is a recommendation for us to amend our Guidelines to provide additional guidance on early works and to include the following definition of early works: 'activities that are completed prior to the construction of the preferred option, to improve the accuracy of cost estimates, and to ensure that a project can be delivered within the time frames specified by the most recent ISP'.

## 1.4. Consultation process

This explanatory statement sets out our reasons for the final amendments we have made to the Guidelines taking into account the stakeholder submissions we received in response to:

- our consultation paper that was published in May 2023
- our draft amendments that were published in July 2023.

The final guidelines and this final decision and explanatory statement incorporate feedback from the 5 written submissions we received in response to our draft amendments. A summary of the issues raised in these submissions and the AER's response can be found in appendix A.

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<sup>22</sup> AEMC, Material change in network infrastructure project costs - Final Determination, section 2.5, October 2022. NER, cl 11.154.3 These amendments are required made under clause 11.154.3 (a)(1) of the NER for amending the CBA guidelines, clause 11.154.3 (a)(2) of the NER for amending the RIT application guidelines and clause 11.54.3 (3) of the NER for amending the distribution application guidelines., relating to the amendments made to clauses 5.16A.2(c)(4); 5.16.2(c)(10) and 5.17.2(c)(10).

<sup>23</sup> NER, clauses 5.16.2(h) and 5.17.2(h) inserted by the MCC rule change.

<sup>24</sup> NER, clause 11.154.3 and the amendments made by MCC rule change to clauses 5.16A.2(c)(2); 5.16.2(c)(6) and 5.17.2(c)(6).

<sup>25</sup> NER, clause 11.154.3 and the amendments made by MCC rule change to clauses 5.16.2(c)(8) and 5.17.2.(c)(8).

## 1.5. This explanatory statement

This explanatory statement provides our reasons for the final amendments we have made to the Guidelines. The final amendments are shown as mark ups to the current Guidelines.

The structure of the explanatory statement is set out in Table 1.

**Table 1: Structure of this explanatory statement**

Description	Section of explanatory statement
Background on the transmission planning framework and reasons for amending the Guidelines	Section 1
Reopening RIT assessments	Section 2
Transmission project cost estimates	Section 3
Guidance on early works	Section 4
Submissions on our draft amendments	Appendix A
Abbreviations	Appendix B

## 2 RIT guidelines: Reopening triggers

### 2.1 Rule requirements

After a RIT assessment has been completed, circumstances may change in a way that could alter the original RIT conclusions. The MCC rule provides, amongst other things, a positive requirement that RIT proponents must consider if there has been a material change in circumstances that requires the reapplication of the RIT.<sup>26</sup>

Several stakeholders, including the Energy Users Association of Australia (EUAA), observed substantial increases in costs of large transmission projects over the period of the RIT-T process and in the lead up to contingent project applications (CPAs). They are not confident that projects still deliver net benefits given observed cost increases because:

- RIT-T proponents have not reopened their RIT assessments in the past
- in their view, RIT proponents have weak incentives to trigger the reapplication of the RIT as a result of a material change in circumstances.

These stakeholders lodged a rule change proposal to address their concerns. While the AEMC did not adopt the rule change proposed, it established new obligations for RIT proponents and gave us new RIT reopening functions. The MCC rule provides, amongst other things, a positive requirement that RIT proponents must consider if there has been a material change in circumstances that requires the reapplication of the RIT.

The MCC rule change requires<sup>27</sup>:

- RIT proponents of projects where the estimated capital cost of the preferred option is greater than \$100 million to develop reopening triggers:<sup>28</sup>
  - The triggers would provide transparency by setting out what the RIT proponent considers a material change in circumstances.
  - The RIT proponents must propose and consult on reopening triggers in the Project Assessment Draft Report for RIT-Ts and the Draft Project Assessment Report for RIT-Ds (as is applicable).
- RIT-T proponents to consider whether there has been a material change in circumstances using the reopening triggers specified in the RIT and other relevant factors.<sup>29</sup>

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<sup>26</sup> NER, cl. 11.154.3

<sup>27</sup> AEMC, Final Rule determination, Material change in network infrastructure project costs, 27 October 2022

<sup>28</sup> Regardless of whether the \$100 million threshold is met, the NER requires all RIT proponents to consider if there has been a material change in circumstances. However, this provision does not apply to the Australian Energy Market Operator where it is the sole RIT proponent.

<sup>29</sup> Note that the RIT proponent is only required to consider if there has been a material change in circumstances if more than six months has elapsed since the later of the RIT proponent completing the analysis required to apply the RIT or the analysis required for any reapplication of the RIT

- RIT proponents, if they consider there has been a material change in circumstances, to notify us and propose a course of action (backed by supporting analysis) to identify if the preferred option previously identified through the RIT:
  - still delivers net benefits
  - remains the most net beneficial option in light of the changed circumstances<sup>30</sup>
- Us to approve or reject and modify the RIT proponent's proposed course of action.
- Proponents of contingent projects, at the time of submitting the CPA, to provide a separate statement to us confirming whether there has been a material change in circumstances, with supporting analysis. If relevant the proponent must advise whether we were notified of any material change in circumstances and outline the course of action that was undertaken.

To assist RIT proponents and stakeholders, the MCC rule requires us to update the Guidelines to include guidance on:<sup>31</sup>

- the purpose and appropriate approach to developing RIT reopening triggers
- provide worked examples of potential RIT reopening triggers and actions that may be taken in response to reopening triggers being triggered

Any amendments to the Guidelines to accommodate the MCC rule change must be made before the rule commencement date of 9 October 2023.

## 2.2 Final amendments to the Guidelines

This section outlines our final amendments to the Guidelines for the reopening triggers and our reasons.

The discussion is split into two sections. The first discusses proposed principles to assist RIT proponents in developing reopening triggers and worked examples to guide the application of these principles. The second section discusses proposed guidance to RIT proponents on possible courses of action to follow when a reopener is triggered.

The final amendments required by the MCC rule apply to all RIT proponents.<sup>32</sup> The proposed approach applies whether a proponent is conducting a transmission, distribution or actionable ISP RIT. For this reason, our final amendments are the same for the RIT-T, RIT-D and CBA guidelines.

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<sup>30</sup> The credible option that maximises the present value of net economic benefit to all those who produce, consume and transport electricity in the market.

