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Mrs Nicola Falcon GM Forecasting Australian Energy Market Operator energy.forecasting@aemo.com.au

Dear Mrs Falcon

## Re: Reliability Forecasting Methodology Issues Paper

Flow Power welcomes the opportunity to make a submission in response to AEMO's Reliability Forecasting Methodology issues paper (Paper).

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 and providing them tools and strategies to help them managing their load and exposure to price volatility and reducing their power bills.

We understand the tight deadline AEMO has to finalise the reliability forecasting methodology and appreciate the consultation being conducted.

In our response to the Energy Security Board National Electricity Rules Amendments – Retailer Reliability Obligation<sup>1</sup> (Response), we highlighted the importance of AEMO's reliability forecasting in driving investments and behaviours. We particularly advocated for accurate, as opposed to conservative forecasts, and we raised concerns that long gap periods and wide gap trading intervals will have the following negative consequences:

- 1. Hinder innovation in market liquidity;
- 2. Result in lower firmness factors than what would otherwise be the case, hence disadvantaging retailers and customers'
- 3. Increase costs to retailers and consumers due to the need to enter into contracts that cover longer gap periods and wider gap trading intervals;
- 4. Discourages customer participation in demand response; and
- 5. Restricts choices to manage obligations.

We proposed the following approach to address the above issues:

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http://www.coagenergycouncil.gov.au/sites/prod.energycouncil/files/publications/documents/Flow%20Power%20Resp onse%20to%20National%20Electricity%20Rules%20Amendments%20-%20Retailer%20Reliability%20Obligation.pdf

- 1. AEMO reliability forecasts and Reliability Instrument Requests (RIR) to specify the likely duration of the shortfalls.
- 2. AEMO forecast to define shortfalls within gap periods not exceeding one month each;
- 3. Where:
  - a. gaps periods are forecast to occur over two or more consecutive months and the gap trading intervals in each month are the same, then one gap period is to be specified in the RIR
  - b. in all other cases either a RIR is issued for each gap period, or one RIR is issued with multiple gap periods.

In addition to addressing the concerns listed above we highlighted the following additional benefits from our proposed approach:

- 1. Improvement in the calculation of the liable entity's share of the one-in-two year peak demand forecast.
- 2. Fairness and elimination of cross subsidy in apportioning POLR costs to non-compliant liable entities
- 3. Fairness and elimination of cross subsidy in passing-through the additional charge to the retailer's customers

We are pleased that the Paper has addressed some of the suggestions we proposed in our Response, in terms of issuing multiple RIRs to cover different reliability gap periods and providing information about the likely duration of the USE events. However, we have the following concerns:

## **Conservative forecast**

As indicated throughout its Paper, AEMO is taking a conservative forecasting approach. We are concerned this will lead to more RIRs being issued and wider gap trading intervals, creating a significant risk for liable entities and realising the negative consequences listed above.

Further, the proposed approach of dealing with months within a reliability period that do not meet the threshold will result in many instances where months that do not meet the thresholds are included in gap periods (further details are provided in Table 2 below), leading to contracting beyond efficient levels. This will ultimately add significant costs for customers and will undermine the RRO policy's intent of encouraging reliable supply and reducing energy costs.

## Logic behind assumptions

The Paper is silent on the logic behind some of the assumptions used in the forecast, making it difficult to provide feedback on their appropriateness. We raise the following questions:

 What analysis has been undertaken to support the decision not to include Com\* projects into the forecast?
Given AEMO has access to historical information on Com\* projects it is appropriate to

analyse this data, create a probability matrix and apply it to future Com\* projects to account for these into the reliability forecast.

 On what basis are the arbitrary figures of 2% and 5%, LOLP exceedance, thresholds have been selected and have they been assessed against historical events to assess their validities – the Reliability Forecasting Methodology Issues Paper Addendum does not provide much in detail? 3. What are the reasons for limiting the number of RIRs to two<sup>2</sup>?

