



Ground Floor, 109 Burwood Road,
Hawthorn, VIC 3122

Level 36 Gateway Tower, 1 Macquarie
Place Sydney, NSW 2000

PO Box 6074 Hawthorn, VIC 3122

P: 1300 08 06 08
W: flowpower.com.au
E: go@flowpower.com.au
F: 03 9277 7768

Progressive Green T/As Flow Power
ABN 27 130 175 343

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Dr Kerry Schott

Chair, Energy Security Board

info@esb.org.au

Dear Dr Schott,

Re: Response to National Electricity Rules Amendments – Retailer Reliability Obligation

Flow Power is pleased to comment on the National Electricity Rules Amendments – Retailer Reliability Obligation (draft rules).

Flow Power is a licenced electricity retailer that works with business customers throughout the NEM. Our model aims to give customers control over their energy costs by exposing them to spot prices. Customers can manage exposure to price volatility through physical or financial hedges.

- A physical hedge takes the form of a demand response or onsite generation (supported by our proven systems).
- A financial hedge may include purchasing financial hedges from markets such as ASX Energy Futures or entering into a PPA with generators.

The result delivers to the customer significant savings, supports the reliability of the system and integrates new forms of generation.

We are pleased that the draft rules classify demand response as a qualifying contract, but find the absence of important details such as what constitutes a qualifying contract and how the relative firmness of a contract is established, in particular contracts using physical demand response, challenging. We note much of the detail is being left to the AER to publish as guidelines but in our view, given our unique product offerings, such details are fundamental in order to provide a proper response.

Firmness principles – inequity between issuers of financial contracts and customers exposed to the same spot price is unfair and will undermine the RRO objective of increasing demand response

Under the draft rules, a standard market cap and swap limiting spot price exposure to less than \$300/MWh will be considered “firm” in order to comply with the RRO. The logic behind this decision is that a seller of financial hedges is exposed to the spot price and therefore has a financial incentive to physically firm the hedge with generation. Importantly, the RRO does not enforce any obligations on those offering financial hedges to demonstrate, if in fact, they have (or will ever) use physical generation to firm the financial hedge. It is assumed, exposure to spot price is incentive enough for the seller to back their hedge through physical generation, but it is entirely at the discretion of the hedge provider

In contrast, retailers' customers choosing to expose themselves to the same spot price are subjected to an entirely different set of rules. Under the draft rules, retailers (and their customers) wanting to manage price risk through demand response must take an evidence-based approach to demonstrate their firmness. This is proposed to be measured through a complex engagement and registration process, baseline methodologies and audits which are very likely to significantly constrain the use of demand response.

It is reasonable to argue retailers, and particularly customers, exposed to spot prices have even more incentive and are more likely to deliver a physical response at a lower cost by reducing load through demand response (to limit their price exposure) than a financial hedge provider, who underwrites hedge contracts based on their financial risk assessment, rather than physically with generation.

This significantly increases the inequity between customers exposed to spot prices compared to the market participants offering financial hedges. It forces retailers to purchase more expensive and less efficient financial hedge products for customers (that may or may not be backed by physical generation) while discouraging customers from managing their price risk efficiently by managing demand and thereby reducing constraints.

We are concerned such inequity will undermine the RRO objective of encouraging investment in new dispatchable electricity to maintain the reliability of the power system. Customers who are exposed to spot price are clearly incentivised to avoid cost by reducing load (or installing generation) and arguably can respond at much lower competitive cost and in a much shorter time frame than adding new generation capacity to the market.

For the last two years more than 50% Flow Power's customers have proven to have reduced load at our request to manage price risk, providing important relief for the system

The electricity market faces unprecedented challenges with the transition to large volumes of variable generation. For a successful transition, it is essential consumers are empowered to respond to supply and the most efficient way to achieve this is for consumers to respond to market price signals.

Flow Power supports genuine steps towards greater reliability including investment in new generation and demand response. However, it is essential that any rule considers the customers role in supporting market reliability, by treating both market participants and customers equally.

Conclusion: Customers exposed to spot prices must be treated equally to financial hedge providers, their electricity contracts should be deemed qualified contracts with a firmness of one for the purpose of compliance.

