Firstlight network®

Pricing Methodology

For the year commencing 1 April 2024

Contents

1. About this document

This document sets out Firstlight Network's (Firstlight and formerly known as Eastland Network) pricing methodology for line charges from 1 April 2024 to 31 March 2025 (RY2025). This document aims to explain how Firstlight's prices are determined:

- Considering the interests of consumers—feedback and how this is impacting the pricing methodology and implementation (Section 3);
- Pricing strategy—Firstlight's long term strategy to evolve prices in line with the Electricity Authority's and Ministry of Business, Innovation & Employment (MBIE) requirements (Section 4);
- Pricing methodology—how Firstlight has defined its pricing approach in line with its pricing strategy (Section 5);
- RY2025 prices—the prices that Firstlight has set for RY2025 using its pricing methodology (Section 6);
- Compliance and Pricing Changes—an explanation of how Firstlight's strategy, methodology, and prices comply with the Electricity Authority's and MBIE requirements (Section 7).

Each year Firstlight is required to publish a pricing methodology that complies with the Electricity Distribution Information Disclosure Determination 2012. Directors have confirmed that this document complies with the determination.

2. Introduction

Firstlight Network operates the electricity distribution network for Gisborne and Wairoa regions, delivering electricity to approximately 26,000 homes and businesses.

In addition to maintaining the distribution network (the poles, wires and underground cabling), we also own and operate the region's high voltage electricity transmission network (110kV steel pylons and poles). These assets form part of our subtransmission system and connect our regions to the national grid operated by Transpower.

Other than Gisborne city and Wairoa township, Firstlight supplies the remotely populated region of the East Coast of the North Island, a land area of 11,952km^2. As a result, Firstlight's consumer density is amongst the lowest in New Zealand. Low density networks typically require a higher level of assets per consumer then seen in higher density networks.

Firstlight also supplies one of the lowest socio-economic regions, which means that consumers' ability to pay for electricity is limited. At the same time, Firstlight's consumers face among the highest retail electricity prices in New Zealand, due in part to the low consumer density referred to above.

The average electricity consumption by Firstlight consumers is amongst the lowest in the country, reflecting the socio-economic circumstances of consumers, the absence of a large industrial consumer base, and the relatively mild climate.

Given these factors, historically Firstlight has sought to minimise investment in subtransmission and zone substation assets that provide redundancy (i.e. network security); rather, we have provided subtransmission and zone substation security through lower cost generation alternatives. The consequence of this practice has been that Firstlight has maintained reasonable line charges on a per consumer basis despite its very low customer density.

Prices are set to recover the economic costs of owning and operating the Electricity Distribution Network that conveys electricity throughout the Gisborne and Wairoa districts. The economic costs include the recovery of the costs of operation plus, an appropriate regulated return on investment (cost of capital), and depreciation.

Firstlight aims to develop efficient pricing to correctly signal the economic cost of providing line services. Correctly signalling of the economic cost allows consumers to consider the value they receive from Firstlight's line services when considering alternatives. Achieving efficient prices is a transition and requires trade-offs to be made. Firstlight's pricing roadmap set outs how we are transitioning to efficient prices. The key trade-off is the speed of change vs. the extent of pricing structure change and the level of price shocks consumers see as prices transition. Given the context of affordability and the current high delivered retail price, Firstlight is appropriately tempering the speed of the transition to avoid undue stress on consumers that are disadvantaged by the transition.

3. Considering the interests of Consumers

3.1. Summary of consumer survey

Each year Firstlight commissions a survey seeking the views of consumers on our network. The survey focuses on the network service, our prices, customers' behaviour around shifting discretionary consumption and switching retailers, uptake of solar panels and electric vehicles and electrification of industrial heat processes.

The key conclusions of the September 2023 survey were:

DOMESTIC AND COMMERCIAL CONSUMER GROUPS

- Customers still consider keeping the power on and getting it back on quickly as the most important part of our service.
- Keeping line charges low is increasing in importance.
- Awareness of domestic TOU pricing is low across all market segments (Gisborne mass market, Wairoa mass market) with 25% of respondents being aware that Firstlight has introduced Time of Use pricing.
- Most domestic and commercial respondents said they could change their consumption patterns either easily or with a little difficulty.
- Domestic and commercial interest in rooftop solar is low, with most respondents saying never but a lesser interest in both Gisborne and Wairoa saying within 2 years.
- Domestic and commercial interest in installing a battery is very low.
- There is some minor interest from domestic and commercial respondents in buying an electric car, but most respondents said never.

INDUSTRIAL CONSUMER GROUPS

- Of those large industrial respondents for whom electrifying industrial heat is still an option (ie. not already done, or not applicable) most expect it to be more than 5 years away.
- Slightly less than half of the large customer respondents have reviewed their half hourly consumption data.
- None of the large customer respondents can easily alter their consumption patterns.
- All large industrial customer respondents expect to be at least 5 years away from installing roof top solar.
- Interest in installing a battery is very low.
- There is definite interest from some large industrial customers in buying electric vehicles.
- 2024 has seen a start of a dialogue between Firstlight and large commercial and industrial customers about their electrification and energy transition plans.

3.2. Implications from the survey

DOMESTIC AND COMMERCIAL CONSUMER GROUPS

The pace of electrification of transport and the uptake of solar PV and batteries is likely to be slow in Gisborne, and even slower in Wairoa. This provides comfort that we can implement changes at a modest pace in an effort to manage price shocks over time. Whilst some consumers may make uneconomic investments in solar and batteries, this is not likely to be significant.

Whilst domestic and commercial consumers say they could change their consumption patterns it is likely that few will unless they are aware of the price signals provided by the TOU Tariff. More work is required to publicise the availability and benefits of the TOU Tariff.

The slow uptake of EVs also means that we are not likely to see constraints on the network for some time, and hence the need to implement more localised pricing and the signalling of constraints (and the cost of new capacity) is not required in the near-term.

INDUSTRIAL CONSUMER GROUPS

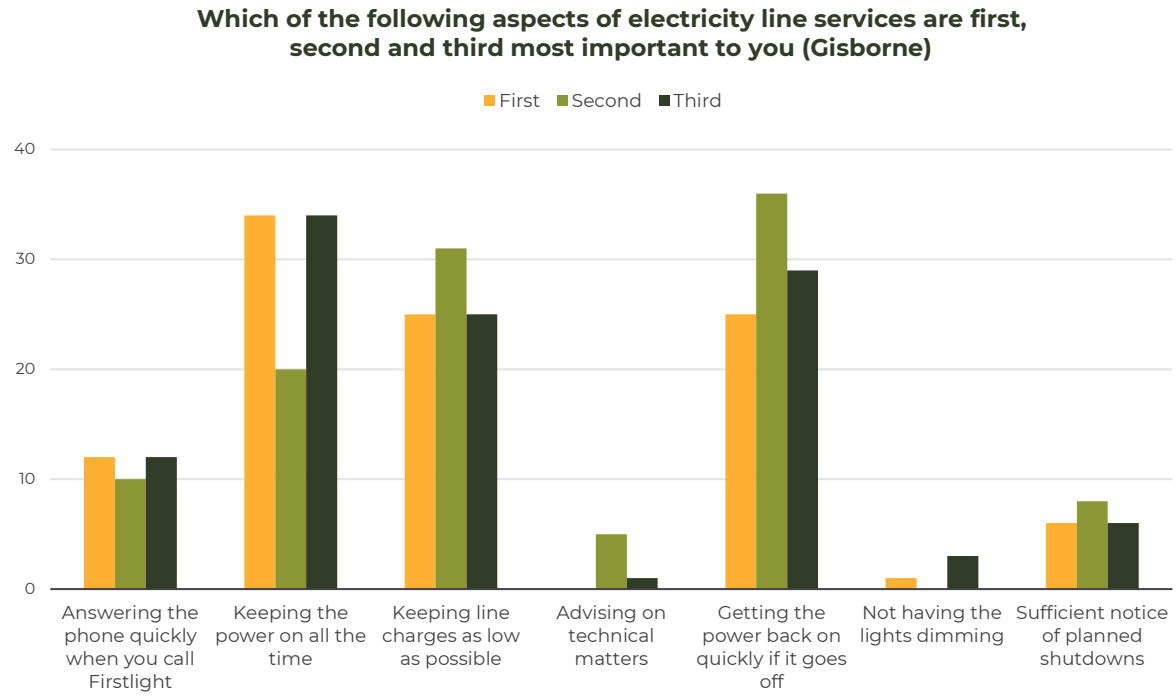
All industrial consumers are exposed to fixed capacity and TOU prices yet they state that they have limited ability to change their consumption patterns. Provided the variable capacity and TOU charges recovery around the long-run marginal cost of the network services then those consumers will be able to make economic decisions in relation to managing their demand using alternatives.

3.3. Consumer survey results in more detail

3.3.1. Importance of electricity distribution service

DOMESTIC AND COMMERCIAL CONSUMER GROUPS

Gisborne domestic and commercial consumers regard keeping the power on all the time as most important. Second most important is split between getting the power back on quickly if it goes off and keeping line charges low, with a skew towards keeping line charges low. Third choice was split between keeping line charges low and getting the power back on.



Wairoa domestic and commercial consumers regard keeping the power on all the time as most important, with second choice being evenly split between keeping line charges low and getting the power back on quickly. Third choice was also evenly split between keeping line charges low and getting the power back on quickly.

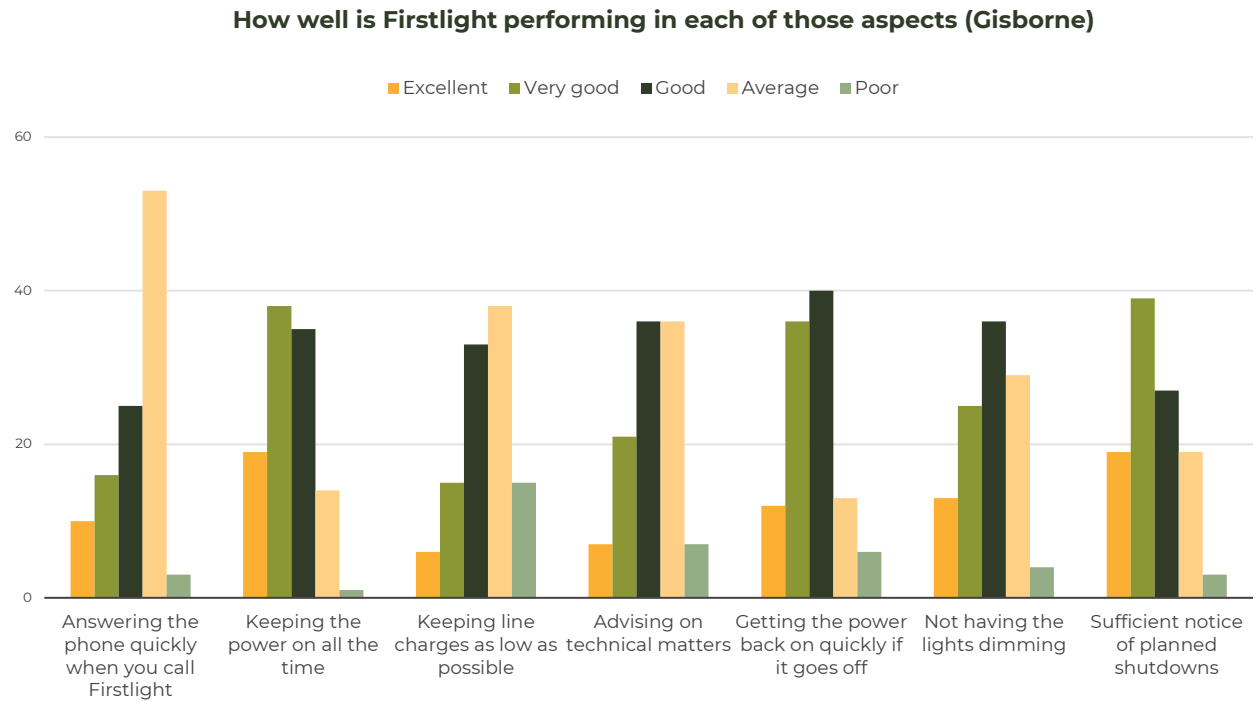
INDUSTRIAL CONSUMER GROUPS

Industrial customers still regard keeping the power on all the time as most important, with getting the power back on quickly if it goes off as a clear second choice. Third choice was dominated by keeping line charges low.

