

Ms Rebecca Knights
Director, Energy Policy and Projects
Department of State Development
Level 8, 11 Waymouth Street
Adelaide SA 5000

By email: DPC.ESTRegulations@sa.gov.au

26 May 2017

Dear Ms Knights,

RE: Energy Security Target Consultation

SACOSS welcomes the opportunity to comment on the Energy Security Target (EST). SACOSS appreciates the significant work already conducted by the South Australian Government to develop solutions to address the system and energy security issues arising in South Australia as a result of federal climate change policies.

As the peak body for the non-government community services and health sectors in South Australia, with a long-standing interest in the efficient delivery of essential services, SACOSS has been investing considerable time, effort and resources in this area of the market. We encourage continued involvement from stakeholders who are willing to set aside self-interested commercial or ideological perspectives and develop practical and positive solutions to address the rapid energy market transitional issues South Australian consumers are facing and the economic and social interests of all South Australians.

SACOSS recognises that the contemplated scheme is designed to increase the amount of gas-fired generation within SA to assist the state to deal with conditions when the wind is not blowing and sun not shining. We acknowledge and recognise this as a desired outcome. SACOSS shares the same desire and goal of the energy security target to increase competition, put downward pressure on prices and provide more energy system stability. We believe that gas is a necessary fuel in the energy market transition process.

SACOSS notes the concern of some stakeholders that at a high level, this scheme will act as a wealth transfer from South Australian consumers to South Australian gas fired generation (within SA) and their gas suppliers (increasingly not within SA) whilst possibly doing very little to guarantee the gas generators will be 'there' when needed. However, we recognise that South Australian consumers do value system and energy security, and that gas is a necessary transition fuel, and hence, we have not taken an approach of opposing this scheme based on the above assumptions.

SACOSS believes that addressing energy and system security in SA is an extremely challenging task and many levers will need to be pulled in order to comprehensively address the issues. Not only is there no silver bullet to adequately address all of the issues, but the technology is at an early stage in terms of its ability to deliver the required protections. For example, the Australian Energy Market Operator has recently cautioned against immediately committing to prescriptive or long-term procurement options for Fast Frequency Response, stating that "It would be preferable to start out with a series of trials to demonstrate the technical capabilities and potential benefits of FFR delivery for real-world frequency control".¹

¹ AEMO (2017) Recommended Technical Standards for Generator Licensing in South Australia at <http://www.escosa.sa.gov.au/projects-and-publications/projects/inquiries/inquiry-into-licensing-arrangements-under-the-electricity-act-1996-for-inverter-connected-generators/inquiry-into-licensing-arrangements-under-the-electricity-act-1996-for-inverter-connected-generators>



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More importantly in the context of the current review, AEMO has stated that a minimum quantity of synchronous inertia will continue to be required in the short to medium term:

“In an electrical power system, inertia can be thought of as a measure of the mass of all the rotating generating units synchronously connected to the power system...The management of power system frequency within the limits in the Frequency Operating Standards will be an increasing challenge in operating a low inertia power system. To help address this challenge, new technologies are capable of providing a very rapid active power response to rapidly changing power system frequency conditions, referred to as fast frequency response (FFR)...Synchronous inertia and FFR are technically distinct services, due to the timescales over which they act, and the different effect they have on power system frequency control. The two services therefore are not fully interchangeable, and a minimum quantity of synchronous inertia will continue to be required in the short to medium term, to allow adequate control of power system frequency.”²

Therefore, it is in the context of needing a minimum quantity of synchronous inertia in SA that we offer the following considerations as constructive comments, intended to further refine the EST to maximise the system and energy security outcomes:

- That diesel generators should be included in the scheme;
- That the certificate target be adjusted as a percentage of the prevailing scheduled demand;
- Additional measures should be implemented to allow the scheme to be adjusted if demand continues to decrease, otherwise SA households will be paying for generation to meet demand that is not present;
- That provision for a dispute resolution mechanism be made;
- That consideration be given to scheme implementation being delayed 6 or 12 months and the reporting framework adjusted from 1 month to 3-6 months, to allow accurate and timely reporting to minimise estimates by the retailers and generators;
- That consideration be given to a trial/prototyping exercise for electricity security certificate creation and acquittal to enable enhanced design and evaluation;
- That further understanding be developed of other similar schemes around the world (and how they differ from the current suggested outcomes), including the Queensland Gas Scheme³.

Some additional options which SACOSS suggest should be explored as a further package of work associated with energy security targets and trying to keep the wholesale market price at levels that are sustainable for consumers:

- Modifications to Murraylink to ensure it can achieve very fast response and frequency control signals (including provision of AGC thereby decreasing the overall cost of FCAS services for SA consumers and non-synchronous generators);
- Ensure SAPN continue finish the randomisation of the hot-water peak load timers, thereby removing the induced SA price spikes that occur just before midnight;
- In the interests of trying to ensure some gas fired generation remains in the SA system over the next 13 years, explore a form of inertia/capacity mechanism.

In addition to the above constructive suggestions, SACOSS believes there are some notable questions which remain unanswered and are worth consideration by the South Australian Government:

- Will the scheme targets be adjusted to changing market conditions such as continued demand decreases?

² AEMO (2017)

³ OBPR (2013) “Technical Report : Queensland Gas Scheme Case Study – Discussion of Findings, Methodology, Inputs and Assumptions”, <http://www.qca.org.au/getattachment/a9551ea0-d951-4486-a9ca-8727268497b2/Queensland-Gas-Scheme-Case-Study-Discussion-of-Fin.aspx>

- Will the scheme be adjusted if a carbon price is implemented?
- Will the scheme remain in place if an inertia market is implemented?
- How will the market price be determined? Will it be a daily, weekly or monthly pricing mechanism and how will it be made public.
- There are also a few administrative aspects to the scheme that need further consideration:
 - The legislation at present contemplates a final report 1 month after the end of Financial Year, yet AEMO interim/initial settlements do not occur until 20 business days following a trading weeks end, therefore compounding the estimations for liabilities on the supply side, but locking in definitive costs to retailers (hence households); and
 - The 10% estimation factor appears excessive and may add to price ambiguity.
- What are the current and future gas price assumptions on gas-fired plant (both existing and new)?
- What changes in historically observed generator and TNSP behaviour have been modelled, hence what decrease in wholesale prices can be expected?
- What impact will the scheme have on the contracting market?
- What assumptions have been made for current business consumers moving to market contracts together with the large industrial consumers, thereby leaving fewer consumers (namely) households to pay for the scheme?

We thank you in advance for consideration of our comments. If you have any questions relating to the following material, please contact me on jo@sacoss.org.au or 08 8305 4211.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Ross Womersley', written over a light grey rectangular background.

Ross Womersley
Executive Director