



13 July 2018

Dr Kerry Schott AO  
Chair  
Energy Security Board

Dear Dr Schott

### **RE: National Energy Guarantee**

ERM Power Limited (ERM Power) welcomes the opportunity to respond to the Energy Security Board's (ESB) detailed design of the National Energy Guarantee (the Guarantee).

### **About ERM Power**

ERM Power is an Australian energy company operating electricity sales, generation and energy solutions businesses. The Company has grown to become the second largest electricity provider to commercial businesses and industrials in Australia by load<sup>1</sup>, with operations in every state and the Australian Capital Territory. A growing range of energy solutions products and services are being delivered, including lighting and energy efficiency software and data analytics, to the Company's existing and new customer base. ERM Power also sells electricity in several markets in the United States. The Company operates 497 megawatts of low emission, gas-fired peaking power stations in Western Australia and Queensland. [www.ermpower.com.au](http://www.ermpower.com.au)

### **General comments**

ERM Power thanks the ESB for their comprehensive and consultative process on the design of the National Energy Guarantee. This is a transformative policy that can help provide affordable and reliable electricity to consumers and meet our international emissions reduction commitments.

In our joint submission on the consultation paper with nine other market participants, we warned that any policy that entrenches the market power of generators and vertically integrated retailers in an increasingly concentrated market risks undermining the steps companies like ERM Power have taken to deliver exceptional service and lower prices to commercial and industrial customers. We also implored the ESB and the Government to ensure competition was not an afterthought.

We are pleased to see that the ESB has heeded these calls. But we must reiterate that the steps the ESB has taken to ensure that the C&I retail market remains competitive – that contract markets remain liquid and that market power is not further entrenched – cannot be allowed to be traded away as an eleventh-hour compromise. These are essential aspects of the Guarantee that will help to ensure that this policy provides the best result for consumers over the long term.

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<sup>1</sup> Based on ERM Power analysis of latest published financial information.

In summary, ERM Power supports the following design elements which foster competition and market liquidity and sees these as critical to a workable National Energy Guarantee:

- A Market Liquidity Obligation for large vertically-integrated gentailers with a narrow bid-offer spread that supports wide access to qualifying contracts during the lead up to a reliability gap. This recognises the importance of financial markets and liquidity for competition and price in the electricity sector;
- A targeted reliability gap to ensure the right infrastructure in the right places at lowest cost, based on targets;
- A trigger period beginning a minimum of three years before a projected reliability gap to allow the market time to respond;
- The ability to adjust contract positions within the T-1 period in recognition that retailer's load shifts and customer's operations flex, impacting load and the consequent contracting obligations.

These provisions will help to minimise costs to customers and to ensure that the lowest-cost way of meeting any reliability gap is secured.

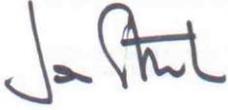
We remain concerned about some elements of the design and would strongly recommend changes as follows:

- Allocation of the target emissions reductions rather than a costly and capital intensive whole-of-market allocation for every MWh. The current proposed design would add significant cost in terms of capital to meet requirements, wealth transfer within the system and generator bidding strategies designed to recoup the cost of reallocating all system emissions to retailers. Allocation of the target emissions reduction would deliver the same outcome efficiently and effectively at far lower cost to energy consumers.
- If the ESB does maintain its approach to require allocation of all emissions, then it must retain an obligation on generators to reallocate all of the emissions associated with their generation. A failure to do so would allow vertically-integrated gentailers to push the costs of high-emissions generation onto their competitors and potentially lead to some coal plants being paid to reallocate their emissions.
- Basing the scaling factor used to account for exempt load on the previous year's actual value rather than having a floating value that is finalised one month before the compliance date. This approach would avoid the risk of retailers over-recovering costs to deal with the uncertainty of the value.
- Removing the proposed exemption for the first 50,000 MWh of load under the emissions requirement. It adds further to the amount of exempt load, which will impact all other customers and is unlikely to foster competition more than other proposed provisions such as banking and deferral of liability.
- Removing the requirement for load to be 'grossed up' to factor in demand response. The necessary calculations are complex and add unnecessary risk to demand response providers. The proposed firmness factor is a sufficient mechanism to ensure that retailers or large users take into account the probability of demand response being available.

