20 January 2021

Ms Merryn York
Acting Chair, Australian Energy Market Commission
GPO Box 2603
Sydney NSW 2001

Dear Ms York

RE: Material Change in Network Infrastructure Project Costs Rule Change

The Energy Users Association of Australia, the Major Energy Users Inc, AGL Energy Limited, Delta Electricity and ERM Power Limited as joint proponents submit the attached Rule change proposal under section 91 of the National Electricity Law. The proposal is to amend clauses 5.16.4, 5.16A.4 and 5.17.4 of the National Electricity Rules (the Rules). The intent is to ensure that for large network infrastructure projects when a significant increase in project costs occurs following application of the Regulated Investment Test (RIT) for Distribution or Transmission that the Australian Energy Regulator (the AER) is the final determining authority for the need for the project proponent to reapply the RIT. The proponents believe that this rule change will make a significant contribution to the achievement of the National Electricity Objective.

Currently the RIT proponent has the sole discretion to determine if the RIT should be reapplied following any material change in circumstance. This applies even where a large increase in project costs occurs following the issue of the Project Assessment Conclusion Report (PACR) for a transmission network project or the Final Project Assessment Report (FPAR) for a distribution network project and AER RIT approval. This rule change request changes only the determining authority for the need to reapply the RIT for a significant increase in network infrastructure project costs. All other provisions with regards to a material change in circumstance remain with the RIT proponent as under the current framework. The RIT proponent would also retain the right to voluntarily reapply the RIT should the project proponent determine that an increase in project costs above the defined thresholds has occurred.

The rule change proposal sets out project cost thresholds above which the project proponent would be required to re-open the RIT process, but retains the AER's existing discretion under the rules to waive the requirement to reapply the RIT and expands this discretion to allow the exclusion of relatively low cost network projects. It would be required that the RIT must be reapplied if the AER decided that these limited and defined set of circumstances are not met. The AER would have a defined timeframe in which to make its determination. Stakeholders would be able to make submissions to the AER during this period.

Consumer and stakeholder confidence in the ability of the RIT to ensure a transparent and efficient network investment framework has been negatively impacted due to significant increases in network project costs sought by network project proponents when requesting capital funding approval from the AER following completion of the RIT process.

The final stage of the RIT (PACR or FPAR) is the last stage where consumers and stakeholders are consulted with and provided the detailed economic analysis which ultimately justifies network investment. Allowing capital costs to significantly increase after the application of the RIT is a poor outcome from a governance perspective and negatively impacts consumer and stakeholder confidence that the RIT framework is achieving its stated purpose. This rule change request seeks to restore consumer and stakeholder confidence in the RIT process by ensuring that the AER and not the project proponent is the determining authority and that a RIT must be reapplied when a significant increase in network project costs occurs post completion of the RIT unless otherwise determined by the AER.

This proposed rule change is complementary to the current AER work to develop a Guidance Note on the Regulation of Actionable ISP projects. Having a more robust capital cost estimate at the time the RIT is completed will give all stakeholders greater confidence that an efficient project is being submitted as a Contingent Project Application to the AER. This will address some of the significant concerns the AER found in its focus group discussions as it developed the draft guidance note.

Network project proponents will also benefit from this rule change by the introduction of clearer obligations in the Rules with regards to the level of project cost accuracy that should be achieved in the RIT to ensure reapplication of the RIT will not be required. This will reduce the level of post-RIT consultation by project proponents to justify project cost increases and ensure a more streamlined process for project funding approval by the AER.

Yours sincerely

Andrew Richards
Chief Executive Officer
Energy Users Association of Australia
Suite 904, 530 Little Collins Street,
Melbourne Vic 3000

Anthony Callan
Executive Manager Marketing
Delta Electricity
Suite 5.01, 580 George Street
Sydney NSW 2000

David Headberry
Public Officer
Major Energy Users, Inc
8 Harker Street
Healesville Vic 3777

Libby Hawker
Senior Manager – Regulatory Affairs
ERM Power Limited
Level 3, 90 Collins Street
Melbourne Vic 3000

Chris Streets
Senior Manager Wholesale Market Regulation
AGL Energy Limited
Level 24, 200 George St
Sydney NSW 2000

NEM Rule Change Request
Material Change in Network Infrastructure Project Costs

1. EXECUTIVE SUMMARY

AEMO's 2020 Final Integrated System Plan (ISP) Report highlighted that each major transmission project identified in the Draft ISP has incurred at least a 30% increase in cost from initial estimates. The potential for further increases in the costs of the projects listed in the ISP exists as these projects move through their respective Regulated Investment Test (RIT) process.

This issue of rising costs for transmission projects has been further highlighted by the increase in costs of Project EnergyConnect (PEC) and the Eyre Peninsula Upgrade. The increase in costs in each of these cases occurred between approval of the RIT-T and the application for funding. In the case of the Eyre peninsula upgrade, costs increased by 21% following approval of the RIT-T and in the case of Project EnergyConnect costs increased by approximately 60% following approval of the RIT-T.

