

National Energy Guarantee Consultation  
Energy Security Board

Submitted by email to [info@esb.org.au](mailto:info@esb.org.au)

13 July 2018

### **Australian Energy Council Response to Draft Detailed Design Consultation Paper**

The Australian Energy Council (AEC) welcomes the opportunity to make a submission to the Energy Security Board's National Energy Guarantee (NEG) Draft Detailed Design Consultation Paper.

The AEC 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 AEC supports the mechanisms enshrined in the NEG. Lack of a national, stable and efficient emissions policy has been a challenge for the electricity industry for many years and has created barriers to dispatchable investment. The NEG is intended to provide a platform by which the industry can invest in sufficient dispatchable options in order to maintain system reliability and competitive consumer prices whilst meeting emissions constraints set by government which are telegraphed well in advance.

The Energy Security Board (ESB) has developed a design that constrains carbon in a technology neutral manner and at lower cost than alternative schemes. In conjunction with other market changes, the Reliability Guarantee builds on the market's existing contracting arrangements to provide greater stakeholder confidence in maintaining system reliability.

The AEC thanks the ESB for the consultative process it has used and for engaging some of the industry's best expertise. We look forward to further engaging in the development of the details necessary to support the implementation of the NEG. Please find attached detailed responses to the Draft Detailed Design Consultation Paper. Our membership will also provide individual submissions, which will deal with more specific issues than listed here.

Any questions about our submission should be addressed to me by telephone on (03) 9205 3116.

Yours sincerely,



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**Australian Energy Council Comments to NEG Consultation Paper**

The views below represent those of the AEC. Members will highlight more specific matters in their own submissions. The following heading numbers relate to the sections as presented in the Consultation Paper.

**Emissions Guarantee**

1. *Overview (3.1)*

The AEC supports the broad design of the emissions registry and its intended support for existing electricity market operations and financial market liquidity. In describing its function, the Paper describes emissions allocations being transferred from generators to retailers. Whilst this is the ultimate outcome, it should also be noted that the competition and balancing objectives are best achieved by not limiting transactions to any particular form, and allowing multiple steps if desired by registry participants.

For the avoidance of doubt, generators should also be able to allocate emissions to other generators, and where desired, retailers should be free to allocate to all other registry participants.

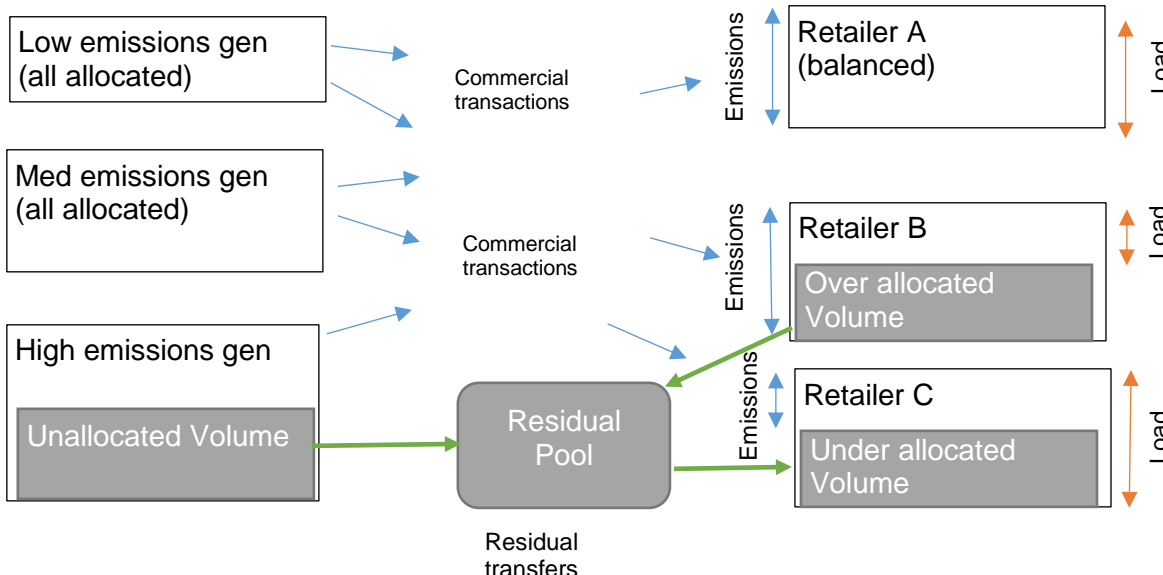
2. *Controlling Corporations (3.3.1)*

The AEC supports the proposed change to the design to make reporting and compliance the responsibility of registered Market Customers rather than controlling entities as defined in the National Greenhouse and Energy Reporting (NGER) Scheme. That previous model created unintentional complexities and potential anomalies based on corporate structures and existing joint ventures.