The submission below details our views on various aspects of the detailed design.

I welcome the opportunity to discuss this submission in detail. Alternatively, please contact Regulatory Affairs Policy Advisor Ben Pryor on (03) 9214 9316 or [BPryor@ermpower.com.au](mailto:BPryor@ermpower.com.au).

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Jon Stretch'.

**Jon Stretch**  
Chief Executive Officer

## Reliability Guarantee

In order to achieve the Energy Security Board's goals for the reliability guarantee – lower electricity prices and competitive energy markets – many of the proposed designed mechanisms need to remain in place. They cannot be removed as a compromise. More detail is required on the design of several other elements to provide confidence that they will actually deliver what they set out to achieve.

In order to ensure that the reliability guarantee helps to bring electricity costs down, it must:

- clearly define the gap to encourage the lowest cost response at a time when the market is tight, and prices are high;
- avoid requiring hedging well in excess of the one in two-year peak demand in aggregate which would create much higher costs incurred to hedge in a tight market;
- provide a three-year trigger period to avoid requiring market customers to be hedged “just in case” thereby increasing costs for all and favouring large vertically integrated generator-retailers; and
- not penalise market customers for a single trading interval excursion beyond their one in two-year load, even though, in aggregate and on average over the gap period, the market customer was hedged sufficiently.

## Forecasting the reliability requirement

The first step of the ESB's proposed reliability obligation involves a more consultative and transparent version of the existing Electricity Statement of Opportunities (ESOO) report providing a 10-year outlook of the supply demand balance.

We support the ESB's proposed approach of using the existing unserved energy (USE) metric to assess whether there is a reliability gap. USE is a well understood metric and underpins the NEM's current reliability standard. The conversion of the USE value into a defined MW gap is also a useful step to indicate to the market what kind of supply is needed to help solve the reliability gap.

We are pleased to see that the ESB has heeded our calls, and those of other market participants, that the increasingly important nature of AEMO's forecasts mean that a greater level of consultation, transparency and scrutiny is required. The ESB proposes that AEMO must consult with stakeholders through a more formal consultation process. In addition, AEMO must report on its forecast performance each year and publish and consult on a proposed improvement program each year. These are all positive steps that will help give industry greater confidence in AEMO's forecasts and ensure they are fit for purpose within the context of the National Energy Guarantee.

## Defining the gap

Throughout the Guarantee design process, ERM Power has steadfastly argued that the reliability guarantee must apply to a well-defined and targeted gap period rather than imposing a broad requirement. While it is impossible now to state in what period a gap may occur in the future, we firmly believe that the gap period should be defined as, for example, something similar to '6-8pm, on working weekdays in NSW, during weeks 3-6 of Q1 in 2023'. This will ensure the right mix of innovative new technologies and infrastructure are triggered and that over-build and gold-plating, which adds cost, are avoided.

A broad requirement such as Q1 in NSW does not provide this guidance meaning it is difficult for generators or new technologies to plan their availability accordingly. ERM Power recommends that the ESB ensure that the guiding principles for defining the gap dictate that only specific periods can be targeted.

Providing a narrow window incentivises various technologies to be available in the right places at the right times to target the specific periods of concern. It allows storage technologies like pumped storage or batteries to be fully available as well as guiding demand response providers of the times to be ready for dispatch. Large users with their own requirement may also be able to structure their business operations to shift demand to other times of the day.

Applying the reliability guarantee to battery storage facilities greater than 5 MW in capacity may in fact act as a barrier to large battery storage facilities entering the NEM. This would be counterproductive to the aims of the Guarantee. Battery storage facilities aim to recharge at times of low prices and dispatch at times of high prices in order to make a return. In all likelihood, at the time of any gap, wholesale electricity prices would be expected to be high, meaning that battery storage is likely to be dispatching. Forcing them to be hedged to a one-in-two year peak level would mean they would likely face increased costs at a time when they should be dispatching electricity into the grid. It could also lead to a proliferation of batteries just under the 5 MW threshold to avoid facing an obligation in their own right.

