

Aidan Morrison

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Australian Energy Market Commission

25 January 2024

Lodged via AEMC website

Submission to ERC0369 – Improving Workability of the Feedback Loop

I object to the proposed rule change, in particular allowing feedback loops to be based on an unscrutinised Draft ISP, which normalises and legitimises an approval process for crucial infrastructure investments that entirely circumvents public consultation on the proposed Optimal Development Path. It amounts to giving TNSPs the opportunity to get approval for adding billions of dollars to their regulated assets based on an AEMO system plan that has yet to be subject to any external scrutiny. It opens a window for collusion, or the perception of collusion, between AEMO and the TNSPs and dramatically decreases transparency. The draft rule claims that it would promote the 'the efficient, timely, and consistent operation of the feedback loop in its role as a consumer safeguard'. I would argue that the rule change may make the feedback loop process more 'timely' and indeed 'workable' for the TNSP proponents, and this might be claimed to be 'efficient' but it does so at the direct expense of the feedback loop's efficacy as a consumer safeguard. The consequences of this loss of transparency and oversight have not been properly considered in any of the arguments made in support of the rule changes.

As per the guidelines for submissions, I want to clarify that I contest the adequacy of the criteria proposed for rule assessment, as there are no criteria that adequately considers the long-term financial interests of the consumer. I accept two criteria, and reject two, and propose that at least one criterion is missing. This will be clarified in the substantive document.

I also note that documents released under FOI confirm the AER and AEMO have had extensive consultations on how to advance specific projects, including HumeLink, through the feedback loop since May 2021. These consultations led to formal requests from AEMO to AER to accept the omission of mandated consultation on ISP Updates, in clear breach of the National Electricity Rules, in both 2021 and 2023. The AER responses, tacitly sanctioning the foreshadowed breach, are an unusual action for a regulator that has the function of enforcing the rules, specifically to investigate and take action to prevent breaches.

No response has been received yet from the AER regarding a complaint made about the foreshadowed rules breach requesting that the AER enforce the rules. A complaint directly to AEMO about the plan to update the ISP without consultation was responded to with a request only to participate in the Draft ISP consultation process, the very process which the un-consulted ISP update and subsequent feedback loops for VNI West and HumeLink effectively subverted. Given that this proposed rule change will effectively normalise and legitimise this exemption from any scrutiny for the document used to pass feedback loops, it is especially important that the rule change is clearly demonstrated to be in the long-term interest of consumers, which the rules should be written to protect. The appearance that the rule change is a post-hoc justification of coordinated and concealed efforts to advance projects outside of the rules, evading public scrutiny, would be very detrimental to the confidence and trust placed in the institutions responsible for the energy system.

There appears to be no reasonable argument, or indeed any serious effort to mount an argument, in any of the previous reviews into this process that demonstrates that this rule change is in the interest of the consumer. Indeed, the 2022 Consumer Panel in their report on the Draft ISP made it clear that AEMO locking in decisions via a feedback loop before receiving stakeholder feedback on a Draft ISP (including their own) was a 'significant

weakness in the ISP framework'.¹ No reference to this appears in any of the supporting documents and arguments regarding the proposed rule change. I consider it essential that AEMC demonstrates in the making of the National Electricity Rules that they are resolved to consistently act in 'the long-term interests of energy consumers', as is claimed prominently in the AEMC's description of its role.² I submit that changing the rules in such a way that so substantially degrades the transparency and oversight of some of the most important decisions in the energy transition (i.e., the addition of multi-billion dollar transmission projects to the regulated asset base) cannot possibly be consistent with the AEMC's mandate or the National Electricity Objective.

Following our address of the suitability of the assessment criteria, our submission will address the original and underlying rationale behind the request to improve feedback loop 'workability', in particular addressing:

- The difference between 'new information' and 'inputs and assumptions' in the National Electricity Rules and Integrated System Plan, and why they must be treated differently, and need not be updated simultaneously,
- The deep problem associated with the current treating of government policies as assumptions or inputs to the ISP,
- The claimed misalignment between the latest IASR and latest ISP in the RIT-T,
- The deep problem associated with the overfitting in the ISP modelling, and the consequent sensitivity to small changes in assumptions and inputs, and
- The significance of distinct consultation on the Draft ISP itself in specifying the ODP, as opposed to the IASR and Methodology, highlighting AEMO's capacity and willingness to influence the ODP in a Draft ISP even with fixed inputs and methodology.

Our conclusion is that the premise that there is a problem with the workability of the feedback loop is, and always was, poorly founded. Increased efficiency, transparency and accountability could be achieved quite simply with trivial changes to the rules, and possibly only with clarification of interpretation of existing rules (for instance, through a Guidance Note from the AER).