Had the original PEC RIT-T process included a more accurate cost assessment, the RIT-T may not have been approved by the Australian Energy Regulator (AER) under the 24 January 2020 approval determination.

Despite this significant increase in costs for PEC, the project proponents did not consider that this 60% increase in costs represented a "material change" under the National Electricity Rules (the Rules)[1] which would require the proponents to undertake a RIT-T re-application. Under the current Rules, the decision on this critical issue as to what is a "material change" in a transmission or distribution network project and whether this requires a re-opening of the RIT-T or RIT-D process (via a re-application of the Project Assessment Draft and/or Conclusions Reports or Final Projects Assessment Report) rests with the project proponent(s), not the AER. This approach is not aligned to good governance principles and is not in the best interests of consumers.

These cases where material increases in project costs have occurred following application of the RIT-T raise serious questions as to whether the current Rules remain fit for purpose and, therefore whether they are able to meet the challenges created by the expected transition in the NEM, and the associated development of a large number of significant scale and cost transmission projects. The issues highlighted with the RIT-T process (and PEC in particular), threaten to significantly undermine stakeholder confidence in the RIT-T process to act in the best interest of consumers. This would especially be the case with respect to electricity consumers who will bear the costs of these regulated multi-billion dollar network infrastructure projects over their 50 to 60 year life.

Full and open transparency in assessing regulated network project proposals will be critical to continued stakeholder support for the major changes that will be taking place in the NEM over the next 20 years. In cases where significant changes in the costs and benefits of major transmission projects occur, following completion of a RIT, it is appropriate that detailed sensitivity analysis of key assumptions be undertaken to assure stakeholders that the economics of the project remain robust.

We acknowledge that the issue of rising transmission capital costs has resulted in a number of initiatives over the last 12 months to improve estimation accuracy for transmission projects:

- The development of the transmission cost data base as part of the 2022 ISP, and
- The implementation of the 'feedback loop' to ensure projects are still part of the optimal development path prior to submitting their contingent project application (CPA)
- The AER's Draft Guidance Note on the regulation of actionable ISP projects ie contingent project applications to the AER

[1] National Electricity Rules subclauses 5.16.4(Z3), 5.16A.4(n) and 5.17.4(t)

However, we believe the whole 'end to end' process needs to be considered, starting from future ISP projects, then future ISP projects with preparatory activities, then Project Assessment Draft Report, then Project Assessment Conclusions Report (PACR), then feedback loop and finally the Contingent Project Application (CPA). The rule change proponents consider there is a gap in the middle around the PACR and RIT approval as it transitions through to the CPA in ensuring that a project continues to provide a net benefit when significant cost increases occur and that is where this proposed rule change is specifically focussed. The proposed rule change is very complimentary to those other initiatives. It will, for example, reduce the chance that an inefficient project gets to the CPA stage for application of the AER Guideline designed to ensure that inefficient project has an efficient capital cost.

Against this background, it is submitted that a rule change with the following elements is required.

1. Require RIT-T and RIT-D proponents, where there has been a material change in costs following approval of the RIT-T or RIT-D, to re-open the RIT-T or RIT-D process through re-application unless otherwise determined by the AER on the basis of a limited and defined set of circumstances.
2. Allow stakeholders to review this material change through a transparent process which will result in a more rigorous updating of the project's Cost Benefit Analysis.
3. Define material change in costs as:
    a. Transmission network projects $0 to $500,000,000 – 15 percent
    b. Transmission network projects above $500,000,000 – 10 percent
    c. Distribution network projects $0 to $200,000,000 – 15 percent
    d. Distribution network projects above $200,000,000 – 10 percent
4. Apply the following thresholds for project scale beneath which the AER would be empowered to waive the re-evaluation if it considered this was appropriate:
    a. Transmission network projects - $150,000,000
    b. Distribution network projects - $50,000,000

The wording of the proposed rule change is set out in Attachment 1.

An amendment to the AER's RIT-T and RIT-D Guidelines would also appear appropriate to ensure that a more rigorous approach to project cost estimates is adopted during the RIT-T and RIT-D processes. This would ensure that project approvals through the RIT-T and RIT-D processes are not based on preliminary estimates. It is recommended that the AER require a level of detail equivalent to the Front-End Engineering Design stage for the project.

It is anticipated that the prospect of being required to re-open a RIT-T or RIT-D because of a material change in costs post publication of the Project Assessment Conclusion Report (PACR), or in the case of the RIT-D the Final Project Assessment Report (FPAR) would result in a more rigorous approach being adopted by proponents in preparing materials for review during the RIT-T and RIT-D processes to avoid the need for re-application. This would significantly improve the governance arrangements with respect to the RIT-T and RIT-D processes and ensure that costs associated with the AER's RIT-T or RIT-D approval process are not understated.

