



1 November, 2012

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

Submitted online to AEMC: Reference EPR0019Transmission Frameworks Review

Dear Mr Pierce

Re: AEMC Second Interim Report for the Transmission Frameworks Review

Pacific Hydro is pleased to provide comments to Commission's Second Interim Report under the Transmission Frameworks Review, following on from our submission to the First Interim Report earlier this year.

Pacific Hydro is a leading Australian renewable energy company with over 20 years' experience in project finance, development, construction and operation of hydro, wind, solar and geothermal power projects in Australia, Brazil and Chile. Building on these existing interests, this year we launched a retail electricity business for the Australian commercial and industrial retail market.

We are a wholly owned subsidiary of the Industry Funds Management (IFM) Australian Infrastructure Fund through which Pacific Hydro provides sustainable infrastructure investment opportunities for around 5 million Australian superannuants. We are proud to continue to provide strong returns for the environment, local communities and investors.

Prevailing policy environment

There are two major signals driving energy market investment that exist external to the energy market and its legislative framework under the National Electricity Law:

- The bipartisan supported 45,000 GWh (20%) Renewable Energy Target for 2020; and
- The Clean Energy Future legislation which is based around the (bipartisan) target to deliver a 5% carbon emissions reduction target for 2020.

The adoption of the expanded RET in 2009 and start of the carbon legislation in 2012 recognise the crucial role of the energy sector for Australia to reduce its emissions.

These policy drivers underpin the fact that renewable energy generators will be major investors in network and connection assets in the coming decades.

While a full transition to clean energy generation will take several (or many) decades to achieve, it has already started and this direction needs to be properly and seriously considered in the AEMC's Transmission Framework Review and related policy discussions with Government and market participants.



The MCE's original terms of reference to the AEMC required that the Transmission Frameworks Review should "have regard to the national electricity objective".

In current policy environment the AEMC should also have regard to other national policies that are vitally linked to existing and future investment in the NEM. In our view, this would include the AEMC having regard to the objectives of the Renewable Energy Target and the Clean Energy Future Legislation. For both, there is a clear inter-relationship to energy generation investment, network investment and market outcomes.

As Pacific Hydro has long argued, the National Electricity Objective (NEO) should include an emissions reduction objective to align investment signals to market participants and ensure that regulatory institutions are directed to consider trends in consumer and market behaviour spurred by long-term energy and climate objectives.

Our submission supports the Clean Energy Council

Pacific Hydro would like to acknowledge that we support the submissions in response to the Second Interim Report from the Clean Energy Council (CEC).

As noted by the CEC, the clean energy industry is expected to be the single largest investor in new transmission infrastructure in the coming few years.

As a founding member of the renewable energy industry in Australia, we have a keen interest in ensuring that the AEMC is fully appraised with regard to the impacts of change, or no change, to the transmission framework on existing and new entrant renewable energy generators in the NEM. Our investment plans are of crucial interest to network planners, the market operator, regulatory institutions and policymakers.

The Second Interim Report's key findings and recommendations thus far relate to planning arrangements, current access arrangements and a potential new approach (Optional Firm Access), connection rules and contestability. The key aspects of the Commission's views and recommendations of interest to Pacific Hydro are outlined below:

- 1. Planning:
- The Commission considers that only a profit-motivated planning body can produce efficient outcomes and as such has recommended that the planning roles undertaken by AEMO for Victoria should move to a for-profit network owner.

The Commission indicated that it considers the Victorian model to be inefficient in comparison to other states' arrangements.

- 2. Connections
 - The Commission has identified areas of ambiguity in the rules over the definition of connection assets, extensions and network assets and the application of those rules by market participants.
 - The Commission has concluded that negotiated transmission services require additional levels of transparency to hold network service providers accountable for their decisions. The Commission did not consider the Victorian model, which encourages contestability for connections, was providing efficient outcomes.
- 3. Access arrangements



- The Commission considers that the current rules impose unworkable obligations on transmission network service providers (TNSPs) and proposed that Clause 5.4A be removed from the rules and therefore remove the 'unworkable' element from the framework. Within this discussion, the Commission has identified that there is 'no guarantee' of access provided in the existing Rules.
- The Commission proposed a new approach to access Optional Firm Access to promote market-led investment in transmission. The OFA model is described by the AEMC as "potentially the biggest change since market start".