Instead, ERM Power suggests that battery storage and pumped hydro facilities should be prohibited from recharging (or pumping in the case of pumped hydro) during the specific gap periods. Provided that the gap is defined in a narrow fashion as described above, this avoids the risk of increasing peak demand at times of greatest concern. It would also avoid some technologies facing a barrier to entry.

### **Trigger period**

The ESB proposes that a reliability gap would be declared three years from the proposed shortfall, with the AER approving (or not) a request from AEMO. The three-year notice period achieves several outcomes. It drives an incentive for more investment in generation capacity. While three years may not be sufficient to build some forms of plant from scratch, AEMO's Electricity Statement of Opportunities provides a 10-year expectation of the supply-demand balance. In the case of a large shortfall, the industry will have had up to 7 years of non-binding guidance. This timeframe is more than adequate to make an investment case for most forms of electricity generation technology. Over the three-year advance period, there is an incentive for retailers to investigate novel approaches with their customers such as installing battery technology or entering into demand response contracts. The three-year period also gives large users (>5MW peak load) notice that they will have to enter into a retail contract, or find their own contract cover more than 12 months out from the gap period.

The ESB's public forum on 2 July 2018 heard a suggestion that the three-year trigger period should be removed. Instead, the suggestion is that the reliability obligation continually be in place unless, at one year out, AEMO declared there was no reliability issue. This scenario adds significantly to risks for retailers and large users of an over contracted market that places a default position of being in state of permanent trigger unless informed otherwise at T-1.

In effect, this would mean that retailers and large customers would have to form their own view of how likely a gap is to occur and manage their contracts accordingly. In the event of force majeure event, such as a flood at an open cut coal mine, leading to an unanticipated gap due to reduced supply,

some retailers could be exposed to significant penalties. A reliability guarantee designed in this manner would create a perpetual cost in the market as customers would have to factor in the risk of a reliability gap being triggered in any given year.

A one-year trigger period is more akin to a capacity market, albeit one which brings with it the risk of severe penalties. If a capacity market were the preferred option to manage reliability on the NEM, then it would be better to consider that as an option. However, ERM Power takes the view that the decision to adopt the reliability guarantee rather than a capacity market is well founded on the basis that a reliability guarantee focuses on times where the supply-demand balance is tight, rather than a capacity market which imposes a cost for procuring capacity (separate to energy) at all times.

Furthermore, only triggering the gap at T-1 would serve to enhance and entrench the power of the existing large vertically integrated gentailers. This is because retailers would essentially need to be hedged to their one-in-two year demand level at all times and for more than 12 months in the future. For vertically integrated gentailers, this would mean they could hold onto internal hedges and only start to sell meaningful volumes into the market if no gap period was declared. Essentially, vertically integrated gentailers would assign themselves a 'swaption' designed to be exercised if the gap period is triggered.

Gentailers with large baseload plant tend to contract all but one of the units they control. They generally do so to ensure that if there is a breakdown at another unit, they are able to generate enough electricity to meet their contracts. Under a situation where the trigger period only occurs at T-1, they could use the headroom of this uncontracted unit to cover unpredictable load increases by customers, or load from new customers, without the risk of penalties. This puts vertically-integrated gentailers at a significant advantage and would further entrench their market power in the NEM. Applying the Market Liquidity Obligation at all times would be one way to partially remedy this if the T-3 trigger is removed.

Alternatively, we believe that the ESB could allow for a gap to be triggered at any point up to one year in advance, with retailers and large customers then given one year to meet the obligations of the trigger. So if a gap is declared 18 months before a reliability gap, then liable entities would have until 6 months before the forecast gap to ensure they have sufficient contracts to meet their share of one-in-two-year peak demand. This would ensure that liable entities would have the opportunity to devise the most appropriate method to meet the reliability obligation, such as installing battery storage, entering into demand response contracts or relying purely on hedging contracts.

This approach would require the Market Liquidity Obligation (MLO) to be in place from the time the gap is declared until the final day before compliance is assessed. This would ensure that there is liquidity in the contract market and ample opportunity for small, independent retailers to comply with the reliability guarantee. Alternatively, a less onerous MLO would allow the obligation to cease three months prior to the final assessment date.

