Consumer
Challenge
Panel

Submission to the Australian Energy Regulator (AER) re:

AER: *Issues Paper Review of the application guidelines for the regulatory investment tests*, February 2018

Consumer Challenge Panel #20

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Introduction

The Consumer Challenge Panel (CCP20) strongly supports all initiatives that encourage Network Service Providers (NSPs) to be innovative and deliver appropriate, cost effective solutions to network challenges and opportunities. It is important that these guidelines continue to reflect the rapidly changing commercial, regulatory, technical and community environment in which the needs of electricity consumers continue to diversify.

The CCP will note with interest the industry responses to the Issues Paper. We look forward to the guidelines encouraging and supporting network operators to address network constraints through the many options beyond the 'hard infrastructure' of overhead lines, cables and transformers. This reflects the imperative of flexibility and responsiveness to the changing customer energy use, and the significant focus on reducing energy costs – both in the short term and across the long-term life of traditional network investments.

It is important to note that network business themselves are not precluded from engaging in many non-traditional approaches to network constraints, and the RIT guidelines should include encouragement and reward for utilities to identify and foster novel and efficient approaches, in a manner similar to the DMIS.

The AER's review of application guidelines for both the RIT-T and RIT-D comes in response to the specific requests from the COAG Energy Council (COAG EC) following COAG EC's 2016 review of the operation of the RIT-T in the current electricity market environment. The guideline review is also in response to concerns expressed by a range of stakeholders about the effectiveness of the RIT-T in encouraging prudent and efficient investment in transmission (including interconnectors) and in non-network options. The COAG EC review recommended, inter alia, that:[1]

- the AER conduct a review of the RIT-T application guidelines with a view to better reflecting net system benefits of options,
- improve engagement of non-network providers,
- explore improved alignment of the RIT-T with the RIT-D, particularly with respect to requirements to consult on and report on non-network options,
- explore the merits of increasing the AER's level of oversight for the RIT-T process,
- consider introduction of civil penalties; and
- consider strengthening linkages between the economic regulatory framework and the RIT.

The expansion of the RIT-T process to the distribution network businesses and the more recent inclusion of replacement expenditure within the RIT-T and RIT-D will progressively expand the role of the regulatory investment test process and links to the economic regulatory framework. In addition, the CCP has observed the growth in the number and value of contingent projects that are included in networks' ex ante revenue proposals. The great majority of the proposed contingent projects include a requirement to undertake a RIT as one of the 'trigger' events for inclusion of the assets in the regulatory asset base (RAB) of the network.

[1] See COAG Energy Council, *RIT-T Review Report*, 6 February 2017, pp 4-5.

As a result of these developments, CCP20 believes it is essential that the RIT process, including the application guidelines set out by the AER reflect a better integration of the RIT-T and contingent projects with the current economic regulatory framework. Moreover, this includes an explicit recognition that both the RIT-T and RIT-D processes reflect recent developments in the network regulatory framework that sees networks and the AER more closely – and proactively - engage energy users and other stakeholders in the investment decisions made under the RIT framework.

CCP20 understands that this greater engagement may require the commitment of more time and resources by the networks, the AER and energy users/stakeholders. It is essential therefore, that the review of the application guidelines reflects these new requirements while ensuring that the processes, including the application processes, are as simple, transparent, and efficient as possible. In our mind, this includes a mechanism that will facilitate efficient engagement of the NSP and the AER with non-network service providers and support the identification of innovative solutions to the network of the future.

To summarise, CCP20 considers the application guidelines must not only set out the technical requirements of a RIT application. The guidelines must move towards a more 'customer centric' process that ensures a more successful engagement with consumers and industry stakeholders.

CCP20 has summarised some of the important opportunities for process reform in the section below. More specific responses to the questions in the Issues Paper follow.

Opportunities

CCP20 has identified a number of important features that we believe the guidelines should reflect. Many of these matters refer to Question 3 – *How the RIT application guidelines can better facilitate consumer engagement*; but as they also pertain to other questions, they have been drawn out as general opportunities.

1. *Seek consistency, Integration and clarity of 'process flow' with other regulatory instruments*.

The RIT is 'one piece in a larger puzzle' of a set of initiatives intended to seek efficient investment in networks. The guidelines should recognise and integrate with the other regulatory requirements such as the DMIS, tariff initiatives, the DAPR & TAPR requirements and connection agreements.
The guidelines should consider the existence, interaction and consistency of these many related regulatory initiatives and other influences in the energy market, and how best these instruments can work in unison to allow their clear understanding and efficient application by customers and the proponents of solutions.

2. *Encourage more creative and effective ways of engaging providers of non-network services as key customers of the RIT process.*

The RIT should support more creative and effective ways for the networks to engage with the market, working proactively with the providers of new technology and commercial arrangements, and recognising that these providers are likely to be working with a focus wider than just the distribution or transmission network operator.

Actively seeking feedback and involvement with non-network service providers, including the renewable energy industry, large customers, aggregators and retailers as 'agents' for consumers as stakeholders, as opposed to just 'interested parties', is encouraged in the development of these guidelines. After all, the output of the work by networks will need to be interpreted and responded to by these other entities in the wider market; and testing these guidelines with these entities as 'customers' will lead to a better outcome.

