



20 July 2006

Dr John Tamblyn
Chairman, Australian Energy Markets Commission
Level 16, 1 Margaret Street
Sydney NSW 2001

Dear John

Reform of the Regulatory Test Principles

The Energy Users Association of Australia is pleased to have an opportunity to make a submission to the AEMC review of the proposal submitted by the Ministerial Council for Energy (MCE) in respect of reform of the regulatory test principles. We apologize for the lateness of this application.

We recognise that the application of the regulatory test is a complex technical process that has caused considerable controversy. It is the only matter related to the Rules that has been before the National Electricity Tribunal, whose decision was subsequently subject to appeal to the Victorian Supreme Court.

The technical nature of this complexity relates to the theory and practice of economics. Accordingly, we have departed from our usual practice in preparing submissions to regulatory reviews by commissioning Marsden Jacob Associates (MJA) to prepare an independent review of the MCE proposal and the background that led to the proposal being made. MJA's report is attached to this letter.

It is of particular concern to EUAA members that the regulatory test has, so far, failed to facilitate efficient investment in inter-regional interconnection capacity across the NEM and has therefore contributed to congestion in the NEM.

This is a major issue that impacts directly on end users both large and small. MJA has provided a preliminary estimate of the impact that these constraints have on the energy market that has been reasonably consistent at around \$0.9 billion/year since the start of the NEM. We note that this estimate is based on application of auction theory to NEM outcomes and may be different to estimates being prepared by the AER and NEMMCo. We also note that not all of this impact could be 'efficiently' eliminated by investment in transmission Interconnectors, although we do have a separate report prepared by (the late) Dr Rob Booth some time ago that suggests a substantial improvement could be made by transmission investments totalling around \$2.4 billion. This figure results from taking the largest capacity and most expensive projects

described in the annual Statement of opportunities, published in July of 2004¹. Despite differences in the absolute value, what is incontrovertible is that system constraints add a substantial burden to the wholesale electricity market by:

- increasing output from less efficient generators;
- increasing the cost of wholesale energy to electricity consumers by distorting 'efficient' pool price outcomes; and
- distorting signals for 'efficient' investment in demand side response and new generation capacity.

It is our reading that the intent of the MCE policy and the Rule change proposal are to redress these outcomes, particularly through the efficient removal of regional price differences in the operation of the NEM. This is a policy initiative that the EUAA fully endorses.

We also believe that to do so would be entirely consistent with the Single Market Objective that must be considered by the AEMC, that is, that Rule changes must be "in the long term interests of consumers of electricity".

The EUAA believes that the current application of the regulatory test suffers from both policy and technical flaws. Key issues and key recommendations are summarised below.

1. The EUAA considers that there is a case for the AEMC and MCE to thoroughly examine whether there is a better way to stimulate achievement of the policy objectives attributed by the MCE to the regulatory test.

Experience from the SNI appeal shows that the outcomes from modelling required to execute the regulatory test can vary substantially, and can produce forecast outcomes that do not eventuate. Even where the modelling suggests an investment may deliver benefits to energy users, there is no mechanism to ensure that investment proceeds. Most importantly, these issues – and the deficiencies in application of the regulatory test - only came to light because Transgrid's decision to proceed with SNI was subject to appeal. There has been no comparable scrutiny of other investment decisions based on outcomes from the regulatory test; and, therefore, no way to determine whether those applications were more robust.

At best, even a robust application of cost-benefit analysis techniques may achieve no more than assist in making a rational investment decision. It is unlikely to produce a 'right' decision alone and must be complemented by other decision criteria. Ideally, those other criteria should be linked to incentives for TNSPs to take actions and make investments that would be reasonably likely to lead to improved outcomes in the NEM. This suggests that there may be benefit to the NEM and energy users in adapting investment decision criteria and incentive mechanisms used elsewhere and abandoning the regulatory test as a 'regulatory instrument'.

The EUAA realises that this is a matter that is beyond the powers of the AEMC to resolve in this Rule change process. Challenges in introducing say the National Grid Co (NGC)-style incentive scheme implemented in the UK, for example, are compounded substantially by the jurisdictional structure of electricity transmission in the NEM. Aggregating all electricity transmission assets into a single 'National Electricity Grid Company', as initially intended by CoAG, may well be required to address this 'regulatory problem'. Resolution of that particular policy issue is a matter for jurisdictional governments. We note also that the Energy Reform Implementation Group (ERIG) formed by the Council of Australian Governments will be considering the matter of a "full national transmission system".

