

# Companion guide to Northpower's roadmap for adopting service-based distribution pricing

## Purpose

This Companion Guide is to assist consumers in understanding Northpower's "roadmap" for adopting Service-based Distribution Pricing.

Electricity Distribution Businesses (EDB's) including Northpower are in the process of reforming their distribution pricing from being mostly volume-based (where the cost is proportional to electricity consumption) to being more service-based (where consumers pay for the level of service they require).

In late 2016, the Electricity Authority (EA) instructed all EDB's to publish "roadmaps" detailing the steps and timeframes that each EDB will follow to develop, consult on and, ultimately, implement distribution pricing that is more service-based.

The Electricity Networks Association, which represents all EDB's in New Zealand, developed a standard template for the "roadmaps" to provide consistency in presentation. Northpower's "roadmap", which is published on the Northpower website alongside this companion guide, utilises the ENA template.

## What is distributor pricing and where do I see it?

A typical electricity invoice received by residential and business consumers from their electricity retailer (Meridian, Genesis, Mercury, Contact, Nova, etc) covers:

- Generation – payments to the owners of generation stations throughout NZ;

- Distribution – payments to electricity distributors (Northpower in this case) who provide the overhead lines, underground cables and substations to deliver the electricity to your home or business premises;

- Transmission – payments by distributors to Transpower for the use of the national grid;

- Retail – other costs from electricity retailers including metering; and

- Government levies and taxes – including GST.

In most cases, electricity retailers do not itemise their invoices to this extent but "bundle" their charges into a daily charge and one or more consumption-based charges.

The prices that distributors (such as Northpower) charge to electricity retailers for the use of the distribution networks and the national grid are known as "distribution prices" and they are an important input into the total prices that electricity retailers charge to consumers.

## What is service-based pricing?

As the name suggests, service-based pricing reflects the cost of providing the service. We already experience service-based pricing in other areas of our lives, for instance:

If we are booking a rental car, the rental car website will require us to select from a small car, a medium car or a large car at maybe \$50/day, \$60/day and \$70/day respectively. So the price we pay is determined by the size (or capacity) of the vehicle we chose to rent.

When we fly within NZ, the price of the airline ticket is strongly influenced by whether we need to travel at peak times for business commitments or if we are prepared to travel off-peak to get a lower price.

## Electricity is billed as “user-pays”, so is it not already service-based?

This is true in respect to generation and retailing but not for distribution and transmission.

The costs of constructing, maintaining, renewing and operating electricity networks, both the local distribution networks and the national grid, are independent of the volume of electricity they transport. Rather the networks and the grid must be engineered to carry the peak loads.

Returning the rental car analogy, the rental cost is determined by the size (or capacity) of the car we select and the rental companies generally allow “unlimited km” so the rental charge is the same whether we drive 20km or 200km in a day. However, when we top up the car with petrol, the cost of the refuelling (the energy component) depends on our usage of the car.

So, the components of electricity pricing should ideally be as follows:

- Distribution and transmission (the transport) – the capacity of the supply or the peak load.
- Generation and retail (the energy itself) – in proportion to consumption (user-pays).

## Why is electricity distribution pricing not already service-based?

Electricity meters have been a limiting factor. For the past 100 years, electricity meters at residential and small business premises have simply recorded electricity consumption and been manually read monthly (or two monthly) so, apart from a daily fixed charge, all electricity has been billed on the basis of monthly consumption at the premises. (These meters are now known as “legacy” meters.)

Within the past ten years, the progressive deployment of advanced meters in NZ has created the possibility of changing the basis for electricity pricing. Advanced meters can provide more detailed data on electricity usage which in turn opens up the possibility of introducing electricity pricing that is more cost-reflective and service-based. In early 2017, over 70% of premises 2017 supplied from the Northpower network have advanced meters and this should reach 90% by the end of 2017.

As a matter of interest, most large commercial and industrial sites (including supermarkets, sawmills, large pumps, etc) have had sophisticated electricity metering (known as “half-hour” metering) for

the past twenty years and distribution prices for those premises are already service-based, assessed on the basis of peak demand rather than consumption.

## What process will Northpower follow? Will it impact my electricity bill?

The “roadmap” outlines the steps that Northpower intends to follow, from initiating the reform process, selecting the options, consultation with key stakeholders, introducing the new pricing, monitoring the response and making changes if necessary.

The key aspects will be:

The work stream in 2017 will be around defining the problem to resolve, particularly for the residential market, modelling different scenarios and working with the wider industry to consider feedback from electricity retailers and other stakeholders.

Obtaining data from advanced meters to facilitate modelling of scenarios.

In 2018, we intend engaging with key stakeholders including consumers, interest groups and electricity retailers.

The new pricing structures would most likely be introduced in 2019 and 2020.

However, because Northpower invoices the distribution charges to the electricity retailers, rather than directly to the end-consumers, the effect on the invoice you receive from your electricity retailer will depend on the extent to which the various electricity retailers “repackage” Northpower’s charges into their retail prices. We expect that some electricity retailers will pass-through the new prices as transparently as practical while other retailers will continue to offer simple combinations of daily charges and consumption-based charges.

## So what happens next?

The publication of the “roadmap” and this companion guide are just the first step in the process.

The Electricity Authority has indicated that it will analyse the individual distributors’ “roadmaps” and may comment on them in mid-2017.

Some areas in NZ already have advanced meters installed at most premises and the electricity distributors in those areas are trialing pricing options that are more service-based.

Northpower is a member of the Electricity Networks Association (ENA) working group on distribution pricing and we will be contributing to and monitoring the output from that working group.