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Energy Security Board
c/- COAG Energy Council Secretariat
John Gorton Building
King Edward Terrace
Parkes ACT 2600

Submitted electronically: info@esb.org.au

Energy Security Board Retailer Reliability Obligation Draft Rules Consultation Paper

Snowy Hydro Limited welcomes the opportunity to comment on matters raised in the Draft Rules Consultation Paper from the Energy Security Board (ESB) on the Retailer Reliability Obligation.

Snowy Hydro Limited is a producer, supplier, trader and retailer of energy in the National Electricity Market ('NEM') and a leading provider of risk management financial hedge contracts. We are an integrated energy company with more than 5,500 megawatts (MW) of generating capacity. We are one of Australia's largest renewable generators, the third largest generator by capacity and the fourth largest retailer in the NEM through our award-winning retail energy companies - Red Energy and Lumo Energy.

Executive Summary

Snowy Hydro advocates that the primary market signals of Unserved Energy, Maximum Price cap, Minimum Floor Price, and Cumulative Price Threshold should be used in the first instance to signal the need for new investments to maintain reliability and security.

The Retailer Reliability Obligation (RRO) should be built on the strengths of the existing wholesale market design which for two decades has been a success based on the centralised decision making. Snowy Hydro believes the existing market design can be relied upon to support reliability in the long-term with the NEM not expected to confront immediate reliability crisis.

Snowy Hydro believes that the Draft Rules Consultation Paper with a trigger period of 3 years for retailers to meet a forecast reliability gap will allow for more current and complete information. If retailers do not meet the requirement by the compliance date, the last resort function will be triggered by the Australian Energy Market Operator (AEMO) 1 year before the forecasted reliability gap.

The impact of any new market mechanisms, such as the RRO, imposed on the existing market needs to be considered carefully to avoid any unintended consequences. In particular Snowy Hydro's has a strong views on following:

- That the ESB acknowledges significant comments to recent consultations from market participants in response to the Enhanced RERT and Market Making Arrangements in the NEM rule changes.

- The anticipated AER guidelines to be put in place allow significant time for the industry to understand the impact of any new market mechanisms imposed on the existing market and avoid any significant unintended consequences.
- That the AER, acting as an independent entity, assess and decide on requests from AEMO to trigger the reliability obligation if there are inaccurate assumptions and errors that are material.
- ESB's concerns to have sufficient time for information to be incorporated into the ESOO, reliability forecast and the T-3 reliability instrument is warranted and therefore the focus should be on AEMO understanding the reliability of aging plant instead of just focusing on technical retirement age along with the addition of further analysis into revenue adequacy for existing thermal plant.
- The proposed treatment of opt-in customers in the draft rules is welcomed with large customers alone representing approximately 20 percent of annual consumption in the NEM. Further to this, opt-in large customers should be treated for the entire reliability gap, rather than being able to opt-in for particular reliability gap periods, increasing market participant confidence in the RRO.
- The flexibility, duration and performance of each contract is the most important for the reliability and security of the NEM. If demand response is to be a firm qualifying contract for the purposes of meeting the RRO it needs to provide the same transparency and certainty that scheduled generators will provide.
- Snowy Hydro agrees that in principle increasing financial liquidity in the NEM would advance the National Electricity Objective (NEO). However, these initiatives should be market led instead of Regulators intervening in the market with a regulated mechanism. The mandatory Market Liquidity Obligation (MLO) will impose potentially very large trading risk on these entities with no improvement on reliability. The MLO if implemented across the NEM, would be ineffective and clearly misguided with the obligation likely to encourage financial misbehavior by participants trying to exploit competitors' enforced buy/sell market making obligations.
- Targeting generators, that exceed the 15 market share in each state, by being required to support liquidity in markets for the period of the gap will not physically increase supply and ensure the reliability of the NEM.
- The ESB's market making requirement to post very tight bid and offer will only benefit the speculative traders in the market as opposed to smaller retailers / industrial users.
- The benefits of a voluntary MLO approach include that the investor confidence in the market remains, there is transparency and the economically efficient allocation of risk in the NEM and commercial drivers are left unhindered encouraging participation of specialist providers. Snowy Hydro strongly encourages the ESB to allow the voluntary schemes such as the Engie and/or ASX proposals to fulfil the requirements of an MLO. We believe the "issues" outlined on page 30 of the Consultation Paper can be resolved.
- The need for the voluntary book build by AEMO is surplus to the RRO purposes following the sufficient incentives under the RRO for market participants to enter into their own trades to meet RRO compliance and the MLO.
- It is important that the Procurer of Last Resort is aligned with the proposed 12-month proposed Enhanced RERT should it proceed.

