Submission to the Review of AEMO Governance (DCCEEW)

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Review of AEMO Governance

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Executive summary

Australia's energy transition demands timely investment in generation, storage, networks and consumer resources. Since the 2020–21 reforms, the Integrated System Plan (ISP) has shifted from advice to an executive blueprint for large, regulated transmission. The post-reform record is unequivocal: major 'actionable' projects have slipped by years, capital cost estimates have escalated by billions, and the ISP framework has offered no credible mechanism to pause, re-scope or replace projects when the underlying facts change.

This submission makes two linked arguments. First, the ISP is a poor fit for planning the energy transition in the National Electricity Market (NEM): uncertainty is high, many constraints are discovered only in delivery, and technology and policy are changing too quickly for a single central blueprint to remain robust. Second, if governments nevertheless retain an actionable ISP, the planning function must be separated from AEMO and vested in an independent body that is structurally insulated from conflicts of interest and institutional incentives that can bias plans toward 'build-and-defend' outcomes.

Recommendations

1. Return the ISP to its original role as advisory planning information, and remove its actionable status as an executive pathway for regulated transmission.
2. If an actionable national plan is retained, establish a separate, statutory National System Planning Authority (NSPA) that is independent of AEMO and of market participants, and assign to it the task of producing the actionable plan and associated cost-benefit and options assessments.
3. Re-focus AEMO on market and power-system operation. Where AEMO provides analysis to governments or scheme delivery services through subsidiaries, require clear separation, transparent funding, and explicit conflict-management arrangements.
4. Mandate open modelling inputs, transparent publication of key assumptions, and structured independent review (red-team challenge) of the actionable plan and of major project assessments before commitments are embedded in policy.
5. Require that cost-benefit assessments for major transmission projects include the costs of complementary assets that are necessary for the claimed benefits (for example, associated generation, storage or firming), and that they explicitly evaluate alternatives that keep options open (for example, staged upgrades, non-network solutions, and distribution-level options).
6. Strengthen oversight of project delivery performance against ISP projections, including an annual public variance report that explains deviations in costs, timing and need, and triggers independent reconsideration when thresholds are exceeded.
7. Clarify the role of state-based transmission planning bodies (such as VicGrid) relative to the national plan, and ensure that jurisdictional plans cannot simply be derived from the ISP without genuine local option testing and accountability.

A failure to grapple with these policy and institutional failures will mean yet more wasted expenditure and consequential needless imposition on consumers, taxpayers and the environment.

1. About VEPC and our interest in this review

VEPC is an independent research centre focused on energy policy, market design, and the economic regulation of network monopolies. Since the introduction of the ISP, VEPC has published analyses of major transmission projects and the ISP framework, including detailed project reviews (HumeLink), critiques of project assessments (VNI West, Marinus Link), and broader assessments of transmission planning in the transition. Our interest in this governance review is grounded in the scale of the decisions now being made through the ISP framework: they involve tens of billions of dollars of regulated investment, long-lived infrastructure that is hard to reverse, and material impacts on communities and the environment. These decisions should therefore be subject to robust governance, independent scrutiny, and clear accountability.

2. The problem: the ISP has become an executive plan, but without executive accountability

The review Terms of Reference emphasise that AEMO's functions have expanded and that the ISP has become the focal point in the development of the national grid, while AEMO's data and analysis are used for an expanding range of policy and public purposes. The Terms of Reference also highlight perceived conflicts of interest, transparency, accountability, and improved oversight of budgets and board appointments. These are the right themes. However, the immediate problem is that an 'actionable ISP' framework effectively grants AEMO a planning monopoly over the most capital-intensive part of the transition (major transmission) while preserving AEMO's institutional incentives to satisfy members and stakeholders, rather than a clear, singular consumer-interest mandate.

Transmission planning is now governed by a circular structure: AEMO's ISP identifies an optimal development path; transmission proponents seek regulatory approvals on the basis of alignment with that path; and cost increases or design changes can be 'validated' through an AEMO feedback loop that re-affirms consistency with the plan. This is not a system of independent checks and balances; it is a system of mutual reinforcement.

Public commentary has also emphasised that making the ISP actionable effectively granted AEMO a monopoly over transmission planning, with the predictable consequence that errors or biases in the plan have system-wide impacts. Governance reform must therefore be judged by whether it creates real countervailing power: independent review, contestability of analysis, and clear accountability for decisions that commit consumers to long-lived, regulated expenditure.

