28th November 2018

Dr Kerry Schott AO
Energy Security Board

Submitted via e-mail to: info@esb.org.au

Dear Dr Schott,

Proposed Metrics

The Australian Energy Council (the "**Energy Council**") welcomes the opportunity to make a submission in response to the Energy Security Board's ("**ESB**'s") *Strategic Energy Plan Consultation on Proposed Metrics Paper*.

The Energy Council is the industry body representing 23 electricity and downstream natural gas businesses operating in the competitive wholesale and retail energy markets. These businesses collectively generate the overwhelming majority of electricity in Australia, sell gas and electricity to over ten million homes and businesses, and are major investors in renewable energy generation.

Introduction

The Energy Council acknowledges there is value in the ESB providing guidance and coordination regarding energy policy and regulation, and the development of the Strategic Energy Plan ("**the Plan**") is an opportunity to help guide the energy sector over the long term. To this end, the ESB should not be rushed to develop its plan, but rather should fully consider the issues to maximise the Plan's value. The Energy Council is concerned that the ESB is proposing draft metrics before a clear scope has been proposed, and the metrics suggested presume that outcomes will follow particular paths. On this basis the Energy Council believes the development of the metrics is premature, and the ESB should first consider the actions associated with the Plan which generate the desired outcomes.

Overall, the proposed metrics pose a risk to industry and consumers, as some are superficial, inappropriate and with their focus on preferred outcomes, do not properly consider broader market cycles. Given the potential role that a Strategic Energy Plan could play in guiding the energy sector, the Energy Council strongly encourages the ESB to work closely with industry to refine the proposed metrics to ensure they are reflective of market dynamics and consumer preferences.

Discussion

The Energy Council believes it is important to consider the metrics within the broader reform process, and the proposed metrics exhibit a number of common, underlying concerns, as follows:

- Dependencies – without adequate detail behind the selection of the metrics, the consultation paper provides no evidence that the interlinkages between many of the metrics have been properly considered;
- Coarseness – some of the proposed metrics use simplistic measures to make assessments with far-reaching consequences for industry structure. The energy industry continues to suffer policy instability and many of the metrics suggested will increase risks by driving particular outcomes;
- International comparisons – many metrics will be assessed against international standards, particularly in terms of costs. The Energy Council cautiously supports international comparisons only where there is clear rationale for comparing Australian and overseas jurisdictions. Any comparison will need to take into account the National Electricity Market's ("**NEM**'s") arrangements both in terms of cost and operation. The NEM is unique in its structure, with a geographically large transmission

Level 14, 50 Market Street
Melbourne 3000
GPO Box 1823 Melbourne Victoria 3001

P +61 3 9205 3100
E info@energycouncil.com.au
W energycouncil.com.au

ABN 92 608 495 307

system supplying a relatively small market. Any metrics referencing international standards need to be cognisant and realistic to the local operational and market context;

- Unrealistic expectations – many of the metrics are expressed such that only one direction is preferred, e.g. "increasing number of consumers …". Markets are cyclical in nature and seeking a particular, unidirectional outcome is not efficient when considered in the context of other indicators of market efficiency. All stakeholders acknowledge that the market is in transition, therefore it is unrealistic to expect particular indicators to move in parallel or in one direction. Some metrics may get worse before improving, while others cannot reasonably be expected to continue to head in one direction indefinitely;
- Applicability – the metrics still differentiate between security and reliability without contemplating the relationship between them. This will lead to inefficient solutions as the nexus of security and reliability is becoming more important as the power system, and its associated market, changes; and
- Pre-emptive – some of the metrics are based around solutions that have not yet been substantiated.

While these are general comments on the proposed metrics in the consultation paper, there are a number of comments specific to the five outcomes which can be made, as follows:

Affordable Energy and Satisfied Consumers

Affordable energy and satisfied consumers should underpin all objectives, since this is largely affected by policy, market, regulatory and operational decisions based on the National Energy Objective. The Energy Council believes it is important for the interrelationship between consumer choice, costs and benefits to be understood and incorporated into the proposed metrics. If the metrics are not well structured, then each can inadvertently affect the others or have flow-on costs. For example, affordability relies on the markets evolving to reflect the technical needs of the system for greatest efficiency.