I will then conclude by briefly addressing the specific arguments laid out in favour of the rule change in the Rule Change Request from Minister Chris Bowen, which the Draft Ruling proposes accepting.

Sincerely,



Aidan Morrison

¹ <https://aemo.com.au/-/media/files/major-publications/isp/2022/isp-consumer-panel-report-on-draft-2022-isp.pdf> p 44

² <https://www.aemc.gov.au/about-us>

Detailed Response to Rule Change

Suitability of assessment criteria as listed in the Draft Rule Determination

Contributing to emissions reduction

I *accept* that this criterion is suitable since it directly reflects one of the objectives.

However, I reject the argument that the proposed rule suitably meets this criterion. The rule makes a change in favour of more rapidly advancing projects at the direct expense of public scrutiny and transparency. Adequate scrutiny of the ISP is also essential to ensure that opportunities for carbon emissions reduction are properly accounted for, and trade-offs and balances are well justified.

For instance, the ISP only considers Scope 1 emissions, and hence does not account for emissions (or foregone abatement opportunities) due to intensive manufacturing required for battery and solar panel manufacture, or the clearing of land for transmission and wind projects. External scrutiny and commentary could play a constructive role in ensuring that the ideal mix of projects is chosen, and that the analysis that supports the claimed emission reductions is rigorous. It is thus essential that the ODP and its timing, and generation mix associated with it is publicly scrutinised to ensure that emissions reductions are credibly reduced, and reduced efficiently.

Promoting principles of market efficiency

I *reject* the suitability of this criterion. The ISP and feedback loop is entirely about the process for approving regulated investments. This is very far from a free market. The idea that market forces such as competition are a significant driver of efficiencies here is absurd. Proper procedures, including external scrutiny of proposed plans, are far more important when reviewing regulated investments. There is no market at work to be made more efficient. Only if 'contestability' reforms that bring multiple different proposals from competing TNSPs to bear are fully implemented could market efficiency be considered relevant. The contestability stream of work has been halted. Hence there are no grounds for considering market efficiency in the assessment of this regulated investment procedure. The inclusion of this criterion substantially degrades the perception that this rule change is well-informed, rigorous, and objective.

Providing timely market-wide implementation

I *reject* the suitability of this criterion. Again, there is no credible claim that there is a 'market' at work in the construction of transmission projects. There is a 'market' for generation, but there is not a market for the provision of transmission, as discussed above. Transmission is a component of the 'system', which is provided by regulated investments through monopoly providers.

I would further reject the use of 'timely' in the wording of an assessment criterion in principle. Timeliness is not an inherent goal in and of itself, it is a means to an end. The end might be reliable power, or reduced carbon emissions (already covered in the first criterion) or lower power prices being provided sooner, or increased reliability, etc. But doing things fast for the sake of being fast is an entirely unsuitable criterion. Doing things fast can lead to mistakes, higher costs, and many other problems. Timeliness needs to be weighed carefully against other considerations. It should never be considered as inherently beneficial, and a goal in its own right.

Furthermore, I would strongly reject the arguments that the rule itself meets the criterion, should it be accepted. It isn't timely, because it wasn't implemented in accordance with the schedule foreshadowed in the Transmission Planning and Investment Review Stage 2 Final Report (i.e., mid- to late-2023).³ This resulted in AEMO having to make a specific request to the AER to have a rule breach overlooked by the regulator in October 2023 in a letter obtained through an FOI request.⁴ A timely reform would have averted the need for breaches of the rules such as

³ https://www.aemc.gov.au/sites/default/files/2022-10/stage_2_final_report.pdf p iii

⁴ Eli Pack (Group Manager System Planning, AEMO) correspondence to Gavin Fox (A/General Manager, Market Performance, AER), 18 October 2023

this one, which was relied upon for the feedback loop approval for the balance of project costs of HumeLink and VNI West in December 2023.⁵ Having very large projects rely on rule-breaching procedures cannot build confidence, stability and transparency in the energy transition in general, and may substantially degrade the credibility and perceived objectivity of key institutions. A timely reform would have prevented this, which this proposal most clearly does not.

Indeed, the timing of the rule change request—being published on 7 December 2023, but with the letter from the proponent (Minister Chris Bowen) being un-dated, and the attached report supporting the rule change being dated June 2023—appears suspect. The opportunity to advance the rule change in time to avert a breach of the rules seems to have been clearly available, but not taken. This rule change is not timely.

Promoting principles of good regulator practice

I *accept* the suitability of this criterion.

