

## Minister for Energy and Resources

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Australian Energy Market Commission  
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Dear Commissioners

**Ref: Inter-regional Transmission Charging, Rule Determination, 2 December 2010**

On behalf of the Tasmanian Government I provide the attached submission in relation to the draft Rule Change introducing an inter-regional charging mechanism in the Australian electricity market.

Yours sincerely

Bryan Green MP  
**Minister for Energy and Resources**

**Submission by the Tasmanian Government to the  
Australian Energy Market Commission  
draft rule determination:**

**“National Electricity Amendment  
(Inter-regional Transmission Charging)  
Rule 2010”**

as released for comment on 2 December 2010

## Summary

The Tasmanian Government welcomes the work that has been done so far on inter-regional Transmission Use of System charges (ir-TUOS) and thanks the Australian Energy Market Commission (AEMC) for the opportunity to provide comments and feedback on the draft rule determination released for consultation on 2 December 2010.

The Tasmanian Government believes that it is likely that inter-regional flows will increase in the decades ahead and that transmission infrastructure will be increasingly required in some regions for the benefit of consumers in other regions.

Inter-regional transmission charging that is fair and reasonable and sends appropriate economic signals to consumers and investors will therefore be an important step in the evolution of the Australian electricity market and the optimisation of the overall supply of electricity.

The Tasmanian Government supports the intent of the ir-TUOS proposal and most of the proposal as presented for comment by the AEMC. However, the key to this reform is how the Load Export Charges (LECs) are calculated.

It is the view of the Tasmanian Government that the draft rule change does not yet provide adequate policy and principles for the calculation of LECs, and that this needs to be improved before the rule change is implemented.

The main reasons for this view are that exports are not the same as other loads, and that the relationship between the parties calculating the charges and the parties paying for them is not the same as the standard relationship between a TNSP and its customers.

LECs will be a new feature of the market and there needs to be additional principles and guidelines to make sure the desired outcomes are achieved. It is important to give this market reform good foundations and to create scope for the calculation and allocation of LECs to adapt to changing circumstances and to improve over time.

In addition, it is the view of the Tasmanian Government that the approach to calculating and allocating LECs should be done on a consistent national basis, so far as possible.

There is provision in the Rules for establishing principles and for the Australian Energy Regulator (AER) to develop guidelines for pricing methodologies consistent with those principles.

This process already exists in relation to TUOS charges. However, the Tasmanian Government believes that the principles and guidelines for TUOS are not sufficient

for ir-TUOS and that additional principles and guidelines are required in order to cover the special circumstances and motivation for inter regional transmission charging.

The rule change should include additional principles specific to the method for calculating and allocating LECs. These should be reflected in additional guidelines to be given to TNSPs by the AER.

The methodology for calculating and allocating LECs needs to be developed in more detail and the results checked against past data and modelled scenarios to check that the outcomes are fair, reasonable, equitable, efficient and in accordance with the National Electricity Objective.

Once the rule change is in place, the calculation and allocation of LECs can be an adjunct to the existing process for calculating and allocating TUOS.

Each TNSP would submit their methodology to the AER. The AER would check this against the guidelines. The AER would also monitor that the actual outcomes are consistent with the approved methodology.

**In summary, the Tasmanian Government submits that:**

- (1) the rule change include additional principles, specific to the calculation of LECs, which can assist the development of guidelines by the AER;
- (2) a detailed approach to the calculation of LECs then be developed by the AER on a nationally consistent basis;
- (3) the outcomes be checked using historical 2008/09 and 2009/2010 data;
- (4) the outcomes be tested against a range of possible scenarios to ensure that the methodology is robust, fair and efficient, and in accord with the National Electricity Objective; and
- (5) the rule change be implemented when these requirements have been met.

## Background

### Introduction

The National Electricity Market in Australia operates as a gross pool with all output from electricity generators being sold at five regional reference “nodes”. Retailers and other purchasers of electricity pay spot market prices for the electricity sold at each node, with prices determined every half hour. Market participants can modify the outcomes through off market hedges and other contractual arrangements.