The Energy Council suggests that more consultation is required before adopting metrics for this outcome, and makes the following observations:

- "Energy spend as a percentage of household disposable income" may not be the best indicator as there are discrepancies with income distribution and average wage. The Energy Council also notes that this measure is dependent on many external factors, and the latest ABS data shows electricity as a very small proportion of household disposable income, less than clothing & footwear and communication.[1]
- Metrics should not be based on the outcome of consumer behaviour but rather on providing the means to facilitate options. For example, a metric on consumers accessing data should instead be focussed on the increased accessibility to data for consumers. Similarly, instead of measuring whether consumers actually choose to participate in the market, a more suitable metric is removing barriers to participate. This becomes important in ensuring that consumers participate in a way that is beneficial to the system and suits their individual circumstances and appetites.

Secure Electricity and Gas System

The objective proposed is that markets operate safely, securely and efficiently, under (the) full range of operating conditions, with minimal intervention.

The Energy Council disagrees with imposing operational metrics which will stifle the Australian Energy Market Operator's ("**AEMO**'s") authority to operate the market and allow market efficiencies to develop organically; rather the metrics need to reflect COAG's broad accountabilities.

The National Electricity Rules already set out AEMO's accountabilities for operating the system securely and reliably, and the Rules are structured to provide this clear, operational mandate while endowing AEMO with a reasonable level of discretion to respond to unexpected events. While there needs to be transparency in these operations, imposing a target on market outages and interventions is counterproductive, particularly when the power system is changing to respond to a new generation mix.

The system contains many unknown unknowns. Key equipment and assets which were designed for system conditions ten years or more ago are now experiencing different operating conditions. The power system is

[1] Australian Bureau of Statistics, *Household Expenditure Survey 2015-16*, 13th September 2017

Level 14, 50 Market Street
Melbourne 3000
GPO Box 1823 Melbourne Victoria 3001

Phone +61 3 9205 3100
Email info@energycouncil.com.au
Website www.energycouncil.com.au

ABN 92 608 495 307

currently accommodating the transition, and both new and old generation is adapting to meet the new conditions. AEMO continues to operate the power system securely and reliably, and any metrics need to grant AEMO and power system participants the latitude to operate the NEM as efficiently as possible, without being constrained in pursuit of inappropriate targets. Inappropriate targets increase the risk of government intervention and compound investment uncertainty, thereby leading to poorer outcomes for consumers.

Similarly, the Energy Council believes that system planning and development is informed by clear and transparent rules. It is important that system planning be conducted by the appropriate bodies such as AEMO, and not be overridden by the COAG Energy Council in response to unsuitable metrics.

Reliable and Low Emissions Electricity and Gas Supply

The Energy Council agrees that emissions targets should be considered in the metrics, but recommends that reductions be measured in terms of intensity to allow for fuel switching, demand changes etc.

In relation to the metrics concerning reliability, these appear to be at odds with the broader existing power system measure of meeting the reliability standard. Assessing performance by reference to indicators such as the number of times the RERT is procured and activated places operational decisions in jeopardy by having multiple conflicting yardsticks by which success can be measured. For example, AEMO may decide to limit the number of RERT activations to meet the RERT target, but in doing so cause the reliability standard to be breached. As the proposed metrics don't consider the matter of precedence, this potentially puts the metrics into conflict with one another. Again, measures such as this don't properly consider the cyclic nature of the NEM, and the fact that there may be periods of increased RERT usage, while the generation mix changes from one state to another.

Instead it is important that markets are appropriately designed such that the market signals are aligned with the technical needs of the system. If this is done, the key characteristics will automatically be valued within the market, and be reflected in its efficiency. This will lead to the objective of "investors efficiently manage risk to support investment, operation, retirement and innovation decisions" being addressed by natural market forces within the framework of policy certainty, without being undermined by participants seeking to meet artificial market indicators, and thereby interfering with the market's natural functioning.

Effective Development of Open and Competitive Markets (where appropriate)

The Energy Council is supportive of wholesale and retail markets being competitive and delivering efficient outcomes for consumers, but the proposed measures are in some cases contradictory (e.g. the use of long run marginal cost in one indicator and levelised cost of energy in another), and in others not justified in the information presented (e.g. the proposition that declining market concentration will improve consumers' outcomes).

