

AEMO (FRG) DRAFT 2024 ELECTRICITY CONSUMPTION AND DEMAND SIDE PARTICIPATION FORECASTS FOR THE 2024 ESOO

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INTRODUCTION

The Energy Users' Association of Australia (EUAA) is the peak body representing Australian commercial and industrial energy users. Our membership covers a broad cross section of the Australian economy including significant retail, manufacturing, building materials and food processing industries. Combined our members employ over 1 million Australians, pay billions in energy bills every year and in many cases are exposed to the fluctuations and challenges of international trade.

Thank you for the opportunity to make a submission as a member of the Forecast Reference Group (FRG) under AEMO's Draft 2024 Electricity Consumption and Demand Side Participation Forecasts.

AEMO has created models for electricity consumption and DSP as inputs into the 2024 Electricity Statement of Opportunities (ESOO) and presented these to the FRG. While we agree or have no opinion on most of the modelling and the assumptions behind those models, we have prepared this submission to recommend amendments to some assumptions as they relate to modelling of potential actions of our members, large commercial and industrial energy consumers.

While the assumptions used by AEMO that lead to systematic errors in the ESOO do not have as significant a financial impact on consumers as similar sized errors in ST PASA or PD PASA (which influence wholesale prices and directions costs), we are aware that NSPs base their planning timeframe (and therefore a component of their regulatory pricing reset proposals) on the ESOO. Additionally, governments also respond to challenges identified in the ESOO with interventions, that either cost the taxpayer or consumers. We therefore consider that the assumptions used in the modelling used as inputs to the ESOO should be as accurate as possible and provide a balanced perspective of the NEM.

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We understand that as part of its surveys of Large Industrial Loads (LIL), AEMO receives data on downside risks and price sensitivity, however AEMO's modelling appears to only use this data for the Progressive Change scenario. By only modelling these downside risks and price sensitivities in the Progressive Change scenario, AEMO is sending a signal to the market, and politicians, that there will be no LIL closures under the other two scenarios. We would suggest that this is simply not the case, and all three scenarios will carry downside risks and price sensitivities.

To correct this, we would preferably like to see modelling of potential LIL closures across all three scenarios to be able to compare "like-for-like". However, should the form of the data collected make this difficult, we would accept LIL closures as a sensitivity analysis as a bare minimum. This approach will demonstrate to the market that there

are different risks associated with each of the different scenarios, as opposed to the current optic that AEMO is portraying that “the Progressive Change scenario is the only scenario with the risk of LIL closures”.

AEMO’s modelling for LIL closures challenges the findings for hydrogen consumption modelling and the sector coupling assumptions, that hydrogen will have some domestic hydrogen consumption and no green steel under the Step Change scenario, and large quantities of hydrogen consumed domestically under the Green Energy Export scenario and that only this scenario will result in Green Steel production in Australia.

We understand that AEMO’s hydrogen consumption modelling follows the CSIRO/Climateworks 2022 multi-sector modelling (MSM), rebased to 2024 and adjusted for the 2024 ESOO LIL Surveys. The “sector coupling” formula in the 2022 MSM, which was correct at the time, does not take into account the significant corporate policy shifts over the last 2 years, not only in response to international government policies, but in response to their own internal and investor pressures. Additionally, we understand that the AEMO has a very low return rate for the LIL survey, potentially skewing AEMO’s perspective of LIL. EUAA has several members who will likely be consuming large quantities of hydrogen under any of the three scenarios.

We suggest that AEMO perform sensitivity analyses of hydrogen consumption across all scenarios, to provide an “error” band to accommodate the various different corporate decisions that will be made in the coming years.

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We support AEMO in its decision to reduce the number of modelled DSP price trigger ranges from 6 down to 3, in recognition that at this point in time there are not enough observations to justify the 6 price trigger ranges (i.e. not enough observations in each range to provide significant confidence of future predictions), and the 3 proposed ranges will provide a more accurate indication with enough points in each range to provide confidence in the predictions.

We have previously stated that the current proposed CER rules are too complex and the compliance cost too high for a significant response from the commercial and industrial sector. It was pleasing to hear that the 2024 ESOO will focus on a residential response (through VPPs, price responsive EV charging etc) rather than a significant commercial/industrial consumer response. With the way the existing and proposed rules are currently written, it is more likely that the commercial and industrial consumers will respond to reliability markets, which AEMO has recognised.

To further develop the modelling for reliability responses, but also price responsive responses, EUAA highly recommends that AEMO establish methodologies to better understand the breakdown of each response by NMI customer group, rather than the current “Program” based classification. We believe that understanding the split of the response between customer groups will provide a far more accurate model, through having a better understanding of both the maximum available response and the trigger for each of the customer groups.

While we have previously argued for all DSP to be included in a single model, rather than scattered across “demand forecasts”, “DSP forecasts” and “supply forecasts”, the information provided to the FRG that explained the logic behind this decision by AEMO (i.e. that these are “regularly scheduled demand flexibility”, “price responsive (to wholesale or reliability markets)” and “demand flexibility from CER” respectively) has alleviated our concern that

total DSP was not contained in a single model. We request that, in future, AEMO provide similar detail into its decision making to its stakeholders to make consultation more efficient and effective.

CONCLUDING REMARKS

As we have stated previously, we believe that AEMO forecasting needs to have a feedback loop, testing the accuracy of the forecasting against actual outcomes, and whether the expected market response actually occurred. This ex-post review is critical to continuous improvement of forecasting methodology leading to more reliable outcomes and potentially lower costs for consumers.

We believe the first step in the feedback loop for the ESOO inputs is to ensure that the assumptions used in the modelling which is then used as inputs to the ESOO should be as accurate as possible and provide a balanced perspective of the NEM and ensure that governments and network responses to the ESOO are efficient and prudent.

The EUAA welcomes further discussions with us and our members around the issues raised in this submission.

Do not hesitate to be in contact should you have any questions.



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