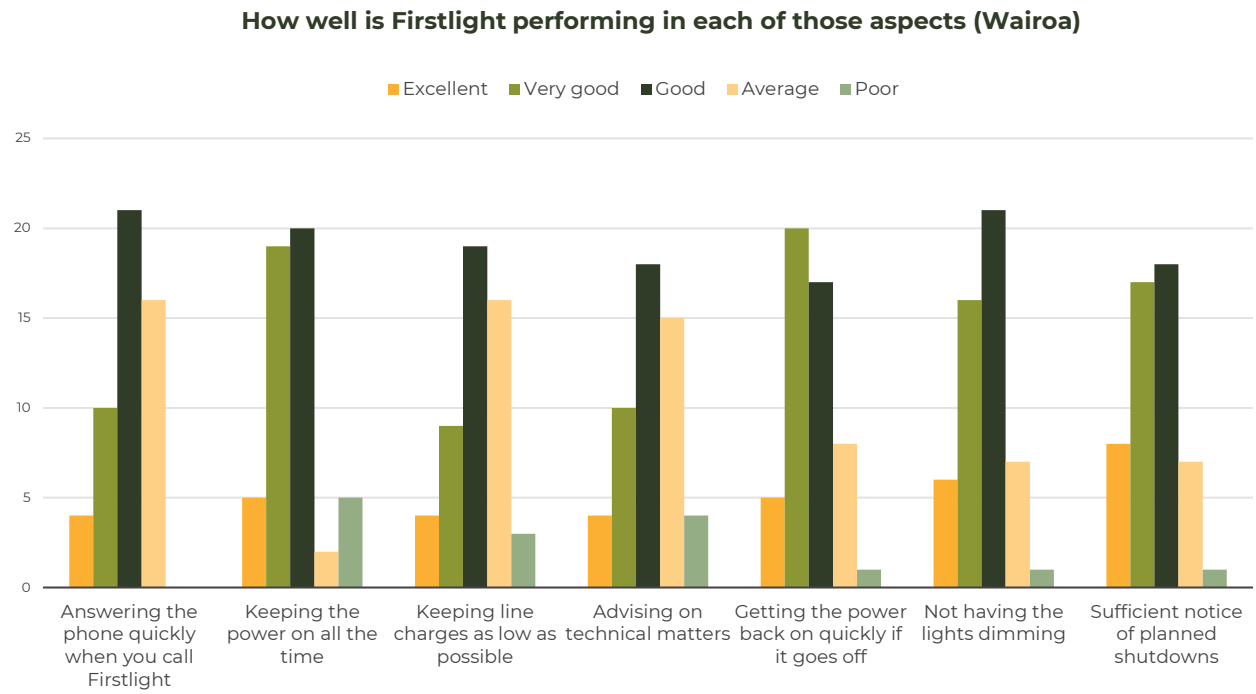
3.3.2. Firstlight network performance

DOMESTIC AND COMMERCIAL CONSUMER GROUPS

Gisborne domestic and commercial consumers have a spread of views from average to *excellent* as to how well Firstlight is doing at keeping the power on, but with a majority thinking either *good* or *very good*. Similarly, almost all Gisborne consumers also have a spread of views from *average* to *excellent* as to how well Firstlight is doing at getting the power back on, but with a majority thinking either *good* or *very good*. Keeping line charges as low as possible has a definite skew towards *average*.



Wairoa domestic and commercial consumers' views on how well Firstlight is keeping the power on range from *excellent* to *poor* with a definite skew towards *very good*. Similarly, views on how well Firstlight gets the power back on range from *excellent* to *average* with a definite skew towards *very good*. Views on keeping line charges low range from *excellent* to *poor*, with a definite cluster around *average* and *good*.



INDUSTRIAL CONSUMER GROUPS

Industrial customers think that Firstlight is either *excellent* or *very good* at both keeping the power on and getting the power back on. Not having the lights dimming was spread with a skew towards *average*.

3.3.3. Awareness of Time of Use pricing for domestic customers

In April 2021 Firstlight Network introduced Time of Use pricing for domestic customers with a communicating smart meter.

We have included a question in 2022 survey to gauge awareness of this pricing structure change so we can understand the likelihood of impact on customer behaviour.

DOMESTIC AND COMMERCIAL CONSUMER GROUPS

Only 25% of Gisborne and Wairoa domestic and commercial consumers were aware of Firstlight's TOU domestic tariff (which is an increase from 19% in 2022).

INDUSTRIAL CONSUMER GROUPS

No large industrial customers were aware of Firstlight's domestic TOU pricing (down from 3 in 2022).

3.3.4. Electrification of industrial process heat

As New Zealand is progressing toward net-zero carbon economy, more commercial and industrial customers are expected to electrify their heat processes.

Most large industrial customers indicated either *not applicable or more than 5 years*.

Both the Gisborne and Wairoa domestic and commercial consumers for whom electrification is applicable and not already done indicated *more than 5 years*.

3.3.5. Review of consumption history

This question was trying to understand whether consumers have ever reviewed their half-hourly or hourly consumption data.

DOMESTIC AND COMMERCIAL CONSUMER GROUPS

Most of the Gisborne and Wairoa domestic and commercial consumers have not reviewed their consumption data.

INDUSTRIAL CONSUMER GROUPS

Slightly less than half of the large industrial customer have reviewed their consumption data.

3.3.6. Consumer appetite to alter consumption pattern

DOMESTIC AND COMMERCIAL CONSUMER GROUPS

The Gisborne domestic and commercial consumers show a slight skew towards being able to easily shift consumption.

Similarly, the Wairoa domestic and commercial consumers also show a skew towards being able to easily shift consumption.

INDUSTRIAL CONSUMER GROUPS

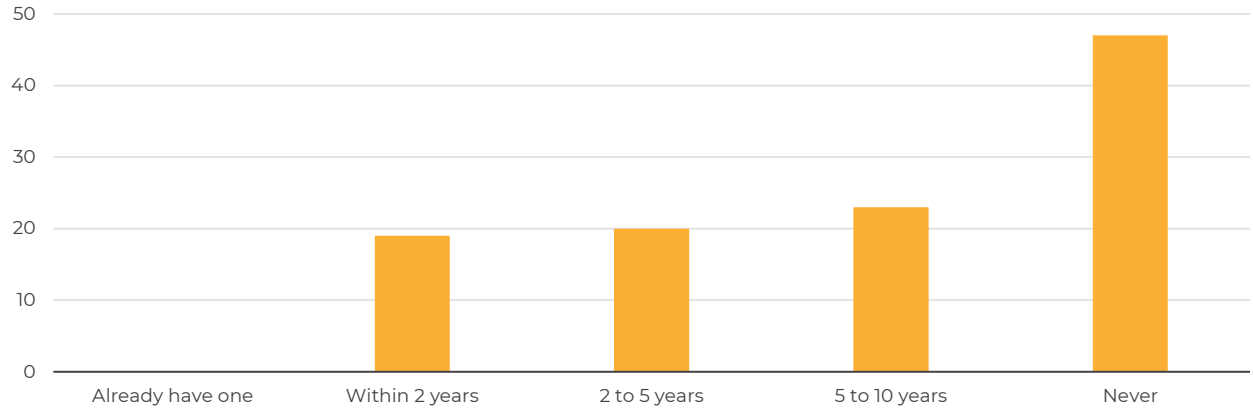
None of the large industrial customers could easily shift their consumption to off-peak periods, with one large industrial customer saying they could shift to off-peak periods with some difficulty. Common themes were that most of their load is chilling (and is therefore already 24 hours) or that they operate 2 and 3 shifts during harvest seasons. This compares well with no large customers stating they could easily change their consumption patterns in 2021 and 2022.

3.3.7. Likely installation of solar panels

DOMESTIC AND COMMERCIAL CONSUMER GROUPS

Both the Gisborne and Wairoa domestic and commercial consumers have definite skews towards *never* installing rooftop solar, but the majority of respondents are looking to install a solar panel over the next 10 years.

When would you be likely to install rooftop solar panels? (Gisborne)



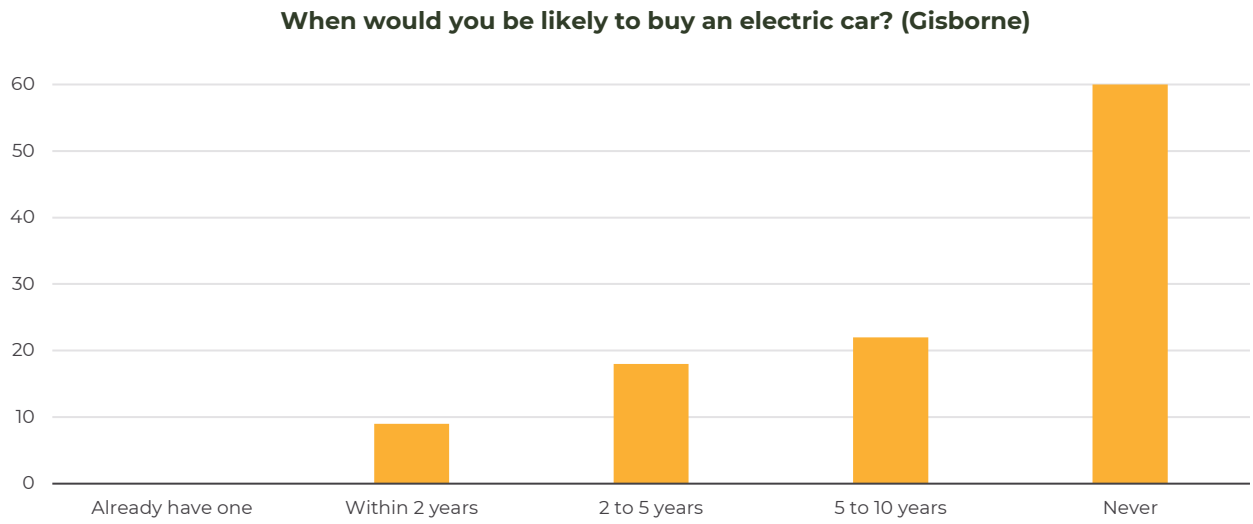
INDUSTRIAL CONSUMER GROUPS

Installation of rooftop solar is likely to be at least 5 years away if at all for most large customers.

3.3.8. Likely purchase of an electric car

DOMESTIC AND COMMERCIAL CONSUMER GROUPS

Both the Gisborne and Wairoa domestic and commercial consumers have a minor interest in buying an electric car *within 2 to 5 years* (but with a definite skew towards *never* buying an electric car).



INDUSTRIAL CONSUMER GROUPS

There is a definite interest amongst large customers of buying an electric car (presumably as an office run-about) within 2 to 5 years.

3.3.9. Likely installation of battery

DOMESTIC AND COMMERCIAL CONSUMER GROUPS

The Gisborne domestic and commercial consumers have a spread from *2 to 5 years to never* installing a battery, but with the majority indicating never.

The Wairoa domestic and commercial consumers responses show a definite skew towards to either *5 to 10 years or never*.

INDUSTRIAL CONSUMER GROUPS

Almost all large customers' do not intend to install a battery.

4. Pricing Strategy

4.1. Our pricing strategy

Firstlight Network's pricing strategy is to:

Implement cost reflective pricing to support our region's transition to a net zero-carbon economy.

Implementation of our pricing strategy will seek to balance cost reflectivity with other factors such as socio-economic circumstances in Te Tairawhiti and Wairoa, and the varying quality of service across our network. Our pricing should encourage electrification of transport, development of energy storage and Distributed Energy Resources (DER) and the electrification of industrial processes. This pricing strategy is consistent with prior years, and we have implemented this strategy by introducing mass market time of use (TOU) pricing tariffs in 2021 and improving our Cost of Supply and pricing model in 2022.

4.2. Previous pricing strategy implementation

As part of our journey to adopt increasingly cost reflective pricing, we introduced a new 'Time of Use' pricing structure effective from 1 April 2021. This pricing structure has rolled out Time of Use (TOU) pricing across mass market and low-capacity commercial customers with consistently communicating smart meters. TOU tariffs introduce higher prices during peak times of the day when the network is more congested, and lower rates during off peak times when there is plenty of capacity on the network. This indicates to consumers that consuming electricity off peak may reduce or delay investments into network assets and shares this benefit with consumers who consume off peak.