<sup>31</sup> AEMC, Material change in network infrastructure costs, Final Determination, section 2.5, October 2022. NER, cl. 11.154.3. These amendments are required made under cl. 11.154.3(a)(10) of the NER for amending the CBA guidelines, cl. 11.153.3(a)(2) of the NER for amending the RIT application guidelines and cl. 11.154.3(3) of the NER for amending the distribution guidelines, relating to the amendments made to clauses 5.16A.2(c)(4); 5.16.2(c)(10) and 5.17(c)(10)

<sup>32</sup> NER, glossary, 'RIT reopening trigger'

## 2.2.1 Guidance on developing reopening trigger events

The AEMC's final determination on the rule change states that the objective of the reopening triggers is to help the RIT-T proponent determine whether there has been a material change in circumstances between the final RIT-T report and the CPA.<sup>33</sup> The MCC rule defines the reopening triggers as:<sup>34</sup>

.....the events, factors, or circumstances which, if they occur or eventuate would mean that the preferred option for a RIT-D project contemplated by clause 5.17.4(j)(13) or RIT-T project contemplated by clause 5.16.4(k)(10) or clause 5.16A.4(d)(9) may no longer be the preferred option, and may include a change in the key assumptions used in identifying or ranking the credible options for that project.

Our draft amendments to the Guidelines outlined the principles that RIT proponents should consider in developing reopener trigger events and provided worked examples of reopening trigger events. Our worked examples covered a range of circumstances:

- a change in project costs
- a change in demand
- a change in government policy
- Significant events affecting multiple variables
- changes in technology costs.

We selected these worked examples on the basis that they are realistic and would likely have a material impact on most RITs. These worked examples are only illustrative and RIT proponents need to consider changes in circumstances that would be relevant in the context of their specific RIT.

The worked examples show the impact of each change in circumstances on the costs and benefits of a project, including the circumstances that may result in eliminating net benefits and/or altering the ranking of credible options.

The principles for developing RIT reopening triggers included in our draft amendments to the Guidelines were:

1. identify the key inputs and assumptions used in RIT modelling, and the events, factors and changes in circumstances that may alter those key inputs and assumptions
2. establish RIT reopening triggers that would have a real, rather than a potential or a possible, likelihood of affecting the key inputs and assumptions and may eliminate net benefits of the preferred option and/or alter the ranking of credible options
3. define RIT reopening trigger objectively and ensure they are capable of being verified

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<sup>33</sup> AEMC, Material change in network infrastructure project costs – Final Determination, Section 2.4.2, October 2022

<sup>34</sup> NER, glossary, 'final rule';

4. where possible, the RIT reopening trigger should quantify boundary values of key inputs and assumptions, for example the cost limit of a project before the net benefits of the project becomes negative.

Submissions focused on the principles-based approach that we proposed. Submissions also commented on the \$100 million threshold that applies to reopening triggers, application of the AACE costing system and requirements for sensitivity analysis. The \$100 million threshold is considered further in section 3 of this explanatory statement (Cost estimation in RITs).

### *Principles based approach*

Submissions from NSPs and AEMO support our principles-based approach and the principles we articulated. AEMO submitted<sup>35</sup>:

... the principles proposed to guide TNSPs will balance the need for rigour with the principle of avoiding 'analysis paralysis' and unnecessarily delaying the development of efficient transmission investments when developing reopening triggers, as noted in our previous submission. We also want to stress our view that the impact of delays to transmission investments will reduce the likelihood of aligning with the National Electricity Objective as it relates to price and the achievement of emissions reductions targets.

The ENA submitted<sup>36</sup>:

ENA agrees with the AER that guidance in relation to the development of reopening triggers should not be prescriptive. A change in circumstances may be material to the outcome of one RIT application but not another, and the impacts of any given change in circumstances are likely to vary across options within a RIT application.

By contrast, the EUAA submitted that we should have applied a more prescriptive approach. Their concern is RIT proponents may have incentives to pursue their preferred investment option without reopening a RIT process:

We argued in our initial submission that a non-prescriptive approach will provide the proponent with too much ability to influence the selection of triggers that suit its purposes.

While the changes propose that TNSPs must consult on re-opening triggers and the worked examples ... help, their effectiveness relies on the transparency of the proponent and the ability of the proponent's customer panel to have the knowledge, expertise and time to debate them in detail with the proponent. Our extensive lived experience in network customer panels suggests this is not always the case.<sup>37</sup>

Similarly, PIAC submitted:

The draft amendments make steps in the right direction. The requirement for proponents to set out reopening triggers provides consumers some basis on which to hold proponents to account with regard to material escalations in costs.

However, the changes do not address ....:

- The information asymmetry between project proponents and the consumers...

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<sup>35</sup> AEMO submission, 8 September 2023, page 2.

<sup>36</sup> ENA submission, 3 September 2023, page 4.

<sup>37</sup> EUAA submission, 8 September 2023, page 2.

- The absence of any incentive or requirement for proponents to revisit RITs as a result of material changes in circumstances ...
- There is significant contemporary evidence of material change in circumstances occurring and resulting in the large cost blowouts on projects without triggering any reopening.

Iberdrola supported the proposal for RIT proponents to develop reopening triggers and raises two issues:

.... we remain concerned that AEMO, as a RIT-Transmission (RIT-T) proponent is not required to develop reopening triggers. We are also concerned that the NSPs, particularly the Transmission NSPs will develop reopening triggers in such a way that they will never be triggered, even if a clear material change has occurred.

There is some comfort in that the reopening triggers will be consulted on during the RIT- T process, but the AER will need to have the ability to ensure that if submissions reasonably identify a need for a reopening trigger that is either not adequately defined by the TNSP or was not originally identified by the TNSP, that the trigger is adopted.

Transmission users remain concerned about the track record of RIT proponents not reopening a RIT to date. The EUAA states that the estimated costs of major projects such as Humelink and VNI West have increased, but RIT proponents have not reopened their RIT-T assessments. The EUAA are concerned about lack of transparency about the proponent's decisions not to reopen and are not confident that the projects are still the best option.

Our final amendments to the Guidelines maintain a non-prescriptive approach. A particular change in circumstances may be relevant to one project but not another, and the impact of any such changes are likely to vary across projects. It is not feasible to prescribe a re-opening trigger that captures all of the specific circumstances relevant to a given project. Given this, it follows that a reopening trigger must be assessed on a project specific basis.