In addition, the solutions that may be offered to a network provider may also be of interest to other market entities, including AEMO, retailers and transmission companies. This relationship and shared benefit should be considered in the guidelines.

3. *Include the principles of strategic procurement partnerships in the guidelines*

Much can be shared between the intention of the RIT and the doctrine of strategic procurement of materials and services, as both seek to identify the novel and efficient provision of services for mutual benefit. After all, the outcome of a RIT is essentially an outsourcing arrangement; and moving from a 'tendering' process to 'strategic procurement' is demonstrated in most cases to lead to a more effective and efficient outcome for both parties, and ultimately consumers.

Consideration the following principles of strategic sourcing should be given in the development of the guidelines:

- Regular early assessment of the available market of suppliers and related industries;
- Engaging service providers early and working cooperatively to identify evolving trends and market developments and how they may be applied to emerging requirements;
- Regular re-evaluation of the needs and approach to the services required;
- Focusing on the synergies of a tactical joint arrangement, with common performance indicators, sharing of the benefits of good performance and clear allocation of risk in the mutual development of any service agreement;
- The preparedness of both parties to adjust their business model for the best outcome;
- Analysis of the total cost of all options; and
- Co-operative sourcing

The key benefits of such an approach would include cost reduction, clarity of risk assignment, standardisation, simplified processes and formal information sharing.

4. *Reduce the complexity, volume and administrative overhead of the RIT and related processes, including Annual Planning Reviews.*

The production of the DAPR, the volume of data in a RIT and other initiatives present a significant 'data overload' not only to the network businesses but also to the many potential providers of solutions. The cost and time to produce, then receive and analyse the information can be significant and detract potential solution providers. The guidelines should encourage the efficient use of data already available in the public domain, standard data formats, the use of electronic data files.

The development of a 'proforma' network support agreement, perhaps using the Network Transformation Roadmap[2] as a guide, may be of assistance - not only to distributors but also to assist proponents who may consider engaging in an alternative or 'non-network' solution. Experience developed through Chapter 5A – network connection agreements – and the hierarchy of Basic, Standard and Negotiated support agreements may be a useful starting point to standardising the relationships between the network and non-network service providers and avoiding the need to 'reinvent' the contract in each situation, particularly given the larger number of smaller sized projects may emerge from the extension of the RIT to replacement projects.

To be clear, this does not mean CCP20 advocates a mandatory standardised contract across all RITs. We recognise that some degree of customisation is required particularly for larger projects. However, having a recommended standard contract attached to the guideline provides a starting point for discussions between the network and non-network service providers. It adds transparency, clarifies 'risk sharing' arrangements and reduces the period of negotiation and the cost of legal fees.

5. *Ensure the guidelines address 'the problem that needs to be fixed'*

RITs have had a low rate of success in finding novel non-network solutions provided by others to network constraints, as illustrated in Table 5 of the Issues Paper. It is worth considering possible reasons for this lack of effectiveness when determining the requirements of a revised guideline.
A significant issue is that the construction of a network asset is seen by a network as low risk, high availability, reliable, long term solution to the constraint; in contrast to non-network solutions that are often been seen by utilities as:

- (risk) Increasing risk to the security of supply, through requiring a set of actions by others that are not in the direct control of the utility, and therefore the timeliness and reliability of the response may be degraded by other factors outside the network's control;
- (indemnity) Not able to sufficiently shift the full consequences and cost of poor response to the supplier of the action, should it not operate as planned;
- (no Return on Asset) Not adding to the long-term return-on-investment of the DNSP;
- (funded by opex) Requiring additional operating funds (opex) to provide availability and support payments to the solution provider;
- (inevitably required) A delay to the inevitable requirement for a network asset that will take significant time to deliver;
- (increased cost over time) Adding to the cost of the ultimate network asset as land costs, construction inputs and the cost of permission to construct increase over time; and

[2] www.energynetworks.com.au/electricity-network-transformation-roadmap

- (conflicts of application) Likely to be gazumped or in conflict with the needs of other parts of the market who also wish to avail themselves of the demand response capability.

As the guidelines are developed, they would benefit from being 'tested' against these beliefs and roadblocks to effective application.

6. *Recognition of benefits beyond the specific network constraint*

The guidelines may benefit from the recognition that a proposal for an alternative solution to a constraint may have broader 'option value' – advantages or disadvantages - in what is sometimes known as 'the value stack'. A mechanism to recognise these broader advantages or potential conflicts across the wider market to serve multiple needs would be useful.
Many solutions that can be used to address a network constraint can also serve to present additional value to the community of energy consumers generally, such as improving load factor and its impact on customers on volumetric tariffs; or allowing an increased penetration of embedded generation. These benefits should be evident in the cost-benefit assessment of the RIT.

7. *The guidelines assist the allocation of risk, indemnity, long-term costs and performance*

The guidelines recognise that varied proposals to a constraint will include differing allocation of risk and responsibilities that will need to be reasonably and fairly considered and communicated in what may be a contentious environment.