In selecting Time of Use pricing, we considered several pricing options, including customer peak demand, network peak demand, installed capacity, and nominated capacity. We assessed these options against a number of criteria, including their ability to manage peak loads, improve utilisation of network assets, signal the best time to charge electric vehicles (EV), better ensuring all consumers contribute fairly to fixed and peak costs, giving consumers the ability to manage their bill (where Retailers pass through directly and transparently), being simple for consumers to understand, managing our revenue risk and finally the electricity market readiness. After years of planning, research and consultations we established that TOU is the most appropriate option right now.

While current TOU pricing offers consumers the ability to reduce their electricity bill by shifting some electricity use from peak to off-peak times as well as encouraging take-up of new technology, we recognise that TOU pricing may only be a stepping stone to a more cost reflective pricing model. Firstlight Network will observe the wider electricity arena and the Electricity Authority and Electricity Network Association guidance and be prepared to implement more cost reflective pricing, e.g. locational pricing/ demand or capacity based. We are currently considering the introduction of demand based variable charges to large commercial and industrial customers in addition to the current capacity based fixed charges and time of use consumption based variable charges.

4.3. Further changes made to align pricing with the cost of service

As outlined in this document, we carried out a review of our Cost of Service Model (CoSM) in 2022. This has set a revenue target trajectory for the consumer groups that we continue to follow with prices effective from 1 April 2024. The key driver for the change in the cost allocation trajectory for the consumer groups was an asset cost allocator. This updated model used geo-spatial asset analysis to

allocate asset-related costs to consumer group based on the extent of assets used by that particular consumer group. Further details on the updated cost allocation methodology in the Cost Allocation section of this document.

MBIE has announced a 5-year plan to phase out Low Fixed Charge (LFC) regulation. As a result, we have increased fixed charges for our low user domestic customers from 45c to 60c from 1 April 2024. Our intention is to remove the Low user domestic tariff once the 5-year phase out window elapses.

Transpower's new pricing methodology came into effect from 1 April 2023, and saw a 26% reduction in transmission charges to Firstlight. For the pricing period 2024-25, there is a 2.8% increase to transmission charges. All transmission costs are continued to be passed onto the customers via fixed charges as in the previous year.

As more than 90% of our costs are fixed in nature, meaning that they do not vary based on how much electricity our consumers use, we will continue moving towards higher proportion of distribution charges being fixed. As we still would like to keep the ability to send TOU price signal, we currently deem 70% fixed as a reasonable target to allow enough variable charges to send peak price signals to encourage EV charging off-peak, the use of batteries and solar, etc.

With around 20% annual growth in roof solar panel installations, there is an increase of cross-subsidy from connections without solar generation. Even though variable charge based on kW rating of solar panel installed seems like a solution to this cross-subsidy problem, it is widely believed in the industry that such charge would result in undesirable reduction in solar panel installations. As we increase proportion of fixed charges and as low fixed charge regulation is phased out, this cross-subsidy issue will reduce and so will the need for PV panel variable charges. We have reviewed this area and looked for alignment with other EDBs and decided that kW based variable charges for PV are currently not in the best interest of consumers.

In order to prepare for electrification of transport in Te Tairawhiti and Wairoa, we considered the use of Controlled tariff to be the main tariff used by EV users, i.e. all EV chargers should be on ripple relays. From the consultations with EV users and other EDBs, control over EV charging similar to hot water is not desirable and will not be accepted by EV users. We are currently exploring new alternatives, such as giving discounts to customers that register their EV charger with a third-party demand flexibility service provider.

4.4. Future strategy implementation work

As part of our pricing strategy, Firstlight was consulting with traders on reintroducing density-based pricing. In addition to this consultation, we held conversations with several other EDBs and considered the interest of our consumers. The decision has been made to keep the current pricing structure and not reintroduce density-based pricing unless there is clear guidance from the Electricity Authority for EDBs to set up pricing structures that way. On our network we believe that while there is a higher cost per connection in rural areas, these customer experience significantly higher outage time due to their remoteness – balancing out the cost/quality equation.

In 2023 we have reviewed the long-run marginal cost (LRMC) calculation for the network. Our preliminary calculation indicated that this was in the order of $300-$350 per kVA per year and our 2023 review specified a value of $340 per kVA. This value is higher than observed at other network companies and reflects the cost of the third 110kV subtransmission line to Gisborne proposed in the early 2040s. Give the Firstlight Network's peak demand, the value of $340 per kVA per year equates to $2.3 million p.a. This value is an indicator of the extent of revenue that should be recovered each year through (demand based) variable prices. That is, over the long-term, Firstlight should be agnostic to consumer behaviour that alters electricity usage to avoid demand charges set via variable prices as the reduction in revenue should match the reduction in long-term costs.

We intend to review the LRMC work, including assessing scenarios in relation to the third transmission line to Gisborne as we get further information on costs.

4.5. Progress vs. the Pricing Roadmap

Firstlight Network pricing roadmap focused over the past 5 years on implementing various stages of the Pricing Reform. Time of Use pricing reform was implemented for mass market effective from 1 April 2021. Year 2022 marked an update to our Cost-of-Service Model, which improved our understanding of the assets being used by the different pricing groups and helps allocate costs with higher accuracy. The new model also improved allocation of transmission costs, which closely followed Electricity Authority guidance.

The strategy roadmap focuses on fine tuning out pricing structure and progress the EA guidance, increasing cost reflectivity, and keeping moving network pricing in the direction as set out in our strategy statement.

Table 1: Strategy Roadmap

Strategy Roadmap – 5 year plan			
	Activity	Objective	Timing
1	Time of use pricing reform implementation.	To introduce Time of Use pricing structure for mass market and low capacity commercial connections.	Competed 2021
2	Post TOU implementation review	Review desired outcomes on the newly implemented TOU pricing structure. Review on-peak and off-peak differentials completed. Review periods of completed 2023 consultations with traders suggested changes to TOU mass market pricing structure may be required.	In progress 2022-2025
3	Review cost of supply model	Review value of assets and cost of maintenance by region and allocation per tariff category. Review tariff categories and review allocation of overheads, pass-through and recoverable costs, e.g. transmission costs.	Completed 2022-2023
4	Solar generation cross-subsidy review	To review the cross-subsidy problem between connections with and without solar generation. Review pricing of other EDBs for national alignment.	Completed 2023
5	Implement quality of service and connection density into pricing model	Firstlight Network removed density based pricing in 2020 based on a rationale that lower density areas while having higher cost per connection receive materially different level of service. We will look to include this into the model, which may see re-introduction of density based pricing with the quality level overlay.	Completed 2023-2024
6	Increase fixed proportion of prices	Continue moving towards higher proportion of distribution charges being fixed. Currently 70% fixed seems as an appropriate target.	In progress 2022-2026
7	Transition of Low Fixed Charge customers to Higher Fixed Charge	Phase out Low Fixed Charge as per LFC regulation 2021 amendment. Removal of LFC tariff after 5 year LFC phase out window.	In progress 2022-2026
8	Review Capital Contributions Policy	Firstlight Network has been operating 100% capital contribution on the basis of “causer pays”. Many EDBs are currently reviewing their capital contributions policy with the objective to reduce the capital contributions percentage to support electrification of transport and commercial growth.	In progress 2024-2025
9	EV and battery tariff	To investigate and implement tariff to incentivise network control over EV charges and home battery systems.	2024-2029

10	Flexible services agreements	To explore demand flexibility commercial agreements with traders and other flexibility operators.	2024-2029
11	Demand driven charges for C&I sector	To implement demand driven variable charges for the large commercial and industrial customers. The charges considered will be in addition to capacity driven fixed charges and consumption based variable charges,	2025-2029

5. Pricing Methodology

5.1. Consumer Groups

Consumer groups are usually defined to reflect the different impacts that different classes of consumers have on the network. For Firstlight, consumers are broadly grouped according to their assessed capacity requirements. Capacity is assessed based on installed fuse rating or transformer capacity (where transformers are dedicated to supply of an individual consumer).

The consumer groups are:

- Domestic consumers – which are further separated into standard and low fixed charge groups;
- Commercial consumers – which are further separate by capacity (50, 100, 300, 500, 1000 kVA);
- Industrial consumers – which are further separate by capacity (4500, 6500 kVA);
- Generator consumers – which are further separated by the installed capacity of the generator (4500, 6500 kVA);
- Other (being low capacity 3kVA, unmetered load and streetlights).

The current consumer groups (introduced in 2021) make a clear distinction between domestic, commercial and industrial consumers and other connections, which includes tariffs for unmetered load, streetlights and low-capacity connections (e.g. pumps). No changes were made to consumer groups for the pricing-year starting 1 April 2024.

Table 2: Pricing structure

2024-2025 Pricing structure	
Price tariff	Consumer group
Domestic consumers	
DOMFLC	Domestic Low User
DOMSTD	Domestic Standard User
COM0050	High use or high capacity residential user
Commercial and industrial consumers	
COM0050	Commercial and Industrial (<50kVA)
COM0100	Commercial and Industrial (50kVA-100kVA)
COM0300	Commercial and Industrial (101kVA-300kVA)
COM0500	Commercial and Industrial (301kVA-500kVA)
COM1000	Commercial and Industrial (501kVA-1000kVA)
COM4500	Commercial and Industrial (1001kVA-4500kVA)
COM6500	Commercial and Industrial (4501kVA-6500kVA)

GEN4500	Generation (1001kVA-4500kVA)
GEN6500	Generation (4501kVA-6500kVA)
Other consumers and special use tariffs	
OTH0003	Other Low Capacity (<3kVA)
DUML	Unmetered load (Lights, Pay & Display, CCTV)
STLGM	Metered streetlights

5.2. Cost Allocators

5.2.1. Cost of supply model 2022 refresh

The Firstlight Network's Cost of Supply Model (CoSM) is used to determine the revenue requirement by consumer group that is necessary to efficiently allocate costs and reflect the actual cost of its services. Firstlight Network has engaged an experienced consultant to review the CoSM as per our 5 year plan in order to improve the methodology and reflect better the utilisation of assets by various pricing groups. This revised methodology includes dedicated assets analysis and also an improved peak demand analysis to determine a more accurate costs of supply for each consumer group.

Firstlight revised its cost of supply model during RY2022. The updates included:

- Future prices (for each consumer group and tariff) were calculated from historical prices multiplied by a price change;
- Target quantities (by consumer group and tariff) reflected Firstlight's forecasts for the forthcoming pricing year;
- The cost of supply (by consumer group) was prepared by allocating the various cost components of the net allowable revenue (the target revenue) using an allocator that best reflected the component's cost driver (this is discussed in more detail below);
- The forecast revenue (for each consumer group) was calculated from future prices multiplied by target quantities.
- The forecast revenue was tested against the target revenue and the cost of supply (for each consumer group). Future price changes were then optimised to ensure that the forecast revenue (in total) did not exceed the target revenue and that the forecast revenue (by consumer group) was in-line with the cost of supply (by consumer group). In respect of the latter test, Firstlight optimised the price changes to improve (i.e. reduce the difference between) the forecast revenue and the cost of supply for each consumer group whilst also managing price shocks;
- Improvements were also made to the cost allocators (this is discussed in more detail below).

An overview of the cost allocators is discussed below.

5.2.2. Asset cost allocator

Asset value for each consumer group was derived from the most recent (RY2023) published Regulatory Asset Base (RAB). The allocation of asset to consumer groups use:

- Geo-spatial analysis to, where possible, allocate assets to consumer group based on the extent of assets used by that particular consumer group;
- The installed transformer capacity to allocate the value of distribution transformers and substations to consumer groups;

- The number of connections to allocate the value of LV lines, LV cables, consumer connections and load control to consumer groups;
- The remaining assets (i.e. the assets that could not be directly attributable to a particular consumer group) where allocated to consumer groups based on peak period consumption.

5.2.3. Connection cost allocator

ICP forecasts are derived after considering expected changes during the forthcoming pricing year. This data is based on historical averages plus or minus any forecast changes we are aware of.

5.2.4. Consumption cost allocator

Forecast Annual kWh usage is based on historical averages plus or minus expected changes because of growth, weather patterns and economic conditions.

5.2.5. Installed capacity allocator

Installed capacity is based on fuses installed or transformer capacity if a dedicated transformer is installed. This allocator is used in the allocation of assets.

