Consumer advocate verbal submission – 2025 IASR scenarios consultation

Introduction

AEMO published a 2025 Inputs Assumptions and Scenarios Report (IASR) scenarios consultation paper[1] on 17 July 2024. To support consumer and advocate involvement, AEMO held a verbal submission session for consumer advocates on 12 August 2024. This written record, approved by submitters, will be considered alongside other written submissions.

Submitters:

Name	Organisation	Name	Organisation
Sarah Lawley	Canberra Data Centres (**CDC**)	David Prins	Etrog Consulting (**EC**)
Craig Phasey	Energy Flex (**EF**)	Jennifer Brownie	Queensland Electricity Users Network (**QEUN**)

Submission topics

Consumer advocates submitted comments on the following topics.

1. Scenario plausibility
2. Scenario parameters
3. CER
4. Sensitivities
5. Policy

1 Scenarios plausibility

- **QEUN:** There can be a continuation of 3 scenarios as long as they are all plausible. Run the "reality ruler" through all parameters before adopting them. The current scenario set needs a fourth, *Slow Change,* scenario to capture current economic conditions.
- **EC:** AEMO should publish a heat map or analysis on how crucial each stakeholder segment is to enable each scenario. This should show what's expected in each scenario from energy consumers among other stakeholders. Each scenario should set out what is the role of everybody (consumer vs. industry, etc.) in achieving the end goal in that scenario. This will enable assessment of the extent to which the expected investments and behavioural actions of energy consumers and others are plausible to achieve. In the final ISP, only plausible scenarios should be reported.
- **QEUN:** *Step Change*, as the main scenario, needs to be more plausible and adopt the middle view. Both Electrification and CER investments should be moderate, not high. CER coordination can remain moderate. PV uptake is the only aspect of CER that could be high, until subsidies and feed in tariffs are potentially completely or partially removed in the 2030s, when it could fall to a Low PV uptake.

2 Parameters

- **EC:** The current scenarios parameters do not work well as a set. Some parameters are taken as given, while others are influenceable by the energy industry. For example, why are Virtual Power Plant (VPP) registrations by consumers linked with a Green Energy Exports future dictated by energy policy and energy industry? It would be better to use the scenarios spread to set overall

[1] See https://aemo.com.au/consultations/current-and-closed-consultations/2025-iasr-scenarios-consultation

economic and industrial futures and use sensitivities to test inputs and assumptions in regard to the investments and behaviours of energy consumers. Examples include Electric Vehicle (EV) uptake and charging behaviour, VPP take-up and use, and Consumer Energy Resources (CER) uptake and coordination more generally, which are energy consumer led mechanisms that are applicable to all scenarios. Sensitivities should test these "consumer inputs" across all scenarios and provide useful information to policy makers.

- **QEUN:** Subsidy availability should be a parameter, as it is a large driver of energy outcomes.
- **QEUN:** Demand Side Participation (DSP) should include individual consumer responses. The traffic light system, where consumers receive text messages to reduce consumption in times of grid stress, could have a big impact on demand outcomes. If DSP must remain industry-only, perhaps "consumer response" should be another parameter.
- **EF:** Consumer demand can, and will be, flexible and will change the way the market works. Consumer response should be a parameter, where consumers respond to market prices. This can be forward looking too, where consumers respond to tomorrow's predicted price profile, just the same as we plan for tomorrow based on the weather forecast.
- **EF:** For scenario purposes, the load profile (flat load with no flexibility, a shaped load with no flexibility, or a dynamic shaped load) rather than demand type (data centres, new manufacturing, new industries) that is important.
- **CDC:** The large load categories behave in different ways: "Industrial" is typically large flat loads and "commercial" loads tend to vary. Hydrogen and Digital Infrastructure load forecasts may change significantly over time and should be updated regularly and modelled on their own.
- **QEUN:** Data centres and desalination plants will increase significantly in *Step Change*. Therefore, there should be separate categories for energy consumption of traditional industrial loads and for the desalination plants expected to emerge near large population centres.

3 CER

- **QEUN:** The way that AEMO forecasts CER and labels a parameter "CER coordination" indicates to consumers that AEMO plans to control CER. AEMO should explain what this term means in relation to scenarios.
- **EC:** Distinguish between (a) CER investment and (b) how installed CER is operated (managed, controlled, orchestrated, co-ordinated, self-directed, none of the above). These should be two separate parameters and should be variable across all scenarios. Making them variable across scenarios would (a) make the scenarios more realistic, and (b) enable trade-off of CER (small-scale investments on the customer's side of the meter) against larger-scale grid-connected investments. The ISP model should be able to determine in each scenario which combination of smaller-scale CER vs larger-scale grid-connected investment is least cost overall.
- **EF:** CER currently focusses on energy technologies (PV, batteries, externally controllable hot water etc) but does not consider the total consumer load to be an energy asset. We can show consumers voluntarily load shifting in response to price incentives and a smaller set load shimmying dynamically to minimise costs. This is different to demand response because it aims to reduce prices overall, rather than to maintain prices at the highest sustainable level.
- **EC:** Self-directed consumer flexibility should be a separate parameter to coordinated CER.

4 Sensitivities

- **EC:** AEMO should consult on which sensitivities are modelled.

- **EF:** All scenarios seem to assume that the current load profile is fixed, with changes coming from industrial developments, growth or technology changes. We are educating users to understand the daily cost profile of energy and match their use to this profile. As this progresses, the use profile will shift from peak to day pre-emptively. Additionally, there will be dynamic price following load, but at a smaller volume. We recommend doing a sensitivity test by load shifting 10% and then 30% of existing peak load to daytime, and seeing how that changes the results.
- **EF:** A sensitivity should test a percentage of all load being flexible, and following spot prices. For simplicity, this should be on a 30-minute basis, to better align with the consumer experience.

5 Policy

- **EC:** The ISP assumes that policies in place at the time of finalisation of each biennial ISP will remain unchanged till 2050. Obviously, this is not true. Policies (and law) will change in that timeframe, though the details of those future changes are currently unknown. The ISP framework should model a range of policy variations. This would enable the ISP model to achieve its goals through a combination of policy and investment, rather than being required to achieve its goals based solely on investments in an imaginary environment of unchanging policy. An integrated system plan should thereby integrate policy and investment and would provide feedback and inform lawmakers and policymakers alongside potential investors. Further, the opportunities and threats of policy change influence investor confidence, and assuming that those opportunities and threats do not exist is unrealistic.
- **QEUN:** The ISP should include Nuclear as part of the supply mix. Nuclear will be an important part of the ISP if there is a change in the 2025 federal election.
- **QEUN:** There should be a scenario that includes nuclear as part of the generation mix. This is necessary as nuclear could be an important part of the ISP if there is a change of government at the 2025 federal election. A change of federal government means energy consumers need to know how the inclusion of nuclear in the generation mix would impact on the integrated system plan, as in mid-2025 AEMO would be halfway through its consultation on the 2026 ISP. It would be irresponsible for AEMO not to model the potential impact of nuclear as all scenarios should be plausible. It is plausible that a change of government could result in nuclear being part of the generation mix.