



Energy Security Board

By email: info@esb.org.au

13 July 2018

Re: Response to *National Energy Guarantee Draft Detailed Design Consultation Paper*

1. INTRODUCTION

Infigen Energy (Infigen) welcomes the opportunity to provide a submission on the design of the National Energy Guarantee. Infigen has a 557 MW portfolio of wind capacity across New South Wales, South Australia and Western Australia and a further 113 MW of wind generation under construction in New South Wales. We are active participants in the energy market, delivering services to our large C&I customers using innovative mixes of renewable generation, demand response and hedging products. As such, we are acutely aware of price and investment signals in the market, and the complexities of delivering reliable and affordable power.

We support the efforts by the Energy Security Board (ESB) to develop a long-term framework for reducing electricity sector emissions while providing confidence to industry and policymakers that the market will continue to deliver high levels of reliability.

Our preference is for a broad-based scheme, covering all electricity sector resources and markets. However, non-NEM regions including Western Australia are currently excluded, and incumbent renewable plant owners, which have invested in good faith, will see their scheme materially altered by the implications of the NEG. We would therefore suggest that once the LRET scheme is deemed to have been met by the Clean Energy Regulator, new plant not be eligible for LGC creation. This would maintain the investment case for older renewable assets and avoid the risk of Western Australia asset exclusion.

It is also critical that the Guarantee has a focus on reducing wholesale and retail prices, delivering a competitive market structure, and ensuring there are incentives to invest in new supply. Investment in new capacity should come on stream in a timely manner to avoid adverse price impacts of large plant closures, and in a manner that avoids the boom-bust cycles that have arisen from policy uncertainty in the past.

We appreciate the work that the ESB has done on the detailed design document and associated technical working papers, and the effort to incorporate feedback from stakeholders. The sections below focuses on the remaining issues of concern to Infigen.

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2. EMISSIONS REGISTRY

2.1 Timing of allocations

Emissions Allocations should be available for transfer by a generator promptly after generation in order to ensure that:

- Trading is efficient and free and the market is informed about availability of emissions allocations; and
- Transferees can receive cash for transfer or revenue for accounting purposes by effecting the transfer.

Ideally a generator would have the ability to transfer allocations within 1 week of generation, but if this is not possible then it should be monthly. Due regard should be had to the capacity to transfer prior to relevant accounting balance dates (31 December and 30 June).

Transfers from the generator to the retailer (and any subsequent transfers) should be prompt, and no fees should be charged by the registry. Given technology and the presumably infallibility of the register as a single source of truth, then ideally transfers should be registered instantaneously. For example, each retailer and generator could have keys that would allow automatic authentication and transfer.

In order to ensure that the register is providing an informed market on allocations available for retailers, then the ESB could consider imposing an obligation on parties to register a transfer effected outside the register by contract, within a defined period. This period could be monthly to minimise the administrative burden on participants.

2.2 Over-achievement

Given the goal of the Guarantee is to reduce emissions, the proposed penalties for over-achievement (as opposed to over-allocation) do not seem appropriate, especially given the flexible compliance options proposed. Some degree of variability (and unpredictability) of the emissions intensity of the residual pool needs to be accommodated in the policy design.

If the penalties are retained, the term “anti-competitive” should be clearly defined. For example, pre-announced intentions by a retailer to achieve lower emissions intensity levels (i.e. product differentiation) should not be considered anti-competitive, as other retailers will be able to adjust their positions accordingly. On the contrary, a policy that has the effect of limiting product differentiation could ultimately be anti-competitive (i.e. in the retail market).

The deferred compliance provision is generous, allowing up to 10% of the retailer’s target to be deferred for 2 years. The CO₂ emissions in the NEM are currently about 160Mt and being able to defer 16Mt - or the equivalent to the combined total emissions of 1400MW Tarong Power Station and 1400MW Stanwell Power Stations - seems excessive. Policymakers are unlikely to impose sharp CO₂ target

adjustments within a ‘two-year window’ and so the need for such large deferrals does not seem necessary. We would suggest a 5% borrowing for a single year – thus enforcing the policy objective to be met rather than having large deferrals making the policy *‘nice to have’*. Retailers should not be allowed to defer compliance indefinitely (for example, by borrowing in year 1, and then both repaying and borrowing those same emissions in each subsequent year). Retailers should only be allowed to borrow for one (or two, if the Draft Detailed Design is retained) years in a row.

