

30 May 2017

Ms Rebecca Knights
Director – Energy Policy and Projects
Department of Premier and Cabinet
ADELAIDE SA 5000



Business SA
Chamber of Commerce
and Industry South Australia

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Working for your business.
Working for South Australia

Dear Ms Knights

I write in response to the State Government's request for submissions on the proposed energy security target (EST) which forms part of the SA Energy Plan.

Executive Summary

- Business SA welcomes a beginning for consultation on measures within the SA Energy Plan to help ensure that the desired outcomes are more likely achieved at least cost to consumers, particularly energy intensive businesses which have absorbed between 50 and 100% increases in total electricity bills over the past two years.
- We appreciate the focus of the State Government in trying to resolve the State's energy crisis and allocating the required resources to do so.
- Business SA recognises the EST is primarily about just that, security, but it is still critical that the outcomes do not add further to the cost burden on consumers, particularly interstate and export orientated businesses which are crucial to South Australia's economic transition beyond auto-manufacturing.
- Considering the State Government's willingness to have its EST dovetail into a national policy, it would be prudent to wait until both the Finkel Review and the AEMC's System Security Market Frameworks Review reach their final conclusions next month before progressing legislative change in South Australia.
- Incentivising renewable energy without appropriate regard to the benefits firm energy offers the market, including inertia & fault current and an ability to offer firm contracts to business, has cost South Australian business dearly and we agree that future market mechanisms need to account for all technical and market requirements of a functioning grid which can deliver both secure and affordable power.

Should you require any further information or have questions, please contact Andrew McKenna, Senior Policy Adviser, on (08) 8300 0000 or andrewm@business-sa.com.

Yours sincerely,

Anthony Penney
Executive Director, Industry and Government Engagement





Why this matter is important to South Australian businesses

As South Australia's Chamber of Commerce and Industry, Business SA is the peak business membership organisation in the State. Our more than 3,500 members are affected by this matter in the following ways:

- The increase in electricity prices, particularly over the last two years, has had a devastating impact on South Australian business at a time when the State's economy is attempting to transition with the pending closure of Holden's manufacturing operations in October.
- South Australia has the highest proportion of non-firm renewable generation in the National Electricity Market (NEM) and the exit path of Alinta's Northern Power Station which began in mid-2015 has put significant pressure on South Australia's wholesale electricity market, effectively leaving two key players to hedge the base-load electricity needs of industry meaning large market customers, which consume as little as 160MW hours per annum, have experienced peak energy cost increases from seven cents per KWh to as high as 22 cents today.
- Up until mid-2015 when South Australia's wholesale electricity prices began to rise dramatically, network costs had been the primary driver of the significant increases in electricity costs over the past decade and South Australian businesses cannot afford to return to the spending patterns associated with that period which have been compounded through rising regulated asset bases.
- South Australia's blackout on 28th September 2016 crystalised the importance of reliability to business, costing at least \$450 million¹, and it is important for both State and Federal Governments to take reasonable steps at appropriate costs to mitigate impacts of similar events in future.

Key Policy Points

1. While Business SA has been supportive of some aspects of the SA Energy Plan, particularly the 200MW of temporary generation for this summer, we have criticised the lack of consultation with the broader community, particularly consuming businesses across the spectrum. The State Government's move to begin consulting more broadly, starting with the EST, is supported by Business SA although we would encourage an even more expansive and transparent consultation. From a business perspective, the situation in South Australia just needs to be fixed and Business SA, along with many other representative organisations, are willing to consider any Government proposals to do so in a constructive manner.
2. Business SA does have some concerns about the short consultation period for the EST, for us less than two weeks from when we were first notified, and we caution against the State Government rushing to implement any substantive changes to energy policy to avoid unintended consequences.

Business SA would like to acknowledge that there are a range of aspects to South Australia's energy crisis, all of which need to be considered in relativity to their impact on consumers and all in the time frame in which they each need to be resolved. Taking a staggered approach which prioritises the most immediate issues, for example ensuring there is adequate generation capacity in place by this summer, is the optimal means of progressing required energy policy reforms. Subsequently, we welcome the Government's efforts through SA Power Networks on that front.

¹ Business SA, adjusted cost following additional public company results since Blackout Survey Results report, <http://business-sa.com>



3. The Finkel Review primarily originated from the severe price pressure placed on South Australian consumers, particularly businesses, which became evident after South Australia lost its last coal-fired power station and the impact that had on the competition to provide firm contracts to business which fell to fewer and higher priced gas-fired generators. While it took both gas shortages & retail price hikes in mid-2016, and finally the State-wide blackout to generate the political will for COAG to actually implement the independent Finkel Review, the reality of the situation was that alarm bells had been ringing for South Australian businesses since mid-2015.

