Department of Environment, Land, Water and Planning

Mr John Pierce
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Ref: SBR010725

Dear Mr Pierce

AEMC'S PAPERS ON COORDINATION OF GENERATION AND TRANSMISSION INVESTMENT

Thank you for the opportunity to make a submission, on behalf of Victoria, to the Australian Energy Market Commission's (AEMC) *COGATI proposed access model* and *Renewable Energy Zones* discussion papers.

Victoria agrees with the AEMC's view that changes to energy rules are necessary to facilitate urgently needed investment in transmission infrastructure. However, Victoria does not consider that the reforms proposed in the context of COGATI are necessarily the right reforms to facilitate that investment. Further, Victoria questions the significant priority and resourcing being devoted to COGATI, in the context of much more pressing regulatory challenges.

Challenges to Victoria's transmission network

Victoria's comments are made in the context of three major challenges our transmission network is facing.

First, a lack of anticipatory transmission investment (in reference to the anticipation of coal closure and commitment of new renewable generation) presents a major challenge to implementing the Integrated System Plan (ISP) and developing Renewable Energy Zones (REZs). While the ISP provides the blueprint for the energy system to deliver Victoria's energy needs and policies, its lack of actionability presents a clear barrier to delivering those needs and policies. Further, the absence of a mechanism to develop the REZs identified in the ISP, in terms of either sharing connection assets or sharing part of the transmission network, means that REZs are currently conceptual. Victoria's objective is to ensure that the concept of a REZ becomes meaningful and actionable: a zone where large quantities of new renewable generation can connect to adequate transmission infrastructure, with cost-effectively sized connection assets.

Second, there is uncertainty around the closure dates for Victoria's brown coal generators. Victorian brown coal generators have been, and currently are, the main source of electricity supply for Victorian energy consumers. While there are currently nominated plant closure dates for these generators ranging from 2029 to 2048, actual closure dates could be earlier or later. This depends on factors such as the operational state of plant, energy and climate policies (both at a State and Federal level), wholesale market revenues, and regulatory costs. Uncertainty around closure dates makes the task of planning for replacement generation and transmission assets significantly more challenging.

Third, there are uncertainties around how best to maintain system strength, which is necessary for the security and stability of the electricity system in Victoria. Due to the inertia provided by their large spinning turbines, coal-fired generators currently support system strength. As coal generation declines and renewables increase, system strength deteriorates unless action is taken. Under the 'do no harm' requirements placed on new connecting generators, we are frequently seeing system strength remediation infrastructure installed by individual generators when a scalable, shared solution could be cheaper.

These issues are causing inefficient investment and suboptimal new entrant costs in the market today. Victoria considers it important that market bodies, industry and jurisdictions focus their resources on

reforms that help solve these urgent and considerable challenges. Resources should not be diluted by working on matters that are not a priority.

Victoria's concerns about COGATI

Victoria has four major concerns about the proposed COGATI reforms.

First and foremost, Victoria questions the priority and resourcing being devoted to COGATI. While Victoria is not opposed to including better locational market signals or new means to hedge risks in our market, these are a low priority for Victoria compared to the three challenges above. COGATI is currently directing both market body and industry resources from solving these challenges. Victoria is not persuaded that COGATI will enable the development of REZs, or enable the timely development of other transmission infrastructure (such as interconnectors). Nor does the proposed COGATI reform model provide assurance that it will help mitigate the risk posed by disorderly coal closure and the severely negative effect that such an event would have on system reliability and security.

Second, Victoria is concerned that many renewable energy investors are unconvinced that COGATI would reduce investment uncertainty, despite this being a core objective of COGATI. Victoria understands that at a recent AEMC-Clean Energy Council workshop on COGATI, a high percentage of Council members indicated that they do not believe that COGATI would reduce investment uncertainty. Victoria is also aware that many other industry stakeholders, ranging from large incumbents to new players, are worried about the direction of COGATI and have major reservations about the effectiveness of the reform in its present design. Victoria would expect the AEMC to build a broad consensus of support for COGATI, particularly among those that should, in theory, benefit from it, before seeking support from COAG Energy Council to continue its development.

Third, for a reform proposal of this magnitude, Victoria would expect to see comprehensive evidence of the net benefits to National Energy Market (NEM) participants. Such evidence to support the AEMC's COGATI proposal has not been provided. Victoria would also want assurance that risks of perverse outcomes have been adequately mitigated, particularly with respect to real-world implementation issues. COGATI does not provide this assurance.

