

## **SUBMISSION**

**JUNE 2018**

### **Review of the Queensland Energy Legislation - Issues Paper - Australian Sugar Milling Council**

#### **Summary**

To promote the viability of the Australian sugar industry, and the objectives of clean, reliable and affordable energy, state policies and legislation should:

- facilitate lower delivered energy costs by:
  - promoting greater competition in the generation, transmission, distribution and retailing of energy
  - (in the absence of effective competition), providing for price intervention and controls that replicate competitive market outcomes.
- facilitate an increase in the supply and flexible consumption of cogenerated electricity by:
  - removing federal and state duplication and faster administrative processing of approvals (potentially through the imposition of minimum time periods)
  - providing for the ability to enter into a preferential supply arrangement with cane growers (at the cost of supply for example) through more flexible retailing controls
  - promoting investment certainty by imposing legislative requirements on third-parties to fund upgrades to the grid when new supply is likely to exceed agreed export capacities nominated in Connection Agreements.

#### **Background**

The Australian Sugar Milling Council (ASMC) welcomes the opportunity to comment on the Review of Queensland Energy Legislation.

The Australian milling sector consists of 8 owners (domestic and foreign) and 24 mills with collective production capacity of approximately 5 million tonnes (mt) of sugar. Total direct and indirect employment is approximately 16,000. In 2017 the sector produced around 4.4 mt of raw sugar (A\$1.6 billion) and generated an additional \$250 million in revenue through sale of biofuels, co-generated power and molasses.

#### **Competitive threats**

The Australian milling sector competes in a highly competitive global market for raw sugar. Raw sugar prices in the global sugar market are currently depressed given significant oversupply. The Australian sugar industry - consisting of the cane growing sector and the (raw sugar) milling sector - is generating significant losses at today's global



raw sugar prices. Minimising costs and maximising revenues - including energy, is a priority for both sectors.

Energy is a significant input cost to the cane growing and milling sectors and the revenue received from cogeneration is an essential supplementary source of revenue to the millers. State and Federal energy policy and regulations that impact upon the cost of imported energy and the incentives to invest in and maximise the direct and indirect economic returns from co-generated energy have therefore a significant bearing on the industry's viability.

### **Imported energy requirements**

Purchasing around 60,000 MWh of electricity via (in the main) regulated tariffs T22 (transitional) and T48 (obsolete), imported electricity accounted for a significant 5-10 percent of a typical millers cash costs. The proposed cessation of these tariffs in two and four years respectively<sup>1</sup> will, in the absence of significant price competition, cause energy costs to significantly increase at most mills.

Competitive 'market' outcomes will become increasingly important and ASMC supports policy and regulatory settings that encourage greater competition in the generation, transmission, distribution and retailing of energy. This acknowledges that this supply chain is strongly dominated by monopoly operators with strong monopoly controls. In the absence of effective competition in the provision of goods and services along the energy supply chain, ASMC supports fixed retail prices and price controls that mirror a competitive price outcome to offset the monopolistic powers of providers.

### **Exported energy requirements**

Utilising the sugar manufacturing process by-product of bagasse to generate steam and electricity, and incentivised by the large-scale certificates generated through the Renewable Energy Target, the Australian sugar milling sector has invested heavily in recent years to augment its co-generation output.

Greater co-generation is aligned to the government's objectives of cleaner and more reliable and affordable energy supply. This is because cogeneration supply:

- has a minimal 0.2t CO<sub>2</sub>-e/MW emissions profile
- is both reliable and 'despatchable'
- can effectively stabilise or improve system strength in grids with large volumes of intermittent supply (provides system strength)
- can lower the firming costs of additional renewable supply.

With approximately \$300 million in investment, five of Australia's sugar mills have installed 157 MW of significant additional co-generation. In 2017, Australian mills generated around 1,000 GWh of co-generated power and exported around 500 GWh to the grid for domestic consumption (approximately 170,000 homes and \$75 million in revenue, including the value of RET certificates). There is significant potential to expand cogeneration capacity further under the right commercial and policy settings.

---

<sup>1</sup> QCA, Final Determination Regulated retail electricity prices for 2018-19, May 2018, pg 75



Australia's energy system is evolving and the changing mix of dispatchable and intermittent technologies has necessitated a higher focus on ensuring the system delivers reliable, secure, clean and affordable energy. We note that whilst costs for renewables have reduced significantly, the technology and policy drivers are such that renewables need to be built close to available infrastructure to be commercial. This is creating clustering in a number of Queensland localities and potential for certain networks to become overloaded.

Generators that are semi-scheduled or scheduled may be subject to AEMO limiting their output to ensure any network constraints are not exceeded. However non-scheduled generation should not be subject to that limitation and should be able to generate up to the amount specified in their connection contract. The connection contracts do usually contain clauses to limit output during abnormal network conditions but if everything is normal, in general, the maximum export should be that specified in the contract.

The constraining of output from a cogeneration plant that is not classified as scheduled can present difficulties and may in certain circumstances impact sugar production. One solution to this problem is for parties to request Ergon to undertake load studies and guarantee that current agreed export capacities nominated in mill Connection Agreements remain firm. If this cannot be guaranteed the ASMC supports legislated provisions compelling new projects to fund upgrades to the grid.

ASMC also supports policy and legislative settings that incentivise co-generation and lowered total delivery costs through competitively sourced transmission and distribution. The ability of third parties to independently source their own transmission and distribution unencumbered from the controls and stipulations of the monopoly providers would reduce costs and completion times significantly and improve the economics of cogeneration.

Removing duplication and inconsistencies in generation licensing across the federal and state regimes is also supported. The AEMC is taking an expanding role in managing Australia's electricity supply, demand and network operations, and it is recommended that this review should identify and remove clauses that duplicate or possibly conflict with federal laws and regulations (for example generator registration under the Queensland Generation Authority). This review should be completed after the imminent National Energy Guarantee rules are legislated.

ASMC also seeks greater flexibility in how co-generated power is consumed and who can be a retailer - including the ability to provide power at a preferential rate (e.g. at cost) to neighbouring cane growers (through creation of physical regional micro-grids for example or through virtual supply). Electricity represents between 11-20 percent of irrigated growing costs (depending on water source). Increasing electricity costs on canegrowers under transitional tariffs 62 and 65 are impacting cane farming viability, while the product they produce (i.e. cane) provides the fuel for renewable electricity generation close to the source of the primary product.