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5 November 2018

Ms Jessica Shaw
Chair
Economics and Industry Standing Committee
Level 1, 11 Harvest Terrace
WEST PERTH WA 6005

Submitted via email: laeisc@parliament.wa.gov.au

Dear Ms Shaw

Re: Committee Inquiry into the electricity microgrids in Western Australia

I would like to extend my thanks for the opportunity for ATCO to present before the Economics and Industry Standing Committee (the Committee) regarding the Committee's inquiry into microgrids and associated technologies in Western Australia (WA). This letter provides responses to questions taken on notice together with additional comments for the Committee's consideration. This submission is in addition to comments made by ATCO in letters dated 13 April 2018 and 8 October 2018, and does not intend to replace those submissions.

Overarching remarks

ATCO would like to emphasise the following key points:

- ATCO welcomes the opportunity to continue to work with and provide information to Government and policy makers to assist in transitioning regulatory frameworks to keep pace with the current rate of change and ensure the market continues to innovate.
- Ancillary services, specifically load following and spinning reserve, sought by AEMO participants from WA market are at a minimum contract quantity of 8MW from any one site, which inhibits Source Energy Co from providing such services. To overcome this, ATCO recommends that, subject to a successful trial, the minimum contract requirement should be amended to 1MW.
- ATCO supports the passing of the *Strata Titles Amendment Bill 2018 (WA)* on 1 November by the WA Parliament and supports the provisions of the forthcoming *Community Titles Bill 2018 (WA)* to encourage innovation for sustainable infrastructure.

Questions taken on notice

The following provides ATCO's formal response to the two questions taken on notice during ATCO's appearance before the Committee on 10 October 2018.

Question one:

The way in which those ancillary services could be monetised and the capacity of microgrid gas turbines to provide those services, either on a localised basis within a particular geographical, or theoretically island-able area or, more broadly to the network?

Capacity in ATCO's gas network, microgrid gas turbines (GTs) and capacity from distributed energy resources (DERs) from embedded networks could be used to supply ancillary services to the wholesale electricity market (WEM) in WA. ATCO considers the major barrier to monetising these services is the minimum contract quantity that AEMO will accept. By way of one example, in May 2018 AEMO invited tenders for spinning reserve ancillary services for the WEM. Specifically, AEMO was seeking tenders for a total of 26MW in minimum contract quantities of 8MW. ATCO considers the challenge for microgrids and embedded networks is that the microgrid GTs, co-generation facilities, solar photovoltaic (PV) systems and/or lithium-ion batteries typically range from as little as 10kW to under 1MW per site. As such, microgrids and embedded networks will likely be unable to meet the minimum contract quantity of 8MW from any one site.

ATCO recognises that, in practice, AEMO is not set up to deal with a very large volume of small market participants and the need for a practical minimum contract quantity limit. ATCO notes that AEMO has released a specification for DERs to supply contingency Frequency Control Ancillary Services (FCAS) and is looking at a trial for the provision of ancillary services by leveraging new technologies to orchestrate DERs from multiple sites into 1MW minimum contract quantities within the east coast National Electricity Market. ATCO considers an equivalent trial on the WEM will be of benefit to all market participants.

ATCO believes that there is latent capacity from DERs and microgrid GTs in the WEM, which cannot be utilised to provide ancillary services due to existing market rules. As a result, DER and microgrid service operators are not able to monetise ancillary services streams. Additionally, WEM ancillary services prices are likely to be lower than they would otherwise be if the market rules were amended to allow greater competition from a large pool of service providers.

Question two:

Particular recommendations for the Committee to make on the role of ancillary services, in particular ATCO's gas network?

Following on from the comments made above, ATCO recommendations to the Committee are as follows:

1. Work with AEMO to trial the provision of ancillary services by leveraging new technologies to orchestrate DERs and microgrid GTs from multiple sites into 1MW minimum contract quantities to take advantage of the increasing capacity of distributed resource in the WEM and create greater competition in the provision of ancillary services, which will reduce prices and benefit consumers.
2. Subject to a successful trial, facilitate changing the rules to allow the aggregation of DERs and microgrid GTs from multiple sites into smaller minimum contract quantities of 1MW for the provision of ancillary services.

Source Energy Co

ATCO would like to make additional comments as an extension to those made before the Committee with respect to Source Energy Co (Source), these are discussed in turn below.

Price differential

Source entered the market to deliver competitively priced energy supply options to West Australian electricity customers. With that, Source is proud to offer its customers a lower energy (usage) and supply charge of around four per cent and one per cent, respectively, when compared with Synergy's

A1 tariff. In the interests of transparency, Source publishes its tariffs online for customer's information and consideration.¹

Customer protection

ATCO and Source consider customer protection a key part to a successful business model; as such Source considers its customers warrant the same protections and rights being available to them as provided by other energy service providers. As per the *Electricity Industry Exemption Order 2005* and *Energy Coordination Exemption Order 2009*, Source is exempt from holding an electricity retailer or distributor licence. Despite this, Source has executed good business practice and adopted standard form contract terms that are consistent with the standard form contracts of electricity retailers in WA, as published by the Economic Regulation Authority. These terms are applicable to all of Source's customers. For the same reason, Source has also chosen to adopt and comply with the *Code of Conduct for the Supply of Electricity to Small Use Customers*, which was developed to protect the interests of customers who generally have little or no market power.