What is key is that retailers have the opportunity to consider and invest in a variety of options to meet the reliability gap. A notice period of one year with no chance to adjust investments or contracts is one that will greatly favour a small number of larger market participants and ultimately harm retail competition.

### Assessing load for compliance

It is crucial to ensure that individual requirements to meet peak load only applies to a customer's share of system peak at the time of the gap. Requiring all market customers to be contracted up to their individual peak load would create a situation where far more load is contracted for than would be needed, potentially leading to shortfalls in *contract* supply despite there being no shortage of actual supply at times.

ERM Power supports the comments Schneider-Electric made at the ESB's public forum on July 2 that the aggregate peak of their large customers greatly exceeds their coincident peak. This situation could occur through the different load shapes of different types of customers, with many C&I loads peaking in the middle of the day, while retailers with a large residential load will peak in the early evening. It is crucial that the aggregate reliability requirement match closely to the aggregate peak demand.

### Adjustment of contract position

Large customer consumption patterns vary remarkably over the short-term, and given one of the Guarantee's core objectives is to improve affordability, the design of the reliability requirement needs to take this into account. The reliability requirement must balance the competing dynamics of incentivising customers to contract in a timely manner when a gap is apparent, while avoiding penalising retailers for uncertain customer behaviour.

It is unreasonable to think business operations will not change materially within a twelve month window. New equipment may be installed to allow for increased production, or load could shift from a region without a gap to a region with a gap due to unforeseen circumstances. Retailers are unaware of these kinds of changes before they occur.

We understand that there is an intent to allow retailers to apply to the AER to adjust their contract positions inside of the T-1 period in the event that a retailer obtains new large customers or due to "material change that was beyond their control". ERM Power encourages that more guidance be provided around adjusting contract positions. It would be problematic if a retailer were to contract a number of large customers only for the AER to refuse to allow the retailer to adjust their contract position. Smaller and non-vertically-integrated retailers will find it far more difficult to manage the risks of attracting new customers in a gap period unless there is certainty they can adjust their contract position. Similarly, if a large corporation with multiple sites suffered an equipment breakdown at one plant and needed to shift load to another location to meet orders, it would be illogical if they were to be subject to penalties for not having enough contract cover.

Allowing retailers to adjust their contract position within the T-1 period also provides benefits for competition. If retailers were unable to adjust their contract positions, then retailers would face the prospect of costly overhedging in case they did win customers, refusing to contract with new customers, or facing penalties if they did take on new customers. All of these options entail significant costs (or lost business). In fact, the only retailers likely able to manage these risks would be large, vertically-integrated gentailers able to assign hedges internally to cater to any new load. Such a scenario would reduce competition in the market at a cost to consumers and enhance the market power of the large vertically-integrated gentailers.

Making retailers responsible for reliability is in itself perverse – extrapolating that obligation to having retailers being exposed to penalties for the variability of customer operational decisions and activities has the potential to irreparably harm competitive retail markets and increase costs for large users.

A well-designed MLO would remove the need to penalise retailers for load variances that occur post T-1, as customers would have transparency of when the MLO would cease, thus giving a heightened price risk signal to customers if they are uncontracted, i.e. prices would be likely to rise rapidly post-MLO as there would be a shortage of contracts leading into a gap period.

### **Auditing of contracts**

The issue of adjusting a contract position within T-1 also interacts with the requirement for retailers (or large customers) to submit an independent auditor's report on their contract book and the associated 'firmness factors'. With retailers potentially seeking to readjust their contract positions during the T-1 period, it would be costly and cumbersome if an audit were to be required each time a retailer adjusts its contract position.

ERM Power considers that a more appropriate approach would be for the AER to only require auditor's reports in the event that compliance is to be assessed. That is, that demand exceeds the one-in-two-year peak demand forecast. This would further ensure that costs are only imposed when absolutely necessary.

### **Market Liquidity Obligation**

In our submission on the initial consultation paper for the Guarantee, ERM Power highlighted concerns that because retailers *must* contract and generators *may* contract, there was an imbalance that created an incentive for economic withholding by generators. In this draft detailed design, the ESB has proposed a Market Liquidity Obligation (MLO) which would require large, vertically integrated generators to provide market liquidity in the contracts market if a reliability gap is triggered.