Consistent with the National Electricity Objective (NEO), the rule change would be in the long term interests of consumers by promoting a more rigorous approach to the development, and assessment, of major regulated network infrastructure projects. This more rigorous approach would further promote efficient investment in electricity services.

The improved governance and increased transparency in the RIT-T and RIT-D processes under the proposed rule changes would further benefit consumers through increased engagement. This increased stakeholder engagement is crucial to ensuring continued confidence in the RIT-T, RIT-D and AEMO ISP processes at a time of unprecedented changes in Australia's Electricity Sector. The multi-billion dollar capital expenditure associated with regulated network infrastructure projects is paid for by consumers for the life of the project, making it necessary that they have sufficient information to determine whether their money is being spent efficiently.

It is noted in this context that the AER Chair emphasised the importance of Transparency in her Preface to the State of the Energy Market 2020 report in the following terms:

> "Making well informed decisions about energy investment requires confidence in the policy and regulatory environment, along with a deep understanding of the marketplace. The many and varied interventions by governments and regulators are complex for industry and consumers alike. It's incumbent on us all to increase the transparency of and rationale for our evidence based decisions in plain language."

Additionally, due to the large cost increase between the issue of the PACR for PEC and the request for contingent project funding, and that the revised costs for PEC are some 25% higher than the cost set out in the ISP, it is also submitted that the AEMC should approve a one off special transitionary provision that would require reassessment of this project via a requirement for the project proponent ElectraNet to issue an updated PACR. As the benefits from PEC largely accrue well into the future, what in effect would only be a short delay in finalising project approval for PEC would not negatively impact any proposed benefits to consumers.

In considering this, it is also worth noting that the expected benefits of PEC could also be significantly impacted by the NSW Electricity Infrastructure Roadmap released in November 2020, particularly as highlighted by the Energy Security Board in its January 2021 Post-2025 Market Design Directions Paper that;

> "the NSW Roadmap includes a legislated amount of 12 GW entering the system before 2030. This will put NSW on a transition pathway that is <u>at least as fast as the Integrated System Plan (ISP) step change scenario</u>"[2]

A decision to require reassessment via the RIT-T of PEC based on updated information would help restore confidence in the RIT-T process that has been damaged by the PEC project process. Indeed, this is exactly what the AER has invited Electranet and Transgrid to do in its Preliminary Position papers published in mid-December 2020 on the networks PEC contingent project application.[3]

2. <u>BACKGROUND</u>

Developments leading up to the submission of the contingency funding application for Project EnergyConnect (PEC) raise serious questions as to whether the Rules are able to meet the challenges created by the expected transition in the NEM, and the associated development of a large number of significant scale and cost transmission network projects proposed under AEMO's 2020 ISP "Optimal development path" to support this transition of the NEM.

Despite cost increases in the NSW component of PEC of 66% and a 59% increase in the cost of the overall project (compared to the expected increase in transmission costs assumed by AEMO in its 2020 Final ISP of around 30%) this material change in costs was not considered by ElectraNet (the proponent managing the Regulatory Investment Test (RIT-T) process) as a material change in circumstances requiring it to re-open the RIT-T process. The AER found that it was "not unreasonable", absent other information, to accept ElectraNet's position.

Under the current Rules, the decision on this critical issue as to what is a "material change" in a transmission project and whether this requires a re-opening of the RIT-T or RIT-D process (via a re-application) rests with the project proponent(s), not the AER. The issues highlighted with the application for contingent project funding and the significant underestimation of costs during the RIT-T process for PEC, and to a lesser extent the Eyre Peninsula network upgrade project, threaten to significantly undermine stakeholder confidence in the RIT-T process.

[2] Energy Security Board Post-2025 Market Design Directions Paper January 2021, pp22

[3] https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements/contingent-projects/transgrid-and-electranet-–project-energyconnect-contingent-project

In the case of the PEC RIT-T process, had a more accurate cost assessment for PEC been provided, the RIT-T may not have been approved by the AER.

This undermining of stakeholder confidence in the RIT process would particularly apply to electricity consumers who will bear the costs of these proposed multi-billion dollar network infrastructure projects which have a 50 to 60 year project life. Consumers are already required to continue funding network infrastructure that was assessed as efficient based on the prevailing assumptions of network service providers and the market operator at the time of conception and approval but are now either under-utilised or even unused. However, noting today some of those projects would fail to pass the preliminary stage of the RIT-T or RIT-D assessment. It is critical that the mistakes of the past are not allowed to be repeated today. Only full and open transparency in assessing significant changes in the costs and benefits of major transmission projects will be critical to continued stakeholder support for the major changes that will be taking place in the NEM over the next 20 years.

Against this background, it is submitted that rule changes are required, as set out in Attachment 1, and that an amendment to the AER's RIT-T and RIT-D Guidelines is appropriate to ensure that a more rigorous approach to project cost estimates is adopted during the RIT-T and RIT-D processes so that project approvals through the RIT-T and RIT-D processes are not based on low accuracy preliminary estimates.
It is recommended that the AER Guidelines require a level of detail equivalent to the Front-End Engineering Design stage for the project to be provided at the Project Assessment Conclusions Report stage to ensure that the AER assesses costings in the RIT process that are most likely to be reflective of the actual costs. Further it is considered appropriate for the AEMC to approve a one off special transitionary provision that would require reassessment of the PEC RIT-T via a requirement to issue an updated PACR.

