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Submitted by email to info@esb.org.au

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National Energy Guarantee – Draft Design Consultation Paper

The Australian Energy Council (the Energy Council) welcomes the opportunity to make a submission to the Draft Design Consultation Paper (the Paper) on the National Energy Guarantee (NEG).

The Energy Council is the industry body representing 21 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 and sell gas and electricity to over 10 million homes and businesses.

The Energy Council welcomes the development of the NEG and the process of engagement proposed by the Energy Security Board (ESB). We particularly thank Ms Savage and yourself for taking the time to explain the NEG in person at several Energy Council events. The current consultation should be seen as a first stage of a long design process of progressively greater detail. Passing of legislation in late 2018 should not be seen as the end point, but as a step toward many further refinements through subsequent changes to the relevant National Electricity Rules (Rules) and related procedures.

Our members will individually provide very substantive submissions that engage directly with the Consultation Paper's questions. The Energy Council's submission deals instead with the general themes of the paper and presents views that are broadly held across the membership base.

General Comments

The Energy Council welcomes the ESB's efforts to provide stable, national and technology neutral carbon policy through the Emissions Guarantee (EG). The Energy Council considers the lack of such policy has, for many years, been the greatest challenge facing the National Electricity Market (NEM). We recognise that the proposed structure of constraining carbon through obligations on retailers is unique and probably not the expected nor first choice of many of our members. However the Energy Council considers it superior to an alternative of no policy, and expect, through constructive engagement in 2018 and beyond, to progress the design towards a highly workable and efficient scheme.

Energy Council members hold a range of views about whether the existing market design, with its very limited role for the market operator in investment decisions, is the best one to carry the industry through the major industry transformation underway. The Paper presents a wide range of possible implementations of the Reliability Guarantee (RG) from new financial requirements on retailers through to physical requirements with potentially quite substantial roles for the market operator in investment processes. The Energy Council urges caution in rushing into major change with hurried implementation timeframes. The ESB should seek to firstly clarify exactly what objectives the ESB seeks for the RG. After that, the ESB can work through different RG models towards achieving this agreed objective. Given the reliability standard has not recently been breached nor is forecast to be breached in the short-term¹, the Energy Council sees this as a multi-year project which

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¹ See 2017 AEMO Electricity Statement of Opportunities

could be combined with the Australian Energy Market Commission's concurrent Reliability Frameworks Review. At the same time, a clear commitment from COAG to progress the RG design would help to address the serious lack of external stakeholder confidence in reliability.

The Energy Council considers that any form of RG introduced in 2019 must necessarily be minimalist for both practicality and good regulatory practice reasons.

The Emissions Guarantee

Governance

The Energy Council understand and recognises the identified roles for Commonwealth Legislation and National Electricity Legislation (NEL) in setting, respectively, a target and broad objective for managing emissions in the NEM. The Energy Council considers the NEL should retain its high level role of conferring functions and powers, nominating review processes, setting penalties and enforcement and appeal mechanisms. The EG's working mechanism however should be embedded within the Rules, an adaptive instrument with which participants are familiar. As members' concerns expressed about the EG appear to relate to the mechanism itself rather than its objectives, placing the mechanism entirely within the Rules enables participants and stakeholders to design and improve it through the consultative and independent environment of the Rule change process.

Mechanism

Concerns about adverse impacts on electricity contract liquidity can best be dealt with by leaving open as many ways as possible for retailers to cover their obligations. This should include the ways described in the Paper such as direct generator ownership and stapling to electricity price-management contracts.

For the avoidance of doubt, generators and retailers should also be at liberty to create instruments that only specify emissions per MWh, separable from other services such as electricity spot price management and should be able to use these to acquit their obligations, in addition to the other approaches.

With respect to the proposed registry, the Energy Council considers this should only be implemented if the existing carbon reporting arrangements prove insufficient to reconcile the E.G..

The Energy Council supports an ability for retailers to carry-over unlimited surpluses or to defer a limited amount of shortfall from one year to the next. Retailers should also be able to reallocate these surpluses and shortfalls between themselves at any time through contracts similar to those described above.

