

Consultation Paper - Transmission pricing methodology: 2019 Issues Paper

Submission from Graeme Weston (prosumer), 30 September 2019

There is a perception that folk living in the provinces, close to generation, are subsidizing the cost of transmitting energy to large consumers away from the energy sources e.g. Benmore Electricity to Auckland. The downside of subsidies are the distortions they promote.

For example, the Eastern Bay of Plenty has numerous Geothermal and Hydro Power Stations within. It is effectively a net exporter of energy from the area. There is no mechanism to allow a Kawerau house holder (or high energy industry consumer) to purchase energy without paying an unrepresentative transmission charge. What's the real price of transmitting energy via literally a cable over the fence?

When the old NZED was dissolved it was just too hard to divide up the cost of transmission. So, the fixed charge regime was applied. This call for submissions by the EA is recognition that this legacy issue is in need of urgent review.

My submission is that NZ use the technology available in our smart meters to calculate the real costs of transmitting energy. Aim for user pays as a methodology.

If "The Code" is too constraining, quit shuffling the deckchairs in futile efforts to comply with legacy rules that are no longer fit for purpose. In the process future proof for:

- Distributed Energy Resources
- Prosumers, prepared to come on board by investing, who need the grid to trade
- Consumers need access to "their" smart meter data – meter owners deny access at present
- Allow for real time energy trading.
- Establish a model for community microgrids or Virtual Power Plants.

My apologies for not complying with the established practices of an EA submission. As a domestic consumer it has proven difficult trying to decipher the years of patches that have been added to The Code – I believe it is a mighty tome. To compete in the formal process, we domestic consumers would need hours of expensive knowledgeable support to offer arguments in the correct format. The EA appears to have the brief of representing us but has been hog tied by the corporate vested interests who have weaponized the code to suit other agendas.

The Code has been degraded to a maze of bureaucratic clauses subject to gaming by some operators. Shame on them for being imperfect corporate citizens.

Why do we not trust the power companies? We minnows are relying on the establishment, "in the know", to get on and do the right thing for the NZ community.

Sure, we will hear howls of protest from selfish corporate Aucklanders and ill-informed consumers (fueled with sound bites and fake news) prepared to take from provincial dwellers least able to afford the fixed rate. Those Aucklanders who want to do something about it have options:

- move to rooftop solar PV
- support wind turbines on the Waitakere Ranges
- relocate high energy consuming industry to provincial areas close to generation where actual transmission charges should be close to nil

This would benefit NZ:

- reducing energy input costs – products would acquire a world competitive energy advantage
- removing the stresses of an overpopulated Auckland Isthmus
- boost the economies of the poor cousin provinces

Could even lead to NZ establishing a renewable energy export industry:

- An expanded Tiwai Point would become a means of exporting this energy if true transmission charges were applied to its product.
- High energy timber processing plants in the provinces instead of stacks of low value raw logs clogging our ports

Northland is at the end of the transmission system thus would apparently attract the highest transmission charges under a User Pays methodology. Solutions:

- Ngawha Geothermal Power Station expansion
- wind turbines harnessing the vagaries of the nearby Tasman Sea
- solar farms harnessing the second highest solar irradiance on offer in NZ

Could Northland become a net exporter of energy to their neighbor, Auckland? At a price with minimal transmission costs?

Glenbrook steel mill has Tasman Sea wind nearby. High quality steels via electric arc technology are high value products.

Of course, the grid would need to be reconfigured to harness the battery capabilities of the hydro system to meet the variables of sun, wind, the seasons and weather. We are blessed with opportunities.

Introduce a User Pays methodology and allow the opportunities to flow.