As to the risk that a RIT proponent may not have incentives to develop sufficiently robust reopening triggers, there are several measures which we believe will reduce the likelihood of this risk in practice. Firstly, our worked examples, in combination with our reopening principles, set expectations for RIT proponents, consumer reference groups and other stakeholders. Secondly, the principles we have specified encourage the use of boundary values, for example a 10 per cent cost increase, to provide clarity about when an MCC is triggered. This is supported by examples of boundary values in the worked examples. Finally, as noted in our draft explanatory statement, RIT proponents must consult on reopening trigger events as part of a RIT process. The consultation requirement will provide transparency about the basis for the reopening triggers proposed and allow stakeholders to engage with proposed trigger events.

We will monitor compliance with requirements in the NER as part of our general compliance and enforcement role to ensure that reopening triggers have been considered, taking into account submissions from interested parties in the RIT process. We will also review compliance with the reopening triggers as part of our contingent project assessments for actionable ISP projects to ensure that a RIT-T proponent is eligible to submit a CPA. Where it is likely that a material change in circumstances has occurred, we consider it necessary for the RIT proponent to show that the conclusions in the RIT assessment are still relevant. As an example, we recently advised

TransGrid that we require this assessment be undertaken for its 'Reinforcing the Southern Shared Network' RIT-T before it submits a further CPA<sup>38</sup>.

Iberdrola suggested we require AEMO to also develop reopening triggers. AEMO must develop reopening triggers in the same way as NSPs when it undertakes a joint RIT assessment process (for example, with TransGrid on VNI West). However, the NER exempts AEMO from the requirement when it is the sole proponent on the basis that AEMO is an independent not for profit entity. Therefore, the reopening trigger event and the RIT-T guidelines do not apply to AEMO when it is the sole proponent.

## 2.2.2 Guidance on activating a reopening trigger

When events, factors or changes in circumstances occur, RIT proponents must consider whether the changes constitute a material change in circumstances. A material change in circumstances generally occurs where there is a prospect that the proposed project no longer provides net benefits or is no longer the preferred option. The MCC rule change introduces new rules that further (and non-exhaustively) define a material change in circumstances when:

- there is a change to the key assumptions used to identify the need described in the final project assessment report
- one or more RIT reopening triggers has or have been triggered
- there is a change in circumstances which, in the reasonable opinion of the RIT proponent, means that the preferred option identified in the final project assessment report may no longer be the preferred option.

If a material change in circumstances has occurred, including when a RIT reopening trigger has been activated, the RIT proponent must notify us and propose a response. RIT proponents must also:

- publish a statement about whether the preferred option remains so, or if not, what the new preferred option is (with supporting reasons and information)<sup>39</sup>
- advise us about whether in the RIT proponent's reasonable opinion, reapplying the RIT is justified, the costs of delay that may result from the actions it proposes to take, and the costs and delay that may result from the reapplication of the RIT (in whole or part).<sup>40</sup>

Our draft amendments to the Guidelines included worked examples of actions a proponent could take in response to a material change in circumstances. These worked examples outlined actions that may be appropriate depending on the impact of any change in circumstances on the conclusions in the RIT, including where:

- the preferred option remains preferred, and does not require any further action

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<sup>38</sup> AER letter to TransGrid, 22 August 2023 (published on the AER's website)

<sup>39</sup> NER, cl. 5.16.4(z4B)

<sup>40</sup> NER, cl. 5.16.4 (Z4A)



- the ranking of credible options is likely to have changed, and actions may include:
  - further stakeholder consultation
  - preparing a report of the process, including a summary of stakeholders' views and its own conclusions
  - providing this report to us to inform our decision in whether to accept or reject the RIT proponents proposed actions.
- if the change in circumstances is complex (particularly where more than one key input or assumption is affected), this may require reapplying the RIT in whole or in part.

Our draft amendments to the Guidelines stated that the response by a RIT proponent to a material change in circumstances should be proportionate to the issues identified. This could range from a desktop reanalysis to determine whether the ranking of options has changed, to updating the preferred option, to narrow or broaden stakeholder consultation, to a full reapplication of the RIT resulting in a different preferred option.

Once a RIT proponent has considered the impact of a material change in circumstances, it is open to the proponent to propose retaining its current course of action even if the original preferred option is no longer the preferred option. Reasons for not changing the initial course of action could include the delays involved, or the marginal nature of differences between options. The onus is on the proponent to make the case for its preferred course of action with supporting information and analysis.

We must then approve or reject the RIT proponent's proposed course of action. If we reject, we must set out our alternative course of action.

Stakeholder feedback on our draft amendments broadly supported our proposed approach to activating reopening triggers. However, the ENA considers that there was an over-emphasis on reapplication of the RIT. The ENA suggests additions to the worked examples to better illustrate alternatives to re-application of the RIT and when those alternatives are appropriate. In support of its proposal the ENA notes the high cost and delays involved in re-applying a RIT and the AEMC's position that reapplication of the RIT is a 'last resort'.

We have further developed our worked examples to provide additional guidance on which course of action in response to a MCC is appropriate.

## 3 Cost estimation in RITs

### 3.1 Rule requirements

The MCC rule change allows us to amend the RIT-T, RIT-D and CBA guidelines to provide additional guidance on the cost methodologies RIT proponents use.<sup>41</sup> The MCC rule change states that:<sup>42</sup>

- The AER can provide guidance on any acceptable cost estimate classification systems that should be used in the RIT, including any role for contingency allowances.
- The AER is to consider how the Guidelines can be strengthened to promote the development of more robust cost estimates.

The AEMC states that the objective of such guidance is to encourage RIT proponents to develop more robust cost estimates, which should reduce the likelihood that reapplication of the RIT is needed as a result of a material change in circumstances.<sup>43</sup>

The MCC rule change also allows us to specify the relevant parts of the RIT-T and RIT-D application guidelines that are binding on RIT proponents (as it is already permitted for elements of the CBA guidelines).<sup>44</sup> The purpose of this is to provide greater stakeholder confidence in RIT processes.

### 3.2 Final amendments to the Guidelines

This section outlines our final amendments to the Guidelines for cost estimates used to inform RITs. The discussion is in three sections. The first section discusses general guidance on cost estimates, the second our approach to cost estimate classifications systems, and the third our approach to sensitivity analysis.

As with the reopener trigger amendments discussed in section 2, our final amendments apply to all RIT proponents irrespective of whether a proponent proposes a transmission, distribution or ISP actionable project. Accordingly, our final amendments are the same for the RIT-T, RIT-D and CBA guidelines.

