

# CS Energy response to Draft Rule Determination – Ramp Rates

September 2014  
CS Energy reference: B/D/14/25321  
AEMC reference: ERC0165



# National Electricity Amendment (Generator ramp rates and dispatch inflexibility in bidding)

## Our view

CS Energy thanks Australian Energy Market Commission (AEMC) for the opportunity to respond to the Draft Determination on ramp rates and dispatch inflexibility in bidding. We will refer to the Australian Energy Regulator's (AER) proposal as the "*Proposed Rule*" and the AEMC's as the "*AEMC's Preferable Rule*".

CS Energy supports the AEMC's decision to not to make the AER's Proposed Rule.

We believe the AEMC has made a draft determination that is superior to the *Proposed Rule*, but the *AEMC's Preferable Rule* in the draft determination may not satisfy the National Electricity Objective (NEO) as well as the existing Rules.

## Our rationale

CS Energy believes the AEMC considers the *AEMC's Preferable Rule* contributes to the NEO because it has determined that ramp rate and dispatch inflexibility bidding leads to significant inefficiencies in dispatch.

We refer to the National Generator Forum (NGF) response<sup>1</sup> to the consultation paper and believe the NGF response objectively considered the impact of ramp rates in dispatch.

The evidence put forward by the NGF showed that rebidding of ramp rates is a lower order effect in constraint equations that include interconnectors. Of a higher order are the rebidding of prices to the floor price; constraint coefficients; prices in the adjacent regions; other generators' offers in a looped constraint (spring washer effect). It is after these effects that ramp rates affect dispatch and pricing. The NGF also highlighted that constraints were typically the result of transmission monopolies' outages, not generator rebidding behaviour.

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<sup>1</sup>National Generators Forum, response to the, AEMC's consultation on the AER's ramp rate and FSIP rule change

CS Energy believes the effect of ramp rates is of a higher order in: radial constraints or those looped constraints far from interconnectors (where generators cannot compete at the floor price -\$1,000/MWh with the interconnector).

Is the Draft Determination regulating for a symptom rather than the cause?

CS Energy also considers ramp rates to be more important in constraint equations that include aggregated units, because the ramp rate is applied to larger volumes. If these aggregated units have high constraint coefficients (and the interconnectors less so) then this can result in negative residue management (NRM) constraint equations violating and thus reduces the price effect of introducing NRM equations. We note the ramp rate of the aggregated unit is not the source of the inefficiency in dispatch – it is the result of another factor – usually a transmission circuit outage either forced upon or more usually, planned by the network monopoly.

The Draft Determination may be seeking to solve a particular symptom (the rebidding of ramp rates by aggregated units) caused by a different problem (the introduction of transmission outages).

As a result we may expect the *AEMC's Preferable Rule* to result in unintended consequences because it applies in all instances to all participants.

For example, the *Proposed Rule* and the *AEMC's Preferable Rule* could make it easier for the network monopolies to impose poorly timed outages on the market. This is because generators cannot easily express what it is costing them and may not be reflected in dispatch prices. This was a particular problem with the *Proposed Rule* but remains with the *AEMC's Preferable Rule*.

The NGF put to the AEMC that:

*The **intent**, but **not the application**, of the AER's proposal is to force producers to "subsidise" the operating cost of a transmission constraint, by removing the "price effects"; This is poor policy because to force the wrong party to pay for the costs of another (in this case the transmission monopoly) will not incentivise the party causing the cost to avoid them.*

What are the unintended consequences of the AEMC's *Preferable Rule* – what affect will it have on monopolies' behaviour?

We agree with the NGF's comments and believe the *AEMC's Preferable Rule* also does not incentivise the party causing the cost to avoid them.

A particular effect of the *AEMC's Preferable Rule* is to increase the overall minimum level of ramping that must be provided by larger units (in excess of 300 MW).

The 1% of capacity recommendation for the larger units may be excessive from CS Energy's perspective. CS Energy operates a mix of units but notes that the 1% recommendation would require a minimum level across our plant greater than the existing 3 MW/min Rule. This means that the *AEMC's Preferable Rule* will seek to impose greater volumes of congestion on CS Energy than on other generators.

Given CS Energy owns no aggregated units and cannot submit ramp rates that result in NRM equations violating (which are the primary causes for dispatch inefficiencies that justify the *AEMC's Preferable Rule*) we see this as a possible arbitrary wealth transfer between participants.

These possible transfers will not improve economic efficiency and satisfy the NEO. We cannot see any particular gain in economic efficiency in applying the *AEMC's Preferable Rule* to CS Energy.

For our largest unit, Kogan Creek Power Station, a ramp rate of 7-8 MW/min at higher generation levels is too high as the unit was not designed with the intention of fast ramping.

## **Our recommendation**

CS Energy recommends the AEMC should:

1. Consider whether it is possible to establish commercial arrangements between a network monopoly and particular generators to manage the network outage plan more effectively. It may be that the present Market Impact Component (MIC) could present a barrier to successful cooperation between affected parties<sup>2</sup>
2. Consider whether the Rules need to change to deal with units that cannot be scheduled in dispatch upon the introduction of transmission constraints. This should include not just aggregated units but demand, non-scheduled units and exporting substations where the transmission and distribution monopolies interconnect.
3. If no reasonable solution to the first and second recommendations is found, proceed with the *AEMC's Preferable Rule*.

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<sup>2</sup> CS Energy has made comment on the MIC in its response to the Interim Report: OFA Design and Testing and therefore we shall not repeat them in this response.