

10 January 2020

Mr Arek Gulbenkoglu

A/General Manager, Distribution

Australian Energy Regulator GPO Box
520 Melbourne, VIC, 3001

Dear Mr Arek,

## **AER Consultation Paper - Assessing DER integration expenditure**

The Intellihub Group welcomes the opportunity to provide feedback to the Australian Energy Regulator's consultation paper on Assessing DER integration expenditure.

Intellihub Group support the AER assessing DER integration expenditure proposed by DNSP as we believe that consumers should be encouraged to contribute to the overall sustainable energy objective and not be deterred by potential increased costs incurred by DNSPs that maybe passed on.

In regard to the 10 questions listed by the AER in the consultation paper, Intellihub has limited responses as below.

**Question 1 – Information provision –** What information is reasonable and necessary in identifying and evidencing the impact of DER on the demand for standard control services and hence on maintaining the quality, reliability or security of supply of standard control services? No specific position.

**Question 2 – Options analysis –** What range of options should DNSPs consider for DER related investments? Does the Regulatory Investment Test – Distribution provide the appropriate starting point for this analysis? No specific position.

**Question 3 – Sampling and modelling –** Electricity networks have utilised sampling and modelling techniques to forecast energy demand and consumption for decades. These processes have proven affective for large cohorts of consumers where diversified behaviours can be predicted with sufficient accuracy. Is it reasonable to assume that sampling and modelling techniques will play a part in developing dynamic models of the electricity networks? No specific position.

Question 4 – Non-network options – Distributed energy resources are, by definition, located at the end of the electricity network. Typically, networks have less visibility of this part of the network. What approaches or information is reasonable to assess whether DNSPs have considered purchasing the necessary information from metering or DER data providers rather than building their own assets and systems? Contestable Meter Providers have reached out to the ENA requesting a template in reference to additional metering data that DNSPs would require in order to best manage DER and assist in running their network in general. To date there has been no response and Intellihub suggests that this is revisited and dialogue between contestable meter providers and DNSPs be further encouraged. The data required by DNSPs already exists and can be captured by smart meters already installed by contestable meter providers. Having DNSPs build their own assets and systems is a dilution of Power Of Choice and would add significant unnecessary costs to industry. There would also be logistical challenges coupled with this due to lack of space on existing customers meter panels and the inconvenience of the customer coming off supply again to install any said network device.

**Question 5 – Policy and standards –** The optimisation of DER can be improved through many different approaches. Factors such as tariff reform, connection standards, technical standards, energy efficiency standards, etc. can greatly impact the way that DER operates on the network and impact on network performance. How should these options be integrated with the development of network DER proposals? ARENA & AEMO have a program of work, with industry on how to integrate Electric Vehicles to the grid. There would be significant learnings from this that could further inform on this.

**Question 6 - Cost benefit analysis –** Project justifications will require detailed analysis on the costs and benefits of each option. Many of these benefits may be external to the DNSP's cost base and may accrue directly to DER users. What level of analysis is required? No specific position.

**Question 7 – Customer Benefit –** With DER being able to provide services across the electricity supply chain, how should DNSPs identify and value customer benefits? These benefits can include reliability outcomes, increased export potential, greater access to energy markets, access to network support services, etc. Should a common approach to valuing consumer exported electricity be established? No specific position.

**Question 8 – Options value –** Noting the technological rate of change and the typical asset life of 65 years of many network assets, it is important to test whether current research could provide a more efficient option in the near future. Should an assessment of emerging alternative approaches be a requirement for DER forecast expenditure? Should there be an 'options value' placed on this? No specific position.

**Question 9 – Shared learning and systems –** The development of common platforms, communication standards and shared systems may reduce the overall cost and complexity of facilitating DER. Should DNSPs need to show how they have considered options that leverage shared learning, common standards and common systems to provide efficient solutions, and that they have consulted and implemented learnings from prior works and trials across the NEM? Yes. Intellihub believes these learnings and evidence of consultation should be shared with industry.

Question 10 – Rail gauge outcomes – as a corollary to the above question, it will be increasingly important for the industry to work together to provide customer outcomes that are consistent across the NEM (or with international standards if applicable). What approaches or information is reasonable to show that any DNSP-specific communication protocols, interfaces, connection standards, etc. will not lead to increased cost and complexity for consumers and industry providers? ARENA & AEMO have a program of work, with industry on how to integrate Electric Vehicles to the grid. There would be significant learnings from this that could further inform on this.

Intellihub Group would welcome any further discussion in relation to this submission. If you have any questions or wish for further discussion, please contact Robert Lo Giudice on
or at
Sincerely,

## **Robert Lo Giudice**

Manager, Metering Coordinator & Operations