DOMESTIC ENERGY USERS' NETWORK

Members

Age Concern NZ
Child Poverty Action Group
Grey Power Federation
Public Health Association
Rural Women NZ

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Submission to Electricity Authority:
Decision-making and economic framework for transmission pricing methodology review
24 February 2012 Contact: Molly Melhuish, melhuish@xtra.co.nz, 04-568 4873

About DEUN
The Domestic Energy Users' Network, DEUN, is a network of national organizations that advocates for affordable and sustainable energy services for all householders. Our policies are based on both statistical evidence and the experiences of our organizations. We promote actions that reduce the inequities in well-being, made worse by household energy bills. We promote energy efficiency and renewable energy solutions that improve household living conditions while reducing greenhouse emissions and other adverse environmental impacts. DEUN supports the principles of the Treaty of Waitangi.

DEUN's members are:
• Age Concern New Zealand
• Child Poverty Action Group
• Grey Power Federation
• Public Health Association
• Rural Women New Zealand

DEUN's Vision
DEUN's vision is that adequate energy services will be affordable to all householders over the long term. This will be achieved through use of best technology to improve energy efficiency, increased use of renewable resources, and best use of non-renewable resources, especially natural gas, to keep renewable energy affordable.

Submission conclusion:

By and large the economic framework for transmission pricing decisions is reasonable. Market pricing for transmission services is desirable as an option, and for domestic consumers is best implemented through critical peak pricing. There is no persuasive evidence in the discussion document to call for a change in status quo in the current pricing methodology.

Introduction

DEUN welcomes the opportunity to comment on the economic framework and high-level issues of transmission pricing decisions. The consultation document is particularly clear and useful, giving for the first time a concise statement of how transmission pricing has developed since restructuring began, and how choices between market pricing and administered pricing were made over the years.

Relation to retail pricing

At the time of impending system peak, the most important consumer is the householder – the person who chooses to flick the switch thus potentially saving many, many millions of dollars.

Both household energy efficiency and price-responsive demand could reduce peaks, both in real time and over the long term, through behaviour response, automated load shifting, and investment in energy efficiency. Retail pricing is therefore important to TPM even though the methodologies for retail and transmission are decided by different parties.

Transmission costs account for only around 9% of the domestic power bill, but this is rising considerably. In locations where distribution costs are high, either in real time or where new assets are needed, appropriate pricing methodologies for both could lead to very significant cost savings, which in turn should make possible reduction of domestic power bills by those who choose to respond to market price signals.

Such opportunities to reduce transmission costs cannot be realized unless the signals are passed through to domestic consumers. A first implementation of market pricing at the retail level by The Lines Company has led to major consumer dissatisfaction, do to high risks imposed on all consumers, and high costs to some.

Therefore any implementation of market pricing for transmission at the retail level should be offered as an option only. One objective of transmission pricing should therefore be to enable straightforward alignment with distribution pricing, and straightforward pass-through as an option (not mandatory) to domestic electricity customers.

Answers to specific questions

Q1. Do you agree with the Authority's Interpretation of the Statutory Objective [as applied to transmission pricing methodology]?

We disagree with the Interpretation that wealth transfers should be ignored, because the purpose of electricity regulation should be focused on the essential service nature of electricity, not the potential for electricity development to promote economic growth. The Interpretation amalgamates needs which are very different for different consumer groups. The market mechanisms that are preferred in all the Authority's work almost always favour the more or most competitive consumers at the expense of the less or least competitive. Domestic consumers who cannot pay on-line, or who are, or have been in arrears, or live in remote rural areas, are the "least competitive" – they are often unable to take advantage of switching power companies.

s. 3.3.7 correctly notes that firms can be able to temporarily set prices in excess of marginal cost. This however may reflect not superior performance, or innovation – it may simply reflect the ability to exploit a market squeeze at some point in time. In such cases, the ability will not be competed away.

s. 3.3.12 "Efficient levels of reliable supply" will have a different interpretation by domestic consumer in comparison to either commercial or industrial consumers. We believe that most domestic consumers can tolerate one or even a couple of transmission outages a year without great hardship – those who cannot are increasingly able to provide alternatives for themselves, or in some medical cases, transport to an appropriate facility. By contrast, even a single

outage in a central business district can cause major economic loss. Industrial consumers will be as price-sensitive as domestic consumers, often more so – and they apparently have sufficient lobbying power to put "reliability" at the top of the agenda, even while paying on average less than half the prices paid by domestic consumers.

In valuing reliability, "lost load" is taken as the cost of outages, rather than electricity not used because of unaffordable prices. This again dismisses the needs of domestic consumers.

We agree that measures that impact on reliability outcomes should encourage efficient trade-offs between the costs and benefits of reliability. But those tradeoffs, if domestic consumers are to benefit, must be offered to them via optional tariffs.

We also recognize that dynamic and static efficiency aims can conflict. But the importance of dynamic efficiency is reduced where costs are already sunk, and pricing methodologies focus more on real-time pricing. In this respect, and to support a fully informed market, it would be well for Transpower to give some easily accessible information on those locations where sunk costs make market pricing less effective, and where, by contrast, investment might be deferred by price-responsive demand or alternative investments.

Q2. Do you agree with the application of the "three limbs" as in the table?