The guidelines value the sensitivity by customers to the long-term impact on prices resulting in continued investment in traditional assets, despite such outcomes generally being seen as lowest risk to the network business.

8. *Consider the application of contingent projects in the guidelines*

There seems to be tendency for networks to nominate an increasing number of contingent projects. It is important that the guidelines consider the application of the RIT in these circumstances.

In addition, some utilities are considering nominating large asset replacement projects as 'contingent', on the basis that failure is not easily forecast, and customers should receive the advantage of deferring the significant replacement expenditure into subsequent regulatory periods. These projects are 'significant' in so far as they form a large proportion of the regulatory allowance (discussion suggests > 5%) and will be subject to a RIT.

CCP20 will be very interested in any response from networks that relates to contingent replacement expenditure, and how it would be managed through the process of seeking industry support despite the actual replacement not yet being 'a project on the books', through:

- Mitigation of magnitude of the load at risk
- Reduction in the average value of load at risk
- Influence on the triggers to activate the project

This matter is addressed further in question 9.

Summary of Recommendations

1. *Question1, LITC*

The effectiveness of the RIT in its support of the interests of consumers will be enhanced if the guidelines reflect and seek synergy with the wider framework of regulatory, economic and social initiatives that are designed to encourage innovative and cost-effective solutions to network constraints.

2. *Question 1, LTIC*

The guidelines must consider and support the changing expectations of the community in respect to new technologies, network costs and sustainability.

3. *Question 1, LTIC*

The AER should strive to produce guidelines that require concise and effective information, reducing the cost and complexity to not only produce the information, but also for potential suppliers to receive, interpret, use and respond to the request integral to the RIT process.

4. *Question 1, LTIC*

The guidelines must encourage more creative and effective ways of engaging providers of non-network services as key customers of the RIT process.

5. *Question 2, When do RITS apply ?*

Outside the work on this guideline, the AER should further consider the practical application of both the RIT and the more general role of seeking non-network solutions, in the context of the increasing volume, value and risk associated with large asset replacement projects. This would involve guidance as to the nature of contingent projects, management of supply and cost risk to consumers, and the consideration of the appropriate triggers of such projects.

6. *Question 3, Consumer Engagement*

The guidelines should consider the existence, interaction and consistency of the many related regulatory initiatives and other influences in the energy market, and how best these instruments can work in unison to allow their clear understanding and efficient application by customers and the proponents of solutions.

7. *Question 3, Consumer Engagement*

The principles of modern strategic procurement practices should be considered in the development of the guidelines; including early engagement of potential suppliers and the development of mutually beneficial performance-based arrangements that share benefits, risks and accountabilities.

8. *Question 3, Consumer Engagement*

As the guidelines are developed, their effectiveness and application should be 'tested' against the beliefs and roadblocks that have in the past proven detrimental to the effective application of the RIT.

9. *Question 5, Alignment between RIT-T & RIT-D*

Where appropriate, the guidelines should form part of joint planning decisions between transmission and distribution network operators, thereby encouraging the identification of specific initiatives within the distribution system that would yield benefits in more efficient capital investment by both levels of network companies.

10. *Question 5, Alignment between RIT-T & RIT-D*

In the interests of brevity and effectiveness in the market, the guidelines for transmission and distribution applications should utilise common themes, drafting, terminology and requirements wherever possible, to the point where preferably there is only one guideline with perhaps an Appendix identifying explicit departures for different applications.

11. *Question 6, Cancellation*

Should a test be cancelled by the network business, the substantial investment made by potential providers of solutions should be recognised and opportunity provided/encouraged for the non-network service providers to 're-submit' their project to the network at some other time, or to third parties.

12. *Question 7, Identified Need*

The AER to have a 'hold point' role early in the RIT process to ensure the **identified need** is framed from a consumer perspective and acknowledges the effect of uncertainty on this objective (i.e. risks to consumers)

13. *Question 8, Option Value*

The Guidelines should include a requirement to explicitly consider the potential for staging expenditure and how this has been included in the options analysed.

14. *Question 9, Repex*

The guidelines should include guidance on the application of risk-cost methods to repex.

15. *Question 10, External funding & CBA*

The guidelines should be clear that the RIT is a market wide cost-benefit analysis that reflects the costs and benefits that will accrue, ultimately, to electricity consumers. Broader societal benefits can and should be incorporated into electricity infrastructure investments by investment from outside the electricity market and treated in the cost-benefit analysis as an offset to the project cost.

16. *Question 13, Discount Rate*

RIT proponents should illustrate the 'boundary values' for discount rates at which the ranking of options change and a different preferred option would emerge. The proponent can then discuss the *plausibility of these values and consider this in the analysis of risk from a consumer perspective.*

17. *Question 14, VCR*

RIT proponents should illustrate the 'boundary values' for VCR at which the ranking of options change and a different preferred option would emerge. The proponent can then discuss the plausibility of this VCR value and consider this in the analysis of risk from a consumer perspective.