Strata Titles Act

ATCO supports the WA Government's amendments to the Strata Titles Act 1985 (WA) (the Act) which was passed by the WA Parliament in the form of the *Strata Titles Amendment Bill 2018 (WA)* (the Amendment Bill) on 1 November. ATCO also supports the provisions of the forthcoming *Community Titles Bill 2018 (WA)*. ATCO considers the Amendment Bill and *Community Titles Bill 2018 (WA)*, collectively known as the Bills, will bring a degree of clarity to the legislative framework applicable to strata schemes whilst also providing increased flexibility to allow for greater innovation in the delivery of services.

From an energy standpoint, ATCO considers the principal benefit of the Amendment Bill encourages greater scope through a strata company's ability to install "sustainability infrastructure", e.g. solar PV systems. Specifically, the amendments allow strata companies to upgrade common property with the installation of, and associated expenditure for, such sustainability infrastructure. With respect to Source, these amendments are not directly relevant as Source pays for, installs and retains ownership of its infrastructure. As such, the strata company is simply granting Source a legal right for its infrastructure to be located on the common property. ATCO notes in particular section 64 of the Amendment Bill which provides a more certain framework for the grant of the infrastructure rights.

A further benefit of the changes proposed by the Bills includes "infrastructure contracts" as described in the Amendment Bill and Community Titles Bill, respectively. In these instances, a person that owns and operates "utility infrastructure" or "sustainability infrastructure" on "common property" in the "strata scheme" or the "community titles scheme" as those terms are defined will be able to contract with the strata company or community corporation, enabling greater choice and flexibility to install and use sustainability infrastructure in multi occupancy dwellings.

The establishment of a new form of "community title" under the Community Titles Bill will enable multiple schemes to exist within one larger community scheme. As such, the Community Titles Bill will facilitate the creation of larger schemes (which may include a diverse range of land uses) and may also therefore facilitate the installation and sharing of a more expansive level of sustainability infrastructure in such schemes creating further benefit for owners and occupiers of dwellings.

¹ See: <http://sourceenergyco.com.au/wp-content/uploads/2018/06/SEC-Tariffs-010718.pdf>

Batteries potential to supply frequency control ancillary services

Source is in the process of investigating the addition of batteries to capture excess solar PV generation during the day from its embedded networks as part of expanding its mix of behind the meter and grid supplied electricity product offering. The energy stored during the day can generate electricity during the afternoon peak, which reduces Source's exposure to peak wholesale electricity prices.

ATCO considers that batteries added to its embedded networks, which have fast response capability, also have the capability to provide FCAS to the network. This has the twin benefit of providing the network with additional FCAS competition, which should have the effect of reducing the market price of FCAS as well as providing an additional ancillary service revenue stream for embedded network operators like Source.

ATCO notes that the technology exists to aggregate batteries both for virtual power plant programs and the provision of FCAS. Further, AEMO has already released technical specification DERs to supply contingency FCAS which can be adopted in the WEM. ATCO considers that the addition of batteries to provide FCAS to the WEM trial suggested in our earlier recommendation will be of benefit to all market participants.

About ATCO

ATCO is a customer-focused global company that has been proudly operating and reinvesting in Australia for more than half a century. ATCO develops, builds, owns and operates a range of energy infrastructure assets, supporting residential, business and commercial consumers across Australia. ATCO's Australian businesses:

- own and maintain two non-regulated gas distribution networks in Albany and Kalgoorlie, together with the largest (Mid-West and South-West) gas distribution network in Western Australia, connecting over 750,000 customers through more than 14,000 km of natural gas pipelines and associated infrastructure;
- own and operate two power generation facilities in Australia (a joint-owned facility in Adelaide and a wholly-owned facility in Karratha) with a combined capacity of 266 MW; and
- manufacture and deliver permanent and temporary modular building solutions to a diverse group of customers.

ATCO's Australian operations are part of the worldwide ATCO Group with approximately 7,000 employees and assets of \$22 billion. ATCO is engaged in pipelines and liquids (natural gas transmission, distribution and infrastructure development, energy storage, and industrial water solutions); electricity (electricity generation, transmission, and distribution); retail energy; and structures and logistics.

If you have any questions or would like to discuss any of these issues further please contact me or Amy Stanley, General Manager Human Resources & Corporate Affairs.

Sincerely,



J.D. Patrick Creaghan
Managing Director & Chief Operating Officer