

Attachment A
Response to specific questions

As our cover letter notes we do not believe placing the point of liability at the retailer level and using wholesale market contracts to track emissions/reliability obligations will be effective. The comments in the table below are intended to draw out issues that would need to be addressed if the ESB decided to pursue its proposed contracting model and are not intended to infer support for the use of wholesale market contracts to track liability.

Question ref	Origin response
<i>Emissions requirement: ESB design elements</i>	
3.2.1	<p>Entities covered and scheme year</p> <p>We would prefer a financial year scheme as this would align with NGERs data that would be required to track actual emissions from generators. We note however that NGERs entities themselves may not align with specific generators and it could be quite a complex task to disaggregate the required information.</p>
3.3.1	<p>Contracts that specify an emissions source</p> <p>It is not appropriate to seek to ascribe some level of emissions intensity to financial contracts. These contracts were never intended to be used in this manner and it is impractical to do so. Instead, we would suggest that the stapled security option raised in 3.3.2 be further explored. This is likely to allow for greater transparency in tracking any liability under the NEG while enabling the establishment of secondary market which can aid compliance.</p> <p>Whilst the types of contracts described in 3.3.1 (such as PPAs) may appear to be relatively simple to attribute a level of emissions to, the actual generation per year from the specific generator will still need to be tracked, which may occur by using a registry as described in 3.6.2. Ultimately, a verification will be required with generators data through the NGERs. This is likely to be a complex task, which could be costly to administer. This cost will likely be passed on to customers in some form. The need to ultimately verify actual generator data suggests that imposing the liability at the generator level would be the more efficient approach.</p>
3.3.3.	<p>Contracts that specify neither emissions per MWh nor a generation source</p> <p>The paper suggests that some form of deemed factor be used for these types of contracts which in our view would be an overly complex and ultimately imprecise process. Additionally, this runs the risk of diminishing liquidity in the futures market as participants with emissions below the deemed factor is likely to be discouraged from trading through the ASX where they would forgo this value. A significant portion of financial contracts are traded through the futures market, with the ability to manage price risk in the NEM critical to market efficiency.</p>

3.3.5	<p>Unhedged load</p> <p>The choice of taking spot exposure can be part of any prudent risk management strategy so it is not considered appropriate to assign a punitive level of emissions to such unhedged load. The ability for market participants to pursue their optimal hedging strategy lowers the cost of risk management. The proposal here runs contrary to this by potentially creating a perverse incentive for retailers to enter into more hedge contracts even when the retailer believes hedge contract prices are higher than its view of future pool prices.</p> <p>Similarly, a mechanism that encourages a level of contracting for generators above their current preference may only be achieved if generators are rewarded with a higher contract price.</p>
3.4.1	<p>Carrying forward overachievement (banking)</p> <p>We suggest that overachievement should be allowed to be carried forward, with no limits. These rules are well understood from existing schemes such as the RET and have generally worked well. In particular, banking provides additional flexibility to the timing around investment in new projects and can act as an incentive to invest earlier than if no banking was allowed.</p> <p>We do not believe placing limits on banking is desirable. If there are concerns around market liquidity these should be mitigated by the design of other aspects of scheme.</p>
3.4.2	<p>Deferring compliance (borrowing)</p> <p>We agree that a small proportion of deferred compliance (borrowing) should be allowed in the rules to provide increased flexibility. This amount should be referenced as a percentage of a retailer's annual emissions requirement and should be set at a relatively small amount, say 10%. The benefits of flexibility should be balanced against the overriding objective of the emissions requirement which is to invest in increased supply of lower emissions generation.</p>
3.4.3	<p>Use of offsets</p> <p>Origin does not support the use of offsets in the NEG. The use of offsets may weaken the incentive to invest in new lower emissions generation, which would run contrary to the overall objective of the emissions requirement.</p> <p>If offsets are allowed, we suggest that this be strictly limited by both quality and quantity:</p> <ul style="list-style-type: none"> • qualitative limits: this should be restricted to high quality domestic offsets in the first instance, such as ACCUs. (Whilst Origin generally supports access to high quality international units, we believe they should be used by other sector of the economy that are trade exposed and/or have relatively few opportunities to abate.) • quantitative limits: this should be a simple percentage of a retailer's annual emissions requirement, set at a relatively low limit, say 5%.