Pacific Hydro is supportive of appropriate, efficient regulatory settings that encourage competition, increase competitive pressure, promote transparency and provide fair access and pricing arrangements for market participants.

However, we share the CEC's concern that the problems in the current framework have not been clearly articulated nor have the costs to the market of these problems been quantified. Of additional concern is that the potential impact of change on existing semi-scheduled and new entrant generators has not been adequately considered.

We also consider that the Victorian model is proving that competitive pressure in many areas of the market is producing efficient outcomes and ensures there is clear separation between the planning role (undertaken by AEMO) and transmission investment made by privatised network companies.

In general, Pacific Hydro would like to see the AEMC take a strong interest in the way that the current framework is being used in negotiations between new entrant generators and network service providers.

To this end, we remain open to discussions and follow up through the Clean Energy Council and directly with us.

For further information in relation to this submission, please contact our Senior Policy Manager Bridget Ryan on 03 8621 6412.

Sincerely,

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Lane Crockett General Manager Pacific Hydro Australia



Comments in response to the Second Interim Report

As a developer, owner and operator of largely semi-scheduled, new entrant renewable generation Pacific Hydro is concerned that the critical role of renewable new entrant generators in future transmission investment has not been fully considered thus far.

In general, we are concerned that the full cost or depth of the problem(s) in the current transmission framework has not been fully articulated through the First and Second Interim Reports.

We consider that the proposed changes outlined for access in the Second Interim Report are not sufficiently developed, or considered in terms of the potential impacts on *all* market participants. With no cost-benefit analysis provided to underpin the rationale for further steps being taken, we do not consider that it is appropriate for the AEMC to pursue this fundamental market change at this point in time.

At a high level, we are concerned that the Second Interim Report connection and planning proposals *tend* to align with the views of network owners. This is highly concerning and appears to be driving outcomes which could deliver an environment where the current situation, outside of Victoria, will decrease competition and limit the fair frameworks for new entrants.

Further comments are made below in relation to the Commission's proposed changes or recommendations for planning, connections, contestability and access.

1.1 Planning

Victoria is notably the only state to have fully privatised its market and removed retail price caps¹. It is also the only state where network planning is undertaken by an independent non-profit entity other than the incumbent state network owner. As such, we are surprised that the AEMC has agreed with many of the state owned network companies in its latest report.

The approach to planning that is proposed through the Second Interim Report appears designed to quash prospects of the Victorian model for planning continuing in Victoria or being adopted in other states.

If the AEMC is proposing boarder powers for AEMO as the National Planner, then the independent role of state planner in Victoria must be retrieved into an independent not for profit State planner as is expected under Victorian legislation. Rather than the AEMC's approach to move this planning function to a for-profit network owner.

It is clear to us that for profit planning as undertaken in all other NEM states has led to significant network costs the like of which have not been experienced in Victoria as noted in the Speech from Rod Simms on 24 October and highlighted on numerous occasions by Professor Ross Garnaut.

Further, as noted in the Productivity Commission's draft recommendation in the *Electricity Network Regulation Frameworks* report, the PC recommends that AEMO should be established as a national planner with all requisite responsibilities (15.2). The Productivity Commission's

¹ As shown by Professor Ross Garnaut in 2011 and reiterated in the Australian Financial Review recently (**Attachment A**), network revenues (and costs to consumers) have risen sharply in all states outside Victoria.



recommendation further endorses the view that for-profit planning in the NEM does not deliver optimal economic outcomes.

In addition to the above, a recent report for the Energy Users Association also noted that when comparing outcomes delivered by TNSPs in Victoria "appear to be substantially better than the outcomes delivered by TNSPs in other regions of the NEM".

