

Introduction

The Energy Users Association of Australia (EUAA) is the peak national body representing Australian commercial and industrial energy users. Our membership covers a broad cross section of the Australian economy including significant retail, manufacturing, materials and food processing industries. Combined our members employ over 1 million Australians, pay billions in energy bills every year and expect to see all parts of the energy supply chain making their contribution to the National Electricity Objective.

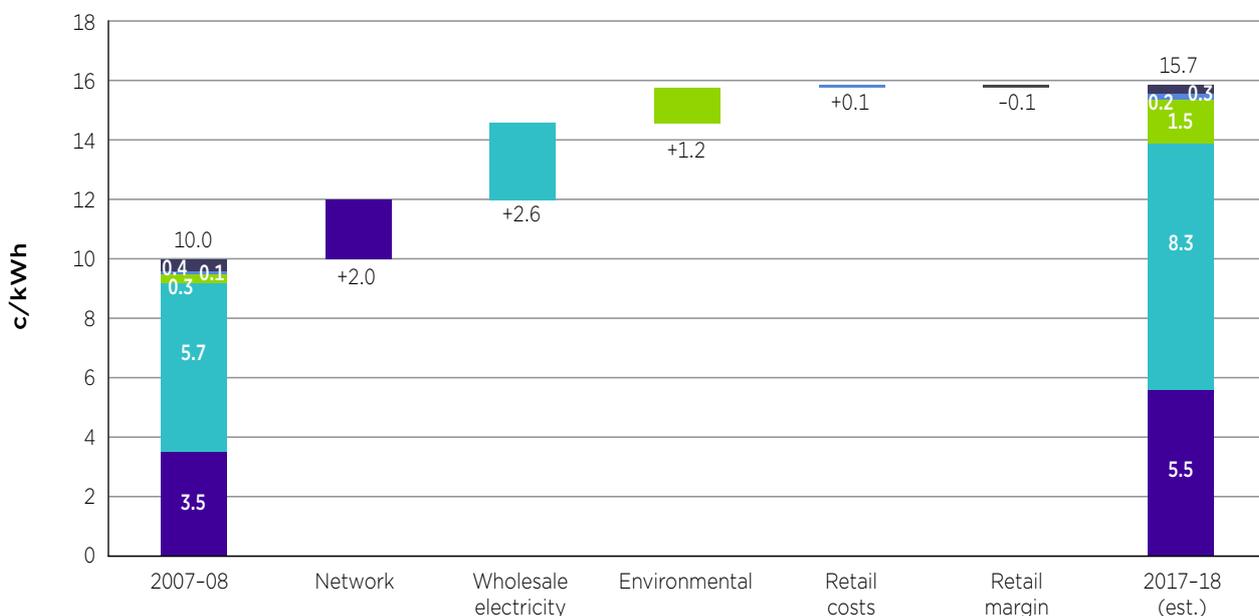
Thank you for the opportunity to make a submission to the Energy Security Target and Safeguard Consultation Paper. We also acknowledge the time and effort taken by the Department of Planning, industry and Environment to consult with stakeholders on these important issues.

This submission sets out some key policy and regulatory principles that guide the EUAA advocacy on energy and climate policy before going on to address key aspects of the proposed Energy Security Target and Safeguard.

Drivers of Higher Energy Bills

Given the energy intensive nature of their operations, EUAA member companies are highly exposed to movements in both gas and electricity prices and have been under increasing stress due to escalating energy costs, the drivers of which are largely outside of their direct control. The chart below, taken from the ACCC Retail Electricity Pricing Inquiry Final Report June 2018¹, shows that increases in environmental program costs has been one of the largest drivers of increased C&I customer bills between 2007 and 2017.

Figure 1.30: Change in average C&I customer effective prices (c/kWh) from 2007-08, NEM-wide, real \$2016-17, excluding GST



¹ https://www.accc.gov.au/system/files/Retail%20Electricity%20Pricing%20Inquiry%20Final%20Report%20June%202018_Exec%20summary.pdf

More recently, in its August 2019 update on the wholesale electricity market the ACCC identified that environmental program costs increased a further 0.3 cents per KW/h in 2018 alone². Based on this trend, environment program costs will account for in excess of \$20MW/h of a typical C&I customer bill in 2020, or approximately 12.5% of the total bill making it the third largest component behind network and wholesale electricity costs. This is comparable to the increase in network costs over the same period driven by the so called “gold plating” of networks that has been the cause of significant consumer concern and political division.

