



13 July 2018

Dr Kerry Schott AO
Chair
Energy Security Board

By email to: info@esb.org.au

Dear Dr Schott,

Re: ASX Response to Draft Detailed Design Consultation Paper

Thank you for the opportunity to make a submission on the National Energy Guarantee Draft Detailed Design Consultation Paper dated 15 June 2018.

Introduction

As indicated in our response in February, ASX is supportive of the key objectives of the National Energy Guarantee (NEG). ASX believes that an open, competitive and transparent market place is the best way to address these issues and develop solutions that deliver on both climate policy objectives, price transparency and system reliability and security requirements.

The provision of long-term policy direction built on sound principles should provide the market place with stability and confidence. Sound policy is required to enable the energy sector to grow, adapt and innovate in the face of challenging dynamics.

This submission by ASX wishes to focus on two main areas:

1. The emissions reduction requirement, specifically the establishment and operation of the registry; and
2. The reliability requirement, specifically the provision of market liquidity.

The Energy Security Board (ESB) in its various consultation papers acknowledges the critical role that financial products and financial markets can play in facilitating the risk management activities of entities operating within the National Energy Market (NEM). We believe that the ESB can play an important role in ensuring this aspect is appropriately reflected in the design elements of the NEG if it is to operate in the most effective and efficient manner.

About ASX

ASX supports Australia's energy markets through the operation of its existing capital, futures and options markets. ASX also provides opportunities to invest in publically listed energy, renewable energy and clean technology companies.

ASX energy markets are comprised of futures and options over Australian Electricity, New Zealand Electricity and Natural Gas. ASX Australian Electricity futures and options are standardised and centrally-cleared financial contracts. They are structured as cash-settled CFDs against the NSW, Victorian, Queensland and South Australian regional reference nodes in the NEM. They provide a robust mechanism for companies that have an interest in or exposure to the NEM to anonymously manage price and counterparty risk.

In the 2017-18 financial year, some 333 million MWh's of Australian NEM based electricity were transacted and cleared on the ASX's trading and clearing platform. As at 9 July 2018, ASX has open contract volume of over 46,000 lots, representing 127 million MWh of energy with a face value of \$8.02 billion.

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The Emissions Requirement and Operation of the Registry

Ensuring contestability in service provision - Section 3.3.4

The proposed emissions reduction requirement envisages the establishment of a registry to provide the necessary infrastructure to facilitate efficient compliance. The registry will need to facilitate the recognition of generation and associated emissions. This generation would be allocated between customers by way of transfer of the respective emission intensity of generation to a market customer's load. Although not explicitly stated, this allocation is expected to result in the transfer of value from the buyer (the liable retailer or major user) to the seller (the electricity generator).

The design consultation paper proposes that this registry be developed and administered by AEMO. ASX believes that the development and operation of the registry should:

1. **Comply with full Delivery versus Payment (DvP) functionality using BIS Model 1 DvP for any re-allocation of emission intensity generation (EIG).** The failure to include secure DvP functionality (simultaneous cash and EIG transfer) may:
 - a. exacerbate credit related issues in the market;
 - b. be anti-competitive in that it creates a competitive barrier to entry for smaller liable entities with insufficient credit standing; and
 - c. hinder the development of a market for the reallocation of EIGs, increasing overall cost of compliance and market transaction costs for market entities.
2. **Be a contestable service.** Registry services should be provided on the most efficient and cost-effective basis if the benefits of the NEG are to be maximised. The ESB has decided that registry services should be administered by AEMO as they currently hold most of, or have access to, the data relevant to the Guarantee's operation. ASX believes a more rigorous assessment process should be undertaken before making such an important decision. To ensure that the best outcome is achieved the ESB should conduct a tender for the provision of registry services based on a set of best practice criteria, including appropriate data access arrangements. There are other registry operators which may be able to deliver a superior service including, for example, delivery vs payment functionality.
3. **Reinforce confidence in the NEM.** The measures introduced as part of the NEG, including the nature of the registry services provided and the choice of registry administrator are both important decisions that will impact on confidence in the system. A failure to deliver the most efficient and cost-effective arrangements can damage the achievement of the NEG's goals and confidence in the NEM.

The Reliability Requirement

Market liquidity obligation – Section 4.6

The consultation paper identifies the importance of liquidity provision in the form of a mechanism called a Market Liquidity Obligation. This obligation is envisaged to be placed on large vertically integrated retailers and would oblige them to make contracts available for the period of the 'gap', on a centrally cleared platform.

Since 2011, four participants have provided price making services in the ASX NZ electricity futures market. Based on any objective analysis, this liquidity provision has succeeded in its goals of creating liquidity, price transparency and increased competition at both a generator and retailer level.

The NZ Electricity Authority states that "an active hedge or futures market with transparent and robust forward prices and easy accessibility for new entrant generators, retailers and consumers is critical to promote competition, reliability and efficiency in the wholesale and retail markets." The benefits resulting from a liquid futures market providing a transparent forward price signal are well documented and understood.

As a result of market making, the New Zealand electricity futures market experiences price discovery and open interest to the full extent of the forward curve, which is currently out to Q4 2021. In contrast, the Australian electricity futures market typically has price discovery and open interest limited to the next two years (current Open Interest is out to Q4 2021) and the full forward curve listed is out to Q2 2022. The greater the liquidity, the lower the transaction costs for transferring and managing risk. This ultimately produces the most efficient price outcome and informs investment decision-making.