2.1 Connections and ambiguity in the rules

As with the earlier (first) Interim Report, the Second Interim Report outlines concerns with the approach to "connections" and "connection assets".

As we argued in our earlier submission, the initial Market Rules defined and approached these terms consistently. The only area where there is confusion is the latterly developed chapter 6A which is largely concerned with network pricing and as a result was primarily consulted on with little input from generators.

To clarify our comments with respect to Clause 5.4A, initially made in response to the first interim report, we want to emphasise that:

- **Clause 5.4A** in the National Electricity Rules is one rule within a chapter that was developed in consultation with all market participants.
- Removal of this rule in its entirety would be at odds with the desire for efficient (economic) outcomes.
 - Clause 5.4A provides fundamental support for the connection negotiation process by placing obligations on TNSPs that are unrelated to "firm access".
 - the removal of any part of clause 5.4A that does not relate to compensation arrangements would be regressive.

With regard to the connections in the Second Interim Report, some network owners have expanded into the delivery and ownership of connection assets and are now looking to extend the boundary of their "network"

Pacific Hydro considers that competition would be impeded by such a move. Any expansion of the TNSP sphere of influence and ownership beyond that appropriate for a monopoly will likely raise costs to the market or end-consumer and reduce the potential for competitive pressure and overall economic efficiency.

Indeed, the risk of monopoly asset owners moving into the delivery and ownership of connection assets was identified a as a risk very early on. We note that due to this risk, the Rules did not contemplate TNSPs owning connection assets, with the corollary that generators would. It is precisely because of this, and in light of the fact that TNSPs have assumed that they can own these assets, that the Commission is now grappling with the issue of how it should approach regulation of these otherwise commercial assets.

From the generator perspective, connection assets that have been paid for by a generator and designed and built to service that generator, are still *connection assets* and are covered under a *commercial contract*.

There are many examples where TNSPs have delivered connection assets under negotiated transmission services. We believe that the proposed transparency in the negotiating frameworks is a good start. However, improved transparency arrangements could be further cemented by



changes which improve consistency between *chapter 6A* and other chapters and definitions in the rules.

In particular these changes should focus on the regulated (shared) *network* and explicitly state the separation between parts of the transmission system including connection assets which were not intended to be considered as "network" assets and the shared, regulated network assets themselves, which were intended to be owned by the monopoly and strictly regulated.

Pacific Hydro is not convinced that there is a clear market benefit to bringing all connection assets into the TNSPs asset base, nor that this would be in the interests of market competition and economic efficiency. In our view, generators should be entitled to own and operate these assets, even where these assets are more than two kilometres long.

Network extensions as "connections"

In relation to network extensions more generally, we note that in its final determination under the AEMC's Scale Efficient Network Extension (SENE) rule change the Commission argued that generators should pay for the network extensions. Ironically, the SENE rule change in effect made these 'extensions' sophisticated connection assets through requiring generators to pay for them. It also in effect removed the relationship and obligation on the NSP to design and build network which is of higher capacity and capable of connecting multiple parties, both generation and load.

Further, the AEMC has, to date, argued against provision of *regulated* network extensions. However, through the proposed approach outlined in the Second Interim Report, the AEMC now seems to be arguing for connections assets to be considered to be "network".

If the Commission continues to pursue such a fundamental change to the definitions, this would increase the boundary of the TNSP's area of control, expanding the effective monopoly while the assets are only designed to carry the generator's capacity. This would mean that these assets no longer remain dedicated connection assets but would be considered 'network' under the rules. If this is the case, in our view, a generator should therefore not be required to pay anything more than the regulated rate of return and the costs associated with the assets must be <u>fully regulated</u>.

"Connections" could be regulated

The delivery of connections assets can be efficiently deployed with appropriate regulation and clear Rules.

In our view, the Commission has an opportunity to clean up the delivery of connection assets so that generators can build and own them without paying excessive and uncompetitive rates.

If the TNSP is to build and own them (as contemplated by the Commission) they should be required to do so only at a regulated rate.