Therefore, we do not see the costs associated with state and federal environmental programs as trivial and is one of the main reasons why we continue to call for a coordinated national approach to achieving environmental outcomes. To be clear, we are in favor of achieving environmental outcomes but it must be done in the most economically efficient way, which necessarily means avoiding duplication where possible.

We are also observing an increase in costs associated with system security and reliability, which left unchecked will begin to add significantly to consumers energy bills. Careful management of the National Electricity Market (NEM) will be required as we move from a centralised, fossil fuel based generation fleet that has a high degree of “dispatchability” to a decentralised, low emission but variable generation fleet.

We have also seen what could be described as High Impact Low Probability (HILP) events impact the system in recent years, mostly brought about by freak weather events (i.e. SA System Black event and recent loss of the Victoria to SA interconnector). When combined, these issues have created varying levels of concern amongst politicians, regulators, market participants and customers.

As a result of this, we have seen an increasing focus on energy security³ and reliability⁴ in recent years with numerous policy and regulatory reforms being considered at a national level. For the most part these are being steered by the COAG Energy Council and coordinated across the various market bodies of the ESB, AEMO, AEMC and AER.

A number of key reforms are already being pursued that have a direct impact on energy security and reliability:

- Retailer Reliability Obligation (RRO)
- Enhanced Reliability and Emergency Reserve Trader (RERT)
- Tighter reliability standards adopted by COAG and the associated Interim Reliability Reserve
- The AEMO Integrated System Plan (ISP) and rules to make it “actionable”
- Establishment of the Wholesale Demand Response Mechanism (WDRM)
- Underwriting New Generation Investment (UNGI)
- Snowy 2.0
- Post 2025 NEM market design

The EUAA have been very active in these processes and while we do not agree with all that is being proposed, at least they are being pursued at a national level by the Federal Government or coordinated via COAG and the ESB.

² <https://www.accc.gov.au/system/files/Inquiry%20into%20the%20National%20Electricity%20Market%20report%20-%20August%202019.pdf>

³ Maintaining voltage and frequency within defined limits

⁴ Enough generation, demand response and network capacity to supply customers with the energy that they demand with a high degree of confidence)

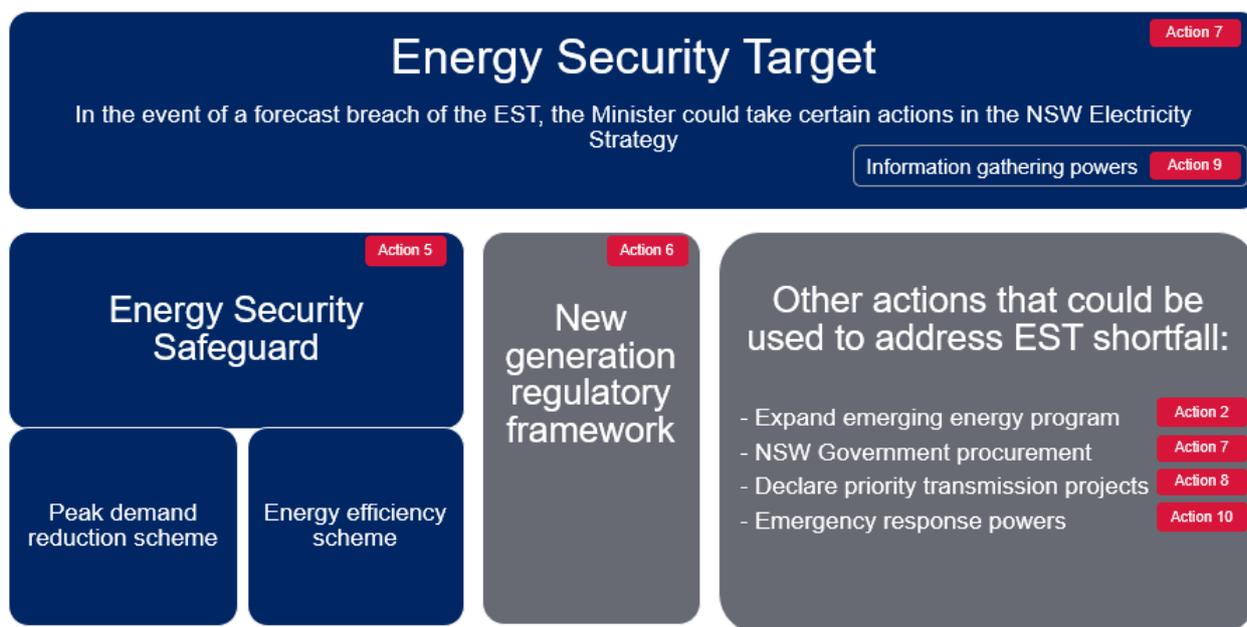
This is important. A key policy ask of the EUAA is that energy and climate change policy (including system reliability and security) be centralised at a national level to avoid unnecessary state-based duplication.