In deep, liquid and mature markets, liquidity provision by market makers is not required. In less liquid markets, particularly those that are volatile, providers of risk capital may require incentive beyond simply the bid and offer spread. In the absence of such rewards, providers of risk capital will have reduced incentive to support liquidity in the market if the financial benefits are not commensurate with risk assumed, resulting in higher costs for end users. This higher cost is realised in the form of wider bid-offer spreads and less robust and consistent price formation. The costs for managing risk for end-users rise as a consequence.

Quantifying the benefits of market liquidity can be challenging. A recent Sapere Research Report commissioned by the Singapore Energy Market Authority¹, estimated that a liquid and transparent futures market “was conservatively estimated to result in the retail electricity price being 5-10% lower than what otherwise would have been the case in the instance that such a market did not exist.” For the NEM, this would mean that the estimated value for end-consumers could be between \$400 million and \$600 million each year. The benefit to all consumers and providers of electricity from liquidity provision is overwhelmingly positive.

Fostering liquidity in the market through market making

Liquidity in a futures market cannot be taken as a given, nor something that can be taken for granted. On the contrary, liquidity is a relatively fragile feature of many markets, particularly new and ‘immature’ markets. Exchange-traded markets typically have far superior liquidity to non-transparent over-the-counter markets or non-exchange traded search markets. The presence of committed price makers prepared to make consistent bids and offers in a futures market, underpins liquidity and begets more liquidity, as additional providers of risk capital have greater confidence in participating in the market. Importantly, the provision of liquidity can also make a material difference in the credit risk assessment of a futures market, reducing capital costs for hedging.

There are broadly three different approaches to the provision of liquidity through market making. These can be categorised as being by:

1. Compulsion;
2. Mutual agreement; or
3. Incentive driven.

Each of these different approaches has pros and cons and are compared in more detail below.

Approach	Key feature	Pros	Cons
Compulsion	The provision of liquidity by parties is imposed typically through rules or law.	Liquidity is assured as parties are compelled to make prices.	<p>Compulsion is blind to the potential cost or risk of loss for those required to make markets.</p> <p>Price makers face the potential for significant loss without commensurate reward for undertaking that risk.</p> <p>Compelled price makers subsidise risk capital providers who take advantage of the liquidity in the market resulting in ‘regulatory arbitrage.’</p> <p>The arrangement is likely to be economically unfair given the potential for many or some parties unfairly benefiting.</p> <p>Given the above, the arrangement is likely to be anti-competitive and result in higher costs than would otherwise be the case.</p>

¹ Costs and benefits of an electricity futures market and EFSC Scheme, Sapere Research Group, November 2015

Approach	Key feature	Pros	Cons
Voluntary agreement	A voluntary agreement between a number of parties to make markets.	No compulsion.	<p>Liquidity is not assured, particularly during periods of heightened price volatility.</p> <p>Mutual agreement can act as a powerful motivator, but this structure can be inherently unstable as different price makers have different appetites for risk, capacity or capability in the price making process.</p> <p>Although not compelled, price makers still subsidise risk capital providers who are able to take advantage of the liquidity in the market, without necessarily contributing to consistent and liquid price discovery.</p> <p>As market growth occurs, pressure on the voluntary arrangement will come under pressure.</p>
Incentive driven	Market making is incentivised through some form of reward or privileged position in the market. This is usually dependent on them meeting contractually agreed obligations.	<p>Price making is undertaken by parties highly motivated to provide the service.</p> <p>If reward is determined by the quality of the market making, competitive forces will drive the most efficient price outcomes and liquidity.</p> <p>Liquidity is assured so long as the potential for reward exceeds the potential for loss.</p>	Determining the contributors, size, nature and allocation of the incentive or reward can be difficult or contentious.

The approach to liquidity provision in the NZ electricity market is currently a mix of Model 2 and 3 - by voluntary mutual agreement (albeit with some regulatory encouragement) and some incentive in the form of an ASX-funded financial pool. Given the importance of liquidity to the market and the economy's overall competitiveness, putting the provision of liquidity onto a solid foundation should be regarded as an important objective for the ESB and NEG. Analysis of the pros and cons of the three models, indicates that an incentive driven model delivers the most sustainable and positive outcome for the market and its participants.

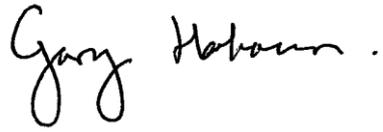
ASX believes that the active participation of market makers in the NEM will deliver many of the reliability goals identified in the NEG. ASX is currently seeking to engage entities interested in making markets continuously – not merely when a reliability obligation is triggered. ASX believes the development of an incentive-driven, committed market making arrangement is a far more preferable solution to the issues identified as part of the reliability requirement, than a mandatorily imposed liquidity obligation.

Conclusion

ASX looks forward to further discussions with the ESB, regulators and industry participants to discuss these ideas in more detail and to help deliver on the objectives as set out in the NEG.

For further information or communication in relation to this submission, please contact: Ken Chapman, Head of Strategic Delivery, Capital Markets (tel: +61 (0)2 9227 0094, E: ken.chapman@asx.com.au).

Kind Regards

A handwritten signature in black ink that reads "Gary Hobourn." The signature is written in a cursive style with a period at the end.

Gary Hobourn
Senior Economic Analyst
Regulatory and Public Policy