ELECTRICITY TRANSMISSION NETWORK owners

Reform of the Regulatory Test Principles

Submission in Response to AEMC Draft Determination

3 November 2006

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1. Introduction

The Electricity Transmission Network Owners' Forum (ETNOF) welcomes this opportunity to comment on the Australian Energy Market Commission's draft decision on Reform of the Regulatory Test Principles.

The Commission's draft decision contains a number of elements on which it is seeking the views of interested stakeholders. These are:

1. whether the Rules should specify the form of the Regulatory Test (the Test), and specifically, whether the Test must have a reliability limb and a market benefits limb;

2. whether the proposed Request For Information (RFI) process under the market benefits limb is appropriate;

3. whether there should be changes to the assessment process under the reliability limb in order to deliver greater overall benefits to the market and

4. whether the proposed savings and transitional arrangements are appropriate.

Specific observations and comments on the Commission's draft decision and ETNOF's conclusions are presented below.

2. Form of the Regulatory Test

The reliability limb is a critical link

In its draft decision the Commission (quite correctly) observed that:

> *"to move away from the MCE's proposed approach (of a reliability limb and a market benefits limb) would be a significant change in the scope of the proposal and potentially represent a divergence from agreed MCE policy."*

However, the Commission then raised the prospect of instead having a reliability principle and an efficiency principle and leaving the Australian Energy Regulator (AER) to determine the precise form of the Test. Such an approach would leave the AER free to adopt a two-limb Test, without requiring it to do so.

ETNOF believes it is absolutely essential for the Test to retain a reliability limb, with its specific focus on transmission investment that ensures a safe and reliable supply of electricity to consumers. Indeed, the absence of the reliability limb in its present form would introduce a significant sovereign risk for TNOs and would jeopardise the timely delivery of upgrades to maintain mandated reliability standards. This risk would arise from the prospect of being caught between the mandatory reliability standards of schedule 5.1 and the risk of introducing an element that would complicate and protract application of the test.

TNOs are generally required to meet mandatory reliability standards, many of which are deterministic (N-x). Tasmania is in the process of mandating a suite of endorsed standards. Furthermore, the AER, as a requirement of the National Electricity Law, must provide the TNOs with a reasonable opportunity to recover the efficient costs of complying with a regulatory obligation. The reliability limb provides the critical linkage between these two legal requirements.

The Ministerial Council on Energy Rule change application recognises the importance of the reliability limb. Further, the MCE recognised the importance of the reliability aspect of transmission in its 2003 report to the Council df Australian Governments (COAG) where it identified three key roles for the transmission system – a transportation service from generation to load centres, to facilitate competition, and to ensure a secure and reliable electricity supply. These roles are also consistent with the basic regional structure of the NEM, by reference to which reliability standards are determined.

There are also specific provisions in the Rules regarding disputes of Regulatory Test analyses that ensure reliability-driven augmentations are not inappropriately delayed. These provisions were themselves put forward to the AEMC by the MCE at the same time as the Regulatory Test Principles, supporting that it is the express policy intent of the MCE for the Test to have a specific reliability limb.

In addition, the statutory test provides that a Rule change must enhance the National Electricity Market (NEM) Objective. A Rule change that provides scope for the removal of the reliability limb from the Regulatory Test would appear to fail this test. The NEM Objective specifically links efficiency of NEM investment with the longer term interests of electricity consumers with respect to "the reliability, safety, and security of the national electricity system". Without the reliability limb of the Regulatory Test, working in partnership with explicit reliability standards, transmission businesses would be faced with complex, time consuming, and controversial assessments, open to challenge and delay from vested interests. Without explicit retention of the reliability limb the clear accountability of transmission businesses for the delivery of a reliable transmission service would break down.

Overall ETNOF believes the Commission has reached the right conclusion in its draft determination and that the principles should continue to specify that the Test have both a reliability limb (in its present form) and a market benefits limb.