Generators will pay a reasonable regulated rate if this is appropriately regulated and transparently determined. The point has been made in other submissions to the Commission that the significant increases in network charges that customers have experienced are not set at an efficient or competitive rate.

From our perspective, the Commission should outline its views on the level and depth of "appropriate regulation" on TNSPs owning connection assets, but should also continue to allow for generators to build and own such assets under commercially negotiated terms. This latter



option should be allowed to occur to support competition and efficiency in the NEM for transmission.

Transparency and "more open" negotiations

The AEMC has proposed more transparency in the provision of negotiated transmission services. We support this principle and consider that monopoly provision should in effect require TNSPs to be open and provide transparent information in negotiations. After all, TNSPs have the upside of the 'information asymmetry' in access to all relevant information about the network and how, specifically, power from a particular generator and connection asset would be transferred through the system.

Open negotiations should be encouraged through this Review and entail at least, transparent information exchange (including of efficient costs) and fair and equitable allocation of risk between parties.

From our understanding, the AEMC appears to consider that it needs to have the same level of regulation for "connection assets" as is applied to network. However, as these assets are very different components of the system, we would like to understand (and be convinced) that the regulation of these assets, in the circumstance where a TNSP is able to own them, will encourage competition in the provision of connection assets, and/or resolve ambiguity.

We note that the CEC's submission proposes an enhancement to 5.4A which would reinforce the current obligations on TNSPs to provide information on constraints in their networks and continue to support the desire for increased transparency in relation to connection negotiations.

2.1.2 Land acquisition

As noted above, a generator can deliver connection assets competitively provided they can access land acquisition provisions.

While not addressed by the AEMC thus far in the Review, it is well known that if land access matters are not open to a generator then you have no option but to negotiate with the regional transmission owner. Indeed, we consider it perplexing that an incumbent TNSP is deemed the only licensed entity that can apply for land acquisition access despite the fact that this detracts from competition outcomes.

In our view, the issue of land access and competition for transmission connection assets should be considered a serious issue by the AEMC in the context of the Review.

3.1 Access and Power Transfer Capability

The AEMC has taken the opportunity in the Second Interim Report to remind participants of the open access nature of the market in which we compete by asserting that there is no guarantee of access.

During connection negotiations TNSPs will (and do) try to avoid specifying a power transfer capability. The obligation within the connection requirements of Chapter 5 to specify the *power transfer capability* in the connection offer is to ensure that TNSPs provide clear and transparent connection studies that define the conditions within the network under which "the maximum permitted *power transfer through* a *transmission* or *distribution network* or part thereof" may occur. The definition is very clear. This is not about transfer *over the connection assets*; it is transfer *through the network*. This definition is about the connection studies that the TNSP must conduct as they are in the most knowledgeable position to perform these studies.



The power transfer capability will be affected by special limits, control schemes, operational arrangements, special temperature conditions (or wind conditions affecting dynamic ratings etc). The existing rules recognise this and require that the TNSPs (as the only ones with the requisite knowledge) to analyse their networks and work out what power the network is capable of accepting. This is not a guarantee, nor does it define a continuous transfer, it is about the **maximum permitted**, which can and will be affected by dispatch, or other physical limits within the network. This description of the conditions under which the maximum permitted transfer can occur is very important as it will outline the factors and network configurations that can (and will) also **reduce** power transfer.

All participants know that they are operating in a competitive market, however, the maximum permitted transfer or *power transfer capability* must be studied and provided to a connecting party. Without this, the connecting party is not informed of all the network factors that can affect the power transfer. This is a power engineering requirement on the TNSPs. A connecting party must know what conditions can physically limit the maximum.

Provision of these studies is an entirely reasonable (and practical) requirement on the TNSP. We are thus disappointed that TNSPs have, in a number of cases (which we are aware of or have had direct involvement in), avoided the provision of a power transfer capacity, failing to provide engineering network studies that identify limiting factors that exist within their networks. From the perspective of a generator, failure to clearly identify the limiting factors within the network to a connecting party amounts to concealing risk that should be disclosed.

