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Submitted via email: RIT@aer.gov.au

Review of the Application Guidelines for the Regulatory Investment Tests

Dear Mr Adams,

Delta Electricity appreciates the opportunity to provide input on the review of the RIT application guidelines. Delta Electricity owns and operates the 1320MW Vales Point power station in NSW and has recently obtained retail licences from the Australian Energy Regulator and the Essential Services Commission of Victoria to sell electricity to large customers across the National Electricity Market. Delta has operated coal and gas fired generating plant in the NEM since its start in 1998 and is an active participant in both the electricity and gas trading markets.

Consumers bear the risk of over-investment in transmission assets for decades. All transmission investment must be exposed to the most stringent of economic tests to ensure that consumers pay the least cost for the level of service expected. Consumers should not be exposed to unnecessary network charges that arise from short-term political policy initiatives or from the interests of investment proponents. Delta is not against renewable energy zones or other strategic investment ideas, but such initiatives should be exposed to the rigour of a stringent economic test. In addition, RIT modelling and scenario development should be coordinated by an independent party to avoid any potential biases that may find their way into evaluations.

Eastern Australia's transmission grid is uniquely long and 'stringy'. This results in large fixed costs that have to be spread across relatively low total demand, making the cost of transmission a large component of a consumer's bill. Consumers have experienced the electricity price impact of network investment in the past. Electricity prices for households increased on average by 72% for electricity in the 10 years to June 2013[1]. This increase was largely attributable to network investment to meet forecasts of a large growth in 'front of meter' consumption that did not eventuate. The RIT-T process should support reasonable investment in transmission under a range of realistic future scenarios of changes in generation and consumption.

As the NEM transitions to low emission sources of supply there will be significant uncertainty surrounding the amount and timing of large and small scale renewable generation deployed. In this environment, it will be essential to ensure that consumers are shielded from the cost impacts of long lived network investments that only deliver benefit for a brief period. Large network investments pose a material electricity price risk as to consumers may be paying for any ineffective or stranded asset over decades. Delta believes that maintaining the existing RIT-T and supporting processes, with some sensible enhancements, is critical to ensuring that network investment is subject to stringent economic assessment. If the RIT-T guidelines are changed to allow strategic investment to support energy policy initiatives, there is a real risk that these investments will unnecessarily burden consumers with higher electricity charges.

[1] Source: Australian Bureau of Statistics

Delta has prepared this submission in response to the consultation questions. Also included is a background report prepared by Marsden Jacob on the RIT and its application.

Anthony Callan
Executive Manager Marketing

Answers to Consultation Questions

Question 1: Do you agree that the RITs promote the long-term interests of consumers by promoting competitive neutrality and investment efficiency? Are there any other factors we should consider?

Delta's view is that a properly applied RIT is the most appropriate way to ensure that consumers bear an appropriate level of risk on network investments. The AER should continue to ensure that transmission and distribution project proponents also bear an appropriate level of risk to ensure that distortionary incentives do not drive inefficient outcomes in the form of over-investment in network assets. Signalling the appropriate allocation of risk between consumers, network businesses and market participants within the RIT application guidelines will help reinforce proper incentives that will result in competitive neutrality and investment efficiency.

Delta believes the current framework could result in distortionary investment as the market environment undergoes rapid technological change. In this environment, transmission planning will require an increasingly flexible and probabilistic approach to ensure that investments are not at risk of stranding with consumers bound to pay for the investment over the subsequent decades. This will require a larger spread of scenarios than previously used. Such an approach should be specified in the application guidelines and would provide improved insights into future risks such as how a potential large transmission project would perform if distributed technologies are more rapidly deployed.

Efficient transmission development requires that the respective economic benefits of competing development options be tested across a set of scenarios representing the full range of reasonable possible futures. The long-lived nature of transmission developments will likely place increasing value on real options, that is ones that would provide for particular developments to occur at a later time. While the RIT-T framework provides for this, it may need to be strengthened to ensure that the real options are considered and compete equally in any assessment.

Least cost modelling is far removed from the economic theory of spot market competition and is not recommened as the primary modelling approach[2]. For example, with least cost modelling, coal plant is often dispatched well beyond normal operating levels which leads to spurious requirements to facilitate flows from regions with coal assets to those without through additional transmission investment. The closer a RIT-T assessment represents the economic benefits that would be obtained under each described scenario, the higher probability of efficient transmission development will be. This can be achieved through modelling that is designed to incorporate the theory and observations of spot market operation.

Confidence and rigour in the modelling undertaken for a RIT-T is essential. The prerequisite for this is a high level of transparency to allow stakeholders to assess the veracity of the claimed economic benefits. This requires the publication of all assumptions, modelling details and modelling results down to at least the half hourly market outcomes and should include any security assumptions or constraints used[3]. Delta's preference is for modelling to be both fully transparent and undertaken by an independent party (ideally the AER).

The comparison of potential projects in a RIT-T application requires that all technical and regulatory requirements are met in each scenario. This implies that security is addressed and fully

[2] Refer to Marsden Jacob supporting submission page 9.
[3] Refer to Marsden Jacob supporting submission page 7.

represented and costed through a RIT-T assessment. In the past this has not been necessary as security was assumed to be met through the security limits used[4].