3. NATURE AND SCOPE OF THE ISSUES WITH THE EXISTING RULES

As set out in Clause 5.16.4 (z3) of the Rules, the power to determine whether a material change would require the proponent to re-open the RIT-T process (via a re-application) rests solely with the project proponent, not the AER:

> **Reapplication of regulatory investment test for transmission**
>
> 5.16.4(z3) If:
>
> (1) a RIT-T proponent has published a project assessment conclusions report in respect of a RIT-T project;
>
> (2) a Network Service Provider still wishes to undertake the RIT-T project to address the identified need; and
>
> (3) there has been a material change in circumstances which, in the reasonable opinion of the RIT-T proponent means that the preferred option identified in the project assessment conclusions report is no longer the preferred option,
>
> then the RIT-T proponent must reapply the regulatory investment test for transmission to the RIT-T project, unless otherwise determined by the AER.
>
> 5.16.4(z4) For the purposes of paragraph (z3), a material change in circumstances may include, but is not limited to, a change to the key assumptions used in identifying:
>
> (1) the identified need described in the project assessment conclusions report; or
>
> (2) the credible options assessed in the project assessment conclusions report.

Updated Rules, Version 154, dated 19 November 2020

There is no change to subclauses 5.16.4(z3) or 5.16.4(z4) under the latest version of the Rules (Version 154 dated 19 November 2020) as to where the power rests in determining whether a "material change" would require the proponent to re-open the RIT-T process (via a re-application); ie, the proponent, not the AER, determines whether a "material change" has occurred . In addition, the new relevant Clause associated with actionable ISP projects (Clause 5.16A.4 (n)) contains some significant additional wording related to ISP projects which reinforce the exclusive power of the proponent to determine if a material change has occurred; this is detailed below for completeness:

Reapplication of regulatory investment test for transmission

5.16A.4(n) If:

(1) a RIT-T proponent has *published* on its website a project assessment conclusions report in respect of a RIT-T project; and

(2) there has been either:

(i) a material change in circumstances which, in the reasonable opinion of the RIT-T proponent means that the preferred option identified in the project assessment conclusions report is no longer the preferred option; or

(ii) *AEMO* has published an *Integrated System Plan* or *ISP update* that shows a change to the *identified need* in relation to the *actionable ISP project* the subject of the project assessment conclusions report,

then the RIT-T proponent must re-apply the *regulatory investment test for transmission*, unless otherwise determined by the *AER*.

(o) For the purposes of paragraph (n), a material change in circumstances may include, but is not limited to, a change to the key inputs and assumptions (including as a result of an *ISP update*) used in identifying:

(1) the *identified need* described in the project assessment conclusions report; or

(2) the credible options assessed in the project assessment conclusions report.

The next step in the regulatory approval processes is for the project proponent(s) to submit a Contingent Project Application for the project, under which the proponent(s) request the AER approve the total capital and operating expenditure required to deliver the project. The relevant Rules requirements are set out in Clause 6A.8.2. Essentially the AER is (only) required to assess whether the forecast capital expenditure is reasonably likely to reflect prudent and efficient costs.

Before the AER can approve a Contingent Project Application, it must remain satisfied that the RIT-T process has been successfully completed and, as set out in the AER's correspondence of 28 September 2020 to ElectraNet, given the significant increase in cost for PEC, this would involve the AER being satisfied that ElectraNet had met the requirements in subclause 5.16.4 (z3) of the Rules.

Based on the AER's correspondence of 28 September 2020 to ElectraNet, the AER has limited, if any, discretion to challenge a conclusion by a proponent that it has met the requirements under Clause 5.16.6 (z3) despite a significant increase in the PEC's costs and the potential for further cost increases due to continued risks with the project as identified by TransGrid.

The approach set out in Clause 5.16.4 (z3) of the Rules has been carried forward to the AER's Cost Benefit Analysis Guidelines: Guidelines to make the Integrated System Plan actionable, August 2020: Section 4.5.4. As a result, under the current rules, a material increase in costs does not automatically lead to the re-opening of the RIT-T.

This is also the case with respect to the RIT-D process. The decision to re-open a RIT-D rests solely with the project proponent. The provision for reapplication of regulatory investment test for distribution are set out in subclause 5.17.4(t). Whilst RIT-D projects tend to be of lower cost than transmission network projects, historically there have been a higher number of distribution network augmentation projects which has collectively resulted in significant cost increases to consumers. Significant cost increases post finalisation of a RIT-D process can also impact costs to consumers and for this reason the rule change proposal has applied a consistent framework to both the RIT-T and RIT-D process albeit with lower costs threshold applied to RIT-D projects, following a similar process to how a lower cost threshold, ($11M vs $43M vs the RIT-T[4]) is applied by the AER for when full application of the RIT-D is required.