3. *Over-allocation of retail volume and generator volume (3.3.2)*

The AEC understands the ESB’s desire that participants strive to attain volumetric balancing of their emissions obligations. The AEC suggests the natural incentives in the scheme and the residual pool will ensure that balancing occurs, and as such administrative obligations will not be required.

Figure: Emissions allocations with Residual Pool



The diagram above represents AEC’s understanding of the original design of the Guarantee:

- All generators have an incentive to transact their emissions with retailers except possibly the most emissions intensive. A generator who fails to transact all its emissions will have those surplus emissions placed in the residual pool.

- An under allocated retailer (“Retailer C”) will be allocated these emissions to make up their load requirement – and as this pool is likely to have a high emissions intensity, there is a natural incentive to avoid it unless Retailer C is substantially over-achieving the target intensity from other sources.
- Finally, if a retailer has purchased more emissions than its load (“Retailer B”) it will have its surplus emissions redirected to the residual pool. These emissions will be taken at the retailer’s average emissions intensity, i.e. close to the target intensity. As these emissions have value, there is a natural incentive for Retailer B to commercially transact these, e.g. to Retailer C.

This design elegantly retains the correct relative incentives between generation sources. It ensures complete balancing and strongly discourages retailers from intentionally over-allocating emissions to themselves.

The Paper has additionally proposed administrative obligations upon generators to allocate all their emissions volume, and upon retailers to not over-allocate emissions volume relative to their load (i.e. Retailer “B”). The AEC opposes these obligations because:

- The balancing process will be a challenging one for participants which will require considerable tuning in the short trading period after metering data and scaling factors firm up. As the Paper recognises, identical matching will not be possible hence the use of a residual pool. It is uncertain as to how material a mismatch would constitute an administrative breach.
- All generators would need to be captured as directly complying entities in the scheme, whereas the original design was intended to elegantly limit the direct compliance burden to retailers.
- Some generators will find difficulty identifying a retailer to agree to absorb their emissions. This creates a risk of unnecessary wealth transfers from pressured commercial negotiations. For these generators, deriving zero value from the allocation process retains the correct relativities versus low emissions generation who will derive positive value. Generators do not need the imposition of mandatory allocation, which may result in a negative value, to confuse the commercial assessment of their viability.
- The obligation is presented as administrative, and presumably would attract only a moderate level of sanction. The nature of the penalty would be relevant to commercial negotiations surrounding re-allocation of high intensity generation. The lack of clarity of the likely level of sanction creates additional uncertainties for participants.

Thus the AEC prefers the original proposal of not obliging generators to allocate all volume, but instead placing unallocated emissions in the residual pool. Such unallocated emissions would have a high intensity, and, as such, there will be a strong natural incentive for retailers to avoid them.

#### 4. *50 GWh liability-free threshold (3.3.2)*

The AEC supports the ESB’s desire to lower compliance burdens for small retailers and facilitate market entry which has led the ESB to recommend a liability-free threshold. Whilst this is a worthy objective, a liability-free threshold necessarily increases the compliance burden for all retailers with sales above the threshold, both in terms of having a two-tiered exposure, and also by increasing the uncertainty in the registry scaling factor.

The AEC’s membership includes members with a wide range of retail scales. Equating to around 8,000 residential customers, 50 GWh is below the level of all but the very smallest retailers, so in practice even quite small retailers are disadvantaged by the threshold.

The AEC expects that complying with the emissions registry is not likely to be a material barrier to retail start-up compared to the numerous other regulatory and commercial arrangements that must be undertaken by a retailer with fewer than 8,000 customers.

Perhaps the most problematic aspect of the threshold is that as it encourages company splitting, the ESB is drawn to contemplate anti-avoidance arrangements in the National Electricity Law (NEL). As discussed in

section 12, the AEC is very concerned about moving the NEL away from prescriptive regulation. The industry uncertainty that results from anti-avoidance provisions outweighs the benefits of a minor reduction in compliance burden for very small retailers.

#### 5. *Wholesale pool purchases (3.3.3)*

The AEC supports the proposed approach to use net flows for customers with small-scale behind the meter generation rather than gross. This ensures settlements rely on metered rather than deemed quantities.