ERM Power believes that this MLO would be effective in countering the risk of economic withholding as well as helping small retailers access contracts during times of tight supply-demand balance. Without this obligation, the competitive dynamics of the retailer market could be undermined during periods of a reliability gap. The proposed bid-offer spread of 5 per cent appears to be set at a reasonable level that is consistent with existing operations in the market. We understand that there may be calls to widen the potential spread but we believe that keeping the spread at 5 per cent would help to avoid costs rising sharply during times of a projected reliability gap. We also note that those entities covered by the MLO may welcome a tighter spread, as this will provide a more efficient price signal and better enable them to manage their own risks.

Additionally, the proposed trade repository and reporting requirement is an option that would further support transparency in the market. ERM Power is cautiously supportive of this proposal, subject to the specific nature of the design of such a repository, the associated costs and the obligations it would impose on market participants.

If costs are truly a barrier, then it would be adequate for parties captured under the MLO to report transactions on a dedicated page on their company websites. In the Western Australian market, Synergy is currently required to post details of all standard product transactions on their website.<sup>2</sup> This could be a low cost way of achieving similar results to a trade repository.

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<sup>2</sup> Synergy Wholesale Transactions. <http://wholesale.synergy.net.au/SitePages/Transactions.aspx> Accessed 4 July 2018.

At the ESB's public forum on July 2, several speakers suggested the MLO only be introduced if it is determined that there are liquidity issues in the contract market. ERM Power would oppose this approach. It is not sufficient to only introduce a market liquidity obligation after contract liquidity issues arise, particularly during a gap period when the supply demand balance will already be tight. By the time the AER or other body has reviewed and assessed the need to introduce an obligation, the damage will have been done. It is too late to protect competition against market power after it is clear market power has already been used to damage competition. The Market Liquidity Obligation must form part of the reliability guarantee and be included as part of the rules.

### **Book build**

ERM Power considers that the book-build mechanism would be a useful tool to help new entrants, smaller retailers and large users access financial products to help manage compliance with the reliability guarantee.

However, the MLO will achieve the same aims. Provided that the MLO remains in place in much the same way as the ESB proposes – with a narrow bid-offer spread and addressing competition concerns – we contend that the book build mechanism is unnecessary.

### **Demand response**

ERM Power welcomes the ESB's continued support for the role of demand response to contribute to meeting the reliability requirement. We agree that demand response offers an excellent method of helping to manage exposure to high spot prices and reduce overall demand on the system. We support the ESB's statements that demand response contracts for the reliability requirement do not need to be subject to specific or additional eligibility arrangements and that these contracts will need to meet the same general qualification criteria as other eligible supply contracts and be registered with the AEMO Demand Side Portal.

The proposed detailed design requires liable entities to apply a 'firmness factor' to all contracts, including demand response. The Technical Working Paper on demand response also proposes that demand response contracts would be 'grossed-up' to the liable entity's load.

ERM Power has concerns around the method for grossing up load as this requires taking a view on what would have happened but didn't. This counterfactual has long been a challenge for demand response – how do you assess exactly what occurred due to demand response and what was natural variation? One possible way could be to have demand response metered separately but the cost of doing so is generally a barrier.

In ERM Power's view the fact that a liable entity must apply a firmness factor to demand response contracts should be sufficient and negate the need to gross up load. For example, if a retailer had multiple contracts for demand response totalling 100 MW and applied a firmness factor of 0.5, only 50 MW would presumably be counted towards a retailer's contract level. Therefore, even if the demand response exceeded expectations and provided 100 MW, the retailer would benefit through reduced load but would still have needed contract cover for another 50 MW. In the event that demand response failed to provide any reduction in load, the retailer's load would be higher than expected and would potentially face penalty costs. In either case, a robust 'firmness factor' will achieve the same aim as the ESB's proposed approach to grossing up load.

The detailed design paper notes that the Australian Energy Market Commission (AEMC) is currently considering how to best facilitate more demand response in the NEM and the specific mechanisms to achieve this. We are pleased that the ESB has not suggested that the role of demand response in the reliability requirement is contingent on the development of a demand response mechanism.