To date we are not aware of any instance where the proponent has applied to reopen a RIT-T or RIT-D process due to a "material change". Under the current rules, the project proponent, who is the provider of the assessed project costs used in the RIT-T or RIT-D process and who receives the financial benefit of the regulated network investment over an extensive time period is the sole arbiter of what constitutes a "material change". Whilst it is clear to the rule change proponents that a RIT-T or RIT-D project proponent would reopen the RIT where a reduction in costs or a change in benefits favoured a project that had failed previously to achieve RIT approval, it is less clear that this would be the case where an increase in project costs or a subsequent decrease in benefits may result in a project being cancelled or the preferred option changed to a lower cost solution. In fact, the current rules do not require a proponent to advise the AER that changed circumstances has materially reduced any benefit claimed under a finalised RIT. In fact, increases in costs are only revealed due to the requirement for the project proponent to seek funding approval from the AER for a project potentially through the Contingent Project Application process.

The failure to re-open the RIT-T process for PEC, despite cost increase of around 60%, and numerous requests from stakeholders to do so clearly demonstrates our concerns. This failure by ElectraNet to reopen the RIT-T process for PEC threatens to undermine stakeholder, and especially consumer, confidence in the RIT-T and RIT-D processes as it raises serious issues around the governance of the process, transparency of decision making and accountability.

In developing this rule change request, the rule change proponents also considered the recent addition of the so called ISP projects "feedback loop" into the rule provisions for application of the RIT-T to ISP actionable projects. These provisions are set out in sub-clause 5.16A.5(b). We are concerned that these provisions will not actually address the problem of RIT-T proponents underestimating costs to pass a RIT-T. This rules provision requires only that AEMO confirms that the preferred option meets the specified need, even if the preferred option is extravagant and that the cost of the preferred option does not change the status of the project under the current ISP.

Whilst the RIT-T approval is based on a single numerical value, it's unclear to the rule change proponents how the feedback loop provision is intended to work from a practical perspective when the ISP reflects only a +/- 30% costing range. Our interpretation of sub-clause 5.16A.5(d) is that AEMO is not in any way limited in how it sets a monetary value in assessing that the project continues to be satisfactory. AEMO may set whatever cost it considers is appropriate and is not required to consider its original estimates in the ISP or even the costs published in the RIT-T. AEMO is not required to consult with stakeholders with regards to the costs increase or the impacts of this on net benefit outcomes.

[4] AER - Cost thresholds review for the regulatory investment tests 2018 https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/cost-thresholds-review-for-the-regulatory-investment-tests-2018

We note that PEC was allocated an estimated cost of $1.53M by AEMO in the Draft 2020 ISP. In the Final 2020 ISP this was changed to a range of $1.393 to $2.587M with a midpoint of $1.99M on which AEMO estimated a relatively small net benefit to consumers, with the majority of expected benefits accruing well into the future. Further, in the ISP the NPV of estimated future benefits was supported via the use of a discount rate well below the discount rate for future benefits that would be applied by a commercial operator.

Despite the large increase in cost estimates for PEC that were announced following the release of the Final 2020 ISP, AEMO's public statements continue to indicate that PEC would satisfy the requirements of 5.16A.5. Therefore, the proponents of this rule change do not consider that the so called "feedback loop" provisions remove or mitigate the deficiency in the Rules that this rule change is intended to correct.

In order to address this issue, the decision as to what constitutes a "material change" and whether a change warrants the need to re-open a RIT-T or RIT-D should not rest with the project proponent; it should be automatic unless otherwise determined by the AER on the basis of a limited and defined set of circumstances. This would ensure that the end-to-end process for determining whether a major network project should proceed is fully transparent and there is full public accountability via the resultant stakeholder consultation process.

Details of the proposed rule change

The proposed rule change would, for a percentage increase in costs above a specified threshold, alter the determination that a change in costs is a "material change" under the current rules. It would be required, unless otherwise determined by the AER on the basis of a limited and defined set of circumstances.

The AER may determine that the material change in circumstances meets the framework for waiver of the requirement to reapply the RIT or should this not be the case, require the project proponent to reapply the RIT. The AER will have 30 business days from the time of publication of the revised capex cost to make its determination. In considering the process for this determination, then we would expect the normal AER engagement process would occur with all stakeholders having the opportunity to make submissions in a timetable to meet the 30 business day period the AER has to make a decision regarding reapplication of the RIT.

The rule change proponents propose a threshold for an increase in costs of either 10 or 15 percent from the costs of the project as set out in the PACR or FAPR as follows;

Transmission network projects $0 to $500,000,000 – 15 percent
Transmission network projects above $500,000,000 – 10 percent
Distribution network projects $0 to $200,000,000 – 15 percent
Distribution network projects above $200,000,000 – 10 percent

The selection of these thresholds is based on:

(i) our application of the AACE International Recommended Practice and Estimate Classification;
(ii) commercial industry practice and collective experience of the rule change proponents; and
(iii) represent thresholds that would capture major network projects that would result in significant increased costs to consumers

Application of the AACE International Recommended Practice and Estimate Classification.