Response to Questions:

Question 1: The role of RITs in promoting the Long-Term interests of Consumers (LTIC)

CCP20 strongly supports the continued application of the RIT process for network investments, valuing all mechanisms to ensure efficient, appropriate and transparent solutions to network needs.

The existing related mechanisms of Rate of Return Guideline, the Capital Efficiency Sharing Scheme (CESS) and the Demand Management Incentive Scheme (DMIS) should remain and be referred to in the RIT guidelines.

The guidelines should contribute to the LTIC by ensuring that the RIT process is applied effectively and efficiently. There are four important aspects of this requirement.

i. Integrate with a complex environment

The RIT framework is just one of an increasing number of initiatives, formal and otherwise, that are all intended to encourage innovative and progressive approaches to network needs. Herein lies greater risk of conflicting solutions, commercial inconsistencies and shared accountabilities. A guideline should consider how these initiatives interact, and guide – or at least not preclude- networks to develop the most appropriate investment response and assist the energy industry and consumers as to how and where the most appropriate solutions may be found.

The guideline should complement existing frameworks such as the DMIS, the Network Transformation Roadmap and the Integrated System Plan (ISP).

Recommendation: The effectiveness of the RIT in its support of the interests of consumers will be enhanced if the guidelines reflect and seek synergy with the wider framework of regulatory, economic and social initiatives that are designed to encourage innovative and cost-effective solutions to network constraints.

ii. Consider maturing customer expectations

The community expectations of the form of a prudent and efficient network investment have matured from that of essentially seeking the least cost technical solution to a network constraint. Electricity customers now expect a network utility to give greater weight to a wider range of factors when validating both the requirement and solution of a network investment need, including:

a) the greater awareness of - and in some cases a reluctance to accept - long-term cost drivers being built into a network's asset base;

b) the expectation of more transparent cost / risk trade-offs in planning decisions;

c) the expectation that all stakeholders, including consumers, will be active contributors to the process of defining the network actions that meet the consumers LTI.

d) the use of shorter term planning horizons in a rapidly changing technological environment;

e) the application of a greater range of new tools and solutions beyond the construction of traditional network assets;

f) a greater diversity of customer expectations of the facility provided by a network; and

g) a premium being placed on environmental values such as land use and carbon emissions.

The guidelines should accommodate this dynamic expectation by customers.

Recommendation: That the guidelines consider and support the changing expectations of the community in respect to new technologies, network costs and sustainability.

iii. Pursue conciseness, simplicity & brevity

The sheer volume and diversity of reports, including the Distribution and Transmission Annual Planning Reports (DAPR and TAPR), registers of proponents, the publishing of demand forecasts and others across all network businesses creates significant costs and inefficiencies in determining efficient and appropriate responses to network investment needs. The guideline should target the creation of an efficient environment for networks to produce information that can be reasonably understood and responded to by industry.

Importantly, these documents are key documents for consumers and potential providers of alternative non-network services to assess the opportunities and risks. Simplicity, conciseness and brevity not only assists the networks, it is an essential component of engaging customers and other stakeholders in the process.

Recommendation: The AER should strive to produce guidelines that require concise and effective information, reducing the cost and complexity to not only produce the information, but also for potential suppliers to receive, interpret, use and respond to the request integral to the RIT process.

iv. Encourage more creative and effective ways of engaging providers of non-network services as key customers of the RIT process.

The industry supporting the development and provision of non-traditional network solutions exists in a nascent market. The RIT guidelines should support the development of an active, engaged and efficient industry of suppliers of non-network and innovative solutions to network constraints.

Similarly, the guidelines should encourage utilities to look for and use the wide range of options available to them, including innovative network agreements, non-traditional network technologies and tariff and pricing options, and to address the changing funding requirements (i.e. capex / opex trade-off, similar to the DMIS).

The RIT guidelines can assist in promoting an active market for non-traditional network solutions, enhancing the more passive relationship that currently exists between many networks and the market of new-technology service providers.

Recommendation: The guidelines encourage more creative and effective ways of engaging providers of non-network services as key customers of the RIT process.

Question 2: When do RITs apply ?

As noted earlier in this response, CCP20 believes that the general intention of the RIT – that is, to identify efficient responses to a network constraint and to recognise that these responses

may be provided by others than the network operator itself – can apply to many projects and programmes beyond those that fall within the mandatory requirement the application of the test under the rules.

For instance, in the realm of asset replacement, broader-based demand management programmes provided by those other than the network itself could influence the timing and value of the network risk across a large area of the network where the aggregate value of a number of small replacement projects is significant, yet none are large enough to meet the RIT threshold.

Similarly, the application of demand management, energy storage or other processes can impact the risk profile, including the quantum and value of Load at Risk, to the point where maintenance decisions can be adjusted.

It is accepted that this development is outside the scope of this particular review, however the AER is encouraged to address this issue in the future.

In considering the RIT exemptions noted in Table 3 of the Issues Paper:

i. Urgent issue

Generally, application of the RIT for augmentation is well understood. The introduction of the RIT for replacement investment is a different issue, however. Large repex projects tend to be based on the risk of failure of a plant item based on condition assessment. Therefore, by delaying a replacement decision, arguably many repex projects will ultimately become urgent.