3. RFI Process

The Commission has proposed mandating a Request for Information (RFI) process as part of the Regulatory Test assessment for proposals being evaluated under the market benefits limb. The intent of this process is to provide a "clearer, more transparent approach to determining which alternatives are likely to occur". ETNOF supports the objectives of the Commission in developing this RFI process.

4. Assessment under the Reliability Limb

In proposing the RFI process for the market benefits limb of the Test, the Commission has invited comment on whether consequential changes should be made to the assessment process under the reliability limb. In particular, the Commission cites the potential for operation of the reliability limb to result in sub-optimal investments being justified as least cost at the expense of (higher cost or earlier timing) projects that may have had higher market benefits.

ETNOF notes that there are a number of provisions already in the Rules that provide opportunities for participants to contribute to the assessment of reliability-driven augmentations and to highlight alternative projects. For example, the Annual Planning Report must provide "a forecast of constraints and inability to meet the network performance requirements set out in schedule 5.1 or relevant legislation or regulations of a participating jurisdiction over 1, 3 and 5 years." This provides advance warning to participants of those parts of the network that are likely to require network augmentation in the near future as well as the nature of the forecast limitation.

In addition the whole public consultation framework for new large network assets is structured around the process of a draft recommendation leading up to a final recommendation. The draft recommendation is contained in an Application Notice which must set out details of the proposed augmentation including the reasons it is required and other reasonable network and non-network alternatives that could meet the identified need. Interested parties may make written submissions on the draft recommendation. The Network Service Provider (NSP) must then respond to those submissions in the Final Report which contains the final recommendation for action.

If the Commission is convinced that there is a real risk of "missed opportunities to capture additional market benefits" arising from the reliability limb of the Test (ETNOF can discern little or no evidence of this risk), there is a potential way of extending the reliability limb in a manner which does not compromise the timely delivery of upgrades to meet mandated reliability obligations.

To achieve this, the Commission would need to ensure that an assessment under the reliability limb can also (optionally) consider the impact of any incremental market benefits that might arise from say an incrementally larger or incrementally earlier upgrade than the pure lowest cost solution. For example, additional savings in transmission losses might arise if the upgrade is advanced a year. If those loss savings are greater than the one year advancement cost, then it would be appropriate that the one year advancement be supported by the Test.

To achieve these types of desirable outcomes, the Commission would need to make two changes to the reliability limb of the Regulatory Test.

Firstly, the Commission should require that it is the net costs of meeting the reliability standard that are to minimised in clause 5.6.5A(b)(2) and not simply the present value of the absolute costs as presently drafted. This means that under the reliability limb, it will be the net costs, after accounting for any incremental benefits that will be minimised. In the example cited above where additional loss savings may be achieved by advancing the construction of a new line by one year, the approach of using "least net cost" will enable the one year advancement option to meet the requirements of the Test if the incremental benefits exceed the incremental costs of advancement. If the incremental benefits exceed the incremental costs, then the "higher than least cost" option would be deemed to have passed the Test, on the basis of being the "least net cost" option. That is, it represents the lowest cost to the market for meeting the reliability standard.

Secondly, and in any case, the word "solely" should be removed from the existing definition of "reliability augmentation". This will ensure that the definition is consistent with the purpose of the reliability limb set out in clause 5.6.5A(b)(2).

This approach will mean that in situations where incremental market benefits can accrue from an investment required to meet a mandated reliability standard, these benefits can be recognised, assessed, and where appropriate realised.

Importantly, by retaining the basic form of the reliability limb, it will not delay investments necessary for reliability purposes in the (majority of) cases where there are no additional market benefits to be gained.

As noted, this approach would provide an effective way for opportunities to be captured in the (few) cases where they might arise, without adversely impacting timely delivery of reliability upgrades in the (many) cases where there are no incremental opportunities.

ETNOF cannot support the approach being promoted by NEMMCO which seeks to remove or fundamentally alter the reliability limb, thereby jeopardising timely delivery of reliability upgrades.

