

# NATIONAL ENERGY GUARANTEE: WILL IT KEEP THE LIGHTS ON?

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Legal Briefings - By **Robert Nicholson, David Ryan, Liza Carver, Nick Baker, Peter Davis and Richard Robinson**

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On 20 April 2018, the COAG Energy Council (**Council**) released its high level design document (**High Level Design Document**) for the national energy guarantee (**NEG**), which has been '*designed to integrate energy and emissions policy in a way that will encourage new investment in clean and low emissions technologies while allowing the electricity system to continue to operate reliably*'.<sup>1</sup> The High Level Design Document prepared by the Energy Security Board (**ESB**) follows the ESB's report on the NEG released on 24 November 2017.<sup>2</sup>

The NEG has two components, **an emissions reduction requirement**, and **a reliability requirement**.

The Council agreed at its meeting on 20 April 2018 for the ESB to progress development of the detailed design of the NEG for determination by the Council at its August 2018 meeting with Ministers to convene in June 2018 by phone to discuss the progress of the detailed design. Further consultation on the NEG is expected to occur in July 2018 when the ESB will release its final design document.

In this note, we focus on the reliability requirement, which, depending on how the reform is implemented, has the potential to cause significant legal risk and compliance cost.

## RELIABILITY REQUIREMENT

The reliability requirement is intended to incentivise retailers and large customers to support investment in resources that maintain the reliability of the power system through their contracting practices. It has the following high level steps:

- **Forecasting the reliability requirement:** The Australian Energy Market Operator (**AEMO**) will forecast, from 10 years out, whether the reliability standard is likely to be met or not in any region of the national electricity market (**NEM**) over the forecast period. AEMO will use the Electricity Statement of Opportunities (**ESoO**) to undertake this forecast.
- **Updating the reliability requirement:** AEMO will update the forecasts referred to above annually or if there is a material change to the supply/demand outlook.
- **Triggering the reliability obligation:** If a 'material' reliability gap is identified in the forecasts, then investment in new capacity (which may be generation, transmission, storage or demand response) is expected to occur. If three years from the period during which a material reliability gap is forecast to occur, that reliability gap continues to exist or a new reliability gap has emerged, then the reliability requirement will be set to trigger. An independent entity (such as the Australian Energy Regulator or the Reliability Panel) will approve a request from AEMO for the reliability requirement to trigger.
- **Liable entities:** If the reliability requirement is triggered, then all retailers and large customers will need to assess their likely share of system peak demand and secure sufficient qualifying contracts by the compliance date to cover this demand. The threshold size of a retailer or large customer that would constitute a liable entity will be considered by the ESB during the detailed design phase for the reliability requirement.
- **Qualifying contracts:** If the reliability requirement is triggered, then liable entities will be required to enter into sufficient contracts of 'dispatchable' capacity (including demand response) to cover their share of the reliability gap. Qualifying contracts are expected to be swaps and caps offered on the basis that they are underpinned by dispatchable generation. Weather derivatives and certain insurance products are not expected to qualify. At what point a swap or cap ceases to be underpinned by dispatchable generation and instead becomes a speculative product or insurance is not addressed by the High Level Discussion Document.
- **Retailers that own generation:** will be required to obtain contracts through 'centrally cleared trading platforms' and/or 'centralised trade repositories' (exchange traded or over the counter) and will not be able to rely on their own generation without having entered into such a contract. AEMO will also conduct a book build to help match buyers of contracts to new capacity.
- **Procurer of last resort:** AEMO will review its forecast one year from the forecast reliability gap. If the reliability gap will be met, then there is no further action. However, if the reliability gap is forecast to continue to exist, then AEMO will procure the remaining resources via an enhanced RERT/Strategic Reserve. Resources that are acquired through the RERT are to be 'off-market' (ie not otherwise available to the market to resolve the reliability gap) as is the case with the RERT currently.

- **Compliance:** The AER will assess liable entities' compliance with the reliability requirement if:
  - AEMO has had to procure resources to meet a forecast reliability gap through the enhanced RERT/Strategic Reserve; and
  - if actual peak demand exceeds that which would have been expected to occur one in every two years.
- **Penalties:** Penalties will be assigned to retailers that are assessed to have fallen short of their reliability requirement. These penalties will include the cost of procuring necessary resources via an enhanced RERT/Strategic Reserve.

