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1 May 2023

Ms Merryn York
Executive General Manager, System Design
Australian Energy Market Operator (AEMO)

Via email: ISP@aemo.com.au

Dear Ms York

Update to the ISP Methodology Consultation Paper

AusNet welcomes the opportunity to make a submission in response to the AEMO's update to the Integrated System Plan (ISP) Methodology Consultation Paper (the Consultation Paper).

AusNet is the largest diversified energy network business in Victoria with over $11 billion of regulated and contracted assets. It owns and operates three core regulated networks: electricity distribution, gas distribution and the state-wide electricity transmission network, as well as a significant portfolio of contracted energy infrastructure. It also owns and operates energy and technical services businesses (which trade under the name "Mondo").

The proposed updates to the ISP Methodology respond to issues raised by stakeholders through the development of the 2022 Integrated System Plan (ISP) and 2023 Inputs Assumptions and Scenarios Report (IASR). AusNet welcomes AEMO's proactive consideration of these issues.

AusNet has responded to four of the eight proposed updates to the ISP Methodology. AusNet supports recognising uncertainty associated with transmission project lead times to the extent it helps manage risks to timely transmission delivery. This recognises that better reflecting uncertainty is not the ultimate objective, and may have a significant impact on the order and timing of projects in the ISP. We are concerned that the two identified options to give effect to this update may have unintended consequences. This includes the potential for either update to reduce the urgency to deliver actionable ISP projects and information available within the ISP's model to assess the net-benefit of delivering a project earlier. AusNet suggests that further work is required to demonstrate whether the proposed update is preferred to the status quo. If the update does proceed, we suggest a broader range of delay risks are considered, and the decision to adjust the EISD is consulted on and agreed to by the relevant TNSP.

The Australian Government's decision to incorporate emissions reduction in the national electricity objectives (NEO) is a significant and necessary step to incentivise and enable investment in energy infrastructure that will deliver on Australia's emissions reduction target. The ISP Methodology should be updated to reflect the intent of this proposal. This includes incorporating carbon emissions reduction as a policy input, within scenarios, and as an explicit value in the ISP's cost benefit analysis (CBA) as soon as possible. A key input into the ISP methodology will be a value of carbon emissions (e.g. price on carbon). AusNet recommends the value of carbon emissions is developed and updated by a single market body, through industry consultation, to apply to all investment decisions related to emissions reductions, including in the ISP Methodology.

AusNet welcome the AEMO's proposed investigation of evidence-based consumer risk preference metrics in the ISP. AusNet sees opportunities for the ISP to consider whether consumers see value in bringing forward early works for a wider set of ISP projects so to better manage the risk of ISP project delays to consumers. We recommend the

draft ISP Methodology document be updated to reflect the need to publicly consult consumers on draft metrics rather than rely solely on professional judgement. AusNet also supports REZ transmission limit formulations being updated to include fossil-fuelled generation as specific terms.

Finally, we reflect that the Consultation Paper is rather brief in length making it difficult to fully engage with the consultation questions. In the future we recommend AEMO includes further information about its strategic objectives as well as the design of and rationale for its preferred solutions. AusNet also considers stakeholders would benefit from further consultation on the Consultation Paper's more complex updates given their potential impact on the 2024 ISP.

These points are addressed in further detail in the attached submission. If you have any questions, please contact Jason Jina, Energy Policy Lead by email at jason.jina@ausnetservices.com.au.

Sincerely,

Jack San
Acting General Manager, External Affairs & Government Relations
AusNet

AusNet

AusNet submission in response to the Update to the ISP Methodology Consultation Paper

Australian Energy Market Operator (AEMO)

Monday, 1 May 2023

1. Introduction

AusNet Services Limited (AusNet) is pleased to provide our response to the AEMO's update to the Integrated System Plan (ISP) Methodology Consultation Paper (the Consultation Paper).