Genuine 'network emergencies' such as unforeseen plant failure must not be unreasonably delayed by a RIT process, however the guidelines must consider the relationship between large repex projects where the risk of failure gradually increases and 'if you wait long enough, every project becomes urgent'.

This is considered further in the discussion around contingent projects as they refer to replacement works.

Recommendation: The AER should further consider the practical application of both the RIT and the role of seeking non-network solutions more generally in the context of the increasing volume, value and risk associated with large asset replacement projects. This would involve guidance as to the nature of contingent projects, management of supply and cost risk to consumers, and the consideration of the appropriate triggers of such projects.

ii. Cost threshold

The dollar-value thresholds noted in the issues paper are supported. It is raised that few individual distribution repex projects would exceed the $5M threshold.

iii. External financial contribution

CCP20 notes that governments and other agencies have an interest in particular aspects of development of the network, and therefore will choose to make financial contribution to support a particular outcome. In this case, it is recognised that the RIT project may be overshadowed by broader regional imperative. As such, the RIT assignment should not be required where the external funding is applied to bring the net cost to customers below the test threshold.

It is noted, however, that the intent of the RIT to seek an optimum outcome should be encouraged in all circumstances.

Question 3: Consumer Engagement and the RIT

This matter is largely discussed in the introduction to this response to the issues paper.

In summary, the key opportunities are:

I. Seek consistency, Integration and clarity of 'process flow' with other regulatory instruments.

II. Encourage more creative and effective ways of engaging the providers of non-network services as key customers of the RIT process.

III. Include the principles of strategic procurement partnerships in the guidelines

IV. Reduce the complexity, volume and administrative overhead of the RIT and related processes, including Annual Planning Reviews.

V. Ensure the guidelines address 'the problem is that needs to be fixed'

VI. Recognition of benefits beyond the specific network constraint

VII. The guidelines assist the allocation of risk, indemnity, long-term costs and performance

The providers of non-network or alternative energy solutions should be regarded more formally as a 'customers' of the RIT guidelines. Actions to formally engage and seek interaction with this group in a mechanism wider than the consultation on specific network projects should be considered, to ensure opportunities in delivering energy solutions that are in the interest of end-consumers are regularly explored, communicated across NSP boundaries, and the process of the RIT is regularly reviewed for efficiency and effectiveness and economy of scale.

Recommendation: The guidelines should consider the existence, interaction and consistency of the many related regulatory initiatives and other influences in the energy market, and how best these instruments can work in unison to allow their clear understanding and efficient application by customers and the proponents of solutions.

Recommendation: (see section 'Opportunities') The principles of modern strategic sourcing practices should be considered in the development of the guidelines; including early engagement of potential suppliers and the development of mutually beneficial performance-based arrangements that share benefits, risks and accountabilities.

Recommendation: (see section 'Opportunities') As the guidelines are developed, their effectiveness and application should be 'tested' against the beliefs and roadblocks that have in the past proven detrimental to the effective application of the RIT.

Question 4: Screening for non-network options

Primarily, the guidelines should encourage early engagement with providers of non-traditional network solutions to work together to understand the emerging network limitations and to highlight possible applications of new technologies.

The guidelines should consider the existence, interaction and consistency of many related regulatory initiatives and other influences in the energy market, and how best these instruments can work in unison for best understanding and efficient application by customers and the proponents of solutions. Examples of related initiatives include:

a. The Demand Management Incentive Scheme
b. Non-network asset responses by utilities such as tariff reform;
c. Commercial influences such as ARENA or government funding;
d. The 'rolling-up' of smaller localised initiatives to provide broader benefit across the network or meet a wider set of customer expectations;
e. Distribution and Transmission Annual Planning reports;
f. Published network business strategies on Demand Management initiatives
g. Registers of interest by potential service providers;
h. Regulatory reset proposals and the development of project plans therein.

Question 5: Alignment of RIT processes

We believe that the ideal situation is a seamless, consistent process for the efficient identification and procurement of non-network responses to constraints. There is value to consumers and providers in standardisation and commonality.

Granted, the NER does treat RIT-Ds and RIT-Ts differently, however in the interests of clarity, brevity and effectiveness in the market the guidelines should be as similar as possible to the point where there is only one guideline, with perhaps an attachment identifying the explicit departures for different applications.

CCP20 considers that several common elements that could be usefully included, such as:

i. Consultation with other parts of the market such as AEMO to seek any integration with 'upstream' opportunities;
ii. Support and encouragement for network businesses to integrate with non-network service providers early in the process;
iii. Guidelines for the matters that should be considered in the establishment of a network support agreement;
iv. Common features of the efficient production of network information;
v. Treatment of projects considered to be contingent; and the
vi. Approach to large asset replacement or retirement projects.

The matter of joint planning is also pertinent in this response. The application of non-network solutions by distributors, in particular demand management, can influence the planning and investment of transmission companies. The guidelines could assist the effectiveness of joint planning decisions by encouraging the identification of specific initiatives within the distribution system that would yield benefits in more efficient capital investment by transmission companies.

