

19 September 2017

Australian Energy Market Commission  
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Submitted by email to [aemc@aemc.gov.au](mailto:aemc@aemc.gov.au)

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### **Coordination of generation and transmission investment Approach Paper**

Snowy Hydro Limited welcomes the opportunity to comment on matters raised in the Approach Paper from the Australian Energy Market Commission (the Commission) on the coordination of generation and transmission investment.

Snowy Hydro Limited is a producer, supplier, trader and retailer of energy in the National Electricity Market ('NEM') and a leading provider of risk management financial hedge contracts.

Snowy Hydro acknowledges that the current degree of uncertainty regarding future patterns and drivers of investment requires a coordinated approach for transmission and generation across the National Electricity Market (NEM). However with the current poorly integrated energy and climate change policy, multiple and overlapping policy reviews and inconsistent State and Federal Government regulatory frameworks recommending any significant changes, such as the Optional Firm Access (OFA) model, is not addressing the cause of the problem but merely addressing a symptom. The OFA would greatly increase the risk of trading in the NEM. Snowy Hydro therefore strongly does not support an OFA option in relation to access arrangements. Rather we support the current status quo of open access supplemented by more strategic planning of the transmission network to ensure transmission is built in the most efficient manner as the NEM transitions to a more variable generation mix.

### **Transmission Charging Arrangements**

As highlighted in Box 3.1<sup>1</sup> of the Commissions' Approach Paper there are a number of valid and economically efficient reasons why generators should continue to not be required to pay for Transmission Use Of System (TUOS) charges:

1. Load as a whole receive some level of implied transmission access rights (ie. Firm rights) to the transmission network due to the fact transmission services and investments are made to satisfy relevant jurisdictional reliability standards.
2. Generators on the other hand have no firm access right to the shared transmission network

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<sup>1</sup> AEMC, 2017, "Coordination of generation and transmission investment, Approach Paper", pg 10

3. For these reasons outlined in 1 and 2 above, customers pay TUOS charges

Snowy Hydro also notes that it would be inefficient to charge generators with a proportion of TUOS charges because the only means of recovering the charge would be through the Spot market. A generator's Spot bids are made of many considerations and hence to incorporate the uplift required to recover generator TUOS charges would most probably mean these costs are not recovered sufficiently. As a consequence, generators viability may be further eroded leading to premature exit from the market.

For the reasons outlined in this section Snowy Hydro strongly opposes any recommendation to charge generators TUOS.

In section 4.1.3 of the Approach Paper, the Commission states that in the absence of requiring generators to pay TUOS charges, consideration of whether a separate registration for storage may be appropriate<sup>2</sup>. Snowy Hydro notes that Snowy 2.0 (pumped hydro development) is no different to the Tumut 3 pumped hydro power station. Snowy Hydro's intention is to register Snowy 2.0 as a scheduled generator and a scheduled load (pumps).

Snowy Hydro notes that for a pumped hydro development, the pumping of the water is primarily for the provision of services such as energy, inertia, system strength, and voltage support - these are all services provided from synchronous generation - and services that are not provided from a load. Hence the services provided from pump hydro generation are services associated with generation from a synchronous generator and therefore TUOS charges should not apply.

### **Integrated Transmission and Generation plan**

Snowy Hydro is supportive of coordinated transmission and generation investment given the challenges facing both network and service providers and generators in the rapidly evolving energy market as it transitions to a lower emissions future.

The National Electricity Rules (NER) currently require TNSP's to undertake an annual planning review and publish the results by 30 June each year. Although the review, which identifies an optimum level of transmission investment to enable TNSP's to deliver required services at an efficient cost, involves significant joint planning with each network service provider, a more integrated and strategic approach to develop the overall grid in the most efficient way is still required. Snowy Hydro notes a primary purpose of the Energy Security Board (ESB) is to improve long-term planning in the NEM.

Currently AEMO's National Transmission Network Development Plan (NTNDP) assess the importance of the NEM transmission grid and the efficient development of the national transmission under a range of scenarios. We believe publications such as the NTNDP are important for the coordinated transmission and generation investment planning required in the current environment.

