# Distribution Pricing Policy

**1 April 2022 – 31 March 2023**

# Buller Electricity Limited – Distribution Pricing Policy

As referenced by the Default Distributor Agreement:

Price Categories

Delivery Price Schedule

Loss Factors

Billing & Settlement Process

**Effective: 1 April 2022**

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# 1. Introduction

This Pricing Policy applies to Buller Electricity's Distribution Network effective from 1st April 2022.

The Delivery Price Schedule (Section 4 of this Pricing Policy) is referenced by Schedule 7 of our Default Distributor Agreement (DDA).

The Billing and Settlement Process (Section 6 of this Pricing Policy) is referenced by Schedule 2 of our Default Distributor Agreement (DDA).

Where any provision of this Pricing Policy conflicts with the provisions of any Retailer Agreement, the Retailer Agreement will prevail. Unless the context otherwise requires, terms used in this Pricing Policy have the meanings defined in the Retailer Agreement.

BEL made a decision to implement Anytime Maximum Demand (AMD) based pricing for Non-Residential connections from 1 April 2021. A detailed explanation of the reasons for this decision are provided in Section 8.

## 1.1. Definitions

**Anytime Maximum Demand (AMD)** means the average kW demand measured over a half hour period occurring any time in the 12-month period ending 31st August each year

**Avoided Cost of Transmission (ACOT)** is the amount equal to the actual reduction in Transpower's annual charges payable by BEL to Transpower under Transpower's Transmission Pricing Methodology (TPM) arising as a direct result of the Generator being connected to BEL's Distribution Network

**Authority** means the Electricity Authority

**BEL** means Buller Electricity Limited and any of its subsidiaries, successors and assignees

**Billing Data** means data provided by the Retailer to the Distributor in the EIEP format as required under the Retailer Agreement, so that BEL is able to undertake the monthly billing process

**Billing Data Due Date** means the date by which the Retailer must provide Billing Data

**Billing Month** means the latest Report Month (the month associated with the Initial Billing Data which is being processed)

**Calendar Month** means the period from the first day to the last day of a month (inclusive)

**Calendar Year** is a one-year period that begins on 1 January and ends 31 December

**Capacity Measurement Period (CMP)** means the period year ending 31 August

**Code** see **Electricity Industry Participation Code**

**Connection** or **Point of Connection** means each point of connection at which a supply of electricity may flow between the Distribution Network and the Consumer's Installation, as defined by the Distributor

**Consumer** means a purchaser of electricity from the Retailer where the electricity is delivered via the Distribution Network to a Point of Connection

**Current Month** means the month in which the charges to the Retailer are being invoiced

**Customer** means a direct customer or a Retailer (where the Retailer is the customer)

**Data Hub** means the Electricity Registry Data Hub which is used by Participants for the transfer of data files

**Delivery Charges** means the fixed and variable charges levied by the Distributor on Customers for the use of the Distribution Network, as described in this Pricing Policy

**Delivery Price Schedule** refers to Section 4

**Demand** means the rate of expending electrical energy expressed in kilowatts (kW) or kilovolt amperes (kVA)

**Distributed Generation** or **Embedded Generation** means electricity generation that is connected and distributed within the Network

**Distributed Generator** or **Embedded Generator** means an electricity generation plant producing Embedded Generation

**Distribution Network** or **Network** means the electricity network owned and operated by BEL

**Distributor** means Buller Electricity Limited, as the operator and owner of the Distribution Networks, and includes its subsidiaries, successors and assignees

**EIEP** means the regulated and non-regulated Electricity Information Exchange Protocols published by the Electricity Authority

**Electricity Industry Participation Code** or **Code** means the rules made by the Electricity Authority under Part 2 of the Electricity Industry Act 2010, as may be amended from time to time

**Financial Year (FY)** means the year ending 31st March

**GST** means Goods and Services Tax, as defined in the Goods and Services Tax Act 1985

**Half-Hour Metering (HHR)** see **Time-Of-Use Metering (TOU)**

**Installation Control Point (ICP)** means a Point of Connection on the Distributor's Network, which the Distributor nominates as the point at which a Retailer is deemed to supply electricity to a Consumer, and has the attributes set out in the Code

**kVA** means kilovolt-ampere

**kVAh** means kilovolt-ampere hour

**kVArh** means kilovolt-ampere reactive hour

**kW** means kilowatt

**kWh** means kilowatt hour

**Load Control Equipment** means any equipment (including meters, receivers, relays and ripple control receivers) designed to receive Load Management Service signals.