In November 2019 the NSW Government released the NSW Electricity Strategy, which according to the Government “sets out a plan for reliable, affordable and sustainable electricity future.” To support this plan an Energy Security Target and Safeguard Consultation Paper was released to gain stakeholder feedback on key elements. We welcome this level of transparency and stakeholder engagement.

However, as the initiatives being proposed are “state based” and in many cases seek to achieve similar objectives of national reforms, the EUAA are not inclined to be supportive. We are concerned that independent state based actions will lead to unnecessary duplication, add to consumers costs and potentially lead to inefficient allocation of resources. We are also concerned that increased reliability is being pursued without due consideration of the cost of achieving it, of consumers’ willingness to pay or full assessment of other market based alternatives.

The Energy Security Target

The following graphic is taken from *page 2* of the Consultation Paper⁵ and provides an overview of all elements of the NSW Government Electricity Strategy.



The consultation paper covers the areas shaded blue

Figure 1 The relationship between the EST, the Safeguard and the generation regulatory framework

Despite significant work at a national level, including the recent tightening of the reliability standard by the COAG Energy Council, it appears the NSW Government has decided to set its own Energy Security Target (EST) to, in its words “give the market certainty about how much new electricity is needed to deliver a reliable energy system over the medium to long-term”.

⁵ <https://energy.nsw.gov.au/media/2031/download>
SUBMISSION – NSW ENERGY SECURITY TARGET AND SAFEGUARD

The discussion paper goes on to say “The EST will serve as an additional framework that compliments the existing national reliability measures, while bolstering the state’s electricity resilience.” While these are worthwhile objectives, many national initiatives seek to do the same.

Overall Response To The Energy Security Target

Having read the consultation paper and after a briefing from the responsible department, EUAA members remain unconvinced that such a scheme is required. At times it can be understood why State Governments believe there is a Federal policy failure and therefore independent action is required on their part (although its perhaps not always justified).

However, we do not believe this is one of those occasions, unless the NSW Government do not trust the approach to system reliability and security proposed by AEMO and agreed by COAG Energy Council. As there is no indication in the Consultation Paper that a lack of trust exists in the revised national approach adopted by COAG, we can only assume this is a “belts and braces” approach by the NSW Government where additional reliability measures will be pursued.

This sounds very similar to the approach to system reliability taken by some State Governments more than a decade ago that led to highly prescriptive reliability standards being applied such as N-2 in NSW. These highly prescriptive reliability standards resulted in billions of capital expenditure by NSW based network companies (and to a lesser extent QLD network companies), a bloated Regulated Asset Base (RAB) and significant increases in consumer bills. This has come to be known as “network gold plating” and has been the source of consumer discontent and distrust of the energy industry, many hours of political debate and barely identifiable improvements in reliability.

We are of the view that much of what is proposed in the Energy Security Target largely replicates what is already occurring at a national level. We are very concerned that this process will lead to a separate and potentially tighter reliability standard being applied in NSW, driving unnecessary investment or at the very least, bringing forward investments to soon. If this occurs the risks to consumer bills could be material.

One of the statements of greatest concern appears on *page 11*⁶ of the Consultation Paper where it states the minister will have the ability to “make a priority transmission project declaration to remove capacity constraints in the transmission system”. We have already seen legislation pass the Victorian Parliament that grants the Energy Minister power to direct investment in energy infrastructure with costs passed through to consumers. We are yet to see what process will be applied or if a transparent cost benefit analysis will be made public.