Recommendation: In the interests of brevity and effectiveness in the market, the guidelines for transmission and distribution applications should utilise common themes, drafting,

terminology and requirements wherever possible, to the point where preferably there is only one guideline with perhaps an attachment identifying explicit departures for different applications.

Recommendation: Where appropriate, the guidelines should form part of joint planning decisions between transmission and distribution network operators, thereby encouraging the identification of specific initiatives within the distribution system that would yield benefits in more efficient capital investment by both levels of network companies.

Question 6: What additional guidance should the RIT application guidelines provide regarding the information network businesses should publish when they cancel RIT assessments?

The use of some form of post-implementation review that identifies the reasons for the cancellation and highlights how that change is likely to influence other investment decisions would be useful.

It is also important to recognise the timing of the cancellation. Stakeholders, such as non-network service providers, may have made substantial investment in responding to the RIT during the process. It would be disappointing if this effort were not recognised in some way by the network, and the opportunity provided/encouraged for the non-network service providers to 're-submit' their project to the network at some other time, or to third parties.

Recommendation: Should a test be cancelled by the network business, the substantial investment made by potential providers of solutions should be recognised and opportunity provided/encouraged for the non-network service providers to 're-submit' their project to the network at some other time, or to third parties.

Question 7: Do you agree with our proposed approach of providing further guidance on how RIT proponents should describe an identified need?

CCP20 is of the view that any investment test must be based on an identified need that is framed from the consumer perspective as this is most likely to deliver to investments in infrastructure or services that are consistent with the National Electricity Objective (NEO). We generally agree with Section 3 of the Issues Paper (The role of the RITs in promoting the long-term interest of consumers) that a well-constructed RIT will promote competitive neutrality and investment efficiency.

This approach is considered in more detail in the Opportunities section of this response, and in our comments relating to questions 1 and 3.

The Issues paper outlines that the AER considers further clarity is required (p31) but it is unclear whether the RIT processes have sufficient regulatory oversight to ensure that the identified need is 'correctly' defined at the start of the analysis. CCP20 is of the view, especially considering the extension of the RITs to repex , that the articulation of the identified need should be a hold-point in the process. That is, the AER should agree the identified need at the early stages of the process and be able to take into account the views of consumers and other

stakeholders in doing so (e.g. by reviewing the consultation performed by the NSP rather than necessarily conducting its own consultation process).

Our approach to considering the long-term interests of consumers is based in the National Electricity Objective (NEO). The NEO is an economic efficiency objective that is often described in terms of three dimensions: productive, allocative and dynamic efficiency.

The pursuit of dynamic efficiency relates to how efficiently the business can innovate and navigate the inevitable changes appearing in the energy markets. The AEMC is conducting a Market Review called 'Coordination of generation and transmission investment" that is inquiring into drivers of change that impact transmission frameworks[3]. The draft Stage 1 Report (11 April 2017) stated:

> *"There appears to be a large degree of uncertainty regarding future patterns and drivers of generation and transmission investment.*
>
> *… While there are processes to review TNSPs' application of the RIT-T, to the extent that costs and benefits are forecast inaccurately, then these* ***risks are born in full by consumers****... [p10]*
>
> *…This allocation of risk becomes more important in an uncertain or changing environment, as the risks associated with transmission investment increase." [p12]*

Making long-term investments in response to an uncertain future means **risk.** The Australian Standard for Risk Management (*AS/NZS ISO 31000:2009 Risk Management – Principles and guidelines)* defines *risk* as the *effect of uncertainty on objectives*. In the case of electricity network expenditure being considered by a RIT, the *objective* being risk managed should therefore be the *identified need* of the RIT itself.

Recommendation: The AER to have a 'hold point' role early in the RIT process to ensure the **identified need** is framed from a consumer perspective and acknowledges the effect of uncertainty on this objective (i.e. risks to consumers)

Question 8: Is there any specific guidance you would like us to provide in clarifying how RIT proponents should calculate option value, make forecasts and test different states of the world? Are there particular scenarios where a worked example would be helpful in providing this guidance?

Recent experience with the Powering Sydney's Future RIT-T highlighted the potential value of staging investment and the potential value of combining network and non-network expenditure in the pursuit of the long-term interests of consumers. CCP20 encourage the AER to revisit the analysis of Dr Darryl Biggar in this regard[4]:

> *In the presence of uncertainty about the future, it does not necessarily make sense to make all the decisions concerning an option (the stages, and the timing of each stage) at the outset. Instead, it may make economic sense to defer some decisions into the future, when we will have better information about market conditions.*

[3] www.aemc.gov.au/Markets-Reviews-Advice/Reporting-on-drivers-of-change-that-impact-transmi.

[4] *An Assessment of the Modelling Conducted by TransGrid and Ausgrid for the "Powering Sydney's Future" Program*, Darryl Biggar for the AER, May 2017.

CCP20 is of the view that a specific example involving staging a project a combining network and non-network options in one of these stages would provide useful guidance. We are also of the view that each RIT should be required to make explicit consideration of how the response to the identified need could be staged and how this has been (or will be, depending on the chronology of the process) taken into account in the analysis.

