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7 November 2024

Ms Anna Collyer Chair Australian Energy Market Commission

By online submission

Dear Ms. Collyer,

Improving consideration of demand-side factors in the ISP – Draft Determination ERC0396

The Australian Energy Market Operator (AEMO) welcomes the opportunity to comment on the AEMC's draft determination: *Improving the consideration of demand side factors in the ISP*, in response to the rule change request submitted by The Honourable Chris Bowen, Minister for Climate Change and Energy.

The Integrated System Plan (ISP) plays a critical role in guiding investment in electricity infrastructure to meet energy demand in the NEM and to meet Australia's emissions reduction targets. AEMO welcomes the opportunity to provide greater transparency on the assumptions and analysis underpinning the ISP to ensure that the outputs are reliable and the decisions that rely on it are well-informed.

AEMO broadly supports the draft electricity rule subject to some proposed changes in drafting as described in Appendix 1 below.

Concurrent to this rule change process, AEMO will be consulting on the methodology for the 2026 ISP which outlines the proposed approach for implementing the actions identified by Energy Ministers in response to the Review of the ISP. The ISP Methodology Issues Paper was publicly released on 23 October 2024 and is available here: https://aemo.com.au/consultations/current-and-closed-consultations/2026-isp-methodology.

If you would like to discuss anything further, please contact Hannah Heath, AEMO Group Manager – Strategic Market Reform (hannah.heath@aemo.com.au).

Yours sincerely,

Violette Mouchaileh

Executive General Manager - Reform Delivery

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APPENDIX 1: AEMO'S COMMENTS ON THE DRAFT DETERMINATION

1. Identification of ISP development opportunities on the distribution network

AEMO supports the proposed changes that aim to provide more information and analysis in the ISP about its assumptions for the uptake and impact of demand side factors on the efficient development of the power system.

AEMO supports the proposed requirement to publish a demand side factors statement as an appendix to the ISP. The detailed inputs and assumptions relating to demand side factors would be published as part of the IASR.

The draft new clause 5.22.6A provides:

- "(a) The purpose of the demand side factors statement is to provide information about:
 - (1) ISP development opportunities relating to distribution assets; and
 - (2) the potential for demand side factors to affect the efficient development of the *power* system.
- (b) In relation to ISP development opportunities, the demand side factors statement must:
 - (1) identify the ISP development opportunities relating to *distribution assets* that *AEMO* has identified based on the information provided to *AEMO* by *Distribution Network Service Providers* under paragraph (e) or available to *AEMO* from other sources;
 - (2) identify which of those ISP development opportunities *AEMO* assumed, for the *Integrated System Plan*, will be developed;
 - (3) describe how *AEMO* considers the ISP development opportunities referred to in subparagraph (2) will contribute to the efficient development of the power system; and
 - (4) include a summary of the assumptions, inputs and scenarios used by *AEMO* in identifying the ISP development opportunities referred to in subparagraph (2)."

AEMO's view is that it is not appropriate or possible, for the ISP to identify development opportunities relating to individual *distribution assets* (defined in the NER to mean distribution system apparatus, equipment and plant, including lines and substations), because their optimal timings are influenced by highly localised drivers. AEMO proposes to broadly account for and identify the need for upgrades at the distribution network level in the ISP, but not identify individual asset augmentations or the sequence and/or timing for when they should be done at a granular level. AEMO requests that the new requirement for the demand side factors statement to provide information about distribution network investment is not described in the rule as "ISP development opportunities" as this normally refers to the development of an individual asset or project.

AEMO therefore requests a change to the drafting to the proposed new clause 5.22.6A as follows:

- "(a) The purpose of the demand side factors statement is to provide information about:
 - (1) the potential for demand side factors to affect the efficient development of the *power* system; and
 - (2) the potential scale of distribution network investment that may be required to realise the demand side assumptions included in the *Integrated System Plan*.
- (b) In relation to distribution network investment, the demand side factors statement must:



- (1) identify the distribution network investment that *AEMO* has identified based on the information provided to *AEMO* by *Distribution Network Service Providers* under paragraph (e) or available to *AEMO* from other sources;
- (2) identify which of that distribution network investment *AEMO* assumed, for the *Integrated System Plan*, will be developed;
- (3) describe how *AEMO* considers the distribution network investment referred to in subparagraph (2) will contribute to the efficient development of the power system; and
- (4) include a summary of the assumptions, inputs and scenarios used by *AEMO* in identifying the distribution network investment referred to in subparagraph (2)."