#### 6. *Exempt load and scaling factor (3.3.3 & 3.3.4)*

On balance, a scaling factor to account for Emissions Intensive Trade Exposed (EITE) load, loss residues and the liability-free threshold appears a reasonable approach. It will be important to provide early advice to help retailers predict the scaling factor. The provision of tracking data is supported, but it may also be possible for the Australian Energy Market Operator (AEMO) to provide reasonably accurate forecasts drawn from their own large customer forecasts.

The proposal to not firm the scaling factor until three months after the end of the compliance year provides retailers with only one month to re-trade their positions back into balance. The AEC suggests that the scaling factor could be firmed earlier – final wholesale metering data on EITEs and total system demand should be available a few days after the date of the final wholesale market invoice issued by AEMO, which is four settlement weeks after the end of the compliance year. This could then provide nearly three months for retailers to balance their emissions.

Another approach would be to set a scaling factor *in advance* of the end of the compliance year, based on expected quantities, either the result of forecasting or possibly by simply carrying over exempt load and loss residues from the previous compliance year. This is consistent with the approximation approach proposed for generator intensities, where emissions are carried over from the previous year's performance.

#### 7. *Greenpower load (3.3.3)*

The AEC has always supported the ability of customers to make a purchasing decision for zero emissions energy, and the market design should support this choice by providing a clear additionality accounting framework. With respect to the Renewable Energy Target (RET), the GreenPower product has been very effective in performing this role.

The AEC also supports the ability of customers to purchase electricity that is additional to the Emission Guarantee's emissions budget. The ESB's attraction to using an existing product for this is welcome, however a number of technical complexities will arise as GreenPower was not intended for a scheme such as the Emissions Guarantee. As the Emissions Guarantee has necessary constraints, e.g. limited banking, it is possible that these could be inconsistent with the freedom of the RET's GreenPower product and may adversely affect the operations of this successful market.

This is a very complex area. The AEC's recommendation is that the ESB should at this time clarify the desired outcomes associated with a voluntary surrender arrangement, but defer the design to the next stage. Any changes to the GreenPower scheme to incorporate the NEG should be consulted on with all affected parties.

#### 8. *Registry Governance (3.3.4)*

The AEC has no strong views over the potential operator of the registry, with the obvious candidates being AEMO and the Clean Energy Regulator (CER). Either could obtain access to the necessary data, although AEMO would appear to be the lowest cost option. As it relates to meeting a national emission policy, an appropriate approach would be for AEMO develop the registry and to recover operating costs from the CER.

AEC does not support the Australian Energy Regulator (AER) operating the registry as it would conflict with their compliance role.

### 9. *Registry Access (3.3.4)*

The operations of the registry as presented in the paper are supported by the AEC. Whilst the obvious users of the registry are generators and retailers, the AEC is comfortable if access is granted to other sophisticated participants. For example, the “Trader” category as registered with AEMO could be a candidate.

### 10. *Registry Data Publications (3.3.4)*

Whilst many physical matters are revealed in public NEM data, many other activities are intentionally not revealed. This provides investors greater freedom and confidence when setting up their commercial arrangements. Presently confidential information includes physical matters such as customer loads, retail market shares and sent out generation, and also non-physical matters such as contracts between generators and customers.

The NEM already has a very high level of transparency compared to international equivalents or other industries. Publication versus protecting confidentiality is a difficult balance with many factors and interests to take into account. The current balance has evolved throughout the history of the NEM, and is always open for careful reconsideration through reviews and rule changes. It is important that the creation of the emissions registry does not inadvertently result in changes to this existing well-understood regime. To that end, the ESB should ensure that no presently confidential information is revealed through the registry, or inadvertently revealed through quantities being reverse engineered. The AEC considers the policy’s objectives can largely be met through publication of aggregate rather than individual quantities.

The AEC strongly supports the present proposal to not reveal individual emissions transactions. To do so would create unintentional incentives to distort efficient trading, as companies would be aware that every transaction would be subsequently revealed to their competitors. For example, companies would tend to delay their transactions to the last possible time.

With respect to the data releases described<sup>1</sup>, the AEC supports all the proposals regarding aggregate information, but the registry should not publish:

- the emissions intensity of individual market customers (at any time); nor,
- the unallocated emissions of individual generators on a rolling basis or at the end of the compliance year.

