

16 February 2024

Sent by email to: Australian Energy Market Operator, isp@aemo.com.au

RE: Draft 2024 Integrated System Plan

About the ETU

The Electrical Trades Union of Australia ('the ETU') is the principal union for electrical and electrotechnology tradespeople and apprentices in Australia, representing well over sixty-thousand workers around the country.

Our members are involved in the construction, operation and maintenance of power generation throughout Australia, including in the declining fossil fuel sectors and the ever-expanding renewable industry sector. ETU members are also critical to the construction, maintenance and operation of transmission and distribution networks, and the installation and maintenance of household energy efficiency appliances and of consumer energy resources. Due to the disruption caused by the energy transition, processes such as the Integrated System Plan are a critical element in the careful and proper planning of the energy transition and ensuring that Australia achieves maximum economic and social benefits from the transformation occurring in our energy sector.

The ETU welcomes the draft 2024 Integrated System Plan and appreciates the opportunity to make this short submission in response to the details contained within the report.

Acknowledgement

In the spirit of reconciliation, the ETU acknowledges the Traditional Custodians of country throughout Australia and their connections to land, sea and community. We pay our respect to their Elders past and present and extend that respect to all First Nations peoples today.

Introduction

As each iteration of the Integrated System Plan (ISP) is released, it is important to acknowledge both the significant effort and expertise that has contributed to each plan, along with new developments in content, that demonstrates the continuing intention to ensure each version is more robust than the last. However, as we note below, there are several instances where assumptions have been made in the absence of relevant, supporting policy mechanisms to deliver on those assumptions.

The ETU welcomes the inclusion of social licence as a sensitivity analysis to the inputs and assumptions that feed into the plan, however, it is troubling that the design of this analysis has had no input or involvement from representatives of workers.

In addition, the ETU continues to be concerned with the lack of inclusion of workforce development and worker transition in the ISP process.

Together, social licence and workforce considerations are one of the largest barriers to a successful energy transition.

In the below table, we outline our feedback on the draft 2024 ISP and would welcome the opportunity to discuss our feedback as appropriate. Note that while we might reference an initial page number as a source, the subject matter may traverse and be repeated in several sections of the draft ISP, and we have not cross referenced every one of these.

ETU Feedback - Draft 2024 – Integrated System Plan

Area	Feedback	Suggestion / Recommendation
Pg7	Workforce Development The executive summary outlines four inherent tensions in the energy transition. Notably absent from this analysis is workforce development and provision of quality, secure jobs.	These are a key tension that must be modelled.
Pg10	REZs REZs are described as having an inherent feature to “promote regional expertise and employment at scale”. There is nothing inherent to a REZ and nor is there any consistent policy mechanism currently in place to deliver on this assumption. All evidence of REZ development to date demonstrates that the opposite is occurring.	Separate statements of fact from assumptions or clarify.
Pg11	Role of Gas The role of gas, including the role of new gas generation, appears significantly overstated. There is little evidence that 16GW of new gas-powered generation is needed to be built into the NEM. Nor is there any evidence of State or Commonwealth policy supporting 16GW of new gas generation.	Explain the basis of asserting 16GW of new gas power generation.
Pg16 & Pg18	Social licence The section on social licence appears to imply that social licence challenges are already ‘in hand’ and being addressed. The section on skilled workforce is equally incomplete. Neither section includes any analysis of the policy mechanisms in place to address these challenges (or more importantly their absence) and there is little analysis of policy barriers to achieving social licence and workforce development.	Stronger analysis and articulation of the barriers created by existing energy laws are placing on investment in resolving social licence and delivering workforce development.
Pg19	Offshore wind The development of Offshore Wind in NSW is notably absent from the ISP despite two OSW areas being declared by the Commonwealth and multiple OSW developers expressing an interest in developing projects. It appears this has been excluded due to NSW policy announcements on OSW, however these projects are in Commonwealth waters, not state waters.	Based on the Commonwealth’s declarations forecasting, the development of NSW OSW resources must be included in the 2024 ISP, even if only conservative estimates are viable at this time.

