4 April 2023

Benn Barr
CEO
Australian Energy Market Commission
Level 15
60 Castlereagh Street
Sydney, NSW 2000

Lodged via AEMC Website

Re: **Response to the proposed *Efficient Provision of Inertia* rule change Consultation Paper**

Dear Benn:

Tilt Renewables welcomes the opportunity to make a submission to the above Consultation Paper ("Paper") as part of our continuing engagement with the AEMC.

Tilt Renewables is committed to continue playing a lead role in accelerating Australia's transition to clean energy. Tilt Renewables is one of the largest owners and operators of wind and solar generation in Australia with 1.7 GW of renewable generation capacity across ten operating (or under construction) wind and solar farms. In addition, Tilt Renewables has a development pipeline of over 5.0 GW of wind, solar and storage projects.

Executive Summary

- Tilt Renewables opposes the rule change proposed by the Australian Energy Council primarily because it will inevitably be very expensive for consumers; in addition, it contradicts previous decisions made by Federal and State Energy Ministers at Energy Minister Meetings.
- While the current process for networks to procure inertia/system strength is flawed, there are other, simpler, and less expensive means to ensure sufficient inertia in the system.
- The proposed rule change conflicts with other rule changes and system strength procurement processes underway, and therefore, should be set aside pending finalisation of these other processes which are likely to achieve more efficient and effective outcomes. In addition, it adds further uncertainty and risk for proponents looking to make large-scale investments in generation stated as necessary in AEMO's 2022 Integrated System Plan.

Our primary objections to the proposed inertia market appears below followed by our responses in the Questions for Stakeholder Feedback Template.

Excessive Costs to Consumers

While the Paper constantly quotes from the AEC submission about their opinion about how efficient and cost effective their proposal is for consumers, it is disappointing that the AEMC offers very few comments on the other side of the argument---namely that a new inertia market is much more likely to impose huge additional costs on consumers.

First, inertia is not an optional product or service for synchronous generators; if they are generating electricity, they are producing inertia. Inertia is provided by gas and coal fired generators, as well as hydroelectric plants, at no cost to the generator, as well as, currently, no cost to consumers. Therefore, the revenue earned by generators from an inertia market will inevitably result in new, significant and incremental costs to consumers.

Second, despite claims of an efficient and competitive inertia market in the Paper, it is a fact that in most States, there are only 3-4 large thermal generators that can provide large amounts of inertia with ownership concentrated across a small group of market participants. With such little competition in each State, let alone in particular regions, the potential for non-competitive bidding---'gaming' of the inertia market will be a very real risk. Besides the inertia market windfall, these generators would also be earning money from the wholesale electricity market as they do now.

Therefore, coal (and potentially gas fired generators) will receive windfall profits from an inertia market paid for by residential and business electricity customers. The likely outcomes of such a market would be very similar to the Capacity Market rejected by Federal and State Energy Ministers last year. These outcomes are:

- Customers paying billions of dollars extra to generators to do what they were going to do anyway (generating electricity).
- As a result of pocketing billions of dollars in windfall profits, coal fired generators would likely remain in the market longer than they would otherwise thereby increasing emissions in the NEM.
- Very slow implementation due to the complexity of designing, refining and implementing a completely new market.

Energy Ministers rejected these outcomes from a Capacity Market; the AEMC should consider these undesirable, and extremely likely, outcomes in their consideration of this rule change proposal.

Risk of Delaying New Generation Investment

New generation investors and financiers need a clear and stable market framework; introduction of a completely new market that will provide very large new revenue streams to some market participants. This will likely disrupt and delay new investment decisions as investors try to understand the consequences such as coal fired power stations remaining in the market longer than anticipated.

In addition, investors need to understand the costs of services to maintain grid stability before they can make investment decisions. The cost of services such as system strength,

voltage & frequency stabilisation and inertia need to be well defined and reasonably predictable. The provision of these services should be allocated to the market proponents that are best equipped to deliver the services/investment at lowest ultimate cost to the industry, and thereby lowest cost to the consumer.

Our responses to the questions in the Stakeholder Feedback Template are an attachment to this submission.

Thank you for the opportunity to comment on the Paper, and we look forward to continuing discussions with the AEMC on these issues. Please feel free to contact jonathan.upson@tiltrenewables.com should you have any questions or wish to discuss any aspect of this submission.

