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**BUREAU OF STEEL MANUFACTURERS OF AUSTRALIA
(BOSMA)**

Submission in response to

**South Australian Government
Energy Security Target Stakeholder Consultation
May 2017**

Introduction

The Bureau of Steel Manufacturers of Australia (BOSMA) has prepared this submission in response to the South Australian Government's Energy Security Target Stakeholder Consultation paper, including the draft Electricity (General) (Electricity Security target) Variation Regulations 2017. This submission is prepared on behalf of BlueScope Steel Limited and Arrium Limited.

BlueScope and Arrium are companies with Australian and international operations employing over 27,000 people. The two companies have combined revenues in Australia of approximately \$8.2 billion and employ around 14,500 people locally. In Australia their steel businesses operate across several hundred sites, servicing customers in the building & construction, manufacturing, infrastructure and agriculture sectors. The two companies are major regional employers in Australia. Arrium is a major employer in the Whyalla region in South Australia with its OneSteel Whyalla Steelworks and Arrium Mining operations.

Steel is a fundamental building block of any modern society and a domestic steel manufacturing capability is a critical and strategically valuable asset for Australia's future economic security and prosperity.

Keeping production costs at globally competitive levels is critical to the viability of the highly trade-exposed and energy-intensive Australian steel industry, which accounts for only 0.3 percent of global steel capacity and is a price-taker. The local industry operates under very low tariffs and is under sustained pressure from import competition, which has intensified as excess global steelmaking capacity has cut margins and led to the dumping of foreign-made steel into the Australian market.

BlueScope and Arrium have undertaken major structural transformation and further efficiencies and cost reductions are underway.

BOSMA appreciates the opportunity to comment on the South Australian Government's paper and draft regulation, and looks forward to continuing engagement with government on the development of the policy, particularly given the potential impact the policy could have on the international competitiveness of the domestic steel industry.

Executive Summary – BOSMA Recommendations

BOSMA supports the steps the South Australian Government is taking to provide more reliable and affordable electricity supply for energy users.

However, BOSMA has some concerns in relation to the proposed Energy Security Target (the “scheme”), both in terms of the very limited consultation process as well as the proposed operation of the scheme and the potential cost impacts on energy users in SA.

It is understood that the scheme is intended to be cost neutral with the cost of ‘electricity security certificates’ acquired by retailers expected to be offset by a corresponding reduction in wholesale electricity prices.

While it is acknowledged that if the scheme is successful in incentivising more ‘eligible’ generation in the market, the security and reliability of electricity supply in South Australia is likely to be improved, a cost neutral scheme does nothing to assist with the affordability issue during the life of the scheme. Affordability is a key issue which must be addressed, and it cannot wait until 2029/30. It must be addressed now.

Of even greater concern is the risk that, despite the modelling undertaken by Frontier Economics, the scheme does not turn out to be cost neutral, adding to an already significant increase in electricity prices that will not be sustainable for many large consumers.

While the theory of the scheme may appear sound, the way things work in practice is often very different - particularly where there are few market participants who can use their power in the market to manipulate outcomes to generate an advantage.

The wholesale electricity market is an excellent case in point where modelling of the supply/demand fundamentals today suggest we should be seeing significantly lower prices compared with actual pool price outcomes. This appears to be, at least in part, due to the bidding behaviour of generators, including some large generators withholding available capacity from the market.

Given the nature of the SA electricity market, and without the benefit of the Frontier Economics modelling, we have strong concern that the cost outcomes for consumers under the scheme will be significantly higher than what the modelling suggests.

Further, the effectiveness of the scheme in increasing ‘clean generation’ will depend in large part on whether natural gas is available at acceptable prices. To the extent that it is not, the result could be to significantly increase costs, particularly in the near term, without any corresponding benefit in increasing generation and lowering wholesale electricity prices.

Based on a capped price of \$50/certificate, we have calculated that the increase in cost as a result of the scheme could be as high as \$18/MWh in FY18 and \$25/MWh in FY25-FY30.

Any net increase in costs from the scheme will reduce the international competitiveness of BOSMA members. This is a very significant concern. We have already lost our competitive advantage in energy and cannot allow our ability to compete to be further eroded.

For this reason, we propose that a full exemption is made available to Emissions-Intensive Trade-Exposed (EITE) industries to ensure they are shielded from any costs or unintended impacts arising from the scheme. To avoid shifting the burden to other energy users, it is suggested that consideration be given to a reduction in the proposed targets.