5.2.6. Demand cost allocator

The demand allocator is based on the allocation of coincident peak demand for those consumer groups where coincident peak demand can be measured, the residual demand is then allocation to consumer groups using the peak period consumption.

5.2.7. Peak period consumption allocator

Peak Consumption is based on peak consumption during the three months when the network reaches the maximum demand. This allocator is used in the allocation of residual assets in the asset allocator and in the allocation of residual demand in the demand allocator.

5.2.8. Cost allocator metrics

Firstlight Network's revised CoSM contains the following input assumptions and statistics for the purpose of cost allocation. Firstlight Network used the following statistics to allocate costs to consumer groups.

Table 3: Cost Allocators

Cost allocation						
Price Category	ICP count	Consumption kWh	Assets $k	Capacity incl. DG installed kVA	Peak period consumption kWh	Peak demand MW
DOMLFC	12,026	61,314,087	62,949	376,883	7,134,111	17.6
DOMSTD	8,383	72,240,541	59,308	233,805	7,481,464	18.5
COM0050	4,630	39,472,257	31,854	231,317	3,633,308	9.0
COM0100	432	22,162,544	12,797	42,883	1,751,824	4.3
COM0300	128	20,444,228	17,122	34,825	2,458,670	6.1
COM0500	23	10,267,956	7,193	11,417	1,045,663	1.5
COM1000	23	31,185,817	7,955	23,833	3,240,757	4.5

COM4500	3	28,780,963	3,847	13,500	2,415,593	2.5
COM6500	0	-	2,977	6,500	681,612	0.9
OTH0003	80	211,452	186	243	20,036	0.0
GEN4500	1	-	208	4,500	-	-
GEN6500	1	113,748	1,724	6,500	-	-
DUML	174 (5123*)	1,584,305	1,279	720	174,984	0.4
STLGM	32 (243*)	34,307	47	10	4,156	0.0
TOTAL	**25,936**	**287,812,204**	**209,446**	**986,935**	**30,042,178**	**65**

*Fixtures/lamps

5.3. Cost Allocation to Consumer Groups

Following the determination of the allocators, the costs of supply (being the various components of Firstlight Network's costs to provide line function services) is allocated to consumer groups.

Firstlight Network allocates most of its costs based on assets used for distribution of electricity. This is to reflect the view that there is still limited growth in the Firstlight Network region and that Firstlight Network's costs are driven by long lasting assets and therefore largely fixed. It is also a reflection that electricity distribution assets have been built to meet the capacity requirements at a connection point irrespective of the actual volume of energy used. As the network has currently enough spare capacity most of the time this allocation is deemed the most suitable.

While the view on how to allocate costs remained focused on assets, the cost allocation has now used asset value as a more accurate allocator.

Table 4 below illustrates how the various cost categories of the network are allocated.

Recoverable and Pass-through costs have been allocated using a mix of allocators. The biggest proportion of this cost category are Transmission costs, which have been allocated using a suggested methodology for distributors to align with Transpower's methodology. Connection charge and Residual charge have been allocated using peak demand during the highest peak observed by Transpower. For those customer groups where this information is not readily available, peak demand consumption during the highest demand months was used as a proxy to demand. Benefits based charge was allocated based on kWh usage of the various pricing groups. All Transmission costs have been allocated using fixed charges as recommended by the Electricity Authority.

Network Opex and System Operations and Network Support costs are fully allocated based on asset values. This reflects that the costs to manage, operate and maintain the network are driven by the quality of assets, that is the scale of the network. The value of assets is the best measure of the scale of the network.

Business Support costs are more general overhead costs that are driven by both the scale and complexity of the business. The number of connections is considered to be the best allocator of both scale and complexity.

Capital charges are driven by the value of assets and as such as allocated to consumer groups based on asset value.

5.3.1. Cost allocators

The cost, cost drivers, and cost allocators used in the revised CoSM are as shown in the table below:

Table 4: Application of cost allocators

Cost group	Cost type	Cost driver	Cost allocator
Pass through costs	Rates on network	Quantity and location of assets	Assets
	MBIE and EA Levies	Levies based on electricity consumption	Consumption
Recoverable costs	Transpower customer Investment contract	Contracted charge for new assets installed by Transpower	Demand
	Transmission connection charge	Transpower's costs provide connection assets	Demand
	Transmission benefits based charge	Transpower grid charges[1]	Consumption
	Transmission residual charge	Transpower grid charges[1]	Demand
	FENZ levies	Value of assets subject to FENZ levies	Assets
Network opex	Cost to operate, inspect and maintain the network	The type, quantity and connection of the assets	Assets
Non-network opex	System operations and network support	The type, quantity and connection of the assets	Assets
	Business support	The size of the business and number of customers	Connections
New connections	Capital contributions and vested assets	Costs (or income) associated with new connections	Assets
Capital charges	Return of capital (depreciation)	Value of assets x depreciation rate	Assets
	Sale of assets	Gain (or loss) on sale of assets	Assets
	Return of capital	Cost of capital x regulated assets base less indexation	Assets

[1] Refer to the Transmission Pricing Methodology.

5.3.2. Costs of supply by allocator

Table 5 below shows that 74% of the cost of supply is driven by assets values. Connections and Demand are the other two main allocators used mostly for transmission costs and business support costs.

Table 5: Cost of Supply by allocator

Allocator	Cost of supply allocation
Assets	74%
Connections	12%
Demand	11%
Consumption	3%

5.4. Specific Aspects of the Pricing Methodology and Tariff Design

5.4.1. Low User Fixed Charges

LOW-FIXED CHARGE DEFINITION

A consumer only qualifies for the domestic Low Fixed Charge (LFC) tariff DOMLFC tariff if it satisfies the following:

- It is the consumer's primary and permanent place of residence. Thereby excludes: Holiday homes, shearers' quarters, separately connected outbuildings, premises that constitute any part of premises described in the Residential Tenancies Act 1986.
- No other person permanently residing in these premises is claiming primary domestic residence at another site whether on Firstlight Network's distribution system or elsewhere in New Zealand.
- The connection does not supply electricity for any Non-Domestic, Business, or Commercial activity. Therefore, metering and electricity consumption must be for Domestic reasons only (i.e. mixed end use of electricity reverts to Non-Domestic supply).
- Does not exceed the following current limits:

  1 Phase Up to 62 amps

  2 Phase Up 42 amps per phase

  3 Phase Up to 32 amps per phase

- Annual consumption is less than 8,000kwh per annum.

For the avoidance of doubt, a person cannot have multiple primary places of residence eligible for the Electricity (Low Fixed Charge Option for Domestic Consumers) Regulations 2004. [1]

All consumers wishing to change from a standard to the LFC tariff may be required to make a declaration and provide supporting documentation such as appearing on the local electoral roll.

APPLICATION OF THE LOW-FIXED CHARGE

Since 2004 the low user fixed charge regulations have capped fixed distribution charges to domestic consumers. These charges were fixed at 15 cents (excl. GST) per day and due to an amendment to the regulation in 2021, from April 2022 these charges increase by 15c over a five-year period until the regulation is dissolved (see table below). This fixed charge component is less than that determined by the Firstlight Cost of Supply Model described earlier. As such, the remainder of the fixed cost allocated to LFC consumers is necessarily recovered through variable charges. Accordingly, the variable charges for LFC consumers are much higher than the variable charges for standard users. Standard users instead have higher fixed charges and therefore lower variable charges.

Table 6: Low-fixed charge transition

Pricing Year	RY21	RY22	RY23	RY24	RY25	RY26	RY27	RY28
LFC charge	15c	15c	30c	45c	60c	75c	90c	TBC (>$2)

Lower consumption driving variable rates are also available for those consumers that allow Firstlight to switch their hot water off during peak times of network use. Controlled rates are priced at discount

[1] See Firstlight Network Ltd Tariff definitions, terms and conditions of supply attached to the 2024/25 schedule of prices.

to any other tariff to provide an incentive to allow Firstlight Network control of hot water. This effectively shifts consumption to periods outside of peak network demand.

Electricity delivered to consumers via controlled metering allows Firstlight to switch off load via ripple control to appliances connected to the controlled meter during periods of peak electricity demand. The price reduction is achieved through the reduction in peak period demand which drives transmission interconnection charges.

5.4.2. Time of Use Tariff

Firstlight Network applies Time of Use (TOU) tariffs to all consumers who have a reliably communicating smart meter. These TOU tariffs enable consumer to manage their loads more effectively and take advantage of a cheaper off-peak tariff. From April 2021, the introduced TOU pricing structure enables all residential and commercial consumer groups with communicating smart meters to be on TOU pricing. TOU tariffs introduce higher prices during peak times of the day when the network is more congested, and lower rates during off peak times when there is plenty of capacity in the network. This indicates to consumers that consuming electricity off peak may reduce or delay investments into network assets and shares this benefit with consumers who consume off peak.

Consumers may need to ask for a smart meter to be installed and/or change to a retailer that offers TOU tariff with a direct pass through of network charges.

There is a default (flat/anytime) tariff and peak and off-peak tariffs under all tariff codes (with exception of high capacity commercial tariffs 101-6500kVA:COM0300, COM0500, COM1000, COM4500, COM6500). Default (uncontrolled) tariff will be used when an exemption applies.

Eligibility for the default (uncontrolled tariff) will be applied when:

- Consumers do not have communicating smart meters that record consumption data in 30-minute time periods needed to calculate TOU tariffs;
- ICPs have intermittent or stopped communications;
- Retailers do not have smart meter agreements with meter providers;
- Retailers need validation process and billing system upgrades to process half hour consumption data needed to calculate TOU tariff;

Prices for peak and off-peak tariff were set so that a consumer with standard electricity consumption profile (based on Firstlight network profile) will pay the same as a customer on a flat rate. Whether customer is on a flat rate or TOU rates depends whether they have a smart meter installed (circa 70% ICPs do) and if the retailer can access reliably the HH data. We currently only receive peak and off-peak consumption for 65% of domestic customers with a smart meter, which is an increase of 7 percentage points on last year. The reason for this is either unavailability of HH data from the smart meter due to connectivity issues or inability of the energy trader/retailer to process HH data. There are several traders that currently have exemptions from the mandatory use of peak/off-peak consumption data due to their system issues.

Based on actual consumption observed on our network, a standard domestic customer uses 33% of electricity during peak periods.

Peak and off-peak period for domestic customers and lower capacity commercial and industrial connections (COM0050, COM0100) are following:

- Peak: 7:00-11:00, 17:00-21:00 (Monday – Friday)
- Off-peak: 11:00-17:00, 21:00-7:00, Weekends

High capacity commercial tariffs (COM0300, COM0500, COM1000, COM4500, COM6500) use more granular TOU pricing, i.e. morning peak, evening peak, off-peak and night:

- Evening Peak: 17:00 - 21:00
- Morning Peak: 07:00 - 12:00
- Off-peak: 12:00 - 17:00 & 21:00 - 23:00
- Night: 23:00 - 07:00

While Firstlight Network has considered demand and capacity based pricing for the mass market, TOU pricing is currently considered to be the best option considering the state and preparedness of the New Zealand electricity market, while still sending pricing signals based on time periods when capacity in parts of the network is approaching upper limits.

5.4.3. Assessment of variable charges vs. LRMC

Over the long-term, Firstlight Network should be agnostic to consumer behaviour that reduces electricity demand to avoid charges set using variable demand prices where the total revenue from variable charges is equal Firstlight Network's long-run margin cost (LRMC).

In respect of TOU tariffs, the differential between peak and off-peak tariff has been set so that across all consumer groups the incremental charge is $2.3 million p.a.. Domestic customers contribute 55% to this through their peak charges.

We have commenced work on calculating the long-run margin cost (LRMC) for the network. A review of previous year LRMC calculations confirmed that LRMC is within the indicated bracket of $300-$350 per kVA per year, specifically $340 per kVA. This value is higher than observed at other network companies and reflects the cost of the third 110kV subtransmission line to Gisborne proposed in the early 2040's. The value of $340 per kVA per year equates to $2.3 million p.a. This value is an indicator of the extent of revenue that should be recovered each year through variable prices.