Target Setting

The Energy Council recognises the Commonwealth's role in setting an over-arching emissions target for the industry. Stability and long lead times are critical for industry confidence and investment, and the Energy Council is pleased that the Paper has developed a regime that attempts to provide this. Importantly, the prescribed target notice periods must be enshrined in legislation to ensure industry receives the certainty it needs to underwrite long-term investment. The NEL's recognition of the target could also be structured such that a change to the notice period would require a change to it as well as Commonwealth legislation.

Non-NEM Grids

The Energy Council supports extending the EG as widely as possible. There would be advantages to these grids and the NEM, and to Australia meeting its national targets, if the EG was able to work seamlessly across all large grids. Low emissions generation could be established where resources are most plentiful and be able to trade contracts from them to retailers in other grids.

Phone +61 3 9205 3100 Email info@energycouncil.com.au Website www.energycouncil.com.au Whilst the other three large² Australian grids have quite different trading arrangements to the NEM, they should in principle be able to adapt to the EG mechanism. Enabling legislation and governance would be more complex to arrange, but not insurmountable. Whilst the ESB's jurisdiction is limited to the NEM, the West Australian and Northern Territory governments could be approached to this effect.

Emissions Intensive Trade Exposed Industries

The Energy Council recognises the need for competiveness in Australian industry. The Emissions Intensive Trade Exposed (EITE) industry exemption category was originally intended for direct carbon pricing schemes which caused the direct inflation of wholesale prices, and where the carbon component of these prices could be readily identified and removed.

The effect of the EG on wholesale prices is less clear, particularly as the energy industry is already on a path to reducing its emissions, and it will be difficult to identify a way to accurately remove only the carbon component from these customers' prices. Unintentional consequences could result in excessively complicating EG settlements, or being seen internationally as a subsidy towards export-focussed industries.

If retailers are able to remove EITE customers' load from their emissions obligations, then this may unbalance the scheme. Effectively this load will be deemed to be supplied by the most emissive generation rather than the average. This could create difficulties in achieving the total average carbon intensity.

The Reliability Guarantee

Urgency and Objective

Whilst there are legitimate questions as to whether the existing market design can be relied upon to support reliability in the long-term, the NEM is not facing an immediate reliability crisis. Despite widespread perceptions to the contrary, no region has actually failed to meet the Reliability Standard³ since 2009, and AEMO's 2017 Electricity Statement of Opportunities forecasts that after the 2017/18 summer, no region will fall short of the standard across the outlook period. At that time margins were forecast to become tighter following scheduled plant closure in 2022, however subsequent participant announcements have effectively replaced this closing capacity. Furthermore, the Reliability Panel has recommended, in their four-yearly review which contemplates current conditions, no change to the Reliability Standard and settings⁴. This fortunate situation provides a buffer for the RG to be developed carefully. There is no need to deliver a final model in 2018.

² Large being defined as consistent with the Renewable Energy Target legislation, i.e. having exceeding 100MW

³ The Reliability Standard is defined as no greater than an average 0.002% energy unserved due to bulk supply inadequacy in any NEM region

inadequacy in any NEM region.

⁴ AEMC Reliability Panel 2018 Reliability Standard and Settings Review

Range of USE outcomes linked with key drivers



Figure: 2017 AEMO Electricity Statement of Opportunities

The Energy Council recognises that many stakeholders outside the industry have a perception that is inconsistent with the current reliability outlook. This may relate to confusion about reliability versus security events, the latter causing the SA system black in September 2016. This may require additional stakeholder education.

Before embarking on the proposed RG design, this timeframe allows the intended objective of the RG to be properly articulated. For example, is it purely to provide confidence in the industry meeting the Reliability Standard, or are there other objectives? Where should the RG sit with respect to the existing market arrangements for rewarding capacity? And once the EG provides much needed stability in environmental policy, how is the situation likely to change?

Governance

Once the objective of the RG is determined, it is appropriate to consider the best vehicle for implementing the RG. As it stands, market processes that underpin NEM reliability and security are all contained within the Rules rather than the NEL. During the life of the NEM, many significant reforms have been undertaken through the well understood process of AEMC review and Rule change. The Energy Council supports continuing with this approach to develop the RG and its detail, which could be integrated with the concurrent Reliability Frameworks Review. Following this model, the Energy Council believes that the RG should not require NEL legislative change and there is no need to engage COAG beyond their in-principle support.