I strongly *reject* the argument that the draft rule meets this criterion, as the proposal to base feedback loops on a Draft ISP blatantly reduces transparency and accountability. Whilst it certainly reduces the workload for AEMO, it should be assumed that good regulation must strike a balance between administrative workload for AEMO and the need for suitable oversight and transparency. Removing all external scrutiny applied to a new ODP produced in a Draft ISP that effectively confirms billions of dollars of transmission investment can't credibly be claimed to strike any kind of balance.

The need for an additional criteria addressing other objectives more directly

I further *reject* the proposed criteria as a set, on the basis that there ought to be another criterion that more specifically addresses the long term interest of consumers, specifically as embodied in the first NEO. In particular, the price and reliability of electricity supply seem to be particularly relevant to the longer-term interests of consumers when considering major transmission investments.

There's no good reason why one national electricity objective (carbon emissions) should have a criterion so directly reflect it, but another one (price, quality, reliability, safety) should not. In fact, it could be argued that this demonstrates a bias in the criteria towards one electricity objective over another. The perception of this bias would be heightened by the absurdity of two other criteria, which imply that transmission is provided by a market (which it isn't, it's a system of connected regulated monopolies), and that timeliness amounts to efficiency and all other objectives are indirectly satisfied by this efficiency.

Disentangling 'new information', from Inputs and Assumptions

The word 'information' has a special meaning because it is referred to specifically in 5.22.15 (b) of the NER. Namely, 'new information' that may 'may materially change the outcome of the regulatory investment for transmission for an actionable ISP project' is the trigger that justifies AEMO considering the impact on the ODP, and issuing an update (with consultation) if it could affect the need for, or characteristics of, an actionable project.

The clear implication here is that, if there's new information that could affect the ODP significantly, an update is required—and worthwhile consulting on, at least briefly. It seems clear that new information is something specific, the impact of which isn't readily accounted for in the sensitivity testing, scenarios, and other ISP methods and mechanisms (such as 'option value' arguments) which are intended to make the ODP robust to some variance between all the inputs that are used and eventual outcomes.

The IASR includes inputs and assumptions. All assumptions used in the modelling are by definition inputs. But not all inputs are naturally classed as assumptions. Some inputs might be based on relatively firm facts, and unlikely

⁵ <https://aemo.com.au/-/media/files/major-publications/isp/2023/integrated-system-plan-feedback-loop-notice---humelink.pdf?la=en> p 2; <https://aemo.com.au/-/media/files/major-publications/isp/2023/integrated-system-plan-feedback-loop-notice---vni-west.pdf?la=en> p 2

to change dramatically. However, a significant portion of the inputs, and particularly their values running out into the future some 25 or 30 years, are quite clearly assumptions.

In Issue #2 in AEMO's submission to the Initiation stage of the Transmission Planning and Investment Review, AEMO claims that the 'role, requirements and process are unclear'.⁶ But their argument makes no attempt to identify which type of inputs are changing when they speak about the 'pace of change'. There seems an implicit assertion that any/all 'material changes' to any/all inputs and assumptions might require an update. They seem to assume that, if an update occurs, absolutely all the inputs that might have changed should be included in the update. That would create an update effort that would rival the next ISP, and hence in what circumstances an update would be used is unclear, if it essentially replicates the next ISP under development. Indeed, such an update would 'divert resources and attention away from the process to develop the next ISP'.

However, in arguing this, AEMO has clearly lost sight of a simpler and more natural interpretation of 5.22.15 of the NER. New information is a *specific* piece of new information, and not the whole gradually moving feast of inputs and assumptions. An update triggered by such a specific piece of new information should include *only* that new piece of information. It should be a discrete and (relatively) simple process to re-run the model with a small, perhaps singular, changed input. Stakeholders would likewise be able to relatively quickly assess the output of the update, as any changes could be readily attributed to a small and finite change. Running a shorter consultation process in this circumstance (the FBPG single-stage) makes perfect sense, and would be well justified.

Instead, the assumption made by AEMO is that an update 'addresses all material changes', with the implication that it might be a long enough list to rival a whole ISP update. This assumption is extremely unnatural, given the context of the update provided in the NER, to the extent that it actually appears contrived. Including many different input changes in a single update dramatically *reduces* transparency, because it means that the impact of any single change becomes much more difficult to ascertain in the output of the model. No justification for this assumption that many new changes should be required in an update is apparent.

In particular, the conflation of 'new information' with 'assumptions', especially those about future projections, seems entirely unwarranted. Information is generally assumed to be anchored substantially in fact. A projection into the future necessarily involves a much greater 'assumed' component. The starting point (which is currently known) could be reasonably described as 'information'. Very short-run extrapolations of slowly evolving parameters might be treated similarly.