Table 7 (below) illustrates that 54% of revenue is recovered by fixed charges. This percentage has been increasing consistently over the past years with a target of 70%. Revenue from peak prices accounts for 7% and is derived from the LRMC calculation discussed above. Variable charges during off-peak periods have been reduced for the pricing year 2024/25, but remain at a high level partially due to LFC regulation and partially due to legacy pricing methodology.

Table 7: Variable charge assessment

Revenue analysis	Revenue recovery ($m)	Change %
Revenue from fixed charge	17.8	54%
Revenue impact from ToU load shift from peak to off-peak	2.3	7%
Revenue from other variable charges	12.7	39%
Total	**32.8**	**100%**

5.4.4. Assessment of uneconomic bypass risk

Uneconomic bypass can occur where the charges from Firstlight Network are high enough to drive consumers to seek alternative options and the alternative option bears costs for the consumer but does not reduce costs of the same magnitude for the network. Uneconomic bypass will occur where the cost to a consumer of the alternative is lower than the reduction in network charges (due to variable tariffs) but higher than Firstlight Network's LRMC. The LRMC has been quantified based on the forecast additional opex and capex to service the forecast additional demand to 2045.

The decreasing cost of emerging technologies such as solar and batteries is likely to encourage uneconomic bypass by some residential consumers. This is due to high variable charges enforced on

the industry by the Low Fixed Charge regulations. As LFC regulation is phased out over the next three years, variable charges for most Firstlight customers should significantly reduce.

Table 7 (above) indicates that further shift from variable to fixed charging is required to minimise the risk of uneconomic by-pass. Further increases in daily fixed charges are planned as mentioned in Section 5.4.1.

Other risk of uneconomic bypass could come from large customers who could potentially connect directly into the Transmission network, however Firstlight Network views this risk to be highly unlikely as there are currently no consumers (existing or potential) of sufficient scale or close enough to Transmission lines to enable them to connect directly to Transpower's transmission lines. With the transfer of the Transpower assets to Firstlight Network this possibility is now even more remote.

5.4.5. Distributed Generation

CONNECTION CHARGES

Distributed Generation pricing is determined in accordance with distributed generation pricing principles contained in Schedule 6.4 of Part 6 of the Electricity Industry Participation Code 2010.

Distributed Generation connection tariffs are asset value based and comprise a fixed distribution charge only for Matawai Hydro and a mix of fixed and variable distribution charges for Waihi Hydro. A new individual tariff has been created for a 4MW Gisborne airport solar farm. Transmission charges are not applied to Distributed Generation that do not export to the transmission grid. This pricing means that the Distributed Generator, (based on generation capacity) is charged only for the distribution assets employed to connect and distribute energy produced. Therefore, in accordance with the distributed generation pricing principles, distributed generators are charged no more than the incremental cost of connection to the network.

Payment for Reduction of Losses is not made, as the benefits are realised by the energy retailer and are passed on to end users. In addition, due to the varying load conditions typical in the distribution network, the assessment of the physical losses applicable to a single installation is typically complex, and as such Firstlight does not financially recognise the reduction of losses.

5.4.6. Distribution Loss Factors

Line losses are determined as the metered energy (in kWh) measured by the metering equipment at each ICP multiplied by the appropriate loss factor. This calculates the equivalent energy at the GXP supplying that ICP for the purposes of the reconciliation agreement and the registry. The loss factor (appearing below) into which each ICP falls will be determined by the point within the distribution network voltage at which the metering for that ICP takes place, together with the particular circumstance of supply.

The allocation of losses is not a contracted line function service and Firstlight does not charge specific recoveries for losses.

Loss factors applicable to Firstlight changed from 1 April 2015 as a result of the acquisition of Firstlight transmission spur assets from Transpower. This is because the metering point for Transpower changed from three GXP's to one GXP. Firstlight have picked up the losses that were previously factored in Transmission into its Distribution network.

The undermentioned Loss Factors are applicable to all time periods, at the GXP.

Loss factors applicable to Firstlight Network:

- 400V connected supplies (LV Low Voltage) 1.0926
- 11kV connected supplies (HV High Voltage) 1.0789

Loss adjustment factors are reviewed annually and may be amended by Firstlight from time to time, to ensure that they reflect unaccounted for energy on the distribution network as accurately as possible. These have been updated for the pricing year 2024-25.

5.4.7. Non-Standard Contracts

Firstlight Network has one non-standard tariff for Eastland Generation Airport solar farm Te Ihi which is based on an NPV cost calculation linked to investment made by Firstlight Network into the connection point installation.

6. RY2025 Price Calculation

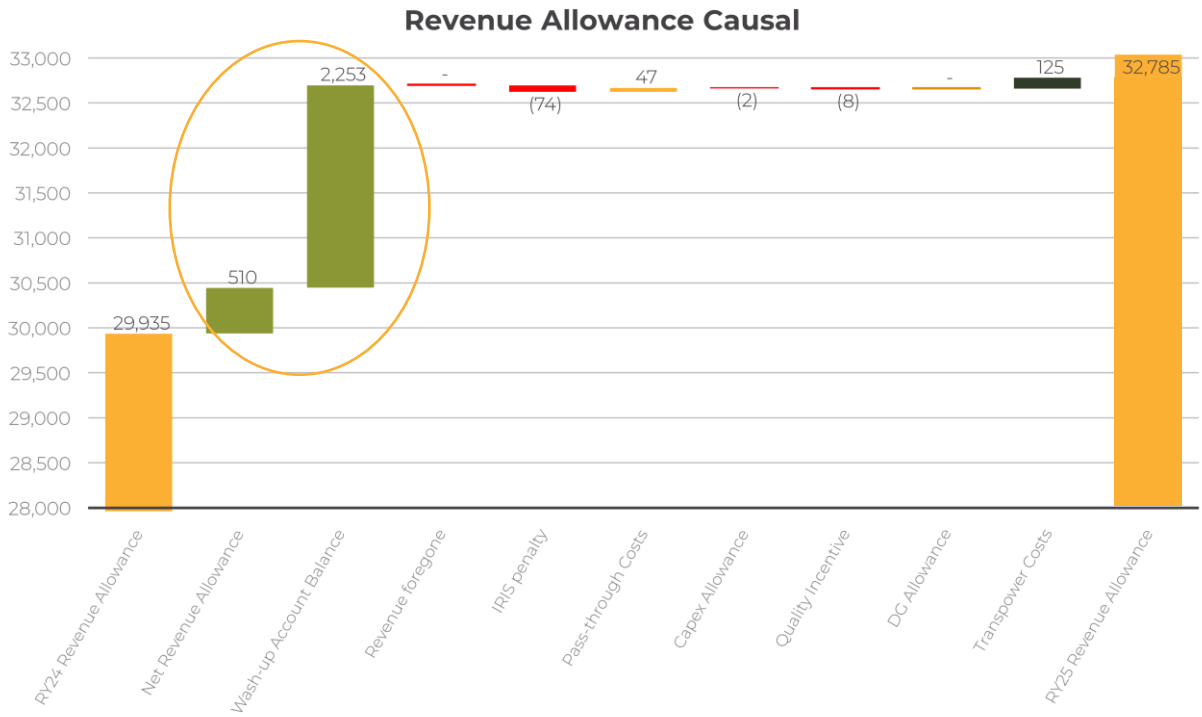
This section sets out how Firstlight has set its RY2025 prices using its pricing methodology.

6.1. Target Revenue

Target Revenue is calculated as a sum of Forecast Net Allowable revenue, Forecast Pass-through Cost, Forecast Recoverable Costs, Pass-through balance allowance and Prior period wash up. The table below shows the components of Revenue Allowance for Firstlight Network for the 2024/25 pricing year. Changes to pricing components result in the Forecast Allowable Revenue increasing by 9.5% year on year. This is mostly due to a high CPI driven wash-up relating to RY23 in addition to increases in price path allowance in revenue (+2%). Pass-through and Recoverable Costs show modest increase of +2.0%.

Table 8: Revenue Allowance

Revenue allowance ($000)	RY24 DPP3 P4	RY25 DPP3 P5	Change %
Forecast allowable revenue	29,935	32,785	+9.5%
Forecast net allowable revenue	25,493	26,003	2.0%
Forecast pass-through and recoverable costs	4,414	4,501	2.0%
Pass-through Balance Allowance			
Wash-up adjustment	28	2,280	8175%



Increase in revenue allowance	2,763
Decrease in revenue allowance	(85)
Change in pass-through and recoverable costs	172

6.2. Pass through and Recoverable costs

Pass through and recoverable costs are costs that are permitted under the DPP regulations to be passed through directly to consumers.

6.2.1. Pass-through costs

Pass-through costs are defined under clause 3.1.2 of the Electricity Distribution Services Input Methodologies Determination 2012 (Input Methodologies). These are costs that outside the control of Firstlight Network and are associated with the supply of electricity distribution services. These costs include

- Rates on system fixed assets payable to a local authority.
- Levies payable
  - Under section 53ZE of the Commerce Act 1986.
  - Under regulations made under the Electricity Industry Act 2010; and
  - By all members of the Electricity and Gas Complaints Commissioner Scheme.
- Ministry of Business, Innovation and Employment levies and Electricity & Gas Complaints Commission levies.

Table 9: Pass-through Costs

Pass-through costs ($000)	RY24 DSPP3 P4	RY25 DSPP3 P5	Change %
Forecast Pass-through Costs	434	449	3.4%
Rates on Network Assets	280	250	-11%
MBIE and EA Levies	154	200	29.6%

6.2.2. Recoverable costs

Recoverable costs are defined under clause 3.1.3 of the Electricity Distribution Services Input Methodology Determination 2012.

There are a number of costs specified in the Input Methodologies. Those applicable to the prices for Firstlight for the 2024/25 year are:

Table 10: Recoverable costs

Recoverable costs ($000)	RY24 DSPP3 P4	RY25 DSPP3 P5	Change %
Forecast Recoverable Costs	3,980	4,052	1.8%
Transpower BBC	857	913	6.6%

Transpower Connection, RC, TC	3,558	3,627	1.9%
Transpower New Investment Charge	75	75	0%
Distributed Generation Allowances			
FENZ Levies	28	59	116.1%
IRIS	(293)	(367)	25.4%
Quality Incentive Allowance	(164)	(172)	5%
Capex allowance	(81)	(83)	2.9%

TRANSPOWER CHARGES

Transpower charges for Firstlight Network are comprised of five elements: 1- Connection charges, 2- Customer investment contract charges and the Interconnection charge has transitioned under the new TPM to 3- Benefits based charge, 4- Transitional cap and 5- Residual charge.

1. CONNECTION CHARGES

Connection charges are an annual amount based on the connection assets used by Firstlight at the point of connection to the transmission grid. Firstlight's point of connection is the Tuai Grid Exit Point (GXP).

2. CUSTOMER INVESTMENT CONTRACT CHARGES

The customer investment contract charges relate to metering assets that were installed as part of the acquisition of assets by Firstlight Network from Transpower on 31 March 2015.

3. BENEFITS BASED CHARGE

The benefits-based charge is a charge that is applied to transmission users based on the benefits they receive from using the transmission system. The purpose of the benefits-based charge is to allocate the costs of the transmission system among the users who benefit from its use, in a fair and equitable manner. The benefits-based charge is set based on a formula that considers the capacity and usage of the transmission system by each user, the level of investment required to provide the transmission services, and the benefits that each user receives from using the system.

4. TRANSITIONAL CAP

The transitional cap is a mechanism that is used to limit the amount of the benefits-based charge that a transmission user must pay during a transitional period. The purpose of the transitional cap is to provide a temporary buffer to transmission users as they adjust to changes in the transmission pricing methodology, and to help ensure that the changes are implemented in a smooth and orderly manner.

The transitional cap is set as a percentage of a user's previous transmission charges and is designed to limit the increase in a user's charges as the new transmission pricing methodology is implemented. The transitional cap is in place for a limited period of time, after which it is removed and the full benefits-based charge is applied.

5. RESIDUAL CHARGE

A residual charge is a charge applied to a transmission user to recover the residual costs of the transmission system, which are costs that cannot be recovered through other pricing mechanisms. This charge is used to recover the costs of providing transmission services to customers who are not directly participating in the wholesale electricity market, such as some large industrial customers or residential consumers.

