



## **Qualifying contracts – Reliability Requirement**

### **Issues Paper**

#### **Introduction**

The purpose of this paper is to facilitate discussions with Jurisdictions and the Technical Working Group (TWG) on qualifying contracts under the Reliability Requirement. Following the Senior Committee of Officials (SCO) Reference Group and TWG meetings, a more detailed technical working paper will be developed. The technical working papers and draft final design document will be available for public consultation in mid-June.

#### **High level design**

- Each year, as part of its Electricity Statement of Opportunities (ESoO) process, the Australian Energy Market Operator (AEMO) would assess whether the National Electricity Market (NEM) reliability standard will be met, and if not whether a 'material' gap in capacity exists over the forecast horizon. If the gap persists three years out from the relevant period the reliability obligation will be triggered and liable entities may be expected to demonstrate future compliance with the reliability obligation by securing sufficient qualifying contracts to cover their share of peak demand.
- The design of the Guarantee should ensure it enhances rather than undermines the liquidity, transparency and level of competition in the retail and wholesale electricity markets whilst ensuring that compliance options remain flexible.
- Qualifying contracts could be designed around existing instruments that provide the financial incentive to encourage dispatch or investment when needed.
- Demand response products should be encouraged under the reliability requirement as they will be central to ensuring the Guarantee is met at least cost.
- Only those contracts bought from centrally cleared trading platforms and/or reported to centralised trade repositories (exchange traded or over-the-counter) will qualify.
- Vertically integrated retailers will not be able to use their own generators to comply, unless purchased via a centrally cleared trading platform and/or reported to centralised trade repository.
- Large customers who are subject to the reliability requirement will be able to use existing contracts to comply.

#### **Detailed design elements for TWG input**

##### ***Qualifying contracts - What should qualify?***

1. How should a framework for qualification be developed?
2. What wholesale contracts might qualify?
3. What could Demand Response contracts look like?
4. How can the integrity of the Reliability Requirement be ensured?

## ***Qualifying contracts - How and where should contracts be traded?***

1. Promoting competition, transparency and liquidity
2. Recognition of centrally cleared, centrally matched or trade repository platforms
3. Ensuring compliance

## **Issues for discussion**

### ***Qualifying contracts – What should qualify***

#### **1. How should a framework for qualification be developed?**

A prescriptive list of allowed contracts could be established, with a periodic review of the eligibility and appropriateness of qualifying instruments (e.g. annually) to capture new products as they are developed by industry.

Alternatively, a framework could be established that offered transparency to market participants as to what types of instruments would qualify for compliance under the reliability requirement. The framework could specify the criteria, broadly in a tick-box fashion, that contracts would be expected to meet for the purposes of compliance.

These criteria could include, but not necessarily be limited to:

- The nature/category of instrument (swap, cap) to illustrate the behaviour to be incentivised by the seller, and the connection/operation in reference to the wholesale spot price;
- The contract purchase price and size agreed between the parties (e.g. \$76.00 for 1 MW / 1 MWh);
- The period and region (e.g. NSW, month/quarter, year).

The framework would not specify a particular size or price for qualifying contracts. If such a framework were supported, a review process would also be required to ensure the framework was sufficiently flexible to accommodate the development of new products that support reliability. It may necessitate putting a ceiling on strike prices for certain products so as to exclude products that are unlikely to support reliability (e.g. value of lost load caps). The framework could also specifically exclude certain types of instruments that have no relationship to the electricity market (e.g. weather derivatives with maximum payouts).

A light-touch framework could be developed to minimise the compliance burden for liable entities. For example, when liable entities submit their contract details for the purposes of compliance, the submission could include a declaration from the entity that all the contracts submitted meet any established criteria. If the Australian Energy Regulator (AER) undertakes compliance activities (e.g. sample audits), the framework would then refer to the criteria to determine whether the contracts qualified.

Questions for the TWG:

- Should the Energy Security Board (ESB) provide a prescriptive list of contracts that qualify (or don't qualify) and develop a process for amending and updating the list of contracts on a regular basis?
- Should the ESB develop a framework for the types of contracts that qualify for the AER to assess compliance?
- If a framework for qualifying contracts is developed, what process should be adopted to allow qualification?
- How should the requirement be specified (in MW for a period of time in a particular quarter, month or other period)?

## 2. What wholesale contracts might qualify?

Given the ESB has committed to a principle of “financial dispatchability” a framework would need to ensure the incentive to encourage dispatch or investment when needed.

Existing financial instruments, such as swaps and caps, expose the sellers of these contracts to significant financial penalties if generation is unexpectedly unavailable when prices are at or near the market cap. Products that incentivise the supply of electricity are more likely to support system reliability and decrease the probability of AEMO intervention.

Products that do not incentivise the physical supply of electricity, but still provide financial cover to participants following specific events (such as weather derivatives), do not necessarily support the operation of the electricity market. If relied upon by retailers, these sorts of products are less likely to lead to investment in new sources of dispatchable generation nor support the reliability of the system. Consideration needs to be given to how firm these products were without being unnecessarily complex to ensure compliance.