But the argument that a changed 25-year projection about the uptake of electric vehicles, or home batteries, for instance, is 'new information' is patently absurd. This type of time series involves something expanding by several orders of magnitude from a small starting base. The possible range of values that might be considered credible only a few years into the future is large. Changes in the actual value recorded over one or two years are information. But a singular new data point cannot be argued to completely invalidate the subsequent values in a 25 year projection encompassing such a dramatic expansion. Even two subsequent data points don't necessarily invalidate it either.

Two years could indeed be a short-run effect. CSIRO makes this exact assumption in their 2022-23 GenCost report for technology costs such as batteries, assuming that multiple years of increasing costs don't fundamentally change the likelihood of a rapid return to a very similar trajectory.⁷

As such, a two-year cadence for re-assessing assumptions about long-run projections, which involves gradually adjusting assumptions about near and long-term trends, is entirely suitable. If the process that led to any assumption being credible is valid, only extreme new data revealed over a two-year period could justify anything other than a small shift in the projected trend. This is unlikely to be considered 'new information' that triggers an update in the sense of the NER, because it would be unreasonable for AEMO to assume that such a minor adjustment would have significant impacts.

⁶ https://www.aemc.gov.au/sites/default/files/documents/aemo_8.pdf p 5

⁷ https://www.csiro.au/-/media/EF/Files/GenCost/GenCost2022-23Final_27-06-2023.pdf p viii

In cases where there really are extremely large uncertainties in projections, then AEMO should, and often does, conduct separate sensitivity testing in an ISP, such as changes in future gas price assumptions, or the uptake of CER. The purpose of such sensitivity testing is to ensure that an ODP is sufficiently robust to a range of credible assumptions on key inputs. This further invalidates the idea that ‘new information’ referred to which would trigger an update includes gradual updates to ‘assumptions’, in particular long-running projections of future prices, consumer patterns etc.

The candidates for ‘new information’ to trigger an update should comprise a relatively short list, not the whole gamut of inputs.

‘New information’ deemed sufficient to plausibly impact the ODP should be:

1. Known with confidence in the present, and if a quantitative change, relatively confidently quantifiable
2. Likely to have a long-running impact into the future

The types of new information that seem suitable to consider an intra-cycle ISP update could include (but not be limited to):

- A significant change in the cost of a specific project, particularly a transmission project
- An accident or disaster that significantly impacts infrastructure into the future
- An announced closure of a coal power station that noticeably varies from assumed closures deemed the most likely in the IASR
- A firm commitment to the addition of a significant single load (i.e., a new smelter)

The treatment of evolving government policy as ‘information’

In attempting to explain the link between the ‘pace of change’ of the energy transition and the assumption that many inputs are rapidly invalidated (e.g., AEMO’s Issue #2), one might infer that changes in government policy constitute ‘new information’, or one of the ‘inputs’ that is rendered obsolete in the IASR.

This treatment of government policy as new information, requiring more urgent updates to the ISP, is deeply problematic for at least two reasons.

Circular Logic

The ISP is used by government as a source of objective truth to justify policy choices. As Minister Bowen has said, AEMO’s Draft 2024 ISP “reiterates what I already know, firmed renewable energy is not just clean, it’s the cheapest way to ensure a reliable grid.”⁸ Likewise, former NSW Energy Minister Matt Kean launched a tender for firming infrastructure, with the NSW Office of Energy and Climate Change anticipating at least 350MW would be required in the Sydney-Newcastle-Wollongong sub-region based on the 2022 ISP and Energy Security Target Monitor Report.⁹ This creates a clear opportunity for circular logic, which is a deep and manifest flaw in the ISP process. The treatment of government targets (e.g., for renewables, or carbon emissions reductions) in the ISP process makes this circular logic particularly concrete. Targets such as these, or declared priority transmission projects from state governments (such as Central West Orana, SuperGrid and CopperString), allow significant investments to be treated effectively as sunk costs in the ISP, or constraints on the model, effectively inserting these targets/assets into the counterfactual.

As such, the ISP only then finds the cheapest way of solving for such constraints, and is never capable of testing

⁸ <https://minister.dccew.gov.au/bowen/media-releases/energy-market-operator-shows-firmed-renewables-path-cleaner-cheaper-more-reliable-grid>

⁹ https://www.treasury.nsw.gov.au/sites/default/files/2022-08/Matt-Kean-med-rel-New-firming-tender-to-ensure-energy-reliability_0.pdf

the actual cost of those parts of the system, or considering any alternative investment. Given statements by the Department of Climate Change, the Environment, Energy and Water admitting that the Federal Government 'socialises' system costs through the tax system in order to avoid the political implications of them being revealed in electricity prices,¹⁰ the ISP does a severe disservice to transparency and accountability by allowing government policy changes to excise significant system costs from the model. Whilst this is a serious problem for the ISP, and one I will discuss in our submission to the ISP consultation, the implication for this rule change is that more rapidly incorporating government policy changes, and removing opportunities for external scrutiny of such changes, only accelerates the process by which the true system cost is effectively obscured. This is a very substantial loss for accountability, transparency, and the long-run interest of consumers to have low electricity price.