## OBSERVATIONS ON THE RELIABILITY REQUIREMENT

We make the following observations on the reliability requirement. These observations are likely to be addressed during the detailed design phase of the NEG, but may in the meantime create temporary investment uncertainty.

### WHAT IS A RELIABILITY GAP?

The key trigger for the reliability requirement is the forecasting of a 'material reliability gap'. The High Level Design Document does not define what a 'reliability gap' is or what would make it 'material'. It is therefore difficult to predict the impact of the reliability requirement of the NEG with any degree of certainty. Indeed, the High Level Design Document comments that '*AEMO will work with the Reliability Panel on the appropriateness of the current Reliability Standard in the face of an increasingly 'peaky' supply-demand balance*'.<sup>3</sup>

It is unclear how renewable generation will be counted in retailers' books. The High Level Design Document suggests that only contracts with dispatchable generators will count towards meeting a retailer's reliability requirement, but in some regions, such as South Australia, there is insufficient dispatchable generation to meet this requirement. The same will ultimately be true in all NEM regions. However, the ESB infers in its High Level Design Document that all firm hedges, regardless of their source may be treated as attributable to dispatchable plant. Renewable generation is often able to contract firm for a portion of its output, especially where supported by other market contracts.

It seems AEMO will use probabilistic models to assess the contribution of renewables at a macro level in determining whether there is likely to be a reliability gap. The forecasts will use a combination of industry inputs (for example, committed generation and announced generator retirements) as well as stochastic modelling of supply and demand. Precisely how renewable generation will be treated is unclear at this point. AEMO's forecasting of unserved energy (**USE**) under the current reliability standard assumes that USE should not exceed 0.002% of consumption per region in any financial year and that renewables contribute to reliability. In particular, when assessing USE in its 2017/18 ESoO, AEMO comments (emphasis added):<sup>4</sup>

*From 2018-19 to 2021-22, progressively decreasing levels of potential USE conditions are observed over the next four summers, due to increasing renewable generation. New strategic reserves to deliver firming capability during this period are recommended, given AEMO will not be able to engage long notice RERT as it is doing for summer 2017-18.*

## **WHAT WOULD RETAILERS NEED TO CONTRACT FOR?**

If there is a reliability gap, retailers will have to demonstrate that their maximum load is covered by qualifying contracts. It is not yet clear how individual retailers' maximum loads will be assessed and how they would apply AEMO's modelling techniques to their own load. The High Level Design Document notes that, as a safe harbour provision, a retailer's share of system peak demand could be assessed based on the system peak demand that would be expected to occur one in every two years.

## **MARKET CONTRACTING AND MARKET REPOSITORIES**

If there is a reliability gap, then retailers that own generation will not be able to rely on their own generation in order to satisfy their compliance obligations. Instead, retailers that own generation will have to enter into contracts through centrally cleared trading platforms and/or centralised trade repositories (exchange traded or over the counter).

This requirement has the potential to impose significant additional costs on retailers that own generation. In particular, Part 7.10 of the *Corporations Act 2001* (Cth) prohibits the creation of a false or misleading appearance of active trading in particular financial products on a financial market.<sup>5</sup> This prohibition is deemed to include 'wash trades' where there is no change in the beneficial ownership of the relevant financial products.<sup>6</sup> Similar prohibitions are included in the ASIC Market Integrity Rules (Futures Markets) 2017.

Trades between a retail business and an associated generation business through centrally cleared trading platforms may breach this prohibition. Retailers that own generation may have to separate their buy and sell trading teams in order to prevent being found to have intentionally or recklessly entered into such trades. This may impose significant additional costs on retailers that own generation in order to achieve compliance with the reliability requirement.

Alternatively, retailers that own generation may be able to rely on centralised trade repositories of over the counter products in order to satisfy the reliability requirement. However, the details of this regime are yet to be clearly developed. Even if retailers that own generation are able to rely on centralised trade repositories, we question whether there will be significant liquidity in the market for qualifying contracts, which may heighten sensitivities over generators trading with non-public information.

## **WHEN A MATERIAL RELIABILITY GAP IS NOT A RELIABILITY GAP AT ALL**

The requirement for retailers to contract their share of system peak demand with dispatchable generation indicates that the expectation of the regime is for investment or demand response to resolve a reliability gap before it occurs. There is no reliability gap if all retailers contract dispatchable generation or demand response up to their share of system peak demand.