2.3 Transparency

The risk management policies of the “prudent retailer” will dictate that a certain percentage of total allocations should be accumulated progressively ahead of the contract year. We would therefore expect that large percentages of allocations will have occurred before the start of any given year. However, the proposed penalties for over-allocation by retailers in the registry, even by 1 MWh, produces an asymmetric risk for fully hedging ahead of time.

In our view, this is likely to reduce total levels of possible forward contracting levels, rather than increase it. Ideally a good liquid market trades at > 100% whereas the current design will virtually prohibit forward activity reaching 100%. We believe prudent retailers will be strongly incentivised to accept some exposure to the residual pool, or to wait to fully contract until the retail load is known, i.e., at the end of the compliance period. A reduction in liquidity throughout the year would have an adverse impact on efficient pricing and cash flows.

Infigen proposes two changes that could address this:

- Under the design, retailers can transfer their allocations at any time but this requires a third party to accept that allocation. Retailers loads may vary and hence a circumstance of overallocation could readily arise. To allow allocations which are not required to be divested, a mechanism should be developed that allows retailers to divest allocations even if a third-party recipient cannot be identified. While we do not consider it necessary, this could be limited to a fixed percentage (e.g., 10%) of the retailer’s load.
- We support full transparency of the registry, similar to the LGC registry. This will enable participants to more easily identify potential trading partners for allocations, improving liquidity, while not materially revealing contract positions for wholesale energy. (We expect participants will be securing allocations through a variety of contracts and negotiated arrangements which do not necessarily align with contracts for energy.)

If full transparency is not adopted, then to assist market competition and efficiency, at a minimum the total allocations and load of both retailers and generators should be

disclosed at the end of each quarter. This disclosure would provide indicative positions and assist in identifying trading partners.

3. RELIABILITY OBLIGATION

3.1 Three-year notification period

The prudent retailer will progressively build a book of contracts to cover their retail load, including accepting some spot price exposure if this would deliver lower cost tariffs to consumers. This is a prudent approach to risk management, and under normal conditions does not threaten system reliability: the Market Price Cap (MPC) provides strong signals to contract, and there is typically excess capacity in the system.

Infigen supports the introduction of the Guarantee to ensure that when a potential breach of the reliability standard is identified, all market customers have an incentive to contribute to closing the gap. Although this will impose additional costs on retailers (compliance costs, less flexibility to consider coincidence of peak demands by different retailers, etc) the proposed approach seems a reasonable balance.

The proposed three-year notification period for triggering the Guarantee is important, as it allows time for retailers to respond (by securing contracts) and for new generation to be built. It therefore satisfies the principle that penalties should be forecastable and avoidable, and ensures that no participants are penalised if a breach of the reliability standard is not identified.

Removing the three-year notification period may mean retailers face the risk of sudden changes to the system (e.g., an unexpected plant closure) causing AEMO to trigger the reliability obligation one year out. This would effectively increase the market “price cap” (the maximum total penalty payable for being unhedged), and would undermine the Reliability Panel’s efforts to set the MPC at an economically efficient level. (If the current reliability standard is not deemed efficient by the ESB, then this could be addressed through a separate Rule Change request.)

Retailers would effectively need to contract to higher than efficient levels or overbuild capacity, even when no reliability issue is identified. This would incur higher costs for consumers for no or limited improvement in reliability. For example, the cost of moving from a 95% firm contract (accepting wholesale price exposure in rare times) to a qualifying contract (completely hedged) can be significant. This delivers corresponding value in “tight” reliability years, but not in most years. Furthermore, this would impact on retail competition, with smaller retailers less able to be agile and efficiently manage their financial risks.

