

CS Energy Response to AEMO

Optional Firm Access - Draft Report

10th February 2015

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Summary and key points

CS Energy thanks the Australian Energy Market Operator (AEMO) for consulting on the development of Optional Firm Access (OFA) Design and Testing.

CS Energy supports the AEMO recommendation to not seek to implement Access Settlement in isolation. It is sensible to refrain from developing Rule change proposals given the Australian Energy Market Commission (AEMC) will report to the Coalition of Australian Governments (COAG) on the complete design of OFA, with this report also encompassing Access Settlement.

We agree with AEMO's conclusion that Access Settlement, in itself, may not benefit the economic test of the National Electricity Objective (NEO).

However, contrary to AEMO's conclusion, CS Energy believes Access Settlement may change incentives and may affect what AEMO has identified as 'dispatch inefficiencies'¹. However CS Energy cannot conclude that the changed incentives will lead to more efficient outcomes – they will just be different.

Although CS Energy concurs with the recommendation not to implement Access Settlement at this stage, we believe the AEMO's strict view of efficient dispatch would set a very high bar for any change in the National Electricity Rules (the Rules) to achieve. It is not surprising that OFA cannot be found to ensure perfect merit order dispatch and does not eradicate the 'dispatch inefficiencies' AEMO has highlighted.

CS Energy has a more sanguine view of dispatch. We believe the market dictates what is efficient and the behaviour within the current Rules is resulting in efficient price outcomes. Dispatch **follows** participants' trading behaviour which includes their position regarding retail, generation, electricity derivatives and overall appetite for risk. We cannot conclude the 'dispatch inefficiencies' AEMO has highlighted are real, material or worthy of a change to the Rules.

If Access Settlement is implemented, we expect dispatch will also follow the access position of the generator, as to whether they are 'access long' (sufficient or greater access than they desire) or 'access short'. To implement Access Settlement without provisions for efficient allocation of access would result in inefficient dispatch. This is CS Energy's main rationale for not implementing Access Settlement in isolation.

¹ AEMO notes the following: portfolio bidding; dispatch versus settlement bidding; bidding late in an interval; and non-scheduled generation

AEMO is setting a very high bar for Access Settlement to achieve

We suggest the primary driver of 'dispatch inefficiency', where dispatch varies from a strict theoretical merit order, is established in participants' hedging activities (which includes fuel purchasing, asset ownership, trading electricity derivatives and risk structure). Dispatch is effectively locked in by these market structures and trading activities years, months and days in advance of dispatch.

If a theoretically cheaper² generator has not sold enough hedge contracts (for whatever reason) and another more expensive generator has, and then a dispatch constraint emerges, CS Energy questions whether this can be regarded as inefficient. Under such a scenario, there was every opportunity for the derivatives market to have driven a more 'efficient dispatch' but this did not occur because the market dictated that perfect merit order dispatch did not occur.

An obvious example of dispatch inefficiency would be a peaking generator running ahead of a base load generator. That the peaking generator is operating has very little to do with dispatch incentives, but more to do with the allocative process of market participants making hedging and scheduling decisions to manage market risks.

CS Energy cannot then say with any certainty that National Electricity Market (NEM) dispatch is inefficient when the market has chosen to dispatch generators in a different order than the perfect merit order. To do this AEMO is effectively concluding the market does not result in efficient outcomes because it does not result in perfect merit order dispatch. We question the assertion that for dispatch to be efficient; it must be perfect merit order dispatch. As such, we cannot conclude the inefficiencies AEMO has highlighted are real, material or worthy of a change to the Rules.

The strict view of efficient dispatch held by AEMO is therefore a very high bar for OFA to achieve. It is not surprising that either the current Rules or OFA can be found to ensure merit order dispatch; because dispatch is determined by participants in the way they compete to manage market risks.

To summarise, we consider the dispatch inefficiencies AEMO has highlighted - portfolio bidding; bidding late in an interval and dispatch versus settlement bidding - are all linked to participants' earlier trading activities rather than transmission constraints causing mispricing. It is to be expected that Access Settlement, which is **only designed to improve dispatch to reduce the effect of mispricing under times of transmission constraints**, does not resolve these other 'dispatch inefficiencies' that AEMO believes exist.

Seeking further changes to the Rules or the dispatch engine to try to create perfect dispatch may be a fruitless exercise.

² As estimated by AEMO

Dispatch may be imperfect under OFA just as it is imperfect under the existing Rules

In our submission to the Interim Report we highlighted the potential for more stable pricing outcomes under Access Settlement. We consider this to be a good attribute for Access Settlement, but we raised questions as to whether the more stable pricing outcomes could (probably less frequently but with more severity) solicit and prolong different behaviour of generators. One of the key points we raised was that with the NEM's present design, under fully constrained pricing, negatively priced offers (when generators disorderly rebid) create an unstable cycle of high prices when first constrained off and then low prices when they feed directly into the pricing calculation.

We thank AEMO for noting CS Energy's comments on page 27 of the document, although we do disagree with some of AEMO's conclusions. You have stated floor price offers upstream of a constraint:

"paradoxically tend to increase rather than lower regional prices due to a blocking effect upon higher³ coefficient competitors, particularly interconnectors⁴"

This is because the times when transmission constraints are greatly affecting prices are when there are large differences in price between suppliers within a looped constraint.

Some participants in a looped constraint, if they have a high coefficient, cannot prevent being constrained off even if they price at the floor. They cannot always "*block other coefficient competitors, particularly interconnectors*". It is under these conditions that we postulated more stable pricing outcomes could ensue under Access Settlement, but that these outcomes are not guaranteed to be more efficient.

Under Access Settlement we may not have the pricing effect of floor price offers and therefore have more stable dispatch during times of looped transmission constraints. This is the very intent of Optional Firm Access. However the stable dispatch could create opportunities for generators to manage nodal price differences in a loop and optimise Access and Energy Settlement. Whether or not this will be more efficient than the present NEM design remains an open question. Given dispatch follows earlier trading decisions, whether dispatch will be efficient will depend on whether the ex-ante allocation of access quantities was efficient.

We note the initial effect of floor price offers within a looped constraint can be to increase regional prices, but also elaborated that the effect of these offers can be to depress regional prices after volumes have been constrained off:

"negatively priced generation sometimes comes through a flowgate and we have cycles of high and then low prices. Typically the first high price is caused by a negative price being constrained down, or a high price being constrained up, and then other participants rebid offers to the floor price. Eventually prices in the other part of the loop increase until NEMDE constrains off - \$1,000/MWh offers and these can affect the RRP.⁵"

³ CS Energy considers this should be lower, not higher, for the greatest change in dispatch and therefore price to occur

⁴ AEMO Optional Firm Access - Draft Report, p27

⁵ CS Energy, response to AEMO Optional Firm Access Interim Report, p11

We do not therefore agree with AEMO's observation⁶ that the unstable, "cyclic" nature of dispatch under constrained conditions is most commonly related to a combination of:

- Dispatch versus Settlement rebidding to increase dispatch;
- Rebids being made to increase prices later in a trading interval; and
- Non-scheduled generation being included in dispatch on an ex-post basis.

We consider these reasons are symptoms rather than the cause. It is the constraint which caused the change in generator offer prices. We also note the constraint itself is probably only a symptom, because the constraint may only arise because of participants' earlier trading activities or, if we were to implement Access Settlement in isolation, allocation of access quantities.

⁶ AEMO Optional Firm Access - Draft Report, p27