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Submission to True Value of Distributed Generation Inquiry – Stage 2 Draft Report

Jemena Electricity Networks Vic Ltd (**JEN**) welcomes the opportunity to respond to the True Value of Distributed Generation Inquiry – Stage 2 Draft Report.

JEN agrees with the Essential Services Commission (**ESC**) findings in the draft report that the network value distributed generation provides is highly variable—that is, it varies by location, time of day, year to year cycles and asset life cycle—and because of the characteristics of network value, a broad base network feed-in-tariff is not an appropriate mechanism to support participation of small-scale distributed generation in a market for grid services¹.

The report notes the mechanisms that already exist in the national energy framework for remunerating grid services do not lend themselves to remunerating small-scale providers of these services². In this regard, JEN considers the recent Australian Energy Market Commission (**AEMC**) final determination³ (**determination**) on Local Generation Network Credits rule change request provides significant improvements to existing mechanism. The final determination requires distribution network service providers (**DNSP**) to publish relevant information that would support participation of small-scale grid service providers in the market for grid services. JEN accepts the findings of the AEMC's determination and agrees that it is an appropriate mechanism to address localised small and micro generation economic signalling.

The ESC has posed several questions in the draft report to identify principles and mechanisms that would most effectively support a market for grid services provided by small-scale distributed generation. Our responses to the questions are set out in **Attachment 1**.

Energy Networks Association has consulted JEN on the issues presented in the draft report and we support ENA's submission on this report.

¹ ESCV, True Value of distributed Generation – Stage 2 Report, October 2016, p XXIX.

² Ibid, p III.

³ AEMC Final Determination on Local Generation Network Credits rule change proposal, 8 December 2016.

If you have questions in relation to the information provided, please contact Siva Moorthy on .

Yours sincerely

Matthew Serpell
Manager Asset Regulation & Strategy

Attachment 1

Responses to questions in the Stage 2 Draft Report on True Value of Distributed Generation Inquiry

Questions	Responses
<p>1. What are the appropriate means to measure the effectiveness of the market for grid services in Victoria?</p>	<p>It is noteworthy the AEMC made a final determination on 8 December 2016 on Local Generation Network Credits rule change proposal. The final rule requires DNSPs to publish a ‘system limitation report’ include information on:</p> <ul style="list-style-type: none">• location of network assets where a system limitation or projected system limitation has been identified during the forward planning period;• the estimated timing of the system limitation or projected system limitation;• the proposed solution to remedy the system limitation;• the estimated capital and operating costs of the proposed solution; and• the amount by which peak demand at the location of the system limitation or projected system limitation would need to be reduced in order to defer the proposed solution, and the dollar value to the DNSP of each year of deferral.⁴ <p>JEN considers the AEMC rule changes provide adequate means to measure the effectiveness of the market for grid services.</p>
<p>2. What are the appropriate principles to guide the ongoing development of the market for grid services in Victoria, including any regulatory interventions that might be considered?</p>	<p>JEN considers the appropriate principles to guide the ongoing development of the market for grid services are:</p> <ul style="list-style-type: none">• Grid services should be non-discriminatory (as there are other grid services such as demand response)• The most efficient solution should be deployed to manage a network constraint (which is already reflected in the National Electricity Rules).

⁴ AEMC Final Determination on Local Generation Network Credits rule change proposal, 8 December 2016.

- The grid services which can be provided by small-scale intermittent source distributed generation (e.g. solar PV) should not be considered in isolation from the challenges increased penetration of distributed generation presents to DNSPs (e.g. reverse flow particularly in low voltage network). While the emergence of technologies such as energy storage and smart inverters may provide appropriate solutions to these issues, we are unlikely to see rapid uptake of these technologies until they become economic for small-scale distributed generation owners to purchase and install.

JEN believes there is no need for any further regulator interventions. The national framework already provides:

- sufficient incentives for network providers to operate efficiently through capital expenditure sharing scheme (CESS); and
- allowances for DNSPs to peruse non-network solutions e.g. DMIS, DMIA.

Additionally, DNSPs are required to:

- implement cost-reflective distribution network tariffs;
- make network support payments (noting the overall objective for efficient investment);
- publish distribution annual planning reports including forecasts of emerging network constraints; and
- publish a demand-side engagement strategy.

3. What opportunities or circumstances exist in Victoria to support the emergence of a well-functioning market for grid services?

Victorian distributors have installed smart meters in more than 98% of residential and small business premises. These smart meters enable distributors to effectively measure distributed generation exports to the grid and demand responses.

JEN considers these smart meters, together with the requirements on DNSP to publish relevant information (see response to question 1), places Victoria in a relatively good position (compared to other jurisdictions) to support the emergence

	of an effective market for grid services.
4. What are the practical measures that might be considered to enable small-scale grid service providers to participate in the market for grid services to the extent they are capable of delivering value in that market?	JEN's experience with managing network problems indicates that network solutions still offer the most cost efficient solution to manage network constraints. We believe the rule change referred to in response to question 1 would provide are the appropriate practical measures to enable small-scale grid service providers to participate in the market for grid services.
5. Is there additional data and analyses that the Commission should consider in assessing the environmental and social benefits of distributed generation in respect of electricity networks, specifically in terms of identifying, quantifying and valuing those benefits of distributed generation?	JEN is not aware of any data or analysis that may assist ESC in assessing the environmental and social benefits.