

S&C ELECTRIC COMPANY

Excellence Through Innovation

141 Osborne Street South Yarra VIC 3141 Australia ABN 62 164 451 914

Mr. David Young Director Energy Essential Services Commission 2 Lonsdale Street Melbourne Victoria 3000

Our Ref: JC 2017-031

24 August 2017

Dear Mr. Young,

S&C Electric Company comments on the Draft Decision Deemed Distribution Contract Variations

S&C Electric Company welcomes the opportunity to provide comments on the draft decision covering Deemed Distribution Contracts.

S&C Electric Company has been supporting the operation of electricity utilities in Australia for over 60 years, while S&C Electric Company in the USA has been supporting the delivery of secure electricity systems for over 100 years. S&C Electric Company not only supports "wires and poles" activities but has delivered over 8 GW wind and over 1 GW of solar globally. S&C Electric Company has been actively engaged in deploying Battery Energy Storage Systems for over 10 years, supporting a full range of business models and using a range of battery technologies, at the kW and MW scale, and currently has 76 MW/189 MWh in operation. In Australia, S&C projects include the Ergon Grid Utility Support System in Queensland, which reduces peak loads and provides voltage support on rural Single Wire Earth Return lines and the 2 MW battery for PowerCor in Victoria.

S&C Electric are particularly interested in facilitating the development of markets and standards that deliver secure, low carbon and low cost networks and would be very happy to provide further support to Essential Services Commission of Victoria on the treatment and potential of these technologies.

Yours Sincerely

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Introduction:

Distribution network connected renewable energy assets such as rooftop solar PV panels and behind-themeter batteries have an impact on the ability of the Distribution Network Service Provider (DNSP) to deliver a secure and safe supply of electricity.

Further, the work of the Australian Energy Market Operator and the Australian Energy Market Commission envisages a future where such distribution network connected energy assets deliver services to the wider energy system. This engagement of distributed energy resources is further explored in the CSIRO-Energy Networks of Australia "Electricity Network Transformation Roadmap".¹

Comments:

The draft decision related to the Deemed Distribution Contracts for DNSPs in Victoria is entirely consistent with other initiatives in the electricity space in Australia.

We are particularly strongly supportive of the obligations to be placed on customers to apply to the DNSP before connecting Solar PV panels and/or battery storage.

In order to deliver a stable network effectively and at lowest cost to the end customer, a DNSP must have visibility of the generation, large loads and batteries connected to its network. We would suggest that customers should be obliged to notify the DNSP if they plan to connect air conditioning systems (both heat and cooling) and electric vehicles.

Having exact knowledge of the loads and generation connected to their networks will allow a DNSP to better forecast and manage both load and export. This will be increasingly important should these same assets provide paid-for services to support either the distribution or transmission system operation. No asset should be able to provide such a paid-for service if it is not registered with the DNSP.

The draft decision by the Essential Services Commission is entirely consistent with the recent decision by the COAG Energy Council to deliver a national register of battery installations in Australia and subsequent proposed rule changes to support the delivery of that register by the Australian Energy Market Operator. It is also consistent with the work currently being undertaken by the Energy Networks of Australia and supported by the Australian Energy Market Commission, to create nationally consistent connection requirements for renewable energy resources².

¹ CSIRO-Energy Networks of Australia, April 2017,: <u>http://www.energynetworks.com.au/sites/default/files/entr_final_report_web.pdf</u>. ² AEMC, August 2017, Final Distribution Market Model Report: <u>http://www.aemc.gov.au/getattachment/fcde7ff0-bf70-4d3f-bb09-610ecb59556b/Final-report.aspx</u>.