

9 October 2014



Mr John Pierce
Chair
Australian Energy Market Commission

Submitted at: <http://www.aemc.gov.au/Contact-Us/Lodge-a-submission?nodeid=24251>

Your Ref: ERC0165

Dear Mr Pierce

National Electricity Amendment (Generator ramp rates and dispatch inflexibility in bidding) Rule 2014

PIAC thanks the Australian Energy Market Commission (AEMC) for the opportunity to provide comment on its draft rule determination, *National Electricity Amendment (Generator ramp rates and dispatch inflexibility in bidding) Rule 2014* (the Draft Determination).

PIAC welcomes the AEMC's decision to make a Draft Determination that goes some way to addressing the problems highlighted in the rule change proposal. However, in PIAC's view, the Draft Determination does not go far enough in addressing the issues raised in the rule change proposal and PIAC considers that the AEMC has not undertaken sufficient analysis of the impact of its proposed solution. PIAC submits that better outcomes for consumers would be achieved if required generator ramp rates were set based on the rates achieved by generators when having a high ramp rate is in their interest.

The rule change proposal

The Draft Determination outlines the AEMC's response to a rule change proposal submitted by the Australian Energy Regulator (AER). The AER proposed changes to the rules governing how quickly generators must offer to increase or reduce their energy production (their 'ramp rate') and the periods for which they say their production must remain at a certain level (dispatch inflexibility profile). These factors are used by the Australian Energy Market Operator (AEMO) in determining which electricity generator's production is dispatched to the market. AEMO's system allows generators to resubmit (or rebid) aspects of their output, including level and ramp rate, every five minutes.

Currently in the National Energy Market (NEM), 'constraint conditions' occur where limits on network transmission capacity mean some generators are limited in the amount of electricity they can dispatch to the market. Under these circumstances, the AER argues that generators rebid ramp rates to 'achieve commercial objectives'.¹ By rebidding a lower ramp rate, thereby indicating that they must reduce output more slowly than previously indicated, generators are able to ensure more of their production is dispatched. This occurs even if the generator in question is offering its output at a higher price than its competitors, because ramp rates are 'considered to be the highest priority constraint' by AEMO.² In

Level 7, 173-175 Phillip St
Sydney NSW 2000
DX 643 Sydney
Phone: 61 2 8898 6500
Fax: 61 2 8898 6555
www.piac.asn.au
ABN: 77 002 773 524

¹ AEMC, 2014, *National Electricity Amendment (Generator ramp rates and dispatch inflexibility)*
² Ibid 11.

the AER's view, this rebidding 'compromises the ability of AEMO to determine an economically efficient arrangement while maintaining system security'.³

The AER's proposed solution is to require generators to provide a ramp rate to AEMO that is 'the maximum the generator can safely attain'.⁴ Where generators rebid their ramp rates at a materially lower level, they would be required to accompany this rebid with a 'brief, verifiable and specific reason' for the change.⁵

The AEMC's proposed response

The AEMC recognises 'that the existing rule may prevent' AEMO from bringing enough electricity into the system to meet demand 'at the lowest cost'.⁶ However, the AEMC does not support the solution proposed by the AER. Instead, the Draft Determination contains a more lenient rule that would require generators to have a minimum ramp rate of 1% of their total generating capacity per minute.⁷

The AEMC notes that this rate would be applied consistently for all generators, which is not the case for the current figure of 3MW/minute for most generators.⁸ In addition, using such a figure would not require the potentially complex verification of maximum ramp rates and 'could be applied easily in practice to minimise compliance costs'.⁹

Finally, the AEMC argues that some of the negative outcomes highlighted by the AER are not only caused by generators rebidding ramp rates when a constraint exists in the market. The negative outcomes include higher prices for consumers, productive efficiency losses, price volatility and counter-price flows between different NEM regions. The AEMC suggests that some of these issues 'will be addressed by the Optional Firm Access (OFA) model currently being developed by the AEMC'.¹⁰ It should be noted that PIAC made a submission to the AEMC's first interim report on OFA that indicated the PIAC was extremely cautious about the merits of the proposed initiative.¹¹

The need to regulate

A report by the consulting firm ACIL Allen, that was included in a submission to the AEMC by Snowy Hydro argued that reducing ramp rates in constraint conditions was a 'rational response' by generators.¹² PIAC takes the view that this behaviour is not in the long-term interests of consumers, for the reasons outlined by the AER. However, PIAC also accepts that businesses operating in a competitive market will do everything they can within the law to maximise their profit. It is, therefore, vital that the regulatory framework eliminates, or at least minimises, opportunities for businesses to 'game the system'.

The AEMC appears to recognise this imperative, noting that 'under the current market design, there is a need to place a regulatory obligation on generators to provide a minimum level of ramping capability'.¹³ Nonetheless, PIAC is concerned that the AEMC is not proposing strong enough requirements as part of its Draft Determination. PIAC's reasons for holding this view are outlined further below.

³ Ibid 10.

⁴ Ibid 2.