Our concerns are raised even further when we read this statement on *page 15* of the Consultation Paper:

“New South Wales is acting to address potential capacity shortfalls. As part of this, the NSW Government will seek to confer new powers on the Minister to increase the Safeguard’s targets, including the energy savings target, if there is a forecast breach of the EST. In such an event, the Government may choose to prioritise reliability over other factors for target setting.”

⁶ <https://energy.nsw.gov.au/media/2031/download> This appears under “Breaches of the Energy Security Target” and is the final item on the list of potential government actions.

Other factors being cost? Consumers' willingness to pay? This statement tends to add weight to the assertion made by the EUAA that governments are seeking a "political reliability standard" as opposed to a technical reliability standard that balances costs and benefits of greater reliability.

New Powers to Gather Information

Under the EST framework it is proposed that the NSW Government will grant themselves new powers to gather information. They intend to do this in consultation with AEMO and in doing so appear to be developing an NSW based version of the ES00.

On *page 7* the Consultation Paper a number of new powers including "the ability to issue notices to produce documents or require industry participants to provide project information"⁷ are described. This information will be used to set Safeguard targets, identify possible shortfalls and make decisions about potential government actions. All information will be centralised and protected by confidentiality deeds.

While this is largely targeted at generators, aggregators and system operators, large energy users may be required to provide information if they are a market participant or are deemed a provider of demand response. Therefore, further detail is required as to the nature of the information being collected and the frequency of collection so that those required to provide it can assess any costs associated with the task. Confidentiality and demonstration of the secure storage of material also needs to be better understood.

Setting the Energy Security Target

The EST will be set by the NSW Government at a capacity level needed to meet customer demand during a summer heatwave while maintaining a reserve margin to account for an unexpected loss of two of the state's largest available generation units. Therefore, the EST will be derived from the following calculation:

$$\text{Energy Security Target} = \text{maximum demand} + \text{reserve margin}$$

The EST will use the AEMO maximum demand forecasts while according to the Consultation Paper, the reserve margin is 1360MW. It is important to note that the AEMO forecasts reflect 10% probability of exceedance (POE10) conditions which implies that the forecast is expected to be exceeded only once every 10 years.

As we have stated on numerous occasions in submissions to AEMO, AER and ESB, the EUAA are concerned this approach will lead to demand being overestimated by AEMO (as it has been on a regular basis in the past). As these forecasts are also the basis for the tighter reliability standard recently endorsed by COAG, it will most likely trigger the Retailer Reliability Obligation (RRO) and the Reliability and Emergency Reserve Trader (RERT) when it may not actually be required, adding unnecessary costs with limited if any improvement to reliability for a majority of energy users.

Breaches of the EST

In the context of the NSW proposal, this higher demand forecast plus significant margin is likely to create an environment where the EST is breached on a regular basis. If the EST is breached, it is proposed that the NSW Government could take the following actions:

⁷ <https://energy.nsw.gov.au/media/2031/download> "Powers to gather information"

- Adjust scheme targets under the Safeguard to reduce operational demand
- Increase program budgets or call for a further round of applications for the Emerging Energy program
- Engage in Government electricity procurement (effectively underwrite new capacity)
- Make a priority transmission project declaration to remove capacity constraints in the transmission system

When we combine an anticipated over estimate of demand by AEMO with a significant reserve margin requirement in NSW, it is possible that the EST will be breached on multiple occasions. These breaches will then trigger potential actions by the NSW government that could come at significant cost that will ultimately be borne by energy consumers.

Energy Security Safeguard

Expanded & Extended Energy Savings Scheme

We understand that the existing Energy Savings Scheme will be re-badged as the Energy Security Safeguard. It will run until 2050, aligning with the NSW Government objective of net zero emissions by 2050. Energy savings targets will gradually increase from the current 8% to 13% by 2030, an approximate target increase of 40% which is a significant, the cost of which should not be underestimated.

The Consultation Paper indicates on *page 17* that “the current penalty rate encourages retailers to buy and surrender certificates and provides an effective ceiling for certificate prices. The NSW Government is not proposing to change the penalty rate.” We are supportive of this decision.

The Consultation Paper also confirms on *page 17* that existing EITE exemptions will continue. We are supportive of this decision

The Consultation Paper also proposes that due to the administrative burden that small retailers would also be exempt from participation. This is a similar approach adopted in the equivalent Victorian scheme and in the ill-fated National Energy Guarantee. We are supportive of this decision.