The key to preventing non-compliance with the reliability requirement is therefore investment in new dispatchable generation or demand response. Are retailers the best entities to make new investment in generation? The reliability requirement gives limited incentive to retailers to invest in new generation given that they will not receive any benefit from generation that they own unless they have entered into a contract through a centrally cleared trading platform and/or notified it to a centralised trade repository.

The reliability requirement therefore gives retailers an obligation and at the same time discourages them from investing in new generation as required to resolve it (through the restrictions on benefitting from generation owned by the retailer). It is unclear whether new generators will be incentivised or if any additional incentives are actually required. Since the inception of the NEM incentives to invest in generation have been provided by the wholesale price. It is unclear what additional incentive the reliability requirement in fact provides for new generators particularly given that once the reliability gap has been rectified, this dispatchable generation will be competing with renewable energy, which generally has low marginal costs for generation, in the wholesale market. A reliability gap forecast to occur during one financial year may not provide sufficient revenue to justify new investment in dispatchable generation without significant increases in wholesale prices.

## **TRANSITION AND DESIGN QUESTIONS**

The High Level Design Document does not set out any transitional arrangements in relation to the reliability requirement. While the High Level Design Document contemplates a ten year forecast for a reliability gap and then a period of time to allow the market to adjust by building new generation or procuring demand response, it is not clear what happens if a material reliability gap is found to occur in the first year after the first forecast. In this case, the reliability requirement could be triggered immediately and retailers who had not already obtained sufficient contracts through a centrally cleared trading platform and/or notified sufficient contracts to a centralised trade repository would be in non-compliance, despite those retailers having no advance notice of the triggering of the reliability requirement. The transition regime therefore needs to be carefully considered.

In addition, a number of other issues will need to be considered as part of the detailed design. For example, issues may arise if a 'retailer of last resort event' occurs following the triggering of the reliability requirement, which would impact the retailer of last resort's system peak demand and may lead to non-compliance through no fault of the retailer. This problem may be particularly acute if retailers respond to the prospect of liability for a reliability gap by seeking to reduce their load rather than obtaining qualifying contracts.

A further design question arises from the proposal that the operation of the reliability trigger is based on the NEM regions (rather than a NEM-wide assessment). Generators and retailers already take a degree of 'inter-regional risk' in their contracts because it is cost-efficient to do so. That is, a South Australian retailer may 'buy' contracts from Victorian generators that are settled against the Victorian regional reference price. While the South Australian retailers take the price divergence risk between the regions that risk can be off-set by the purchase of inter-regional settlement residue units (**IRSR units**).<sup>7</sup> There is a risk that if the reliability requirement's design does not appropriately account for inter-regional contracts it will have the effect of increasing the wholesale costs of retail businesses.

## CONCLUSION

The High Level Design Document leaves significant questions for the industry in relation to the reliability requirement component of the NEG. These issues will need to be developed as part of the detailed design that is now to be undertaken by the ESB. The limited timeframe for the detailed design with one round of public consultation may not resolve or reveal all issues with the NEG, which has the potential to impose significant costs on the NEM.

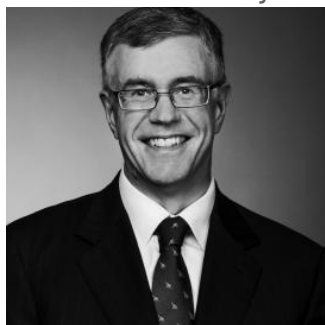
## ENDNOTES

1. The Energy Security Board's paper is available here: <http://www.coagenergycouncil.gov.au/publications/initial-design-guarantee>.
2. Available here: <http://www.coagenergycouncil.gov.au/publications/report-national-energy-guarantee>.
3. High Level Design Document, at 29.
4. AEMO *Electricity Statement of Opportunities for the National Electricity Market* (September 2017) at 1.
5. *Corporations Act 2001* (Cth), s 1041B.
6. *Corporations Act 2001* (Cth), s 1041B(2).
7. Inter-regional settlement residue is a residue relating to inter-regional transmission over

regulated interconnectors and settlement transactions between regions. These residues are calculated on the basis of regional reference prices and inter-regional flows and are listed for auction by AEMO.

## KEY CONTACTS

If you have any questions, or would like to know how this might affect your business, phone, or email these key contacts.



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