The AER's Rule 5.16.6 review of Project Energy Connect drew on the AACE International Recommended Practice and Estimate Classification to assess the accuracy of the capital cost estimate. The AER noted:

> "Given the preliminary nature of the estimated costs, ElectraNet has identified the investment as being in line with a Class 4 estimate under the AACE International Recommended Practice and Estimate Classification. This implies that only 1 to 15 per cent of the scope of the project has been defined.
>
> ElectraNet stated that the accuracy range for this estimate is -15 to -30 per cent on the low side and +20 to +50 per cent on the high side. This would mean that the investment cost could reasonably be in the range of $1.07 billion and $2.23 billion"[5]

It is reasonable for stakeholders to expect the PACR or FAPR capex estimate to be at a minimum a Class 2 estimate for the AER's RIT-T or RIT-D approval process. A Class 2 estimate would mean that 30-75% of the scope of the project has been defined and the expected accuracy range at an 80% confidence interval is negative 5-15% on the low side and positive 5-15% on the high side. Whilst there is no AER Guideline to require that the estimate to comply with Class 2 standards (or any other class) it is nevertheless considered reasonable to use the Class 2 expected accuracy range to inform the definition of material change.

This a reasonable approach because the PACR or FAPR is the last stage at which stakeholders have a chance to engage with the network on the merits of the proposed preferred option. From the experience of Project Energy Connect, it is clear that the engagement at the PACR stage on a Class 4 estimate was rendered almost irrelevant given the subsequent change in capex.

Recent experience in capex estimation in the ISP has highlighted the difficulties in cost estimation when these types of projects have not been completed for many years and the challenge of different routes and approval procedures are considered. In the absence of an AER Guideline requirement that the PACR or FAPR capex estimate be any particular class under the AACE guideline, it is reasonable that a material change of +10/15% from the PACR capex estimate would satisfy the definition of material change.

In effect, this definition will provide an incentive to networks to move towards a Class 2 estimate at the PACR or FAPR, simply as risk mitigation against having to reopen the RIT-T or RIT-D process under the proposed material change definition. This is seen by the rule change proponents as a desirable outcome and consistent with the NEO. Consumers are able to productively engage in the PACR and FAPR process confident that the level of proposed capex will be close to the level proposed to the AER for RIT-T or RIT-D approval and also to the level of capex that can be applied for under the contingent project application It is also worth noting that for actionable ISP projects processed through the RIT-T under the provisions of Clause 5.16A, the contingent project application must be no greater than the costs considered in AEMO's assessment under subclause 5.16A (b) which the rule change proponents believe should be consistent with the costs set out in the PACR.[6]

[5] See pp79-80 in https://www.aer.gov.au/system/files/AER%20-%20Determination%20-%20SAET%20RIT-T%20-%2024%20January%202020.pdf

[6] National Electricity Rules version 154 subclause 5.16A.5(d)

Commercial industry practice and collective experience of the rule change proponents

The rule change proponents have extensive experience in the process that private companies use to develop and approve large scale high cost engineering projects. We believe this is relevant given that the regulatory framework is designed to replicate what occurs in a workably competitive market.

For large scale engineering projects being assessed by a competitive business, it would be normal for the approval process to require the costs estimates to reside within a plus or minus 5 to 10 percent accuracy threshold. Alternatively, the project approval would be based on an approved amount and include a 10 percent contingency allowance for unforeseen events or costs overruns. Project expenditure outside the 10 percent accuracy threshold or contingency amount would normally require the project proponent or manager to seek approval for additional funding from the organisation's management or board. In the case of the RIT-T or RIT-D, the AER acting on behalf of consumers, performs this original and additional approvals functions.

Allowing a generous 10 to 15 percent contingency amount for the RIT-T is above that which would normally be allowed under good engineering and expenditure approval governance practices. We agree with the view that whilst in the early formative stages of the RIT-T and RIT-D approvals process, such as the ISP/PSCR and PADR having a wider range for cost estimates may be appropriate. However, at the final approval stage (PACR) where a determination to proceed is made, having the costs estimate within a 10 to 15% bound would be consistent with good engineering and project approvals governance practice as implemented in competitive enterprises.

The proponents recognise that, depending on the total level of expenditure for a proposed project, there may be proposed network projects where the AER should have some discretion with regards to reapplication of the regulated investment test. In particular, the intent is not to require reapplication of the relevant RIT for lower cost projects. However, where the network project exceeds a specific threshold, then reapplication of the relevant RIT should be automatic.

