

Foreword about the current NEM workings

Currently, some systems of the National Energy Market (NEM) are in change which will impact the capabilities and outcomes of the National Energy Guarantee (NEG). These include the transition to a market interval of 5 minutes, along with multiple recommendations listed in the Finkel report. The NEG will be working in tandem with these changes to assist in providing a cleaner, more reliable network. However, it is important to make clear what the goals of the NEG are.

They are to lower prices to Australian consumers for electricity, to create reliability of NEM and to lower emissions. It is our view the emissions component of the NEG, as discussed below, should be crafted into a simple and effective system that allows for new technologies (such as fast responding battery systems). This could also be expanded to providing economic incentives to retailers and generators who (and potentially other businesses) who invest in controlling demands/loads.

This will provide clear investment signals to investors that these newer technologies are welcome and that the Australian market is looking for innovation to provide our future energy needs. This will have the desired knock on effect of creating network stability.

What are stakeholders' views on whether the compliance year should be a calendar year or a financial year, noting that EITE exemption processes under the RET use calendar years, whereas emissions reporting obligations relate to financial years?

As reducing emissions is one of the two main objectives of the National Energy Guarantee (NEG), it would better suit the NEG for the compliance year to be linked to the emissions reporting obligations. This would provide clear information tied to existing emissions information that would give better clarity to the market and investors.

What are stakeholders' views on the process to calculate a retailer's load?

Providing a simple method which allows a retailer to calculate load is necessary for a responsive, liquid market. A suitable method could be recording the total number of MWh a retailer buys (from producers) and sells (to consumers) or consumes internally.

What are stakeholders' views on how a retailer's emissions should be determined?

The NEG is focused on providing a reliable, transparent energy market. An effective emissions determination process will be necessary in order to encourage investors and reduce possible market congestion. The current proposal is counter-intuitive to the goals of the NEG. Trades and assessments of multi-tier emissions will need to be verified by a third party (most likely AEMO or a newly created NEM regulation body) to prevent fraud. It is presumed the cost of this verification will be borne by the party undertaking trades, rather than the market as a whole.

Retailers who buy power from several smaller companies to form energy deals for larger buyers will have to compensate those that review trades, and keep track of all smaller parts of the deal to make sure they are keeping to the emissions targets set by the Federal Government. This creates a barrier to entry that does not already exist for larger vertically integrated generator-retails (gen-tailers). These gen-tailers will have reduced compliance costs as they can sell primarily their own power directly to customers without maintaining the necessary bureaucracy of monitoring multiple different generator company's emissions and outputs.

What are stakeholders' views on the methods for determining the emissions to assign to contracts where the generation source is specified?

Emissions from known sources per MWh easily determined and can be used to calculate the emissions for a contract. Representing this data as both a net amount (for instance, 400 tCO₂-e for 700 MWh) and as a per MWh value (0.57 tCO₂-e/MWh) will give clear and effective information for all parties. Standardising this method across all new contracts in the NEG would also make it easier for new retailers and generators to enter the market, by giving them a proper framework to work with that will work across the NEM.

If the contract specifies a portfolio of plants and the plants have differing emissions profiles (eg some are zero-emissions plants and some are gas plants, used for firming the variable renewable energy), how should the emissions per MWh under the contract be determined?

In the case of a retailer creating a profile, we must realize that renewables (especially solar and wind) are not constant sources of renewable energies and that they instead represent intermittent generation. This is important, when compared to Gas and Coal who can (provided fuel) generator without need to stop due to time of day or type of weather. With this in mind, it will be important that when it comes to mixed power plant portfolios that we respect this. Put together poorly, these types of portfolios can present options for larger retailers and gen-tailers to create portfolios with higher than allowed emissions levels. These types of loopholes will create financial opportunities for lower prices that are not available to smaller retailers, raising the barrier for entry into the market for them.

As an example, consider a PV solar farm that will generate an average of 100MWh per day while active. It will be active for an estimated 12 hours a day. Over 6 months, this will represent approximately 24840 hours of generation. Compared to a 24-hour Gas fired plant in the same 6-month period, this represents half the hours. To gauge their emissions and properly represent it, we would need to calculate the MWh for both plants on the same timescale. In this case, it would be for a 24-hour day. This would mean that the PV solar farm is "generating" 50MWh for the full period. By standardizing to the same time scale for both these intermittent and continuous generators, better information would be available. By averaging all generation and emissions in a portfolio over the same time period (say 24 hours), the emission per MWh for a contracted generation portfolio should be a simple and clear task.