Cost Benefit Analysis

The Consultation Paper states on *page 14* that there is a significant oversupply of energy savings certificates generated by the current scheme while on *page 15* it states that commercial lighting, the main source of certificates, is rapidly approaching maturity. Commercial lighting upgrades have long been considered the “low hanging fruit” with easy retrofit and fast (under 12 month) payback in investment.

According to Schneider Electric weekly update (27 May 2020), NSW Energy Savings Certificates continue to trade at \$26.50

One could imagine that if the cost benefit analysis that appears on *page 16* and shown below, relies on a continuation of the existing certificate price, representing an over supplied market that has used up all its low hanging fruit, future cost estimates might be overly optimistic.

Table 3 Summary of costs and benefits of increasing the target to 13% in 2030 relative to the existing scheme settings

Present value of incremental costs and benefits to 2030	
Scheme costs	
Government costs (\$m)	\$14
Regulatory costs (\$m)	\$680
Total costs (\$m)	\$694
Scheme benefits	
Reduced wholesale purchase costs (\$m)	\$1,585
Avoided network investment (\$m)	\$155
Avoided cost of greenhouse gas emissions (\$m)	\$67
Avoided health cost of air pollution (\$m)	\$18
Total benefits (\$m)	\$1,825
Net economic benefit (\$m)	\$1,131
Benefit–cost ratio	2.6

The key driver of a positive outcomes is the reduced wholesale price that would come about as a result of reduced demand. Consumers who participate will also see a benefit of reduced bills via reduced consumption. However, while there is likely to be a benefit it can't be guaranteed and as we have seen before in the wholesale electricity market, these benefits can be transient while the costs tend to be locked in.

Key assumptions need to be tested and a number of alternatives modelled and supplied so all stakeholders can understand the risks, costs and potential benefits. We also need to understand the costs of the existing scheme (Government and Regulatory) to check the assumptions being used to extend the scheme against revealed costs of the current scheme.

Expanding Fuel Switching

The NSW Government intends to expand the eligible activities under the Safeguard. The options presented on *page 18* of the discussion paper are:

- **Include switching grid connected energy to cleaner fuels:** eligible activities would be expanded to include fuel switching activities that displace grid connected electricity or gas.
- **Include cleaner fuel switching beyond grid connected energy:** eligible activities would be expanded to include fuel switching activities for both grids connected and non- grid connected energy. For example, on-site use of diesel on farms and factories could be replaced with cleaner fuels.

Increasing the number of eligible activities will increase supply and competition leading to lower costs of the scheme while there may be a number of fuel switching opportunities in the SME and residential sectors. However, it is the experience of the EUAA that in most cases fuel switching for large commercial and industrial is not a viable option given the level of capital already committed to plant and equipment and the capital intensity of replacement.

While the EUAA are supportive of expanding fuel switching initiatives, the NSW Government need to understand this may be of little benefit to large commercial and industrial customers.

New Peak Demand Reduction Scheme

The EUAA are strong supporters of increasing opportunities for consumers to engage directly in the NEM, especially with demand response. In this regard we have been highly supportive of the Wholesale Demand Response Mechanism (WDRM) and look forward to its introduction.

Unfortunately, this state based peak demand reduction scheme proposal would simply create another certificate based scheme that adds cost to consumer bills. We do not see a need for this type of state based demand response scheme when, according to an AEMC media release on 12 March 2020⁸, a national Wholesale Demand Response Market will be in place by October 2021.

While we don't have sufficient information to doubt the cost benefit analysis contained in the discussion paper we would note that the recently approved national WDRM provides a long-term platform for demand response that does not involve a new certificate scheme, does not involve liable entities and therefore does not result in program costs being passed through to energy users, adding to the already growing environmental program cost stack.

As far as we can tell this state based scheme will be in place sometime in 2022. Our recommendation would be to shelve this program until at least 2024 at which time an assessment about the effectiveness of the national WDRM approach can be made.

Kind regards



Andrew Richards
Chief Executive Officer

⁸ <https://www.aemc.gov.au/news-centre/media-releases/new-tool-energy-security-and-reliability-horizon>
SUBMISSION – NSW ENERGY SECURITY TARGET AND SAFEGUARD