A consideration of less ‘vanilla’ trading strategies is also important to ensure that retailers’ approach to risk management remains flexible while being balanced against the need to resolve a forecast material gap in supply for the specified region.

Interregional contracts offer retailers and generators the opportunity to hedge outside of their region, shifting the price risk from the spot to a spread between the two nodes. At times a lack of liquidity in contracts in a one region may be the driver for managing risk in this way. Interregional contracts carry a higher level of risk as they rely on the operation of interconnectors to minimise divergence between the spot prices in each region which can be mitigated with the purchase of SRA units.

One way to manage concerns about the use of interregional contracts could be through a requirement to be supported by SRA’s or caps within the region with the identified gap.

The use of options should also be considered. Swaptions (the option to buy a swap) that are likely to be exercised are a legitimate least cost approach to hedging customers that if exercised could pass a “dispatchability test”, equally some Asian Option strikes would also likely satisfy a “financial dispatchability” test. However, this needs to be considered against the complexity of administering compliance and providing guidance on eligibility.

Large customers will be provided the option of managing their own obligations or transferring this to a retailer. If the customer has transferred this obligation to a retailer, the retailer will need to ensure that they have sufficient qualifying contracts to meet the Reliability Requirement.

Alternatively, large customers may want to manage their own compliance through the use of a mix of demand response and wholesale contracts.

Questions for the TWG:

- Given the ESB has committed to a principle of “financial dispatchability” (i.e. the incentive must be there to encourage dispatch or investment when needed), what contracts should qualify and why? What contracts shouldn’t qualify and why?
- Should interregional contracts be allowed? Should any limitations be made?
- Should any options qualify? What limitations should apply?
- The details relating to large customers transferring obligations will be dealt with by the Retail TWG. Are there any further issues that this TWG should consider relating to large customers?

### **3. What could Demand Response contracts look like?**

The ESB noted in its High-Level Design paper that demand response contracts were central to encouraging least cost compliance. Given the importance of encouraging demand response, should this warrant a deviation from any framework that applied to more vanilla contracts which were already standardised and traded centrally?

One clear benefit of centrally recognised and registered demand response contract would be the potential for increased transparency of demand response capability in the NEM. This could benefit the operation of the market whilst also ensuring a mechanism for demonstrating compliance.

Further consideration should also be given to how embedded and distributed resources could be captured if not registered through vanilla products.

These issues will be considered in parallel in the Retail Workstream.

Questions for the TWG:

- Given the qualification of Demand Response contracts is central to encouraging least cost compliance, what features of demand response should be required to qualify?
- Given demand response products may be physically structured, are there any other physically structured products that should be considered?
- Should demand response and other physical contracts be consistent with a framework if developed?

### **4. How can the integrity of the Reliability Requirement be ensured?**

Requesting retailers to provide details of all contracts entered into, along with supporting information for each trade, could be an onerous process involving the assessment of thousands of trades. Alternatively, placing too small a requirement on retailers may not promote compliance.

One approach could be for retailers to undertake a self-assessment of their contract cover and provide a declaration to the AER. Alternatively, retailers could provide details of their aggregate coverage including MW, region, period (e.g. Q1 2020), contract type etc. As a further step, a sample of some information that evidences the positions could also be provided to the regulator and audited. Fundamental to this reporting framework would be the design of any trade repository or reporting available from any centralised trading platforms.

Further consideration is needed to understand the extent of the contract information required to ensure that a complete picture is provided (e.g. the Reliability Requirement could be entirely met using centrally traded contracts whilst entirely offset by a separate contract book or non-centralised trades that negated the intent of the Guarantee).

There may also be circumstances where contract information may need to be updated closer to the period of the gap, it is important to understand what scenarios may require this however any allowance should not undermine the incentive for all liable parties manage their obligation by 1 year out.

Questions for the TWG:

- What information should be provided to the regulator for assessment to ensure the intent of the Guarantee is delivered?
- Should retailers be required to provide all contracts or only some?
- Under what circumstances should updated contract information be allowed to be provided?
- How can the Reliability Requirement be implemented to mitigate the risk that the guarantee does not encourage increased reliability (e.g. a generator using weather derivatives to sell more firm swaps)?
- What design elements for the reliability guarantee would encourage transparency and liquidity, respectively?

### ***Qualifying contracts – How and where should contracts be traded?***

#### **1. How will competition, transparency and liquidity be promoted through this proposal?**

The ESB is committed to protecting and encouraging the transparency and liquidity of contract markets while ensuring retail and wholesale markets remain competitive and affordable. This extends to managing stakeholder concerns about the Guarantee and its impact on the level of concentration in the electricity market more broadly.

Vertically integrated retailers will not be able to use their own generation to comply unless it has been purchased through a centrally cleared platform and/or reported to a centralised trade repository.

The requirement to only allow contracts bought from centrally cleared platforms and/or reported to centralised trade repositories (exchange traded or over-the-counter) to qualify when the Reliability Requirement has been triggered will bring increased liquidity and transparency to the contract market. Vertically integrated retailers would need to ensure that trading volumes facilitate their ability to source an adequate level of qualifying contracts to comply.