A certain degree of estimation will be required, for variable load generators (coal and gas) which may be fired up or turned down depending on the market requirements. The contracts could also represent a minimum baseload and then any further generation (such as for peak times or for unexpected gaps) could be dealt with by providing new short term contracts.

What are stakeholders' views on how to determine the emissions per MWh to assign to contracts that specify an emissions Level but do not specify a generation source?

Under a system where a registry is in use (as this paper acknowledges), it would not be possible for an emitter to determine emissions per MWh without contracting via an interconnector. In these finite cases, assigning the emissions per MWh as they would be assigned where emissions levels are not specified (see below) would be most suitable to prevent the creation of loopholes.

Calculating emissions per MWh without specifying a generation source would open the market for loopholes in contract reporting and potential avenues for underreporting. Companies that are able to underreport will have a competitive edge over those who cannot, due to their ability to contract (potentially) cheaper higher emissions generators. To maintain the core goals of the NEG it is important that these be avoided.

What are stakeholders' views on how the contract market may evolve to support this type of compliance with the emissions requirement?

The requirement to include compliance information in contracts adds complexity resulting in added bureaucracy and subsequent cost. As discussed, this added complexity will require either the market regulator or the retailers themselves to absorb the costs of maintaining and recording compliance. Depending on the method and levels of detail required, there may be significant costs that will be pushed onto the Australian public to account for. As such, the market will need to adopt a proper clear process and necessary SCADA systems in order to counteract the potential for cost inflation of services.

What are stakeholders' views on the appropriate emissions level to assign to contracts that do not specify an emissions level or generation source?

Emission levels should be included on all contracts to encourage generators to seek compliance with the Paris Agreement. The requirement to specify the generation source should be mandatory.

This position will deter generators and retailers from creating contracts to buy power from another retailer or generator who does not to specify, and prevent generators who produce emissions from 'hiding' the impact they have to the consumer. Additionally, this will prevent large vertically integrated gen-tailers from being incentivised to establish shell companies to improve their image without reducing emissions.

What (if any) impact would these approaches to determining the deemed emissions level have on the liquidity and availability of those types of contracts?

Whilst it is possible that additional information in a contract could slow transaction rates, the NEG will require emission reporting on contracts to track emissions and power. Any cumbersome or complicated requirement will disproportionately impact on small to medium enterprises, who have less ability to absorb the cost of bureaucracy and change. This risks creating an oligopoly market. To partially mitigate this oligopoly risk clear, simple, commercial-off-the-shelf over-the-counter contracts are essential. Should the process be streamlined sufficiently to allow all levels of retailers to partake in the market, it will increase liquidity and provide a benefit to the market. Otherwise, it will only serve to promote the larger retailers and provide an inhospitable marketplace for smaller retailers.

What are stakeholders' views on how to deal with internal non-contractual arrangements between the retail and generation arms of a gen-tailer, for the purposes of the emissions requirement?

All trading between different companies that are related parties within a gen-tailer should be reported as contracts to the market. This will minimise the risk of Part 4A taxation concerns, will properly track emissions across all generation, and will represent a genuine attempt to meet the emissions goals of the Paris Agreement

All contracts between all companies should be at arm's length.

The intent business continuity test (as per s165-12 of the ITAA 1997 and 269-C of sch 2F of the ITAA 1936) should apply to how losses associated with emission trading contracts are treated within any and all companies – including gen-tailer subsidiaries.

What are stakeholders' views on how to determine the emissions level to assign to contracts between the retail and generation arms of a gen-tailer?

Emission levels assigned to gen-tailer contracts should be the same as applied to all other contracts. This will prevent gen-tailers from creating markets that advantage the gen-tailer at the expense of small to medium enterprises (which may be anti-competitive) and also avoid costs associated with emissions.

What are stakeholders' views on how to determine the emissions level to assign to unhedged loads?

Where a party takes on an unhedged load, that party should be required to report emissions associated with the unhedged load contract as if they had taken on the average emissions of the NEM at the time of contraction. This should incentivise parties to hedge their loads appropriately. An alternative would be for the unhedged load emissions to be reported either the highest emissions or average emissions of the current uncontracted MWh within the NEM.