We also suggest that consideration is given to expanding the definition of ‘accredited electricity generating plant’ to allow for the generation of certificates by self (on-site) generation facilities using

natural gas or other waste process gases or materials. Such on-site generation facilities not only reduce the demand on the grid (helping to lower wholesale electricity prices) but also are an efficient and effective means of reducing greenhouse gas emissions and, therefore, should be encouraged and incentivised.

Overall, it will be critical that the scheme is designed with appropriate protections and controls to ensure that it operates efficiently and effectively without manipulation by large generators or retailers. A failure to do so will lead to an increase in electricity costs for SA consumers. This is clearly the last thing that we need.

As such, BOSMA strongly recommends that consideration be given to the following:-

- The ownership of certificates should be open to any registered entity to improve market liquidity similar to the RET, as ownership of certificates is currently restricted to generators and retailers;
- The registry of certificates should be completely transparent and public to facilitate public scrutiny of the operation of the scheme and the behaviour of participants;
- Consideration of 'synthetic inertia' technologies to increase sourcing options and the potential supply of certificates, opening the restricted market to greater competition;
- Augmentation of proposed Essential Services Commission of South Australia reporting requirements; and
- Placing expiration dates on certificates to ensure they are used for compliance in the same financial year in which they were created.

Finally, consideration needs to be given to the impact of the scheme, not just on the electricity market, but also on the gas market. By incentivising increases in gas-fired generation and, therefore, the demand for natural gas, the current shortfall in domestic gas supply will only worsen. While there are steps being taken to address this issue, it will take time for the market to respond. BOSMA would therefore encourage the SA government to consider delaying the commencement of the scheme until such time as there is a high level of confidence that there is sufficient gas supply to support the desired increase in gas-fired generation and meet the needs of the domestic market.

BOSMA Commentary and Recommendations

Introduction

As major energy users, the Australian steel industry has a strong interest in the pricing, security of supply, and reliability of energy.

Energy costs are a key determinant of the industry's competitiveness against imports and in export markets. In recent years and looking forward, the escalation in prices, power disruptions, and limited access to reasonably-priced energy are serious concerns for the industry.

Energy is one of the major costs in the production of steel products.

As such, energy pricing and security of supply are critical issues for the domestic steel industry and BOSMA supports sensible and considered energy policy reform. Failure to address the issues of rising energy prices and ensuring energy security will result in large manufacturing companies no longer having the capacity to invest in Australia and see smaller manufacturers forced to close.

While BOSMA understands the drivers for the South Australian Government to develop legislation to improve security within the electricity system, it has a number of significant concerns regarding the impacts of this proposal:

1. the potential for the scheme to further increase electricity costs – further challenging the viability of manufacturing (particularly EITE industries) in the state;
2. the potential for this scheme to reduce electricity market competition through the exclusion of technologies that may provide technically equivalent stability characteristics;
3. a design of the scheme which limits participation to just generators and retailers – thereby removing transparency in the market and potentially limiting the opportunity for large users to acquire least cost compliance outside of traditional electricity supply arrangements;
4. the potential for the banking of electricity security certificates allowing for acquittal in future periods hence introducing an opportunity for gaming of prices and providing no actual physical security benefit in the compliance year; and
5. the potential for the scheme to create adverse consequential impacts on wholesale gas pricing as a result of increased natural gas demand.

For Arrium, such potential electricity and natural gas price rises are particularly concerning given the need to continue to take further cost out of the business to secure the ongoing viability of the Whyalla Steelworks and its iron ore mining operations in SA.

Response to Consultation Paper Questions

QUESTION 1: Do the proposed amendments provide the level of transparency which would support the long term interests of South Australian electricity consumers?

There has been little or no transparency in the way the proposed amendments have been developed and, therefore, there is no clear basis to determine whether they support the long term interests of consumers.

The proposed amendments and supporting stakeholder consultation paper fails to provide detail as to how the measure will succeed in meeting the stated aims of creating sufficient market conditions to facilitate increased competition, put downward pressure on prices and provide more energy system stability.

In developing the proposed legislative framework, it is understood the government has engaged Frontier Economics to undertake modelling of the scheme which we presume will have considered the anticipated impacts on electricity price and certificate costs; the longer term effects on generation mix and supply security; and the sensitivity of this analysis to the anticipated behaviours of participants in

the market. In the absence of this information, and the government's basis for determining the regulatory settings (eg the \$50 price cap), it is unlikely that any stakeholder could reasonably judge how the proposed amendments support the long-term interests of SA consumers which need to balance security with both energy affordability and sustainability.