¹ P106 *The Effect of Industry Structure on Generation Competition and End-User Prices in the National Electricity Market* Bardak Ventures Pty Ltd 2005

The EUAA recommends that the AEMC take this issue up with the ERIG and MCE for resolution.

2. The issue of welfare transfers must be considered by the MCE.

This is one of the most divisive issues to be raised in the prolonged debates that have accompanied development of the regulatory test. MJA has identified that the ACCC has not dealt with this issue in a satisfactorily comprehensive or transparent way in development of the regulatory test. The ACCC's view can be summarised into the general principle that competitive neutrality requires that a business is not unfairly advantaged against its competitors. This is a sound principle as far as it goes, but it offers no advice on how to address the weighting of producer and consumer surplus. It can therefore not be used to justify equal treatment of all groups, nor how to weight certain groups, in particular when the two groups under scrutiny are consumers or producers.

The main point is that the *public benefit* test currently applied during application of the regulatory test assumes that a *total surplus* standard is appropriate. But this is one of a series of tests that could be conducted and no attempt has been made by the ACCC to justify the current *total surplus* standard². Further, international experience indicates that choice of the appropriate standard is by no means a simple matter. Indeed, the orthodox approach would seem for policy makers to adopt a *consumer welfare*³ test approach.

Given that this matter has not been directly addressed by the MCE, and – as MJA argue – is not a matter of public policy that should be decided by the AER, the AEMC needs to consider whether or not welfare weightings (apparently) assumed by the AER are both appropriate and consistent with achievement of the NEM objective to promote efficient investment for the long term interest of consumers of electricity.

In supporting this recommendation, the EUAA makes it quite clear that any reasonable interpretation of the Single Market Objective for the NEM would suggest that long-term consumer benefit be given greater weighting than other stakeholders. This would be entirely consistent with outcomes from a competitive market and also reflect the fact that it is end users who pay 100% of the cost of shared transmission services. MJA notes that these are perfectly rational arguments for assigning greater weighting to consumer welfare in a reasonable application of cost benefit analysis.

3. It is essential to ensure that execution of the regulatory test, if it is to be retained, is done with appropriate technical rigour.

We agree with MJA's advice that any reasonable practitioner should be expected to consider each of the issues listed by Professor Stephen Littlechild (refer S2.3.3 of the report)⁴ in a sound and technically rigorous manner during application of the regulatory test, although we also accept that the level of detail involved in applying cost-benefit analysis must be appropriate to the circumstances.

Accordingly, we believe it would be entirely appropriate for the AEMC to require the AER to amend its Guideline for application of the regulatory test to include a requirement that practitioners:

² The total surplus standard is the summation of all surpluses with no special weighting attached to any particular group(s).

³ Under the "consumer welfare test" consumers are attributed all the weight in the analysis.

⁴ Littlechild's papers are referenced in the MJA report. These papers provide a detailed summary of the arguments presented by parties appearing before the NET and Supreme Court, the NET and Supreme Court responses and Littlechild's own views on issues of relevance. The final summary of the issues that Littlechild deemed essential for application of cost benefit analysis is presented in the list below. The EUAA endorses MJA's recommendation that the AEMC, AER and regulatory test practitioners closely examine the arguments presented by Littlechild and ensure his criticisms are addressed when developing and applying the test.

1. actively identify relevant alternative projects and scrutinise them closely;
2. avoid an unduly restrictive approach to the screening of alternative projects to ensure that all reasonably comparable alternatives are considered;
3. examine ways of making potentially beneficial projects commercially feasible instead of taking a premature judgement that they are not commercially feasible to the regulatory test proponent and eliminating them, again to ensure that all reasonably comparable alternatives are considered;
4. be sensitive to the incremental costs and benefits associated with components or variants of particular projects;
5. seek out, identify and highlight the possibility that particular components of a project could provide all or most of (or even more than) all the benefits associated with the project as a whole;
6. actively explore the most economic configuring of submitted projects;
7. explore in more detail claims of risks associated with the potentially most beneficial projects, including the sources of such risk, their probability or likelihood, and the expected costs associated with them;
8. explore possible and economic ways of mitigating any justified risks, including by alternative network design and by means of contractual or charging arrangements, in the context of the statutory objectives on the parties in question;
9. insist from the outset on a more explicit and accessible form of modelling, with wider and more informed discussion of results; and
10. demonstrate understanding (and explain the impact of) relevant organisational incentives, as documented in the economic literature and as recognisable in practical experience, and their potential implications for the proposals, issues and decisions likely to arise in the context of the regulatory test.

