

Mr John Pierce Australian Energy Market Commission Level 6, 201 Elizabeth Street Sydney NSW 2000 Lodged via www.aemc.gov.au

Fridey, 20 January 2017

Dear Mr Pierce,

RE: Distribution Market Model Approach Paper (ref SEA0004)

ENGIE appreciates the opportunity to comment on the Australian Energy Market Commission (AEMC) Distribution Market Model Approach Paper (Approach Paper).

ENGIE is a global energy operator in the businesses of electricity, natural gas and energy services. ENGIE is the number one independent power producer in the world with 115.3 GW of installed power-production capacity, 19 GW of which is renewable. ENGIE employs 1,800 people in Australia and provides generating capacity in Victoria, South Australia and Western Australia. ENGIE also owns Simply Energy which provides electricity and gas to more than 600,000 retail customer accounts across Victoria, South Australia, New South Wales and Queensland.

As outlined in the approach paper, the recent and expected accelerating growth in distributed energy resources (DER) presents both challenges and opportunities for distribution network businesses. ENGIE supports the AEMC in carrying out this important work to ensure that as DER develops and evolves, it is appropriately incorporated into the regulatory and operational frameworks of the energy industry.

ENGIE acknowledges that many of the issues that are raised by the growth in DER have the potential to impact on distribution businesses, nonetheless, it is important that we do not consider all of these issues through the prism of the distribution businesses impact alone. In order to achieve the most cost effective outcomes from the end user perspective, it will be important that these issues are considered from a wide perspective, taking into account the requirement of both the competitive and the regulated components of the electricity industry.

The need to consider DER from a holistic perspective is reflected on page i of the executive summary in the approach paper which includes the statement "there is a need to facilitate cooperation between various parts of the supply chain to maximise the value of the multiple services that can be provided by distributed energy resources".

INTERNATIONAL POWER (AUSTRALIA) PTY LTD ABN 59 092 560 793 is part of a joint venture between ENGIE S.A. and Mitsui & Co., Ltd.



ENGIE agrees with this statement, and by way of example, points to the recent discussions about the need to encourage frequency control ancillary services from new technologies including aggregated DER's.

Whist ENGIE agrees that consideration needs to be given to possible regulatory changes in response to the issues being presented by the proliferation in DER, the level of uncertainty regarding the capabilities and timing of future technologies as well as the wide range of possible customer responses suggests that a cautious, incremental approach to regulatory change would be prudent. This sentiment is supported by the statement in the approach paper regarding uncertainty around the extent to which DER continues to grow versus growth in grid scale renewable energy.

If for example, substantial changes were made to rules and regulations based on a single current expectation of the future, there is a high likelihood that these predictions will prove to be wrong, and that the regulatory changes made were poorly conceived. In this context, it would be inappropriate to establish a firm "transformation roadmap" as proposed by the Energy Networks Association Electricity Network Transformation Roadmap¹.

ENGIE is supportive of an evolutionary process which is based on iterative review stages carried out at appropriate point in time as technology, customer behaviour and other relevant changes manifest and the regulatory needs become clearer. If on the other hand, we dive straight in based on our current assumptions, it is not clear exactly what problem we are trying to solve, which is a problematic starting point for important regulatory change.

ENGIE is not yet convinced that the growth in DER requires distribution systems to "be more actively managed, like transmission systems are currently", as suggested in the approach paper. Distribution networks currently plan and operate their networks based on measurement of customer behaviour, and forecast models of customers expected future behaviour. Although DER will impose new forms of customer behaviour, networks will still be able to function based on observation and forecasting, balanced by appropriate responses in both the operational and planning timeframes.

ENGIE recognises that as customer behaviours and use of DER changes, it is likely that the distribution networks will need to make some changes in response. Some of these changes might be operational (such as use of reactive plant, transformer tap changes, voltage regulator settings and the like) or planning and investment changes (such as upgrade feeders and transformers, or installation of new reactive plant).

The important point to note is that substantial changes in aggregate customer behaviour are likely to occur incrementally over a period of time, providing an opportunity for distribution networks to recognise and respond to the changing behaviour. Whilst an individual customer behaviour might change suddenly, this is not significant compared to the overall distribution network capability. It is only when a critical mass of customers all change their behaviour in a certain manner that the network needs to respond.

The time frame for changes that would require a distribution network operator to respond are likely to be months or years, and not hours or days. In other words, it is not likely that a distribution network operator would need to "actively" or "dynamically" respond to changes in customer behaviour.

¹ See Electricity Network Transformation Roadmap; available at <u>http://www.energynetworks.com.au/electricity-network-transformation-roadmap</u>.



In consideration of the above point, it is useful to draw an analogy with the rapid increase in the penetration of household air conditioners in Australia, which increased from around 35 percent in 1999 to 74 percent in 2015. Although the rapid uptake of household air conditioners required network businesses in some areas to make operational and / or planning changes, this was nevertheless able to be managed with the current regulatory processes and timeframes for networks, and did not require any new active or dynamic network response.

The approach paper suggests that in the longer term, distribution businesses may need to be enabled to provide market platforms that incentivise efficient integration of DER. ENGIE agrees that a platform of some sort will be desirable to facilitate trade between providers and users of DER services. ENGIE does not agree however that the distribution businesses are the best party to provide such a platform, given that distribution businesses are a potential buyer of DER services.

Whilst ENGIE does agree that distribution businesses should be able to purchase DER services where they can be shown to be in lieu of direct network investment, it is important that such purchases are subject to competitive forces, and that distribution businesses are not placed in the position of being the monopsony purchaser. A potential provider of DER services should be able to weigh up the options of selling to the distribution businesses, or to another purchaser that utilises the service for other markets such as energy or ancillary services. Ensuring this competitive tension is critical to achieving efficient outcomes for end use customers, which must be the primary objective.

In any case, the sale and purchase of DER services, whether for a distribution business or other market use, needs to be subject to a transparent process, to ensure confidence across potential buyers and sellers. ENGIE would prefer an arrangement where the market platform is independently provided (eg by AEMO), where potential sellers and buyers of DER services can trade in an open and transparent manner.

ENGIE looks forward to working closely with the AEMC on this project and trusts that the comments provided in this response are of assistance to the AEMC in its deliberations. Should you wish to discuss any aspects of this submission, please do not hesitate to contact me on, telephone, 03 9617 8331.

Yours sincerely,

l Dagre.

Chris Deague Wholesale Regulations Manager