#### 3.2.1 Improved cost estimation transparency

The RIT-T and RIT-D guidelines require RIT proponents to estimate the costs of each credible option. Relevant costs include:

- construction costs
- operating and maintenance costs over the operating life of the credible option

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<sup>41</sup> NER, clause 11.154.3 and the amendments made by MCC rule change to clauses 5.16A.2(c)(2), 5.16.2(c)(6), 5.17.2(c)(6), 5.16.2(c)(8) and 5.17.2.(c)(8).

<sup>42</sup> NER, cl 5.6.2.(c).

<sup>43</sup> AEMC, Material change in network infrastructure project costs – Final Determination, 2.4.2

<sup>44</sup> NER, clauses 5.16.2(h) and 5.17.2(h) inserted by the MCC rule change. NER, clause 5.22.5(c).

- cost of complying with laws, regulations and applicable administrative requirements in relation to the construction and operation of the credible option.

The RIT-T and RIT-D guidelines do not currently provide guidance on the information RIT proponents should provide in support of their cost estimates. For example, RIT proponents are not required to explain the basis for the inputs and assumptions used to derive estimated costs for each credible option.

Our draft amendments required RIT proponents to:

- Outline key inputs and assumptions in their RITs along with relevant methodologies used to derive the cost estimates of credible options. Subject to confidentiality obligations, this could include market testing, unit costs from recent projects, and engineering-based cost estimates.
- Provide relevant reasons in support of the key inputs and assumptions used to derive the cost estimates of credible options.
- Explain the level and basis of contingency allowances adopted.

Our draft amendments also required RIT proponents to undertake sensitivity analysis for all projects over \$100 million (see section 3.2.3 below).

This position was informed by stakeholder submissions to our consultation paper that supported the inclusion of guidance to promote greater transparency.

We have made some changes to improve the clarity of our final amendments to the Guidelines in response to stakeholder feedback on our draft amendments. Submissions on our draft amendments were generally supportive of these changes as they promoted greater transparency of cost estimates (ENA, EUAA). In our final amendments, we have made further changes primarily in response to a submission from ENA which sought further clarification of the requirements on proponents<sup>45</sup>. In the final amendments, we have clarified that:

- RIT proponents must provide additional cost estimation information and contingency allowances *to the extent practicable* and in a manner which is *fit for purpose for that stage of the RIT-T*. This is in response to a submission from ENA which considered the obligation *to maximise the accuracy of all costs* is not feasible.<sup>46</sup> Our changes provide further clarification of the obligations on proponents and ensures consistency with the NER.<sup>47</sup>
- We do not expect commercially sensitive information to be disclosed. A submission from ENA raised the importance of not revealing commercially sensitive information.
- We have removed an obligation for proponents to specify how they plan to minimise the spending of any contingency allowance as we consider this is better addressed during the

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<sup>45</sup> ENA, submission to AER's Guideline Review, 3 September 2023, pp. 14-15.

<sup>46</sup> ENA, submission to AER's Guideline Review, 3 September 2023, p. 14.

<sup>47</sup> NER clauses 5.16.4(b)(6)(v) and 5.17.4(e)(6)

CPA. This change is in response to a submission from ENA which stated that this obligation is not relevant to the RIT stage<sup>48</sup>.

This guidance will improve the transparency of cost estimates and the events, factors and circumstances that are likely to materially affect costs. However, the approach is not highly prescriptive as key assumptions and inputs, including any cost estimation methodologies will differ between RIT proponents and are likely to vary across projects.

To promote greater transparency and promote improved costs estimates, our final amendments make this part of the Guidelines binding.

### 3.2.2 Cost estimate classifications systems

In the MCC rule change, the AEMC clarified that we can provide guidance about the use of cost estimate classification systems that should be used for the RIT in all three of our guidelines.<sup>49</sup>

Our draft amendments strengthened the RIT-T guideline by mandating that RIT proponents *must consider* use of the Association for the Advancement of Cost Engineering (AACE) cost estimate classification system for projects over \$100 million. If a RIT proponent does not apply the AACE system, it must provide reasons for not doing so.

This position was informed by stakeholder submissions to our consultation paper that supported use of a consistent cost classification system and cited benefits including greater cost transparency (ENA, TransGrid, AEMO). Stakeholders expressed various views about whether cost classification systems should be binding, and which projects the binding guidance should apply to.

Submissions to our draft amendments were mixed. Some stakeholders supported mandating that RIT proponents must consider use of the AACE (AEMO, ENA, Iberdrola) but some stakeholders considered that we should have had stronger obligations on proponents (EUAA, PIAC). While our expectation is that RIT proponents will use the AACE classification system and provide reasons if they choose an alternative cost accuracy methodology, we have not mandated its use as we consider the most suitable approach to providing guidance on cost accuracy is likely to vary from project to project.

In response to stakeholder feedback, we have made some changes to improve the clarity of our final guidelines. We have clarified that:

- The \$100 million cost threshold refers to the estimated capital cost of the preferred option. This is consistent with the threshold for reopening triggers identified in AEMC's final rule. A submission from ENA sought clarification of the reference to costs in the draft amendment.<sup>50</sup>

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<sup>48</sup> ENA, submission to AER's Guideline Review, 3 September 2023, pp. 14-15.

<sup>49</sup> <https://aemc.gov.au/sites/default/files/2022-10/ERC0325%20-%20Final%20determination%20%282%29.pdf>, p. 39.

<sup>50</sup> ENA, submission to AER's Guideline Review, 3 September 2023.

- Where the estimated capital costs of the preferred option exceeds \$100 million, the proponent must, for all credible options (including the preferred option), either:
  - apply the cost estimate classification system published by the Association for the Advancement of Cost Engineering (AACE), or
  - if it does not apply the AACE cost estimate classification system, identify the alternative cost estimation system or cost estimation arrangements it intends to apply, and provide reasons to explain why applying that alternative system or arrangements is more appropriate or suitable than applying the AACE cost estimate classification system in producing an accurate cost estimate.
- The \$100 million cost threshold applies to the cost of an individual project as opposed to programs of work. A submission from ENA sought clarification of this in the context of a RIT-D.<sup>51</sup>
- The cost threshold will be reviewed every three years to ascertain whether in light of changes to input costs, the threshold needs to be amended. This is consistent with clause 5.15.3 of the rules. ENA sought clarification on how the threshold will be updated over time.<sup>52 53</sup>

This decision has been informed by strong support from stakeholders for the use of a consistent cost estimate classification system. This requirement will help provide greater clarity to stakeholders about the accuracy of project cost estimates and promote the consistency and comparability of proposals across different process stages and projects. In adopting this approach, as previously noted, AEMO uses the AACE cost estimate classification system to classify the cost accuracy of future ISP projects and cross-check the level of accuracy of cost estimates developed by TNSPs.