**Load Management Service** means providing a signal for the purpose of reducing or interrupting delivery of load to all or part of a Consumer's premises

**Low Voltage (LV)** means voltage of value up to 1,000 volts, generally 230 or 400 volts for supply to Consumer's

**Monthly Maximum Demand (MMD)** means the Anytime Maximum Demand (AMD) for each Calendar Month

**MVA** means megavolt-ampere

**Payment Month** means the month in which the Retailer must remit money in respect to the Current Month's charges. For electricity Retailers, the Payment Month is the same month as the Current Month

**Point of Connection** means the point at which electricity may flow between the Network and the Consumer's Installation and to which an Installation Control Point is allocated

**Price Category** means the relevant price category selected by the Distributor from this Pricing Schedule to define the Delivery Charges applicable to a particular ICP

**Pricing Policy** refers to this overall document which is referred to in Schedules 2 & 7 of the Default Distributor Agreement (DDA)

**Pricing Year** means the 12-month period between 1st April and 31st March

**Price Option** means a Price Category provides for Retailer choice amongst two or more options, subject to a particular configuration of metering and Load Control Equipment

**Processing Month** means the month in which the Distributor processes the relevant data files

**Reconciliation Manager (RM)** means the person appointed from time to time as the Reconciliation Manager pursuant to the Code or such other person from time to time to whom metering data in respect of electricity is to be sent pursuant to the Code

**Report Month** means the month the Billing Data relates to

**Retailer Agreement** means the Use of System Agreement, Conveyance and Use of System Agreement, Default Distributor Agreement or Agreement for Use of Networks and, to avoid doubt, includes any agreement in the form of the Authority's Model Use of System Agreement (MUoSA) or Default Distributor Agreement (DDA)

**Registry** means the Electricity Registry (http://www.electricityregistry.co.nz)

**Residential Connection(s)** means a premise that:

- Is used or intended for occupation mainly as a place of residence (for example, not mainly as a business premises);
- Is the principal place of residence of the Consumer who contracts with the Retailer to purchase electricity for their use (this excludes holiday homes and other non-permanent places of residence);
- Is a domestic premises as defined by Section 5 of the Electricity Industry Act 2010;
- Is not a building ancillary to a person's principal place of residence (for example, a shed or garage) that is separately metered; and,
- Is not exempted from Low-Usage Price Option coverage under an exemption granted under the Electricity (Low-Fixed Charge Tariff Option for Domestic Consumer's) Regulations 2004

**Retailer** means the supplier of electricity to Consumer's with installations connected to the Distribution Network

**Site** has the same meaning as Installation Control Point (ICP)

**Time-Of-Use Metering (TOU)** (also referred to as HHR metering) means metering that measures the electricity consumed for a particular period (usually half-hourly) and complies with Part 10 of the Code

**Trader** see Retailer

**TPM** Transpower's Transmission Pricing Methodology

# 2. Implementation of AMD Based Pricing

BEL made a decision to implement Anytime Maximum Demand (AMD) based pricing for Non-Residential connections from 1 April 2021. A detailed explanation of the reasons for this decision are provided in Section 8.

A key part of our implementation of AMD pricing is an annual AMD assessment process undertaken each year in September/October. This is the first step in our annual pricing setting process which leads onto Price Category and Chargeable Capacity assignment, price setting, pricing notifications to Retailers, Registry updates effective 1st April, and billing from the start of the next Pricing Year. Relevant details of these steps and associated matters are explained in the following Sections.