## Approach to months within reliability period that do not meet the threshold

In its Paper, AEMO proposed issuing one RIR in instances where there is no consecutive two-month period that does not meet the threshold<sup>3</sup>. In other instances, two RIRs will be issued<sup>4</sup>.

We understand the issuing of two RIRs in the later instances assumes gap periods are most likely to occur between 1 November and 31 March<sup>5</sup>. We agree with this assumption.

Our analysis shows that under the AEMO approach there will be 11 instances, out of 32 possible instances, where the RIR issued will include months that do not meet the thresholds. Refer to Appendix A for details. This will result in contracting beyond efficient levels and increasing energy costs.

While the Paper is silent on the reason for limiting the number of RIRs to two and assuming there is a logical reason for this decision, it is useful to consider another alternative approach and compare it to that proposed in the Paper in terms of flexibility and effectiveness in addressing the negative consequences and supporting the realisation of the additional benefits listed above, noting that:

- The higher the number of instances where two RIRs are issued, the more flexible and effective the approach will be; and
- The lower the number of instances where months not meeting the threshold are included in the RIR, the more effective the approach will be.

Table 1 below compares AEMO approach criteria to that of the alternative approach

| Table 1 – AEMO | ) approach | vs alternative | approach criteria |
|----------------|------------|----------------|-------------------|
|----------------|------------|----------------|-------------------|

| AEMO APPROACH   | ALTERNATIVE APPROACH   |  |
|---|--|--|
| Where there is no consecutive two-month period that <u>does not meet</u> the threshold – issue a single RIR | Where there is a consecutive period of one or more months that <u>do meet</u> the threshold – include the month(s) into a single RIR |  |
| Where there is a consecutive period of two (or more) months that do not meet the threshold – issue two RIR  | In all other cases – issue separate RIRs for each gap period   |  |

Appendix A compares the results of the two approaches across the 32 possible instances that can occur between 1 November and 31 March. Summary of the results are shown in Table 2 below

<sup>&</sup>lt;sup>2</sup> AEMO, Reliability Forecasting Methodology Issue Paper, April 2019, page 26, top dot point

<sup>&</sup>lt;sup>3</sup> AEMO, Reliability Forecasting Methodology Issue Paper, April 2019, page 25, last dot point

<sup>&</sup>lt;sup>4</sup> AEMO, Reliability Forecasting Methodology Issue Paper, April 2019, page 26, top dot point

<sup>&</sup>lt;sup>5</sup> We note If the gap period is beyond 1 November to 31 March (for example 1 October to 30 April) a possibility of issuing three RIRs will exist.

|   | AEMO<br>APPROACH | ALTERNATIVE<br>APPROACH |  |
|---|------------------|-------------------------|--|
| Number of instances where two RIRs are issued                                       | 5                | 16                      |  |
| Number of instances, where months not meeting the threshold are included in the RIR | 11 <sup>6</sup>  | Zero                    |  |

Table 2 above shows that the alternative approach provides more flexibility and is more effective than the approach suggested in the Paper, yet it is consistent with the Paper's approach of limiting the number of RIRs to two.

Note under the alternative approach there will be one instance where 3 RIRs can be issued (instance 11). While we do not see this as a reason for AEMO not to consider adopting the alternative approach, a way around it, to limit the number of RIRs to two, is for one RIR to cover the month of November and another RIR to cover the quarter January to March.

Flow Power, therefore, recommends that the alternative approach be adopted in the AEMO reliability forecasting methodology.

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

Yours sincerely

Furt

Matthew van der Linden Managing Director Flow Power

<sup>&</sup>lt;sup>6</sup> Refer to Appendix A, AEMO approach column, numbers in red.

