

External Submission

Response on 'Draft Detailed Design of the National Energy Guarantee'

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OVERVIEW

Edge Energy Services (“Edge”) welcomes the opportunity to respond to the Draft Detailed Design of the National Energy Guarantee: Consultation Paper.

Edge is a leading consultancy within the energy space, assisting with procurement of over 10 terawatt hours each year in the National Electricity Market. Our clients are some of the largest energy users and the largest employers in the country. Edge also works with generation companies entering the market, which increasingly is either renewable or enabling technologies such as batteries.

Overall, Edge is supportive of the NEG and the policy objectives it sets out to achieve. Edge notes the tight timeframe for creating the legislation while acknowledging the market’s need for certainty. However, Edge is concerned that the quality of engagement is being compromised due to the aggressive timeframes. There are still some very important issues to explore and provide careful consideration. It is critical that everyone be given the opportunity to understand how the legislation will both indirectly and directly affect them.

SECTION 3 – EMISSIONS REDUCTION REQUIREMENT

The ESB has clarified that the emissions obligation would be a financial year obligation with the first compliance year being 2020-21. There doesn’t seem to be any justification for using financial year as opposed to calendar year. Calendar year aligns better with customer contracts and the renewable energy target obligation. This is also important for Emission-Intensive Trade-Exposed entities who already report on a calendar year basis. A better explanation of why the ESB has chosen financial year compared with calendar year would be appreciated especially since calendar year seems more aligned with the market.

CONSULTATION PAPER: SECTION 3.2

It is proposed that the NEL reference Commonwealth legislated annual average emissions. The level of emission reductions is critical to providing certainty to new investment, and fundamentally the success of the NEG. It is proposed that emission reductions be set out in the NEG legislation to ensure that a change in Commonwealth Government is unable to trigger a change in emissions targets. This would provide additional certainty to investors. The timeframes (initial period of 10 years followed by an additional 5 year target each 5 years starting at 2025) could be kept the same.

CONSULTATION PAPER: SECTION 3.3.2

The allocation rules allow for the first 50,000 MWh of consumption to be exempt from the emission target. This exemption is then allocated to the customers who are not exempt. It is noted that this provides smaller retailers and some market customers a benefit as it will be a large proportion of their liability compared to larger retailers. The increased amount of exemptions makes it more difficult for retailers to estimate the liability for a consumer and therefore the ability for large customers to proactively self-manage the liability under sophisticated electricity sales agreements. The exemption sets out to allow more competition, however may inadvertently reduce competition if large users are unable to establish self-management mechanisms around their retailer’s liability.

The ESB should consider how much the exemption could increase the liable load for the non-exempt and how much that is expected to change year on year. How do liable entities and large consumers looking to proactively self-manage (as opposed to facing pass through retailer costs) have transparency around the extent of exemptions in any given year?

It is noted that the ESB will consider anti-avoidance rules. It would be helpful to see how these are drafted as there are legitimate reasons for some niche retailers.

CONSULTATION PAPER: SECTION 3.3.3

The ESB propose to measure consumption at the node instead of at the transmission level, as this aligns better with wholesale generation. There will still be a difference due to interregional losses. Has the ESB considered ways to account for these?

Grid connected batteries are proposed to be measured on a net basis. The NEG should not seek to favour technologies. If applied to batteries, it could be applied equally to pump storage hydro. It could also be argued that embedded generation should only be calculated as a net load. There seems to be no argument for providing exemptions for grid-connected batteries over other types of stored energy. Preference is that batteries are treated as other technologies i.e. they have an obligation for the emissions they are responsible for creating in seeking their profit. Equally, it should be noted at the point of generation, batteries (and pump-storage hydros etc) do not produce any emissions and so should be considered zero emissions technologies. Once again, this will otherwise subsidise batteries at a cost to the rest of consumers. Any direct subsidies should be provided as a direct subsidy, not embedded in other legislation.

There doesn't seem to be any reason to single out pre-1997 renewable generation and exclude them from the requirement. There would be very few, if any, generators that have been built on the back of the NEG being passed. Any argument for pre-1997 renewable generation could equally be held for all generation (renewable or not) built up until now. Edge would preference that all generation is accounted for.

CONSULTATION PAPER: SECTION 3.3.4

The ESB suggests that any gaps in NGERs will be dealt with in "appropriate legislation, regulations or Rules". It would be helpful to see how the ESB proposes that this be dealt with.

All data is finalised by 30 September following the compliance year. Although there could still be revisions in the data. It is appropriate to have a final date and seems practical that this date occur soon after the compliance year despite not all information being finalised. The concern is that any imbalance would need to be resolved in a month to allow for compliance assessment to start from 1 November (Section 3.5.2). Given the variables to determine liable load, this doesn't seem to be sufficient time to determine liable load and then contract it in the market.

