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SENT VIA EMAIL

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Australian Energy Market Commission

**Response to AEMC's Consultation Paper: Distributed Energy Resources Integration - Updating Regulatory Arrangements - 30<sup>th</sup> July 2020**

Diamond Energy is an active retail and generation NEM Market Participant, and is the Registered Participant for a number of renewable generators, including embedded generators as well as retailing for many "presumer" customers, across the NEM.

We welcome the opportunity to provide a response to the AEMC's consultation paper released on the 30<sup>th</sup> June 2020, and to partake in the consult in discussion with the AEMC regarding these issues. After a review of the paper, and reflection upon the broader operations and visions for the NEM, we are wanting to raise a few items for the AEMC's consideration.

Overall, the consultation paper proposes a radical shift in the very construct of the Australian electricity market, primarily because if the changes were allowed it would likely result in "*double taxation*", the "*mis-allocation of investments*" and "*increased losses*" of electricity.

The design and construct of the market is a one-way approach in which generators are enabled to connect and sell their energy produced into the system at a zero "transaction cost" while the consumers via the AER's approved allocation of transmission and distribution costs are allocated (via tariffs) the "cost" of the transmission and distribution system.

A "double taxation" would occur primarily in the following circumstances:

Users who have invested in assets to reduce their consumption from the grid could now be charged on-going fees, such as;

- o a daily export service fee, i.e. \$/day if you have a generator or battery system , or
- o a variable export fee, i.e. \$/Kwh exported
- o a demandexport access fee, i.e.\$ KW peak export/30 min

Users, who have invested, or are considering invest in generation and have paid historical tariffs, would be charge new "export" fees but not be credited for their implicit investment distribution in earlier years, and

Users of the system that store electricity, purchased from the grid ...and re-export it, would be charged double distribution fees.

Additionally, because electricity is lost (~1s%) from line losses etc, implicitly generation near to consumption delivers clear savings, the proposed rule changes would undermine and create a disincentive structure to reduce system losses. The approach is at odds with the ESB's "Post-2025 market design" in which they state "mix of resources is required to deliver electricity at the lowest overall cost to customers"

Further this series of proposed rule changes is being misclassified as "updating regulatory arrangements" it should be better titled as "re-writing distributor's incentives", because, if this rule change is allowed, it will fundamentally re-write the very basis of the Australian electricity market, it would result in the mis-allocation of generation/ batteries away from areas close to consumption (with reduced losses) and lock customers into escalating grid dependence.

The potential double taxation, increased losses and mis-allocation is identified by the ESB in their recent *"Post-2025 market design"* for *"Two sided markets"* in which the ESB identifies *"owners of DER"* stating that *"making demand more flexible can support lower investment requirements and create operational efficiencies that benefit all consumers."* The ESB's goal is clear *"... seek to provide opportunities for DER to participate where possible and efficient - making it easier for DER to provide services into all markets, and for owners to get value for their investments."*

This potential rule change would dramatically diminish the ESB's pursuit for DER and two sided markets and by doing so the value to the end customer and the broader network that can be created by DER users.

The proposed rule change deflects from a customer-focused energy market proposed as part of the Post-2025 market design work by the ESB. The proposal is a blunt instrument to continue a DNSP driven market design, in which customers pay for network augmentation to meet peak demand.

New enabling technologies allocate the energy where it receives its highest value. Pricing structures with an aggregator/retailer component provide more flexibility, allocate energy to its highest value use, and allow for the network to be used more efficiently. An export tariff would reduce the value of the following market opportunities:

Aggregators and third-party providers of active DER participation services, particularly those that can provide a reliable control of distributed PV capability at low cost to customers.

Load and storage flexibility, demand arbitrage, tariff topping and additional grid services.

Fast active power response (FAPR) (sub-second response), with anticipated development of market frameworks that reward this capability.

#### 1) NER clause 6.1.4. - modifications

This clause is vital to the principles of the Australian electricity grid, it is the essence of the NER that avoids "double taxation" and enables investment (allocation of resources) aligned to minimising losses across the network.

Any change must be carefully considered, as the proposal to remove this clause will have dire and perverse effects.

As an example, the NER clause clearly identifies it applies to the "Distribution Network User". While the consultation paper uses the loose term "customer", it must be clearly explained that a sizeable gap exists between the term "User" and "customer".

The clause impacts more than just the "Market Customers" connected to the relevant distribution network. The term "Distributed Network User" includes "Embedded Generators" and "Second-Tier Customers" in addition to "Market Customers".

***It is the Embedded Generators" and HSecond-Tier Customers" that are the flotsam in this rule change whirlpool. Without careful attention, they risk being skimmed over ...and disappearing into the vortex created by this plug hole.***



We note that SAPN's proposal does identify the need for a "new rule" to maintain and protect the existing NER rights for "large embedded generator customers , who are stand-alone generators" ....however it is important that the current definition of "Embedded Generators" included via Clause 6.1.4 is maintained, and is not watered down if a "new rule" is enacted.

DER can provide material benefits to the network, if managed effectively. Removing clause 6.1.4 will reduce the value of these benefits and fails to recognise the broader benefits that optimisation of embedded generation and DER can provide to the grid.

The existing regulatory framework is sufficiently flexible to support efforts to improve investment and operation of DER to promote efficient network integration, reducing the need for costly network augmentation to accommodate DER.

Accommodating this integration should be an accelerated rollout of smart metering to enable these new technologies and the pursued of a flexible RIT-D process to encourage DNSPs to invest in innovation that enables more efficient DER operation to optimise network benefits.

Please do not hesitate to contact me if you wish to discuss the above or related matters further as required.

Regards

A handwritten signature in blue ink, appearing to read "Tony Sennitt".

Tony Sennitt  
Managing Director | Diamond Energy

A handwritten signature in black ink, appearing to read "Linda O'Mullane".

Linda O'Mullane  
Co-Founder | Hub Energy