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Australian Energy Market Commission
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National Electricity Amendment (Distribution Network Pricing Arrangements) Rule 2014

The National Generators Forum (NGF) is the national industry association representing private and government owned electricity generators. NGF members operate across all states and territories and all generation technologies, including coal-fired plant, gas-fired plant, solar, bio-waste, hydroelectric plant and wind farms.

The NGF welcomes the opportunity to respond to the National Electricity Amendment (Distribution Network Pricing Arrangements) Rule 2014.

We support the Rule Proponents objective to modify the distribution pricing principles to encourage distribution network prices to be set on a more cost reflective basis, to provide greater certainty on how and when distribution network businesses will change their network prices over time, and to provide more opportunity for stakeholders to be consulted on in the development of the distribution prices.

The NGF believes it is important to provide some context of the current state of the NEM from which this Rule change will be assessed.

Electricity demand (energy consumption) is falling

Electricity demand has been declining since 2008 and the rate of decline is accelerating. Demand for electricity was 4% lower for the first quarter of the 2013/14 financial year than in the previous financial year and is now around 10% lower than when electricity demand peaked in 2008.

Demand for electricity in Australia is now around the same level as it was in 2004. This decline in demand is unprecedented in Australia's post war history and policy makers have been slow to adjust to this new paradigm. Other large developed economies have also experienced this trend of declining demand.

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Peak demand is falling

Peak demand is falling due to a number of factors such as increase energy efficient appliances and increased customer awareness.

Distribution network businesses have already invested in assets to meet forecasted increasing peak demand which has not eventuated.

Analysis from the Grattan Institute illustrates this clearly. Figure 1 below shows how peak demand for the 2012-13 year compares to historical peaks in each state of Australia. The fall in peak demand ranged from three per cent in Western Australia to more than ten per cent in Tasmania¹.



Figure 1. Source: The Grattan Institute, Shock to the system, Dec 2013

Distribution assets are already invested (sunk)

In the current regulatory period Distribution businesses have already invested in assets based on optimistically and unrealistically high demand growth expectations. Falling peak demand leaves distribution network businesses with excess network capacity. These assets are sunk but their capital cost still has to be recovered.

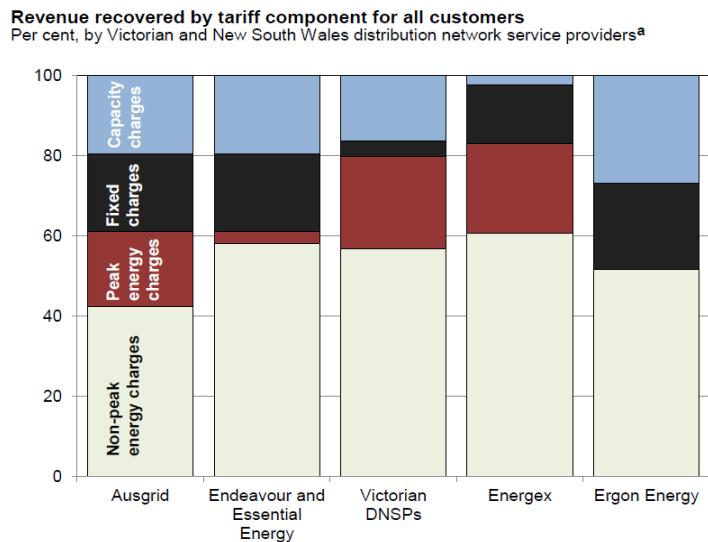
The NGF believes existing pricing principles and tariffs are inefficiently discouraging consumption of electricity. The variable elements of tariffs are clearly far too high when the majority of costs for networks are fixed and have been sunk. In addition, under the revenue cap regulation even if these sunk costs are avoided (through reduced consumption) the costs will be recovered in the following years as the allowed revenue under the AER determination is recovered by the network monopoly. According to the Queensland Audit Office², Powerlink, Energex and Ergon collectively recognised \$947.1M in receivables as under-recovery of revenues at 30 June 2013.

¹ Grattan Institute (Dec 2013), Shock to the system: dealing with falling electricity demand, page 15

² Results of audit: Energy sector entities 2012 – 13, Report to Parliament 9: 2013–14

To illustrate this point that the fixed component is inefficiently too low the NGF highlights a graph produced by the Productivity Commission which shows how much revenue is recovered through variable charges, rather than fixed.

As can be seen from figure 2 only up to 20% of the revenue is recovered through the fixed component.



^a Ausgrid, Essential and Endeavour Energy, Ergon Energy and Energex are based on forecast 2012-13 revenues, while Victorian distribution network service providers' revenues are based on 2010 revenues. Capacity charges apply to parties — mainly large businesses — that place a sufficient volt-ampere (VA) loading on the network infrastructure (which may require particular substation capacities).