It is important that the ESB continues to provide further detail to market participants to ensure that the RRO is flexible and does not stifle the market allowing time for industry to prepare for market changes. It must also be recognised that an RRO trigger sets off a major compliance exercise by the industry.

Snowy Hydro appreciates the opportunity to respond to the Draft Rules Consultation Paper. Any questions about this submission should be addressed to Panos Priftakis, Regulation Manager, by e-mail to panos.priftakis@snowyhydro.com.au.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'K Ly', with a long horizontal stroke extending to the right.

Kevin Ly
Head of Wholesale Regulation
Snowy Hydro

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Detailed Submission

Interaction with other rule changes

The Energy Security Board (ESB), should continue to work closely with the Australian Energy Market Commission (AEMC), the Australian Energy Regulator (AER), Australian Energy Market Operator (AEMO) and stakeholders to identify issues and targeted, least cost solutions for the RRO.

Snowy Hydro understands that the ESB faces a significant challenge to have the RRO in place by 1 July 2019 however market participants have provided significant comments to recent consultations which should be considered before the ESB finalises the RRO. In particular we refer to the following consultations:

- The Enhanced RERT¹ includes an extension of the RERT to 12 months to secure RERT contracts to satisfy the Procurer of Last Resort (POLR) for the RRO and secure the same capacity. The procurement trigger time and lead time however in the RRO rules notes the commencement can begin more than 12 months prior which is not consistent with the Enhanced RERT rule change. The POLR needs to be consistent with the Enhanced RERT.
- The market making arrangements consultation the AEMC² is undertaking for the ENGIE rule change has led to the majority of stakeholders expressing their concern that any market making obligation should only be promoted to the extent that contracts are traded by willing participants according to their business requirements. Snowy Hydro and numerous market participants have noted that forcing participants to trade through market making powers will distort financial markets and work against preserving the integrity of the market which would clearly be against the long term interest of both the NEM and consumers. The RRO compulsory MLO needs to address the concerns raised by market participants.

Role of the Regulator

Snowy Hydro welcomes the anticipated AER guidelines to be put in place. The proposed consultation for the guidelines will allow significant time for the market participants to understand the impact of any new market mechanisms imposed on the existing market which need to be considered carefully to avoid any unintended consequences. Snowy Hydro will actively participate in the consultation process across all guidelines. Further to this, we recommend that the Draft Rules include a routine review of the relevant guidelines after commencement and then every 3-4 years thereafter.

Forecasting the reliability requirement

AEMO's Electricity Statement of Opportunities (ESOO) will play a significant role in the RRO through the reliability forecast in identifying any potential reliability gaps in the coming five years. AEMO's work will be relied on heavily for decision-making with confidence being gained in the forecasts if industry provides input in the process and AEMO take input on board to make the forecasts as accurate as possible.

¹ AEMC, Enhancement to the Reliability and Emergency Reserve Trader, Draft rule determination, 7 February 2019

² AEMC, *Market making arrangements in the NEM, Consultation paper, 20 December 2018*

Snowy Hydro agrees with the ESB note that “to ensure that liable entities can have confidence in the reliability forecast, the ESOO forecasting needs to be based on information that is current and of sufficient quality.”³ The increased climate variability and quantification of uncertainty in the growth of certain technologies however mean that although AEMO makes every effort to ensure the information is accurate over the long term, the likelihood of being inaccurate is high.