# **Appendix 1**

## Possible instances of months that meet or do not meet the thresholds

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| Possible instances | Nov          | Dec          | Jan          | Feb          | Mar          |
|--------------------|--------------|--------------|--------------|--------------|--------------|
| 1                  | ×            | ×            | ×            | ×            | ×            |
| 2                  | ×            | ×            | ×            | ×            | ✓            |
| 3                  | ×            | ×            | ×            | $\checkmark$ | ×            |
| 4                  | ×            | ×            | ×            | $\checkmark$ | $\checkmark$ |
| 5                  | ×            | ×            | $\checkmark$ | ×            | ×            |
| 6                  | ×            | ×            | $\checkmark$ | ×            | $\checkmark$ |
| 7                  | ×            | ×            | $\checkmark$ | $\checkmark$ | ×            |
| 8                  | ×            | ×            | $\checkmark$ | ✓            | ~            |
| 9                  | ×            | $\checkmark$ | ×            | ×            | ×            |
| 10                 | ×            | ✓            | ×            | ×            | ✓            |
| 11                 | ×            | $\checkmark$ | x            | $\checkmark$ | ×            |
| 12                 | ×            | $\checkmark$ | ×            | ✓            | ✓            |
| 13                 | ×            | $\checkmark$ | $\checkmark$ | ×            | ×            |
| 14                 | ×            | $\checkmark$ | $\checkmark$ | ×            | $\checkmark$ |
| 15                 | ×            | $\checkmark$ | $\checkmark$ | $\checkmark$ | ×            |
| 16                 | ×            | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| 17                 | $\checkmark$ | ×            | ×            | ×            | ×            |
| 18                 | $\checkmark$ | ×            | ×            | ×            | $\checkmark$ |
| 19                 | ✓            | ×            | ×            | $\checkmark$ | ×            |
| 20                 | ✓            | ×            | ×            | ✓            | $\checkmark$ |
| 21                 | ✓            | ×            | $\checkmark$ | ×            | ×            |
| 22                 | ✓            | ×            | ✓            | ×            | ~            |
| 23                 | ✓            | ×            | $\checkmark$ | $\checkmark$ | ×            |
| 24                 | ~            | ×            | ~            | ~            | ✓            |
| 25                 | ✓            | ✓            | ×            | ×            | ×            |
| 26                 | ✓            | ✓            | ×            | ×            | ~            |
| 27                 | $\checkmark$ | $\checkmark$ | ×            | $\checkmark$ | ×            |
| 28                 | ✓            | ~            | ×            | ✓            | ✓            |
| 29                 | ✓            | $\checkmark$ | $\checkmark$ | ×            | ×            |
| 30                 | $\checkmark$ | $\checkmark$ | $\checkmark$ | ×            | ✓            |
| 31                 | ~            | $\checkmark$ | $\checkmark$ | $\checkmark$ | ×            |
| 32                 | ✓            | ✓            | ✓            | ✓            | ✓            |

| Number of Reliability<br>Instruments Requests |                    |  |
|---|--------------------|--|
| AEMO<br>approach                              | Suggested approach |  |
| 1   | 1                  |  |
| 1   | 1                  |  |
| 1   | 2                  |  |
| 1   | 1                  |  |
| 1   | 2                  |  |
| 1   | 2                  |  |
| 2   | 2                  |  |
| 1   | 1                  |  |
| 1   | 2                  |  |
| 1   | 2                  |  |
| 1   | 3                  |  |
| 1   | 2                  |  |
| 2   | 2                  |  |
| 2   | 2                  |  |
| 2   | 2                  |  |
| 1   | 1                  |  |
| 1   | 1                  |  |
| 1   | 1                  |  |
| 1   | 2                  |  |
| 1   | 2                  |  |
| 1   | 2                  |  |
| 1   | 2                  |  |
| 2   | 2                  |  |
| 1   | 1                  |  |
| 1   | 1                  |  |
| 1   | 1                  |  |
| 1   | 2                  |  |
| 1   | 1                  |  |
| 1   | 1                  |  |
| 1   | 1                  |  |
| 1   | 1                  |  |
| 0   | 0                  |  |

month does meet the threshold

✓ month does not meet the threshold

Note:

- Under the AEMO approach column, the numbers in red represent 11 instances where one RIR will be issued that includes at least one month that does not meet the threshold.
- Under the alternative approach, the RIRs will not include any month that does not meet the threshold.