Central planning role

A key feature of the NEM's design, which has operated for 20 years, is that the market operator has no role in supply investment apart from providing forecasting documents to assist disaggregated decision making, and in operating the reliability safety net (which can only operate a few months ahead of a forecast shortfall). Such an approach may have the disadvantage of reducing stakeholder confidence, but has the benefit of placing forecasting risk with investors. For example, the cost of oversupply that followed the surprise downturn in demand growth at the start of this decade was worn by investors rather than consumers.

Some of the options presented in the Paper contemplate a very significant role for the market operator during investment timeframes. In all options the operator has at least a triggering role, and in some the operator is

Phone +61 3 9205 3100 Email info@energycouncil.com.au Website www.energycouncil.com.au ABN 98 052 416 083 ©Australian Energy Council 2018 All rights reserved. drawn into a "book-build" or "procurer of last resort" role. These are fundamental changes from the present investment processes, and the Energy Council considers it appropriate to thoroughly develop a clear vision for the NEM investment process before contemplating such changes.

Forecasting

Concern about the NEM's investment mechanism appear to mostly arise from events that were not well forecast. For example, as the downturn in demand from around 2010 caught the industry by surprise, there was considerable regretted investment and a period of over-supply. Subsequently, as several coal plants closed earlier than was expected from 2015-2017, there followed an unexpected period of relatively tight supply versus demand (although still meeting the Reliability Standard).

While individual market participants and other stakeholders conduct their own forecasting, tuned to their own perceptions of the market and appetite for risk, it is the market operator's forecasts which are often used as the benchmark for such exercises and confidence in them is essential.

The Energy Council acknowledges that forecasting is always uncertain, and whether or not conditions could have been better anticipated by the market operator is moot. Some of the RG's options appear to place even more of the industry's fortunes upon these forecasts. As these options will result in power system investment relying even more on the accuracy of the market operator's forecasts, it is worth considering whether the ultimate outcomes would improve stakeholder confidence.

Preferred approach in the short-term

As noted earlier, the Energy Council recommends a thoroughly considered approach, as there is no urgency for implementing hurried changes. If however the ESB feels it essential to implement a RG during 2019, it must necessarily be minimalist. Options that attempt to link retailers' electricity price-management contracts to approved sources of physical capacity are not realistic in this timeframe due to administrative complexity, and may create considerable disruption to existing commercial positions. Furthermore it could erode the electricity contract standardisation that is a key enabler of liquid and competitive financial markets.

In these timeframes, the ESB suggests limiting options to high-level assessments of the adequacy of financial contracting by Market Customers. For example, this could possibly be through an ex-post self-declaration that a retailer's net hedge position sat within agreed risk tolerances.

Non-reliability matters

The Paper clarifies that the RG is intended purely to assist the market in achieving the reliability standard, and that the many other critical components of providing a robust power system are to be dealt with separately. This is a useful clarification that the Energy Council supports, in order to make the RG tractable, but also to ensure these critical matters are not overlooked. We must ensure they are adequately provided and rewarded in the NEM.

The following list is provided to ensure these matters are properly considered, even if handled outside the RG:

- Flexibility: Startup times and ramping.
- Inertia/fast-frequency response.
- System strength/fault injection capacity.

Conclusions

The Energy Council supports the ESB's work towards developing the NEG and the consultation process undertaken to date and laid out for the remainder of 2018. This however should not be seen as the end of the matter, as the governance construct permits many design matters to be embedded in the National Electricity Rules which can be further refined over time.

The Energy Council is pleased at the ESB's efforts to provide much needed clarity to carbon policy via the EG, in particular the governance and target setting seems well designed to provide this. Whilst the mechanism is bespoke to the NEM, the Energy Council believes that through careful design it could prove an effective approach.

The Energy Council support's the ESB's efforts to provide greater confidence in the long-term reliability of the NEM as the industry transitions. The reliability mechanisms of electricity markets are very complex which deserve careful and thorough consideration before embarking on major change. Fortunately current market outlooks suggest there is sufficient timing buffer for that careful analysis to occur, which will be further assisted by the EG's provision of carbon policy clarity.

With respect to the RG options presented in the Paper, the Energy Council considers that only those involving ex-post financial assessments appear feasible in the very short-term.

Any questions about our submission should be addressed to me by email to [ben.skinner@energycouncil.com.au] by telephone on (03) 9205 3115.

Yours sincerely,

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