5. Counterfactuals Analysis

The Commission has proposed that for network investments assessed under the market benefits limb of the Test that a "with and without test", seemingly based on the NSP's view of the future, be applied. That is, the NSP is required to compare the "future with" the new investment (the factual) with the "future without" the new investment (the counterfactual or, potentially, counterfactuals). The Commission has considered that these counterfactuals be possible alternatives identified through the RFI process.

ETNOF considers that there is a risk of confusing alternative network investments with the variety of market development scenarios that the network alternatives are currently assessed against in the Regulatory Test economic analysis. Under a market benefits analysis it is normal practice for the costs and benefits under different market development scenarios postulated in response to a network investment proposal to be compared with the costs and benefits under market development scenarios for the "do nothing" option. This seems equivalent to the "with and without" test put forward by the Commission.

The attached analysis prepared by NERA and Clayton Utz for TransGrid suggests that the current drafting may not achieve the AEMC's intentions in this regard. ETNOF would encourage the AEMC to consider this assessment to ensure that its intentions are clearly captured by the drafting of the final Rule. In this regard we would be pleased to arrange a meeting between AEMC staff, ETNOF, and TransGrid's advisers to work through this matter.

The Draft Decision states the following intent:

> *"higher hurdle for alternative projects, which should limit the ability of a project which is purely speculative or unlikely to proceed, from being used to block a proposed transmission augmentation." (page 59 of the AEMC report)*

In practice, this appears to mean that the Regulatory Test would only compare the net present value of those alternative investment options that are likely to occur in the absence of the proposed new network investment. This may or may not include "genuine and practicable network and/or non-network investment options" as is presently the case.

In this regard it is essential that potential non-network investments only be considered as alternative options when they have a genuine proponent who will commit to the investment in the absence of the network alternative. There must be a genuine commitment otherwise the NSP could defer to the potential non-network investment as delivering greater net benefits, only to find that no investment is made. In these circumstances there would not be any benefits delivered to the market.

6. Saving and Transitional Provisions

The Commission has proposed saving and transitional provisions that deem the existing Regulatory Test to meet the requirements of the new principles until 31 December 2007. This is intended to give the AER sufficient time to review the current Test and consult on any changes that may be required. In addition the Commission has proposed that any actions or processes commenced prior to 31 December 2007 or any changes to the Test, will continue under the current form of the Test.

ETNOF supports these saving and transitional provisions as providing certainty for investment assessments that commence during any transitional period.

NERA
Economic Consulting

CLAYTON UTZ

Memo

To: **Phil Gall - TransGrid**
Date: 3 November 2006
From: Brendan Quach, Greg Houston – NERA
Paul O'Donnell – Clayton Utz
Subject: **AEMC Regulatory Test**

Introduction

The purpose of this memo is to:

- document how the current regulatory test operates *in practice*;
- set out our understanding of the *intent* of the AEMC's proposed change to the market benefits limb of the regulatory test;
- interpret the apparent effect of the AEMC's draft Rules; and
- outline some possible issues with the new draft Rules.

Current Regulatory Test

The current 'market benefit' limb states that an option satisfies the regulatory test if:

> the option maximises the expected net present value of the *market benefit* (or in other words the present value of the *market benefit* less the present value of *costs*) compared with a number of *alternative options* and timings, in a majority of *reasonable scenarios*.

In practice this means that an NSP generates a matrix of the net present values (NPV) of:

- genuine and practicable network and/or non-network investment options (along one axis); and
- reasonable market development scenarios, incorporating varying levels of demand growth at relevant load centres, alternative project commissioning dates and various potential generator investments and realistic operating regimes (along the other axis).

