NEOEN



RULE CHANGE RESPONSE

Efficient Provision of Inertia



Rule Change Response: Efficient Provision of Inertia Date: 26 April 2023 Level 21, 570 George Street Sydney, NSW 2000, Australia <u>neoen.com</u>

About Neoen

Neoen is one of the world's leading and fastest-growing independent producers of exclusively renewable energy. Our total capacity in operation or under construction is currently over 6.6 GW, and we are aiming for more than 10 GW by the end of 2025.

Neoen has around 3 GW of renewable assets in operation or under construction in Australia, spanning across Wind (1090 MW), Solar (918 MW) and Energy Storage (976 MW / 1679 MWh). This represents over 3.5 billion Australian dollars in investment. Neoen intends to reach 5GW in Australia by 2025.

Importantly, Neoen is a long-term owner and operator of assets. This means our focus necessarily extends beyond short-term fixes that merely improve project development prospects and includes consideration of the implications for new and existing renewable generation and storage throughout its full lifecycle.

1 Overview

We welcome the AEMC's consideration of alternative options to address potential future inertia requirements and reiterate our view that it is not the time for an inertia market. We recommend that full and fair consideration be given to alternative procurement options before prematurely settling on a market solution. We consider that a procurement-based approach is more appropriate given the high capital, but low operating, costs associated with delivering new inertia services.

2 Introduction

The technical end state of RoCoF requirements should be considered fully as a precursor to commercial incentive formation.

In the short term, an inertia market is likely to be vulnerable to implicit cartel behaviour, and not a good signal for investment by itself. In addition, unlike FCAS, inertia rarely has a real-time opportunity cost which reduces the value of a dispatch market. Given the phaseout of coal, and high operating cost of gas, we see the issues with real-time RoCoF procurement as a short-term inconvenience.

We note the AEMC has identified that other procurement options may also represent a suitable response. In particular, we consider the current approach taken to SRAS procurement could represent an appropriate basis for design—with such an approach reflecting the low operating cost and high capital cost of new inertia solutions.

2.1 Case Study – SA Regulation FCAS

The South Australian Regulation FCAS market was subject to conscious parallelism from 2015-2017. The behaviour was precipitated by an unexpected increase in local REG requirements, and capable generators found themselves setting price at \$15,000, a price they had bid at to avoid uneconomic dispatch. After initial competition for market share collapsed prices, the three capable participants came to holding 29% of the SA REG market each, with the largest participant setting price for the remaining capacity and the clearing price for the local market. The iterative nature of this behaviour over many days suggests that it

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was not explicit cartel behaviour, but rather participants were looking at bids from previous days and individually concluding that super-profits could be shared.

3 Discussion

In the short term, an inertia market is susceptible to similar behaviour. There are few large synchronous generators, and given the binary nature of inertia dispatch, some of them are certain to offer inertia at high prices to avoid uneconomic stop-start of units. During times of inertia scarcity these generators may find their unit or portfolio in a super-profitable position and given the small number of competitors an equilibrium of sharing these profits can easily arise.

The presence of super-profits in a small market is not a good signal for investment, as seen by the many hundreds of millions in FCAS payments by windfarms, with negligible investment in physical hedging of those services by windfarm participants. The new entrant business case should consider the possibility that their entrance causes prices to collapse, or that the circumstances leading to high prices reduce in frequency, and that they may not recover capital.

In the SA example, super-profits were only disrupted by a new entrant triggered by government procurement.

Furthermore, because the regulated investment test is unable to effectively measure public benefits, a TNSP is unlikely to secure approval for a syncon, even if super-profits are evident, due to the fact that the operating costs of incumbents are negligible.

Investment is more strongly impacted by contract prices rather than spot prices directly. Therefore, contracting for inertia services is likely to solve the dispatch issues, and may also be lower cost. Only if service contracts become ineffective with respect to competition or opportunity costs in dispatch, should a market be considered.

Sincerely,

Tom Geiser, Senior Originator