“if the spot price signal is sufficient to drive action for those offering hedge contracts (whether backed up by physical generation or not), it must also apply to customers exposed to the same price signal”

The most efficient way to deliver the RRO is to:

- **provide both retailers and customers with choices on how to manage their reliability obligations;**
- **promote more avenues to facilitate demand response; and**
- **eliminate cross subsidy**

AEMO's forecasting of the reliability gap period and the likely time of occurrence of the shortfall are instrumental in driving investments and behaviours. Based on more than ten years' experience running demand response programs, the broader the gap period is, the less likely customers will commit to demand response.

The proposed likely time of occurrence of the shortfall is informative but not enough to motivate customers to consider participating in demand response or allow an investor to make an informed investment decision in generation. On the other hand, if the AEMO forecast provides specific information on the likely duration of the shortfall, this can be fed into the decision-making process. For example, investing in a battery to address 4 hours shortfall duration maybe more attractive than investing in other form of energy resources.

The draft rules appear to allow for one reliability gap period (and making one reliability instrument) for a given year T. This means should AEMO reliability forecast identify two gaps, each occurring in non-consecutive months (say one in December and one in March) the gap period specified in the reliability instrument will cover four months (December to March). Further if the shortfalls' likely time of occurrence are different for each month (say 9 AM to 2 PM in December and 4 PM to 8 PM in March) the time of occurrence AEMO will specify in the reliability instrument will be the combination of both (9 AM to 8 PM).

These limitations are likely to result in the following undesirable consequences:

1. Hinder innovation in market liquidity.
2. Disadvantage retailers and customers who have contracts with lower firmness factors than what would otherwise be the case. One of the firmness principles is the likelihood of the contract providing cover to the buyer during a reliability gap. For some contracts, such as corporate PPA's with solar farms, the likelihood of coverage is affected by the likely time of occurrence of the shortfall. Using the example above it is reasonable to argue having two gap periods (one in December 9 AM to 2 PM and one in March 4 PM to 8 PM) would result in an overall more favourable contract firmness factor compared to having a single gap period covering 4 months (December to March 9 AM to 8 PM).
3. Increase costs to retailers and consumers due to the need to enter into contracts that cover longer gap periods and wider timeframes. Using the example above, the cost of two contracts, one for December covering the timeframe 9 AM – 2 PM and one for March covering the timeframe 4 PM to 8 PM, will be less costly than a single hedge contract covering the 4-month period December to March from 9 AM to 8 PM.
4. Discourage customer participation in demand response. Based on our experience, Using the example above, a retailer or a consumer would be more willing to participate in demand response for two months (December between 9 AM to 2 PM) and in March (4 PM to 8 PM) than for 4 months (December to March 9 AM to 8 PM).

5. Restrict choices to manage obligations. Using the example above a retailer or a customer may choose to use demand response in December but enter into a hedge contract for March to manage its obligation. Such action will also reduce their compliance costs.
6. May encourage AEMO to pursue a conservative instead of an accurate forecast.

We propose the following approach to address the issues discussed above:

1. AEMO forecasts and Reliability Instruments must specify the likely duration of the shortfalls. For example, the likely period of a shortfall may be 9 AM to 2 PM but the likely duration of the shortfall may be only 3 hours. The duration of the shortfall should not have an impact on compliance, that is, the liable entity must meet its obligation over the entire gap period regardless of the shortfall actual duration.
2. AEMO forecast to be concise and define shortfalls within gap periods not exceeding one month each;
3. Where:
 - a. gaps are forecast to occur over two or more consecutive months and the likely time of occurrence of the shortfall in each month is the same, then one gap period is to be specified in the reliability instrument
 - b. in all other cases either a reliability instrument is issued for each gap period associated with year T, or one reliability instrument is issued with multiple gap periods.

In addition to addressing the issues above our proposed approach will deliver the following benefits:

- **Improvement in the calculation of the liable entity's share of the one-in-two year peak demand forecast.** Using the example above and assuming one Procurer of Last Resort (POLR) was activated in December and another one in March, a liable entity may comply in December but not so in March. However, under the draft rules, the entity will be assumed to be non-compliant for the period December to March.
- **Fairness and elimination of cross subsidy in apportioning POLR costs.** Using the example above and the situation described in the previous dot point, under our proposed approach the liable entity will only be liable to pay its share of the costs associated with the POLR activated in March, instead of cross subsidising other entities by paying a share of the total costs associated with both the POLR activated in December and the one activated in March, as proposed in the draft rules.
- **Fairness and elimination of cross subsidy in passing-through the additional charge to the retailer's customers.** Using the example and the situation described above only the liable entity share of the cost associated with the POLR that was activated in March will be pass-through to those customers that contributed to the shortfall in March.

