



10 February 2011

Mr Christiaan Zuur
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Dear Mr Zuur,

National Electricity Amendment (Application of Dual Marginal Loss Factors) Rule 2011

This submission by ActewAGL Distribution is in response to the AEMC's consultation paper on Dual Marginal Loss Factors, dated 9 December 2010.

ActewAGL Distribution is a multi-utility which provides electricity, natural gas, water and wastewater services throughout the Australian Capital Territory. Virtually all of the electricity consumers in the ACT are connected to ActewAGL Distribution's electricity network.

The design of the National Energy Market (NEM) has evolved since its inception and the proposed Rule change is designed to improve the efficiency of market settlements, by removing a deficiency that arises from its regional structure.

Intra-regional residues have historically played an important role, by efficiently offsetting Transmission Use of System (TUoS) prices. This is a matter of particular concern to ActewAGL Distribution and ACT consumers, as the transmission charge to the ACT has increased by an average of 33% in each of the three years to 2010/11.

ActewAGL Distribution is concerned at the impact of such sharply increasing transmission charges.

The AEMO has explained how the proposed Rule change, if it had applied in 2009/10, would have led to an increase of \$6.8 million in the intra regional residue. That would have reduced TUoS charges to NSW and the ACT by about 1 per cent in the following year. ActewAGL Distribution is concerned about the rapid decline in available offsets to the transmission prices, which have fallen from \$159.0 million in 2007/08 to just \$17.1 million in 2010/11.

Let's power ahead.

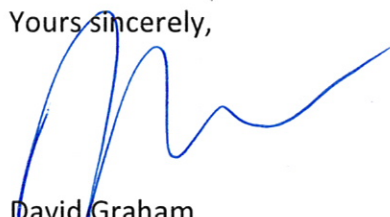
ActewAGL Distribution strongly supports the proposed Rule change as proposed by AEMO. The principal reasons for this support are as follows:

- The proposed Rule change will provide an improvement in the efficiency of operation of the National Electricity Market (NEM), at negligible cost to participants;
- By improving the efficiency of operation of the NEM, the change is considered to be consistent with the National Electricity Objective;
- The change does not add significantly to the complexity of the existing market settlements; and
- The overall outcome should be an efficient reduction in transmission charges to electricity consumers.

The attachment provides further information in support of the Rule change and brief responses to the specific questions that the AEMC has asked.

Should you require any clarification of this submission, please contact Janusz Worony on (02) 6293 5871.

Yours sincerely,



David Graham
Director Regulatory Affairs and Pricing

Attachment – Response to AEMC Questions

Materiality and extent of the identified problem

- To what extent is the identified problem causing, or is likely to cause, a material market impact?
- Will the identified problem primarily have a material impact through:
 - ♦ over/under recovery of intra-regional residues?;
 - ♦ changed operational and investment decisions for participants?; or
 - ♦ any other avenue?
- What parties are most affected by the identified problem and the proposed Rule? How?
- Are there any parties, other than hydroelectric Generators with pump storage, who are likely to be affected by the identified problem and proposed Rule change in the medium to long term?

The AEMO examples submitted with the Rule change proposal demonstrate how a single volume weighted marginal loss factor (MLF) can lead to a large under recovery of Intra-regional residues (IRR), over a relatively short period of time.

To illustrate the materiality of this issue, AEMO, in Appendix 1 of its Rule change proposal, estimated the impact on IRRs for 2009/10. The current market arrangements lead to a reduction of \$6.8 million in the IRR, the majority of which took place on a single day, 22 April 2010. The Tumut pumped storage scheme was the beneficiary of this windfall gain, at the expense of all electricity consumers in the NSW region of the NEM.

This adverse effect on all electricity consumers throughout the market is magnified for consumers in the ACT by the structure of the transmission charge. The ACT transmission charge comprises an unusually high proportion of energy charges, against which the IRR is offset. This charge structure has been responsible for the transmission charge to the ACT increasing at a rate of 33% per annum in the most recent three years, compared with 22% for the combined average of NSW and the ACT.

All electricity consumers in the ACT are being affected now and will be in the medium and longer term by this distortion of transmission costs that feed through to electricity prices.

The year-on-year material increases in transmission charges also have the potential to affect the consumption and investment decisions of larger transmission and distribution connected consumers, for whom the transmission charge represents a significant input cost.

The proposed Rule change, if adopted, would be factored into the investment and operational decisions of market participants and these more efficient pricing arrangements would serve to encourage more efficient market settlements for the long term benefit of electricity consumers.

Options to address the identified problem

- Do any of the options listed above represent a viable and proportionate solution to the identified problem?
- Are there any alternative options which have not been considered?
- How are each of these options likely to affect participant behaviour?

AEMO's Rule change request considers a number of alternatives to dual MLFs for connections to the network where load and generation are connected. Each of the alternatives was assessed in arriving at the current proposal.

ActewAGL Distribution agrees with AEMO that the dual loss factor proposal identified is an appropriate and proportionate solution to resolve the current deficiency in market design.

The alternative solutions put forward by AEMO and the AEMC would all appear to deliver an inferior outcome to the dual loss factor proposal. The alternatives all suffer comparative disadvantages:

- A single time weighted MLF for load/generation sites is unlikely to significantly improve the efficient dispatch of electricity and thereby the efficiency of market operation;
- The use of dynamic loss factors raises significant issues of market complexity of design, and management of the associated loss factor variability; and
- The establishment of dual connection points and metering would involve significant implementation cost.

ActewAGL Distribution accepts AEMO's proposal that the best solution to the identified problem is that the Rules be modified to require pumping stations (and equivalent generators that satisfy the associated criteria) to have two volume weighted MLFs, one to apply when the site is generating, and the other to apply when the site consumes energy from the market.

Criteria for the application of options to address the identified problem

- Do any of the criteria listed above present a viable solution as to how an alternative MLF methodology should be applied?
- Do any of the criteria listed above represent a proportional response to the identified problem?
- Are there any alternative criteria which have not been considered?
- How are each of the criteria listed above likely to affect participant behaviour?

AEMO has proposed a criterion to determine whether a transmission connection should be required to use dual MLFs. That is met when the difference between the energy generated and consumed at a connection point over a given year is less than 30% of the total energy generated in that year. The AEMC has proposed several alternative criteria for examination.

The inefficiency in the market design that the dual loss factor proposal is designed to address has been highlighted by the particular situation of Lower Tumut pumps. AEMO has not identified, and ActewAGL Distribution is not aware of, a material issue at other locations at this stage.

As a general principle, ActewAGL Distribution believes that the Rule change should provide for some guided flexibility in application of the criterion, rather than having it 'hard coded' into the Rules. This would allow for more timely refinement of the criterion if it proves necessary in the future as new technologies and energy sources emerge, including technologies such as battery storage.

It is also important that the eligibility criterion should not apply:

- In a technology specific manner, eg. solely to pumped storage schemes; or
- To all connection points where energy is both generated and consumed.

The overriding principle is that dual marginal loss factors should apply where the difference between the loss factor whilst generating and the loss factor whilst consuming would result in a material effect on market settlements outcomes.

Therefore, ActewAGL Distribution believes that it is not appropriate for the AEMC to explore a range of alternative eligibility criteria during consultation. The Rule change should establish the principles that the criterion needs to address and provide for the criterion to be established by AEMO following consultation with industry participants.