

29 May 2013

Mr John Pierce Chairman Australian Energy Market Commission PO Box A2449 Sydney South NSW 1235

Submitted by online: www.aemc.gov.au

Dear Mr Pierce

## EPR0032 - Management of negative inter-regional settlements residues review

Origin Energy (Origin) appreciates the opportunity to provide comments to the Australian Energy Market Commission (AEMC) Issues Paper on the management of negative interregional settlements residues.

Origin understands the AEMC is required to conduct a review of the efficiency with which the Australian Energy Market Operator (AEMO) conducts Negative Residue Management (NRM) under clause 3.8.10(g) of the National Electricity Rules (NER). Origin also acknowledges that AEMO is required to develop a policy for NRM under NER 3.8.10(c) for network constraints and NER 3.8.1(b)(12) for central dispatch in the National Electricity Market (NEM). The review, therefore, considers the efficient application of the NRM policy consistent with the National Electricity Objective (NEO).

Origin broadly endorses AEMO's current NRM policy. We consider the application of the NRM constraint, as part of the NRM policy to intervene in central dispatch of the NEM, has generally been conducted transparently and efficiently to date.

Origin notes that the NRM policy is a market intervention. That being said, counter-price flows are not in and of themselves an adverse market outcome; in fact, efficient market dispatch can continue in their presence. The challenge, however, is how to fund the negative accumulation in the most effective way. In the absence of an alternate funding model, we consider the NRM policy provides a proportionate mechanism to do so.

## Reasons for having an NRM policy

It is not economically efficient to build out all transmission congestion in the NEM. The Regulatory Investment Test for Transmission (RIT-T) has been developed to identify economic network or non-network solutions to address congestion in the transmission network. It is a responsive approach. As a result, some level of network congestion will always be present and constraints continue to bind in the presence of certain market conditions.

Counter-price flows can arise in light of certain intra-regional constraints reaching their limits. Recently, intra-regional constraints in Queensland and Victoria that relate to thermal limits for transmission equipment and maintaining regional voltage stability have given rise to counter-price flows.

These counter-price flows are not necessarily an inefficient market outcome. As such, the use of the NRM policy is not a consequence of inefficient network congestion. There is not a market design flaw. Rather, it is an intervention to manage the financial

consequences of those efficient flows, which can give rise to a large negative reside accumulations that need to be recovered from somewhere. The NRM policy caps the accumulation. While this action is a market intervention, given it is addressing a funding consequence and not a market failure, we consider this is a proportionate and measured response.

## The application of the AEMO NRM constraint

Origin considers AEMO has efficiently operated the NRM policy. We recognise it is important to provide a threshold where AEMO will intervene in the NEM to 'clamp' interconnector flows. This provides Market Participants with predictability and certainty around AEMO's application of its NRM policy. The NRM constraint is a 'soft' constraint; prioritising power system security over the accumulation of negative settlement residues, enabling negative settlement residues to still accrue once the NRM constraint binds. To this extent, a stable and consistent threshold is as important as applying a \$6,000 or \$100,000 threshold.

Origin accepts a limitation of the NRM policy is pre-dispatch accuracy in forecasting. AEMO's practice is to apply an NRM constraint in dispatch to limit the accumulation of negative settlement residues; however, this is not visible to market participants in pre-dispatch. The application of the NRM constraint can therefore not be managed in pre-dispatch. This can explain some of the spot price volatility that can arise both before and after AEMO 'clamps' interconnector flows.

We recognise, however, that it is not practical to apply clamping constraints in predispatch. For one, pre-dispatch provides information to market participants about the prevailing supply and demand balance per dispatch interval and gives an outlook for the pricing outcomes of those conditions. Participants make decisions in light of that information - including changes to consumption or generation offers. Applying a clamping constraint in pre-dispatch is effectively taking action based on counter-factual rather than actual outcomes. This can possibly distort what would have been efficient market responses.

Second, it is difficult to forecast binding constraints in pre-dispatch. This is due a range of factors including changes in generation, demand, generation flow paths and transmission equipment ratings, which depend on ambient conditions, wind speed and equipment de-rating. Accurately forecasting spot market outcomes – like whether a prospective constraint will give risk to counter-price flows - is therefore challenging. Given this level of uncertainty, we can appreciate how AEMO apply its NRM policy.

The Impact of NRM on inter-regional hedging and cost recovery

The AEMC provided the cumulative value of positive and negative inter-regional settlements residues between July 2010 and January 2013. Origin notes that following the AEMC Congestion Management Review in 2008, the cost recovery for negative settlement residues changed. The old methodology was to net the negative residues off against the corresponding pool of positive settlement residues. The new methodology charged the initial \$100,000 of negative residues for each event to the Transmission Network Service Provider (TNSP) of the importing region, with amounts above \$100,000

<sup>&</sup>lt;sup>1</sup> We understand the NRM constraint has a lower Constraint Violation Penalty than equipment ratings and load shedding, for example, meaning the NRM constraint will violate ahead of constraints relating to the safe, secure and reliable supply of electricity. <sup>2</sup> AEMC 2013, Management of negative inter-regional settlements residues, Issues Paper, 18 April 2013, Sydney. p. 7.

being recovered through Transmission Use of System Charges (TUOS). The policy change was primarily to support the values of Settlement Residue Actions (SRAs) and the use of SRAs as an inter-regional hedging instrument.

Origin does not consider negative settlement residues or the application of the NRM policy materially devalues SRAs. Bidding for SRA units has not been adversely affected by negative settlement residues. We consider bidding is based on a Market Participants estimation of the total accumulation of positive settlement residues and does not materially reflect the current instances of NRM. This could be consistent with the accepted industry view of SRAs as a non-firm instrument for inter-regional hedging.

In regards to cost recovery, we consider the customers in the importing region do accrue a benefit from counter-price flows. Theses consumers face a reduction in the wholesale cost of energy where the counter-price flows suppress the region's spot price. On balance, we consider the allocation of these negative residues to those customers appropriate.

## Conclusion

Origin welcomes the AEMC review of the efficiency of the AEMO NRM policy in managing the accrual of negative inter-regional settlements residue. While the review has been stipulated in the NER, we consider it prudent and good regulatory practice to periodically review the efficient operation of schemes impacting the performance of the NEM. Origin broadly endorses AEMO's current NRM policy. We consider the application of the NRM constraint, as part of the NRM policy to intervene in central dispatch of the NEM, has been conducted transparently and efficiently to date.

Should you have any questions or wish to discuss this information further, please contact Hannah Heath (Manager, Wholesale Regulatory Policy) on (02) 9503 5500 or <a href="mailto:hannah.heath@originenergy.com.au">hannah.heath@originenergy.com.au</a>.

Yours sincerely,

Phil Moody Group Manager - Energy Markets Regulatory Development Energy Risk Management