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Submission to Australian Energy Market Operator (AEMO) consultation on updates to the ISP Methodology

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Dear AEMO

Environment Victoria welcomes the opportunity to make a submission to AEMO's consultation on updates to the ISP Methodology.

Environment Victoria works with a broad range of stakeholders throughout Victoria who are deeply concerned about the impacts of infrastructure scenarios on First Nations, ecological and agricultural communities.

Our concern is that the only 1.5-degree aligned scenario banks on an extremely rapid scale-up of Australia's clean energy exports, which, if done well and equitably, could provide benefits to energy consumers. However, there is significant uncertainty regarding hydrogen production and use, including for domestic purposes. As such, we need other 1.5-degree scenarios that assume rapid domestic decarbonisation of our economy.

A 1.5-degree scenario in which high distributed energy resources (DER) complements additional infrastructure builds could establish a trustworthy baseline for the minimum, not just the maximum, level of additional generation needed in a 1.5-degree world. As an example, such a scenario could be modelled that assumes maximum rooftop solar and smaller-scale storage capacity complements additional renewable generation and transmission infrastructure.

Our concern for the necessity of such a scenario is three-fold. Firstly, as noted above, the only current 1.5-degree scenario envisages rapid scale-up of domestically produced renewables exports – namely hydrogen. Whilst a strong renewable-powered export economic modelled in Green Exports is a credible path, there is considerable uncertainty about hydrogen production and use not least within the context of end-use electrification. Some assumptions related to the domestic use of hydrogen and biogas are less justifiable because they do not emerge in existing policies or tested from a viability standpoint.

Secondly, land use planning and impacts to cultural heritage of First Nations communities, the availability of whose land and waters it is assumed for energy infrastructure, must be determined and negotiated using the standard of free prior and informed consent. A 1.5-degree scenario that inputs high DER to provide baseline certainty about minimum infrastructure requirements could assist in facilitating 'informed' consent by providing additional modelled scenarios.

Moreover, the cultural and ecological impacts of infrastructure planning could be included as an input to cost benefit analysis. First Nations communities, and National Electricity Market consumers

more broadly, need as much certainty as possible about minimum and maximum impacts of system planning. This could include modelled 1.5-degree scenario/s that assume conservative land and sea country disturbance and the impacts of that disturbance on cultural heritage based on maximum domestic decarbonisation that takes advantage of high DER

Third, achieving social licence for large energy infrastructure builds is a delicate process. It requires transparent good faith consultation that builds trust and fosters community appetite for the inevitable energy transition. Part of this transparency could include modelled 1.5-degree scenarios that factor in high DER to provide, with some degree of certainty, the minimum infrastructure builds acquired and where that infrastructure could be located.

Such a scenario could assist in good faith consultation and engagement with other impacted communities, including agricultural and conservation groups, whose interests are affected when land and sea is assumed available for systems planning. As recent tentions regarding VNI West demonstrates, social licence for renewable generation and associated infrastructure required to support delivery of electricity is currently fragile at best.

Moreover, the ecological and social impacts – both adverse and beneficial – of infrastructure systems planning must be addressed to the extent that can be done so. Scenario planning that models rapid domestic decarbonisation in a 1.5-degree world through high DER as complementary to larger infrastructure builds could provide a baseline of minimum needs to assist with community consultation.

Environment Victoria would appreciate the opportunity to discuss our position further. If this is of interest, please contact Bronya Lipski, Policy and Advocacy Manager.