	<ul style="list-style-type: none"> we note that the potential use of offsets would be in addition to other flexibility options such as banking and borrowing rules. <p>We also note that the consultation paper suggests that “within-NEM” offset opportunities be given priority. Whilst we understand the logic that within NEM emissions reductions should be encouraged, so that the integrity of the NEM emissions reduction target is maintained, we are unsure what is meant by this type of offset. If it is referring to offsets based on energy efficiency schemes, then we would not support access to such units for the NEG.</p>
3.5	<p>Interaction with voluntary green programs</p> <p>The NEG should be designed so that voluntary green schemes (such as GreenPower) remain additional and can continue to be offered to consumers. The example in the consultation paper is a reasonable approach to compliance for voluntary programs. It is important that the additionality of voluntary offerings is maintained so that retailers can continue to offer new products as the market evolves.</p>
3.6.2	<p>Compliance registry</p> <p>Issues regarding the use of contracts as a means of ensuring scheme compliance reinforces the need for a simple and transparent process. As we have stated earlier further development of the concept of a stapled security could look to capture the benefits of a certificate mechanism which would aid transparency and compliance. The confidence provided by a robust compliance registry is fundamental to market participants’ view of a credible emissions requirement.</p> <p>We also do not believe it is practical to track every financial contract that is bought and sold in order to establish a net position for a retailer. Financial contracts may turn over more than three times the underlying physical market. Such a scheme would impose an unnecessary compliance burden with the resulting cost largely be borne by customers.</p>
3.6.3	<p>Reporting requirements</p> <p>The proposed reporting requirements reinforces our view that having the retailer as the point of liability may not be the most efficient option. Information from generators would be required to ensure that net positions presented by retailers can be verified. An annual cross-check with generators data from NGERs could be the best way to check on overall emissions from the NEM, to evidence that the integrity of the emissions intensity reductions was being maintained. However, as we note above, the need to cross-check in this way indicates that placing the requirement at the generator level may be more appropriate.</p> <p>Consideration should also be given to what data would be publicly available. It is suggested that only aggregate level data that does not disclose specific contracting positions of retailers and generators would be suitable.</p>
3.6.4	<p>Enforcement tools</p>

	<p>If the AER is to be the body to enforce compliance with the scheme then the tools listed in the paper appear suitable. We note that a form of penalty price, as used in the RET and other schemes, is not included. We suggest that further consideration should be given to a penalty price or similar compliance tool, as it can send useful signals to the market.</p>
3.7.1	<p>Competitive markets</p> <p>We support the intention that the NEG should be designed in a manner that does not inhibit competitive markets from efficient operation. Any consideration of the potential impact the NEG may have on competitive markets should be made as a priority from the outset rather than an issue for further consideration when the design of the scheme is more complete. We highlight that it will be important to maintain liquidity in financial contracts as a key means of fostering a competitive electricity market.</p>
3.7.2	<p>Jurisdictional considerations</p> <p>We note that 4.2.5 below deals with the interaction with state-based targets. We suggest that there should be an opportunity for states to equate their existing state-based renewable energy targets with an emissions intensity equivalent. This may allow states to pursue more ambitious state-based targets within the NEG framework. Overall, we support a national target but recognise that states also have an important role to play in reducing emissions from the electricity sector.</p>
<i>Emissions requirement: Commonwealth design elements</i>	
4.2.2	<p>Form of emissions target</p> <p>Expressing the target as an annual average emissions intensity number (tCO₂/MWh) is a logical approach. Whilst this can be considered to “self-adjust” to some extent, we suggest that significant changes to demand should be specifically taken into account in the updating of targets (see below).</p>
4.2.3	<p>Forecasts and adjustments to the target</p> <p>Origin would support a two-stage approach to target setting, which could include:</p> <ul style="list-style-type: none"> • Long-term guidance on the range of emission reduction targets, which could be set out to 2030, or later. • Short-term targets which could be set in blocks of say 5 years, which would fall within the bounds of the long-term guidance. <p>We suggest that there should be a formal target adjustment process that is written into the rules from scheme commencement. This adjustment process would be able to consider significant changes that were caused by factors such as:</p> <ul style="list-style-type: none"> • Changes to the national target, for example because of changes to Government policy or because of the “ratchet mechanism” under the Paris Agreement