Snowy Hydro will participate in the supporting material to be published alongside a reliability forecast which will be covered in AEMO’s Reliability Forecast Guidelines. In addition the AER’s development to publish the Forecasting Best Practice Guideline will provide confidence to Market Participant in the quality and transparency of reliability forecasts. The Forecasting Best Practice Guideline will provide guidance about forecasting processes to ensure they are undertaken in line with identified best practices and minimum standards.

It is important that the AER acting as an independent entity assess and decide on a request from AEMO to trigger the reliability obligation if there are any inaccurate assumptions that are material and there are any material errors. There continue to be significant issues that need to be resolved with regards to AEMO’s forecast to provide confidence to the market.

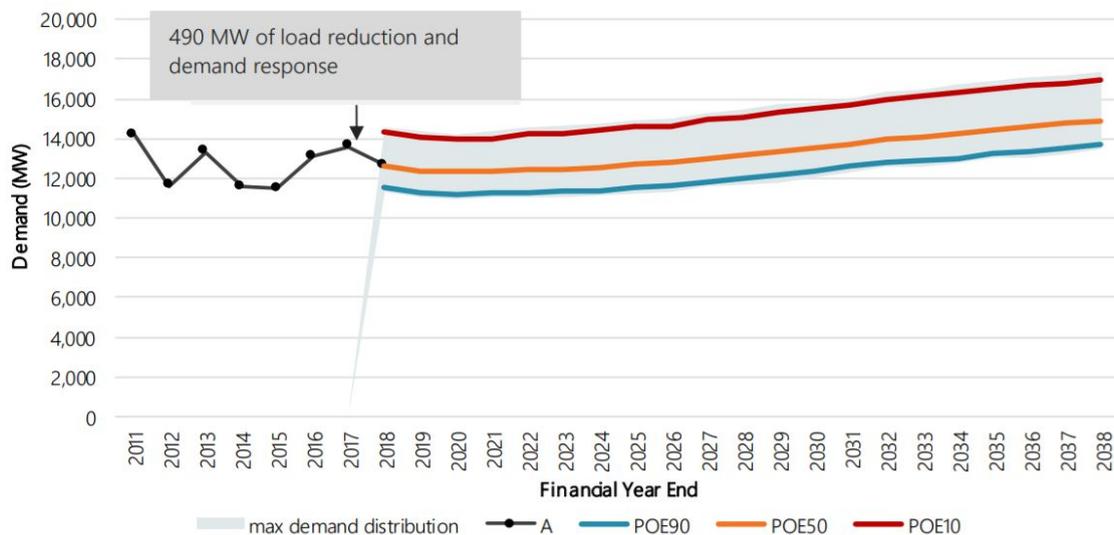
In New South Wales, demand in AEMO forecasts can vary by 3,300 MW between the lower bound (95% POE) and the upper bound (5% POE), shown in Figure 1 below.⁴ In regards to maximum demand AEMO experiences variances up to roughly 5 per cent of maximum demand which AEMO correctly notes is extremely vital when 5 per cent can be the difference between the reliability standard being exceeded in a region or no Unserved Energy (USE) being observed at all. This increased variability and uncertainty on the demand side make AEMO’s task extremely challenging to forecast demand in the long-term. We understand the challenges AEMO faces with some of the variances being due to unobservable random consumer behaviour, unpredicted weather changes and other unintended consequences⁵. However, a triggering of the T-3 reliability instrument even if it doesn’t result in a T-1 determination triggers compliance obligations for the entire industry. Hence the importance of increasing transparency and intentions of demand side into central dispatch processes.

³ Energy Security Board (ESB), 2019, “ESB Retailer Reliability Obligation Draft Rules Consultation Paper”, 8 March 2019, pp5

⁴ AEMO, 2018, “2018 Electricity Statement of Opportunities - August 2018”, <<
https://www.aemo.com.au/-/media/Files/Electricity/NEM/Planning_and_Forecasting/NEM_ESOO/2018/2018-Electricity-Statement-of-Opportunities.pdf >>

⁵ AEMO, 2018, “2018 Electricity Statement of Opportunities - August 2018”, <<
https://www.aemo.com.au/-/media/Files/Electricity/NEM/Planning_and_Forecasting/NEM_ESOO/2018/2018-Electricity-Statement-of-Opportunities.pdf >>