3. Evidence that the actionable ISP framework is failing

3.1 A persistent gap between ISP projections and project delivery

Multiple independent sources now document that major transmission projects initiated through the ISP have experienced large delays and very large capital cost increases. This pattern is not confined to one project or jurisdiction; it is widespread across interconnectors and Renewable Energy Zone (REZ) trunk assets that were central to early ISP visions.

These are not marginal 'inflation' adjustments. AEMO's 2025 Electricity Network Options Report, as reported publicly, acknowledges that (after accounting for inflation) transmission cost estimates used for ISP inputs are in some cases up to around 100% higher than equivalent 2024 ISP inputs [9]. That is an admission that the cost base used to confer 'actionable' status was not fit for purpose. When the plan can double the expected cost of cornerstone projects within a single planning cycle, it cannot be treated as a reliable blueprint for committing consumers to decades of regulated charges.

3.2 Summary table: escalation in costs for major ISP-linked projects

Project	Earlier public estimate	Latest published estimate	What this shows
HumeLink (NSW)	$1.3bn (early estimate cited in VEPC review of the HumeLink PACR) [2]	$4.88bn total project cost (AEMO feedback loop notice, 2026 ISP cycle) [4]	A 'flagship' actionable project moved from low single-billions to nearly $5bn, after endorsement.
VNI West (NSW–VIC)	$3.87bn (Draft 2024 ISP estimate, 2022–23$) [5]	$7.6bn expected (2025$, –30%/+50% uncertainty), implying up to ~$11.4bn [6][7]	Cost doubled (or worse) after being embedded as a cornerstone ISP project; uncertainty remained extreme.
Western Renewables Link / WVTNP (VIC)	$370m (2019 Western Victoria Renewable Integration PACR; PV) [8]	$4.2bn estimate cited in SCC submission (2024$), and 'already 500% over budget' for an earlier contracted version [3]	The project evolved from hundreds of millions to multiple billions; early costing did not survive contact with delivery reality.
Project Marinus (TAS–VIC)	$6.3bn combined Marinus 1&2 estimate in VEPC DVTP submission (2023$) [3]	$7.57bn total cost for both stages (AEMO feedback loop notice) [10]	A major inter-jurisdictional project escalated further even after years of 'planning' and policy commitment.
Project EnergyConnect (NSW–SA) (near completion)	$2.1bn original forecast (2023 REAL) [11]	$3.6bn revised net project cost (Jan 2025 update) [11]	A project already deep in delivery revised upward by ~70%, underscoring why early ISP-era estimates are unreliable.

3.3 Case study: VNI West (Victoria–NSW interconnection)

VNI West has been treated as a cornerstone of the ISP pathway. In December 2023, AEMO confirmed a total cost of about $3.96 billion (2022–23$), broadly consistent with the Draft 2024 ISP estimate of $3.87 billion [5]. By mid-2025, AEMO's 2025 Electricity Network Options Report placed the expected

cost at $7.6 billion (2025$) with an uncertainty range of –30%/+50%—a plausible high case of roughly $11.4 billion [6][7]. This is not 'noise'; it is a plan-breaking revision. If the actionable ISP is meant to reduce risk and improve coordination, it is failing on its own terms.

3.4 Case study: HumeLink (NSW)

HumeLink shows the same pattern. VEPC's review of the HumeLink Project Assessment Conclusions Report documented how an initial cost around $1.3 billion became a $3.3 billion official estimate, with very large deadweight losses imposed on consumers even on AEMO's own framing [2]. AEMO has since confirmed a total project cost of $4.88 billion in its feedback loop notice for the 2026 ISP cycle [4]. This is a catastrophic forecasting error for an 'actionable' project whose core justification rests on the claim that it is the least-cost way to unlock renewable supply and manage coal retirement risk.

A further governance concern is the use of AEMO confirmation as a substitute for independent reassessment. VEPC's review noted that Transgrid described how, as costs rose, the project would still be treated as part of the ISP provided AEMO confirmed it remained part of the optimal development path. This demonstrates the circular accountability problem: a cost blowout can be 'validated' by the plan that originally relied on an under-costed estimate.

3.5 Case study: Project Marinus / Marinus Link (Tasmania–Victoria)

Marinus Link illustrates the governance risk of embedding large inter-jurisdictional projects into an actionable plan before costs and delivery risks are mature. AEMO's August 2025 feedback loop notice put the total cost of Project Marinus at $7,570 million [10]. Earlier public estimates in VEPC's DVTP submission placed combined Marinus 1&2 capital outlays around $6.3 billion (2023$), excluding additional onshore augmentation in Tasmania [3]. When billions of dollars of regulated expenditure can drift upward while the project remains politically 'locked in', the core governance safeguard is not better modelling—it is institutional independence and hard accountability.

