



# Updated Plan for the Adoption of Efficient Distribution Price Structures

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### **Distributors to Publish Plans for Adopting Efficient Distribution Pricing**

The Electricity Authority has identified the adoption of efficient distribution pricing – which is cost-reflective and serviced-based – as a key area of importance to promote the efficient operation of the New Zealand electricity industry for the long-term benefit of consumers. Electricity industry participants and stakeholders agree that distribution pricing needs to be reviewed to ensure that the structures being employed are fit for purpose and suitable for the widespread introduction of new evolving technologies in the distribution sector. An industry-led approach to distribution pricing reform is in progress, and as part of this the Electricity Authority has requested that Distributors report on the progress made towards achieving efficient pricing and publish their updated plans prior to 31 March each year.

Buller Electricity Limited (BEL) has previously published information detailing the Company's plans for the adoption of efficient pricing structures in March each year (2017-2021) and these documents can be viewed on our website [here](#). This document presents an update and contains information in the following key areas:

- Background on future electricity industry trends and the need for efficient distribution pricing
- An update on the recent Amendment to the Low Fixed Charge (LFC) 2004 Regulations
- Commentary on the drivers and enablers for the adoption of efficient distribution pricing and BEL's relevant circumstances
- An update on the progress BEL has made on the indicative plan for distribution pricing reform published in March 2021
- Our indicative plans for the introduction of more efficient distribution pricing structures for 2022/23 and beyond

This document fulfils the Electricity Authority's expectations and demonstrates BEL's commitment to reviewing our pricing and to undertake pricing reform where appropriate.

## **Future Electricity Industry Trends & Efficient Distribution Pricing**

The introduction of evolving technologies such as PV solar generation, energy storage and management systems, more energy efficient appliances, Smart Meters with modern data handling capabilities, advanced demand response, and electric vehicles (EV's) has significant implications for the electricity industry and consumers. The adoption of these technologies will increasingly be driven by the social and political desire to mitigate the impact of climate change through the decarbonisation of the energy and transportation industries.

The electricity related services consumers make use of, and their decisions to adopt evolving technologies, are influenced by the cost of electricity – energy cost plus delivery cost – and the relative benefits which they provide. To ensure that electricity infrastructure is used efficiently, and the investment decisions made by Distributors and end use consumers are in the long-term benefit of all consumers and the wider economy, it is necessary for electricity pricing structures to be put in place which accurately signal the costs to consumers of the services they use. This is referred to as cost-reflective service-based pricing and encourages consumers to make decisions that bring long-term benefit.

## **Amendment to the Low Fixed Charge (LFC) Regulations 2004**

The Low Fixed Charge (LFC) Regulations 2004 were introduced to offer a low fixed charge pricing option to residential consumers at their primary residence. Due to the general trend of lowering electricity consumption at the household level and the introduction of new technologies, these Regulations are no longer delivering the outcomes they were originally designed for e.g. to assist low income households with electricity affordability. The electricity industry has been advocating for the removal of the Low Fixed Charge (LFC) Regulations 2004 for a number of years and this has culminated in the decision by the Government to make an Amendment to the Regulations in November 2021.

This Amendment puts in place an option for Distributors to phase out Low User pricing over a 5-year period from 1 April 2022. The Fixed Daily Charge for these users (previously set at \$0.15/Con/Day) will be able to be increased by \$0.15 each year for the next 5 years, at which time the Standard User and Low User Residential categories will be amalgamated. BEL is of the view that it is appropriate that we phase out our pricing to Low Users in this manner and we have decided to implement this option.

## **Pricing Reform Drivers, Enablers & BEL Circumstances**

Key drivers for distribution pricing reform include:

- The level to which cost-reflectivity currently exists in a Distributors pricing
- The uptake of evolving technologies
- The forecast capex expenditure required to manage/relieve network growth and constraints
- External factors such as transmission pricing
- A Distributors appetite for (radical) pricing reform

In addition to this there are a number of factors which will impact/enable a Distributors ability to implement pricing reform, including:

- Access to appropriate data for mass market consumers
- The level of Smart Meter penetration
- The capabilities of Retailer and Distributor billing systems

While BEL's circumstances are not unique it is clear that our need to implement distribution pricing reform is not as strong as that for Distributors with high growth and/or major urban centres for the following reasons:

- A very small rural based network
- Significant spare network capacity and no existing congestion issues
- No forecast capex expenditure required to manage/relieve network growth and constraints
- A relatively slow uptake of evolving technologies (PV Solar & EV's)
- 50% of revenue is recovered as fixed charges (excluding the Low User Price Category)

BEL's Asset Management Plan 2021-31, available from our website [here](#), provides details on our Load Forecasts, Constraints & Proposed Capex Program in Sections 6.6 – 6.8 respectively. Section 6.8.2 states that, as BEL is forecasting zero growth for the 2021-31 planning period no allowance has been made for capex expenditure for system growth.