Policy movements may also be reversed

AEMO has consistently failed to properly contemplate that government policy can change in *either* direction. A proper cost benefit analysis that genuinely considers the long-term interest of consumers must consider that public policy can be reversed. I have seen such events recently in Australia, for example the Carbon Tax.¹¹ The exclusion of any scenario where a net-zero carbon target is not achieved by 2050 is an exemplar of AEMO's bias in this instance. Multiple countries around the world have implemented policies that are expected to result in previously set renewables and carbon emissions reduction targets being missed, moderated or removed (e.g., UK¹², US,¹³ Germany¹⁴, China¹⁵). Just as previous ISPs contemplated ambitious carbon reduction mandates as eligible scenarios before they were formally adopted, current ISPs should also consider scenarios where targets are missed, moderated or removed.

It might be reasonable to incorporate very stable public policy, with long-running acceptance, as being a fixture in all scenarios. But if a target/mandate can be increased or established within one or two years, it remains reasonable to assume that it could also be decreased or removed within a comparable timeframe. Removal of generous feed-in-tariffs from rooftop solar shows one such retraction of pro-renewable policies (e.g., Solar Bonus Scheme closed by NSW Government in 2011 and ended in 2016¹⁶). Consequently, just as with long-run assumptions about battery prices, and EV uptake, long-run assumptions about government policy cannot be credibly altered quickly in a way that should be assumed permanent and irrevocable. The failure to consider that the Snowy 2.0 hydro scheme could still be cancelled, and \$6 billion of capital investment diverted to a more efficient purpose, is another deep flaw of the ISP. Multi-billion dollar investments spanning several decades have been cancelled before, e.g. cancellation of the Attack Class Submarine.¹⁷

A proper ISP process would allow for uncertainty in government policy in the long run, and properly assess the risk of under- or over-investment from the consumer's perspective, given this is also based on assumptions. Consequently, there is little reason to assume that government policy changes in the short term rapidly invalidate a plan that must necessarily make assumptions and accept a significant degree of possible variance in public policy, in the long term. Thus, the argument that a new government policy, such as a target or a declared REZ, justify updating the ISP urgently, is deeply flawed, as these policies may be reversed, and providing a holistic cost of the whole system is a valuable objective for the ISP (currently unserved), even if some of the costs are eventually met by taxpayers rather than electricity consumers.

¹⁰ <https://www.energy.gov.au/sites/default/files/2023-08/CIS%20Webinar%20-%20Transcript.docx> Kirsty Gowans 1:19:55

¹¹ <https://www.theguardian.com/environment/2014/jul/17/australia-kills-off-carbon-tax>

¹² <https://www.theguardian.com/environment/2023/dec/05/uk-miss-paris-climate-targets-emissions>

¹³ <https://www.scientificamerican.com/article/hope-dims-that-the-u-s-can-meet-2030-climate-goals/>

¹⁴ <https://www.reuters.com/business/environment/germanys-climate-efforts-not-enough-hit-2030-targets-experts-say-2023-08-22/>

¹⁵ <https://www.aljazeera.com/economy/2023/8/30/chinas-coal-habit-clouds-climate-fight-as-emissions-top-us-eu-combined>

¹⁶ <https://www.energymatters.com.au/rebates-incentives/solar-bonus-scheme/>

¹⁷ <https://www.aspistrategist.org.au/the-hidden-cost-of-the-attack-class-submarine-cancellation/>

Misalignment between latest ISP and latest IASR

In the previous sections, I outlined reasons why 'new information' used to trigger an ISP update should only be interpreted in the NER as changing a very limited set of inputs. In particular, it should be things that are known to have changed (and/or be quantified) with confidence right now (i.e., information, not assumptions), and expected to have a long-lasting impact (i.e., could credibly affect the ODP in ways not accounted for adequately through scenarios and sensitivities). Specifically, we've argued that, in general, public policy changes and long-run projections of economic/consumer trends should be excluded from the 'new information' category. Rapid recent changes might reverse just as rapidly. Credible assumptions about the distant future should only ever evolve gradually. Sudden large changes would imply that the original assumptions were never credible in the first place.

In conclusion, the inputs into the ISP model can and should be divided into those inputs which should only evolve gradually (and should never justify an intra-cycle update if the cadence is appropriate) and a much smaller set of inputs which change significantly enough on a shorter timescale with certainty and can be expected to have an impact that lasts long enough to impact the ODP.