	<ul style="list-style-type: none"> • Significant changes to demand such as the closure of a large generator or large demand source (such as an aluminium smelter) • Other exogenous changes such as a step-change in technology <p>Rules could be written around when such changes would trigger an adjustment to the target, so that the market would have clear notice. For example, a significant change may be regarded as a movement of greater than +/- 10% of a regions demand.</p> <p>We do not support the need for at least 5 years notice of changes to the scheme target, so long as these changes fell within any longer-term guidance ranges that had already been announced. We suggest that 2-3 years notice of changes to scheme targets would be sufficient.</p>
4.2.4	<p>Timing and process for setting the electricity emissions targets</p> <p>Origin supports greater ambition to reduce emissions from the electricity sector. We view the currently stated target as a floor and would expect that the ambition of this target will be raised well before 2030.</p> <p>We support the intention to set the emissions targets for the period 2021-30 upfront, but as stated above do not support the need for at least 5 years notice of changes to targets. We believe that 2-3 years notice is sufficient.</p>
4.2.5	<p>Geographic neutrality</p> <p>Origin's preferred approach is a national emissions reduction target for the electricity sector. Whilst the paper indicates that states can pursue separate emission reduction policies, there is no specific guidance given as to whether these could be considered "additional" to the NEM-wide target.</p> <p>We suggest that there should be an opportunity for states to equate their existing state-based renewable energy targets with an emissions intensity equivalent. This may allow states to pursue more ambitious state-based targets within the NEG framework, subject to the reliability requirement.</p>
4.3.1	<p>Treatment of EITE activities</p> <p>Origin supports the principle of providing assistance to emissions intensive trade exposed (EITE) industries. We understand that the EITE assistance regime from the RET forms a logical starting point for consideration of similar assistance under the NEG emissions requirement. However, the NEG is not designed to be a subsidy scheme so we question whether a full exemption for EITEs is necessary. Rather, the NEG emissions requirement may operate as a form of marginal pricing for emissions reductions, which would suggest that a lower rate of assistance would be more suitable. A partial assistance regime could help balance a range of factors, including:</p>

	<ul style="list-style-type: none"> • costs to other customers - if exemptions are granted to EITEs then this may lead to additional costs being placed on other customers, which includes households and small business • incentive to reduce emissions - a partial exemption will retain part of the price signal for EITEs to reduce emissions
4.4	<p>External offsets</p> <p>Origin does not support the use of external offsets in the NEG. The use of offsets may weaken the incentive to invest in new lower emissions generation, which would run contrary to the overall objective of the emissions requirement.</p> <p>If offsets are allowed, we suggest that this be limited by both quality and quantity:</p> <ul style="list-style-type: none"> • qualitative limits: this should be restricted to high quality domestic offsets in the first instance, such as ACCUs. (Whilst Origin generally supports access to high quality international units, we believe they should be used by other sectors of the economy that are trade exposed and/or have relatively few opportunities to abate.) • quantitative limits: this should be a simple percentage of a retailer's annual emissions requirement, set at a relatively low limit, say 5%. • we note that the potential use of offsets would be in addition to other flexibility options such as banking and borrowing rules.
<i>Reliability requirement</i>	
5.3	<p>Forecasting the reliability gap</p> <p>A longer forecast horizon would be more appropriate to allow the market sufficient time to respond to resolve any reliability gap. We support the use of AEMO reporting requirements as the starting point. The paper notes that AEMO will publish the methodology used to develop its forward assessment for public consultation. This should take place as part of the NEG design development process and not after the design has been finalised. The methodology is an important component of the reliability requirement and having some initial view of it will better equip stakeholders to provide feedback on the broader NEG design. Once finalised and in operation, it may also be appropriate to have periodic assessments of the methodology.</p> <p>When deciding on the use of the ESOO, MTPASA or a new bespoke process, the following should be considered:</p> <ul style="list-style-type: none"> • Forecasting in the ESOO and MTPASA is based on voluntarily supplied information from market participants. The ESB should consider whether this is appropriate and necessitates the most reliable forecast for the reliability requirement where forecasting is of the utmost importance to avoid triggering the requirement unnecessarily. • AEMO's forecast of POE demand is currently based on a series of historical demand years. If the shape of demand changes significantly from these historical years, this leads to a less accurate forecast. Investigation should be undertaken into whether focusing on maximum demands instead would produce a better forecast.

	<ul style="list-style-type: none"> • The current practice of forecasting generator failure risk is to de-rate it for summer conditions and allow for random outages. A more robust forecast methodology would be needed. • The need for greater stakeholder review of draft forecasts. • Consideration of the governance framework that can balance against a market operator's inherent bias to be conservative.
5.4	<p>Updating the reliability gap</p> <p>A longer forecast horizon does risk a larger margin for error and therefore should be accompanied by regular updating for market changes over time. This, however, must be considered against the potential that a constantly changing forecast could increase uncertainty and lead to perverse stakeholder incentives. As such, annual updates probably provide the best balance. This could be complemented by ad hoc updates for material changes, such as the announcement of a generator's intention to close.</p>
5.5	<p>Triggering the requirement</p> <p>The NEG's reliability requirement should ultimately seek to incentivise a market response before a requirement is triggered. The warning period between when the gap is forecast and the requirement is triggered should give sufficient opportunity for market participants to alleviate any potential shortfall to avoid the imposition of the requirement.</p> <p>At the same time, any potential generator closures should be known in advance of the requirement being triggered to ensure completeness of the information available to the market and an ability to respond accordingly. This lends itself to a shorter trigger period but not one that is so short that market participants do not have sufficient time to make necessary investment decisions on new capacity or demand response in order to comply with the requirement.</p> <p>Responding to the reliability requirement requires that retailers have the most up-to-date information possible. This suggests a multi-year gap should be addressed one year at a time to ensure retailers can best respond to changes in forecasts and so would prevent any potential over-investment.</p>
5.6	<p>Qualifying instruments</p> <p>The paper's discussion of the different classes of potential qualifying instruments highlights the logistical and practical complexity of establishing which contracts could be eligible to meet the reliability requirement. This is one of the main reasons Origin does not support a retailer based capacity requirement and would prefer that an AEMO process be used instead.</p> <ul style="list-style-type: none"> • Retailers primarily manage financial risks associated with their spot market exposures via the use of exchange-traded and over-the-counter (OTC) swap and cap contracts. They then use supplementary hedging options, such as power purchase agreements and bespoke financial contracts, to complete the preferred hedging position. The reliability obligation is likely to result in a shift from exchange-traded contracts towards OTC contracts. The ASX market performs an important function allowing rapid and anonymous execution of trades, avoidance of credit risk, and visibility of contract market prices.