ESB states that any gaps in NGERs emissions data will be addressed (page 25). There are currently generation facilities which are not subject to NGERs reporting. Will all generators fall under NGERs reporting?

The registry should be made public so intending parties, potential developers etc could access current information. This would also provide the data directly to large customers who manage their own contracting despite not being considered a market customer under the rules.

CONSULTATION PAPER: SECTION 3.4.1

The carry over percentage seems low. The objective should be to reduce carbon emissions in line with the targets set out by the Federal Government. As such, it doesn't make a difference if the reduction happens immediately or a couple of years later.

CONSULTATION PAPER: SECTION 3.6.1

Could the ESB please clarify if it expects renewable generators commencing operation after 2020 to receive LGCs.

Much of the detail of the reliability requirement has been put into separate technical working papers. Instead of referencing the main Consultation Paper, most of the references will be to the technical working papers.

TECHNICAL PAPER: LIABLE ENTITIES FOR THE RELIABILITY REQUIREMENT

In section 3.1 it is suggested that 12 previous months of historical data be used to estimate peak demand. A 5 MW threshold is then applied to identify liable large consumers. This seems regardless of when the 5 MW maximum demand has occurred. As with the generation profile for hedges, there should be a firmness factor applied. A site with a single 5 MW spike during night in autumn should not be liable if the gap occurs in the middle of the day in summer. It is also noted that there is little justification for making a 5 MW customer the liable entity. It can be difficult for some large customers (of this relatively small size) to manage their own load and it should be generally more efficient to manage this uncertainty in aggregate at a retailer level. The 5 MW threshold should increase. Based on the level of sophistication amongst customers in our portfolio, this should be at least doubled to a minimum of 10MW. Again, with a firmness factor applied (as outlined above). Alternatively, suggest that the scheme becomes an “opt-in” where the liability sits with the retailer unless a large customer chooses to manage the obligation themselves.

TECHNICAL PAPER: QUALIFYING CONTRACTS

In section 3.3 it is suggested that all liable entities present their net position in MW to the AER at time T-1. This is understood to be one year from the start of a financial year in which there is an identified gap. This means that contracts must be secured well in advance of the actual period and potentially before large consumers have finalised how much their consumption is likely to be. This could encourage over-hedging which could come at an economic loss for consumers who could be concerned about accidentally being under-hedged and exposed to high prices that AEMO pays for the RERT.

It is assumed that the ESB will introduce additional anti avoidance rules to avoid entities setting up separate “Trading Houses” which will not be liable entities however still able to game the obligation. Any details on this would be appreciated. It is also noted that if ESB think the obligation can be gamed there is an implicit suggestion that the reliability obligation is not commercially rational, and it creates a loss to the system.

Conceptually the idea of the firmness factor for contracts is supported. However, there could be unintended adverse circumstances that should be addressed. It was the understanding from the 20 April 2018 “Initial design of the Guarantee” that caps would be a qualifying contract. It is appreciated that if the strike price of a cap is well above the standard for the market (especially near the maximum price cap), it is likely to be in force to avoid the reliability obligation instead of managing spot risk. The current definition of firmness (which acts like a delta) doesn't work well for caps in general. Even a \$300 cap will have a delta of less than 1. This means that more caps will have to be purchased than the consumer has load in order to meet the obligation. E.g. if the firmness of the cap is 0.8 a consumer with 100 MW of obligation would have to purchase 125 MW of contracts. This would encourage overinvestment in peaking plant or lock in consumers to only use products with a firmness of 1.

There should be additional guidance in the assessment of firmness factors. Auditors could yield vastly different results, particularly as there is very little guidance for the auditors to assess firmness. Firmness factors could heavily influence the success of the reliability obligation. It is also noted that various contract methods would have significantly different firmness factors depending on when the gap was likely to occur. A solar PPA may have a high firmness factor during the day however a low (or zero) during the night. This would mean that an auditor would have to assess firmness factors for some products each time a new reliability obligation is expected. This could make longer term deals difficult to assess.

Section 3.5 proposes a grandfathering arrangement for existing consumers who have already entered into a retail agreement before 20 April 2018. The grandfathering approach sounds like a good idea as it is unreasonable to think that consumers expected to have to secure qualifying contracts before that date. There are however still so many uncertainties in the current draft NEG design that Edge would suggest making the grandfathering date align with passing of the actual legislation. This would allow consumers an appropriate timeline to agree firm mechanisms for passing costs through. Without legislation these mechanisms are largely agreements to agree, which do little to provide large consumers protection.