The draft rules will undermine the wholesale demand response mechanism rule change review process currently underway

The wholesale demand response mechanism (WDRM) rule change request, currently under review by the AEMC, is of particular relevance to the RRO.

It must be noted at the outset the discussion below intends to argue how the draft rules may undermine the WDRM review process. Flow Power questions the need of any WDRM requiring the use of baseline methodology for energy settlement purpose with AEMO. This is in line with our initial points regarding fairness in the market. Further, we support the draft rule provision that where a demand response is activated during a POLR and such demand response is not specified as qualifying contract, no adjustment to the actual metering data will be made.

One of the options presented for consideration by the AEMC is for the energy settlement between AEMO and retailers to be based on adjustment to actual consumption using a baseline methodology (or methodologies), in the event the retailer's customer participated in a demand response with an aggregator. Yet, under the draft rules, participation in demand response will only result in AEMO adjusting actual consumption where the demand response is classified as qualifying contract and is activated during the gap period. In other cases, actual metering data will be used. Further, depending on the outcome of the WDRM rule change review, complexity may also arise if the baseline methodology (or methodologies) used is (or are) different from the methodology used for the RRO.

The inconsistencies that flow from applying potentially different rules to the same set of consumer's consumption data is likely to create risks, confusion, disputes, errors and additional cost from maintaining and handling different sets of consumption data and unintended consequences.

We are concerned if the RRO was to commence 1 July 2019 as intended, this will undermine the WDRM rule change review process by implicitly dictating a direction to be taken in order to avoid the potential inconsistencies and issues discussed above.

We believe it is prudent to wait until the WDRM is concluded and certainties are provided in terms of measurements and implementations of demand response before the RRO rules are introduced.

AEMO Demand side participation information portal and systems will require changes

We note the draft rules:

- require a demand side participation contract to be registered on AEMO Demand Side Participation Information Portal for it to be a qualifying contract; and
- provides that if a qualifying demand response contract is included in the liable entity net contract position, and activated during the gap period, actual demand will be adjusted to add the reduction in demand back in for the purpose of assessing compliance.

However, under the Demand Side Participation obligation, retailers and other participants are required to provide AEMO with information about all customers participating in demand response, not just those classified as qualifying contracts. AEMO's current information requirement does not have provision to distinguish between those that are classified as qualifying contracts and those that are not, to identify which data is to be adjusted for the purpose of assessing compliance with the RRO.

As discussed in the previous section, the AEMC is reviewing how demand response will interact in the market. Flow Power has previously suggested that a register of demand response would meet the needs of all parties. We suggest that this portal could be leveraged to that purpose.

Further, AEMO Demand Side Participation Information Portal opens from 31 March until 30 April. Given that under the RRO draft rules a liable entity may adjust its net position if specific changes happen between T-1 and T, this may require the liable entity to access AEMO portal post the closing date of 30 April to record changes to its demand response qualifying contracts.

We believe the AEMO demand side participation information guidelines and requirements will need to be amended and its system may need some changes, to facilitate the RRO and ensure accuracy of adjustments, before the RRO is implemented.

We have provided more specific comments in relation to the questions explored in the consultation paper within Appendix 1.

If you have any queries about this submission, please contact Nabil Chemali, on 0417 971 032 or nabil.chemali@flowpower.com.au

Yours sincerely

A handwritten signature in black ink, appearing to read 'Matthew van der Linden', with a long horizontal flourish extending to the right.

Matthew van der Linden
Managing Director
Flow Power

Appendix 1

Question 1: Consultation paper, clause 4.7

We support extending the notice of closure of a generator to four years to provide AEMO enough time to incorporate any changes into the ESOO.