Yours Sincerely,

Jonathan Upson

Head of Policy & Regulatory Affairs

Tilt Renewables

ERC0339: Efficient provision of inertia

STAKEHOLDER FEEDBACK TEMPLATE

The template below has been developed to enable stakeholders to provide their feedback on the questions posed in the consultation paper and any other issues that they would like to provide feedback on. The AEMC encourages stakeholders to use this template to assist it to consider the views expressed by stakeholders on each issue. Stakeholders should not feel obliged to answer each question, but rather address those issues of particular interest or concern. Further context for the questions can be found in the consultation paper.

SUBMITTER DETAILS

ORGANISATION:	Tilt Renewables
CONTACT NAME:	Jonathan Upson
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PHONE:	0400 501 676
DATE	31/3/2023

PROJECT DETAILS

NAME OF RULE CHANGE:	Efficient provision of inertia
PROJECT CODE:	ERC0339
PROPONENT:	Australian Energy Council
SUBMISSION DUE DATE:	Friday 31 March 2023

CHAPTER 1 – THE CONTEXT FOR THIS RULE CHANGE REQUEST

Comments	

CHAPTER 2 – PROBLEM DEFINITION

1. Technical information on inertia	Do stakeholders consider there is any additional technical information required to assess the challenges and long-term system requirements related to inertia beyond what AEMO is doing? Do stakeholders have their own technical information or studies that can be shared to help answer these questions?

		Tilt Renewables considers that the ability and conditions by which grid forming inverters and Battery Energy Storage Systems (BESS) would quality for an inertia (or system strength) market should be finalised before any such market is considered, let alone implemented. *The alternative of buying 1950's era technology (i.e. Synchronous Condensers) to provide inertia is not a cost effective (or modern) solution.*
2.	Inertia procurement and allocation in real-time	What are stakeholders' views on the merits (or not) of defining and procuring inertia requirements dynamically in operational timeframes, as opposed to the current approach (that is, annual assessments that inform longer-term inertia procurement to specified minimum levels)? *Tilt Renewables does not support procuring inertia in operational timeframes.*
3.	Investment signals for inertia	What are stakeholders' views on the adequacy of the current inertia framework in providing long-term investment signals and the need for reform? *The current process for NSPs to procure inertia/system strength is far from ideal. The NSP has the choice of pursuing an RIT-T which will take many years to complete…before the NSP can procure any remediation equipment. Alternately, the NSP can let the inertia/system strength in their network degrade to the point where AEMO declares an immediate system strength shortfall at which point the NSP can start to tender for equipment to rectify the shortfall without the need for an RIT-T. This approach, which happened in Western Victorian in December 2019, is obviously risky for system security.* *There needs to be process where NSPs can tender for needed inertia/system strength ahead of the actual shortfall without going through a RIT-T. Competitive tendering for the needed inertia will enable a far more efficient outcome for consumers than an inertia market.*

CHAPTER 3 – THE AEC'S INERTIA SPOT MARKET PROPOSAL AND ALTERNATIVE OPTIONS

4.	Will the AEC's proposed solution best address the problems raised?	What are stakeholders' views on the AEC's proposed solution? Is it the best solution to improve the: • efficiency of inertia provision in the operational timeframe? • efficiency of inertia provision in the investment timeframe? • transparency of the power system's inertia requirements? *No, Tilt Renewables considers the AEC's proposed solution to be far from the best solution for the reasons cited earlier.*

5.	Alternative options	Do stakeholders consider that any of these options address the problems identified (see Chapter 3) more effectively than the proposed solution of an inertia spot market? Are there any additional options not identified in this consultation paper that should be investigated? *See response to question 3.*
6.	Implementation consideration	What are stakeholders' views on the implementation considerations identified?

CHAPTER 4 – MAKING OUR DECISION

7.	Assessment Framework	Do you agree with the proposed assessment framework? Are there additional principles that the Commission should take into account or principles included here that are not relevant? *We consider the assessment framework to have one important omission. Energy Ministers agreed in August of last year to incorporate emission reductions as an objective in the NEO and the Department released draft wording of the NEO changes in December.* *While not incorporated as yet, it is almost certain to occur. Therefore, the assessment framework should consider the likely impact on emissions. As mentioned earlier, as coal fired generators will be receiving windfall profits for inertia, it is likely some coal generators would remain in the market longer than they would otherwise, thereby contradicting the new emission reduction objective to be incorporated in the NEO.*

OTHER COMMENTS

8.	Additional comments	