Figure 1 New South Wales, maximum demand distribution forecast vs historical demand⁶



Snowy Hydro understand that for AEMO it is difficult to measure the accuracy of probabilistic forecasts, especially where they relate to the ‘long tail’ of distributions. The measures adopted as part of AEMO’s forecasting performance monitoring system are therefore likely to require specially developed techniques. We therefore encourage AEMO to expose some of their forecasting components so commentary can be received from the industry. The choice of metrics AEMO uses are critical and this needs to be properly consulted by market participants. The AER should provide a sounding board for the treatment of confidential data and the appropriateness of AEMO data.

Timeframes for requesting and making reliability instruments

The ESB has concerns regarding the sufficient time for information to be incorporated into the ESOO, reliability forecast and the T-3 reliability instrument. The requirement for all large generators to provide at least three years' or greater notice prior to closure however may be difficult for generators to manage despite the ESB’s intent to improve the provision of information and enhance transparency and predictability. The cost of extending the life of a power station and the terms under which it would run need to stack up against competing technology solutions.

There will be certain generators that will need to be retired in the medium term due to economic age and increased competition from lower-emissions sources of power generation. The focus could be on AEMO understanding the reliability of aging plant instead of solely focusing on technical retirement age along with the addition of further analysis into revenue adequacy for existing thermal plant.

Liabile entities

Snowy Hydro supports the proposed treatment of Opt-in Customers in the draft rules and believe the opt-in for large customers should be treated for the entire reliability gap rather than being able to opt-in for particular reliability gap periods. This is important as large customers represent

⁶ AEMO, 2018, "2018 Electricity Statement of Opportunities - August 2018", << https://www.aemo.com.au/-/media/Files/Electricity/NEM/Planning_and_Forecasting/NEM_ESOO/2018/2018-Electricity-Statement-of-Opportunities.pdf >>, pg82-84

approximately 20 percent of annual consumption in the NEM and market participants will need to be confident in the contracts provided in the RRO.

If there is a risk that a large customer faces a difficult economic environment and crippling costs market participants will be required to accept the customer's costs. To counter this exposure we support AEMO developing procedures to ensure Opt-in Customers have sufficient credit support.

Qualifying Contracts and Net Contract Position

Demand side participation contracts

Demand response is likely to play an increasingly important role in the future of the National Electricity Market (NEM). Snowy Hydro understands that demand response will improve through technological advancements however we believe that AEMO should focus on clearly displaying the flexibility and duration of demand response if it is to accommodate the increasing penetration of variable renewable generation.

The flexibility, duration and performance is the most important for the reliability and security of the NEM. There is a significant difference in firmness and flexibility on small and large scale demand response. Snowy Hydro therefore understands the draft Rules consultation paper that notes *"in addition to complying with the normal requirements for being a qualifying contract, a demand side participation contract may only be a qualifying contract if it is also registered on AEMO's Demand Side Participation Information Portal (DSPIP)."*⁷ All NEM registered participants are already required to submit information to AEMO however following a number of proposed demand response rule changes it is important that all demand response sources proposing to participate in the RRO be registered. If demand response is to be firm qualifying contract for the purposes of meeting the RRO it needs to provide the same transparency and certainty that scheduled generators will provide.

Firmness

With the energy industry's investment focus shifting to a combination of firm lower emissions gas generation, renewables and enabling technologies, more than 3,000 megawatts of firm generation exited the market in Australia over the last few years. For an electricity system to work properly and contribute to reliability there needs to be sufficient dispatchable and flexible capacity that can operate continuously on a sustained period of time.

Snowy Hydro supports the principles proposed by the ESB in the consultation. We believe that if the RRO is triggered, "firmness" of contracts used for compliance will take into account the firmness factor applied to each contract considering characteristics such as strike price, the variability and profile of volume settled under the contract and the likelihood of the contract providing cover to the buyer during the reliability gap. Further to this we will participate in the consultation of the draft Rules currently being proposed that the AER Contracts and Firmness Guidelines which will set out a range of default methodologies for determining the firmness factor of standard contracts.