Figure A provides a simplified illustration of the resulting matrix:

Figure A

	Scenario *(i)*	Scenario *(ii)*	Scenario *(iii)*	Scenario *(iv)*
Option-A	$PV\text{-}A_{(i)}$	$PV\text{-}A_{(ii)}$	$PV\text{-}A_{(iii)}$	$PV\text{-}A_{(iv)}$
Option-B	$PV\text{-}B_{(i)}$	$PV\text{-}B_{(ii)}$	$PV\text{-}B_{(iii)}$	$PV\text{-}B_{(iv)}$
Option-C	$PV\text{-}C_{(i)}$	$PV\text{-}C_{(ii)}$	$PV\text{-}C_{(iii)}$	$PV\text{-}C_{(iv)}$

In effect the regulatory test compares the present value of three alternative investment *options* under four different market *scenarios*. The option that has the highest present value in the majority of reasonable scenarios passes the test.

For example, if the NPV analysis had the results set out in the example below then Option A, which has the highest new present value in three of the four market scenarios, would pass the test:

Figure B

	Scenario *(i)*	Scenario *(ii)*	Scenario *(iii)*	Scenario *(iv)*
Option-A	*500*	*250*	*325*	*400*
Option-B	*400*	*150*	*250*	*150*
Option-C	*350*	*200*	*350*	*100*

Intent of the Draft Rules

The stated intent of the AEMC is to create a:

> "higher hurdle for alternative projects, which should limit the ability of a project which is purely speculative or unlikely to proceed, from being used to block a proposed transmission augmentation." (page 59 of the AEMC report)

In practice, this appears to mean that the regulatory test would only compare the present value of those alternative investment *options* that are *likely* to occur in the absence of the proposed new network investment.

It follows that if Option-C was deemed to not be likely then the regulatory test would only compare Option-A (the proposed new network investment) and Option-B (the likely alternative option).

Figure C illustrates the resulting, simplified matrix.

Figure C

	Scenario *(i)*	Scenario *(ii)*	Scenario *(iii)*	Scenario *(iv)*
Option-A	*500*	*250*	*325*	*400*
Option-B	*400*	*150*	*250*	*150*

In this case Option-A would have the highest net present value in all scenarios.

Interpretation of the Draft Rules

Clause 5.6.5A(c) of the AEMC draft Rules sets out the principles of the market benefit limb of the regulatory test. However, the wording of the clause introduces a new term, ie, 'outcomes' or 'alternative outcomes' for which the interpretation is potentially unclear, especially by relevance to the above matrix of alternative options and market scenarios.

On its face, the use of the term 'outcomes' in the draft Rule appears to require that rather than options being analysed under different market development scenarios, the regulatory test is applied by the "likely" outcome (that is, it would appear, the outcome within the market) being analysed with the alternative options being used as a basis for determining the likely outcome if the project does not proceed. Under this approach, it appears that a project would satisfy the regulatory test if the outcome of it proceeding maximised net market benefit as compared to the likely outcome (or outcomes) in the market if it did not.

The difficulty with the term likely is discussed below. However the draft Rule provides that the test require that the "likely outcome" maximise net market benefit. This appears to mean that the regulatory test will require that a party applying it form a view as to what the effect (on the development of the market) of the project proceeding or not proceeding will be and is a fundamental departure from the role of market development scenarios in the current test where a

range of scenarios are adopted to recognise the inherent difficulty of forecasting future market developments accurately.

Further, (and again leaving aside the difficulty with the term likely) the result of the analysis will presumably be a range of outcomes for the 'with' scenario and the 'without' scenario. These outcomes may not be the same for the 'with' scenario and the 'without' scenario (since the flow on effects of an alternative option may differ from those of the proposed project). The draft Rule addresses neither how the regulatory test will provide for those outcomes to be compared nor a decision criterion.

Putting it another way, does a project satisfy the regulatory test if one of the outcomes if the project proceeds has the highest net market benefit of the outcomes studied or must it have that effect in all or the majority of the outcomes?

Finally, the use of the term "likely" is problematic. In general use "likely" means that something is probable or has at least a 50 per cent chance of occurring. Given this, there will normally be only one "likely" outcome (or at most two). However, the draft Rule appears to envisage that there will be a range of "likely" outcomes. As a result, it is very unclear in what circumstances an outcome will be "likely".