While not directly an issue the ESB can act on, ERM Power is concerned that particular design elements of a demand response mechanism could undermine a liable entity's compliance with the reliability guarantee. This could occur if the design of a demand response mechanism does not contain robust measurement of delivered reductions. Under the previous demand response mechanism investigated by the AEMC, parties would have been able to look back on the spot price and claim they reduced demand. This kind of situation would undermine hedges of retailers that will be used to manage financial risks and comply with the guarantee. Furthermore, it is unclear how load and demand response will be treated where a third party is enabling the demand response separate to the retailer and on-selling that to another liable entity for compliance with the reliability guarantee.

## Emissions Guarantee

The proposed emissions guarantee represents a workable foundation for Australia's electricity sector to reduce its emissions in line with Australia's targets under the Paris Agreement.

ERM Power has identified several key changes that we believe will lower the costs of the emissions guarantee for consumers. These include:

- Allocating targets based on the incremental improvement needed to meet the target rather than across every MWh of load.
- Setting the EITE scaling factor based on the previous year's actual value.
- Removing the exemption for the first 50,000 MWh of load.

These issues and others are discussed in more detail below.

## Generation and emissions allocation approach

The ESB has set out a design whereby liable entities will be required to match their load (scaled up to reflect the approximately 20-25 per cent of exempt load) with actual generation and associated emissions. This will occur via reallocations of generation volume and emissions to market customers (generally retailers).

In ERM Power's view the broad design of this approach appears reasonable. However, getting the detail right is critical. There are many settings that will influence the decisions of generators and retailers in managing the reallocations of emissions, and as such, we consider that it is important to have a design that aligns the incentives across the supply chain to ensure the best possible outcome.

We understand the rationale for the ESB's proposal to exempt the first 50,000 MWh of a market customer's load for the emissions guarantee. This would mean that smaller and new entrant retailers would face a proportionally smaller task in achieving the emissions intensity target. However this approach may lead to unintended consequences such as some large users possibly deciding to become market customers in order to gain the benefit of the 50,000 MWh exemption. This would further shift the burden onto the remaining load.

There are currently 77 market customers registered in the NEM according to AEMO.<sup>3</sup> This equates to 3.85 TWh of load or around 2 per cent of the total. In isolation this may be acceptable, when combined with the exemption for EITE load, around 20-25 per cent of load would be exempt. Furthermore, some market customers will also justifiably benefit from the exemption for EITE load. The exemption would presumably mean that their non-EITE load is also exempt. Several existing market customers also sit under the same corporate umbrella – and there are good reasons for this – meaning that they would effectively be exempted from more than 50,000 MWh of load, potentially even up to 200,000 MWh. The ESB has flagged anti-avoidance provisions to counteract the potential for retailers to split into smaller loads in order to benefit from multiple exemptions.

Considering all of this as a whole, we believe it is better to avoid the exemption entirely. There are other design features, such as deferrals and the potential for offsets, which sufficiently help small customers meet their emissions obligation without the need for distorting the market.

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<sup>3</sup> AEMO, [NEM Registration and Exemption list](#). As at 28 June 2018.

## **EITE load**

The Commonwealth Government has resolved to exempt EITE load from the emissions requirement. This will be given effect by reducing a retailer's liable load by the volume of EITE load and then scaling up all load to reflect the reduction of exempt load. The scaling factor will be reported on in the registry over the course of the years and finalised at the end of September, prior to the 31 October final compliance date for the emissions requirement.

ERM Power believes there are risks with this approach that could result in higher costs to consumers. Despite being tracked over the course of the year, it is likely that retailers will take a risk averse position and apply the cap value over the course of the year. This may be trued up at the end of the compliance period to reflect the actual value recorded. However, if a customer has moved away from the original retailer, then this may not be passed back to the customer. For customers who are charged 'bundled' tariffs with all components rolled into a single figure, they are likely to remain unaware of the impact of this scaling.

