AUSTRALIAN ENERGY COUNCIL

Infrastructure Victoria
Level 33
140 William Street
MELBOURNE VIC 3000

25th February 2021

Submitted online to:
https://engage.vic.gov.au/victorias-30-year-infrastructure-strategy/making-submission

Dear Sir/Madam,

Victoria's 30-Year Infrastructure Strategy

The Australian Energy Council (the "**Energy Council**") welcomes the opportunity to make a submission in response to Infrastructure Victoria's *Draft 30-Year Infrastructure Strategy*.

The Energy Council is the industry body representing 21 electricity and downstream natural gas businesses operating in the competitive wholesale and retail energy markets. These businesses collectively generate the overwhelming majority of electricity in Australia, sell gas and electricity to over ten million homes and businesses, and are major investors in renewable energy generation.

Discussion

Energy Industry – an input to the broader economy

It is important for Infrastructure Victoria to remember that the energy industry is an input to the economy, rather than an economy of its own. Inefficient consumption of capital or skilled labour within an input industry acts as a deadweight on the Victorian economy. It was this realisation of the burden caused by the consumption of scarce resources by a historically bloated electricity system that was identified by the Industry Commission and the Hilmer Report in the early 1990s and led to its subsequent major restructuring. [1]

While the energy industry must transition to a cleaner future and take advantage of new technologies available to it, Infrastructure Victoria's chief focus should remain unchanged from those of Hilmer, in that this should occur with the least possible consumption of scarce resources. Wherever possible, the transition should look to utilise existing capital, such as the existing transmission grid, and utilise the efficiencies resulting from national market competition.

Handling a system in transition

Infrastructure Victoria correctly identifies that the energy system is in transition. However when considering this transition, it is important to recognise that it is not solely Victoria which is in transition. Victoria is deeply connected to both the National Electricity Market ("**NEM**") and the east coast natural gas transmission system, hence decisions that are made within and nominally on behalf of Victoria will have effects on other states, and vice versa. It is therefore critical that any initiatives proposed give due consideration to the *National Electricity Objective* and *National Gas Objective*,[2]

[1] See https://www.pc.gov.au/inquiries/completed/energy-generation/11energyv3.pdf and http://ncp.ncc.gov.au/docs/National%20Competition%20Policy%20Review%20report,%20The%20Hilmer%20Report,%20August%201993.pdf

[2] Section 7 of the *National Electricity Law* and Section 23 of the *National Gas Law*, respectively

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to ensure that any projects proposed are economically efficient, and in the national, not just Victorian, interest.

This consideration of economic efficiency extends to demand management also. For example it is neither realistic nor economically defensible to target 100% reliability to customers, and significant research has been conducted to determine the value customers place on reliability, to ensure that this value is not exceeded by the overbuild of assets.[3] The Energy Council therefore agrees that improving demand management pricing signals are a useful way for this resource to be incorporated into the operation of the power system, but these signals must find their natural level and not distort the market by denying customers access to the supply they want, and are willing to pay for, by providing inappropriately large incentives which subjugate their wishes.

Transmission Augmentation

The Draft Infrastructure Strategy proposes that critical electricity transmission infrastructure should be augmented to accommodate new renewable energy generation and improve network resilience.

The Energy Council acknowledges congestion on transmission assets is an issue for renewable generators, but identifies that there are a number of means by which this is being addressed, without requiring Victorian Government intervention.

Each year, in accordance with Clause 5.12 of the *National Electricity Rules*, the Australian Energy Market Operator prepares a *Victorian Annual Planning Report*,[4] which reviews the performance of the Victorian electricity transmission declared shared network, and assesses its adequacy to meet reliability and security needs over the coming ten years. Building on the NEM's *Integrated System Plan*,[5] it pinpoints emerging network needs, and identifies network upgrade projects which are likely to deliver nett economic benefits, and lower-cost outcomes for consumers.

These projects are then actioned by the relevant transmission network service providers, and, before they are constructed and their costs passed on to the consumers, they are assessed whether they have positive market benefits by the Australian Energy Regulator under the Regulatory Investment Test for Transmission.[6]

Thus there are already robust processes in place to identify Victorian power system needs and implement the necessary augmentation, without any Victorian Government intervention. Such intervention runs the risk of confusing and ultimately delaying the efficient planning of the national grid, and thus acting counterproductively to the intent.

In addition, it should be noted that the Energy Security Board is exploring mechanisms by which Renewable Energy Zones can be facilitated,[7] and variable renewable energy generators can be afforded transmission access, while the Australian Energy Market Commission is also considering the coordination of generation and transmission investment.[8] These plans will ensure, on a National Electricity Market level, that variable renewable energy generators, as well as conventional generators and other technologies such as storage, have appropriate access to the transmission system, and transmission augmentation is developed appropriately and efficiently.