The proponents recommend the following thresholds for project scale beneath which the AER would be empowered to waive re-evaluation if it considered this appropriate;

Transmission network projects - $150,000,000
Distribution network projects - $50,000,000

The rule change proponents submit this proposed rule change would apply to all RIT-T and RIT-D projects for which a PACR or FAPR has yet to be finalised and approved by the AER. As such we ask the AEMC to consider what transitional rules may be required, including how the proposed rule made may apply to RIT-Ts and RIT-Ds that are currently part way through.

Special Transitionary Provision for Project Energy Connect

As noted, there has been a large cost increase between issue of the PACR for PEC and the request for contingent project funding. We request that the AEMC consider a transitional rule that requires reassessment of PEC via a requirement to update the PACR. It is noted that the Boards of both TransGrid and ElectraNet have only given conditional approval to PEC and that it would take some time before major works were commenced following final Board approval. Additionally, the benefits both proponents claim from PEC largely accrue well into the future. As a result, the time taken to consider this request for a transitional rule change, and its implementation, is likely to lead to only a relatively short delay in finalising project approval and would not have any major impact in terms of the expected commencement date for project major works or the proposed benefits to consumers.

Additionally, the expected benefits of PEC need to be re-assessed in the wake of the release of the NSW Electricity Infrastructure Roadmap in November 2020. It is particularly noted that the January 2021 Energy Security Board Post-2025 Market Design Directions Paper highlighted that:

> "the NSW Roadmap includes a legislated amount of 12 GW entering the system before 2030. This will put NSW on a transition pathway that is at least as fast as the Integrated System Plan (ISP) step change scenario"[7]

A decision to require reassessment via the RIT-T of PEC based on updated information would help restore confidence in the RIT-T process which has been damaged by the PEC project process at a time of unprecedented changes in the Electricity Sector that will require multi-billion dollar investments in major transmission infrastructure that consumers will ultimately pay for over a timeframe of potentially up to 60 years.

4. HOW WOULD THE RULE CHANGE ADDRESS THE ISSUES RAISED AND PROMOTE THE ACHIEVEMENT OF THE NATIONAL ELECTRICITY OBJECTIVE

The prospect of being required to re-open a RIT-T or RIT-D because of material changes in costs would be expected to result in a more rigorous approach being adopted in preparing materials for the relevant RIT-T or RIT-D. This more rigorous approach would further promote efficient investment in electricity services, thus helping to ensure that these substantial projects are undertaken in a manner that is fully consistent with the National Electricity Objective:

> "to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to:

- price, quality, safety and reliability and security of supply of electricity
- the reliability, safety and security of the national electricity system."

Regulated transmission and distribution use of system costs are a significant portion of consumer energy bills and owners of these networks continue to receive regulated returns regardless of whether the utilisation of these networks assets falls below the level at which the construction of the network assets would be shown to be economic.

Ensuring that consumers have confidence in the governance and transparency of the RIT-T and RIT-D processes would therefore assist consumers to form a view that the objectives of the NEO with regards to pricing for network services are, in fact, being achieved.

5. IMPACT OF THE PROPOSED RULE CHANGE

The prospect of being required to re-open a RIT-T or RIT-D because of material changes in costs would be expected to result in a more rigorous approach being adopted in preparing cost estimates for the relevant RIT-T or RIT-D. This would improve the governance arrangements with respect to the RIT-T or RIT-D process. This would be in the long term interests of consumers by promoting a more rigorous approach to the development, and assessment, of major infrastructure projects. This more rigorous approach would further promote efficient investment in electricity services by ensuring a more accurate assessment of net benefits during the RIT-T or RIT-D process. Both the Eyre Peninsula Upgrade and Project Energy Connect RIT-T process have identified outcomes where a substantial increase in costs has occurred subsequent to the issue of the PACR and RIT-T approval, yet on each occasion, the project proponent determined that a "material change" had not occurred.

Additionally, increased transparency in the RIT processes under the proposed rule change would benefit consumers through increased engagement, with this increased Stakeholder engagement ensuring continued confidence in the RIT-T, RIT-D and AEMO ISP processes at a time of unprecedented changes in Australia's Electricity Sector and multi-billion dollar capital expenditure in associated network infrastructure projects, the cost of which is ultimately borne by consumers.

[7] Energy Security Board Post-2025 Market Design Directions Paper January 2021, pp22

6. CRITICALITY OF THE PROPOSED RULE CHANGE

The 2020 ISP prepared by AEMO lists a number of major transmission projects, including inter-connectors, that AEMO considers will be required under its "Optimal development plan", with a multi-billion dollar price tag. It is critical to ensure that the governance arrangement for reviewing and assessing these projects under the RIT-T process is far more rigorous than under the current rules to ensure that the most efficient investment outcomes are achieved, consistent with the NEO.