We welcome the decision to update the ISP Methodology and recognise its importance to signalling efficient and timely transmission, generation and storage investment in the NEM.

Our submission responds to four of the eight proposed updates to the ISP Methodology. More specifically it:

- Supports recognising uncertainty associated with transmission project lead times to the extent it helps manage risks to timely transmission delivery (Section 2).
- Agrees that the ISP Methodology should be updated to reflect the intent to incorporate emissions reduction in the NEO (Section 3)
- Welcomes evidence-based consumer risk preference metrics in the ISP and stresses the need to consult stakeholders on specific metrics (Section 4).
- Support an update to allow fossil-fuelled generators to be included in REZ transmission limit formulations (Section 5).

2. Transmission project lead times

AusNet supports recognising uncertainty associated with transmission project lead times to the extent it helps manage risks to timely transmission delivery.

In our submission to the Draft IASR, AusNet commented that there is currently limited information available in the IASR or ISP about whether the timeframes to reach commissioning dates for major transmission projects are reasonable given known and credible risks in the planning and delivery process. This recognised the implications of delivering ISP projects late is likely to be significant (e.g. higher prices, lower reliability, continued reliance on fossil fuels and supply shortfall).

We suggested there is role for the ISP to help manage these credible risks and identified several changes worthy of further consideration. This included commencing preparatory activities for future ISP projects earlier to build optionality into the optimal development path (ODP) and requesting more information from transmission proponents about the development timeline of each Actionable ISP project.

Consistent with the above comments, AusNet supports recognising uncertainty associated with transmission project lead times but only to the extent the update helps manage risks to timely transmission delivery. The below section provides a detailed explanation of our position.

The current methodology for calculating transmission project lead times provides 'unfiltered' information about the optimal timing for ISP projects.

AusNet agrees that the ISP is strongly affected by the lead time and earliest in-service dates (EISD) assumed for transmission projects. This is because a project is only "actionable" where the ISP's cost benefit analysis (CBA) concludes the project should proceed at the EISD (or at least within EISD+ 1 year). Actionable status is important because it signals the project provides net-benefit to consumers and enables a range of regulatory and early works activities to begin.

The EISD represents the earliest date a project can be completed. As a result it sets the minimum number of years the model must wait before the project can be included in the ODP. This means that the ISP's CBA can only calculate the net-benefit of commissioning the project from this date until the end of the modelling time horizon.

For example, in the 2022 ISP EISD were categorised as short (1-3 years), medium (3-5 years) and long (beyond 5 years). Credible options identified as having a 'medium' or 'long' EISD were, for the purposes of the ISP's CBA, unable to model their benefits for three years and five years respectively. This meant that stakeholders had information about the optimal timing to build an ISP project for almost all of the modelling time horizon.

While the proposed updates may better reflect uncertainty of transmission project lead times, they may also have unintended consequences.

While it is desirable for EISD's to incorporate the most up to date information about project delivery timelines and delay risks, better reflecting uncertainty in itself is not the ultimate objective and may have unintended consequences.

AusNet is concerned either of the two identified options to implement this update may:

- **Be perceived as reducing the urgency to deliver actionable ISP projects as soon as possible**. Amending project lead times to reflect project delay factors is likely to extend the EISD's of ISP projects beyond their current timeline. There is a risk that a later EISD may present an unrealistically optimistic view about when actionable ISP projects are required to manage supply-demand deficit following coal-fired retirements.
- **Reduce potential information available to assess the net-benefit of delivering a project earlier.** As discussed earlier, the ISP's CBA can only calculate the net-benefit of commissioning a project from its EISD to the end of the modelling time horizon. Therefore, if an actionable ISP project's EISD is extended to reflect project delay factors, stakeholders may have access to much less information about the optimal timing to build the project as the project cannot be built for a larger portion of the modelling time horizon.