3.2 Optional Firm Access model

Pacific Hydro cannot support the OFA proposal as we do not believe that the AEMC has considered the potential impact on existing and future renewable energy market participants who are largely semi-scheduled. The model proposes costs for access that are to be calculated by the TNSPs which again seems fraught with problems given the present experience with network price determinations and regulatory incentives.

Further, as noted by the CEC, we are concerned that the cost to the market from the issue that this model is trying to address has not been fully quantified. In our view, given that this proposal is likely to take over seven years to develop and impose the biggest change since market start, the potential costs and risks must be fully and judiciously investigated prior to choosing this option.

Of particular concern to us is that the OFA model is likely to have a severe negative impact on the ability to achieve emissions reduction and the renewable energy target. On this point, we strongly support the CEC's call for these issues to be fully accounted for in the AEMC's report(s) to the Standing Council on Energy and Resources.

In conclusion, as the designated Rule Maker, the Commission should not allow (or support) arrangements that will end up costing the market more and reducing competition.





Attachment A



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NEWS rules 'failing ergv

Marcus Priest

Prominent economist Ross Garnaut has called for a reduction in the guaranteed rate of return on investment

anteed rate of return on investment for electricity networks, claiming the rules are "unsustainable". Speaking to a Senate select com-mittee on electricity prices, Professor Garnaut also advocated allowing communities to buy distribution assets and opt out of existing elec-tricity networks.

assets and opt out of existing elec-tricity networks. Dr Garnaut's comments come after *The Australian Financial Review* reported national and state energy price regulators were tough-ening up allowable power company infrastructure and borrowing costs. Research from energy efficiency firm BigSwitch Projects on energy price increases for businesses since July I reveal increases of up to 75 per July I reveal increases of up to 75 per cent in the peak demand charges

cent in the peak demand charges imposed by some electricity networks

Dr Garnaut told the committee power prices had risen more between 2006 and 2012 than any other comparable period in Australia or in other developed countries.

He said the reason for the increase was the contribution from transmis-sion, distribution and retail energy

Windfalls



sectors. In contrast, the cost of wholesale electricity - including the carbon price - was lower in real terms now than in 2006. "Where we went wrong is adopt-

ing rate of return regulation of prices and rate of returns that was

too high," Dr Garnaut said. "I think, frankly, we have to face

up to having made a mistake in regu-lation in 2006 and that mistake has given very large amounts of income and wealth to some people.

As demand for power has fallen in response to increases, energy prices had increased even further to make

up for the lost revenue, he said. "It is basically a risk-free rate of return," he said. We are in that unsustainable

situation now.

He said for government-owned networkcompanies a decision had to be made whether there were better ways of raising revenue. "Is artificially raising the price of

electricity a good way for government to raise revenue? I would expect there will be alternative forms of revenue that would give you the fiscal effect you want at much lower cost to the community.

Under rules being reviewed by the

state-owned disfederal regulator, debt of 9 per cent, even as the cost of debt of 9 per cent, even as the cost of debt falls to 3.5 per cent thanks to strong offshore demand.

The study by BigSwitch of 66 large business power users found the averbusiness power users found the aver-age price increase was 18.6 per cent after the start of the carbon price scheme, although the increases ranged as high as 53 per cent and as low as an actual fall of 5 per cent. The carbon price added on aver-age 11 per cent but there were also have increases in "demand charses"

large increases in "demand charges" imposed for the maximum power demand.

demand. For sites supplied by the major Ausgrid network in NSW, the demand charge rose between 69 per cent and 75 per cent, while the charge for the Energex network in Brisbane was up between 29 per cent and 46 per cent

and 46 per cent. BigSwitch managing director Gavin Gilchrist said the businesses surveyed did not know peak demand

surveyed dd not know peak demand charges wolkl go up so much "While everyone's been focused on the carbon price, many electricity companies have imposed a historic shift in the way business is charged for power, one few would be aware of," he said.

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