### 3.2.3 Sensitivity Analysis

Our draft amendments required a RIT proponent to perform sensitivity testing by varying one or multiple inputs and assumptions for all projects with an estimated cost in excess of \$100 million. Sensitivity testing allows a RIT proponent to test and show how robust the RIT modelling is to its input assumptions or to particular changes in inputs/assumptions insofar as they are relevant to the RIT assessment. Stakeholders will have more confidence in RIT outcomes if the preferred option performs well under different sensitivities. Our approach supports accurate option ranking and will enable stakeholders to better understand the robustness of options.

As it is already common practice for RIT proponents to conduct sensitivity testing and outline boundary values for key input assumptions at which the preferred option would change, we believe that the amendment will create limited additional costs to proponents.

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<sup>51</sup> ENA, submission to AER's Guideline Review, 3 September 2023.

<sup>52</sup> ENA, submission to AER's Guideline Review, 3 September 2023.

<sup>53</sup> Clause 5.13.3 of the NER *requires* us to review the cost thresholds associated with RITs and CBAs every three years. This now includes the \$100 million threshold, to reflect changes in input costs. The last review was undertaken in 2021 and the next review is scheduled for 2024.

This position was informed by stakeholder submissions to our consultation paper that encouraged sensitivity analysis as a way to increase transparency and improve robustness of analysis.

While stakeholders were largely supportive of our draft amendments, we have made some changes to improve the clarity of our final guidelines in response to questions from stakeholders:

- The \$100 million cost threshold refers to the estimated capital cost of the preferred option. This is consistent with the threshold for reopening triggers and use of AACE. A submission from ENA sought clarification of this.<sup>54</sup>
- Proponents must apply sensitivity analysis to all credible options in a RIT if the cost threshold is satisfied. A submission from ENA sought clarification of this.<sup>55</sup>
- The threshold will be reviewed every three years to ascertain whether, in light of changes to input costs, the threshold needs to be amended. This is consistent with clause 5.15.3 of the rules. ENA sought clarification on how the threshold will be updated over time.<sup>56</sup>

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<sup>54</sup> ENA, submission to AER's Guideline Review, 3 September 2023.

<sup>55</sup> ENA, submission to AER's Guideline Review, 3 September 2023.

<sup>56</sup> ENA, submission to AER's Guideline Review, 3 September 2023.

## 4 Early works

### 4.1 Rule requirements

In its stage 2 report, the AEMC recommended<sup>57</sup> that we provide additional guidance to stakeholders on early works.

Currently, early works are not explicitly defined in the regulatory framework for electricity network planning.<sup>58</sup> However, the concept of ‘early works’ has arisen in the course of developing the ISP, our guidelines for the ISP, and in subsequent RITs.<sup>59</sup> In these contexts, early works refers to works that are:

- required for the provision of electricity network services
- undertaken at an early stage of the overall project timeline.

The AEMC recommended that we update our CBA guidelines to provide additional guidance about the term ‘early works’ and the activities it encompasses.<sup>60</sup>

In its stage 2 report, the AEMC recommended that we should describe early works as:<sup>61</sup>

activities that are completed prior to the construction of the preferred option, to improve the accuracy of cost estimates, and/or to ensure that a project can be delivered within the time frames specified by the most recent ISP.

### 4.2 Final amendments to the Guidelines

Current references to early works do not define this term nor do they distinguish early works from other works required for the provision of electricity network services.

In response to our consultation paper the ENA, EUAA, Iberdrola, PIAC, and TransGrid all noted the potential benefits from undertaking early works.<sup>62</sup> Responses to our explanatory statement on the draft amendments from the EUAA, ENA, AEMO, PIAC, and Iberdrola also highlighted the potential benefits from early works.<sup>63</sup>

The ENA submitted in response to our draft amendments that there may be cost-recovery uncertainty for unforeseen preparatory activities and submitted concern if “the AER were to disallow cost recovery for early works activities on the basis that those activities are already

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<sup>57</sup> AEMC, Transmission Planning Investment Review, Stage 2 Final Report, October 2022

<sup>58</sup> That is, in the National Electricity Rules, the RIT-T, RIT-D, AER guidelines, or the ISP.

<sup>59</sup> AEMC, Transmission Planning Investment Review, Stage 2 Final Report, Section 4, Box 4, October 2022

<sup>60</sup> AEMC, Transmission Planning Investment Review, Stage 2 Final Report, Section 4, Box 3, October 2022

<sup>61</sup> AEMC, Transmission Planning Investment Review, October 2023

<sup>62</sup> ENA submission 19 June; EUAA submission 19 June, Iberdrola submission 19 June, PIAC submission 19 June, Transgrid submission 19 June

<sup>63</sup> ENA submission, 3 September 2023, p. 15; EUAA submission, 7 September 2023, p. 3; AEMO submission, 8 September 2023, p. 2-3; PIAC submission, 8 September 2023, p. 2; Iberdrola submission, 8 September 2023, p. 2-3.

funded through regulatory allowances, whilst at the same time not allowing NSPs to seek cost pass through for a material increase in preparatory activities”.<sup>64</sup>

We note that the regulatory regime allows for recovery of the cost of RIT-T actionable ISP projects, including early works costs and any incremental costs incurred in the project planning process, through CPAs (applications to adjust the five-yearly revenue determination).

The ENA also reiterated that “additional guidance on the types of activities that may be accepted by the AER as part of an early works CPA may provide greater certainty for both NSPs and consumers, even under the current Rules”.<sup>65</sup>

Iberdrola also submitted that there would be benefit in defining early works in greater detail and in relation to activities that may be undertaken, stating:<sup>66</sup>

It is important to balance the improvement in cost estimates through early works versus the likelihood that breaking up a large project into a series of separately funded “activities” will result in increased costs to customers. We remain concerned that “activities” in the early works definition remains troublingly loose.

We recognise the need for flexibility, but we would prefer that there is a level of prescription in defining the activities that constitute early works, as this would provide clarity to both the NSP and stakeholders.