Question 2: Do you agree that a RIT assessment is not required where the external financial contribution results in the project falling below the cost threshold?

Delta supports the RIT-T being applied to all transmission and distribution investments over the threshold irrespective of the source of funding for the investments. Any transmission or distribution project funded externally should be required to recover costs on a merchant basis. This would ensure that only transmission and distribution assets that provide an economic benefit are constructed. The alternative is to expose the market to distortions that could result in more costly outcomes for consumers.

Transmission developments undertaken outside of the established planning framework are not in accord with the National Electricity Rules. Such developments increase the risk to the competitive market and increase the risk of stranded transmission assets. A properly designed cost benefit analysis, as undertaken through a RIT process, would identify the economic and option value of developments such as REZs. The likely consequences of "strategic developments" is higher costs to consumers[5] through:

- the risk of stranded transmission assets through assumptions of economic value that were not properly tested; and
- increased risks in the competitive market.

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

Delta supports the proposal to require proponents to refer to net economic benefit or reliability in their identification of project need. This will encourage greater rigour on the part of proponents and clarify the benefits to the market so that these benefits can be assessed by all stakeholders.

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?

Guidance should be provided that encourages a broad range of scenarios to be reviewed. Particularly in relation to technology costs, fuel costs, distributed generation and storage growth. Every RIT-T should consider a distributed energy future to ensure that as these technologies continue to grow, the need for grid based transfers is not overstated.

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

[4] Refer to Marsden Jacob supporting submission page 11.
[5] Refer to Marsden Jacob supporting submission page 14

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?

Wealth transfers, such as a reduction in inter-regional price differentials, should not contribute to a net benefit for the purposes of a RIT.

Delta disagrees that external funds should contribute to the net benefit of the project. External funds are not a benefit to the market unless they increase the consumer and producer surplus under a range of scenarios.

Question 11: 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? Do the RIT–T application guidelines require expanding to assist proponents in accounting for these events? 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?

High impact, low probability events are by their nature very difficult to quantify in economic terms and subject to a wide range of disputable assumptions. The net benefit for these types of events should be treated very carefully. Delta notes that transmission assets may not be the best solution to the consequences of these events. Appropriate incentives should be put in place so that non-network solutions can compete to provide security services under the circumstances identified.

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

RIT-T proponents should consider a range of future environmental goals to ensure that the investment remains robust in an uncertain future. This is consistent with Delta's proposition that as wide a range of possible futures should be examined to determine the value of the investment under an increasingly uncertain future for the industry. However, in practice it will be unlikely that consumers and market participants will accept investments made on the basis of policy assumptions that are not government policy.

If the National Energy Guarantee becomes government policy then specific guidance should be given to proponents to limit assessments to this policy and to the emissions reduction targets implemented by the Commonwealth government.

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?

Delta supports the use of the same discount rate when comparing all credible options. This rate should equate to the discount rate should be similar to those used for commercial return calculations on an equity basis. This more equitably reflects the potential returns to equity network owners and more closely aligns the risk profile of equity and consumers. If maximum NPV of market benefits is used as the project selection criteria the discount rate becomes doubly important and could lead to inequitable risk sharing between regulated and non-regulated industry entities.

Delta notes that RIT is not prescriptive on the metric used to maximise net market benefits. Approaches in the past have calculated the expected NPV over a number of scenarios with scenarios weighted on likelihood. However, the high level of uncertainty that now exists would suggest that an approach that better values risk is needed. This can be done through incorporating cost/benefit ratios and/or real option analysis in the assessment process. This would possibly lead to developments that are more incremental in nature reflecting the future uncertainty that exists[6].

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

The use of a Value of Customer Reliability that is higher than the Market Price Cap creates a distortion in investment incentives between generation, demand response and transmission projects. This has been identified as one of the contributing factors that lead to over-investment in network assets during the 'gold plating' period up until 2011. Delta therefore recommends revisiting this approach to harmonise the signals given on the value of reliability for transmission and competitive market participants.

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?

Delta sees the AEMO ISP as a useful strategic planning instrument for the development of the grid and the energy system. This can provide guidance to TNSPs on the projects to more closely evaluate but should not be used to limit or force investment in the identified transmission developments. The strategic planning value would rely on the ISP providing a spread of scenarios that covers the conceivable range of market inputs, outcomes that could be expected in the NEM.

Use of the AEMO ISP in a RIT-T application should not exclude other scenarios and assumptions being used. The RIT guidelines should explicitly require additional scenarios to be evaluated and assumptions to be reviewed to ensure they are up to date at the time of the RIT application. A properly functioning RIT-T would complement the strategic planning service provided by the AEMO ISP by providing the rigour, transparency and currency necessary to evaluate a transmission investment. In addition, the modelling undertaken as part of the RIT-T must include consulted on assumptions and results with high granularity to ensure that the results can be critically reviewed by stakeholders.

Both the ISP and RIT-T should provide market outlooks and transmission developments that are cognisant of the needs of the market and that express the changing nature of NEM operation. As noted previously, while least cost modelling can be undertaken, this should not be the main methodology used.

[6] Refer to Marsden Jacob supporting submission page 13.