DISTRIBUTED GENERATION ALLOWANCE

Distributed generation is electricity generation that is connected to a distribution network. A distributed generation allowance is defined in the Electricity Distribution Services Input Methodologies Determination 2012 as

"any positive allowance for costs incurred and amounts payable, or negative allowance for amounts receivable, in relation to avoided transmission charges arising from distributed generation …"

The regulations set out in the Electricity Distribution Services Default Price-Quality Path Determination 2020, allow a distribution company to recover the costs of avoided transmission from its consumers and/or electricity retailers via line charges.

Any distributed generation allowance made must be paid in accordance with the Pricing Principles in Schedule 6.4 of The Electricity Industry Participation Code 2010. Clause 2 of this schedule states that charges to Distributed Generators are

"… to be based on recovery of reasonable costs incurred by a distributor to connect the distributed generator … and must include consideration of any identifiable avoided or avoidable costs"

Accordingly, where a generator provides an alternative to Transpower's transmission services, the benefit of avoided transmission charges will be passed through to the generator. The value of such benefit used to be based on the assessed impact that these alternatives had on GXP load profiles both in terms of demand and kWhs and were calculated in a similar method to Transpower's transmission pricing methodology.

With the changes to the Transmission Pricing Methodology to a benefits based model, payments to generators are no longer applicable as of 1 April 2023 (see Table 3).

AVOIDED CONNECTION COSTS

A generator that increases the capacity of the distribution network may be recognised as an alternative to a Transpower upgrade of connection assets. There will be a benefit to consumers over the Transpower solution if that capacity can be delivered on a more economically-efficient basis.

The avoided cost of connection charge is the total amount of connection charges that have been avoided due to the presence of Distributed Generation on Firstlight Network's network. Connection charges may be avoided either by:

- Avoiding a new transmission connection asset; or
- Avoiding an existing transmission connection asset.

The amount of avoided connection charge is calculated based on the value of new transmission connection asset projects and/or existing transmission connection assets that have been avoided. The value of new transmission connection projects is converted to an avoided connection charge using Transpower's current pricing methodology for connection assets. The value of existing connection assets that are avoided is calculated based on the most recent connection charge (for the assets avoided) inflated to current costs. Avoided charges payable to the generator are capped so that the generator earns no more than their weighted average cost of capital on invested assets.

No such payments are current made nor included in the distribution revenue.

FIRE AND EMERGENCY NEW ZEALAND LEVIES (FENZ)

Fire and Emergency New Zealand Levies are a new recoverable cost introduced in the amendments to the Input Methodologies in 2019.

INCREMENTAL ROLLING INCENTIVE SCHEME (IRIS)

The IRIS scheme provides incentives for EDBs to control costs. Where expenditure deviates from the Commerce Commission allowances, penalties or rewards are imposed. For the 5 year period from 1 April 2015, Firstlight operating expenditure was above the Commission's allowances, consequently, penalties of $367k have been imposed for the 2024/25 pricing year. This amount has been deducted from allowable revenue calculations for the 2024/25 pricing year. This penalty is $74k higher than in the pricing year 2023/24.

QUALITY INCENTIVE ALLOWANCE

The Quality Incentive Allowance is an incentive scheme that rewards or penalises those electricity distribution businesses that over or under achieve against set quality targets.

During the 2022/23 year, Firstlight's assessed quality results fell within the limits set by the Commerce Commission but exceeded its quality targets due to many adverse weather events during that year. This means that under the quality incentive scheme allowable revenue is decreased by $172k for the 2024/25 pricing year, which is at a similar level as in the pricing year 2023/24.

6.3. Network Opex, System Operations & Network Support, Business Support, Depreciation and Taxation

The revenue requirement components including, network maintenance, system operations & network support, business support, depreciation and taxation are based on budgeted regulatory costs for RY2025.

6.4. Return on Investment

Network owners are allowed to achieve a return on the value of their investment. Under the regulatory regime the return on investment is recovered through revenue and also through the increase in value of the regulated asset base (i.e. indexation).

The value of the investment is the regulated asset base (RAB) less the value of regulatory deferred tax (RDT).

The rate of return is the weighted average cost of capital (WACC) as determined by the Commerce Commission.

ROIR = (RAB - RDT) x WACC - Indexation

Where:

ROIR	–	Return on Investment component included in revenue
RAB	–	Regulated Asset Base at the beginning of the pricing year
RDT	–	Regulated Deferred Tax as calculated in accordance with the clause 2.3.7 of the Input Methodology Determination 2012.

WACC	-	Weighted Average Cost of Capital
Indexation	-	The value of the indexation of RAB

The weighted average cost of capital for the 2021 to 2025 pricing years has been determined by the Commerce Commission as 4.23%[2], however, the price path threshold creates a cap on this return and the actual return on investment may vary from this.

6.5. Target revenue vs. cost of supply

Table 11 summarises the difference between the target revenue from RY2025 prices and the cost of supply. Ideally all values should be zero. Positive values indicate that the target revenue is greater than the cost of supply and negative values indicates that the target revenue is below the cost of supply.

The material conclusion is that currently the cost of supply for the domestic low-fixed charge consumer group is not being fully recovered through revenue. This shortfall is being recovered from the standard domestic consumer group.

Table 11: Differences between target revenue and cost of supply

Item	Commercial	Domestic LFC	Domestic Standard	Generators	Other
Transmission	0.2	-0.1	-0.1	0.0	0.0
Distribution	0.1	-0.6	0.5	-0.1	0.1
Pass through & recoverable costs	0.0	0.0	0.0	0.0	0.0
Total	0.3	-0.7	0.5	-0.1	0.1

Note: Values are $ million.

However, Table 12 indicates that the overall alignment of target revenue and cost of supply has improved for and the network consumers. Target revenue under recovery for Domestic LFC has reduced by $0.4m and over recovery on Domestic Standard has reduced by $0.6m. This is a significant improvement on prior year.

Table 12: Change in target revenue vs. cost of supply

Item	Commercial	Domestic LFC	Domestic Standard	Generators	Other
Transmission	0.0	-0.1	0.1	0.0	-0.1
Distribution	-0.2	0.5	0.5	0.0	-0.1
Pass through & recoverable costs	0.0	0.0	0.0	0.0	0.0
Total	-0.1	0.4	0.6	0.0	-0.2

Note: Values are $ million.

The tables above indicate that Firstlight Network does not charge all consumer groups their true cost of supply. This is due to a number of factors including:

2 67th percentile estimate of post-tax WACC - Electricity Distribution Services Default Price-Quality Path Determination 2020 [2019] NZCC 21;

- Low Fixed Charge regulations which restrict the level of domestic fixed charges;
- Balancing higher cost per ICP in lower density areas with lower quality of service in these areas;
- The complexity, and potential arbitrary results in determining individual costs of supply;
- The desire to make the tariff schedule administratively simple;
- The desire to manage rate shock.

The planned increases to fixed charges will improve the cost recovery for the domestic low-fixed charge consumer group.

7. Compliance and Pricing Changes review

Table 13: Price changes

Firstlight Network – Price Changes RY25 vs RY24					
Price Tariff	Consumer Group	Charge Type	RY25	RY24	Delta %
DOMLFC	Domestic Low User	Fixed Daily Charge	0.6000	0.4500	33%
		Consumption Uncontrolled	0.1169	0.1116	5%
		Consumption Controlled	0.1025	0.0979	5%
		Peak	0.1807	0.1588	14%
		Off Peak + Night	0.0875	0.0882	-1%
DOMSTD	Domestic Standard	Fixed Daily Charge	2.1809	2.0001	9%
		Consumption Uncontrolled	0.0478	0.0427	12%
		Consumption Controlled	0.0240	0.0229	5%
		Peak	0.0889	0.0708	26%
		Off Peak + Night	0.0278	0.0280	-1%
COM0050	Commercial (<50kVA)	Fixed Daily Charge	2.4971	2.3065	8%
		Consumption Uncontrolled	0.0392	0.0346	13%
		Consumption Controlled	0.0229	0.0208	10%
		Peak	0.0776	0.0591	31%
		Off Peak + Night	0.0234	0.0237	-1%
COM0100	Commercial (50 to 100kVA)	Fixed Daily Charge	9.7303	8.7471	11%
		Consumption Evening Peak	0.0490	0.0467	5%
		Consumption Morning Peak	0.0323	0.0308	5%
		Consumption Off Peak	0.0995	0.0829	20%
		Consumption Night	0.0329	0.0332	-1%
COM0300	Commercial (101 to 300kVA)	Fixed Daily Charge	20.2129	17.1694	18%
		Consumption Uncontrolled	0.0493	0.0411	20%
		Consumption Evening Peak	0.0451	0.0376	20%
		Consumption Morning Peak	0.0421	0.0351	20%
		Consumption Off Peak	0.0275	0.0278	-1%

		Consumption Night	0.0153	0.0155	-1%
COM0500	Commercial (301 to 500kVA)	Fixed Daily Charge	48.7710	40.0264	22%
		Consumption Evening Peak	0.0262	0.0218	20%
		Consumption Morning Peak	0.0244	0.0203	20%
		Consumption Off Peak	0.0159	0.0161	-1%
		Consumption Night	0.0089	0.0090	-1%
COM1000	Commercial (501 to 1000kVA)	Fixed Daily Charge	95.0390	78.7439	21%
		Consumption Evening Peak	0.0243	0.0208	17%
		Consumption Morning Peak	0.0227	0.0194	17%
		Consumption Off Peak	0.0152	0.0154	-1%
		Consumption Night	0.0085	0.0086	-1%
COM4500	Commercial (1001 to 4500kVA)	Fixed Daily Charge	233.5269	218.6888	7%
		Consumption Evening Peak	0.0314	0.0262	20%
		Consumption Morning Peak	0.0294	0.0245	20%
		Consumption Off Peak	0.0194	0.0196	-1%
		Consumption Night	0.0107	0.0108	-1%
COM6500	Commercial (4501 to 6500kVA)	Fixed Daily Charge	285.4261	282.7105	1%
		Consumption Evening Peak	0.0391	0.0326	20%
		Consumption Morning Peak	0.0366	0.0305	20%
		Consumption Off Peak	0.0242	0.0244	-1%
		Consumption Night	0.0133	0.0134	-1%
GEN4500	Generation (1001 to 4500kVA)	Fixed Daily Charge	70.1445	63.3949	11%
GEN6500	Generation (4501 to 6500kVA)	Fixed Daily Charge	134.1233	110.7198	21%
		Consumption Uncontrolled	0.0340	0.0309	10%
DUML	Distributed Unmetered	Fixed Daily Charge/fixture	0.0745	0.0679	10%
		Consumption Uncontrolled	0.0836	0.0697	20%
STGLGM	Street lights metered	Fixed Daily Charge/fixture	0.0737	0.0656	12%
		Consumption Uncontrolled	0.0984	0.0820	20%
OTH0003	Low Capacity (<3kVA)	Fixed Daily Charge	0.5608	0.5198	8%
		Consumption Uncontrolled	0.1169	0.1063	10%

7.1. Domestic Customer Price Changes

DOMESTIC – LOW USER (<8,000KWH)

The government is phasing out low fixed electricity pricing plans across New Zealand, started in April 2022. The change was a key recommendation of a 2019 independent panel review of electricity prices.

The review found low fixed charge regulations were poorly targeted and resulted in a number of unintended consequences, such as shifting costs to households with low incomes and high electricity use.

The change means that the electricity sector can implement fairer pricing plans for distributing electricity, which will ultimately help networks manage the load more efficiently during peak times.

The changes to the regulations resulted in the fixed charge increasing from 45c to 60c for pricing year 2024/25. Moreover, an increase in Forecast allowable revenue due to CPI driven wash-up had a negative impact on the variable rates. However, while the variable charges for peak consumption increase, the charges for off peak consumption fall slightly.

DOMLFC	kWh	New	Old	Delta
Low	2,000	$445	$380	+17.1%
Average	5,000	$783	$703	+11.4%
Max	8,000	$1,122	$1,026	+9.3%

An average low user domestic consumer (5,000kWh) will see their network charges go up by +11.4% or $7 per month. The 1500 customers that consume around 2000kWh will see charges go up by +17.1% or $5 per month. Due to low consumption and an increase in fixed charges, the percentage price increase for low user domestic customer is higher than for domestic standard users.

TOU pricing (as introduced in April 2021) means that a customer can see a variance to the above average reduction based on when they consume electricity and whether their current retailer passes distribution charges directly through to the customer (most retailers still aggregate their distribution charges).

