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Moving to a Two-Sided Market  
Energy Security Board

By email: [info@esb.org.au](mailto:info@esb.org.au)

### **Essential Energy's response to Moving to a Two-Sided Market issues paper**

Essential Energy welcomes the opportunity to provide a submission to the Energy Security Board (ESB) *Moving to a Two-Sided Market* issues paper. Energy Networks Australia has also made a submission on this issue which Essential Energy supports.

The ESB's consideration of how the NEM needs to evolve to function as a true two-sided market appears to be a natural and sensible part of the overall market development agenda. However, like all changes to existing frameworks, consideration of the costs and benefits of any changes including how these changes improve customer outcomes, must be front and centre. To this point, careful consideration of the future role of the distribution network in a world with high penetration of distributed energy resources (DER) is critical. Having a framework in place that allows for effective optimisation of these resources will require new market arrangements and rules. Further, effective utilisation of distribution level resources has the potential to defer or eliminate the need for future transmission or system security investments. While the focus of much current market development is on transmission level issues, greater consideration needs to be given to distribution level issues if we are to meet our customer and system security objectives while minimising whole of system costs.

Any co-ordination and optimisation on a system-wide basis to improve the efficacy of both the demand and supply side, will require some fundamental improvements in network data and capabilities. These capabilities include basic visibility into what is connected to the low voltage network, what energy is flowing and where constraints are occurring. Some of this capability build would require network investment, but a lot of this data and capability could be accessed through partnerships where infrastructure is already deployed. To effectively facilitate the multitude of players contemplated in a true two-sided market, focus would also be required on creating common communication and data protocols allowing access to distribution and transmission level markets.

Essential Energy appreciates the ESB's consideration of the Open Energy Networks (OpEN) project as a key program that is already underway and examining issues regarding the integration of DER into the market. This project has examined a series of 'no regrets' actions that would be required to enable a Distribution System Operator (DSO) market. These actions will provide benefits to customers no matter what the structure of a future DSO world looks like. The no regrets actions generally relate to gaining greater visibility and understanding of the low voltage network. Once visibility is improved Distribution Network Service Providers (DNSPs) will be able to define limits to network capacity in a more dynamic way. This will ensure that network assets are utilised more efficiently, that customer needs can be understood and supported and outcomes for broader system security more effectively delivered.

In relation to some of the specific questions in the issues paper, in principle, locational marginal pricing would help manage congestion in distribution networks. To date the focus of this has been at the

transmission level. Essential Energy will be in a better position to assess the merits of locational marginal pricing through its engagement in the Distributed Energy Integration Program (DEIP), and once the Access and Pricing Working Group has published its findings.

Tariff reform is obviously a key enabler for dynamic network operation and a range of other network and consumer benefits. The drivers of costs for distribution networks are changing as the way our customers use the network changes. For example, the proliferation of DER on our network may require upgrades to the network that are unrelated to increases in peak demand.

There is currently no mechanism available to distribution networks to appropriately allocate the costs imposed by solar exports, for example. This is because clause 6.1.4 of the National Electricity Rules (NER), prohibits DNSPs from charging use of system charges for the export of electricity generated by the user into the distribution network. The issues paper suggests the possibility of using a subscription-based charging methodology, similar to that used by internet service providers. Essential Energy supports further exploration of this approach.

Essential Energy supports a thorough examination of the services provided by the distribution network and how we can appropriately value these services. This may mean rewarding customers where their DER contributes to the network (for example, by reducing peak demand) but also charging customers for the costs imposed by increased solar penetration on the network (for example, by causing voltage issues).

If you have any questions in relation to this submission, please contact myself on 0406 534 682 or Natalie Lindsay, Head of Regulatory Affairs on 02 6589 8419 or [natalie.lindsay@essentialenergy.com.au](mailto:natalie.lindsay@essentialenergy.com.au).

Yours sincerely



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