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<sup>2</sup> AEMC, 2017, "Coordination of generation and transmission investment, Approach Paper", pg 19

According to the recent Independent Review into the Future Security of the National Electricity Market<sup>3</sup>, AEMO's current transmission planning provides limited guidance regarding prospective resource zones for solar, wind, or pumped hydro storage while TNSPs' annual planning reports generally only discuss the location of renewable energy resources in each region at a high level. Snowy Hydro supports an integrated grid plan for the NEM transmission network which identifies renewable energy zones across all NEM regions and identifies transmission network routes to efficiently connect the renewable energy zones to the existing transmission infrastructure.

An integrated transmission plan which will allow market based solutions to arise is our preferred approach over a centrally-planned and mandated approach to transmission investment. We agree with the Commission which noted that *"centrally planned solutions rely on a centralised agency making decision about coordination of transmission and generation investment, which will likely foreclose the considerable potential benefits of a well-functioning market, and may result in trade-offs being made between different objectives by governments on behalf of consumers"*<sup>4</sup>. The market with good information to make investments provides the best incentives for innovation which will deliver benefits in the long term interest of consumers.

### **Transmission Access Arrangements**

The Commission has considered the OFA model in relation to access arrangements. Snowy Hydro strongly opposes implementing an OFA type model with our preference being to continue with the status quo of open access option.

In general the current process to relieve transmission network congestion is adequate at ensuring transmission investment is developed in conjunction with generation developments. We believe the current RIT-T framework is used to ensure network investment is optimised despite certain limitations, such as the accuracy of the forecasts on which the assessment relies, and possible lags in transmission network investment. Strategic transmission investment which may not be properly assessed through the RIT-T framework may require a separate mechanism to assess and invest in the relevant project. Alternatively, the RIT-T could be amended to adequately assess and value the strategic value of the transmission augmentation.

As stated earlier, Snowy Hydro supports an integrated grid plan for the NEM transmission network which identifies renewable energy zones across all NEM regions and identifies transmission network routes to efficiently connect the renewable energy zones to the existing transmission infrastructure.

Snowy Hydro asserts this is not the time for the Commission to make a significant change to transmission access arrangements when there is uncertainty in the current environment. Until there is a stable emissions reduction policy in place in the energy sector it is very difficult to predict what the impact on generation, and in turn, transmission will be. The current uncertainty regarding emissions policy is having a negative impact on investor confidence and willingness to invest in new generation.

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<sup>3</sup> Independents Review into the Future Security of the National Electricity Market: Blueprint for the Future, pg 121-125

<sup>4</sup> AEMC, 2017, "Coordination of generation and transmission investment, Approach Paper", pg 13

The OFA would increase rather than reduce the risks faced by consumers and would be more likely to harm the efficiency of generation and transmission investment coordination than to improve it.

In 2015 the Commission found that the benefits of OFA did not outweigh the costs with the OFA not offering an appropriate way forward for the NEM, irrespective of potential future changes in market conditions and uncertainty regarding generation technologies and costs<sup>5</sup>. The Commission at the time did not establish the existence of significant problems in the current market design that OFA would be likely to address. We believe two years later the same arguments apply.

Firm access planning in an uncertain investment environment will lead to information asymmetry between TNSP and the Australian Energy Regulator (AER) and a risk of uneconomic overbuild of network capacity. Certain generators may be prepared to accept having capacity they know could get constrained off and unable to earn revenue while risk averse generators would make their own assessment of efficient investment rather than investing in fully firm access to achieve an efficient outcome.

Snowy Hydro supports the Commission assessment using the principles outlined in the Approach Paper, but any recommendations should also be contemplated in the context of the other reviews in progress, as well as proposed rule changes under consideration which may affect the outcome of this review

Snowy Hydro appreciates the opportunity to respond to the Approach Paper. Any questions about this submission should be addressed to Panos Priftakis, Regulation Manager, by e-mail to [panos.priftakis@snowyhydro.com.au](mailto:panos.priftakis@snowyhydro.com.au).


Yours sincerely,

A handwritten signature in black ink, appearing to read 'K Ly', with a stylized flourish underneath.

**Kevin Ly**  
Head of Wholesale Regulation  
Snowy Hydro

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<sup>5</sup> Frontier, 2015, "Response to OFA Draft Report", pg iii

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