It is also unclear how this scheme will be integrated with the suite of existing and new energy measures at both a State and Federal level.

To provide the transparency necessary to respond appropriately in this consultation, BOSMA requests that the South Australian Government publishes the Frontier Economics modelling, and details of the assumptions and market analysis that underpin it.

In addition to concerns regarding the release of the modelling underpinning the scheme, BOSMA believes that the scheme must be designed with sufficient controls to ensure an efficient and transparent market operation is established and maintained.

To this end, the draft Regulations do not provide meaningful public transparency of the certificate supply or ownership. This lack of transparency, in addition to constraining ownership to either certificate creators or liable retailers, may decrease retail competition by adding an additional barrier to entry for retail markets and limit the ability of large electricity users to procure certificates outside of the traditional retail electricity supply relationships.

Since the closure of the Northern Power Station there has been an increased concentration of electricity market power partially contributing to the recent material increases in electricity prices. BOSMA is concerned that this measure may additionally limit the ability for retailers without an interest in South Australian gas-fired generation to compete in the state.

This may be partially managed through expanding the permissible ownership of certificates to all "registered entities". Like the RET, ownership should be open to any registered entity to improve market liquidity. Similarly, the registry of certificates should be completely transparent and public to facilitate scrutiny of the operation of the scheme and the behaviour of participants.

Finally, the draft Regulations do not include a mechanism to review retailer behaviour in passing through energy security certificate charges higher than their actual costs. Unlike a least cost bidding process (such as renewable energy or carbon abatement auctions) the proposed measure does not have any mechanism to ensure the cost of compliance with the target is passed onto the consumer at least cost.

Notably the draft legislation also fails to provide a safety mechanism to check or control the price charged by retailers for certificates below the price cap of \$50.

QUESTION 2: Has the Essential Services Commission of South Australia been provided with sufficient powers to effectively administer the electricity security target?

While the proposal and draft legislation appear to provide sufficient powers to operate the electricity security certificate scheme, they don't appear to provide any mechanism to limit the potential for retailers to control the supply and therefore price of certificates in the market, nor the pass-through costs of compliance.

QUESTION 3: Are there any changes to the draft Regulations you consider necessary to support the long term interests of South Australian electricity consumers?

There are several issues that should be considered in further developing the draft Regulations:

3.1 Inclusion of an EITE Exemption.

The design of the scheme should include an exemption for EITE facilities similar to those incorporated into the Federal RET scheme to the same 100% exemption level.

A \$50 certificate price has the potential to result in a direct pass-through cost by as much as \$25/MWh over the life of the scheme resulting in immediate electricity cost increases of up to 15%.

These additional certificate costs could also be exacerbated by increases to gas prices. Without release of the Government modelling, the actual impacts on electricity and gas costs are presently unknown.

The scheme is intended to increase the contribution of spinning capacity from 36% to potentially 50% of the operational electricity market by 2025. While there is presently sufficient gas fired capacity installed in South Australia to meet the proposed targets, introducing more gas fired generation back into the market could potentially increase gas prices through the reintroduction of an additional 14 PJ of demand.

An increase to gas prices in addition to potential certificate pass-through costs, without a corresponding reduction in wholesale electricity prices, will reduce the international competitiveness of domestic industry located in South Australia – and erode the benefits of the significant work undertaken by Arrium to reduce the operating costs at its South Australian steelmaking and mining activities, placing in jeopardy its future viability.

While we appreciate the Government's view that the scheme is intended to lower wholesale electricity prices, BOSMA submits that an EITE exemption should be included to shield trade-exposed industries from any potential exposure.

To avoid shifting the burden of introducing an exemption for EITEs, it is suggested that consideration be given to lowering the proposed targets under the scheme.

Further, the administrative burden in establishing this exemption could be minimised by simply recognising the EITE status established within the framework of the Federal Renewable Energy Target and the level of exemption granted (100%).

3.2 Inclusion of Synthetic Inertia.

The legislation appears to exclude 'synthetic inertia' from contributing to the target, which would therefore exclude technologies such as paired battery systems and wind generators. BOSMA is concerned that by excluding synthetic inertia or 'fast frequency response' (FFR) technologies from the eligible technologies, that the legislation may have the effect of forcing a level of synchronous inertia that may not be necessary to ensure the security of supply, and therefore creating unnecessary costs to consumers.

