

12 July 2018

Energy Security Board
info@esb.org.au

Dear Energy Security Board,

Re: Draft detailed design consultation paper

Hydro Tasmania is Australia's largest producer of renewable energy, and is internationally recognised for its expertise in renewable energy operation and development. We are an integrated energy business providing retail energy products through our Victorian-based retailer Momentum Energy and as a generator through Hydro Tasmania's participation in the National Electricity Market. Hydro Tasmania's assets generate around 9000GWh from hydropower and 1000GWh from wind generation in an average year (around 5% of NEM demand). In addition, Tasmania's hydropower system can store up to 14 000GWh of energy.

We welcome the opportunity to comment on the draft design and look forward to contributing further to the development of this important national reform. We have been pleased by the high level of engagement between the Energy Security Board and industry participants. The Commonwealth responsibilities with respect to the Guarantee have a great deal of overlap with the ESB's design considerations. While we have provided separate submissions to the two papers we have taken the opportunity to outline where we believe there are key dependencies.

During its development, the following principles have informed our assessment of the Guarantee and its objectives:

- the Australian electricity sector should **provide at least its share of the national emissions reduction target;**
- the reliability and emissions **requirements of the Guarantee must be balanced** to ensure appropriate long-term investment signals;
- AEMO should forecast the **size, duration and type of future reliability deficits** with the market given sufficient opportunity to deliver these additional energy resources;
- the design of the Guarantee **must support efficient long-term investments;**

- **market liquidity** should be maintained and if possible enhanced;
- the policy design must reflect the **benefits of interconnection and diverse resources**; and
- compliance obligations should be **no more burdensome than is absolutely necessary**.

Hydro Tasmania is a member of the Australian Energy Council (AEC) and the Clean Energy Council (CEC), many of our views are reflected in the submissions of those associations.

Further responses to the consultation paper are provided as Attachment A. This submission covers both Hydro Tasmania's perspective as a generator under the Guarantee as well as Momentum Energy's position as a retailer and future liable entity.

Next Steps

It is important that industry stakeholders fully understand the process and circumstances under which the Guarantee may evolve over time. Section 5.4 of the paper (Summary of key steps and issues) is helpful in explaining how the Guarantee will be implemented. Industry participants would benefit from further discussion of how the design could be amended through COAG or Commonwealth processes.

I look forward to continuing to work with the ESB on the development of the National Energy Guarantee. Please contact Colin Wain (03 8612 6443, colin.wain@hydro.com.au) if Hydro Tasmania or Momentum Energy can provide further assistance to the ESB.

Yours sincerely



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Attachment A – Responses to the draft detailed design consultation paper

The points below have been structured with reference to the relevant section of the ESB's draft detailed design consultation paper.

Section 3 - Emissions Reduction Requirement

The design features of the emissions reduction requirement are heavily impacted by the emissions trajectory legislated by the Commonwealth Government. For example, should the Commonwealth adopt an emissions target that is easy for the sector to meet (places no binding constraint) then there will be little need for flexible compliance options. Alternatively, should the Commonwealth set an ambitious trajectory then it would be prudent to allow liable entities the flexibility to meet the emissions trajectory in a least-cost manner. While there is a need to set the terms of the Guarantee from the outset, there may also be a need to evolve some aspects of the policy in response to market outcomes and overall policy objectives.

3.3.2 Allocation Rules

- Hydro Tasmania supports the ESB's view that all generation and associated emissions should initially be unallocated within the emissions registry.
- The residual emissions intensity should be applied against any MWhs that a liable entity does not have generation allocated against.
- It may be appropriate to further consider whether the first 50,000MWhs of a market customer's load should be exempt. This exemption has motivated the proposal for an anti-avoidance regime. It may be possible to achieve the same outcome by providing the 50,000MWh exemption only by application, under certain circumstances, or for a limited period. This could remove the need for an anti-avoidance regime and ensure a level playing field for liable entities.
- Hydro Tasmania supports the Australian Energy Council (AEC) view that the natural incentives of the Guarantee should encourage balancing in the registry and that as such, penalties for over-allocation may be unnecessary. It is expected that where a generator or retailer ends the period with an over-allocation of MWhs that these will be transferred to the residual pool.
- As noted on page 23 of the paper, energy storage including batteries and pumped hydro should only be liable for their net wholesale pool purchases with respect to the emissions guarantee.