Additionally, as electricity consumers ultimately bear the cost of these projects, for a lengthy time period, improving the governance, transparency and accountability with respect to the regulatory approval processes is critical to maintaining stakeholder, and especially consumer confidence in the RIT-T and RIT-D processes. This is also particularly important at this point in time given the current Energy Security Board review of the National Electricity Market and the major changes in the operation of the NEM that are expected over coming years. Ensuring consumer confidence in the RIT-T and RIT-D process for any network infructructure project must be a key outcome for Network Service Providers and the NEM's regulatory bodies. In the view of the proponents of this rule change, consumer confidence that the regulatory investment test is acting to ensure an efficient outcome for consumers is currently low and needs to be urgently improved through the proposed changes.

7. CONTACT DETAILS:

Please contact Ron Logan 0427 002 956 or rlogan@ermpower.com.au if you have any questions with regards to this rule change request.

ATTACHMENT 1

Proposed Rule Changes

Clause 5.16.4 (z3) to read:

(z3) If:
(1) a RIT-T proponent has published a project assessment conclusions report in respect of a RIT-T project;
(2) a Network Service Provider still wishes to undertake the RIT-T project to address the identified need; and
(3) there has been a material change in circumstances which, in the reasonable opinion of the RIT-T proponent means that the preferred option identified in the project assessment conclusions report is no longer the preferred option, or
(4) there has been an increase in the total assessed cost of the project equal to, or greater than, the following percentages:
(i) for projects with a total project cost less than $500,000,000 – 15%,
(ii) for projects with a total project cost greater than $500,000,000 - 10%

then the RIT-T proponent must reapply the regulatory investment test for transmission to the RIT-T project, unless otherwise determined by the AER.

Clause 5.16.4 (z5) to read:

(z5) When the AER makes~~making~~ a determination under paragraph (z3), the AER must have regard to:
(1) the credible options (other than the preferred option) identified in the project assessment conclusions report;
(2) the change in circumstances identified by the RIT-T proponent; and
(3) whether a failure to promptly undertake the RIT-T project is likely to materially affect the reliability and secure operating state of the transmission network or a significant part of that network: and
(4) whether the estimated cost of the preferred option is below $150,000,000.

Additional clause 5.16.4 (z5A)

(z5A) the AER will have 30 business days from the date of the publication of the revised total project cost forecast to make and publish a determination under paragraph (z3)

Clause 5.16A.4(n) to read:

(n) If:
(1) a RIT-T proponent has published on its website a project assessment conclusions report in respect of a RIT-T project; and
(2) there has been either: (i) a material change in circumstances which, in the reasonable opinion of the RIT-T proponent means that the preferred option identified in the project assessment conclusions report is no longer the preferred option; or
(ii) AEMO has published an Integrated System Plan or ISP update that shows a change to the identified need in relation to the actionable ISP project the subject of the project assessment conclusions report, or
(iii) there has been an increase in the total assessed cost of the project equal to, or greater than, the following percentages:
(i) for projects with a total project cost less than $500,000,000 – 15%,
(ii) for projects with a total project cost greater than $500,000,000 - 10%

then the RIT-T proponent must re-apply the regulatory investment test for transmission , unless otherwise determined by the AER.

Clause 5.16A.4(p) to read:

(p) When the AER makes~~making~~ a determination under paragraph (n), the AER must have regard to:
(1) the credible options (other than the preferred option) identified in the project assessment conclusions report;
(2) the change in circumstances identified by the RIT-T proponent; and (3) whether a failure to promptly undertake the RIT-T project is likely to materially affect the reliability and secure operating state of the transmission network or a significant part of that network: and
(4) whether the estimated cost of the preferred option is below $150,000,000.

Additional clause 5.16A.4 (q)

(q) the AER will have 30 business days from the date of the publication of the revised total project cost forecast to make and publish a determination under paragraph (n)

and 5.17.4 (t) to read:

(t) If:
(1) a RIT-D proponent has published a final project assessment report in respect of a RIT-D project;
(2) a Network Service Provider still wishes to undertake the RIT-D project to address the identified need; and
(3) there has been a material change in circumstances which, in the reasonable opinion of the RIT-D proponent means that the preferred option identified in the final project assessment report is no longer the preferred option, or
(4) there has been an increase in the total assessed cost of the project equal to, or greater than, the following percentages:
(i) for projects with a total project cost less than $200,000,000 – 15%,
(ii) for projects with a total project cost greater than $200,000,000 - 10%,

then the RIT-D proponent must reapply the regulatory investment test for distribution to the RIT-D project , unless otherwise determined by the AER.

and 5.17.4 (v) to read:

(v) When the AER makes~~making~~ a determination under paragraph (t) the AER must have regard to:
(1) the credible options (other than the preferred option) identified in the final project assessment report;
(2) the change in circumstances identified by the RIT-D proponent; and (3) whether a failure to promptly undertake the RIT-D project is likely to materially affect the reliability and secure operating state of the distribution network or a significant part of that network: and
(4) whether the estimated cost of the preferred option is below $50,000,000.

Additional clause 5.17.4 (w)

(w) the AER will have 30 business days from the date of the publication of the revised total project cost forecast to make and publish a determination under paragraph (t)