The costs of delivering the electricity from generators to consumers is not part of this spot market. Transmission and distribution network costs are regulated, calculated and charged separately. Because networks are natural monopolies, there is only one provider of network services in any particular location. Accordingly the prices that can be charged are regulated by the Australian Energy Regulator, in accordance with National Energy Market Laws and Rules. The amounts that can be recovered by a Transmission Network Services Provider (TNSP) are determined by the AER for each TNSP separately, every four years. (Likewise for Distribution Network Services Providers, but in this discussion we are focussing on transmission cost issues).

Not all markets are organised along these lines. For example, in fruit and vegetable markets, buyers pay a price that cover both the product itself and the various costs involved in getting it to market. There is not a separate charge arriving by a different process to cover farmers’ freight costs.

But electricity is not like farm produce. It is invisible and shared. In essence generators energise the grid at input points, customers draw down that energy at output points, and high and low voltage network service providers get paid for providing the wires and services in between.

The process by which transmission costs are regulated is set out in the National Electricity Rules. The Rules also describe a process in which TNSPs must obtain approval from the AER for the methodology by which they will recover their allowed revenues from customers.

The situation is more complicated where transmission assets cross regional boundaries. In general the costs are divided between the regions concerned on a case-by-case basis. An exception is Basslink, which is the only Market Network Services Provider remaining in the National Electricity Market (NEM). Basslink earns revenues from the differences in the pool prices in Victoria and Tasmania, multiplied by the relevant energy flows. Basslink assets are not affected by the proposed rule change.

However, each end of Basslink is a point of import/export into the Victorian or Tasmanian regions. Hence ir-TUOS is an important issue for Victorian and Tasmanian customers, as it is for customers in all of the five regions that make up the NEM.

### **Rationale for the change**

Under the current transmission charging arrangements, consumers in an importing region do not contribute to the costs of transmission assets and related activities in the regions that are exporting the electricity to them. Those costs are borne by the consumers in the exporting region, even when they themselves may derive no benefit from this.

This is inequitable (unless by chance there are imports in either direction that would result in net balances close to zero). It is also a market failure in that there is not an appropriate price signal to consumers requiring the imports or to providers of energy and transmission assets in either the exporting or the importing regions.

Inter-regional flows of electricity are likely to become more significant as the market grows, not least because of the need for greater sustainability. An effective inter-regional charging mechanism will therefore lead to better outcomes and more efficient market development.

### **Chronology**

- In August 2008 the Ministerial Council on Energy (MCE) asked the Australian Energy Market Commission (AEMC) to undertake a review of existing energy market frameworks in the light of policies related to climate change and renewable energy.
- In October 2009, the AEMC recommended, amongst other things, that the transmission charging framework be amended to introduce inter-regional transmission charges.
- In February 2010 the MCE asked the AEMC to undertake the Rule Change process in respect of this recommendation.
- The AEMC released draft rule determination for consultation on 2 December 2010.

### **Objective of the Change**

The Tasmanian Government believes that the objective of this rule change is to promote more efficient development in national transmission networks. Australian electricity consumers should be confident that the national electricity grid and supply chain develops in the most efficient manner, without distortions brought about by State or regional boundaries.

### **The Current Proposal**

The AEMC has responded to a request from the MCE with a draft rule change. It has proposed that the point of export be considered to be a load on the transmission grid, and be apportioned a share of transmission charges like other loads in that region of the NEM. This is called the load export charge (LEC).

The LEC would be calculated each year and sent to TNSP(s) in the importing region. The receiving TNSPs would then allocate the costs to loads connected to their network.

The overall effect is not to increase or decrease total revenues allowed to be recovered by TNSPs, but to redirect a small proportion of them to more appropriate payees.

The draft rule change proposes that the LEC will comprise three components: A locational charge, a non-locational charge and a common service charge.