3.3.3 Pre-1997 renewable generation

- The Guarantee has been designed with the principles of technology, geographic and competitive-neutrality in mind. Excluding a subset of generation from the emissions obligation is unwarranted and will distort the investment and reinvestment signals the Guarantee provides. Existing hydropower delivers flexible, dispatchable renewable energy into the NEM. National energy policy must support the retention and modernisation of these important assets.

- As the consultation paper states on page 32:

“...the existence of the LRET and any participation in this scheme does not preclude this generation from also being included in the Guarantee and contributing to achieving the emissions reduction trajectory for the sector.....All renewable generators will contribute to achieving the emissions reduction trajectory established for the electricity sector under the Guarantee.”

- Should the ESB recommend a baseline-year approach, the only reference year that could make sense is one based on either the announcement or the introduction of the Guarantee. To be technology neutral as well as equitable for all market participants, this would need to apply to all generation sources below the emissions intensity target.

3.3.3 Exempt EITE Load

- Hydro Tasmania supports exemptions for emissions intensive trade exposed entities. The scaling factor must be clearly communicated to participants to aid compliance.

3.3.4 Registry Access & Publication

- The consultation paper states that the emissions registry will only be accessible to market customers and generators. As outlined in the AEC and CEC submissions, there may be justification for allowing access for some appropriately qualified intermediaries. This could promote liquidity and ease compliance for participants as well as aid in the development of secondary markets.
- As noted in the AEC and CEC submissions, while a level of transparency is desirable, the Emissions Registry should not disclose commercially sensitive information.

3.4 Flexible compliance options

The need for flexible compliance options is acutely influenced by the emissions trajectory legislated by the Commonwealth Government and by the potential inclusion of offsets. Should the emissions trajectory not bind from the start, there would be benefit in allowing the carry-forward of over-achievement by market participants. Hydro Tasmania believes the most efficient generation of zero/low emissions generation over the period 2020-2030 would occur if over-achievement provisions were relaxed. In part this is because it would allow the market to accommodate fluctuations in output from renewable generators (including hydropower) as well as changes to demand and market conditions.

- It is sensible to allow flexibility for the emissions trajectory to be met at least cost through 2020-30 and beyond. Ideally, the sector will be able to deploy zero/low emissions technology at an economically efficient rate over medium and long-term horizons.
 - o Understandably, the ESB would prefer to limit banking and borrowing in the Guarantee in its early years. This supposes that the Commonwealth’s legislated emissions trajectory will closely match the Business As Usual expectations for the electricity sector at least initially.

- Limiting the carry forward of overachievement could have the unwanted effect of discouraging efficient early investment in zero/low emissions generation if this investment caused the sector to be ahead of the emissions constraint. As has been seen with respect to the closure of coal generation across Australia, it is important that replacement generation is available before or as closures occur. The guarantee should not act to delay investment through overly restrictive banking rules.
 - o On this basis, a higher carry-forward rate is preferred.
- We support the intention to increase the limit if all market customers are compliant.
 - o It may be better to test this against the access to sufficient zero/low emissions generation in the registry and the liquidity of this, rather than relying on the compliance position of individual entities.
 - o It would be preferable to indicate early in the compliance year whether a higher carry forward limit would be allowed that year so that liable entities can benefit from this option when available.
 - o Once an amount has been 'carried-forward' that benefit must not be extinguished (e.g. due to a lower carry-forward rate in a subsequent year). It is expected that should the emissions trajectory bind in a future year, that entities would use any carried-forward amount to meet their compliance requirements. It may be appropriate to require entities to use their carried-forward MWhs before using current year MWhs. This could promote liquidity in the current compliance year.
- The ability to defer 10% of the emissions compliance obligation (per MWh) is aligned with the current RET arrangements. Limited deferral (borrowing) can aid liquidity and lead to less volatility. On this basis we support a 10% limit.
- Deferral is closely related to the use of offsets (3.4.3). If offsets are to be permitted then a tighter deferral limit could apply.

3.6.1 Interaction with the Large-scale Renewable Energy Target

- Hydro Tasmania supports the ESB's view that no changes be made to the LRET and that it continue to run its course through to 2030. Any other arrangement easily becomes too complex and would impact on investments made under the current legislation.