3.6 Transmission cost inflation and time-to-deliver

VEPC's submission on VicGrid's Draft Victoria Transmission Plan makes the wider point: the transition's transmission outlays have been badly under-estimated and cannot be treated as 'sunk' or 'already committed' simply because they appear in the ISP [3]. The submission also emphasises that none of the major 'anticipated' projects had secured the approvals, landholder consent or construction progress that would justify treating their costs as unavoidable [3]. A central blueprint that assumes away cost realism and social licence is not a plan—it is a political device for locking in expenditure. VEPC's project pages compile the underlying working papers, submissions and presentations documenting these issues across multiple projects [12][13][14].

3.7 Under-costing and the political economy of locking in the plan

The recurring pattern is systematic under-costing followed by escalation after endorsement. Under an actionable framework, early low estimates help secure 'need' and create momentum; later revisions are then framed as unavoidable 'market conditions' rather than as failures of the planning function. That

dynamic is visible across VNI West, HumeLink, Project Energy Connect, Marinus and WRL—and it is confirmed by the fact that even a project now near completion (EnergyConnect) revised its cost materially upward [11]. Governance reform must therefore address incentives and accountability, not just process. If the planner is insulated from the consequences of forecast error, under-costing will persist.

4. Why the ISP is structurally ill-suited to transition planning

4.1 The modelling problem: least-cost output cannot reliably map to market or engineering reality

Electricity planning models necessarily simplify a highly complex physical and commercial system. The NEM involves lumpy network investments, strong scale economies, complex substitution between transmission, storage and demand response, and non-linear constraints governed by power flows. In a world of rapid technological change and deep uncertainty, these modelling limits are decisive. Central plans can look coherent on paper yet collapse when confronted with real-world delivery: supply chains, workforce limits, project sequencing, land access, approvals and social licence.

4.2 The option value of flexibility is systematically undervalued

The transition is not a one-shot optimisation problem. Good governance should preserve option value: the ability to delay, stage or redesign investments as information improves. Actionable blueprints do the opposite: they create path dependence. Once a corridor is declared essential, agencies and proponents have strong incentives to proceed even if new information (cost increases, route constraints, new technologies) undermines the original rationale. This is a central reason why central planning tends to overshoot on large, irreversible investments.

4.3 Externalities and social licence arise in implementation, not in blueprints

Transmission lines and large energy projects impose substantial local externalities: land access, visual and environmental impacts, biodiversity offsets, cultural heritage issues, and effects on farming practices and regional amenity. Critical information about these impacts is often discovered only through route selection, surveys and approvals, after a project has already been endorsed in principle. An actionable blueprint therefore tends to discount precisely the constraints that matter most for delivery.

4.4 Central plans reduce adaptability when technology and policy change

The energy transition is characterised by policy uncertainty, rapid cost declines in some technologies, changing consumer behaviour (including behind-the-meter resources), and evolving system security requirements. A central plan that locks in long-lived transmission corridors risks crowding out faster, more modular options that would keep choices open. Once a blueprint becomes executive, agencies tend to defend it; this is a predictable source of unintended consequences.

5. AEMO's governance and incentives help explain these outcomes

5.1 AEMO now combines multiple roles with different constituencies

AEMO operates the power system and the wholesale energy and gas markets; it also produces the ISP and increasingly provides policy-adjacent advice. The governance review itself notes AEMO's expanding

functions and the involvement of its part-owned subsidiary AusEnergy Services Limited [1]. These roles create structural conflicts: the planner is also the operator; the planner depends on cooperative relationships with regulated investors and governments; and the planner's reputation is tied to defending the blueprint it produces. A monopoly planning function cannot credibly sit inside an organisation with these overlapping mandates.

5.2 Membership and stakeholder dependence are incompatible with a planning monopoly

The Terms of Reference explicitly raise whether reforms, including potential divestments, are needed to enhance management of roles and perceived conflicts of interest. This is crucial. A planning monopoly cannot credibly exist within an entity whose governance is shaped by a membership structure that includes governments and market participants (and regulated network service providers) with direct financial interests in planning outcomes. Even if decision-makers act with integrity, the incentives and information environment will systematically favour plans that are acceptable to influential stakeholders and that expand regulated assets, rather than plans that are strictly robust and consumer-focused.