However, AEMO should still be able to include relevant information in the demand side factors statement about distribution network investment which relate to individual distribution assets in the *optimal development path*, or which AEMO considers is relevant to include in the ISP, in accordance with NER clause 5.22.6(a)(5) and (b)(1). AEMO considers that the amended drafting of proposed new clause 5.22.6A(b)(2) would enable this.

AEMO is currently consulting on the proposed approach to improving consideration of demand side factors in the ISP from 2026. The ISP Methodology Issues Paper can be viewed here: https://aemo.com.au/consultations/current-and-closed-consultations/2026-isp-methodology

Broadly, AEMO proposes to:

- represent existing distribution network capabilities and future augmentation opportunities through extensive consultation with DNSPs, and
- allow the ISP model to consider opportunities for distribution network investment to facilitate increased operation from CER and other distributed resources.

The draft determination describes the proposed requirement that DNSPs provide, in their DAPR, a brief description of the status of each ISP development opportunity relating to the distribution system of the DNSP identified by AEMO in the most recent demand side factors statement and expected progress over the forward planning period. In practice, any opportunities for distribution network investment identified in the ISP are likely to be at a higher level of granularity than that which would be appropriate to be reported on in the DAPR. AEMO's view is that it would be helpful to make this distinction in the final determination.

2. Demand side factor uncertainties

The draft clause 5.22.6A(c) would require AEMO to, in the demand side factors statement:

"(3) include sensitivity analysis that considers the effect on the development of the power system if the impact of the demand-side factor (or combination) is less than, and greater than projected"

AEMO does not consider it appropriate or workable for a sensitivity analysis to be done for each demand side factor assumption. AEMO requests that, instead of this requirement, the final rule should require the demand side factors statement to include information available to AEMO about demand side factor uncertainties that may affect the development of the power system, including if any demand side factor (or combination of factors) is less than or greater than projected.



Similarly, the projection of the impact of demand side factors required by draft clause 5.22.6A(c)(2)(i) is unlikely to be done for individual demand side factors, as AEMO considers many demand side factors with different degrees of quantification. AEMO intends to forecast aggregate impacts across a combination of factors and will undertake sensitivity analysis on the demand side factors which are considered most critical. AEMO therefore requests the final rule should instead require the demand side factors statement to include a projection of the impact of demand side factors selected by AEMO on the efficient development of the power system during the period for the development of the power system to which the Integrated System Plan relates.

3. Assumptions, inputs and scenarios for identifying ISP Development Opportunities

The draft rule states that the demand side factors statement must (among other things) include a summary of the assumptions, inputs and scenarios used by AEMO in assessing the ISP development opportunities related to distribution assets that it has assumed will proceed. The assumptions, inputs and scenarios will be the same as those consulted on in the IASR, therefore AEMO considers it unnecessary and duplicative to repeat this information in the demand side factors statement. AEMO requests that the requirement in the draft rule to repeat this information in the demand-side factors statement is removed.

4. Demand side factors statement - relevant period

The proposed clause 5.22.6(9) requires the ISP to include a demand side factors statement "covering the period relevant to the *Integrated System Plan*". AEMO prefers the period to be described as "the period of development of the power system to which the Integrated System Plan relates". It is relevant for AEMO to consider historical data in preparing the ISP, but the relevant period referred to here is the 20+ year planning horizon covered by the ISP. This change would clarify this policy intent.

5. Additional transitional provisions in relation to consultation on changes to AEMO's ISP Methodology and preparation of Demand Side Factors Information Guidelines required as a result of these rule changes

AEMO requests that additional transitional provisions be included in the final rule to provide that:

- to the extent that AEMO has taken steps to develop the Demand Side Factors Information Guidelines in accordance with its anticipated obligations under proposed clause 5.22.6A(j) and (k) prior to the commencement of the Amending Rule, AEMO is taken to have satisfied the relevant requirements in proposed clause 5.22.6A(j) and (k) and 11.[XXX].2 upon the commencement of the Amending Rule;
- to the extent that AEMO has taken consultation steps under NER clause 5.22.8 to update the ISP Methodology to take account of the Amending Rule prior to the commencement of the Amending Rule, AEMO is taken to have satisfied the relevant requirements of both clause 5.22.8 and proposed clause 11.[XXX].3 upon the commencement of the Amending Rule.