At this early stage in our pricing reform journey BEL is of the view that the best option for us is to adopt a measured approach to reform, where we can learn from the early adopters, and make the best use of industry experience as the industry understanding of distribution pricing develops and matures.

## Distribution Pricing Consultation

The Authority has recently received submissions on its Distribution Pricing Consultation<sup>1</sup>. While an update to the Distribution Pricing Practice Note has since been issued, the Authority has yet to fully consider the submissions. BEL's submission<sup>2</sup> details the key short coming that we have identified to the very high fixed charge recovery approach to pricing that the Authority is advocating for unconstrained networks.

Our pricing reform work program undertaken prior to our decision to implement Anytime Maximum Demand (AMD) based pricing from 1 April 2021 has led us to closely examine the pricing options available and what appears to be the Authority's single-minded pursuit of economic efficiency above all other considerations. Furthermore, fixed (non-responsive) charging is offered by the Authority as the appropriate method for the recovery of Residual Charges in order to achieve economic efficiency.

The reasoning for this approach is however fundamentally flawed as it is underpinned by the erroneous assumption that fixed (non-responsive) charges eliminate/reduce the incentives for consumers to distort their use of the network. BEL contends that the Authority's high-level guidance on the recovery of Residual Charges is overly simplistic as it conveniently overlooks that fixed (non-responsive) charges create step changes in fixed charges at pricing capacity/demand or price category boundaries. Given that consumers are entitled to supply upgrades & downgrades the inefficient economic incentives for consumers to distort their network use dramatically increases in comparison with responsive fixed charges as these step changes are approached from above and below. Consumers will almost certainly take advantage of the inefficiencies associated with step changes through the adoption of disruption technologies as these clearly present as excellent business opportunities.

Furthermore, as step changes in fixed (non-responsive) charging also introduces a significant number of other negative consumer impacts related to fairness, equity, arbitrage and administration. As a result, we are of the view that the Authority would be wise to re-examine its thinking on distribution pricing with a view towards developing a more holistic, balanced and convincing approach which takes these important factors into consideration.

We look forward to the Authority's consideration of our recent submission and further discussions on these important Distribution pricing issues in 2022. Readers are directed to our Pricing Policy 2022/23 (available [here](#)) for a full explanation as to the reasons for our decision to adopt an AMD based approach to pricing.

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<sup>1</sup> <https://www.ea.govt.nz/development/work-programme/pricing-cost-allocation/distribution-pricing-review/consultations/#c18986>

<sup>2</sup> <https://www.ea.govt.nz/assets/dms-assets/29/Buller-DP-Practice-Note-submission-2021.pdf>

## **Progress on Indicative Plan for Distribution Pricing Reform 2021/22**

BEL had a very limited pricing reform program in place for 2021/22 with this essentially consisting of the bedding in of our recently adopted AMD based pricing system and price setting processes. This included the request and processing of half-hour Smart Meter data for non-residential sites to support the AMD assessment process for 2022/23 price setting.

Two changes which we are making to our pricing for the 2022/23 financial year are:

- Increasing the fixed daily charge for residential low users as per the recent amendment to the Low Fixed Charge (LFC) Regulations 2004
- Decreasing the differentials which exist between our volume price components e.g. Uncontrolled/Controlled & Day/Night, with a view to reducing the strength of the pricing signals consumers are being given to distort their use of the network. This is a process which was initiated in the 2021/22 financial and will be phased in over 3 years (ending in the 2023/24 financial year). This is explained in Section 7.3 of our Pricing Methodology 2022/23 and aligns with the Authority's pricing directive.

## **Indicative Plan for Distribution Pricing Reform 2022/23 and Beyond**

With the major pricing structure changes which were implemented for the 2021/22 financial year we have substantially completed our existing pricing reform work program. No major changes have been made to our pricing for 2022/23 and we do not anticipate making any significant changes to our pricing for 2023/24.