Prices for peak and off-peak were set so that a consumer with standard electricity consumption profile (based on Firstlight network profile) will pay the same as a customer on an anytime rate. Whether customer is on a flat rate or TOU rates depends whether they have a smart meter installed (circa 77% ICPs do) and if the retailer can access reliably the HH data and supply to us for billing (only about 50% of ICPs with smart meters are being billed based on TOU usage).

A standard customer uses 33% of electricity during peak periods on a weekly basis. A customer can save on network charges (based on standard profile and average consumption) by shifting a discretionary load to off-peak periods during weekdays or to the weekend (depending on their retailer plan).

Conversely, a peaky consumer (i.e. consumer who consumes more electricity during peaks than the average customer) may see a higher increase on their annual bill.

DOMESTIC - STANDARD USERS (>8,000KWH)

Prices for higher user domestic tariff or non-residential consumers (e.g. holiday homes) were set in a way to achieve 8,000kWh pivot point, while maintaining cost reflective fixed charge.

Lower cross-subsidisation to other pricing groups does not fully offset the high increase in Forecast allowable revenue. As a result, standard domestic customers will see a price increase this year aligned with the overall revenue increase. For an average high consuming customer (8,500kWh) prices have increased by +9.5% ($8 per month). Given that holiday homes consume electricity often during off-peak periods, charges to the retailer will likely be lower than those shown in table below.

In contrast to last year (where fixed charges remained the same), in RY25 fixed charges for standard domestic customers increase by 9%. Variable charges in total are going up by 10% so that the last year's price reduction of 10% was reversed. Only variable charges for off peak consumption will see a price reduction.

Residential customers with consumption over 8,000kWh will benefit from switching to Domestic standard user tariff (DOMSTD) as they will benefit from lower variable charges. Should consumption exceed 20,000kWh, such consumers would be switched to low-capacity commercial tariff (COM0050) to benefit from even lower variable rates.

DOMSTD	kWh	New	Old	Delta
Low	2,000	$878	$804	+9.2%
Pivot point	8,000	$1,125	$1,027	+9.5%
Average	8,500	$1,146	$1,046	+9.5%
Max	20,000	$1,619	$1,473	+9.9%

7.2. Commercial Customer Price Changes

Fixed charges for all commercial and industrial customers will increase by an average of +13%, while variable charges increase by an average of +11%.

Most of the changes are driven by both the cost allocation methodology and the Transmission allocation guidance to recover costs via fixed charges.

The updated Cost of Service Model resulted in varied impact to the different commercial and industrial pricing groups. An improved insight into customer group dedicated assets and an analysis into peak demand analysis by major customers helped improve the accuracy of cost allocation and therefore cost reflectivity.

COMMERCIAL (<50KVA)

COM0050	kWh	New	Old	Delta
Low	2,000	$981	$903	+8.6%
Average	8,400	$1,202	$1,100	+9.3%
Pivot point	20,000	$1,604	$1,457	+10.1%
Max	50,000	$2,643	$2,379	+11.1%

COM0050 has 15% higher fixed charge than standard commercial tariff to reflect the higher cost associated with the higher capacity electricity distribution equipment. Compared to domestic customers small commercial customers under tariff categories COM0050 experience a smaller fixed charge increase of +8.3% as it was already set at the appropriate level. On average, all variable charges are going up by 13%. The only exception are variable charges for off peak consumption, which decrease slightly. The new prices result in an average charge increase by 9.3%. Higher consuming connection will see a higher increase (11.1%) of 2024-25 price changes, while low consuming ICPs (2000kWh) will see a lower increase (+8.6%). An average low-capacity commercial customer (8,400kWh) will see $9 increase on their monthly distribution charges.

Residential connections that would qualify for domestic tariff (DOMSTD) will benefit from COM0050 tariff once consumption exceeds 20,000kWh. In addition, residential connections with higher capacity requirements, e.g. 2 phase 62 Amp will not qualify for DOMSTD tariff and will be placed onto COM0050.

COMMERCIAL (50 TO 100KVA)

COM0100	kWh	New	Old	Delta
Low	20,000	$4,532	$4,127	+9.8%
Average	55,000	$6,247	$5,761	+8.4%
High	300,000	$18,252	$17,203	+6.1%

Fixed charges for commercial and industrial connections with capacity between 50 and 100kVA will go up by +11.2% while variable charges in total increase by +7%. Only variable charges for off peak consumption will see a small reduction. For an average connection (55,000kWh) prices will go up +8.4% and there will be an increase of $40 on their monthly distribution charges.

COMMERCIAL (101-300KVA)

COM0300	kWh	New	Old	Delta
Low	40,000	$7,980	$6,813	+17.1%
Average	174,000	$9,999	$8,642	+15.7%
High	600,000	$16,418	$14,458	+13.6%

Prices for commercial and industrial connections with capacity between 101 and 300kVA will experience a higher increase due to the consumer group currently under-recovering its revenue requirements. Prices will go up on average +15.7% and an average connection (174,000kWh) will see $113 increase on their monthly distribution charges.

Fixed charges increased +17.7%, while variable rates will go up by +11%. Just like with all other tariff groups, the only variable price rate that goes down is the variable charge for off peak consumption.

COMMERCIAL (301-500KVA)

COM0500	kWh	New	Old	Delta
Low	40,000	$18,508	$15,252	+21.4%
Average	416,000	$25,154	$21,287	+18.2%
High	1,050,000	$36,360	$31,464	+15.6%

Prices for commercial and industrial connections with capacity between 301 and 500kVA will see the highest increases in fixed charges (+22%) due to cost allocation requirements. As a result of a high differential between low and high energy users in this consumer tariff group, the change in fixed charges will have varying impact on customers based on their energy consumption. Those that have comparatively low kWh consumption will see their distribution charges go up more, while those with high consumption will see less impact.

Prices go up on average +18.2% and an average connection (416,000kWh) will see $322 increase on their monthly distribution charges. Variable rates increase 10%, only prices for off peak consumption experience a low reduction.

As a result of these high tariff movements, customers with low consumption that enjoyed low distribution charges in the past are being brought closer to the average cost of connection in this consumer group.

COMMERCIAL (501-1000KVA)

COM1000	kWh	New	Old	Delta
Low	300,000	$39,673	$33,343	+19.0%
Average	1,300,000	$56,286	$48,679	+15.6%
High	4,000,000	$101,140	$90,088	+12.3%

Comparable to COM0500 prices for commercial and industrial connections with capacity between 501 and 1000kVA will also see high increases in fixed charges (+21%) due to cost allocation requirements.

Prices will go up on average +15.6% and an average connection (1,300,000kWh) will see $634 increase on their monthly distribution charges. Variable rates in total increase 8%, only prices for off peak fall slightly.

As with previous pricing category, these high movements in tariff changes have a varying impact on customer based on their energy consumption. These tariffs are resulting in a fairer annual charge, which is closer to the average cost of connection and will correct the historic undercharge of low consuming customers and overcharge of high consuming customers.

INDUSTRIAL (1001-4500KVA)

COM4500	kWh	New	Old	Delta
Low	3,100,000	$150,556	$139,277	+8.1%
Medium	4,900,000	$188,482	$173,800	+8.4%

High	15,800,000	$418,150	$382,854	+9.2%

Network charges for industrial customers under tariff category COM4500 tariff will see an average price increase of 8.4%. This percentage increase is below the overall price increase of 9.5%.

Fixed charge increases by 7%. While the variable rates in total increase by 9%, only the charges for off peak consumption go down. A medium connection (4,900,000kWh) will see $1.224 increase on their monthly distribution charges.

INDUSTRIAL (4501-6500KVA)

For RY2025 there will no longer be any customers under tariff category COM6500.

GENERATION (4501 TO 6500KVA) – WAIHI

GEN	kWh	New	Old	Delta
Matawai		25,603	23,139	+10.6%
Waihi	98,971	52,320	43,471	+20.4%

Both Matawai Hydro and Waihi Hydro will receive price increases for RY2025. Matawai Hydro will see a lower price increase (+10.6%) than Waihi Hydro (20.4%).

METERED STREETLIGHTS, UNMETERED LOAD AND OTHER

DUML	kWh	New	Old	Delta
Low	1,471,197	262,299	229,508	+14.3%
STLGM	**kWh**	**New**	**Old**	**Delta**
High	37,258	10,203	8,874	+15.0%
OTH0003	**kWh**	**New**	**Old**	**Delta**
Average	3,000	$555	$509	+9.2%

Special purpose tariffs will see increases between 9.2-15.0%.

8. Appendix

8.1. Appendix 1 - Pricing Principles

Information Disclosures require Firstlight Network to demonstrate consistency with the pricing principles published by the former Electricity Commission in 2010, adopted by the Electricity Authority, and updated in 2019.

PRINCIPLE A

Prices are to signal the economic costs of service provision, including by:

- Being subsidy free (equal to or greater than avoidable costs, and less than or equal to standalone costs)
- Reflecting the impacts of network use on economic costs
- Reflecting differences in network service provided to (or by) consumers; and
- Encouraging efficient network alternatives

As Electricity distribution networks make very long-term decisions regarding investment in assets a prudent planning margin is built into assets installed to enable additional small increments to be gradually added until such time as new investment in infrastructure is required.

"The planning margin is necessary given the very long lead-time to increase supply capacity in respect of 110kV Substations and 110kV transmission lines. Having headroom in the capacity is considered to be of particular importance in the Gisborne region given the unpredictability in growth associated with wood harvesting and related industrial activity[3]."

Consequently, short-term incremental costs are minor or nil.

Where long-term incremental costs are incurred these costs are included in prices over the life of the assets. As there is little growth in the Firstlight region, this is considered appropriate. Where there are areas of significant growth and corresponding constraints on the network, those requiring additional capacity are typically required to provide some capital contribution for the additional investment incurred. These additional investments are quite localised and therefore easily attributable to customer requests. As pricing for these localised areas are not easily separated from general pricing, capital contributions are appropriate. The value of these contributions will assist the customer to determine whether an alternative supply is a more beneficial solution for them and reduces the chance of cross-subsidies.

The standalone price is the cost of a consumer obtaining electricity from an alternative source. However, as distribution costs are only approximately 43%[4] of the total cost of a power bill in the Firstlight region, the cost of energy and retail margins will also influence the customer's decision.

Currently Firstlight's pricing is heavily influenced by regulation and in particular the pricing structure has been developed to comply with the Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004 whereby fixed charges are limited to 60c per day for pricing year 2024-25. Consequently, the remainder of the domestic revenue required is received through variable (c/kWh) pricing. While historically, this variable pricing has had the effect of allowing customers to reduce their power bills through energy efficiency initiatives, new opportunities to reduce usage are being achieved through the instalment of small-scale generation such as solar panels on rooftops. This is becoming more prevalent as the price of solar and batteries reduce. However, the cost of these

3 Extract from Firstlight Network Limited Asset Management Plan
4 Quarterly residential sales-based electricity cost – March 2019; Ministry of Business, Innovation & Employment

alternatives has not yet reduced to the point where standalone is more economic than connection to the network. However, the high variable charge for domestic connections encourages inefficient investment in these types of technologies. Until such time that household scale electricity storage is cost effective, reliance on network delivered energy will still be required during seasonal & peak times.

Firstlight Network's tariff structure divides customers according to capacity thereby signalling the economic cost of service provision based on capacity.

Firstlight Network introduced from 1 April 2021 Time of Use (TOU) for all consumers with communicating smart meter in addition discounted controlled load tariffs for residential consumers. These tariffs allow the customer or the network to reduce load during peak periods and consequently the consumer is rewarded with cheaper rates during off peak times.

PRINCIPLE B

Where prices that signal economic costs would under-recover target revenues, the shortfall should be made up by prices that least distort network use.

This principle is based on Ramsey pricing where prices are inversely adjusted according to their elasticity of demand. That is, prices are higher for those customers who are less likely to change demand as a result of price changes.

The difficulty of applying this principle in practise is that a) it works to the detriment of socially deprived domestic consumers as their demand is generally the least elastic; and b) obtaining reliable price elasticity information regarding various groups of customers is extremely difficult.

An alternative to this is to measure elasticity over time intervals rather than by customer groups[5]. It would be expected that peak periods during the cold winter evenings would be the least elastic and consequently prices during peak periods could be set to recover any shortfall in revenues from efficient incremental cost pricing.