Fourth, Victoria seeks clarity around the integration of COGATI with the rest of the COAG Energy Council and Energy Security Board (ESB) reform agenda. The structural changes proposed through COGATI are expected to be long-lasting. COGATI will therefore impact on the direction of projects such as the ESB's Post 2025 Market Design. Victoria is concerned that COGATI may limit the broader reform options available to the ESB.

In summary, while Victoria has no in-principle objection to work progressing around better locational market signals or new means to hedge risks in our markets, this is not as high a priority as solving the three important transmission challenges listed above. Further, given that the COAG Energy Council has tasked the ESB with developing advice on a post 2025 fit-for-purpose market framework to support reliability, the AEMC's proposed COGATI proposals would be better considered during that process.

Victoria seeks the AEMC's views on these points of concern.

Specific comments on the AEMC's COGATI proposal

Further to these general concerns, Victoria has a list of comments and questions to the AEMC on specific COGATI proposals. These are in **Appendix 1** of this submission.

I trust this input is of assistance. If you have any questions about this submission, please contact Dr Sharn Enzinger, Executive Director, Energy Group by email sharn.enginzer@delwp.vic.gov.au or on (03) 9412 4071.

Yours sincerely

Anthea Harris
Deputy Secretary, Energy

Appendix 1: The AEMC's proposed changes, the expected impact on Victoria, and DELWP's questions to the AEMC

Proposed change	Expected Impact on Victoria	DELWP's questions to the AEMC
Locational Pricing: 1) Generators and storage would receive a new, local, price that better reflects the marginal cost of supplying electricity at their location in the network. The AEMC expects this change would lead to better locational operational and investment decisions that would make the transmission network more efficient and reduce costs for consumers.	1) Prospective generators would locate away from congested areas of Victoria's network, such as the western Victoria diamond and invest in uncongested areas, such as the La Trobe Valley.	1) Given that transmission upgrades are already underway in Victoria to address thermal constraints (e.g. the western Victoria transmission upgrade), does the AEMC consider there will be any short to medium term impact of this change on network congestion in Victoria?
2) Non-scheduled market participants (including retail load) would continue to face a regional price. There are several reasons for this choice; an important one is that load is typically not as price responsive as generation.	2) Retail participants in Victoria would continue to pay a regional price for wholesale electricity. They would have the option of becoming a scheduled participant if they wished to pay the locational price.	2) Has the AEMC considered whether there will unintended consequences or perverse incentives for demand response (DR) and behind the meter (BTM) generation responding to the regional price when this is materially different to the local price for generation? Major growth in behind the meter generation could worsen imbalances between generation and load in constrained areas when the price signals for load and generation diverge. For example, where a high regional price incentivises load reduction (DR or BTM generation) at the same time and location that a low local price drives reduced generation.
Financial Transmission Rights: Generators and storage would be able to purchase financial transmission rights (FTR) from an AEMO-run auction to enable them to better manage the risks of congestion. The AEMC expects this change would reduce investment uncertainty for generators and storage and may also reduce the cost of capital in the longer term.	Generators currently located in the western Victoria diamond would be able to manage the risk of physical curtailment by purchasing FTRs.	Reducing investment uncertainty for generators and reducing the cost of capital would be a positive outcome. However, DELWP is also aware that investors interested in investing in renewable generation in Victoria are very concerned about the likely volatility of dynamic loss factors that would be introduced as part of COGATI. Has the AEMC considered that there may be no net gain to investment in Victoria due to these conflicting outcomes?
Renewable Energy Zone (REZ) Type A facilitation:	The 2018 Integrated System Plan designated five	Due to the geographical concentration of generators in