Recommendation: The Guidelines should include a requirement to explicitly consider the potential for staging expenditure and how this has been included in the options analysed.

Question 9: Would any guidance in addition to the areas listed in section 5.3 of this issues paper assist in the application of the RITs to repex projects? Is there particular guidance stakeholders would like to help understand how the RITs will apply to asset replacement programs?

CCP20 notes the dominance of repex in recent NSP ex-ante capex proposals to the AER and understands there is likely to be a sharp increase in the number of RITs performed given the potential volume of repex initiatives that will meet the requirement. Our experience is that repex programs are largely based on risk versus cost analyses. Guidance in relation to best-practice application of the method (e.g. including preferred sources for costs and probabilities of consequence values) would likely improve consistency and increase transparency.

CCP20 is very interested in industry views in this regard. There is little practical experience in applying a RIT to repex and an actual example from an NSP would provide useful experience.

Our initial views on replacement programs versus replacement projects are that large programs (replacement of multiple individual assets of the same or similar type) should be captured by the RIT cost thresholds and therefore subject to the transparent analysis that the RITs ensure.

We are conscious that the AER has been engaging with NSPs on applying the RITs to repex and we are also aware of the maturation of the AER Repex Model (and look forward to considering the views of NSPs in this regard. As outlined in Section 3 of the Issues Paper, the RITs are intended to ensure competitive neutrality as well as investment efficiency and we would welcome clear guidance for repex projects on both of these elements. The pursuit of competitive neutrality is an area of particular interest for consumers in this era of rapid technological change.

CCP20 agree that guidance on the selection of a base case is important to the conduct of an effective cost-benefit analysis and that this should be incorporated as part of this guidance.

Recommendation: The guidelines should include guidance on the application of risk versus cost methods to repex

Question 10: Do you agree that the RIT is a market-wide cost–benefit analysis? Do you agree that, as a consequence of this, funds that move between parties within the market should not affect the final net-benefit, but funds that comes from outside the market to a party within the market should increase the final net benefit?

CCP20 agrees that the RIT is a market wide cost-benefit analysis that should reflect the costs and benefits that will accrue, ultimately, to electricity consumers. Consequentially a financial contribution to a RIT project from a market participant remains as a cost that will ultimately be borne by electricity consumers and is therefore not a contribution to the net benefit of the project. However, a contribution from a government or public agency can be considered a legitimate reduction in the costs seen by electricity consumers – and hence a contribution to the net benefit of the project - even though it might be a cost these same consumers bear in the role as tax payers.

Recommendation: The guidelines should be clear that the RIT is a market wide cost-benefit analysis that reflects the costs and benefits that will accrue, ultimately, to electricity consumers. Broader societal benefits can and should be incorporated into electricity infrastructure investments by investment from outside the electricity market and treated in the cost-benefit analysis as an offset to the project cost.

Question 11: (a) Do you agree that the scenario analysis currently prescribed in the RIT application guidelines can sufficiently capture the effects of high impact, low probability events and system security requirements?

CCP20 does not see a new requirement for investment guidance as a result of the South Australian 'black system' event of September 2016. The Issues Paper refers to AEMC work programs that are pursing market-based frameworks for a number of related issues and we would agree that this is very relevant to valuing system security. The existing framework should be able to accommodate these high impact, low probability events through network security standards and the appropriate selection of parameters.

(b) Do the RIT–T application guidelines require expanding to assist proponents in accounting for these events?

Our initial thoughts are that consideration of the Value of Customer Reliability (VCR) is the appropriate parameter and encourage a pragmatic perspective on the event in question as strong politicisation has likely undermined the prudent assessment of underlying causes and rational responses.

(c) Is there specific guidance you would like on this topic, or particular scenarios where a worked example would be helpful—and how (if at all) should this differ between the RIT–D and RIT–T application guidelines?

A retrospective review of the Powering Sydney's Future RIT-T may provide a case-study opportunity as parallels to the South Australian event of 2016 and the Auckland event of 1998 were drawn during consultations on that project.

Question 12: What additional guidance would stakeholders find useful in regarding the treatment of environmental policies in the RIT–T application guidelines?

It is our understanding that by 'environmental policies', the Issues Paper is principally referring to Australia's national policies on the reduction of greenhouse emissions from the electricity sector. It is our understanding that other environmental policies (such as in relation

to pollutants, land-use and endangered species) are sufficiently well defined to be reflected in the costs of options. Further, it is our understanding that policies on the reduction of greenhouse emissions from the electricity sector manifest in the consideration of different levels of renewable energy in the market.

We tend to agree with the Issues Paper that further guidance on reflecting the National Energy Guarantee would be an important addition to the guidelines. Further, we are of the view that consistent treatment of the relative costs of different generation technologies and uptake scenarios is an important component of the RITs. To this end, it is our view that AEMO's planning functions (including the Integrated System Plan) should provide these consistent parameters. The RIT guidelines could reference these sources or made it a requirement to explicitly articulate why a particular RIT has not adopted the AEMO parameter values.