Under current provisions the locational component of prescribed TUOS charges is allocated by way of cost reflective network pricing which is based on the relative utilisation of the network. All TNSPs use the same software (T-Price) to determine the allocation.

Currently the Rules set out that the balance between locational and non-locational TUOS charges is done on about a 50:50 basis. This seems to be a rule of thumb.

The non-locational TUOS charges and the common service charges are allocated to the loads at connection points on a postage stamp basis. However, postage stamped charging is not useful for sending detailed price signals. It just recovers the TNSP's remaining allowable costs.

The allocation is a mixture of a flat postage stamp rate linked to capacity requirements and a flat postage stamp rate linked to energy requirements. This is a mixture of "causer pays" and "beneficiary pays" principles.

Over time the TUOS arrangements have become reasonably settled. However, adding LECs to this mix needs to be done carefully. Simply applying current practices for TUOS to ir-TUOS is not a sound approach and it is important to deal with the issues from the onset rather than letting the issues become problems for the future.

## **Concerns with the Draft Rule Change**

While supporting the general intent of the ir-TUOS proposal, and most of the content of the draft rule change, the Tasmanian Government is concerned by what it sees as shortcomings in the rule change as currently proposed.

### **Irrelevant costs**

The main problem with the proposed approach is that the customers in importing regions can end up paying for assets and other costs that have nothing whatsoever to do with getting electricity to them, or supporting their requirements in any way.

For example, Victoria gives price support to a major user (an aluminium smelter) which is paid for by money raised in the form of a land rent on the easements of Victorian transmission lines. This is a local policy for local benefit. It is not reasonable to include such costs as part of the LECs transferred to adjoining regions.

Likewise any local taxes and charges that are raised for the local benefit should not become charges that are passed to consumers in other regions.

The problem may also extend to assets. The draft rule change states that the charge should be based on the use of “relevant assets”. However, it does not give guidance on what constitutes relevant assets. Without clear guidance it is possible that consumers in importing areas are asked to contribute to the returns on assets which have no role in supporting their requirements.

### **LECs are not the same as other loads**

It may be tempting to declare that LECs are just another load on the transmission system and leave the calculation of LECs to the existing processes for other transmission connected loads. However, LECs are not just another load. If they were they would be part of the national market arrangements already. In fact, LECs are a new aspect of the market arrangements and the rationale for the introduction of LECs is not quite the same as the rationale for existing TUOS.

### **Volatility**

Another significant problem is that a point of export can be a large export load one moment and a large source of electrical supply not long after. Furthermore, for historical reasons each region is more or less self sufficient in electricity and interregional flows provide a “swing” source of supply. Consequently the net energy flow from one region to another is highly variable, and is often dependent on rainfall, hot weather periods and other unpredictable factors.



Accordingly, if non-locational charges and common user charges are based on energy flows then the impacts on the receiving region could be quite volatile, causing problems for both the receiving TNSPs and their customers.

The draft rule proposal suggests that ir-TUOS are likely to be too small to create significant volatility. However, only one year was modelled and in that year the issue was already material for the Tasmanian region.

### **Principal Agent Issues**

Normal TUOS end up as charges between TNSP's and real customers – distributors and large transmission connected users. Such customers can argue their interests during regulatory determinations for the TNSP in question, make choices about their connection and energy use and check the charges that are passed to them.

This is less feasible for ir-TUOS. There is an extra step involved. The TNSPs who calculate and levy the LECs are different from the TNSPs who allocate the charges. The originators of the costs are in a different region and jurisdiction from the parties who pay for them and there may not be a direct relationship at all.

The parties who ultimately pay for the LECs may neither have a clear sight of them nor an opportunity to verify or challenge them prior to their impact. Furthermore, when they buy energy they may not have any signal at all about how their choices will affect their transmission charges.