3.2 Defining the reliability gap

Infigen broadly supports the proposed approach to forecasting the gap. In particular, Infigen supports the “materiality” threshold for AEMO intervention, given that forecasts will always be uncertain and market intervention should be avoided where possible: medium- or short-notice RERT can always be used.

Infigen agrees that the reliability gap should be defined relative to the reliability standard, and AEMO's modelling should be able to indicate the time periods (day or season) where unserved energy is most likely.

The cost of procuring qualifying contracts will likely depend on the length of time these contracts are required, both within a day and across a year. As AEMO is not directly exposed to these costs, AEMO should have an obligation under the Guarantee to minimise the duration of the defined gap while still meeting the other requirements. Rather than a gap defined as "summer peak periods", AEMO should define the gap as some specific combination of relevant variables to ensure the reliability objective function is met while simultaneously minimising costs. Relevant variables might be, for example:

- January working days
- Between 3pm and 7pm
- For no more than four hours
- When the next-day temperature is forecast to be greater than 37° C

AEMO could define these times by periods where there was a material risk of unserved energy, or where the procurement of additional capacity would have a material impact on the annual unserved energy.

Determining the duration of the gap by applying the reliability standard (0.002%) to shorter periods of time is unlikely to be meaningful, as it necessarily requires averaging over a full year that includes lower demand periods.

If a gap is to be expressed in MW, this should be clearly defined as the additional MW required to be available (during the hours of the gap) to reduce the expected unserved energy (averaged across all scenarios) to level of the reliability standard.

3.3 Qualifying contracts

Infigen supports the proposed approach to qualifying contracts – this will ensure that firm capacity is available, but provide flexibility as to how that firmness is procured, including the use of interregional contracts. The use of an independent auditor will be an additional cost for retailers, but is an acceptable trade-off for flexibility.

Infigen accepts that knowledge of total market liquidity is important, but any information submitted to trade repositories must be confidential for participants. If the trade reporting requirement is not intended to be an annual process we think the ESB should engage with AFMA to re-initiate its (voluntary) OTC reporting which can then be combined with ASX futures reporting to obtain a total view of forward market activity.

3.4 Exempt load

Our understanding of the policy intent of the 50,000 MWh exemption is to reduce potential barriers to new entry. But the manner in which this applies, i.e., broad based, could lead to gaming. The better view should be to have entities apply to the AER for the 50,000 MWh exemption, and for the AER to examine whether granting an exemption is consistent with minimising barriers to entry, or consistent with gaming the intent of the policy (e.g., a 4.9MW market customer engaging in policy



avoidance) We offer this suggestion noting that the number of ‘registered’ new entrant retailers with loads lower than 50,000 MWh must surely be limited at point in time, and of the approximately 100 market customers, only a limited number will face bona-fide competition barriers.

3.5 Compliance

Infigen supports allowing retailers to take on (and report) additional qualifying contracts if their customer base changes materially between T-1 and the compliance year. For example, currently, if an C&I customer materially changes their operations or if emerging weather conditions forecast significantly higher loads, retailers would seek additional contracts from the market. Infigen considers it unlikely that retailers would try to “game” the Guarantee through this option, but it would be appropriate for retailers to need to provide evidence of the material change to the AER.

3.6 Book build

Given the proposed Market Liquidity Obligation on large, vertically integrated retailers, Infigen does not see a need for AEMO to act in a book build role. A liquid financial market will create incentives for new generation (if required). However, this might require the liquidity obligation to apply to more targeted products, consistent with the gap identified by AEMO.

3.7 Procurer of Last Resort

Infigen supports the use of the RERT framework to deliver the PoLR function.

However, it may not be necessary to increase the allowed lead-time under RERT from the current nine months long-notice RERT to 12 months, given that time will be required to confirm the materiality of the gap, to put out tenders for resources as to negotiate contracts. (Infigen understands that AEMO currently has the power to negotiate RERT resources ahead of the nine-month lead-time, just not to sign contracts.)

4. CONCLUSION

Infigen looks forward to continuing to engage with the Energy Security Board to deliver a strong but efficient approach to the Guarantee. Please feel free to contact me directly in relation to Infigen’s submission.

Yours sincerely,

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Managing Director