ERM Power considers it would be better to set the scaling factor at the previous year's actual value. This is similar to the approach the ESB has proposed to establish the emissions intensity of generators, which relies on the reported NGERS emissions intensity from two years prior to the compliance year. We understand the Board's concern that this could lead to a situation where generation does not match load and as such, create difficulties in the compliance registry.

Yet this risk exists in the Board's preferred approach, if the scaling factor is capped in any given year. Instead, ERM Power considers that any emissions or generation that remains in the registry could be rolled forward into the next compliance year. The availability of flexible compliance arrangements such as deferral, banking and the use of offsets would all help liable entities to manage their exposure if reallocations of generation do not match actual generation.

## **Obligation to allocate emissions**

The detailed design proposes that generators face an obligation to re-allocate all emissions associated with the generation over the compliance year. We are disappointed that the ESB has moved away from the concept of allocating all emissions to the controlling corporation as was proposed in the draft design. ERM Power recognises that this would pose challenges in terms of corporate restructures to avoid obligations, but believe this could be managed simply using AEMO registration records.

Notwithstanding our view that only the incremental improvement in emissions needs to be allocated, ERM Power believes that requiring generators to allocate all emissions was a workable alternative approach that would support competition and meet the aims of the emissions guarantee.

This approach would mean that the vertically-integrated gentailers responsible for the highest levels of emissions in the NEM would likely reallocate some proportion of their own emissions to their retail arm up to the point that they can still comply with the emission requirement. This would be balanced with any renewable or gas generation they also own. Any additional low emissions generation required would be reallocated via contracts with other generators.

The previous approach of an unallocated pool of emissions that has not been reallocated would create a situation where only the most emissive generation remained unallocated. The generators responsible for these emissions would then be able to 'dump' this high emissions output onto the rest of the market at zero cost. It would provide no incentive for highly emissive generators to adjust their dispatch to reduce output at times when it may be appropriate and economic to do so.

Should the ESB decide to allow unallocated emissions to be placed in a central pool, then in the interests of preserving competition, gentailers should be required to allocate their most intensive generation assets to themselves first. AEMO generator registration records will provide the best guide on which generation assets belong to which retailers. In order to protect against corporate restructures to subvert the intention of the policy design, the AER can be called upon to approve any redistribution of emissions responsibility due to corporate restructures.

Allowing for an unallocated pool of emissions would also create a situation where retailers will need to pay for all reallocations with an emissions intensity below the value of the unallocated pool, which is likely to be the most emissive plant in the NEM. So black coal generators, whose emissions intensity is likely to exceed the target level would receive payments to reallocate their emissions. ERM Power considers this is counterproductive to the goals of the emissions guarantee.

It also means that the vertically-integrated gentailers would be able to reallocate low-emissions generation to themselves and foist high emissions generation on other parties, who are highly likely to be independent retailers. The vertically integrated gentailers could also opt to enter into power purchase agreements (PPAs) or invest in renewable generation in states where they do not have a significant generation ownership presence, to allow them to gain the benefits of low emissions reallocations without creating dispatch competition for their highly emissive generation in other states.

ERM Power strongly supports an obligation on generators to reallocate all of their emissions.

### **Minimising costs**

The current design of the emissions guarantee would logically see low emissions generators being paid for the electricity they generate below the target, with generators above the target having to pay retailers to accept their emissions. This creates a cost-of-capital issue for retailers who will need to access funds in order to fund credit support obligations and manage payment timing differences. It also results in a large degree of wealth transfer through the system which will find its way into customer costs. This could be through higher wholesale prices as large, higher-emission generators adjust their bidding strategies to recoup the transactional cost of reallocating their emissions to retailers.

Due to the capital-intensive nature of this activity, the costs of compliance vary depending on the credit rating of the parties carrying out reallocation. Large listed vertically-integrated generators and retailers are advantaged by not only being able to reallocate internally, but by credit ratings that reduce the cost of capital required to support reallocation. Thus, the proposed design, through its capital-intensive nature, offers significant advantages to large incumbent vertically-integrated generators and retailers.

ERM Power has separately provided the Energy Security Board a working model where only the incremental improvement in emissions needed to meet the target is reallocated. This will vastly reduce the cost impact on consumers as well as providing an incentive for increased volumes of low emissions generation.