A possible alternative to the use of centrally cleared contracts may be the use a centralised matching process which would not involve credit risk management processes that occur under centralised clearing. This could encourage liquidity and transparency whilst minimising some of the additional transaction costs associated with central clearing.

Alternatively, the use of trade repositories for reporting of internal trades for vertically integrated businesses would benefit the market by providing greater transparency but potentially without the liquidity benefits. Data could be published of aggregated volumes and prices that provided anonymity whilst assisting the broader market in price discovery.

To promote increased liquidity in contract markets, volumes of trades through centrally cleared platforms could be capped (e.g. individual contract trade sizes could be limited to avoid large blocks

of off market transactions qualifying). This could promote more competition for contracts and prevent large participants from tying up their generation in a series of large trades (e.g. 10 x 100MW contracts) and limiting the ability of smaller retailers to take a position.

Further discussion with TWG is required to understand how the ESB can most effectively deliver on its commitments to transparency and liquidity without unnecessarily adding complexity to retailer's risk management processes.

Questions for the TWG:

- How would a centralised trade repository promote the objectives of improved transparency and liquidity? Would central clearing provide additional benefits? What additional costs (e.g. prudential/credit costs, transactions costs) would be associated with adopting the requirement for centralised clearing or trade repositories?
- What are the risks to the ESB's objectives promoting competition, transparency and liquidity, if a centralised clearing or the trade repository requirements were not implemented?
- How could the requirement for vertically integrated entities to purchase contracts through a centrally cleared trading platform or report contracts to a trade repository work? Are there any legislative or exchange rules that would prohibit this?
- Should centralised matching (without centralised credit risk management) be considered instead of centralised clearing? How would the benefits and costs differ?
- Should individual trade volumes of any centrally cleared trades that are recognised be limited to encourage liquidity?

## 2. Recognition of centrally cleared, centrally matched or trade repository platforms

The proposal for qualifying contracts to be bought from a centrally cleared trading platform and/or reported to a centralised trade repository may necessitate changes in the approach taken by some retailers. While most retailers will have experience in using centralised clearing platforms, the use of trade repositories has been limited as electricity derivative reporting requirements are currently exempt.

In developing the detailed design, the ESB will need to reach a position on whether contracts should be purchased from a centrally cleared trading platform or reported to a centralised trade repository (exchange traded or over-the-counter), or if a combination of both is appropriate.

ASIC administers the Australian Derivative Trade Repository (ADTR) licensing regime for mandatory reporting obligations under the G20 over-the-counter derivatives commitments. However, any requirements for a trade repository for the purposes of the Guarantee do not necessarily have to follow ASIC's approach. The reporting requirements for the Reliability Requirement will need to be structured around improving the transparency of retailer's actions in the market to support reliability rather than to monitor the risks of financial contagion (though this could potentially be an additional benefit).

More importantly the recognition of centrally cleared (or centrally matched platforms if considered) will likely require ASIC licencing or exemption and AER recognition on the basis of any requirements specified by the ESB (e.g. whether the market is centrally cleared or matched or whether the platform meets ESB public and private reporting requirements).

Further discussion with TWG is required to understand the ways in which centrally cleared trading platform and/or trade repositories could be developed or recognised in a way that supports the

ESB's commitment to enhancing transparency and monitoring retailer's management of their reliability requirement.

Question for the TWG

- What is the best approach for the recognition or development of an OTC trade repository?
- What is the best approach for the recognition of a centrally cleared or centrally matched platforms?
- What specific reporting requirements are required to support the transparency of the market?

### 3. Unintended consequences of relying on centrally cleared contracts

Only contracts bought through a centrally cleared platform and/or reported to centralised trade repositories will qualify for compliance. This is intended to improve transparency and liquidity as well as support competition in retail and wholesale markets. However, this approach would not prevent liable entities from trading away positions off-market after they have been purchased through a reported platform.

The AER's information gathering powers in an investigation may be a sufficient disincentive for liable entities to attempt to circumvent the intent of the Guarantee by trading away positions off-market. The introduction of a substantial civil penalty may address this concern.

Questions for the TWG:

- What information requirements should satisfy as evidence that a contract has been executed centrally?
- What contractual documentation changes would be required to facilitate the implementation of a trade repository?
- Given the specific requirements of the reliability guarantee, how could a trade repository be designed?
- What approach should the ESB adopt for recognising trade repositories? Are ASIC's derivative trade repository licensing requirements sufficient? Are there any benefits in a centrally run trade repository administered by an Energy Market body?
- If centralised clearing or trade repositories were both acceptable for compliance with the reliability requirement, would compliance be simpler if all centrally cleared contracts were also registered in the repository? If so, what approach should the ESB adopt for recognising centralised clearing or matching?
- How can the risk that centralised or repository trades can be offset by non-centralised trades be mitigated where this would be contrary to the intent of the reliability requirement?
- Existing C&I contracts will be grandfathered. What process should be adopted to recognise existing deals for Large Customers? When should this be provided? What details should be provided?

## **Interdependencies with other elements of the Guarantee**

- Compliance
- Forecasting
- Definition and calculation of gap
- Calculation of load
- Demand response
- Liable entities
- Book-build