### 11. *Carry forward over-achievement (3.4.1)*

In our Draft Design submission, the AEC recommended unlimited banking. The AEC acknowledges the concerns in respect of such an approach now articulated in the Consultation Paper. In recognition of those concerns, it may be appropriate to begin the scheme with such a limit, but to set up a periodic review with respect to adjusting or removing it.

The switching of the carry forward limit on and off with respect to all customers being in compliance seems problematic as it would create uncertainty and at worse perverse incentives for retailers to become intentionally non-compliant.

### 12. *Anti-avoidance (3.5.3) and Unreasonable Withholding*

The AEC opposes introduction of an anti-avoidance regime in the NEL. It is a fundamental feature of industry compliance that it is able to take the words of the many regulatory instruments at their face value, and not need to detect an underlying intent behind those words. An anti-avoidance regime leads to:

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<sup>1</sup> Emissions Registry Technical Paper, pg 10

- considerably higher risks for participants, as activities that are at face value compliant may yet be subsequently argued by regulators to be against the intent of the instrument; and,
- reducing the necessity for rule makers to clearly identify the specific behaviours it wishes to prohibit.

Consideration of this regime appears to have emerged due to the perceived risk of company splitting in order to maximise access to the 50 GWh liability-free threshold, yet the Consultation Paper appears to envisage it applying across the NEL. It is entirely inappropriate to contemplate a change in compliance arrangements for the entire NEM in response to the liability-free threshold. The AEC suggests the liability-free threshold should be reconsidered for the reasons discussed in section 4.

To foster competition, the technical papers<sup>2</sup> have also proposed introducing new legal requirements that:

- retailers not “unreasonably withhold” allocations of generation from each other, and,
- generators not “unreasonably withhold” allocations of generation to retailers.

Whilst the AEC is keen to promote a competitive environment, and in general the NEL does this, it has never been the role of the NEL to directly regulate competitive behaviour. This is clearly the function of the Competition and Consumer Act (CCA) and the Australian Competition and Consumer Commission (ACCC). The AER is an economic and technical regulator only, and it is problematic to confuse its role in this way. Behaviours in the NEG will be automatically subject to the constraints of the CCA, along with any other Australian business activity, and any perceived shortcomings in that act should be addressed directly within it.

### *13. Civil Penalties*

The ESB has proposed a maximum \$100m civil penalty for the breaches described, being:

1. exceedance of the emissions reduction requirement;
2. exceedance of the emissions deferral limit; or,
3. requirement to not over-allocate generation to a retailer.

The enforcement of the Emissions Guarantee is a key component of the design. There are two broad approaches to this:

1. Having a potentially very high maximum penalty but provide the regulator discretion in its application with respect to the perceived seriousness of the breach. This is effectively the model in the paper.
2. Having a known fixed penalty per unit of non-compliance set upfront. No regulatory discretion or sanction beyond the penalty is applied. The penalty is linked to the perceived level of harm imposed upon the scheme’s objectives, and fills a policy role by setting a maximum cost of the scheme.

Of the two approaches, on balance the AEC prefers the second approach, which should improve industry certainty and encourage the market to explore the most efficient allocation of emissions, whilst also protecting customers from the industry making extreme responses to unexpected situations, such as drought.

If the ESB chooses to retain the first approach, the AEC supports the AER having regulatory discretion and having the power to issue infringement notices where it considers this an appropriate remedy. The AER also suggests that “make good” mechanisms may be a useful additional tool for the AER. Nevertheless, despite the discretion, the penalty for these breaches seems excessive for the level of harm done, creating additional

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<sup>2</sup> Compliance and Penalties for the Emissions Reduction Requirement Technical Paper, page 10

risks for participants and forcing participants to contemplate inefficiently expensive measures to avoid breaches.

Note also the AEC suggestion in section 3 of an alternative to a compliance penalty for overallocating generation to a retailer.

#### *14. Pre-1997 generation and interaction with other schemes (3.3.3 & 3.7.1 & 3.7.2)*

The Emissions Guarantee is proposed as an industry-wide, technology-neutral emissions constraint mechanism. These schemes typically provide an equal marginal incentive to abate carbon to all activities regardless of type or vintage. Some activities will of course more readily respond to the marginal incentive than others, but attempting to identify the less-elastic activities and exclude them is extremely difficult and can create anomalies.