Should the emissions requirement allow for unlimited carry-over of overachievement or specify limits on the carry-over of overachievement?

The Australian taxation system created the business continuity test to prevent companies from purchasing shell entities that were only valued for their tax losses and the subsequent ability to offset gains in the purchasing company. Allowing for unlimited carry-over for emission targets will allow bigger market players (especially retailers) to predatorily trade companies for their emissions carry-over rather than focus on reducing emissions themselves.

Large retailers will rapidly trade their portfolios for the largest capital gain, focusing on financial gain rather than compliance with the Paris Agreement. Should a large retailer create a large amount of carry-over, they could sell the entity holding this carry-over or sell off assets and replace them with cheaper sources from more emissions intensive sources who may be trying to sell cheaper to appear more attractive. This kind of trading would artificially lengthen the lifespans of emissions heavy generators and give advantage to larger retailers when it came to delivering the "cheapest" options.

Whilst carry-over has appeal, if permitted a business continuity test should be applied as a minimum, with consideration given to a maximum life-span of carry-over.

If limits are to be specified, what should those limits be and how should they be designed? For example, should the size of limits vary inversely with the size of the retailer's load? This could give more flexibility to smaller retailers.

The limit for carry-over should be calculated with consideration of the retailer's emissions per MWh. Should the emission limits per MWh be set to 0.73 tCO₂-e/MWh and the generator produces 0.70 tCO₂-e/MWh over the period, this would result in a 0.3 tCO₂-e/MWh over-achievement that the generator could carry-over.

A generator trading exclusively in renewables for a year would have significant over-achievements. The quantum of these over-achievements should be limited so as to minimise offsetting under-achievements. Limiting carry-forward of over-achievements to a small amount of the next year's emission per MWh target (for instance, 20% initially with the carry-forward percentage reducing fractionally each year the scheme is in place) will supply generators with incentive and the space for some market mobility, while also steering parties toward longer term contracts with low-emissions generators.

If limits are to be specified, how should overachievement in excess of the limits be treated? Should there be a process by which it is offered to the market?

Over-achievement past the limit should be encouraged and rewarded. The NEG seeks to reduce emissions, so rewarding over-achievement could provide encouragement through monetary recompense in the form of research grants, tax concessions, or even offsetting other environmental degradation costs.

Incentivising over-achievers could drive retailer and gen-tailers to invest further in renewables and environmentally friendlier technologies for both baseload and dispatch-able power, particularly where incentives minimise tax rather than offset bad emission behaviour.

What are stakeholders' views on the deferral of compliance?

Initially deferral of compliance may be necessary to allow retailers and gen-tailers time to invest in structures, software and competence to comply with NEG requirements of low emissions. The duration of deferred compliance should be limited, with parties entering and operating in the market being required to comply fully by a certain date.

Initially compliance deferral should correlate with the retailers load as a percentage of the entire market, which is rapidly decreased annually until the retailer fully complies (in not greater than five years from commencement of the NEG). This will allow time for retailers of all size to adapt to the new market and invest in options that may take more than a year to realize.

Should all retailers be able to carry forward a fixed amount or should it be set proportionally to a retailer's load? This could give more flexibility to smaller retailers than large ones. If so, would any provisions need to be introduced to prevent large retailers re-organising themselves as several smaller retailers in order to gain the benefit of the higher limit?

The deferral should function should correspond with a percentage of the retailer's total emission per MWh. This would give both larger and smaller retailers' the opportunities to adapt to the market with time, without giving them incentives to abuse the system.

Should limits on individual retailers' use of offsets be set at an absolute level, regardless of retailer size? An absolute limit would represent a greater proportion of a smaller retailer's emissions than a larger retailer?

Or, instead, should limits on individual retailers' use of offsets be based on the size of retailers' loads, such that offsets represent the same proportionate share of retailers' emissions regardless of retailer size?

What are the pros and cons of each of the above approaches?

If limits on use of offsets are independent of retailer size, how should the risk of large retailers splitting into several smaller entities for the purposes of increasing their overall offset limit be addressed?

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What (if any) requirements to use within-NEM opportunities before using offsets are appropriate?

Allowing offset trading with parties outside of Australia risks allowing parties in Australia to ignore the intent of the NEG and Australia's obligations to the Paris Agreement in exchange for purchasing from trading schemes. These trading schemes are likely to be regulated in a different manner and this discrepancy may not promote global reduction of emission.