While this is a specialised technical area, BOSMA recognises that the opinion of industry experts appears to be evolving to the point where FFR and battery storage are thought to be able to play a significant role in supporting grid security and management. FFR can reportedly complement synchronous inertia in meeting the frequency operating standards of the grid, such that lower levels of synchronous inertia are likely to be required.

If 'synthetic inertia' qualifies for a proportion of the certificate requirement, this would significantly increase sourcing options and potential supply of certificates, and open up the restricted market conditions to greater competition. In addition, if the scheme allows synthetic inertia for at least part of the target, it is believed that the scheme is more likely to meet its goals by bringing additional storage to the market, rather than just increasing cost, potentially without changing business as usual outcomes.

BOSMA believes further consideration and/or transparency is required in relation to the eligibility of these technologies, including the potential for them to reduce the cost impact of the scheme on consumers.

3.3 Inclusion of Self Generation

On-site generation facilities using low or zero emissions fuels not only reduce the demand on the electricity grid (helping to lower wholesale electricity prices) but also are an efficient and effective

means of reducing greenhouse gas emissions and, therefore, should be encouraged and incentivised.

We recommend that consideration is given to expanding the definition of 'accredited electricity generating plant' to allow for the generation of certificates by self (on-site) generation facilities using natural gas or other waste process gases or materials.

3.4 Transparency and Scheme Reporting

The scheme has a stated goal of increasing competition, putting downward pressure on prices and providing more energy system stability. On an annual basis the Essential Services Commission of South Australia should report on both the compliance with, and outcomes of, the scheme.

To this end, BOSMA submits that Regulation 44EK (3) should be amended to ensure the report is not only provided to the Minister but is made public and importantly its content should be expanded to include:

- an assessment of the extent to which the scheme contributes to energy security in South Australia;
- the volume weighted average certificate price;
- the impact on the scheme on electricity and natural gas prices; and
- an assessment of the ongoing need for the scheme.

Additionally, Regulation 44EL (2) should be amended to allow for public access to the register of accredited electricity generating plant and the register of electricity security certificates.

3.5 Ensuring Certificates Contribute to Actual Security

Our analysis indicates that the proposed targets could be fully met with utilisation of existing gas fired generation capacity – suitably incentivised to operate during the time period in which it is most needed.

Under the draft Regulations, 'eligible' generators could create surplus certificates to be banked for future compliance periods allowing for a perverse outcome whereby retailers may pass on certificate costs for generation which occurred many years in the past – without providing any security benefits in the current compliance period.

Further, generators or retailers could withhold certificates from the market, or potentially release excess certificates into the market, for the purpose of manipulating prices.

To ensure 'eligible' generation capacity is available during the periods required, and to minimise the potential for gaming of the market, BOSMA submits that Regulation 44EH should be amended to ensure certificates are automatically cancelled within three months of the end of the financial year in which they were created.

To accommodate this change the retailer surrender date outlined in Regulation 44EI (1) should be changed from one month to three months – allowing sufficient time for certificates to be both created and surrendered.

These changes would ensure a certificate produced in respect of generation in a financial year is only valid to meet liabilities in respect of that financial year.

3.6 Price Cap

BOSMA supports the inclusion of a cap on the price of certificates, but recommends that consideration is given to lowering the proposed cap of \$50/certificate, at least until the market is established and market behaviours are understood, to limit the impact of the scheme on consumers who are already struggling with record energy costs.

Independent advice and modelling suggests that electricity prices could increase by up to \$18/MWh in FY18, and escalate to an increase of over \$25/MWh by FY25, under the scheme. While it would seem unlikely that the net impact would be at these levels given the expectation of a reduction in wholesale electricity prices, a lower price cap for the next two to three years would reduce any impacts if the scheme fails to operate as expected.

QUESTION: What verifiable information could be submitted to evidence electricity security certificate creation and acquittal?

BOSMA supports the development of a transparent market mechanism to reduce the risks associated with limited market participants potentially controlling the supply of certificates and artificially driving the prices of certificates higher.

A public register should be created that provides public data on the creation and surrender of certificates as well as the current ownership of certificates, to support the development of a transparent market and to allow scrutiny by both the public and the regulator in relation to the supply of certificates and any potential manipulation of prices and/or unintended cost impacts for consumers.