The challenges of attempting to exclude activities from such a scheme include:

- Identifying which activities to exclude. For example:
  - It is unclear why the Renewable Energy Target's 1997 cut-off date would be relevant to the NEG rather than a more contemporary date.
  - The exclusion could arguably equally extend beyond renewable energy to other low emissions generation sources in operation prior to the NEG's implementation.
- Exclusion of baseline generation leads to anomalous incentives, such as production swings from one compliance year to another around a baseline.
- Exclusion of certain activities can inefficiently remove incentives to re-invest in aging low emissions plant to extend its life. At worst it can encourage early closure of functional low emissions plants and replacement with scheme-eligible plant.

The AEC concurs with the Paper's preliminary position that the creation of the NEG does not necessarily require any corresponding adjustments to the large-scale RET. Unrelated to the NEG, the RET's economic impact upon the market is expected to decay from about the same time as the introduction of the Emissions Guarantee.

The AEC supports the proposed treatment of state and territory renewable energy targets as complementary to the Emissions Guarantee.

### **Reliability Guarantee**

#### *1. Forecasting and updating the reliability requirement (4.2 & 4.3)*

The AEC supports the approach taken in the Consultation Paper of using the existing forecasting approaches as a basis for the reliability requirement. As the AEMO reliability forecasting arrangements will now have a more clearly direct and consequential impact upon the market it is entirely appropriate to introduce greater transparency and the continuous improvement approach described in the Paper.

The AEC agrees the trigger should be based on the single metric of the reliability standard that should be set, independently of AEMO, by the Reliability Panel. There should be no provision to recommend a trigger on any other basis, for example the proportion of modelling simulations that contain unserved energy (USE).

#### *2. Triggering the reliability obligation (4.4)*

The AEC supports the current design of only triggering the obligation if the reliability standard is forecast to be breached at T-3 and at T-1. This limits the compliance burden to only those years and regions where reliability is specifically of concern. Furthermore the specific trigger warning at T-3 will draw market attention

to the reliability concern whilst there remains considerable time to rectify it. Indeed the simple process of warning may encourage the market to self-correct the concern.

The AEC is aware that the ESB is considering alternative proposals not listed in the Consultation Paper that would result in the compliance requirement being exercised more frequently. These should be treated cautiously as they will increase compliance costs in situations where reliability is not at risk, and may invoke other mechanisms, such as the market liquidity obligation, which were not intended to be called in such conditions. In any case, the industry would need an opportunity to respond in detail to a proposal brought before it.

The AEC understands the South Australian Government has suggested a continuous annual compliance obligation regardless of reliability forecasts. This appears excessive and contrary to the stated intent of the Reliability Guarantee to only act where reasonable reliability risks exist. For example, current forecasts show the Queensland and Tasmanian regions staying well within the standard through the planning horizon, and as such this proposal would pointlessly subject retailers in those regions to an expensive compliance and audit burden.

The AEC understands there may also be concerns about a scenario where at T-3 the reliability standard appears met, but conditions subsequently deteriorate. As a result, there have been suggestions that the Guarantee trigger should only consider the T-1 conditions. Mitigating this concern is the three-year notice of closure rule that is expected to be made prior to the Reliability Guarantee coming into effect. With this rule in place, such a deterioration should only occur as a result of a *force majeure* situation. In such a situation, it would be unreasonable to expect participants to have sufficient contracts in place to deal with an unforeseeable event. And, as by definition this situation occurs without notice, there would be no opportunity for retailers to prepare their contract positions. The ultimate result of such an approach would be to force all retailers to conservatively act as if the Reliability Guarantee compliance mechanism was about to be invoked, no matter how optimistic the present reliability forecast is.

### *3. Triggering responsibilities (4.4)*

The AEC supports having a transparent framework for determining a material gap and a guideline to inform the role of the reviewer.

Whilst the AEC generally supports the proposals and metrics discussed for the trigger, we propose a subtle but significant change in the ownership of the recommendation. AEMO should operate only the forecasting tools, and report these numerically to the independent reviewer without a recommendation. Instead the decision to trigger should be entirely left to the Independent Reviewer. They are better placed to balance the competing issues of reliability and cost than the market operator and such an approach will avoid conflicts between the two institutions.

### *4. Timing of "T-1" (4.4)*

For the avoidance of doubt, the AEC does not consider that triggers and provisions of contract information should be linked to the date of 1 July nor the publication of the Electricity Statement of Opportunities (ESOO). Instead "T-1" should mean 12 months ahead of the first month of identified USE risk, which would typically be during the summer period. As the ESOO annual publication date is several months ahead of summer, this should provide some warning to retailers of the impending trigger. Of course, where a mid-year ESOO publication anticipates a shortfall in the summer after the next, AEMO would be expected to provide at least one further update prior to T-1.