Previous emissions trading schemes worldwide (such as the European Union Emissions Trading Scheme (EU ETS)) have allowed cross-trading between different countries. This has resulted in the creation of "carbon credit farms", whose sole purpose were to farm carbon credits then sell them off at a profit to European entities under the EU ETS. Such farms were common outside of the EU, such as in Africa where the regulation on their carbon credit assignment and system was much poorer. These also existed within the EU (a "Carbon Credit Farm" in Britain being the most notable one).

If, to the detriment of the Paris Agreement, the ability to trade offsets from overseas markets were allowed in Australia, the quantum should be capped (to less than 5% of the retailers load) and should only be allowed from specific ETS's that have strong regulation. It is noted that downward creep of regulations is likely to occur, and the scheme would be highly prone to failure and corruption.

Setting the use of offsets to a retailers load (as a percentage) will be highly disadvantageous to the goal of reducing emissions. There are several potential methods for larger retailers (and gen-tailers) to hide their full load behind internal contracts, EITE offsets and carry-over. Setting it as an absolute amount will also incentivize retailers to split themselves into several smaller companies. However, not allowing offsets at all will prevent this from occurring and reduce barriers to entry for innovative low-emission generators.

What are stakeholder views on the interaction between the emissions requirement of the Guarantee and voluntary programs such as GreenPower?

A retailer undertaking a voluntary program (such as GreenPower) that adds to their emissions requirement should be responsible for meeting both the requirements of the program and the requirements of the NEG separately. For example, if the NEG assign the retailer an emissions target load of 0.73 tCO₂ per MWh, and the retailer has a GreenPower 10% reduction, the retailer's requirements should be amended to 0.657 tCO₂ per MWh. A retailer should not be able to meet the requirements of both the NEG and a voluntary program simultaneously as it would defeat the purpose of undertaking a voluntary emissions reduction plan and not deliver the intended reduction in emissions.

What are stakeholders' views on the need for a compliance registry? What are stakeholders' views on its design?

A compliance registry would be required for the market to keep track of how companies are complying with the NEG. The registry should contain information on compliance on a year by year basis, showing their load (MWh), their emissions (tCO₂) and if non-compliant, by how much. Ideally, it should be made inter-operable with the LGC database for the RET to check that retailers are not counting the same MWh towards both schemes.

The register should be federal, an a single source of confirmed and regulated information (similar to ASIC providing a single source of company information, the ATO providing a single source of tax information or a land register in a state providing a single source of information pertaining to land in that state).

Are there alternative schemes that would allow retailers to monitor and verify compliance with the emissions requirement? How could these alternative schemes work?

Not that would provide such a simple and elegant solution as a compliance registry.

Are there any additional features which the registry should have?

The registry should track the MWh and emissions for each generator within the national grid (including those used privately for internal generation). This would provide a quick and easy database for regulators and retailers to check their contracts for validity. This would also provide data for analytics to allow the regulator to optimise the system and understand how to better legislate.

Should any of the data in the registry be made publicly available?

All information of this registry should be made public to create market liquidity and provide information for new players to enter the market. This may be at a cost to allow data extraction to be at the cost of the party seeking the data rather than the register (in a similar manner to ASIC data).

There may be some data (which is personal data that could identify an individual) that should not be made available to the public, but this would be a very small element of the total data available.

What types of information are likely to be required to be entered into the compliance registry in order for retailers to monitor and assess their compliance with the emissions requirement?

See above.

Is information on generators' contracting positions also required to be entered into the compliance registry, for the purposes of reducing the chance of either double-counting or attributing generation output to the wrong retailer?

If the registry contains generation MWh and emissions for each generator and the usage of these MWh by retailers is kept track of by regulators, then this will help prevent double-counting or attributing generation to the wrong retailer.

This will also allow sharing of information with other regulatory bodies (such as the ATO and ASIC).

Is there a need for retailers or generators to report contract pricing information as part of the input into the registry?

No. This registry would be for the purpose of compliance with regards to emissions only.

What are stakeholder views on the proposed approach to compliance with the emissions requirement and particular:**Whether this approach provides the appropriate drivers of compliance.**

The proposed approach does not provide appropriate drivers for compliance, but has with minor amendments (including financial incentives and penalties) the potential to drive compliance.

The type of information the AER will need to access to ensure compliance.