4. Consideration needs to be given by the AEMC to treatment of outcomes arising from using cost benefit analysis techniques when applied to the NEM as a partial equilibrium analysis.

The application of cost benefit analysis as a ‘partial equilibrium analysis’ is another of the ACCC’s assumptions that requires more comprehensive and transparent consideration. Adopting a ‘partial equilibrium analysis’ means that certain economic effects may go undetected. There is, therefore, a risk that a project that appears to yield net economic benefits in a partial equilibrium analysis will result in net losses when investigated in a general equilibrium context or vice versa.

It is MJA’s view that development of the current version of the regulatory test has not been accompanied by discussion of this issue. Nor has the ACCC attempted to explain or justify why a partial equilibrium approach is appropriate – other than assuming it is too complex to do otherwise.

MJA acknowledge that the introduction of general equilibrium framework could be onerous and, too complex to implement in a more general sense, but we also agree the AEMC should carefully consider the extent of any effects that would be expected to be included in a general equilibrium framework. If it can be established that these effects are negligible, then we would accept that the current approach is satisfactory. However, if analysis shows substantial second

order effects, then we would recommend that guidelines are provided to ensure that these are quantified if possible and, as a minimum, are captured in qualitative manner.

The key issue to evaluate is whether an investment project is small enough so that a partial equilibrium approach will suffice, or whether it is of a size (in terms of impact) that will have general equilibrium repercussions outside the NEM. For example, 'SNOVIC-400', the 400MW upgrade of the Snowy-Victoria interconnector involved a relatively small investment (approximately \$45 million) but is generally acknowledged to have provided benefits far in excess of this. At the time, there was some discussion of a further upgrade of an additional 400 MW, at a higher but still not excessive cost. We understand this additional upgrade option did not proceed because it could not deliver a net benefit in the partial equilibrium analysis involved in applying the regulatory test. But no attempt was made to consider whether or not additional benefits external to the NEM might be generated that would deliver long-term benefits to consumers.

The MJA report provides a comprehensive analysis of the history of the regulatory test and uses this as the basis for proposing "pragmatic recommendations". This includes extensive reference to issues identified in the SNI appeal process. MJA also notes that these matters have been covered in even more detail in two papers prepared by Prof Stephen Littlechild following his involvement in the appeal process, and subsequently with the ACCC. It should also be noted that MJA's recommendations are generally consistent with actions that would address technical, economic issues related to application of cost benefit analysis that were identified by Littlechild at least as far as these relate to regulated transmission services.

We agree with the MJA conclusion that properly applied, cost-benefit analysis can assist in determining whether a particular action or project is likely to make a positive contribution to welfare of society. In the form of the regulatory test, the application of cost-benefit analysis seeks to determine whether a particular project should be undertaken or decision should be made that would lead to improved performance of the NEM. It is clear that this is an intention that underpins the MCE proposal. However, as MJA note in the paper, the practical application of cost-benefit analysis is not without challenges. We concur with MJA's view that issues relating to technical application of cost benefit analysis identified in the SNI appeal process are material and need to be addressed by requiring the AER to modify its regulatory test guidelines.

The EUAA considers that, in respect of the policy and technical issues, this is an important matter that policy-makers and the AEMC must get right. The MJA report provides a comprehensive explanation of why the regulatory test must be overhauled. As you will note, many of MJA's recommendations are entirely consistent with the principles for transmission reform adopted by the MCE; and several relate to detailed technical matters concerning appropriate technical rigour in applying cost benefit analysis techniques to electricity transmission investments.

We look forward to the Commission's consideration of the issues and adoption of the recommendations above. Robert Davenport (bob.davenport@euaa.com.au) has primary carriage of this issue in the EUAA and should be contacted if you have any queries.

Yours sincerely,



Roman Domanski
Executive Director