⁷ Energy Security Board (ESB), 2019, "ESB Retailer Reliability Obligation Draft Rules Consultation Paper", 8 March 2019, pp27

Market Liquidity Obligation

Snowy Hydro agrees that in principle increasing financial liquidity in the NEM would advance the National Electricity Objective (NEO). However, these initiatives should be market led instead of Regulators intervening in the market with a regulated mechanism. From this perspective Snowy Hydro does not support the market making requirements such as the mandatory Market Liquidity Obligation (MLO) which will impose potentially very large trading risk on these entities with no improvement on reliability. The NEM does need further market intrusion. The MLO if implemented across the NEM, would be ineffective and clearly misguided with the obligation likely to encourage financial misbehavior by participants trying to exploit competitors' enforced buy/sell market making obligations.

Instead Snowy Hydro supports adopting voluntary mechanisms if the ESB believe there is a financial liquidity market failure. It is our expectation that either the Engie and/or the ASX market making scheme can be designed to meet the requirements under the MLO. The major difference and advantage with the voluntary schemes is that they will be functioned by willing Participants with either the physical and/or financial resources to provide increase liquidity in the NEM.

Obligated Parties

*"The draft Rules propose that the MLO will only require obligated parties to make contracts available for the period of the forecast reliability gap where there are at least two corporate groups in that region which exceed the 15 per cent market share threshold for the last two consecutive quarters (on average) in that region (each corporate group, being a 'MLO group')."*⁸ Targeting generators, that exceed the 15 market share in each state, by being required to support liquidity in markets for the period of the gap will not physically increase supply and ensure the reliability of the NEM. There's also the risk that the capacity forced upon by the MLO would restrict a Genterailer from adequately hedging its own retail load. This may have negative consequences for retail competition in the NEM.

The identification of any competition issues should correctly be addressed by the Australian Competition and Consumer Commission (ACCC). The MLO will not achieve the intended outcomes the ACCC has identified.

The price of these contracts may not be able to be matched/agreed between Sellers and Buyers. This issue becomes more acute the closer to real time dispatch. This is a conscious choice made by both the Seller and Buyer not to transact. There are consequences for both Sellers and Buyers with this choice to effectively go to the Spot market. If eventual Spot prices are low then the Buyer is vindicated at the expense of the Seller. The converse is true if the eventual Spot price turns out to be high. This is a dynamic that plays out in the market and a function of the risk tolerance of players. Therefore, Snowy Hydro's clear position it that there is no need for a compulsory market marking arrangement that targets specific generators.

In the United Kingdom the equivalent to the MLO has brought some benefits to the market, however, these benefits have come at the cost of a subset of market participants while the established smaller players are finding it hard to compete⁹. Five market participants in the United 5

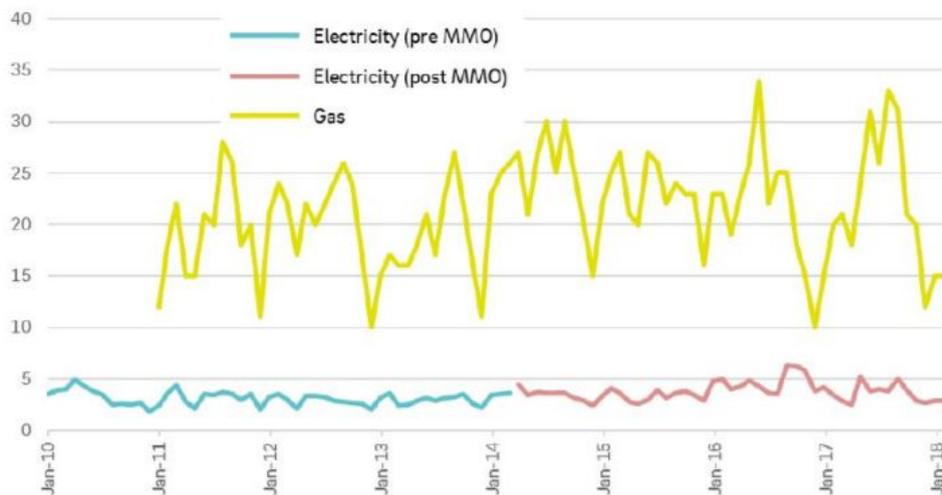
⁸ Energy Security Board (ESB), 2019, "ESB Retailer Reliability Obligation Draft Rules Consultation Paper", 8 March 2019, pp30