Considering the broad remit of the Finkel Review to consider all options to transition the national electricity market (NEM) to low carbon while maintaining security, safety, reliability and affordability, Business SA encourages the State Government to adequately consider how its findings could replace the need for South Australia to implement its own EST. We recognise the State Government cannot sit on its hands to address South Australia's energy security issues, but the best long term interests of consumers are served by both the State and Federal Governments taking a collaborative approach to agreeing energy policies which ensure secure, reliable and affordable electricity across the entire NEM.

The most successful South Australian businesses today are either export orientated or have substantial interstate business with much of this growth made possible by successive Government reforms between the State and Federal Governments on a range of measures including industrial relations, work, health & safety, heavy vehicle regulations and tax to name a few which have all had one common goal, harmonising the law to create efficiencies across the country, not to mention we finally aligned interstate rail gauges after a century of State's going their own way. Any political differences between current State and Federal Governments are just that and do not override the much broader consensus of consumers for collaboration in the goal of efficient national policies. We cannot afford to take an island South Australia approach.

4. Business SA understands that the Australian Energy Market Operator (AEMO) is still progressing a body of work in relation to system security, including detail around minimum required levels of system strength and inertia required within South Australia. This modelling is also expected to include quantifying the number and location of synchronous generators which may be required to address system strength issues.²

Considering a key goal of the State Government's proposed EST is to ensure there is adequate inertia, particularly synchronous inertia, and fault current to maintain system security in South Australia, a policy to incentivise both technical services should be underpinned by the latest available data on what is the required minimum of each under the various dynamic circumstances over time which present in our electricity grid. Consequently, a target which aims to provide appropriate market incentives is more likely to deliver the required services at a level that does not exceed nor fall short of the required minimums at any given time.

² AEMO, Progress Report – Future Power System Security Program, P21, January 2017



5. The findings to date from the Australian Energy Market Commission (AEMC) System Security Frameworks Review point to the need to set both short and long term investment signals in the electricity market for requirements such as inertia. As such, the proposed EST would seem to provide a long-term incentive for conventional thermal generators to provide these services. However, it is not clear that the EST would ensure that the required inertia over time is made available at the specific times required in such a dynamic grid. Business SA suggests further explanation of this aspect of the EST is made publicly available in further stages of the consultation process along with how the EST will incentivise synchronous generation in the specific locations required within South Australia to mitigate against system strength concerns.
6. Business SA recognises that at present South Australia needs a level of synchronous generation to maintain system security without expert consensus that all our system security requirements can be met by fast frequency response and non-synchronous inertia.

After engaging GE Consulting to provide analysis, AEMO recently concluded that *'some minimum amount of synchronous generation is required to manage frequency control in the NEM, but fast frequency response (FFR) may provide a benefit by reducing the amount of synchronous generation required. In the future, FFR might be able to replace synchronous inertia with equivalent instantaneous services from an inverter-connected plant, but this is not possible at present. Significant development will be required by equipment manufacturers and researchers before this becomes possible.'*³

In light of that advice, Business SA is concerned that introducing an EST in South Australia which is considered to effectively exclude developing technologies like batteries may not deliver the required outcomes at the least cost to consumers as and when technologies advance and become more economically viable.

Business SA acknowledges an EST is also about broader considerations of incentivising the delivery of firm contracts to consumers, which we welcome given that batteries are not yet able to do this economically, but we think the consultation process would benefit from more transparency around the why the State Government's proposal needs to technically limit the certificate qualifications to 'real' inertia and fault current.

7. Business SA understands the EST is supposed to incentivise local providers of synchronous generation, but we are concerned about unintended consequences from further limiting imports on the interconnector. The reliability of generation within South Australia, which we appreciate is technically distinct from security, includes having access to an interconnected grid at periods of high local demand where the coincidence of demand in other states may not necessarily align.

We acknowledge that appropriate considerations need to be made for when South Australia is islanded, but we also need to be careful not to jeopardise a future where we can leverage off our abundant renewable energy resources exporting through an appropriately interconnected network to Victoria, New South Wales and beyond. If that is part of the State Government's vision for South Australia as a renewable energy leader, it needs to be made clearer in future consultation on energy policy. Furthermore, if South Australia does go down the path of further interconnection, this should reduce the probability of our State being islanded, although we recognise there are technical considerations to deal with on that front.

On a related point, a future national electricity market with increasing intermittent renewable energy may not be best served by the existing State jurisdictional regions and Business SA requests the advice procured by the State Government on combining Victoria and South Australia's jurisdictional regions be made publicly available.