Thus the Energy Council notes that while facilitation of energy infrastructure land-use planning matters would assist in the implementation stages, there is no need for the Victorian Government to intervene to create outcomes which would not be consistent with the *National Electricity Rules*. The

[3] See, for example, Australian Energy Regulator, *Values of Customer Reliability – Final Report on VCR Values*, December 2019
[4] Available at https://aemo.com.au/energy-systems/electricity/national-electricity-market-nem/nem-forecasting-and-planning/victorian-planning/victorian-annual-planning-report
[5] Available at https://aemo.com.au/en/energy-systems/major-publications/integrated-system-plan-isp
[6] National Electricity Rule 5.16
[7] See, for example, http://www.coagenergycouncil.gov.au/reliability-and-security-measures/renewable-energy-zones
[8] See https://www.aemc.gov.au/market-reviews-advice/coordination-generation-and-transmission-investment-implementation-access-and

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Energy Council therefore believes that the powers and obligations of a Victorian REZ "coordinating body" should be limited to ensure that it does not affect the operation of the market in deciding how, when & where to construct generators, which should be matched to the capital availability and risk-return appetite of investors.

Natural Gas Emissions

The Energy Council notes the Government's target to have nett zero emissions by 2050, and supports this goal,[9] however it is important to observe that the goal does not require no emissions, instead it caters for emissions as long as they are offset, and a nett zero position established. To the Energy Council this suggests that policies which mandate reduced natural gas use, without considering the alternatives of offsets, are unnecessarily interventionist.

The Energy Council supports introducing optionality for consumers, by allowing new housing estates to be "gas-free", but does not believe that natural gas policies should be reviewed with a view to outlawing natural gas, as has occurred in the ACT.[10] Instead the Energy Council believes that, while natural gas has greenhouse gas emissions, it can still remain part of a transition to a nett zero future by the use of offsets, carbon sequestration, and other possible technological developments over coming years.

Transport

This is an area where actions by sub-national jurisdictions can make a positive difference. State governments have a role to play in supporting the uptake of zero emissions vehicles ("**ZEV**") through incentives such as stamp duty and registration concessions, and Government fleet targets. While stationary energy infrastructure is best considered nationally, there are likely to be significant benefits in state-based action in the land transport sector. This is because:

- Land transport infrastructure and regulation is almost entirely the responsibility of sub-national jurisdictions;
- The transport sector is likely to be more responsive to direct state and local government actions, through their existing regulatory roles, such as vehicle registration and parking controls. These roles are likely to be more effective in encouraging improved consumer choices than the Commonwealth's more indirect role in fuel excise and vehicle standards; and
- Victorian transport emissions are on a consistently strong growth path and show no sign of peaking in a business-as-usual future. Electric vehicles are considerably more energy-efficient than conventional vehicles and less emissive even when supplied with fossil-fuelled electricity.[11]

Government actions in the land transport sector to reduce liquid fuel consumption are frequently shown to have negative costs to users, by overcoming informational and other barriers.[12]

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[9] See https://www.energycouncil.com.au/news/australian-energy-council-backs-net-zero-emissions-by-2050/#:~:text=The%20Australian%20Energy%20Council%20has,by%202050%20target%20for%20Australia.&text=%E2%80%9COur%20members%20have%20long%20accepted,need%20to%20decarbonise%20the%20economy.

[10] https://www.cmtedd.act.gov.au/open_government/inform/act_government_media_releases/rattenbury/2020/now-were-cooking-with-electricity!-gas-no-longer-a-requirement-in-canberra-suburbs

[11] *Clean Green Machines, the truth about electric vehicle emissions*, The Conversation, https://theconversation.com/clean-green-machines-the-truth-about-electric-vehicle-emissions-122619

[12] *Pathways to a Low Carbon Economy, Version 2 of the Greenhouse Gas Abatement Curve,* https://www.mckinsey.com/~/media/mckinsey/dotcom/client_service/sustainability/cost%20curve%20pdfs/pathways_lowcarbon_economy_version2.ashx Exhibit 8.6.4

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International experience demonstrates a strong correlation between public charging infrastructure and the uptake of ZEVs.[13] The Energy Council believes that during the early stages of the ZEV market in Australia, fast charging infrastructure is likely to present a challenging business model for private sector investment, as ZEV ownership is low. Grant programmes can ensure both sufficient and efficient investment in fast charging infrastructure, and the Government's agreement with Chargefox is a good example of what can be achieved.[14]

Any questions about this submission should be addressed to the writer, by e-mail to Duncan.MacKinnon@energycouncil.com.au.

Yours faithfully,

Duncan MacKinnon
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[13] *Roll-out of public EV charging infrastructure in the EU,* Transport and Environment, September 2018 https://www.euractiv.com/wp-content/uploads/sites/2/2018/09/Charging-Infrastructure-Report_September-2018_FINAL.pdf

[14] *Victoria charging ahead with electric vehicles*, Department of the Premier, press release, 25 October 2018 https://www.premier.vic.gov.au/victoria-charging-ahead-with-electric-vehicles/

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