Question 2: Consultation paper, clause 5.4

- We believe all large Customers should be given the choice to opt-in. We appreciate the potentially large number of connection points across the NEM, but it is unlikely a reliability instrument will be issued for year T to cover the whole NEM.
- We support the proposed prescribed Opt-in Customer threshold

Question 3: Consultation paper, clause 6.8

Firmness principles

- Refer to our covering letter, where we argued customers exposed to the spot price must be treated equally to hedge providers, therefore their electricity contracts must also be deemed qualified contracts with firmness of one for the purpose of compliance.

Bespoke products' firmness methodologies

- We support the alternative approach proposed by the ESB under which the AER would establish a panel of auditors to review and approve the firmness methodologies for bespoke products. This model can also work alongside the one proposed in the draft rule, providing liable entities with a choice to utilise either.

Market liquidity obligation (MLO)

- MLO design - The MLO should be carefully designed to alleviate the risk of gaming. For example, in anticipation of a MLO being triggered, obligated parties may choose to withhold trade volume from the liquidity market, to protect against their regional portfolio being oversold via the MLO. This could adversely impact liquidity outside MLO windows and impact buyer's ability to cover an anticipated reliability gap through normal market hedging. Obligated parties would also be incentivised to artificially inflate the price and "front run" the market in anticipation of a MLO window, knowing buyers will be required to purchase complying contracts during this period.
- Registered capacity – to ensure consistency, we suggest the use of the same generator capacity information AEMO uses in its forecast.

Permitted adjustments

- We believe the second dot point in the box “permitted adjustment”, page 40 of the RRO Draft Rules Consultation Paper is meant to read “Large customers under 30 MW” instead of “Existing large customers under 30 MW” as the dot point itself refers to taking on new customers or losing existing customers below 30 MW. This is also consistent with the proposed change stipulated in Clause 4A.E.7 (b) (2), page 777 of the RRO Draft Rules for Consultation that reads “the number of connection points for large customers (who are below the opt-in customer threshold) in the region for which the liable entity is financially responsible changes
- We support the proposed 1% threshold set for large customers

Question 4: Consultation paper clause 7.5

- In our covering letter we propose an approach whereby AEMO forecast defines shortfalls within gap periods not exceeding one month each and either a reliability instrument is issued for each gap period associated with year T, or one reliability instrument is issued with multiple gap periods.
- Under this approach:
 - the ESB proposed formulae used to determine a liable entity’s share of the one-in-two year peak demand forecast would be calculated for each gap period.
 - each gap period will be associated with different peak demand forecast and different scaling factor
- We believe our proposed approach will improve the accuracy of the calculations, not only in terms of determining the liable entity’s share of the one-in-two year peak demand forecast but also in calculating and apportioning the POLR costs. Further information has been provided in our covering letter
- We support the proposal that if a POLR is activated and a liable entity undertakes demand response that is not specified as qualifying contract in the liable entity net position, the actual data will not be adjusted to reflect the reduction in demand caused by the demand response.
- It is to be noted that if a liable entity chooses the option of undertaking demand response to manage its obligation and such demand response is not specified as qualifying contract, the liable entity net position report will show an un-hedged (or exposed) position equal to the liable entity’s forecasted demand reduction that would result from the demand response.

Question 5: Consultation paper clause 8.5

Apportioning POLR costs

- As discussed above and in our covering letter we have proposed the POLR costs to be calculated for each gap period where the POLR was activated and recovered from the non-compliant entities associated with the relevant gap period.

Pass-through for non-compliant retailers

- Non-compliant retailers should be able to pass-through their additional charges through to their customers.
- Our covering letter describes Flow Power model. Our customers are given the opportunity to manage price risk through either a physical hedge (supported by our well-established systems) or financial hedge. This allows them to make business decisions in line with market prices. We believe this should be able to continue through the RRO.
- When a reliability instrument is issued, we will work with customers to help them make a choice on whether to buy a financial hedge over the gap period or to use physical response to hedge. If they commit to manage their load and fail to reduce their demand when the POLR is activated, then it is fair that they bear the additional cost.

Incentive related to C&I customers

- We do not believe the POLR cost recovery mechanism, together with the retailer's ability to pass-through the additional charge to their C&I customers will reduce the incentive for retailers to contract at T-1 for their C&I peak demand forecast. From Flow Power's perspective and as discussed in the previous response, this decision lies with the customer exposed to the spot price.