5.3 Weak scrutiny of models and assumptions

The ISP relies on complex modelling and a large set of assumptions. In practice, only a small circle of specialists can interrogate the model structure and datasets. This creates an accountability gap: the plan carries executive weight, but governments and the public cannot easily test whether results are robust to plausible variations in costs, project sequencing, demand forecasts, distributed energy, storage deployment, or policy changes. Governance must therefore embed properly independent review as a standard feature, not as a "stakeholder engagement" exercise.

5.4 Budget, performance and variance reporting

Planning performance must be treated as measurable output. If the ISP is used to commit consumers to large regulated expenditure, persistent forecast error (cost and timing) must have consequences. At minimum, the planning body should publish annual variance reporting that compares projections to realised outcomes, explains deviations, and commits to specific methodological changes. Where deviations exceed defined thresholds, an independent re-evaluation should be mandatory. Without this, the planning function is effectively immune from accountability.

6. Reform options for policy makers

6.1 Preferred reform: remove the ISP's actionable status

The simplest and most effective governance remedy is to restore the ISP to an advisory role: a transparent, publicly useful systems-thinking document that informs decision-makers, but does not operate as an executive pathway that locks in regulated transmission. This would reduce monopoly power, encourage rival analyses, and allow projects to rise or fall on their own merits through well-specified regulatory tests and local negotiation.

6.2 If governments insist on an actionable plan: create an independent National System Planning Authority

If governments consider a national executive plan indispensable, the planning function should be separated from AEMO and vested in a statutory, independent National System Planning Authority (NSPA). The NSPA would be responsible for producing the actionable plan, maintaining open modelling datasets, commissioning independent challenge, and reporting annually on variances between plan projections and actual delivery outcomes.

Core design features of an NSPA

- Statutory independence: established by legislation with a clear mandate to promote the long-term interests of energy consumers, with explicit duties regarding transparency and consideration of alternatives.
- Governance insulated from industry: board appointments through an independent process; no industry membership rights; strict conflict-of-interest rules and public registers.
- Separation from market and system operation: AEMO remains the market and system operator; the NSPA is the planner. Each has a clear objective and can be held accountable for its outputs.
- Separation from policy delivery: where governments use contracting or underwriting schemes, NSPA advice must be separate from scheme administration to avoid planning to the subsidy.
- Open modelling and reproducibility: publication of key datasets, scenario inputs, and model code (or equivalent reproducible artefacts), subject to legitimate confidentiality constraints.
- Structured independent review: standing expert panels (engineering, economics, social impact) with authority to publish dissenting views; mandatory red-team review of major project assumptions.
- Local negotiation and externalities: explicit processes to incorporate landholder, Traditional Owner, and environmental impacts into option selection early; preference for staged or modular options where feasible.

6.3 Strengthen accountability mechanisms regardless of institutional model

Whether or not the ISP remains actionable, governments should strengthen accountability for planning outputs. Key measures include: (i) an annual public report comparing ISP projections to realised outcomes; (ii) thresholds that trigger re-evaluation (for example, when capital costs rise by more than a specified percentage or delivery slippage exceeds a specified period); (iii) requirements that cost-benefit

analyses include complementary asset costs and realistic delivery constraints; and (iv) enhanced parliamentary and ministerial scrutiny of budgets, board appointments and subsidiary activities.

6.4 Immediate reforms to apply to the next planning cycle

- Introduce an independent review panel to scrutinise the next ISP's assumptions and publish a public report (including any dissent).
- Adopt conservative and transparent cost estimation practices aligned with recent market-tested data, and publish sensitivity analyses on capital costs and delivery times.
- Require that interconnector benefits are not counted without explicitly including the costs of complementary generation, storage and network augmentations needed to realise those benefits.
- Publish a delivery risk assessment for each actionable project, including workforce, supply chain, approvals and social licence risks, and show how these risks change the preferred pathway.
- Strengthen engagement with communities and Traditional Owners early, and create a clear mechanism for local impacts to change option selection rather than being treated as implementation detail.

7. Conclusion

The governance review is timely. AEMO's role has expanded into transmission planning and policy-adjacent analysis at a moment when the NEM is undergoing unprecedented change. The evidence is now clear that the actionable ISP framework has not delivered a credible, reliable pathway for timely transmission expansion. Cost estimates for key projects have been revised dramatically, delivery timelines have slipped, and social licence challenges have intensified. These outcomes are consistent with known limits of central planning in complex, uncertain and politically contested environments.

Policy makers therefore face a choice. They can de-escalate the planning monopoly by returning the ISP to advice and enabling decentralised, negotiated, and competitive discovery. Or, if they insist on an actionable plan, they must create a new planning institution that is not conflicted, is subject to independent scrutiny, and is accountable for the consequences of the blueprint it produces.

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