A 'type A' REZ is a cluster of generators connected to the shared transmission network via a dedicated connection asset. For these REZs, the transmission investment associated with it are connection assets. The main barrier to transmission investment here is that generators do not want to or are unable to coordinate connections to share the costs of connection assets because competitive tensions and commercial challenges act as a disincentive to do so. The AEMC is not proposing any changes to facilitate type A REZs. This is because the barriers identified (including the one noted above) are non-regulatory, which are unlikely to be resolved through changing the regulatory framework. The AEMC also notes that there are a range of changes outside of COGATI already underway, such as the draft rule change regarding transparency of new projects, which may enable generators to better coordinate with each other.	REZs in Victoria: Moyne, Western Victoria, Murray River, Gippsland, and Ovens Murray. As the ISP identified REZS as "a cluster of generation in an approximate geographic boundary that may involve investment in the shared transmission network, in addition to an individual generator's connection assets", the AEMC considers that REZs in the ISP are type B, rather than type A.	Victoria (mainly in western Victoria), DELWP considers that there are significant benefits to be gained from regulatory changes that incentivise generators to share connection assets. Coordination models for type A REZs could also apply to generator-funded network support assets, such as system strength remediation equipment which is increasingly being required for new connecting generators in parts of Victoria. Victoria notes that individual generators have powerful incentives not to collaborate, particularly in areas where more generators in the same area could serve to lower wholesale prices and worsen marginal loss factors. Victoria questions whether the mechanisms already provided for under the Rules will ever be sufficient to drive scale-efficient cost-effective results. Can the AEMC further elaborate on its position on type A REZs with regard to the challenges Victoria faces, including whether it considers that there are different barriers for coordinating system strength solutions within REZs?
Renewable Energy Zone (REZ) Type B facilitation: A type B REZ is a cluster of generators within an approximate geographic boundary that are connected within the shared transmission network. For these REZs, the transmission investments associated with the REZ is a shared transmission network. The key difference between type A and B REZs is that type B include assets that are used to facilitate flows to consumers directly, whereas type A REZs do not. The main barrier to investment here is the free-rider problem. Generators do not have an incentive to invest in shared network infrastructure because other generators can subsequently benefit from that investment without having contributed to the cost. Moreover, free-riding generators can also cause congestion that prevents the first generator from being dispatched. To facilitate type B REZs, the AEMC is proposing that generators be able to purchase a long-term hedge that provides firmer access to the regional	This change would be expected to facilitate generator investment in the shared network in Victoria's five REZs.	Victoria is unique in the NEM in that AEMO (a non-profit entity) is the transmission planner for the state. Has the AEMC considered whether this will impede AEMO's ability to use long-term hedges to inform its transmission planning? DELWP is concerned that these proposals are insufficient to stand up REZs in a timely manner. As the AEMC will be aware, REZs are needed sooner rather than later. However, the proposed changes do not provide strong assurance that REZs will be built quickly. Can the AEMC indicate how long it will be before new transmission infrastructure is built to support REZs in Victoria?

reference price through a financial payment in return for the investment made in the shared network. These long-term hedges would also be used by TNSPs to inform the transmission planning process.		
Link between COGATI reforms and transmission investment: Under the proposed changes in the *access model paper*, transmission planning and investment would continue to be conducted using the current regulated process, including the ISP. FTRs would be issued at the end of this process and would therefore indirectly inform subsequent planning and investment decisions. However, there would be no direct financial link between FTRs and network upgrades. In the *REZ paper*, the AEMC proposes that generators be able to make a financial contribution toward any proposed network upgrades that are necessary to make a REZ. In return, the generator would receive firmer access to the regional price. Assuming the network upgrade passed the RIT-T, the financial contribution would be used to reduce TUOS, thus saving consumers money.	AEMO would continue to plan, and investment in network upgrades in Victoria under the current regulated process, i.e. the RIT-T. The sale of FTRs (which would be undertaken by AEMO) would be used to help inform AEMO's forward transmission planning process. Generators in Victoria would be able to invest in areas of the shared network that have been designated as REZs (such as Western Victoria). AEMO, as Victoria's TNSP, would be able to use these investments to offset the cost of these upgrades. In return for their investment, generators would receive firmer access to the regional price in Victoria.	There appears to be a contradiction in policy intent here. In the *access model* paper, the AEMC is proposing that there be no link between hedging products and transmission investment. Conversely, in the *REZ* paper, the AEMC is proposing a direct link between hedging products and transmission investment. Is the AEMC able to clarify its policy intent?
Timing: The AEMC proposes that its proposed access model be implemented by July 2022. The AEMC considers that since it has dropped FTRs directly informing transmission planning, the model is simple enough that this timeline is achievable.		DELWP notes that many stakeholders have raised concerns about the achievability of this implementation date. Does the AEMC still consider this timeline achievable, given the lack of broad support for the changes?