The AER will require information detailing the generator source, capacity in MWh and emissions per MWh to ensure compliance. The AER will also require all information on MWh purchases by retailers (even by internal purchases for gen-tailers) to ensure compliance across all bodies.

Other possible enforcement tools, such as increased prudential requirements or restrictions on accepting new customers while emissions requirements remain outstanding.

Applying fines (that are proportional to the tax cuts or grants provided for over-compliance) will be required as a first step for non-compliance, in order to ease the cost to the consumers and the Australian public at large for a culture of compliance and over-compliance.

What are stakeholder views on how the Guarantee may impact on competitive market?

Should the NEG be introduced as it has been initially proposed, it will create needless bureaucracy and provide an avenue for gen-tailers and larger retailers to reduce competition from smaller and medium sized retailers. This will lead to increased electricity prices, and not reduce emissions, thereby failing the NEG goals. A radical rethink of the process for emissions calculation and tracking (such as reducing it to a simple registry with contract certification) is necessary to achieve the NEG.

What are stakeholder views on the operation of the emissions requirement in particular jurisdictions? (ACT and TAS)

The emissions requirement should be applied federally. For the emissions requirement to work effectively in over-performing regions and where there is an insulated grid, the emissions requirement should be set high enough that all member states of the NEG can reach them (realistically) while also not allowing them to defer their burden of meeting the NEG to other states.

Stakeholder views are sought on options for setting the emissions targets under the Guarantee.

The emissions target should be set to provide a clear signal to international and local investors that Australia intends to be a world leader in the clean energy market and will be working progressively towards it over a foreseeable period (including past the Paris agreement of 2030). By setting an aggressive floor for emissions reductions, Australia will signal that it will no longer support dirty emissions (such as coal) and is looking to new and innovative ways to reduce emissions while providing a clean energy, which will promote investment. An emissions floor (a minimum amount of emissions reduction required) set by the government would ensure Australia's goal and commitment of lowering emissions while providing clear signals to investors that more and innovative renewables are the future of Australian electricity generation. This emissions floor should be initially set using Australia's Paris agreement commitments as the base. This will set a transparent, realistic overall reduction target for all of Australia to work towards.

Stakeholder views are sought on:

Whether, and in what circumstances, electricity emission targets already set should be adjusted.

The process for making any such adjustments to electricity emissions targets.

Stakeholder views are sought on the proposed timing for updating the electricity emissions targets, including a five-year notice period.

The emissions target should be adjusted regularly, but in small increments. Small, but frequent (i.e. every six months) increases to the emissions target floor will provide a better predictability for investors while allowing for a continual push towards a low emissions Australia. This emissions floor should only be raised upon review by a party independent from AEMO. An ideal candidate would be the Reliability Panel, as this falls in line with their existing duties. The Reliability Panel exist as a board of industry members, which would also prevent the discussion from being dominated by a single voice or single sector of the industry.

Stakeholder views are sought on the proposed approach to setting the electricity emissions targets under the Guarantee and interaction with state renewable energy schemes.

Setting the emission floor will require a suitably courageous federally minded body to prevent any individual state from being sluggish with moving towards the NEG goals of reduced emissions at the expense of other states.

Stakeholder views are sought on issues to be addressed in exempting EITE activities from the emissions requirement of the Guarantee?

This requirement should be reduced over time to a non-zero percentage of a party's total usage to prevent the NEG being undermined. To accelerate Australia's uptake of renewables, we propose aiming for an exemption of 25% (as opposed to 100%) by 2030.

Stakeholder views are sought on whether retailers should be allowed to use external offsets to meet a proportion of their emissions requirement. In particular, views are sought on:

Whether there is a strong rationale for the use for offsets within the Guarantee

No.

The impact allowing offsets would have on investment under the Guarantee

Allowing international offsets would reduce investment in Australian emission reducing innovation in favour of buying offsets from other markets (including markets that may be less robust or more prone to corruption). This will not promote business in Australia, or increase investment in Australia.

If offsets were to be used to help achieve compliance with the emissions requirement, what would be an appropriate limit for their use?

See above.

What are stakeholder views on the length of the forecasting period? (2-3-10 years)

A shorter forecasting period for reliability will allow just-in-time solutions to be implemented without jeopardising the ability for generators to supply the market.