AEMO supported the draft amendments in relation to early works and consider that the early works activities are consistent with this definition.<sup>67</sup> AEMO also suggested that an additional method of providing clarification on the definition could be to include an example of the Determination for Humelink in August 2022, where the AER approved expenditure for steel tower assembly design and prototype testing.<sup>68</sup>

As we noted in our explanatory statement on the draft amendments, the Transmission Planning Investment Review stage 3 report recommended:<sup>69</sup>

- providing greater cost recovery certainty to TNSPs for early works by enabling them to submit a separate CPA for early works to us without the need to first complete a RIT-T
- introducing a definition of early works to underpin the AER’s assessment of an early works CPA in the NER.

Implementing these recommendations requires changes to the NER. Were the AEMC to implement such changes, as previously discussed, we would then revisit any consequential and required changes to our guidelines at that time, including how we might best identify or prescribe activities that are or should be early works.

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<sup>64</sup> ENA, submission in response to AER draft decision, 3 September 2023, p. 15.

<sup>65</sup> ENA, submission in response to AER draft decision, 3 September 2023, p. 15.

<sup>66</sup> Iberdrola submission, 8 September 2023, p. 2.

<sup>67</sup> AEMO submissions, 8 September 2023., pp. 2-3.

<sup>68</sup> AEMO submissions, 8 September 2023., pp. 2-3.

<sup>69</sup> AEMC, Transmission Planning Investment Review, stage 3 report, May 2023



For these reasons, our position now remains to only include the definition of early works used by the AEMC in its stage 2 report, namely activities that are completed prior to the construction of the preferred option to improve the accuracy of cost estimates and/or to ensure that a project can be delivered within the time frames specified by the most recent ISP. We have not proposed guidance on specific activities as submitted by Iberdrola that fall within this definition given this will be relevant to any future amended rule that reflects the stage 3 report recommendations.

## Appendix A: Submissions on our draft amendments

This attachment summarises and responds to input that stakeholders provided about:

- approach to developing reopening triggers
- existing worked examples on developing reopening triggers
- new worked examples describing actions that a proponent should take in response to a material change in circumstances event
- cost estimate classification systems
- cost estimation transparency
- sensitivity analysis
- early works

Issue	Stakeholder submissions	AER response
<p><b>Approach to developing reopening triggers</b></p>	<p><b>ENA</b> identifies that the \$100 million threshold for developing RIT reopening triggers should apply to the <i>preferred</i> option rather than <i>any credible</i> option.</p> <p><b>Iberdrola</b> expresses concern that AEMO, as a RIT-Transmission (RIT-T) proponent is not required to develop reopening triggers.</p> <p><b>Iberdrola</b> expresses concern that the NSPs, particularly the Transmission NSPs will develop reopening triggers in such a way that they will never be triggered, even if a clear material change has occurred.</p>	<p>The AER has updated the guidelines to reflect that proponents need to develop RIT reopening triggers if the estimated capital cost of the <i>preferred</i> option exceeds \$100m.</p> <p>AEMO must develop reopening triggers in the same way as NSPs when it undertakes a joint RIT assessment process, for example with TransGrid for VNI West. However, the NER exempt AEMO from the requirement when it is the sole proponent on the basis that AEMO is an independent not for profit entity. This means we cannot extend the Guideline requirement to develop reopening triggers to AEMO.</p> <p>We have introduced worked examples and objective and verifiable triggers to promote robust selection of triggers:</p>

	<p><b>Iberdrola</b> state that the AER will need to have the ability to ensure that if submissions reasonably identify a need for a reopening trigger that is either not adequately defined by the TNSP or was not originally identified by the TNSP, that the trigger is adopted.</p>	<p>RIT proponents are best placed to assess reopening triggers because of their expertise, experience and understanding of the project being considered.</p>
	<p><b>PIAC</b> states that prescription (determining for each project which of a range of pre-existing alternatives would be appropriate for each project) would add much needed rigour to the protection measure and ensure it operates more effectively.</p>	<p>RIT proponents must consult on reopening trigger events as part of a RIT process. The consultation requirement will provide transparency about the basis for the reopening triggers proposed and allow stakeholders to engage with proposed trigger events.</p>
	<p><b>PIAC</b> recommends creating a mechanism for any actor to alert the AER to the occurrence of an MCC, with the onus on the AER (not the proponent) to uphold or reject that.</p>	<p>The AEMC's final determination on the rule change states that the objective of the reopening triggers is to help the RIT-T proponent determine whether there has been a material change in circumstances between the final RIT-T report and the contingent project application</p> <p>RIT proponents are best placed to assess reopening triggers because of their expertise, experience and understanding of the project being considered.</p>
	<p><b>EUAA</b> states that the effectiveness of consultation requirements relies on the transparency of the proponent and the ability of the proponent's customer panel to have the knowledge, expertise and time to debate them in detail with the proponent.</p> <p>Their experience in network customer panels suggests this is not always the case.</p>	<p>Use of worked examples and principles that encourage objective and verifiable trigger events will help set expectations for customer panels and other stakeholders.</p>
	<p><b>EUAA</b> asks:</p> <ul style="list-style-type: none"> <li>• how will the AER be able to judge that the TNSP has complied?</li> <li>• Will consumers on the TNSP customer panel be able to complain to the AER, during the course of the TNSP's consultation that the TNSP is not following the Guideline?</li> <li>• What compliance and enforcement powers does the AER have?</li> </ul>	<p>We will monitor compliance with requirements in the NER and requirements and principles as part of our general compliance and enforcement role. We will also review compliance with reopening triggers as part of our contingent project assessments.</p>
	<p><b>EUAA</b> proposes that the AER is able to approve or reject the proponent's selection of triggers.</p>	<p>RIT proponents are best placed to assess reopening triggers because of their expertise, experience and understanding of the project being considered.</p>
<p><b>Amended examples-reopening triggers</b></p>	<p><b>ENA</b> suggests that re-opening trigger examples should be created in reference to the PACR (in the case of a RIT-T) or the FPAR (in the case of a RIT-D),</p>	<p>The worked examples assess a change between the PACR and PADR (in the case of a RIT-T) and the DPAR and FPAR (in the case of a RIT-D). We have amended example 38 and 39 accordingly.</p>