⁹ Andrews, A, 2017, "Is the Secure and Promote liquidity fix fit for purpose?", <<
<https://www.newpower.info/2017/04/is-the-secure-and-promote-liquidity-fix-fit-for-purpose/> >>

Kingdom are required to cross-subsidise their competitors' risk management activity at an annual cost of some £20 million¹⁰

E.ON, a UK energy company, recently noted that the UK's Market Making Obligation (MMO) had not improved liquidity in electricity¹¹. Ofgem's data showed that churn in the electricity market remained much lower than in the gas market and the trend had not changed since the introduction of the MMO. Figure 2 shows that MMO has provided no underlying improvement in liquidity.

Figure 2: Churn rate of electricity and gas¹²



Mandatory market making would be extremely problematic for peaking plant such as energy limited hydro generation and open cycle gas turbines. For instance, it is unclear with energy limited generators what the opportunity cost of their generation may be and gas generators would have fuel risks with volume and transportation issues. Hence suggestions of forcing the entity to post tight bid/offer swaps up to its registered capacity is inefficient when the opportunity cost of these energy limited plant changing all the time, and short term spot gas prices can significantly vary on a daily basis.

The compulsory market making requirement will impose potentially very large trading risk with no improvement in liquidity, as shown in the UK above. Snowy Hydro are concerned that any market making requirements will provide a further obligation on market participants to provide market liquidity making it in the process more difficult to meet. This would add to market uncertainty by singling out particular market participants for action in response to perceived competition shortcomings.

The compulsory market liquidity requirement would simply increase risk to the gentailer which ultimately is passed through to consumers. It also risks inefficient use and misallocation of scarce resources for fuel-constrained plant, again worsening consumer outcomes.

¹⁰ RWE, 2017, "Secure and Promote Review: Response to Consultation"

¹¹ E.ON, "Secure and Promote: Suspension of the Market Making Obligation", response by E.ON to consultation.

¹² E.ON, "Secure and Promote: Suspension of the Market Making Obligation", response by E.ON to consultation.

Potential alternative approach to the MLO

Should there be a need for a market making mechanism to satisfy other objectives Snowy Hydro's preference is for one implemented on a market based and incentive driven basis. Such approaches are less interventionist and less distortionary to market and investment confidence. The option of a voluntary market liquidity obligation should be offered, at a minimum by the ESB, before any compulsory approach is considered.

The proposed approaches by ENGIE and the ASX Market Making Incentive Scheme are partly complementary both being based on the voluntary participation while expected to cover all regions in the NEM. Should any of the proposals proceed then it is important that the MLO proposed by the ESB be removed from the reliability guarantee and replaced with one of the market based approaches. The benefits of a voluntary approach include that the investor confidence in the market remains, transparency, economically efficient allocation of risk in the NEM, commercial drivers left unhindered and encourages participation of specialist providers.

The voluntary schemes should be able to satisfy the requirements of the mandatory MLO. It shouldn't matter from a public policy perspective who provides liquidity under the voluntary scheme. That is, whether it's a Market Participant with physical supply or a Financial Intermediary, the end objective of improved liquidity is met.

The voluntary proposals minimise the need for market intervention and centralised decision-making. Further to this, Snowy Hydro notes that the voluntary schemes should be given time to work and the proposal to make the scheme mandatory after a period of time should strongly be avoided.

Market making requirement

Snowy Hydro has concerns with the ESB's market making requirement to post very tight bid and offer spreads. The ESB proposes a maximum difference in bid and offer prices of 3% for flat base load or peak load contracts in NSW, VIC and QLD and 5% in SA with the maximum bid-offer spread on cap contracts at 10% for any region. In addition the bid-offer spread is not required to be less than \$1 per MW. We suggest the percentage spreads suggested by the ESB serves as a floor and the spreads are allowed to increase in line with the implied volatility in the market.