  For example, there may be benefit to consumers from TNSPs or jurisdictional planning bodies taking actions that mitigate the risks of project delay and shorten its EISD (e.g. commence preparatory works or early works earlier than anticipated to create optionality in the ODP). However due to an extension to its EISD, this information may not be available for TNSPs or jurisdictional planning bodies.

AusNet notes the update may also result in some future ISP projects being classified as actionable sooner than would occur under the current ISP methodology. This is because projects within each least cost development pathway are actionable if their optimal timing aligns with the EISD for that project (or at least within EISD+ 1 year) and this is more likely if a future ISP project's EISD is extended. In this context, the update may build greater optionality and risk margin into the ODP by allowing TNSPs to investigate a broader scope of projects earlier.

While preliminary in nature, the above reflections suggest adjusting EISDs could have a significant impact on the preferred timing of ISP projects. In some circumstances, the proposed update may lead to the ISP selecting a development path that is less optimal or efficient for consumers than would occur under the current approach.

If the update does proceed, AusNet suggests a broader range of delay risks are considered, and the decision to adjust the EISD is consulted on and agreed to by the relevant TNSP.

AEMO may wish to proceed with the update despite the above concerns. If either option is introduced, AusNet suggests AEMO:

- **Consider a broader range of delay factors, recognising some may be project specific.** The planning and delivery of major transmission infrastructure is a long and complex process. There are range of factors that can cause delays to major transmission projects, some of which may be project specific. AusNet suggests AEMO consider the following:
  - **Regulatory risk:** The risk that a project is delayed by slower than expected regulatory approvals process (e.g. RIT-T or feedback loop.
  - **Community acceptance risk:** The risk that community understanding and confidence in a project is low, impacting acceptance of the project and delaying associated development activities.
  - **Land and easement risk:** The risk that a project is unable to obtain the land and easements required to construct the project along its preferred route.
  - **Procurement risk:** The risk that a project is delayed due to administrative tendering and contract management processes.
  - **Environmental and planning risk:** The risk a project is unable to obtain federal or jurisdictional planning and environmental approvals. AusNet notes these approvals primary vehicle for assessing whether a project will achieve a balance of economic, social and environmental outcomes. Without these approvals it is not possible to proceed to construction.
  - **Supply chain risk:** The risk a project is unable to acquire long lead time equipment, particularly for items in high demand internationally.
  - **Workforce risk:** The risk a project is unable to acquire sufficient labour, particularly specialist resources.
- **Recognise that there are limitations in accurately measuring the impact of each delay factor and EISD's is likely to change over time.** There is currently not enough completed projects to objectively quantify EISD's. In practice, uncertainty associated with major transmission projects is reduced over time. A project's actionable ISP status allows for range of activities to commence, enabling greater accuracy over a project's costs, benefits, risks and ultimately timing. Any update to project EISD's should reflect these limitations.
- **Seek agreement of the relevant TNSP before finalising the EISD.** The draft update to the ISP Methodology document proposes AEMO apply its own judgement and assessment to finalise the EISD. AusNet does not support this approach. As the party responsible for delivering on the finalised EISD, TNSPs are uniquely placed (and resourced) to advise on the practicalities of bringing forward or delaying EISD's of major transmission infrastructure. We recommend AEMO amend the methodology to require agreement be reached with the relevant TNSP before finalising the EISD.
- **Require AEMO to consult publicly on EISD's before their application in the ISP Methodology.** The draft update ISP Methodology document proposes AEMO "endeavour to" consult publicly on EISD's before their application in the

ISP Methodology. Given the importance of EISD's to ISP outcomes, AusNet suggests this be changed to a requirement.

The comments above suggest that better reflecting uncertainty of project EISD is complicated. Updated EISD's are likely to have a material impact on the order and timing of projects in the ISP. At the same time stakeholders may have limited confidence these updated EISD's are in fact accurate given the range of delay factors at play and lack of accurate data.