Section 4 - Reliability Requirement

4.2 Forecasting the reliability requirement

AEMO plays an important role under the Guarantee due to the need to produce and maintain forecasts of expected energy demand and supply. While this role has always been significant, the added effect of triggering reliability obligations on retailers amplifies the need for AEMO to access the best available information.

AEMO's forecasting will need to consider and communicate the types of reliability that are needed in the NEM on a rolling basis. Each MW that exits or enters the market will have specific characteristics. As an example, demand-side responses or battery storage may be available for a shorter duration than gas peakers. AEMO's assessment will need to reflect on the duration of dispatch available in the market and identify any shortfall (or type of shortfall) that could occur during the forecast period.

- We support the approach outlined in section 4.2 of the paper including the proposal that AEMO consult with stakeholders and report on the performance of forecasts.
- AEMO's process for determining whether a forecast gap is "material" is a critical step in the operation of the reliability guarantee. Hydro Tasmania looks forward to further guidance and consultation on this issue.

4.5 Liable Entities

- A 5MW threshold appears appropriate to determine liable entities. As noted in the CEC submission, there could be complexities around energy storage developments greater than 5MW that may be captured by the reliability guarantee. Further clarification of this issue will be needed.
- The proposal to allow customers below 5MW to 'opt-in' if they wish to manage their reliability obligation is sensible.
- The reliability guarantee aims to improve outcomes for energy consumers through promoting efficient contracting during times of supply shortage. To ensure that retailers are incentivised to engage with customers of all sizes, we support the intention to allow liable entities to adjust their contract position between T-1 and T. Without this ability it is possible that retail competition could be severely limited for years in which the reliability obligation is triggered.

4.6 Qualifying contracts

Hydro Tasmania understands that in establishing a framework for qualifying contracts, a key desire for the ESB is to ensure and promote liquidity.

- Centrally cleared or trade repository approaches will cause increased compliance costs for liable entities and may not necessarily result in the desired increase in liquidity. To be available when required, a trade repository would need to be developed in advance of the reliability obligation being triggered. We therefore see this as an additional burden on liable entities that could be avoided.

- There are challenges with each of the 5 options presented in the consultation paper. Of the options put forward, the Market Liquidity Obligation (MLO) is the most likely to improve liquidity. Any intervention risks unintended consequences and may impact on efficient operation of the market, however, in the context of the reliability guarantee this could be the most appropriate approach. To mitigate against unintended consequences from an MLO:
 - o It could be appropriate to set weekly or total limits on the volume of contracts that a counterparty under the MLO is required to transact. It is not the intent of the Guarantee to force a party to net-sell more than they can physically back.
 - o Further consultation on the appropriate bid-offer spread and other criteria applied to large vertically integrated retailers should be undertaken.

Page 11 of the *Qualifying Contracts - Technical Working Paper* states that: *“For the purposes of compliance, it is expected that a covered interregional position would receive a large firmness-factor, potentially discounted based on the historic performance of the interconnector.”*

- Market participants continually make their own assessment of the reliability of their own generation, competitor plant, interconnectors and of demand forecasts. It is appropriate that the Guarantee consistently assesses compliance based on financial exposure to spot prices.
 - o Of note is that the Guarantee proposes to differentiate between vertically integrated and market transactions. For example, the paper proposes that a load following hedge would be ‘firm’ due to the seller’s financial exposure to the pool price. However, where a load following hedge or other transaction was an internal contract between arms of a gentailer, it is expected that the firmness would be discounted with reference to the expected availability of the generator’s assets (or other backing approaches).
 - o The proposal to differentiate reliability expectations based on corporate structures needs to be carefully considered to ensure the Guarantee doesn’t lead to poor or unintended outcomes.
- If a covered interregional position was to be allocated a firmness-factor below 1, it is critical that an appropriate historical period is used to assess the performance of the interconnector. For example, performance over the life of the asset.
- As noted in the AEC submission, we would expect that industry codes could be developed in order to help auditors and liable entities achieve consistent approaches to contract ‘firmness’.

4.7 Procurer of Last Resort

- As is noted on page 43 of the paper: *“It is not the intention of the Guarantee for AEMO to become the default procurer of capacity for the NEM.”* On this basis, Hydro Tasmania is cautious about the role of the Procurer of Last Resort under the Guarantee. It is important that activation of the RERT (or enhanced RERT) does not act to discourage economic long-term investment in energy resources. Market participants would be alarmed if the Guarantee resulted in increased intervention other than when absolutely necessary.