Similarly simplistic indicators such as a "year-on-year increase in market participants" don't provide adequate guidance on the health of the NEM by assuming that the efficiency outcome is more likely to have been met by this occurring, rather than considering more detailed, appropriate information.

This need to consider individual circumstances extends to the metrics regarding "deep, liquid and transparent financial markets for electricity and gas and related services". These metrics do not consider individual regional generation mix differences, political risk and potential impacts relating to a market in transition. Liquidity in some contracts may decrease while new, more appropriate contracts are developed, or in response to sharp policy changes (such as both the introduction and repeal of the Carbon Tax). The Energy Council suggests looking to existing work such as the proposed Market Liquidity Obligation and Wholesale Demand Response Mechanism Register to inform the ESB's view on whether open and competitive markets are developing effectively. In addition, any measure needs to provide sufficient flexibility to allow innovative financial products to evolve and address market participants' wholesale market exposure.

In relation to fuel and international markets, the Energy Council advises caution since there may not be parallels to be drawn with the Australian market and its unique circumstances, being geographically isolated, smaller and with fewer participants. In addition, the limited contextual information presented in the consultation paper suggests that more information needs to be exchanged between the ESB and stakeholders to determine what is actually being sought, and the reasons for doing so.

Innovation is an important part of industry being efficient and competitive. As technology changes, this assumes more importance, but the proposed metrics need to ensure that they are not assuming that efficiency

Level 14, 50 Market Street
Melbourne 3000
GPO Box 1823 Melbourne Victoria 3001

Phone +61 3 9205 3100
Email info@energycouncil.com.au
Website www.energycouncil.com.au

ABN 92 608 495 307

always follows innovation and technological change. Other actions such as cost reductions and optimisations are important in ensuring market participants work as efficiently as possible, and the Energy Council is concerned that metrics such as those proposed for innovation will be used for cross-purposes, such as providing government grants to technologies which would not otherwise have been commercially viable. As outlined before, it is appropriate that any measures proposed report the *availability* of particular customer offerings, rather than participation, since customers may not wish to participate for a number of reasons, specific to themselves.

Efficient and Timely Investment in Networks

The Energy Council contends that most of the proposed metrics for this objective cannot be assessed adequately in a holistic manner. While existing processes such as Regulatory Investment Tests for Transmission ("**RIT-T**s") will address the underlying concerns embodied by the proposed metrics, aggregating them to report them at the NEM level is not meaningful and will neither reflect the health of the NEM, nor affect planning outcomes. In addition, measures such as "reducing generation connection times from project commitment" are, to some extent, not in any individual party's control and therefore reporting a simple number does not expose any underlying cause of delays, and may lead to unwarranted regulatory intervention if the reason for the delay is internal to the developer, such as issues securing finance. The Energy Council therefore cautions against using the metrics developed to make conclusions about systemic shortcomings and the need for regulatory change. There are many more physical aspects to networks delivering consumers with safe, secure and reliable power than are captured in the broad metrics suggested in the consultation paper. The Energy Council would welcome the opportunity to work with the ESB in refining the proposed network metrics.

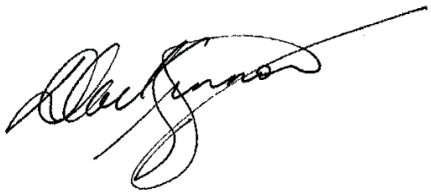
The Energy Council also notes that the consultation paper considers distribution and transmission networks maintain their separation, when it is apparent that over the longer-term distribution matters will need to be incorporated into transmission planning.

Conclusion

In conclusion, the Energy Council is supportive of the ESB developing metrics which provide an indicator of the health of the NEM, but suggests that the Strategic Energy Plan needs to be further developed, and there should be significantly more consultation with stakeholders to ensure the clearest and most meaningful parameters are reported.

Any questions about this submission should be addressed to the writer, by e-mail to Duncan.MacKinnon@energycouncil.com.au or by telephone on (03) 9205 3103.

Yours sincerely,



Duncan MacKinnon
Wholesale Policy Manager
Australian Energy Council