Without impugning the motives of any TNSP, it does seem that there could be a risk of introducing a conflict of interest in the current rule change proposal. TNSPs calculating the LECs might be more concerned about being paid than about who pays exactly. There may also be a temptation to load as many costs as possible onto the LECs and so export the costs to other regions.

TNSPs in the receiving location are allowed to pass on the LECs received and are not responsible for calculating them or paying them.

Both sets of TNSPs may be motivated to favour simplicity of approach and certainty of payment over and above the objective of sending efficient long term price signals.

This makes it all the more important that the regulations affecting the calculation and allocation of LECs be done in a clear, rigorous and transparent manner, based upon sound principles and agreed policy.

To this end it is important that the AER has the benefit of clear principles in the Rules to assist it in drawing up its guidelines. It is the view of the Tasmanian Government that is unreasonable to oblige the AER to administer ir-TUOS without giving it the benefit of a set of LEC explicit policies and principles already debated

and agreed by policy makers, transparent to all stakeholders and reflected in the Rules.

### **Inadequate modelling**

The draft rule change revealed on 2 December 2010 leaves the detail of how LECs are calculated to TNSPs, using methodology to be approved by the AER. However, this does not provide sufficient evidence for stakeholders to be able to assess the impact of the proposed change, and to be assured that the future outcomes will drive efficient patterns of investment, be in accord with the National Electricity Objective and be fair to stakeholders in each region. There was only one year of modelling data provided and even in this year there were some aspects of concern.

## **Suggestions**

The Tasmanian Government believes that the objective of this rule change is to promote the most efficient development of national transmission networks.

The request for the rule change from the MCE to the AEMC stated that, “The proposed Rule will have the effect that importing regions will contribute towards the costs of all existing and new assets used by adjacent regions to provide the inter-regional transfer capability required to facilitate the imports of electricity.”

The intent was clearly that ir-TUOS be cost reflective. Only costs that are occasioned by the need for exports, or the possibility of exports, are relevant.

The request said nothing about making consumers in importing regions contribute to irrelevant fixed costs and general overheads of transmission companies in adjacent regions. There is no signal towards the most efficient development of national transmission networks in such activity. In fact there is no locational signal at all.

Furthermore contaminating the locational signals with costs that have nothing to do with meeting the requirements of consumers in the importing regions reduces their effect and is likely to lead to additional complexity and argument. Common service charges need to be recovered so that TNSPs can recover their efficient level of costs, but unless there is sound reason to the contrary, the Tasmanian Government contends that they are better left as a cost recovery through local TUOS.

Therefore the Tasmanian Government proposes that the rule change ensures that there is an augmented set of principles in the rules that can inform the development of guidelines for the calculation of LECs, and that the overall set of principles covers the following points:

1. The calculation and allocation of Load Export Charges will create a price signal and incentives which will promote the efficient development of national transmission networks as if regional boundaries did not exist.
2. Load Export Charges will reflect costs which are specific to meeting the requirements of consumers in the importing region.
3. Load Export Charges will not contain charges which are irrelevant to meeting the requirements of consumers in the importing region.
4. General overheads and common service charges (as are often assigned to connection points on a postage stamped basis) are not to be part of Load Export Charges.
5. The basis for the calculation of Load Export Charges will be done using a methodology which is consistent across all regions as far as possible.
6. The outcome of the ir-TUOS process must be reasonable, fair and equitable to consumers in both exporting and importing regions.

### **Benefits**

Eliminating general overhead and other common service charges will make LECs more cost reflective, less volatile and less likely to become the subject of argument.

Costs which have nothing to do with meeting the requirements for consumers in importing region (for energy, reserves, ancillary services, future growth etc) will not form part of the LECs.

Likewise costs which would be incurred irrespective of the presence or possibility of exports will not form part of the LECs.

The Tasmanian Government believes that the augmented set of principles will, when reflected into guidelines maintained by the AER, produce better outcomes in line with the National Electricity Objective and the objectives of the rule change request from the MCE.

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