	<p><b>ENA</b> suggests strengthening reopening triggers worked examples by including reference to boundary testing informing the cost metric.</p>	<p>We have amended example 36 to include reference to boundary testing informing choice of cost metric.</p>
	<p><b>ENA</b> suggests that specific policy change or emergence of a credible option that utilises new technology may be better incorporated as factors that could lead to a cost change or demand shock, rather than being separately identified as examples of reopening triggers.</p> <p>If the AER decides to leave this example, the <b>ENA</b> suggests that:</p> <ul style="list-style-type: none"> <li>- The pre-amble and example is reversed in the examples relating to government policy, 'act of god' and technological change;</li> <li>- The AER avoids use of words such as "likely" and "promising" in example relating to technological change.</li> </ul>	<p>Although these events impact the RIT outcome through an impact on costs of credible options, they result in the proponent considering a new option that was not included in the original RIT analysis. The AER considers this to be worth distinguishing from cost changes or demand shocks.</p>
	<p><b>ENA</b> notes that an example covering an 'act of god' is unlikely to be helpful in practice because such events are often unforeseen and so are difficult to specify in advance in a meaningful way in a reopening trigger.</p>	<p>We have changed the phrasing to indicate an event that an NSP can be more reasonably expected to prepare for. The purpose of this example is not to foresee the specific event, but to develop reopening triggers in the case of an event that will incorporate a combined change across multiple economic factors.</p>
<p><b>Additional examples - actions that an NSP may take in response to a material change in circumstance event</b></p>	<p><b>ENA</b> suggested including an example in which the proponent continues with the original preferred option, despite the MCC leading to another option becoming more highly ranked.</p>	<p>We have added a worked example in which a trigger is met, and the proponent should check whether the ranking of options has changed through a desktop analysis.</p>
	<p><b>ENA</b> suggested including an example in which updated NPV analysis shows the second ranked option becoming the preferred option and the proponent deciding to proceed with this option instead.</p>	<p>We have added a worked example in which the cost of the preferred option rises and the proponent should assess whether the second-ranked option should proceed.</p>
	<p><b>ENA</b> suggested including an example in which a new credible option is introduced as a result of the material change in circumstance and the proponent decides to reissue the PADR/DPAR to allow further stakeholder input.</p>	<p>We have added a worked example in which the full reapplication of a RIT is most likely to be the appropriate default course of action.</p>
<p><b>Cost estimation classification systems</b></p>	<p><b>ENA</b> queried whether the requirement for proponents to consider use of AACE applied in the case that the preferred option exceeding \$100m or in the case that <i>any credible option</i> exceeds \$100m.</p>	<p>We have amended the guidelines such that proponents must, for projects with an estimated capital cost in excess of \$100 million, apply the Association for the Advancement of Cost Engineering (AACE) cost estimate classification system or provide reasons to explain why applying an alternative system or arrangements is more appropriate or suitable than applying the AACE cost estimate classification system in producing an accurate cost estimate.</p>

**ENA** queried whether the proponent must consider use of the AACE in assessing all credible options (including any that fall below \$100 million) or only in assessing the preferred option.

We have amended the Guidelines such that proponents must, for projects with an estimated capital cost in excess of \$100 million, apply the Association for the Advancement of Cost Engineering (AACE) cost estimate classification system or provide reasons to explain why applying an alternative system or arrangements is more appropriate or suitable than applying the AACE cost estimate classification system in producing an accurate cost estimate.

**ENA** suggests the guidelines could explicitly link the threshold to the threshold applying in the Rules for RIT reopening triggers.

We agree and have amended the Guidelines to link the cost threshold for considering the AACE cost estimate classification system to the rules that apply to reopening trigger events.

**ENA** queried whether proponents must consider use of the AACE when the estimated capital cost exceeds \$100m or whether this threshold includes operating and maintenance costs.

We have amended the Guidelines to clarify that the “estimated cost of the preferred option” refers to the estimated capital cost.

**ENA** queried whether, in the case of a RIT-D, the threshold applied to asset replacement programs or individual projects.

We have clarified in the explanatory statement that, in the case of a RIT-D, the threshold applies to the cost of individual projects as opposed to programs.

**ENA** raised that it is not clear how estimates to an AACE classification system could be imposed on proponents of non-network options.

We recognise that non-network service providers may not use the AACE cost estimate classification system and if the AACE is not applied for a non-network option with an estimated capital cost greater than \$100 million, the non-network provider should explain why applying an alternative system or arrangements is more appropriate or suitable than applying the AACE cost estimate classification system in producing an accurate cost estimate. .

**ENA** notes that AACE classification system does not extend to cost components such as land and biodiversity offset costs, which may be material for some projects.

If proponents find the AACE is not applicable to particular material project costs, they may provide reasons to explain why applying an alternative system or arrangements is more appropriate or suitable than applying the AACE cost estimate classification system in producing an accurate cost estimate..

**ENA** states that there may be some options in a RIT-T which are not expected to be top-ranked, so it will not be worth obtaining AACE class estimates

If the AACE is not applied for a credible option when the estimated capital cost of the preferred option exceeds \$100 million, the proponent must provide reasons to explain why applying an alternative system or arrangements is more appropriate or suitable than applying the AACE cost estimate classification system in producing an accurate cost estimate.

	<p><b>ENA</b> considered that where the cost threshold is met, the NSP should retain the flexibility to consider applying the AACE classification system to each option in that RIT, rather than needing to apply the AACE classification system to each option in the RIT.</p>	<p>The proponent has the flexibility to consider not applying the AACE classification system if they consider that there is a more appropriate system or arrangement for a particular project, option or cost.</p>
	<p><b>PIAC</b> does not agree that mandating the AACE cost estimation classification system will increase RIT costs or delay the RIT process. On the contrary, use of a standardised system should reduce processing costs and times as the regulator and other actors will not have to learn and assess the cost estimation classification system each time they process a new RIT.</p>	<p>We have not mandated the use of the classification system as the most suitable approach to providing guidance on cost accuracy is likely to vary from project to project. However, the expectation is that RIT proponents will use the AACE classification system, and they must provide reasons if they choose an alternative cost accuracy methodology.</p>
	<p><b>EUAA</b> states that mandating RIT proponents to consider use of the AACE cost estimate system is of little benefit to consumers if:</p> <ul style="list-style-type: none"> <li>• the proponent can simply provide a reason for not doing so, and</li> <li>• there is no recourse for consumers to appeal that decision to the AER which does not have the power to decide whether the proponent’s reason is valid.</li> </ul>	<p>We have not mandated the use of the classification system as there may be more suitable approaches to cost estimation for different projects. However, the expectation is that RIT proponents will use the AACE classification system and, if they choose an alternative cost accuracy methodology, they must provide reasons why that method is more appropriate.</p>
	<p><b>ENA</b> notes that no DNSP currently adopts the AACE cost estimate classification system, and that adopting this system would incur substantial implementation costs. ENA considers it would be preferable to remove this guidance from the RIT-D guidelines altogether.</p>	<p>The AER acknowledges that no DNSP currently adopts the AACE cost estimate classification system. If the DNSP finds that adopting this system will incur substantial costs, it can explain why applying an alternative system or arrangements is more appropriate or suitable than applying the AACE cost estimate classification system in producing an accurate cost estimate.</p>
<p><b>Cost estimation transparency</b></p>	<p><b>ENA</b> considered that references to “maximising” the accuracy and transparency of cost estimates would more appropriately be ensuring “appropriate” accuracy and transparency, which can be expected to differ depending on the size of the RIT project.</p>	<p>We have removed the reference to maximising the accuracy of cost estimates and replaced this with <i>in a manner fit for purpose for that stage of the RIT-T</i>. We consider this wording appropriately recognises that the level of accuracy of the project will depend on the stage of the project and the type of infrastructure proposed.</p>
	<p><b>ENA</b> considers that it is important that the information does not reveal commercial sensitive information or information that may indirectly impact the cost of future projects by affecting tender outcomes.</p>	<p>We would not expect NSPs to disclose commercially sensitive information in disclosing their cost breakdowns.</p> <p>We note that the RIT guidelines state, “The RIT–T proponent should undertake best endeavours to address potential confidentiality concerns that might prevent it from making data or modelling information available. For example, the RIT–T proponent could explore whether it can aggregate, anonymise or redact that information, or share it with requesting parties on a confidential basis.”</p>