Firstlight has implemented Time of Use (TOU) pricing to all residential customers alongside larger commercial customers from 1 April 2021 as a step to managing peak loads on the network. Firstlight recognise that there are no capacity constrains in many areas of the network, however overall the network has been observing a higher increase in demand over the past couple of years and will lose N-1 security during peaks over the few years if this trend continues. An investment into either an industrial scale battery, a diesel generator or a peaking plant will be a necessary step and we prepare for further electrification of transport, heating and industrial heat.

PRINCIPLE C

Prices should be responsive to the requirements and circumstances of end users by allowing negotiation to:

- **Reflect the economic value of services; and**
- **Enable price/quality trade-offs.**

Firstlight Network is willing, if the situation warrants, to discuss alternative arrangements with customers whose connections are remote and costly to maintain. Firstlight does provide some flexibility with regard to capital contributions for new connections to counter uneconomic bypass. This enables Firstlight and their customers to negotiate price-quality trade-offs. Firstlight Network is currently working on moving some remote customers outside the main network to a microgrid.

5 Regulation of the Power Sector, Springer-Verlag London 2013, Edited by Ignacio J Perez-Arriaga

There are no current or future planned industrial operations of sufficient scale and close enough to a GXP to connect directly to the Transmission grid. Large-scale off-grid alternatives are also not currently an economic alternative to connection to the distribution network.

Firstlight Network owns multiple diesel generator to secure power supply to remote locations on its network during maintenance and network faults. These generators provide security of supply at a significantly lower cost than building additional overhead lines.

Firstlight Network also requires installation of load control relays for all new connections to enable demand response on its network which is implemented regularly during daily peak periods. Where the relays are owned by Firstlight Network, the cost to maintain and replace the relays are also borne by Firstlight Network thereby ensuring load control is available as a tool for demand response.

PRINCIPLE D

Development of prices should be transparent and have regard to transaction costs, consumer impacts, and uptake incentives.

Development of prices is disclosed in this document which is publicly available. Tariff categories have been updated twice over the past few of years (2020 and 2021), but impact on consumers remained of significant importance as Firstlight Network prepares for electrification transport and industrial processes. Firstlight is consistently reviewing its pricing strategy to address progression towards net zero carbon economy. This strategy and change process will involve considerable engagement with end consumers, retailers, regulators and other key stakeholders.

Electricity distribution prices in the Firstlight Network region are applicable to both the Wairoa and Gisborne networks and are the same across all retailers. This allows for simplicity across both regions and provides a level playing field for all retailers within the Firstlight region.

8.2. Appendix 2 – Consumer Group Target Revenue

Firstlight Network – Revenue by Tariff category				
Price Category	Consumer Group	ICPs/fixtures*	Consumption kWh	Forecast revenue $
DOMLFC	Low User Fixed Charge	12,026	61,314,087	9,654
DOMSTD	Standard Domestic	8,383	72,240,541	9,768
COM0050	Capacity (0 to 50kVA)	4,630	39,472,257	5,735
COM0100	Capacity (101 to 300kVA)	432	22,162,544	2,628
COM0300	TOU – Demand (201-300kVA)	128	20,444,228	1,775
COM0500	TOU – Demand (301-500kVA)	23	10,267,956	591
COM1000	TOU – Demand (501-1000kVA)	23	31,185,817	1,316
COM4500	TOU – Demand (1001-4500kVA)	3	28,780,963	898
COM6500	TOU – Demand (4501-6500kVA)	0	-	9
GEN4500	Assessed Capacity (1001 to 4500kVA)	1	-	26
GEN6500	Assessed Capacity (4501 to 6500kVA)	1	113,748	53
DUML	Distributed Unmetered	174 (5123*)	1,584,305	272
STLGM	Street lights metered	32 (243*)	34,307	10
OTH0003	Low Capacity (0 to 3kVA)	80	211,452	41
Total	ICPs	25,936	287,812,204	32,775
	Fixtures*	5,366		

*Fixtures are only applicable to DUML and STLGM tariffs and relate to street lights, decorative lights, pay&display machines and CCTV cameras.

8.3. Appendix 3 - Pricing Schedule

Firstlight Network Schedule of Charges – Effective 1 April 2024						
Price Tariff	Tariff Code	Consumer Group	Charge Type	Distribution Charge	Transmission Charge	Total Charge
DOMLFC	DOMLFCF	Low fixed charge domestic customers <8,000kWh	Fixed	0.3464	0.2536	**0.6000**
	DOMLFCU		Uncontrolled	0.1169	0.0000	**0.1169**
	DOMLFCC		Controlled	0.1025	0.0000	**0.1025**
	DOMLFCP	12026 ICPs	Peak	0.1807	0.0000	**0.1807**
	DOMLFCO		Off Peak + Night	0.0875	0.0000	**0.0875**
DOMSTD	DOMSTDF	Standard domestic customers >8,000kWh	Fixed	1.7996	0.3813	**2.1809**
	DOMSTDU		Uncontrolled	0.0478	0.0000	**0.0478**
	DOMSTDC		Controlled	0.0240	0.0000	**0.0240**
	DOMSTDP	8383 ICPs	Peak	0.0889	0.0000	**0.0889**
	DOMSTDO		Off Peak + Night	0.0278	0.0000	**0.0278**
COM0050	COM0050F	Commercial customers <50kVA + Domestic >20,000kWh	Fixed	2.1086	0.3885	**2.4971**
	COM0050U		Uncontrolled	0.0392	0.0000	**0.0392**
	COM0050C		Controlled	0.0229	0.0000	**0.0229**
	COM0050P	4630 ICPs	Peak	0.0776	0.0000	**0.0776**
	COM0050O		Off Peak + Night	0.0234	0.0000	**0.0234**
COM0100	COM0100F	Commercial customers <100kVA	Fixed	6.9652	2.7651	**9.7303**
	COM0100U		Uncontrolled	0.0490	0.0000	**0.0490**
	COM0100C		Controlled	0.0323	0.0000	**0.0323**
	COM0100P	432 ICPs	Peak	0.0995	0.0000	**0.0995**
	COM0100O		Off Peak + Night	0.0329	0.0000	**0.0329**
COM0300	COM0300F	Commercial customers <300kVA	Fixed	8.8670	11.3459	**20.2129**
	COM0300U		Uncontrolled	0.0493	0.0000	**0.0493**
	COM0300EP		Evening Peak	0.0451	0.0000	**0.0451**
	COM0300MP	128 ICPs	Morning Peak	0.0421	0.0000	**0.0421**
	COM0300OP		Off Peak	0.0275	0.0000	**0.0275**
	COM0300N		Night	0.0153	0.0000	**0.0153**

COM0500	COM0500F	Commercial customers <500kVA	Fixed	30.1981	18.5729	**48.7710**
	COM0500EP		Evening Peak	0.0262	0.0000	**0.0262**
	COM0500MP		Morning Peak	0.0244	0.0000	**0.0244**
	COM0500OP	23 ICPs	Off Peak	0.0159	0.0000	**0.0159**
	COM0500N		Night	0.0089	0.0000	**0.0089**
COM1000	COM1000F	Commercial customers <1000kVA	Fixed	45.6734	49.3656	**95.0390**
	COM1000EP		Evening Peak	0.0243	0.0000	**0.0243**
	COM1000MP		Morning Peak	0.0227	0.0000	**0.0227**
	COM1000OP	23 ICPs	Off Peak	0.0152	0.0000	**0.0152**
	COM1000N		Night	0.0085	0.0000	**0.0085**
COM4500	COM4500F	Commercial customers <4500kVA	Fixed	126.9237	106.6032	**233.5269**
	COM4500EP		Evening Peak	0.0314	0.0000	**0.0314**
	COM4500MP		Morning Peak	0.0294	0.0000	**0.0294**
	COM4500OP	3 ICPs	Off Peak	0.0194	0.0000	**0.0194**
	COM4500N		Night	0.0107	0.0000	**0.0107**
COM6500	COM6500F	Commercial customers <6500kVA	Fixed	148.1482	137.2779	**285.4261**
	COM6500EP		Evening Peak	0.0391	0.0000	**0.0391**
	COM6500MP		Morning Peak	0.0366	0.0000	**0.0366**
	COM6500OP	1 ICP	Off Peak	0.0242	0.0000	**0.0242**
	COM6500N		Night	0.0133	0.0000	**0.0133**
GEN4500	GEN4500F	Generation <4500kVA	Fixed	70.1445	0.0000	**70.1445**
		1 ICP				
GEN6500	GEN6500F	Generation <6500kVA	Fixed	134.1233	0.0000	**134.1233**
	GEN6500U	1 ICP	Uncontrolled	0.0340	0.0000	**0.0340**
OTH0003	OTH0003F	Low Capacity <3kVA	Fixed	0.4357	0.1251	**0.5608**
	OTH0003U	80 ICPs	Uncontrolled	0.1169	0.0000	**0.1169**
DG		Distributed Generation	Fixed	0.0000	0.0000	**0.0000**
DUML	DUMLF	Distributed Unmetered Load	Fixed (per fixture/day)	0.0548	0.0197	**0.0745**

	DUMLU	5123 fixtures	Uncontrolled	0.0836	0.0000	**0.0836**
STLGM	STLGMF	Street Lights Metered	Fixed (per fixture/day)	0.0597	0.0140	**0.0737**
	STLGMU	243 fixtures	Uncontrolled	0.0984	0.0000	**0.0984**

8.4. Appendix 4 – Glossary

AMP	Asset Management Plan.
Code	Electricity Industry Participation Code 2010 and subsequent amendments.
Commission	Commerce Commission.
Consumer	A person or an entity whose electricity installation is connected to the electricity network.
Controlled	An option where consumers elect to have part of their electricity supply subject to interruption at Firstlight's discretion. The most common example is control of electrically heated hot water.
COSM	Cost of Supply Model.
Demand	Electricity load, measured in either kW or kVA, usually averaged over a half-hour period.
Distributed Generation	Generating plant that is electrically connected to a distribution network.
Distribution Business (EDB)	An entity other than Transpower which owns an electricity network other than an embedded network. Often denoted as an Electricity.
Domestic	Any person who purchases or uses electricity in respect of their home. Home means the premises used or intended for occupation principally as a place of residence.
DPP Regulations	Electricity Distribution Services Default Price-Quality Path Determination 2015.
EA	Electricity Authority.
EGCC	Electricity & Gas Complaints Commission.
FENZ	Fire and Emergency New Zealand.
GXP	Grid Exit Point. The point at which Firstlight Network connects to the National Grid.
Half-hour metered	An ICP with metering that records electricity consumption in half-hour intervals.
ICP	Installation Control Point. An individual connection to an electricity distribution network.
IRIS	Incremental Rolling Incentive Scheme.
Input Methodology	Electricity Distribution Services Input Methodologies Determination 2012.
kVA	Kilovolt-amp. Measure of total apparent power.
kW	Kilowatt. Measure of true power.
kWh	Kilowatt-hour. Rate of energy flow.
LFC Regulations	Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004.
MBIE	Ministry of Business, Innovation and Employment.
Power factor	kW/kVA.

Principal Place of Residence	In the context of clause 3 of the Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004.
PV	Photovoltaics.
RCPD	Regional Coincident Peak Demand. Customer off-take at the Tuai Grid Exit Point (GXP) during a regional peak demand period.
Residential Consumer	A consumer at a residential ICP which satisfies the definition of "domestic premises" in Section 5 of the Electricity Industry Act 2010.
The Code	Electricity Industry Participation Code 2010.
TOU	Time of Use.

8.5. Appendix 5: Directors' Certification

Firstlightnetwork

Schedule 17: Certification for Pricing Methodology Disclosures

Clause 2.9.1

We, Mark Adrian Ratcliffe and Fiona Ann Oliver, being Directors of Firstlight Network Limited certify that, having made all reasonable enquiry, to the best of our knowledge:

a) The following attached information of Firstlight Network Limited prepared for the purposes of clauses 2.4.1 to 2.4.5 of the Electricity Distribution Information Disclosure Determination 2012 in all material respects complies with that determination.

b) The prospective financial or non-financial information included in the attached information has been measured on a basis consistent with regulatory requirements or recognised industry standards.

Director: M Ratcliffe	Director: F Oliver
15 March 2024	15 March 2024
Date	Date