⁵ Ibid.

⁶ Ibid 21.

⁷ Ibid ii.

⁸ Ibid 24.

⁹ Ibid 23.

¹⁰ Ibid 17.

¹¹ PIAC, 2014, *Multiple risks for uncertain benefit*, available at: <http://piac.asn.au/publication/2014/10/multiple-risks-uncertain-benefit>

¹² AEMC, above n 1, 13.

¹³ Ibid ii.

The AEMC's proposed minimum ramp rate

PIAC supports the AEMC's efforts to design a minimum ramp rate that applies fairly to all generators. As previously stated, a ramp rate that is expressed as a percentage of total capacity means the rate is proportionate to the size of the generator. However, PIAC notes that the AER proposal would also deliver ramp rates that are set in reference to a generator's characteristics.

PIAC further notes that while simplicity of operation is a desirable characteristic of regulation, it should not be prioritised above effectiveness. While determining the maximum ramp rate of a generator may involve a level of complexity, PIAC takes the view that this is not sufficient reason to reject such an approach. Given that the role of determining such a figure would likely fall to the AER, PIAC argues that the AER would only have proposed such a rule if it was confident in its ability to enforce the requirement.

In addition, PIAC notes that the AEMC's Draft Determination would require the maximum capacity of a generator to be determined, in order for a 1%/minute ramp rate to be derived. The Draft Determination does not explain how this would be determined and by whom. In addition, given the efficiency of complex mechanical systems generally decreases over time, the maximum capacity may change over time. The AEMC has not stated whether the maximum capacity will be set permanently or re-evaluated periodically.

PIAC, therefore, recommends that in its final determination, the AEMC provide more information about how the 1% figure would be determined, (assuming the AEMC continues with that approach) and whether this figure will be subject to change.

Recommendation 1

PIAC recommends that the AEMC provide more detail about how a generator's total capacity will be determined, and re-examined, should this be the basis for determining ramp rates in the Final Determination.

Consideration of the impact on consumers

PIAC submits that the AEMC's Draft Determination does not give sufficient regard to the impact of the proposed rule change on consumers.

In recent times, PIAC has been encouraged by the AEMC's moves to require energy networks to consult with their consumers, including as part of the current network tariff rule change process.¹⁴ In addition, the AEMC itself has made encouraging efforts in recent times to engage with residential consumers advocates, including PIAC.

While Table 4.2 of the Draft Determination¹⁵ illustrates the regional changes in aggregate minimum ramp rate requirements, PIAC believes that the AEMC should more closely examine the impact of these changes on the operation of the wholesale market. Such analysis may provide an indication about whether the draft rule change will address the issues highlighted by both the AER and the AEMC.

PIAC, therefore, recommends that the AEMC undertake such analysis as part of preparing its final determination. As a community legal centre, PIAC is familiar with the constraints that limited funding can place on an organisation's operations. PIAC also appreciates the large volume of work being undertaken by the AEMC and its future work program. However, PIAC considers that modelling of the impact of a proposed rule change is a vital part of the rule change determination process.

¹⁴ AEMC, 2014, *Draft rule determination – National Electricity Amendment (Distribution Network Pricing Arrangements) Rule 2014*.

¹⁵ AEMC, above n 1, 26.

Recommendation 2

PIAC recommends that the AEMC undertake analysis of the proposed rule change's impact on the wholesale electricity market, and in particular its impact on consumers.

PIAC's proposed alternative

As highlighted above, PIAC supports the AER's analysis of the market efficiencies created by rebidding of ramp rates. Further, in a competitive market environment, profit-seeking businesses can be expected to pursue the maximum profit possible within the rules, including by gaming the system. PIAC would, therefore, like to see a higher minimum ramp rate requirement than that proposed in the Draft Determination.

Accordingly, PIAC proposes that the minimum ramp rate should be the same as the maximum rate at which a generator ramps down when it is in its interests to do so. This would allow generators to make their own judgements about the safe and efficient operation of their equipment. The ramp rate for one 12 month period could be determined by the highest rate achieved in the previous 12 months. While this would be more administratively complex, PIAC believes it would mean generators are bound by their true ramp rate capacity. PIAC expects that this, in turn would benefit the wholesale market and be in the long-term interests of consumers. PIAC is not, however, in a position to model the impact of this proposal.

Recommendation 3

PIAC recommends that the AEMC amend the National Electricity Rules to set a generators required ramp rate at the maximum level reached by that generator in the previous 12 months.

Once again, PIAC thanks the AEMC for the opportunity to provide comment on the Draft Determination. If you require any further information from PIAC in relation to this matter, please do not hesitate to contact me or Oliver Derum, Senior Policy Officer in PIAC's Energy and Water Consumers' Advocacy Program, on 02 8898 6518 or oderum@piac.asn.au.

Yours sincerely



Deirdre Moor
Manager, Policy and Programs
Public Interest Advocacy Centre

Direct phone: +61 2 8898 6508
E-mail: dmoor@piac.asn.au