**ENA** considers that the requirement for a proponent to specify various aspects of the cost estimation are not consistent with:

We have amended the Guidelines to reflect this.

- The AER's expectations that costs be broken down to the extent possible
- NER obligations for proponents of non-actionable RITs to provide total indicative capital and operating & maintenance costs to the extent practicable, for credible options.

**ENA** suggests adding the words "and in a manner which is fit for purpose for that stage of the RIT-T".

**ENA** suggests amending the wording of the guidelines to recognise the AER's intent that the transparency requirements apply where the NSP has included a material contingency allowance.

We have not limited the obligation to *material* contingency allowance as we consider that the inclusion of any contingency allowances should be transparent, and the term materiality is not well defined.

**ENA** suggests that an appropriate level of cost disaggregation would be to the same level as the key asset and cost components identified in the NSP's regulatory proposals.

The AER does not believe it is necessary to amend the proposed cost estimation transparency measures.

### Sensitivity Analysis

**ENA** states that the cost threshold for sensitivity analysis needs to be clearly specified in the guidelines, including:

- That the reference to 'costs' above \$100m is intended to be capital costs above \$100m;
- How the threshold will be updated over time; and
- Whether the threshold applies to the cost of the preferred option, or any credible option.

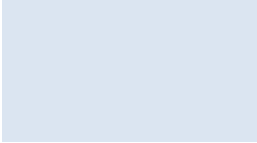
Proponents must apply sensitivity analysis to all credible options in a RIT if the cost threshold is satisfied.

We also encourage all RIT-T proponents, where the estimated capital costs of the preferred option is less than \$100 million, to consider undertaking sensitivity analysis as well.

The threshold will be updated in line with the threshold for developing reopening triggers.

	<p><b>AEMO</b> does not consider that a binding obligation should be imposed on RIT-T (non-actionable ISP projects) proponents to conduct sensitivity analysis on the estimated costs of credible options in the RIT application guidelines.</p>	<p>Stakeholders will have more confidence in RIT outcomes if the preferred option performs well under different sensitivities. Our approach will enable stakeholders to better understand the robustness of the preferred option.</p>
<p><b>Early works</b></p>	<p><b>ENA</b> does not agree that ‘once the RIT is satisfied, there is little practical purpose to distinguish between early works from other activities’.</p> <p><b>ENA</b> would be concerned if the AER were to disallow cost recovery for early works activities on the basis that those activities are already funded through regulatory allowances, while at the same time not allowing NSPs to seek cost pass through for a material increase in preparatory activities.</p> <p><b>Iberdrola</b> emphasise the importance of balancing the improvement in cost estimates through early works versus the likelihood that breaking up a large project into a series of separately funded “activities” will result in increased costs to customers.</p> <p><b>Iberdrola</b> would prefer that there is a level of prescription in defining the activities that constitute early works, as this would provide clarity to both the NSP and stakeholders.</p> <p><b>Iberdrola</b> would also prefer to see AEMO define what activities constitute early works, including a delivery time frame for when the early works should be commenced and completed, for any transmission project identified in the optimal development pathway of the ISP</p>	<p>We consider that once the project has satisfied the RIT, the electricity network service provider may seek cost recovery for early works via a contingent project application for an actionable ISP project if all the eligibility requirements in the rules have been satisfied.</p> <p>We consider that preparatory activities and early works are recoverable through the regulatory framework.</p> <p>Under the current regulatory framework, early works above the RIT cost threshold cannot be funded through regulated revenue allowances for actionable ISP projects without first satisfying a RIT.</p> <p>We consider that the level of detail included in a RIT should be fit-for-purpose and commensurate with the level of risks involved.</p> <p>As the AEMC has recommended further rule changes in relation to early works and we consider that it is not appropriate to prescribe activities that would be covered by early works.</p>
<p><b>General</b></p>	<p><b>ENA</b> suggests that the AER includes in the RIT-T and RIT-D application guidelines a list of the binding elements of the guidelines, similar to that currently included in Appendix A to the CBA guidelines.</p>	<p>We do not consider this is necessary as we have only mandated that, for RIT’s where the estimated capital cost is above \$100 million, the RIT proponent must perform sensitivity analysis on all credible options and apply the Association for the Advancement of Cost Engineering (AACE) cost estimate classification system to all credible options or provide reasons to explain why applying an alternative system or arrangements is more appropriate or suitable than applying the AACE cost estimate classification system in producing an accurate cost estimate.</p>





**ENA** has also identified areas of the draft amendments where the wording could be improved or clarified.

The AER has considered these identified areas in its preparation of the final amendments.

## Appendix B: Abbreviations

This appendix provides the extended form of key abbreviations used in this issues paper.

Shortened Form	Extended Form
AACE	Association for the Advancement of Cost Engineering
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
CBA	cost benefit analysis
ISP	Integrated System Plan
MCC	Material change in network infrastructure project costs
NER	National Electricity Rules
RIT-D	regulatory investment test for distribution
RIT-T	regulatory investment test for transmission
TNSP	transmission network service provider
TPI	Transmission Planning Investment