Sources: AER (2012n, pp. 124-7); Ausgrid (2012b, p. 12); Ergon and Energex (pers. comm., 2013).

Figure 2.

The Perfect Storm Causing the Energy Market “Death Spiral”

The NGF believes the NEM presently has conditions which has caused the perfect storm for pushing up retail electricity prices. Inefficient network prices and subsidies for rooftop solar systems have interacted to reduce energy consumption below efficient levels.

As consumers reduce their electricity consumption and the fact that network tariffs are designed to recoup revenues predominantly from the variable consumption charges, the DNSPS allowable revenues are recovered from less electricity sold and therefore as a result retail electricity prices must rise.

A vicious circle arises from increasing retail electricity price causing falling energy consumption which causes the need to increase retail electricity prices even more. This has been termed the energy market death spiral.

The NGF believes that it is in all stakeholders' interest to prevent and stop this death spiral.

The NGF's position on Network Pricing Principles

In the previous sections the NGF has described the contextual conditions in the NEM. To summarise we have a NEM where energy consumption is falling, demand growth has not eventuated, DNSPs have already invested in sunk assets to meet non-existent forecasted demand growth, retail prices have risen dramatically due to this increased DNSP expenditure, and as a result consumers are further reducing their electricity consumption. Further compounding the issue is that consumers are paying prices set on the full revenue allowance in their current regulatory periods. In Queensland the network companies are expected to under spend by over \$3bn and in NSW similarly so at approximately \$3bn.

In theory, the regulatory approach used by the AER, called “incentive regulation” is supposed to reveal efficient costs for the next regulatory period. Instead we have found that “incentive regulation” has revealed that the monopolies have profited from imposing stranding risk (that assets are paid for but not required) on consumers³. So not only do we have overcapitalised networks, we price set on expenditure that has not, and will not, occur.

With the existing network tariff structure where the fixed component only constitutes up to 20% of the tariff, consumers have found ways to reduce consumption and avoid the cost of using the distribution network. This has created a vicious cycle termed the energy market death spiral. From this set of conditions we believe the AEMC should promote the following distribution pricing principles to improve market efficiency.

1. Sunk network assets must be recovered in an efficient manner so that it does not distort consumption decisions;
2. Network tariff reform must develop in a co-ordinated approach with metering infrastructure reform;
3. Network tariffs should be easy for customers to understand and accept and be simple to implement; and
4. Tariff reform should be focused on economic efficiency.

Sunk network assets and cost recovery

The NGF believes that the most important pricing principle is that sunk network assets must be recovered in an efficient manner so that it does not distort consumption decisions.

The variable elements of network tariffs are clearly far too high when the majority of costs for networks are fixed and have been sunk.

The sunk costs of the existing network have already been incurred. Consequently, it would be inefficient to allocate these costs in a manner which encourages network users to change their network use to avoid these sunk costs. Although the individual network user may benefit, the sunk costs have not changed and must still be recovered. Also, a charge based on variable use will distort the effective marginal costs of resources. The implication is that the recovery of sunk costs may distort the relative valuation of resources into the future.

³ There are differences in the way NSW and QLD network companies are regulated, with NSW being under a price cap and QLD under a revenue cap. The risk associated with lower consumption must be more keenly managed by monopolies under a price cap.

An efficient approach is to charge a fixed amount that is independent of variable grid usage. This principle has become even more important with falling energy demand, network investments which have already been occurred in anticipation of non-existent demand growth, and incentives for consumers to disconnect from the grid.

The remaining cost recovery of the DNSPs allowable revenue should be structured to signal the marginal cost of providing an additional unit of energy.

Network tariff reform must develop in a co-ordinated approach with metering reform

This is an important principle because without smart meters it would be impossible to implement all types of cost reflective tariffs. A co-ordinated approach with both network tariff and metering reform would also ensure that public expectations of what can be achieved are realistic.

Network tariffs should be easy for customers to understand and accept and be simple to implement

The recent Victorian smart meter mandatory roll-out showed that customer acceptance of cost reflective tariffs must be an important factor before deciding to mandate smart meters. We believe that network tariffs that are easy to understand will be more likely to gain customer acceptance. The network tariffs should also be simple to implement so that the implementation costs is minimised.

Tariff reform should be focused on economic efficiency

Issues of equity may arise in relation the network tariffs for recovering the total costs of providing distribution services and signalling the long run marginal cost of future services.

Equity issues are essentially wealth transfers between different classes of customers. Hence the NGF believes tariff reform should be focussed only on economic efficiency.

The NGF appreciates the opportunity to respond to this consultation. Please contact Kevin Ly on (02) 9278 1862 if you would like to discuss any issue associated with this submission.

Yours sincerely



Tim Reardon
Executive Director