³ AEMO, Progress Report – Future Power System Security Program, P8, January 2017



8. In light of the AEMC's proposed interim package on system security, which involves having transmission network providers procuring inertia for up to three year contracts, Business SA recommends any State based EST is limited by time or has a strict review clause.
9. Incentivising local thermal generators to remain in the market should improve system security but how much it reduces price volatility also depends on the penetration of intermittent generation which from our understanding, is not intended to change as a result of the EST.

Any price impact from an EST on local consumers will only be nullified if there is adequate competition within South Australia to provide firm generation. Given the current lack of competition amongst South Australian generators to provide businesses with firm contracts, we are concerned that the additional cost of energy security certificates will end up resulting in higher prices to consumers. With the existing capacity of generators exceeding 20,000 gigawatt hours per annum,⁴ some members have concerns that the EST will pay existing generators for what they do but not adequately incentivise new generation to enter the market.

Furthermore, we are unsure as to how the EST will displace or over-ride the AEMO requirements already in place to have at least two synchronous generators on-line in South Australia at any given time. If that restriction is no longer required, Business SA would like to understand what cost that might save consumers, given interconnector imports are currently limited, in so far as how that might improve the case for an EST.

10. Business SA recognises that generators need to be adequately remunerated to provide a service but this has to be considered against the reality that consumers have faced unprecedented price increases over the past two years, particularly energy intensive businesses, and there is significant angst in the South Australian business sector about how to operate with such high input costs. While we acknowledge there are a range of factors at play, including the gas price, businesses need to better understand the relativity of the influencing factors driving the prices they are left to pay in order to appropriately consider policy options.

Along with releasing the Frontier Economics modelling which predicts neutral price impacts to consumers from the EST, including all cost inputs and interpretations, Business SA recommends the State Government undertake or release any of its own analysis of the aggregated gas-price adjusted market revenues to South Australia's synchronous generation fleet, separated by peaking and base-load, comparing the two years prior to Alinta announcing its withdrawal from the market in mid-2015 against the two years since.

Business SA notes the following from Frontier Economics advice⁵ on the EST:

'The government's proposed EST aims to improve the economics of operation the State's fleet of gas generators and other scheduled and synchronous generators. The scheme works by requiring retailers to ensure that a targeted minimum quantity of scheduled, synchronous generation is supplied to the State each year. Retailers will need to effectively subsidise these generators to encourage them to run more regularly.

The subsidy will help overcome the uncertainties of cost recovery for these generators. The subsidy should be considered as a cost of obtaining greater security.'

⁴ Based on extrapolation of available gas capacity from AEMO South Australian Electricity Report, August 2016

⁵ Frontier Economics, Assessment of South Australian energy reform package P6, March 2017



Frontier go on to argue that *"once the other measures (of the SA Energy plan) are in place to deepen the competitiveness of the generation market, the net effect of the EST will be that consumers will be no worse off and, indeed, there are good reasons to believe that prices will be in fact lower."*⁶ Frontier also advise that *'another important outcome of greater local generation from synchronous, scheduled generation capacity is the improvement in supply of hedging contracts in South Australia.'*⁷

Business SA recognises that each generator will have a unique set of circumstances in terms of profitability, but if consumers are ultimately wearing the risk that an industry wide subsidy does not result in the same or lower prices, then we expect more analysis to be provided in relation to aggregated local synchronous generation revenues, adjusted for the price of gas, to evidence the need for the Government's proposed subsidy.

We do support the Government's efforts to increase competition for the supply of firm contracts which is what Business SA has been advocating for on behalf of members, but businesses are ultimately the ones who will foot the bill if the policy does not succeed and coming from a starting point of such significant price increases in less than two years, there is an even greater need to ensure that any substantive changes to energy policy are thoroughly rigour tested.

11. There are a number of Government bodies and authorities such as AEMO reviewing the extent of system security issues and the least cost solutions across a range of technical services. However, it remains unclear as to what the likely cost or value that the market attributes to delivering the required services. To ensure the most appropriate response, the State Government or AEMO could run a confidential tender process to ascertain the willingness of market participants to provide required inertia and fault current and the most competitive price it could be delivered for over required time periods. The Government need not be bound by having to procure from the market at any price, but the aggregated findings could be socialised on a wider market level, protecting the anonymity of individual generators, to give some perspective on the relativity of the cost. For example, if it might cost \$10 million per annum versus \$110 million per annum, there is a significant difference in the broader willingness of consumers to accept the outcome, or in the validity or otherwise of a range of policy options which might be able to achieve even more market benefits at the same cost.

⁶ Frontier Economics, Assessment of South Australian energy reform package P6, March 2017

⁷ Frontier Economics, Assessment of South Australian energy reform package P7, March 2017