The obligatory tight bid/offer spreads will only benefit the speculative traders in the market as opposed to smaller retailers / industrial users. Snowy Hydro is also concerned that forcing a spread of \$1 dollar given the risk associated with these contracts will lead to these contracts being picked off by financial players and not the participants ESB is allegedly doing this for. We believe the spreads should be a function of market volatility. The ESB could use Option implied volatility as a proxy for overall market volatility and to safeguard lack of volatility there should be a floor on the spreads. The maximum spreads proposed by the ASX voluntary approach were reasonable.

Costs of the Market Liquidity Obligation

The costs of the compulsory approach have not been set out in the consultation paper by the ESB. Costs are likely to include administrative costs, the cost of the bid offer spread or other incentive required to ensure market making is provided over all contract periods. Snowy Hydro is concerned that the compulsory market making approach would likely have the most significant costs associated

with implementation of all those proposed. The proposal which would compel physical participants to trade contracts they are unwilling to trade free, due to a lack of financial incentives and additional risk exposure, would be significant change in the operation of the NEM and hence a significant costly change to participants.

Voluntary Book build

The draft rules noted that if the reliability obligation is triggered, AEMO will invite interested parties to lodge an expression of interest to participate in a voluntarily book build mechanism. This is not supported by Snowy Hydro as it is unnecessary following the sufficient incentives under the RRO for market participants to enter into their own trades to meet RRO compliance.

The need for the voluntary book build by AEMO is surplus to the RRO purposes following the significant amount of work the industry is putting into the market liquidity obligation. The voluntary build should be discontinued and if there is a clear benefit of a book build option, financial intermediaries are well placed to initiate this process without the need for centralised facilitation. The book build is not a means for AEMO to centrally procure generation at will.

Procurer of Last Resort (POLR)

The Retailer Reliability Obligation (RRO) will require companies to hold contracts or invest directly in dispatchable energy to meet peak demand reducing the reliance on the RERT to be materially reduced. There is only one market in the NEM and all regulatory settings should be calibrated to incentivise participation in the market. The ultimate goal should be to encourage participation in the NEM and investment directly into dispatchable energy to meet peak demand.

The POLR should only be used as a last resort safety net and the energy-only market should be left to deliver the economic level of bulk supply reliability to customers as reliability is delivered at a lower cost to consumers through the market.

The ESB notes that *“AEMO will commence procurement of resources at T-1, should there be a material reliability gap, through the Reliability and Emergency Reserve Trader (RERT) framework to address the remaining gap with costs to be recovered through the Procurer of Last Resort cost recovery mechanism as detailed below.”*¹³ In regards to this proposal, Snowy Hydro notes that It is important that the Procurer of Last Resort is aligned with the proposed 12-month proposed Enhanced RERT should it proceed. The trigger period should not increase following this Enhanced RERT or RRO draft rule consultation as it would cause further uncertainty in the NEM. The market should allow the POLR to work as intended without the need for further urgent rule changes. We are concerned there could still be inconsistency with the Enhanced RERT as AEMO would be able to start contract negotiations beyond 12 months, including while retailers are finalising contracts under the RRO.

Greater transparency will improve the ability of retailers, consumer groups, governments and policy makers to explain the costs and benefits of emergency reserves to consumers and the industry more broadly, allows efficient investment and operational decisions in response and improves general market confidence in the POLR process because the market would have greater understanding of the reasons and conditions that required the procurement of the RERT.

¹³ Energy Security Board (ESB), 2019, “ESB Retailer Reliability Obligation Draft Rules Consultation Paper”, 8 March 2019, pp.iii

The cost recovery approach by the ESB's Procurer of Last Resort should remain as consistent as possible with the AEMC Enhanced RERT proposed approach. Snowy Hydro supports the clear cost recovery processes and believes that amendments to the draft Rules are required to allow for further POLR adjustments

The ESB should continue to work closely with the AEMC, AER, AEMO and stakeholders to identify issues and targeted, least cost solutions for any upcoming challenges.