In discussions with the Electricity Authority in late 2019 the Authority made it clear that it did not perceive a need or expect BEL to implement TOU pricing at this point in time given our current circumstances (no network constraints existing or pending). We nonetheless see the introduction of TOU pricing as the most likely next step in our pricing reform journey so that we will be in a better position to be able to signal existing and future peak demand related costs to consumers.

As an alternative to TOU we will also be exploring the option of introducing demand based pricing for the signalling of peak demand related costs. While BEL considers that our recent pricing reform program has put in place a solid foundation for our future pricing structures – being the demand based (responsive) recovery of fixed charges, there remains significant work to be done in terms of further developing and refining our strategy for the most appropriate method for the recovery of our existing variable charges (50% of total revenue) which are currently recovered via consumption charges. Our longer-term view on an effective pricing strategy is that peak demand is the most important and relevant parameter, and this most likely needs to be considered over the long-term (12 months), medium term (monthly), and short term (critical peak), where the revenue recovered from these 3 components is weighted to create the required/desired overall pricing signals to consumers.

A key enabler for the implementation of Monthly Maximum Demand (MMD) charging is the availability of MMD data on a regular and timely basis as part of EIEP1 billing data or as a separate

EIEP data format. In terms of critical peak demand pricing/billing using the GXP data/methodology would seem to be the most viable and elegant option available for this under the existing market structure. Furthermore, given that BEL has recently implemented a Segmented Loss Factor (where a different Loss Code is used for each Price Category) a certain ability exists to target Critical Peak Demand (CPD) charges to the consumer groups and areas where constraints exist. BEL will be raising this matter with the Authority as part of our annual distribution pricing discussions and future consultations.

Other options for distribution pricing reform which BEL Management and Board have decided are not to be considered for implementation at this point in time are:

- Increasing the overall level of fixed charges to being greater than 50% in any Price Category
- Urban/Rural locational pricing differentiation

It is noted that increasing the level of fixed charges for Residential Standard Users would have the negative impact of increasing the fixed charge gap between Standard & Low Users at the end of the 5-year LFC Regulation phase out period. This could potentially prolong the phase out period of Low User pricing on the BEL network and amalgamation with Standard User pricing.

In terms of distribution pricing reform BEL's immediate plan for 2022/23 and beyond is outlined as follows:

- Monitoring, review and adjustment of the pricing structure changes put in place in 2021/22
- Further investigations into the options and requirements for TOU pricing/billing
- Further investigations into the options and requirements for MMD and CPD pricing/billing
- Reviewing the options available for managing the charging of new EV connections
- Review of our overall pricing strategy and consideration of the next steps

Key events, decisions, and outcomes which will have a significant impact on BEL's future decisions and implementation plans relating to the adoption of efficient pricing structures include:

- The progress we able to make with the Authority in terms of the pricing matters which have been identified in our recent consultation submission
- ENA publications and guidance released by the Distribution Pricing Working Group (DPWG)
- The ability for BEL to be able to receive meter information (such as TOU data) in order to undertake analysis/planning of new pricing structures to a sufficient level of accuracy and penetration
- Key decisions BEL management and owners (Buller Electric Power Trust) make given the advice and information available
- Wider adoption of new technologies by consumers

In terms of pricing reform BEL is mindful of the balance which must be struck between the:

- Complexity of the structures adopted to achieve cost-reflective service-based pricing
- Practical aspects and costs associated with pricing administration and implementation
- Ability for the consumer to easily understand the pricing which is being applied

At this point in time it is unclear how this balance, and the best pricing for BEL and its consumers, can be achieved in the long-term. BEL will be looking towards the future work undertaken by the ENA and its working groups, and the response of Retailers and consumers in other distribution areas where new pricing structures have been adopted, to provide guidance.

### **Concluding Comments**

BEL is looking forward to working with our stakeholders in the development and implementation of distribution pricing structures which are fit for purpose and facilitate the best outcomes for BEL, consumers and the wider economy. It is important that we consult with our consumers and stakeholders to ensure that any change to our pricing meets the needs of the majority now and into the future. BEL also looks forward to meeting the Electricity Authority's requirements for introducing more efficient distribution pricing structures during this period of industry reform.