22 September 2023

Australian Energy Market Commission
GPO Box 2603
Sydney NSW 2001

Sent via: AEMC website

To whom it may concern

RE: ERC0363 Enhancing investment certainty in the R1 process

Summary of position

The Australian Sugar Milling Council is pleased to provide this submission to the ERC0363 AEMC rule proposal that seeks to reduce the complexity and delays in finalizing new connections.

In summary our submission:

- Supports the Clean Energy Council view that the regulatory processes for generation connections (new and existing) are lengthy and costly and reforms to the Rules are urgently required;
- Supports amending the Rules to achieve a more workable balance between grid reliability and regulatory efficiency;
- Does not support the scope of the reform which is just variable renewable inverter-based technologies; and
- Supports Rule changes that accommodate the unique operating requirements and specific concerns of the sugar millers regarding the current generator approval processes.

Introduction

The Australian Sugar Milling Council (ASMC) is the peak industry organisation for the raw sugar manufacturing sector. We represent sugar manufacturing companies which collectively produce 85 percent of Australia's raw sugar.

In 2022, sales of raw sugar, exported electricity, molasses and ethanol generated around AUD$2.3 billion in revenue for the Australian milling sector with returns reinvested locally into the maintenance and upgrades of sugar mills.

In 2021, the Queensland sugar industry (cane growers and raw sugar millers) employed around 20,000 people and contributed around AUD$4 billion in Queensland Gross State Product[1].

Sugar milling energy production

Ranging from 8MW to 68MW's of individual capacity, and 438 MW of aggregate co-generation capacity, ASMC members generate 1 million MWh's of co-generation power per annum of which around 50% is exported to the grid as synchronous, green, reliable supply. Furthermore,

and consistent with the sector's revenue diversification agenda, the sector is actively assessing the feasibility of liberating more bagasse and increasing capacity beyond 1GW.

Sugar milling energy regulatory concerns

Whilst acknowledging the need for generator performance standards (GPS) and provisions that support the reliability and security of the network, ASMC member feedback is that NSP (Energy Queensland) and AEMO regulatory processes for obtaining generation connection approvals are challenging, lengthy and at times not suited to the unique circumstances of milling which is primarily to utilise available heat, steam and power to manufacture sugar. **Attachment 1** provides a more detailed summary of our concerns with the current R1 and R2 processes. Please note that our concerns relate to the regulatory approvals processes, and not the standards themselves.

ASMC members will need to undertake regular and routine maintenance to existing generating units over the coming years (e.g, protection, governor controls, switchboard and Automatic Voltage regulator upgrades etc.) and some of these activities will trigger new GPS approvals. This work is in part to improve generator control, reliability and security of aging parts but will equally benefit the local networks in which they are located. Some of this maintenance, especially to units that are >30MW and market registered, will in likeness trigger regulatory reviews and consequently be forced to meet more onerous GPS and testing (R1 and R2) as obligated under section 5.3.9 of the National Electricity Rules (NER). Generating systems <30MW but greater than 5MW fall in a grey zone where the obligations and standards required are more arbitrary and prone to change and hence very difficult to accurately cost and plan for.

The consequence of not achieving timely and low cost approvals will be diversion of internal capital to other essential factory upgrades. This may mean that generation units are not maintained leading, ironically, to lower grid reliability - a perverse result of rules designed to do the opposite.

Less understood is that the generating units are primarily designed to reduce or minimise more expensive imported energy to maintain the mills' primary business of manufacturing raw sugar. Failure to replace generating systems or parts will increase the use of imported energy to keep the mills operating and significantly increase running costs.

Further, costly and long delays in commissioning new co-gen may undermine the sector's appetite to commission an additional capacity and for Queensland communities to capture the associated environmental and grid reliability benefits.

Sugar milling relationship with EQL and AEMO

ASMC in late 2022 initiated a process similar to the CEC Connections Reform Initiative whereby sugar millers, AEMO and EQL continue to meet to share operational and regulatory perspectives, clarify process requirements and attempt to find efficiencies in the processes. Whilst appreciative of the support of AEMO and EQL to this process, it is clear that fundamental improvements to the rules are also required to improve the processes themselves.

Please don't hesitate to contact David Rynne, Director Policy, Economics & Trade at david.rynne@asmc.com.au or phone 0431 729 509 for further clarification on the issues raised in this submission.

Yours sincerely

Mr David Rynne
Director - Policy, Economics and Trade
Australian Sugar Milling Council

Attachment 1: Identified milling sector concerns with R1 and R2 generator performance standard approvals processes

1. Typical testing & commissioning processes don't acknowledge operating seasonality constraints (that is, maintaining heat and steam to run the sugar mills during the June-Nov crush is the imperative of the sugar industry, whereas producing power to the grid is secondary). In other words, the industry has narrow windows of opportunity to execute maintenance or capital projects without impacting the broader industry and regional community.
2. The capability to model old co-generation kit doesn't exist.
3. The regulatory processes are lengthy and costly and this is exacerbated if errors are made.
4. Changes in the NER's often occur at intervals more frequent than the time required to develop a R1 Package.
5. The applicable NER's aren't locked in until an R1 Package is submitted and a significant change to requirements just prior to submission can lead to lengthy delays.
6. The proponent is forced to demonstrate that their Generating System is compliant rather than the NSP/regulator or AEMO establishing that the Generating System can actually affect the reliability/security of the network.
7. The information required to prepare a R1 Package from an OEM often borders on company intellectual property.
8. There is often an overlap in responsibility between AEMO and the NSP/regulator, and achieving a shared position between both often leads to delays.
9. The registration process triggers a retrospective review of a sites network connection assets against current standards (this more often than not will require capital from the proponent to upgrade these assets without any alternative).
10. NSP/regulator costs are not contestable with bureaucratic and rigid (sequential) sub-processes. Infrastructure requirements are often 'gold-platted', and there is often a shortage of resources and expertise within the NSP/regulator from both an assessment (R1 Due Diligence) and construction (Connection Assets) perspective.
11. R2 (commissioning processes) testing pushes systems to capacity and are not based on real risk (potential to damage plant during the process).

End.