In light of this more natural interpretation of the NER, the presentation of the problem of misalignment between the ISP and the latest IASR by AEMO is deeply flawed.

The fact of the misalignment is true. 5.15A.3(b)(7)(iv) of the NER does specify that an RIT-T proponent should use the 'most recent ISP parameters', which includes the latest IASR. However, the natural resolution of the misalignment should simply be to change the 'ISP parameters' definition to specify the IASR used in the latest ISP, rather than the latest IASR itself.

The rationale for requiring the latest IASR relies on the assumption that a large number of the inputs in the IASR are fast-evolving, and will be dangerously out of date after 18 months or 2 years. This isn't the case.

As discussed, the vast majority of the inputs in the IASR should definitely be regarded as slowly evolving, as they are assumptions, i.e., projections about the long-term future (including public policy). Credible assumptions in this respect must only evolve slowly. Rapid evolution in light of new information implies the original assumptions weren't credible.

The exceptions to this, i.e., information that is fast-evolving but with an impact that is long lasting, should *necessarily* demand an update to the ISP, as per the NER 5.22.15 (b). This, however, is a vastly smaller set of likely inputs being affected by new information. Updates should still be relatively rare, and generally only model a single change. The impact of this single change should be readily assessed in a review rather than an update that incorporates multiple changes. A single-stage review, of as little as 30 days, should be appropriate to verify that the impact on the ODP and modelled changes are credible responses to the changed input.

Our assessment on this issue of which inputs can credibly be deemed rapid-evolving or slow-evolving need not be crystallised into rules or guidance, or even specified at all. If AEMO would like to argue that a government policy announcement is sufficiently unlikely to be reversed, and properly necessitates a change in the modelling inputs, then they could do so, and it would be contested in a consultation process by stakeholders.

In conclusion, I argue the most recent ISP *must* always have the ability to be credible. This is quite achievable because most inputs in the IASR should only evolve slowly. Credible assumptions about long-run future trends for 20 or 30 years shouldn't be routinely invalidated by new data that arrives in 2, or even 3 years. If they are, then they weren't credible projections in the first place, since short-run effects can also reverse subsequently. Exceptions to this principle should be argued, and subject to scrutiny. For those inputs which are only knowable in the short-term, and impactful in the long term, an ISP update *must* be issued in order for the ISP to remain credible. But since it will be a discrete, limited change, the update process need not be excessively onerous.

The implication of the arguments presented by AEMO and advanced by the AEMC with the proposed rule change are that there isn't a credible ISP for at least six months, hence the exclusion window. This assumption that very many of the IASR inputs are likely to be invalidated within 18 months isn't justified. AEMO's assumption that an

update should include many parameters, and that they should all be updated simultaneously, by omnibus, in an ISP update of complexity and effort rivaling a new ISP, is entirely unjustified. Most of the inputs in the IASR, if credible, should age very well, and shouldn't be adjusted significantly in any cadence faster than 2 years. Exceptions to this require an immediate, specific update, which should be simple to run and consult on whilst maintaining transparency because only one (or very few) inputs would be changed.

The significance of model sensitivity to transparency

The ISP optimisation involves a linear program, which necessarily reaches an exact, deterministic optimal outcome to meet all the constraints and inputs. Consequently, the installed capacities for generation extremely tightly hug the requirements of the exact sequence of weather years. This results in over-fitting, evidenced in implausible enlargements and contractions of installed capacities. An alternative series of weather years could result in a substantially different result. The unsuitability of the ISP for modelling reliability requirements has also been highlighted by the Department of Climate Change, Energy, the Environment and Water.¹⁸

One of the direct consequences of this is that small changes to inputs and assumptions can have quite significant impacts on the modelled outcomes for an ISP, because so many of the installed capacities will be leaning on some particular driving event (i.e., a weather event).

Given the problem of significant investment decisions hinging on extremely small modelled differences in net present value (as highlighted by the ISP Consumer Panel¹⁹), this introduces a severe issue for omnibus updates, where a large number of parameters are simultaneously changed. It makes it extremely difficult for an external stakeholder to disentangle what changes in inputs were material in delivering a change in outcomes.

A particularly pertinent example is HumeLink, which was assessed as having net benefits of roughly \$1.3 billion in the 2022 ISP,²⁰ but then faced a \$1.6 billion cost estimate increase subsequently.²¹ Despite this increase in costs, the draft 2024 ISP shows that benefits have increased (through averted gas capital installation requirements) enough to leave the project still with a positive projected value, and HumeLink remains actionable in the ODP. The delicacy and significance of this assessment is brought into focus by the Decision Rules included in the Draft 2022 ISP, which would have had the project removed from actionable automatically if the costs rose 'materially' or a dispatchable generator was retained, both of which now seem to have arisen.

