

20 April 2017

Mr John Pierce  
Australian Energy Market Commission  
Level 6, 201 Elizabeth Street  
Sydney NSW 2000  
02 8296 7800

Dear Mr Pierce,

**RE: Submission on System Security Market Frameworks Review Directions Paper**

ATCO Australia (ATCO) welcomes the opportunity to provide a submission to the Australian Energy Market Commission's (AEMC) System Security Market Frameworks Review Directions Paper, published on 23 March 2017.

ATCO Australia is part of the ATCO Group of Companies, a global organisation with approximately 7,000 employees and assets of CAD\$20 billion. ATCO is engaged in electricity (generation, transmission, and distribution); pipelines & liquids (natural gas transmission, distribution and infrastructure development, energy storage, and industrial water solutions); retail energy and structures & logistics (workforce housing, innovative modular facilities, construction, site support services, and logistics and operations management).

ATCO views Australia as an important strategic market for future growth and investment. At present, our Australian operations include:

- ATCO Gas Australia owns, operates and maintains the largest gas infrastructure network in Western Australia, serving more than 740,000 residential, commercial and industrial consumers. Service is provided via the Mid-West and South West Gas Distribution System (regulated by the Economic Regulation Authority (ERA) of Western Australia) and networks in Kalgoorlie and Albany.
- ATCO Power Australia, which owns an 86MW open cycle gas turbine generation facility in Karratha, WA, and within the NEM owns, in joint venture with Origin Energy, the 180MW Osborne combined cycle gas turbine generation facility in South Australia.

Due to these diversified business interests, ATCO is keenly aware of the dynamic energy market in which it operates and the importance of the AEMC System Security Market Frameworks Review. Global concerns regarding climate change and green-house gas emissions have driven rapid changes in the Australian energy landscape. Complex, unstable and uncoordinated State and Commonwealth Government policies aimed at reducing emissions have resulted in dramatic changes in the mix of generation technologies operating in the National Electricity Market (NEM). As a NEM participant, ATCO has been monitoring the rapid application of non-synchronous generating technologies, coupled with the retirement of older conventional coal-fired generation, and appreciates the challenges this presents for the operation of the power system.

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Importantly, ATCO believes that the integration of non-synchronous generating technologies with existing network assets is necessary to optimise the resilience of electricity supply. To achieve optimal integration, the focus of Commonwealth and State Government agencies must centre on developing and implementing cohesive policies that recognise the need to deliver affordable and reliable energy solutions that contribute to reductions in carbon emissions.

As part of this system security review the AEMC must have regard to the fact that Australian energy markets have been trending towards greater disaggregation and decentralisation over recent years. This position is consistent with the views of Ms Audrey Zibelman, the recently appointed CEO of AEMO:

*[Ms Zibelman] said the electricity system and regulation hadn't kept up with the furious pace of technology development. "Technology is evolving so quickly" she said. "That's really where we're going in energy".*

Given the divergence between the electricity system and the rules and regulations governing its operation, ATCO is mindful that its future role in the NEM will be heavily influenced by the outcome of ongoing market reviews and policy decisions. In this review, ATCO encourages the AEMC to ensure that it delivers outcomes consistent with a fair market framework that provides a level playing field where one energy source is not promoted over another. The AEMC and other policy makers must act quickly to address the inequities in the NEM or risk losing valuable energy options that are essential to meet the overall objectives of affordability, reliability and carbon reduction in a rapidly evolving energy environment.

ATCO is supportive of the AEMC's proposed roadmap to reforming energy market frameworks; however we are concerned by the apparent bias towards traditional centralised planning and investment decisions. This bias is evidenced by the proposal to rely on Transmission Network Service Providers (TNSP) to manage the procurement of inertia and fast frequency response (FFR). ATCO do not believe that a centralised approach is consistent with a rapidly evolving energy system. Furthermore, it is likely that this approach would create perverse incentives to encourage investment in (potentially) redundant infrastructure that is unlikely to deliver outcomes in the Long Term Interest of Customers (LTIC). It will also predispose the NEM towards security and reliability standards designed to protect high levels of power flows on very large single transmission elements. ATCO is not sure that this will remain in the long term interest of customers and urges AEMC to consider rules that are less likely to predispose this outcome.

This position is also inconsistent with the sentiment and direction of energy policy currently under development. As noted recently by Australia's Chief Scientist, Dr. Alan Finkel:

*"We are feeling the force of a global shift away from traditional electricity generation technologies to greater reliance on solar and wind generated electricity, which have very different characteristics," Dr Finkel said.*

*Residential consumers are helping to drive the transformation as they look to take charge of their energy use and bring down their bills. Australia leads the world in solar rooftop penetration per capita, with more than 1.5 million systems installed. More than 1 million home battery storage systems are projected over the next 20 years.*

ATCO firmly believes that a more effective mechanism for delivering the AEMC's proposed reforms is to create open markets for system frequency and inertia as contestable ancillary services. Defining these services as market ancillary services would allow for their prices to be set according to the

regional balance of supply and demand. This would send clear signals to market participants on the value of the continued availability and operation of thermal plant, until a network or non-network solution is developed to lessen that need. Combined with transparent and symmetric network and carbon pricing, this type of market based solution will encourage investment in solutions that deliver reliable, secure and affordable energy.

While we are concerned about the role of TNSPs proposed by the AEMC, the concept of user charges for the restoration of system strength standards is an important feature worth noting:

- That is, users should pay for additional system costs that are caused by changing the use of the grid (noting the AEMC's intent to exempt retirees);
- These charges should be applied to all users who cause additional cost, including both generators and load;
- This form of cost recovery should be a central feature of the NEM transmission and distribution pricing framework and would, in ATCO's view, assist in the proper evolution of the NEM in response to rapid technological change; and
- The principle should not simply apply to system strength: ATCO believes that as part of this set of rule changes, the AEMC needs to consider broadening this concept of user charges for transmission services.

If you have any questions or would like to discuss any of these issues further, please contact myself or Frayne Donaldson, General Manager Power Australia.

Sincerely,



R.L. (Bobbi) Lambright  
**Managing Director & Chief Operating Officer**  
**ATCO Australia**