AusNet suggests that further work is required to demonstrate whether the proposed update is preferred to the status quo. It may be better to consider any update to EISD's as part of AEMO's more fulsome four-year review of the ISP Methodology. This approach would enable market bodies to explore a more holistic set of methodological and rule changes that better consider the interrelationship between EISD's and other elements of the ISP framework. This could include changes to the definition of EISD's, ISP projects status and cost-benefit analysis framework.

3. Value of carbon emissions reduction

We agree the ISP Methodology should be updated to reflect the intent to incorporate emissions reduction in the NEO.

AusNet strongly supports the Australian Government's proposal to incorporate emissions reduction as a new component in the national electricity objectives (NEO). The proposal is a significant and necessary step towards incentivising and enabling investment in energy infrastructure that will deliver on Australia's emissions reduction targets.

The Consultation Paper proposes to amend the ISP Methodology to incorporate the possibility of using a value of carbon emissions in the capacity outlook modelling, and additional class of market benefit in the ISP's CBA. AusNet supports AEMO's proposed approach and provides the following thoughts for such time when the NEO amendments are in place and further consultation is appropriate:

- **Market bodies should incorporate carbon emissions as a policy input, within scenario and as an explicit value in the ISP's CBA as soon as possible.** The earlier a decision is made, the early emissions can be factored as an additional class of market benefit to guide all transmission planning decisions that impact consumers.
- **Emissions should be valued consistently by a single market body.** A key input into decision making around investments that reduce carbon emission will be a value of carbon emissions (e.g. a price on carbon). To ensure consistency in decision making among market bodies and to provide certainty to investors, it is important there is a consistent value that can be used by all market bodies. Hence we do not consider the ISP Methodology is the right mechanism to derive a value for carbon emissions. Rather, this value should be developed and updated by a single market body (such as the Australian Energy Regulator (AER)) and subject to robust industry consultation. We believe the AER would be well placed to balance the value of carbon emission against other NEO objectives to support an orderly and affordable transition to net-zero (e.g. price, quality, safety, reliability and security of supply)..
- **Any update to the ISP Methodology should align with the intent of the Australian Government's proposal to capture all public commitments related to emissions reduction.** AusNet notes that the Australian Government proposal to incorporate emissions reduction includes any government public commitments that are directly related to (or likely to contribute to) emissions reduction, including policies that are not legislated. The 2024 ISP should be ready to align with the intent of this final legislative amendments. We note this may require updates to both the ISP Methodology and public policy criteria set out in NER 5.22.3(b).

4. Consumer risk preferences

We welcome evidence-based consumer risk preference metrics in the ISP and stress the need to consult stakeholders on specific metrics.

AusNet strongly agrees that quantification of consumer risk preferences can be improved and should inform the selection of the ODP. We welcome AEMO's investigation of evidence-based consumer risk preference metrics in the ISP.

The Consultation Paper suggests AEMO has yet to decide what metrics are appropriate to measure consumer risk preferences. AusNet sees opportunities for AEMO to consider whether consumers see value in bringing forward early works for a wider set of ISP projects so to better manage the risk of ISP project delays to consumers. This recognises that consumers bear greater risk from transmission infrastructure arriving late than too early, and that early works provides an insurance to consumers by enabling projects to proceed from planning to delivery much more quickly than could otherwise occur.

We also see value in consumers having the opportunity to inform the specific metrics designed to capture their preferences. We recommend the draft update ISP Methodology document be updated to reflect the need to publicly consult consumers on draft metrics rather than rely solely on professional judgement.

5. Impact of fossil-fuelled generation on REZ transmission limits

We support allowing fossil-fuelled generators to be included in REZ transmission limit formulations.

AusNet supports REZ transmission limit formulations being updated to include fossil-fuelled generation as specific terms. The current approach appears to unfairly reduce the capacity for new generation to connect to locations where incumbent generation has retired. AusNet agrees that the proposed update better represents REZ transmission limits without the need for manual corrections.

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