Pg22	<p>Regional/rural jobs Assumption at 1.3 that “new jobs particularly in regional and rural areas” is a feature of the transition. There is no critical analysis of public policy or evidence to justify this statement. This is not an inherent feature of the transition absent deliberate policy levers to ensure it occurs.</p>	ISP should include analysis of policy barriers and opportunities regarding the clean energy workforce.
Pg24-27	<p>Demand and Consumption AEMO has a long history of forecasting strong demand growth which has not eventuated. The analysis of demand and consumption in section 1.2 is questionable. For example:</p> <ul style="list-style-type: none"> - hydrogen production appears more likely to be powered by stand-alone renewable generation assets rather than from the grid, with excess generation fed back into the grid where these facilities are grid-connected. - The role of energy efficiency, distributed batteries and virtual power plants etc. will impact the grid in dynamic ways. - The role of smart home management needs to be questioned. The premise of the ISP is modelling against current policy settings, currently Australia has no policy settings to establish minimum appliance standards. 	The section on demand and consumption needs to identify the policy barriers and opportunities that are implied in this section and provide greater clarity on why these assumptions are included when not supported by policy.
Pg28	<p>Benefits Section 1.3 makes assumptions that, as a result of the energy transition, Australians are more likely to see new jobs and lower cost electricity. Again, in the absence of direct policy settings to make these assumptions a reality, it is difficult to understand how these assertions were derived.</p> <p>As a case in point, while Project Energy Connect could be assumed to deliver more Australian jobs, much of the construction workforce on this project are temporary migrant workers and currently there are no Australians on this project indentured in a Transmission Linesperson apprenticeship, despite it being one of the largest transmission projects in Australia and Australia having a significant skills shortage of transmission linespersons.</p> <p>There is currently no policy mechanism to ensure that lower wholesale costs directly translate into lower retail costs.</p>	ISP should include analysis of policy barriers and opportunities to deliver these benefits.
Pg33	Asserts that Australia's processes to register, connect and commission new resources are ‘highly regarded’.	Provide citation or evidence?

Pg34	<p>Prosumer actions The hyper focus on ‘prosumer’ actions ignores the community benefits that could be gained from a more programmed and coordinated deployment of new energy assets, for example deploying grid batteries where solar outputs are already facing significant curtailment.</p> <p>It also disregards that close to a third of all households are rentals with limited or no capacity to make home energy efficiency upgrades.</p>	ISP should consider the community benefits when evaluating the relative value of ‘prosumer’ actions and the capacity of households to make these changes.
Pg35	<p>Workforce, productivity and social licence The ISP needs much more work to identify policy barriers and opportunities as they relate to workforce, productivity and social licence, including:</p> <ul style="list-style-type: none"> - The National Energy Objective’s failure to factor in climate resilience, workforce development and social licence. - Inefficient policy mechanism, such as ringfencing, which drives deep inefficiencies in NSPs. - The lack of conditionality relating to workforce, skills, training, and the quality of jobs in Government procurement and special investment vehicle frameworks. 	Map out / identify relevant policy barriers and opportunities.
Pg47	<p>CER As above, there are assumptions around CER and smart appliances despite there being no government policy to support this.</p>	As above
Pg49	<p>High levels of renewable penetration The ISP does not currently contemplate that high levels of renewable penetration may lead to a circumstance where generation in some locations may become ‘too cheap to meter’. Spilling and curtailing surplus renewable generation as contemplated in this section is highly problematic under the current market framework. Who directs this to occur and what compensation occurs?</p>	Future iterations of the ISP need to contemplate at which point renewable penetration will substantively interfere with existing market models and require change.
Pg65	<p>Gas peakers The ISP should discuss the role of public ownership in capping or managing prices impacted by gas peakers. In addition, there appears to be limited analysis of whether gas infrastructure would exist to service GPG assets or what role hydrogen or blended peaking stations might play.</p>	Future iterations need to include analysis of gas infrastructure to service GPG assets.

Sensitivity Analysis

In addition to the matters outlined above, we provide the following specific feedback to the inclusion of the social licence sensitivity analysis. Page numbers refer to Appendix 8 unless otherwise specified.

Pg 11	Exclusion of GPG The ISP excludes GPG from their sensitivity analysis, based on the assumption that they are likely to be co-located near existing transmission substations and have lower footprint than VER. However, this does not take into account any social licence impacts where gas infrastructure is not already in place to service these assets. The exclusion of gas infrastructure results in the models that have lower renewable development automatically being ranked higher than those with more renewables, against evidence of negative community sentiment regarding new gas infrastructure assets (e.g. pipelines).	GPG should be included in social licence sensitivity analysis and should include gas infrastructure needed to service these assets.
Pg 11	Exclusion of offshore wind The exclusion of offshore wind reflects the treatment of offshore wind in the ISP discussed above.	OSW and related social licence impacts must be included in the sensitivity analysis.
Pg 11	Exclusion of Native Title and ILUAs This has been excluded due to the complexity of the available data. Given that the government is currently developing a First Nations' Clean Energy Strategy, this exclusion may put the ISP at odds with that strategy.	Native Title and ILUAs should be included in the sensitivity analysis.
Pg 11	Slower uptake of CER Given the emphasis of 'prosumer' actions in the ISP, it is problematic to exclude it from the sensitivity analysis.	Variable uptake of CER should be included in the modelling.
Pg 12	Tipping point The document provides costs to consumers if a low social licence tipping point is reached that results in no new renewable generation or transmission being built. However, it is not clear how that tipping point is determined, and how the modelling assesses the relative risks of a tipping point being reached in each of the CDPs.	Detail on tipping point assumptions and how they inform assessment of the optimal path should be provided.