However, given the massive volume of changes made in a full update, it's relatively difficult for an outsider to scrutinise which change in the inputs allowed the benefits of HumeLink to expand enough to match its increased costs. Careful scrutiny of these outcomes is essential for consumer protection, especially given how contested the decision to progress even early works for HumeLink was in the 2022 ISP.²² The inclusion of very many parameter changes in a single update, coupled with the intrinsic sensitivity of the model to small changes, means that the opportunity for AEMO to effectively rig the outcome of a delicately balanced cost-benefit decision is open. The credible conjecture that such an event might have occurred would be greatly detrimental to the credibility of the ISP process. Obviously, the eventuation of such an event would also be grossly contrary to the long term interests of consumers. This makes external scrutiny of a large update especially important, and means that the period open for consultation cannot be greatly contracted. The proposed rule change eliminates any such opportunity for consultation on a Draft prior to it being used to allocate substantial costs to consumers. This cannot be in the long term interest of transparency, or consumer interest.

¹⁸ <https://www.energy.gov.au/sites/default/files/2023-08/CIS%20Webinar%20-%20Transcript.docx> Zoe Konovalov 1:27:15

¹⁹ <https://aemo.com.au/-/media/files/major-publications/isp/2022/isp-consumer-panel-report-on-draft-2022-isp.pdf> p 36

²⁰ 2022 ISP p 68

²¹ \$3.3 billion in 2021 Transmission Cost Report (p 42) compared to \$4.9 billion in 2023 Transmission Expansion Options Report (p 30)

²² <https://aemo.com.au/-/media/files/major-publications/isp/2022/isp-consumer-panel-report-on-draft-2022-isp.pdf> p 42

The importance of reviewing ISP separately and in addition to IASR and Methodology

AEMO has frequently argued in their update to the 2022 ISP²³ and in correspondence to AER released under an FOI request²⁴ that the consultation processes undertaken and completed for the Methodology and IASR are sufficient, and that separate consultation on the ISP update (which overwrites key parts of the previous ISP with the latest draft) wouldn't add much value. I reject this argument.

The ISP process does allow AEMO considerable discretion, separate to the fixed inputs and methodology, to argue projects in or out of the ODP or actionable list—for example, the 'option value' argument used to justify VNI West (in the 2020 ISP²⁵) and Humelink (in the 2022 ISP²⁶) being brought forward from their optimal timing to make them actionable. It's essential that external scrutiny be applied to such arguments, as these are quite separate to the modelled results. The Consumer Panel 2022 engaged in these arguments vigorously.²⁷ That these arguments were essentially already made irrelevant by the update and feedback loop undertaken was noted, with considerable concern by the Consumer Panel.²⁸ This action was a direct breach of 5.22.15(c) in the NER, and effectively sanctioned by the AER. AEMO has never explained how allowing this process, in which important arguments are brought by consumer advocates, to be ignored by a feedback loop decision being made on the unconsulted draft is in the interest of transparency or consumers.

Furthermore, there are sometimes discrepancies between the IASR as consulted on and the actual inputs used in the ISP. For example, the 2023 IASR had Snowy 2.0 maximum capacity at 2040MW,²⁹ but the 2024 Draft ISP has it at 2200MW,³⁰ a 7% increase. Given the sensitivity in the model, it's not clear that this kind of increase is not material to the outcome for key projects in the ODP. Since the IASR values that were consulted on were not the values used in the Draft ISP, failing to allow a thorough consultation process means there is no way to detect and challenge any unexplained parameter alterations.

There are multiple other detailed questions that are raised in Draft ISP consultations that relate to methods and decisions in the modelling process that aren't specifically disclosed, or adequately disclosed in either the ISP methodology or IASR. The modelling of coal profitability requirements in closure of coal plants is one example from the 2022 ISP, which was also queried by the AER.³¹

In conclusion, the ODP, including all the outputs of the modelling that produced it, as well as the additional processes and discretionary arguments used to justify the choice of projects being deemed 'actionable' in the ODP, must be consulted on. The claim that the IASR and Methodology consultation processes are sufficient imply that the link between those inputs and the outputs is fixed, trustworthy, and not subject to other choices or decisions that still rest within AEMO's discretion. This is plainly not the case, and therefore consultation on the Draft ISP adds a lot of value in ensuring the long-term interests of consumers are protected. Since AEMO's claim that further consultation would add little value is clearly false, it would be a very poor outcome for this rule change to normalise this omission, for which the consultation is actually essential to ensure proper scrutiny.