Low emitters, such as renewables are active and agile in providing reliability solutions. These parties can construct new sources of generation quickly in innovative ways. This includes providing nano-generators and macro-generators in diverse regions where approvals can be streamlined and grid

stability managed. The response time for renewables to a forecast need can be measured in months whilst a heavy emitter (such as coal) requires many years to establish and commence operation.

A six-month rolling forecast with a look-ahead of between two (2) and three (3) years will favour innovation and renewables.

A two-year rolling forecast with look-ahead of 10-20 years supports coal and gas generation that utilises older technology and is unlikely to support the goals of the NEG.

New energy intensive markets (such as cryptocurrency mining) can also lead to large increases in energy usage that a two-year forecast would be unable to account for, let alone a 10 year forecast.

Should the existing ESoO and MTPASA forecasting processes be adapted for determining the gap, or should a separate bespoke process be developed?

Adapting the MTPASA forecasting process to the Australian market with a goal of increasing renewables usage would be the best method. Investing in an entirely new process where risks are not yet known or tested is unlikely to deliver best value. Small amendments to a known, understood and tested process which will allow optimisation for NEM would be a higher value solution.

What elements of the current MTPASA and ESoO processes should be reviewed in light of the potential for the process to lead to a compliance obligation? E.g. how should AEMO treat inputs from generators such as their forced outage rate or summer capacity if these assumptions could lead to a triggering of an obligation?

Seasonal or short term changes to the required capacity of the NEM should be investigated to determine whether their need can be met from existing unallocated capacity (forecasted to the time of these events). Should these provide greater than what can be (realistically) met by the NEM, then a reliability trigger should be triggered.

Should AEMO be able to determine assumptions independently or should responsibility for the accuracy of assumptions be placed on the market participant?

To reduce the potential for finger-pointing and blame-shifting that could potential cripple and required reforms, AEMO should be wholly responsible determination of assumptions related to forecasting.

How should the forecasting methodology and assumptions be consulted on?

The forecasting methodology (as with the emissions forecasting) should be reviewed by the Reliability Panel, who can provide feedback and guidance on the method. However, the ultimate authority on how and when changes are implemented should be placed onto AEMO. This degree of culpability apply pressure to ensure that AEMO taking the utmost care with the forecasting.

How frequently should the forecast be updated?

The reliability forecast should be updated in line with the emissions forecast (every 6 months) in order to keep the market simple. Updating them at differing times will only lead to uncertain investment opportunities. This is in line with the emissions forecasting as discussed above.

What trigger point would be most appropriate and proportionate to the identification of the reliability gap?

When a potential gap of relative size of the unallocated power generated within a region (say 50% or larger of the unallocated power generated within the VIC market). For example, if a gap of future generation is larger than 50% of the current unallocated capacity is identified, this should trigger the reliability protocol. A small gap will lead to continuous investment in smaller products when waiting for a larger gap that could be solved with a larger (and ultimately) cheaper project will help save the Australian consumers money.

Should a multi-year gap trigger a compliance requirement in only the first year of the gap or over the full duration of the gap?

Full duration of the gap. Triggering only for one year could lead to continual gaps or to rushed short term solutions for what could be a longer term problem.

What is the minimum feasible time period for the market to alleviate a potential shortfall?

2 years. Renewables generators have proven their ability to build projects within these timeframes and this ability should be respected. Any shorter may lead to cost-cutting measures to speed production, while any longer could result in generation sitting unused (costly to the consumers).

If the length of the trigger period is such that the market is not given this minimum feasible time, is it appropriate for the Guarantee to contain the flexibility to have a shorter term trigger to provide sufficient time for the market to have an opportunity to respond to the shortfall?

Yes.

What are stakeholder views on the types of contracts that should be considered eligible for the purposes of the requirement?

See above. Both financial and physically backed contracts. Financial should be weighed less in their assessment than physically backed ones. This could take place as a monetary scaling. For example, 100% of the allocated budget for capacity is paid to contracts backed by physical generation, while only 60% is paid to those that cannot provide proof of physical generation (purely financial contracts).

Do stakeholders consider eligible contracts should be financial, or have a link to physical capacity?

Both, see above.

What do stakeholders think of the approach to certify financial contracts back to a physical asset?

Given the scaling for physically backed contracts to financially backed contracts, this will provide incentive for retailers to secure physically assets as part of their contract.

To what extent does the design choice about eligible contracts influence different types of retailers, and so market structure?

