

10 October 2019

Nathan White
Manager Victorian Transmission Planning
Australian Energy Market Operator
GPO Box 2008
MELBOURNE VIC 3001



Dear Mr White,

Submission to VNI upgrade RIT-T PADR

The Public Interest Advocacy Centre (PIAC) is an independent, non-profit legal centre based in New South Wales. Established in 1982, PIAC tackles systemic issues that have a significant impact upon people who are marginalised and facing disadvantage. We ensure basic rights are enjoyed across the community through litigation, public policy development, communication and training. The Energy + Water Consumers' Advocacy Program represents the interests of low-income and other residential consumers, developing policy and advocating in energy and water markets.

PIAC welcomes the opportunity to respond to the PADR for the Victoria to NSW Interconnector (VNI) upgrade RIT-T.

The preferred option

PIAC supports the proposed preferred option (ISP base option with modular power flow controllers) as the most desirable option considered in the RIT-T process. In particular we are encouraged by the use of modular power flow controllers as an alternative to the more traditional uprating transmission lines, because it is both more cost-effective and faster to implement.

However, despite it being the best of the options considered, PIAC has several questions regarding whether or not the option is in the long-term interests of consumers. These are described below.

Cost and risk allocation principles in general

Given the need to invest in both new generation and networks to enable the energy transition to an affordable, low-emissions future, it is essential to determine the proper risk allocation between industry and consumers.

As with most questions of risk allocation, PIAC considers that risk should be borne by those best placed to manage it. For instance, it is not appropriate for consumers to entirely bear investment risk to cover the financial impacts of generator curtailment either through funding additional transmission investment to alleviate physical constraints or underwriting financial instruments.

Distinct from the allocation of risks, is the recovery of costs – noting that while the costs and risks are generally related, they are not necessarily the same.

PIAC's key principles for cost recovery are that:

- Costs are recovered according to a beneficiary-pays framework, such that those who benefit from a given investment should also pay for that investment. Where there are multiple beneficiaries, the costs should be recovered proportionally to their share of the benefits.
- Where it is not practical and transparent to identify or measure the beneficiaries, a causer-pays principle should be used.
- Cost recovery should also include the risk, to the extent it exists, of the underutilisation of assets and hence asset stranding.
- Cross-subsidies should only be permitted where they are accepted by informed consumer feedback (such as retaining postage stamp pricing for distribution network tariffs) or immaterially small.

These principles highlight two predominant questions regarding major investments in interconnectors or national transmission flow paths such as the proposed VNI upgrade:

- the recovery of costs and accrual of benefits between consumers and other parties such as generators; and
- the recovery of costs and accrual of benefits between consumers of different NEM regions.

Addressing both is essential to ensuring any major investment to the transmission network is in the long-term interests of consumers. For the VNI upgrade, PIAC considers that the recovery of costs and accrual of benefits between consumers of different NEM regions is the more relevant of the two.

Cost and risk sharing for the VNI upgrade between consumers in different regions

In PIAC's view, even if the VNI upgrade provides a net benefit overall, it would only be in the interests of all consumers if the expected benefits that accrue to NSW consumers outweigh the costs imposed on them and the benefits that accrue to Victorian consumers also outweigh the costs imposed on them. Otherwise, the VNI upgrade should not be built without cost recovery arrangements that correct for this misalignment.

The current investment efficiency tests, such as the RIT-T, are designed as a NEM-wide cost-benefit analysis. As a result, the modelling is insensitive to where in the NEM these costs or benefits occur – it only considers the total costs and total expected benefits across all consumers throughout the NEM. This is in contrast to the way these costs are actually recovered through network prices which are primarily based on where the expenditure occurred.¹

For projects that are incremental expansions or reinforcements of the existing network and distant from neighbouring regions, such that the expected benefits from the investment accrue

¹ There are mechanisms in place to apply network costs across network jurisdictions. However, PIAC considers the effectiveness of these in certain cases to be very limited. For instance, the inter-regional TUOS is only applied to the locational component of transmission costs (currently 50%) and does not address the risk of asset underutilisation. Further, it assumes that asset utilisation in terms of power flows is an appropriate proxy for the value delivered to consumers. This is discussed further in PIAC, [Submission to Coordination of Generation and Transmission Investment options paper](#), October 2018, 6-8.

exclusively to consumers within the network's jurisdiction, this misalignment would not pose a significant issue. However, this is often not the case for more strategic or nationally significant investments, such as the VNI upgrade, where a significant proportion (or even the majority) of benefits may accrue to another jurisdiction or multiple jurisdictions.

This misalignment effectively means that one set of consumers may pay for the benefits received by a different set of consumers, which runs counter to one of the fundamental principles of the NEM of cost-reflectivity. If costs materially exceed benefits in any jurisdiction, a particular project may have a negative net economic benefit (i.e. an overall detriment) for consumers in one network's jurisdiction despite being positive NEM-wide.

Recommendation 1

PIAC recommends that AEMO and TransGrid examine the relative accrual of expected benefits to consumers in different NEM regions and compare this to how the consumers' portion of costs will be recovered through TUOS.

If there is a material imbalance, PIAC recommends that AEMO and TransGrid highlight this fact and examine options to address this as part of the VNI upgrade RIT-T, including reallocating capex and/or regulated revenue recovery between NEM regions in proportion with their share expected benefits.

Interaction with other RIT-T processes

PIAC is aware of a number of other related transmission investments at various stages of planning that may have material impact on the VNI upgrade, including HumeLink, project Energy Connect and the Western Victoria RIT-T. PIAC expects clarity on how AEMO, TransGrid and other TNSPs plan to incorporate the impacts of other transmission projects into market modelling and options selection. This is important to ensure that multiple projects are co-optimised, costs are not doubled up or benefits double counted.

Recommendation 2

PIAC recommends AEMO and TransGrid provide clarity on how it plans to incorporate the impacts of other related transmission projects (such as HumeLink, Project Energy Connect and the Western Victoria RIT-T) into the market modelling and options selection of the VNI upgrade RIT-T.

Continued engagement

PIAC would welcome the opportunity to meet with AEMO, TransGrid and other stakeholders to discuss these issues in more depth.

Yours sincerely,

Miyuru Ediriweera

Senior Policy Officer, Energy and Water
Public Interest Advocacy Centre

Direct phone: +61 2 8898 6525

E-mail: mediriweera@piac.asn.au