	<ul style="list-style-type: none"> • The focus on physical backing has implications for the involvement of financial institutions in the contract market, which could lead to reduced liquidity as these players are potentially pushed out of the market. • As noted in the paper, not all energy sources may be considered equally so further consideration needs to be given to how the firmness of different sources is rated. This is most clearly necessary for different generation sources, which would need to take into account such things as capacity factors, previous performance and availability. • Certification of contracts could lead to a significant divergence in contract costs for different energy sources with firmer sources commanding a premium. While this is a natural market response, it may not be the optimal one as it could lead to a segmentation of financial contracts into tiers. This would increase risk and cost and therefore reduce liquidity. There would likely be a significant compliance imposition placed on retailers who would have to actively track all contract activity, even before a reliability requirement is triggered. <p>This complexity, the potential compliance costs and the implications for financial market liquidity and information could be a barrier to entry for new retailers.</p>
5.7	<p>Allocating the requirement</p> <p>Any gap should be expressed as the shortfall and not as the total as a total obligation would suggest the whole market would have to be fully contracted, which is not the current intention for the market nor should it be the future intention for the market.</p> <p>Placing the requirement on retailers is complicated. We do not support a retailer based capacity requirement and would prefer that an AEMO process be used instead.</p> <p>While we suggest there is merit to a book-build/tender process, further detail around the terms and conditions of the new capacity are required to assess its viability:</p> <ul style="list-style-type: none"> • The book-build's focus on new capacity does not facilitate retailers entering into new demand response contracts or allow retailers with excess contracts to sell their excess capacity. Is there a way this market response can still be facilitated in conjunction with the book-build process? • What happens to the new capacity after the shortfall period? • Would the new capacity be inside or outside of the market? It's inclusion in the market could be distortionary. • Who will retain dispatch rights? • Who receives future income?
5.8	<p>Compliance</p> <p>The paper states that guidance will need to be provided on the types of information that would need to be reported to the regulator, the form in which that information is to be reported and the frequency of information reporting. This clearly indicates an increased compliance requirement on retailers once the reliability requirement has been triggered, and is one of the reasons we do not support</p>

	<p>such a mechanism. It is integral that the ESB also acknowledge the compliance burden extends beyond solely when the requirement is triggered as participants will need to set up systems and processes to actively track all their contracting activity even when the reliability requirement has not been triggered.</p>
5.9	<p>Procurer of last resort</p> <p>The procurer of last resort should be seen as a safety net measure in the event the market has failed to deliver reliability through the forecasting period or the AEMO book-build/tender. It should only be pursued if the market response has been insufficient to address the forecast gap and therefore, should be triggered closer to the forecast gap to avoid market distortions. As such, it is more likely to be needed to manage unexpected shortfalls in demand in an operational timescale. This suggests the RERT or a strategic reserve is the most appropriate mechanism. A least cost objective is necessary for any procurer of last resort.</p>
5.10	<p>Penalties</p> <p>If the ESB pursue an AEMO book-build/tender process the discussion of potential penalties is less relevant. Rather the key issue becomes how to apportion the costs of such a process. The simplest option would be to spread the cost of the tender across the relevant region by retailer load. However, we also suggest there is merit in further exploring a way to create incentives for retailers that have hedged appropriately (and therefore not contributed to any forecast reliability gap) to have their share of any apportioned costs reduced.</p>
5.11	<p>Other considerations</p> <p>We support the intention that the NEG should be designed in a manner that does not inhibit competitive markets from efficient operation. Any consideration of the potential impact the NEG may have on competitive markets should be considered as a priority from the outset rather than an issue for further consideration when the design of the scheme is more complete. We highlight that it will be important to maintain liquidity in financial contracts as a key means of fostering a competitive electricity market.</p>