Grandfathering also makes the reliability obligation somewhat 'compromised' until such time all large retail contracts come up for re-negotiation. Many of these are confidential, however there are reports that some of the NEM's largest users have existing contracts that extend towards 2030. Based on the anticipated loads under such agreements, this could represent over 10% of a given region's demand. Having a reliability scheme which at best will add up to 90% of total demand seems like an unnecessary cost. It is worth exploring if the ESB (or perhaps the AER) could contact all larger load (say more than 10 MW) and check when the retail agreement expires and then work with them to find a solution. The grandfathering would also potentially disadvantage consumers who have chosen not to have a retail agreement however have made other long-term investments in managing energy costs (such as investments in embedded generation).

Section 5.4 discusses the Market Liquidity Obligation. It would be helpful to tighten the language. It is unfortunate to label companies such as CS Energy and Stanwell as vertically integrated retailers as they are better characterised as generators with some retail load. The focus should be on the measure which is provided as 15% share of generation in a region. It should be specified if this 15% covers capacity or volume. In the absence of further clarification which would be helpful, it is assuming that it is any company which produced more than 15% of all generation in the region in the previous financial year. A suitable definition should be provided by the ESB without relying on generalisation such as "vertically integrated retailers". We see the liquidity obligations as being critical to controlling prices following the announcement of a reliability gap. It is unclear how the ESB propose to manage / monitor this requirement. We would certainly like to understand this. What incentives (penalties) are there for the appropriate organisations to ensure this liquidity is initiated and sustained? Without an adequately designed liquidity obligation consumers will potentially be exposed to much higher energy pricing during periods containing a reliability gap.

TECHNICAL PAPER: FORECASTING THE RELIABILITY REQUIREMENT

Overall the ESB need to consider if there are groups other than AEMO better placed to forecast the requirement. There is no consequence for a "false positive" i.e. AEMO predicting a reliability requirement where there is none and so it is likely that AEMO will be prone to erring in this direction. False alarms over reliability gaps will adversely impact consumers. Also, past performance of AEMO's predictions are tentative. There could be value in procuring a commercial provider who could be incentivised to produce an accurate forecast.

Section 4.2.2 discusses the temporally definitions. These are important as the reliability obligation should only be for relevant time periods and could assist in determining the firmness factor as discussed above. The question is what constitutes a reliability gap over time. If in T-3 a reliability gap is identified in the first quarter of a year and in T-2 this has moved to the second quarter of the year is this considered sufficient to trigger the radiality obligation (assuming that the reliability gap persists for T-1 and other conditions are met)? If it is sufficient, consumers who started purchasing additional contracts for the first quarter will now have to purchase contracts for the second quarter as well. In this situation, is the reliability gap for both quarters even if there is only a reliability gap in the second quarter in T-1? Edge recommends that as much as possible all temporally definitions align to the market. Currently the most liquid period is quarters, and time is typically divided into peak and off-peak. Therefore, Edge recommends that where possible any gaps are identified in these categories (peak / off-peak by quarter). It should be noted that peak definition should follow the market where generation on weekends and public holidays are excluded. A peak product

which covers all periods from 7 am to 10 pm as envisioned in the Technical Working Paper on Qualifying Contracts (section 5.4.2) is not a commonly traded product

Section 4.3.1 discuss what makes a reliability gap material. It is somewhat concerning that this is only being consulted on at this stage of the process. This can potentially have a large impact on consumers in terms of removing choices on how to manage their electricity costs, so the trigger should be clear. This should be defined and legislated as part of the national electricity rules.

CONCLUDING REMARKS

Edge reiterates that we are supportive of the NEG and the policy objectives it sets out to achieve.

The comments and questions within are designed to support the design process. We welcome direct engagement with the ESB and its technical advisors to work through these design aspects.

Summarising that our concerns mainly sit around the following:

- Ongoing investment risk if emissions targets are subject to Federal Government intervention;
- Practical implementation – for example:
 - Forecasting a reliability gap – false positives;
 - Granularity of forecasting a reliability gap – peak / off-peak by quarter probably best suited given the prominent qualifying contracts available in the market;
 - Enforcing and maintaining the liquidity obligation, which we see as critical to controlling the cost of the market’s most liquid qualifying contracts (such as swaps); and
 - The financial year application.
- Justification for some of the qualifying metrics – for example:
 - 5MW peak demand for a liable large consumer under the reliability obligation – this is a very small large customer (as captioned under the emissions component);
 - 50,000MWh exemption on the emissions component, and what this means in aggregate for the remaining liable load; and
 - Grandfathering prior to 20 April 2018, when much uncertainty remains around the NEG design - and it still has the potential to change significantly.

DISCLAIMER

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