### *5. Liable entities (4.5)*

The AEC recognises the proposed treatment of large customers is controversial. We are sympathetic to the concerns of these customers, however after carefully considering the objectives of the Reliability Guarantee, conclude that the ESB has struck the right balance by encouraging these customers to act early in securing their commercial arrangements.

The AEC supports the "opt in" arrangement for below threshold customers.



## *6. Qualification framework (4.6)*

The AEC supports the broad framework proposed in the Paper that audited net firm contract positions be self-reported by retailers. As stated in the technical paper, this will both be the simplest to assess, but most importantly will provide flexibility for innovation in contracting to develop over time. The proposed approach of allowing the market to self-determine firmness factors is also supported. It is highly likely that bodies such as the Australian Financial Markets Association (AFMA) will develop industry codes to help retailers and auditors achieve consistent treatment.

The AEC also supports the position of not obliging all contracts to be centrally cleared, for the reasons presented in the paper. With respect to the proposed trade repository, the AEC suggests this may need several years' development.

AEC members will contribute more detailed views on the Market Liquidity Obligation.

## *7. Voluntary book-build (4.6)*

The AEC considers that a voluntary book build conducted by AEMO is unnecessary. If the market sees value in having such a facility, it is highly likely to be entrepreneurially developed by an intermediary.

## *8. Demand Response Contracts (4.6)*

The AEC supports the approach proposed that demand response must be "in market" and treated consistently with qualifying contracts, with firmness self-reported and also recorded in the Demand Side Participation Portal.

The technical paper has proposed an arrangement to recognise the firmness of demand response and to gross up a retailer's load by its activated demand response. AEC members will contribute detailed comments on its specifics. As a general comment, the AEC notes this is a very complex and novel area for the NEM and can easily lead to unintentional anomalies. The ESB might consider alternatively the approach used for scaling load in the Paper's section on compliance (4.8) which defers developing the detailed framework to a separate consultation. The grossing up of demand response could sensibly be incorporated into the load scaling consultation.

The AEC supports efforts to better integrate demand response into the scheduling processes of the NEM. This will provide better short-term market forecasts and result in a more efficient dispatch outcome for scheduled generation and for demand response itself. The data that must necessarily be obtained for the Reliability Guarantee may also create options to incorporate this presently opaque activity into scheduling. The Australian Energy Market Commission appears best equipped to progress options for this.

## *9. Procurer of Last Resort (4.7)*

The AEC considers that this mechanism should align with the existing Reliability and Reserve Trader (RERT), indeed it should be possible to remove the concept of a Procurer of Last Resort and to have AEMO simply use the long-notice RERT with its existing powers.

The AEC will also submit to the current rule change on the Enhanced RERT that the existing nine-month contracting period is sufficient for AEMO to play the intended role of Procurer of Last Resort in the Reliability Guarantee. If the T-1 is to apply 12 months ahead of the first month of shortfall, then after allowing for a period for the independent review, followed by AEMO seeking tenders, the nine month contracting constraint will not in practice bind. Furthermore, AEMO has shown an ability to acquire large volumes of reserves from the medium and short-notice RERTs, and also to direct participants, which should provide stakeholders with a large degree of confidence that the considerable intervention tools at AEMO's disposal will ensure the reliability standard is met.

For the avoidance of doubt, where the paper refers to AEMO or a state government submitting an expedited rule change, the AEC considers that this capability already exists in the NEL and that no change is required.

#### *10. Compliance (4.8)*

The AEC supports the broad approach of a safe harbour for years where the one in two year demand forecast was not exceeded, and for scaling back retailers' demands in higher years. The ESB has correctly recognised the complexities of selecting individual trading intervals and scaling. In this respect, the AEC welcomes the intention to develop consulted methodologies and review them over time.

The methodology should also encompass a review mechanism where an individual retailer that considers the methodology has resulted in an unintended anomaly in their case can appeal to have its case specifically considered.

#### *11. Penalties (4.9)*

The AEC supports the changed approach towards predetermined penalties rather than linking them to the unpredictable costs of the Procurer of Last Resort, as long as the quantities are retained within the industry.

The penalty should be linked to the level of non-compliance. For example, it could be set proportional to the level of compliance shortfall in MW, with the cost per MW being linked to the cost of new capacity such as occurs for setting the Reliability Capacity Mechanism cap in the Western Australian Wholesale Electricity Market.