In saying this, CCP20 wishes to make clear that we do not endorse the suggestion made, for instance, by TransGrid, in its recent revenue proposal, that the RIT should not be required for a project, including a contingent project that is a response to a project specified by government or regulatory body. The RIT serves both a prudency and efficiency role in the regulatory framework and is important in identifying the most effective response to a mandated requirement, and for ensuring that non-network solutions to that requirements are treated on an equal footing (see also response to Q. 16).

Question 13: Do you support our proposal to expand our RIT application guidelines to specify that, as a default, RIT proponents should use the same discount rate when comparing different credible options?

CCP20 is of the view that the treatment of discount rates is a critical sensitivity of any cost-benefit analysis. We are of the view that the discount rate selected for an analysis will have a significant impact on the comparison of network and non-network options and in the comparison of capex and opex for a NSP.

Discount rates reflect the time-value of money as well as the uncertainty that future cash flows will actually be realised. Reflecting on risk from a consumer perspective (see response to Q7), a higher discount rate reflects lower reliance on future cash flows (due to the greater uncertainty they will appear). Large expenditure in the short term for large benefits that may only accrue many years hence needs to be effectively compared to smaller investment with more certain, shorter term benefits. The flexibility to apply discount rates that reflect the project specific (or solution specific) uncertainties over future cash flows (from a consumer perspective) is an important way of optimising expenditure to manage risks in an effective and efficient way.

Analysis by the Reserve Bank supports a view that private sector firms assess capital investments using hurdle rates well in excess of their cost of capital[5]. In our view the range of discount rates tested should, at least, include values that reflect the uncertainties of the specific project and the risk appetite of the party who will ultimately fund the expenditure – consumers. This may imply consideration of higher discount rates and may influence the

[5] For example: *"Firms' Investment Decisions and Interest Rates*" in RBA Bulletin June Quarter 2015 by Kevin Lane and Tom Rosewall available from www.rba.gov.au/publications/bulletin/2015/jun/pdf/bu-0615-1.pdf

business case for staging or delaying investments and may influence the comparison of capital versus operating cost options.

CCP20 looks forward to engaging on this matter further with the AER.

Recommendation: RIT proponents should illustrate the 'boundary values' for discount rates at which the ranking of options change and a different preferred option would emerge. The proponent can then discuss the plausibility of these values and consider this in the analysis of risk from a consumer perspective

Question 14: What kind of additional guidance, if any, would you like the RIT application guidelines to provide on selecting an appropriate VCR?

CCP20 is of the view that the treatment of VCR is also a critical sensitivity of any cost-benefit analysis. VCR was a controversial element of the Powering Sydney's Future RIT-T and we would encourage the AER review to reflect on submissions made to that process.

Our view is that AEMO VCR values should be the default values, weighted by the proportions of customer types relevant to the project in question. Any excursion from these values for the base case should be explicitly explained and well-justified. It is not sufficient for a RIT proponent to simply claim that a VCR will be very high in one area and it should be noted that this parameter can too readily be reverse engineered by the proponent of the project to achieve a net benefit outcome. Moreover, the VCR used should be 'capped' by an objective assessment of how consumers/stakeholders might respond if the proposed value of VCR was 'offered' to the market. For instance, in the PSF RIT-T, the initial VCR for the Sydney area was set at $170/kWh ($170,000/MWh). As Darryl Biggar illustrated in his report on the PSF (see above), multiple non-network solutions – including substantial installation of co-generation - would have been available to TransGrid at a price well below that level.[6] As such, the proposed VCR figure was clearly unrealistic.

Further, VCR should form an explicit sensitivity test.

Recommendation: RIT proponents should illustrate the 'boundary values' for VCR at which the ranking of options change and a different preferred option would emerge. The proponent can then discuss the plausibility of this VCR value and consider this in the analysis of risk from a consumer perspective

Question 15: Should we revise the RIT–D application guidelines to clarify that a 'business-as-usual' base case should be used for repex projects? Is there any other guidance the RIT application guidelines should provide on selecting an appropriate base case?

CCP20 agree that guidance on the selection of a base case is important to the conduct of an effective cost-benefit analysis. This should be incorporated as part of the guidance discussed in Section 5.3 and Question 9 of the Issues Paper.

[6] Biggar, D, *An Assessment of the Modelling Conducted by TransGrid and AusGrid for the "Powering Sydney Future"* Program, May 2017, pp 4-5.

Question 16: Given AEMO is currently developing the Integrated System Plan (ISP), what additional guidance would stakeholders find useful in the RIT–T application guidelines with respect to the ISP?

CCP20 is of the view that each RIT should require an explicit statement as to how the project (and preferred option) are consistent with the ISP.

We also note that the revised Regulatory Proposals from TransGrid, ElectraNet and Murraylink proposed modifications to contingent project trigger events that sought to frame the RIT as a substitute for a RIT-T. CCP9 made specific comments on this issue in submissions to the AER and we note that the AER's submission to AEMO's ISP consultation explicitly stated[7]:

> *"The identification of transmission projects in the ISP will not of itself be considered an exemption trigger to a RIT-T"*

[7] http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Planning-and-forecasting/Integrated-System-Plan