## The Australia Institute

Research that matters.

Australian Energy Market Commission Level 6 201 Elizabeth Sydney NSW 2000 Submitted electronically

24 June 2016

Dear Sir/Madam,

The Australia Institute welcomes the opportunity to make this submission to the Australian Energy Market Commission (AEMC) on the proposed 5 Minute Settlement Rule Change, (ERC0201) and thanks the AEMC for agreeing to accept a late submission. The Australia Institute supports the proposed rule change. In our view, this rule change will support increased competition and sensible utilisation of emerging technologies.

The Australia Institute is a Canberra-based economics and policy research institute which publishes regularly on energy-related topics, including support for the Carbon Emissions Index (CEDEX®), copublished with pitt&sherry, which is the benchmark indicator for Australia's carbon emissions from the energy sectors.

We support the rule change as it will work to increase competition in the National Electricity Market (NEM) and ensure that wholesale prices will be lower than they would otherwise be. We note that in recent years the closure of several old coal fired generators and the withdrawal from service of some gas fired generators has reduced the number of market participants and increased ownership concentration in the NEM. The closure by Alinta of Northern power station is but the most recent, and perhaps most significant example. While we await the Australian Energy Regulator (AER) assessment of the very much higher spot prices in the NEM over recent weeks, compared with the similar period one year ago, it is hard to avoid the conclusion that contributing factors must include reduced levels of supply competition. The very high incidence of dispatch interval price spikes, as detailed in the AER's weekly market reports, is particularly noteworthy. It is logical to expect that fully rewarding demand side market participants for 5 or 10 minute entries to the market would encourage their greater participation and contribute to moderating overall price levels.

We recognise that in the short term the change is likely to impose some increase in costs on generators and other market participants. However, we note the advice of the Australian Energy Market Operator (AEMO) that in the first instance use of SCADA data will be able to support operation of 5 minute settlement with an acceptable level of accuracy and at relatively modest cost and inconvenience to market participants. We take the view that in the longer term the increased

competition that this rule change will support will work to reduce costs to consumers beyond what is passed on by current participants in the short term.

More importantly, and more certainly, the rule change is an important element of the more far-reaching changes that will be needed for the NEM to accommodate much higher levels of support from variable renewable electricity generation, supported by distributed batteries. Politically, all major Australian political parties are committed to achieving large reductions in Australia's greenhouse gas emissions. Most recognise that a large part of the reductions is bound to come from the electricity supply industry and that this will involve a much increased share supply from variable renewable generation sources, particular wind and solar photovoltaics. The Australia Institute's assessment is that, even in the absence of policy drivers, technical improvements and cost reductions will bring about this outcome. It is imperative that all parts of the industry give serious and immediate consideration of how the industry will need to be restructured to ensure that the supply of electricity remains secure and affordable with such a supply mix. There can be no doubt that greatly increased capacity to store electricity over periods from fractions of an hour to several days will be a very important part of the new system design.

The very different performance characteristics of batteries, compared with thermal generation plant, makes batteries ideally suited to meeting supply/demand imbalances over periods of less than an hour. For this reason we see the proposed rule change as an important part of the process of transforming the NEM towards a system for delivering a secure supply of low emission electricity to all consumers from a supply system using a high proportion of variable generation. As such, shifting to a 5 minute settlement interval will be essential within a few years. We can see no reason for delaying the implementation of this change.

We would be happy to expand on this submission in writing or in person at a relevant hearing. Please feel free to contact me on <a href="mailto:rod@tai.org.au">rod@tai.org.au</a> or 02 6130 0530.

Yours sincerely,

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