The first example given in "competition" - transmission charges falling to one more than another group of generators - is of course the perennial HVDC controversy. The different viewpoints are concisely explained in the document, and to our mind, the term "distort competition" is going too far. The status quo pricing methodology has in our view reflected real costs to date –and also appears to reflect the description in section 4.1 of the behaviour of a workably competitive market. Once the HVDC expansion is completed, any changed methodology would allow SI generation to expand without regard to its dependence on a very expensive asset. We disagree that HVDC pricing distorts competition from SI generation,

The table maintains the appearance of accommodating investments in demand-side and generation alternatives; it does not address the situation for domestic consumers who could provide some of the lowest-cost peaking alternatives (natural gas and firewood). They have had no opportunity for contestable investment in our preferred peaking alternatives.

Economic framework

We agree with the distinction between market and administered pricing. The explanation of how nodal pricing failed to provide the expected market-price signals is particularly helpful.

Consistent with our discussion above, we would like market pricing to be a choice for domestic consumers – not mandatory. And the choice should be for a proportion, not all, of their consumption as is being imposed by The Lines Company distribution pricing. After all, almost all businesses prefer to hedge their prices so that no more than 5 to 10% is subject to uncertainty.

The best example of domestic-consumer-friendly market pricing is "critical peak pricing", in which a consumer is informed of the approach of a critical peak time, and gets a discount for reducing or shifting demand accordingly.

Answers to specific questions

Q3. Agree that market based TPM would promote efficiency in use and investment in the grid and other parts of the electricity industry?

It depends. As noted above, the most important grid "users" are not Transpower's customers, but the actual domestic consumers who flick the switch. If market signals reach them (in the form of an optional tariff), then we agree this would promote efficiency. But it all depends on the requirement (or lack of it) for downstream businesses to use the pricing signals to promote efficiency rather than increase their own revenues – any retailers who add margins to Transpower's costs are not promoting economic efficiency.

Q4. Agree that market-based TPM is more durable and stable than … administered charges?

Not necessarily. Negotiated transmission pricing will inevitably suffer from the negotiating power of the Transpower monopoly. This will be exacerbated by the factors mentioned in section 4.3.5: economies of scale and the inherent planning bias for early investment which has led to a preponderance of sunk costs. And s 4.3.17 confirms that the Electricity Commission has approved the majority of grid upgrade expenditure. Because of this, market pricing is not really possible to define - who pays for sunk costs is more an administrative than a market question.

Q. 5. Agree that Authority's first preference should be market pricing …?

Again our answer is yes where other factors do not dominate – yet in interconnection pricing other factors have dominated to date, and it is hard to see this changing.

Q 6. Is there any merit in further development of market-based TPM for interconnection and/ or HVDC link assets?

As noted above, HVDC pricing does appear to mirror behaviour of a workably competitive market, with existing, and especially new, producers paying the transport costs, rather than consumers. This describes the status quo, and we see no robust argument for any changes to the status quo.

For interconnection assets, so much of the investment is already made or committed that again any change from the status quo pricing methodology would need to be justified by big efficiency gains, to justify the further costs (including consultation expense!) of change.

Q 7. Agree with the hierarchy of pricing methods – exacerbators, beneficiaries, other options?

Yes where possible, but with the qualification above. It's the pass-through to domestic consumers, and probably new irrigators or other exacerbators that would improve efficiency.

Q 8, 9: how should exacerbators be identified? , what price should they face?

At the level of domestic consumers, clear exacerbators are those in cold (also very hot-in-summer) districts, where heat pumps are increasing peaks loads while often decreasing throughput. Their "ability to act differently" should be captured by tariff options that make it attractive for them to reduce or shift load at critical peak times. In other words, they could identify themselves, given the right tariff offers. It would seem long-run incremental cost would be the most reasonable price.

Q. 10: agree with the assessment of pricing for exacerbators?

S. 4.5.28 is a good summary of an efficient approach.

Q. 10: What if [there are multiple small users]?

This essentially describes the increasing penetration of heat pumps in households. If their demand is leading to a need to augment the transmission network, the most effective and tolerable way to influence their demand would be to offer an attractive tariff to encourage moderation in their use at critical peak times.

S 4.5.32 says "it is important to confirm this [pricing] would not result in them [consumers] acting inefficiently in order to avoid the charge". That statement is only valid if the costs are already sunk. At this level of detail, one must consider efficient use and investment for both transmission and distribution assets together, and pricing negotiations need to include an advocate who can speak effectively for the domestic consumer sector.

Further questions: beneficiaries pay, alternative charging options

Most of these issues have to do with identifiable large customers, and are not of direct concern to the domestic consumer community.

For example, the threat to avoid high transmission charges by disconnecting from Transpower assets has little relevance at the domestic consumer level. There is much talk of amongst consumers of disconnecting in protest at high power prices, but the economics of this are poor.

In contrast, householders installing alternative energy sources which reduce peak loads may well have significance, and should be encouraged not discouraged. Few will want to export energy to the grid, and in the case of rooftop photovoltaics, any electricity export may well alleviate peak loads. Meridian's tariff option, though it requires two separate meters, seems a sensible offer – to accept exports at the retail power price.

The "residual option", postage-stamp pricing, has much merit for mass-market customers, whose location decisions will depend almost entirely on non-electricity considerations. To keep it simple, this should undoubtedly be the default option, with more-market-based pricing options negotiated, probably by distributors, on behalf of consumers in their region, with the expectation that retailers will cooperate.

Conclusion:

By and large the economic framework for transmission pricing decisions is reasonable. Market pricing for transmission services is desirable as an option, and for domestic consumers is best implemented through critical peak pricing. There is no persuasive evidence in the discussion document to call for a change in status quo in the current pricing methodology.