It will dictate which types of contracts (be they financial or physically backed) become the standard of the market.

What are stakeholder views on the proposed approach of determining the generation source in a vertically integrated business?

In order to maintain market information and liquidity, they should be required to use contracts that can be certified via a generation registry (as described as part of the emissions part of the reply).

What are stakeholder views on the proposed method of allocating the gap to retailers?

Allocating the gap to retailers via contracts or other potentially biased methods could lead to the all sorts of messes. Instead, letting the market allocate the gap itself using a bidding method (such as a reverse auction or auctioning on specific contracts) would be a much better solution. To combat the gaming of the system (as has happened in the past in both NSW and SA), the proposed 5-minute interval for information and price-setting within the NEM should be bought forward as part of the NEG. We suggest that in line with recent advancements of the technology (such as battery storage responses that can happen in <1s), this timeframe be reviewed and potentially bought down to reflect on these technologies capabilities.

Should the gap be allocated based on AEMO's forecasts or on the retailer's own view on their hedge position?

AEMO forecasts to maintain some degree of impartiality.

How should C&I load be treated?

The same as everyone else's load. Making exemptions will lead to potential avenues for abuse of the system by companies who can afford to.

How should load met by interconnectors be treated?

The load from interconnectors should not be considered for meeting reliability gaps. Given how the system currently works, there is potential for abuse that could lead to much higher prices for consumers.

Should a different level of compliance and/or reporting requirement be required for large energy users who are registered Customers?

No; same requirements on compliance and reporting as for Generators.

What are stakeholder views on extending the reliability requirement to large energy users that are *not* market customers?

See above.

If the reliability requirement should be extended to large energy users that are not market customers, what would be an appropriate definition of 'large energy user'?

See above.

What are stakeholder views on an ex ante or ex post approach to compliance?**What are stakeholder views on the implications for the assignment of the gap, given an ex ante or ex post approach?****What parameters should be taken into account when deciding between these two options?****Does an ex post or ex ante approach impact different retailer types?****Could an ex post approach be effectively implemented while retaining a credible procurer of last resort function?**

As discussed above, the assigning of the “gap” to specific retailers presents multiple opportunities for perverted practices that will benefit specific entities at the loss of others, as well as providing poor signals to local and international investors. Should the compliance requirement be triggered, this notice should be made clear to the market (essentially, an ex-ante approach) to provide them time to fill the gap themselves. By creating opportunities for retailers and generators to assess and correct the gap using their own means, we can encourage the market to innovate and invest in new methods. This method could be assisted by AEMO providing a clear energy supply and demand roadmap based on their forecasting for the industry and public to use.

By letting the market regulate itself in this way, AEMO can retain a credible procurer of last resort that will give them the time to properly remedy the gap from market resources. While this may open the system to potential gaming by larger retailers, by creating an open market that appeals to investors this should largely mitigate these potential issues. It is important to encourage natural competition for new generation supply instead of creating potential monopolies.

What are stakeholder views on the including a procurer of last resort function in the reliability requirement?

A procurer of last resort function (such as a reverse auction) would be necessary in order to prevent gaps from becoming larger and enduring.

When should the last resort function be triggered?

Should the market prove unwilling to meet the gap when it is first forecast. Giving them a window (say up to 1 year before the gap is forecast to occur) could be the preferred method, however this is open to change.

How should a significant and enduring gap be resolved?

Letting the market do it would be the most democratic method. As a last resort, a reverse auction method (as discussed above), while costly to the Australian public could provide a better cost alternative than letting larger gen-tailers drive up prices to extremes.

Do stakeholders consider that retailers not meeting the requirement should be charged a penalty or allocated costs or a penalty plus costs?

Not if the gap is not allocated to retailers. A financial penalty along with allocated costs (as appropriate) should serve as significant deterrent to both creating contracts with no intention of meeting them and to retailers to fulfil them.

Are there other enforcement tools that would be appropriate?

Escalating with increasingly harsh penalties (leading to a loss of license to retail) would be appropriate.

What are stakeholder views on how the Guarantee may impact on competitive markets?

Allocating the gap to certain retailers would likely dull small to medium sized investors from entering the market.

What are stakeholder views on the operation of the reliability requirement in the ACT and Tasmania?

Having the reliability requirement act in all markets will help to prevent inter-state gaming of power prices.