²³ <https://aemo.com.au/-/media/files/major-publications/isp/2022/update-to-the-2022-integrated-system-plan.pdf?la=en> p 2

²⁴ Daniel Westerman (AEMO CEO) correspondence to Clare Savage (AER Chair), 24 August 2021

²⁵ <https://aemo.com.au/-/media/files/major-publications/isp/2020/final-2020-integrated-system-plan.pdf?la=en&hash=6BCC72F9535B8E5715216F8ECDB4451C> p 65

²⁶ <https://aemo.com.au/-/media/files/major-publications/isp/2022/2022-documents/2022-integrated-system-plan-isp.pdf?la=en> p 85

²⁷ <https://aemo.com.au/-/media/files/major-publications/isp/2022/isp-consumer-panel-report-on-draft-2022-isp.pdf> p 39

²⁸ <https://aemo.com.au/-/media/files/major-publications/isp/2022/isp-consumer-panel-report-on-draft-2022-isp.pdf> p 11

²⁹ 2023 Inputs assumptions and scenarios workbook, Existing Gen Data Summary tab

³⁰ 2024 Draft ISP results workbook, Summary tab

³¹ <https://www.aer.gov.au/system/files/AER%20-%20Transparency%20Review%20on%20AEMO%202022%20Draft%20ISP%20-%207%20January%202022.pdf> p 3

Summary Responses to Rule Change Request

In this section I will summarise our specific responses to relevant sections of the rule change request in light of the more detailed arguments above.

3.1 Statement Of Issue

The issue identified is essentially the same one identified by AEMO in 2021. This argument depends on the assumption that the IASR becomes 'outdated' within about two years. It implies that the planned cadence and framework for the development of the ISP is too slow, and always has been. There is no specification of exactly what information in the IASR would have been outdated within two years. The argument fails to acknowledge that the vast majority of inputs should only be adjusted slowly because they are fundamentally assumptions, including long-range projections. It fails to grasp the natural interpretation of what 'new information' might be that would legitimately necessitate an immediate update, based on discrete, probably singular, changes to inputs. The claim that the burden to comply with the update consultation process is too high rests fundamentally on the perception that all possible changes must be done in a large, omnibus update that might rival a new ISP in complexity. The very premise that there is a workability issue rests on this very poor argument that 'new information' could be anything, and should be everything. Accepting that discrete updates of single/few variables would be relatively simple, and transparently reviewed, would completely resolve the workability issue.

4.1 Aligning the feedback loop assessment with the publication of a draft or final ISP would improve workability issues

As discussed above, I dispute the existence of a workability issue that requires this solution. However, I must strenuously underline that the proposed solution effectively means that there will be no external consultation on the ODP, and the ISP modelling and additional arguments applied by AEMO to arrive at it, prior to the use of this document to give effectively final approval to the economic case for billions of dollars of infrastructure. This is an enormous reduction in transparency for a crucial part of the ISP process. No effort to balance this loss of transparency with the claimed improved workability is made.

5. How the proposed rule will address the issue

As above, the existence of the workability issue is poorly founded. But most importantly, there is no effort here to consider how the proposed solution protects the interests of consumers, and transparency, which have been terribly compromised in order to 'provide flexibility to AEMO to time the feedback loop assessment to the circumstances of the particular investment'. The very purpose of the feedback loop, as protection for consumers, has been fundamentally undermined.

6. How the proposed rule will or is likely to contribute to the achievement of the National Electricity Objective

This section notes the significance of 'price, quality, safety, reliability and security of the supply of electricity' to long-term consumer interests. However, the arguments that this rule change advances those interests, particularly points 1 and 2, make no serious case that these consumer interests are actually advanced in any way other than simply making AEMO's job easier. AEMO's interests are not fundamentally the same as the consumer. For the arguments given here to make any sense, one must assume that they are. In this particular case, where transparency and accountability are certainly in the consumer's interest, but create more work for AEMO, there is a clear tension. This section provides no explanation about how the complete loss of public scrutiny of an ODP in a Draft ISP prior to a feedback loop using that document is balanced against the increased convenience/workability for AEMO.

7.1 Expected Benefits

These benefits listed are entirely for AEMO, and fail to acknowledge the degree to which the safeguard for consumers is undermined by the removal of external consultation and review of a Draft ISP prior to a feedback loop.

7.2 Expected Costs

All these costs considered relate entirely to TNSPs, AEMO, or AER. There is no mention here of costs to the consumer that might be borne through efficient investments made on an unscrutinised plan.

7.3 Expected Impacts

Again, there is no discussion here of the impact to consumers through reduced transparency and accountability.

In conclusion, there isn't any serious consideration in this rule change proposal of the impact on consumer interests resulting from the dramatic reduction in the opportunity for consultation and review of the ISP version used to pass feedback loops. As such, in its current form, this rule change clearly cannot be claimed to advance the long term interest of consumers.