## 2.1. AMD Definition

AMD is to be determined as the maximum of the average demand (in units of kW) over a half-hour period which is nominally an electricity market trading period. While AMD can be defined over a range of time periods – from instantaneous to the average over multiple half-hour trading periods – BEL has chosen the half-hour AMD as the most appropriate as it provides some time averaging, is reflective of the required capacity rating of the Consumer's supply and is readily available from half-hour data obtained from Smart Meters.

Where Smart Meter data is available this will be the preferred source of data for AMD assessment. As legacy metering remains in place for approx. 30% of the connections to our network, BEL has undertaken load monitoring using data loggers at approx. 50 high consumption Sites (>50MWh) in 2019 & 2020 to supplement the half-hour data derived AMD. For data logger AMD assessment, the half-hour periods may not necessarily be time synchronised to the electricity market trading periods.

## 2.2. Capacity Measurement Period (CMP)

The period over which the AMD is to be assessed is for the 12-month period ending 31st August – referred to as the Capacity Measurement Period (CMP). Where a full 12-month half-hour or Monthly Maximum Demand (MMD) dataset is unavailable a partial dataset will be used.

For BEL load monitored Sites a CMP of 3-7 days has been deemed to be suitable given the resources available to undertake this work. BEL does not intend to reassess manually load monitored Sites in the future unless there is a specific reason for us to do so e.g. requested by the Retailer or Consumer, or suspected change in use at a Site.

## 2.3. AMD Assessment Process

For Sites where half-hour data is available from Smart Meters BEL intends to assess AMD on an annual basis for the year ending 31st August until further notice. The AMD is used to assign the Price Category, and if a Fixed Capacity Charge ($/kW/Day) applies, the Chargeable Capacity is set to the AMD from 1st April of the following year. The Price Categories that BEL uses are detailed in Section 3.

If half-hour data is unavailable the AMD for the current CMP, the AMD for the previous CMP will be rolled over unless there is good reason to suggest that the AMD at the Site may have materially changed (e.g. significant change in energy consumption has occurred) and BEL load monitoring is deemed to be necessary. In the interests of ensuring that BEL has current data on which to assess AMD and that Consumer's are charged appropriately, we encourage Retailers to:

- Install Smart Meters at all Sites >50MWh consumption as a priority
- Install Smart Meters at all commercial Sites
- Provide half-hour data to BEL on an annual basis so that we are able to reassess Consumer's AMD

Power account holders can apply (via their Retailer, an agent or directly to BEL) to have their AMD reassessed at any time in situations where there has been a material change in electricity use at the Site. The application should be accompanied by an explanation as to how/why network use has changed, the circumstances surrounding the expected future electricity use at the Site, and supporting half-hour data from a Smart Meter if this is available.

BEL has limited resources to undertake load monitoring, but we shall use best endeavours to reassess AMD at non Smart Meter Sites where this is deemed necessary. BEL currently does not intend to charge Consumer's for up to one load monitoring reassessment in any 12-month period.

## 2.4. Pragmatic Approach to Consumer Categorisation

The implementation of an AMD based pricing required BEL to adopt a pragmatic approach to assigning Price Categories to Sites where an AMD measurement is not available. BEL has been able to establish the AMD for approx. 300 of the 600+ existing Non-Residential Sites using half-hour data, and this has been supplemented with additional BEL load monitoring at high consumption Sites. The vast majority of Sites for which BEL does not have an AMD measurement (from half-hour data or manual load monitoring) remain in the lowest demand/capacity Non-Residential Price Category (AMD < 15 kW).

Half-hour AMD data indicates that very few Sites with an AMD > 15kW have an annual consumption < 50 MWh. The exceptions to this are a small number of Sites with constant loads supplying water pumps and communications equipment. There are likely to be a significant number of Sites which are currently categorised as AMD < 15 kW as the AMD has not been measured, but the AMD is actually > 15 kW. These Sites will be migrated from G15 to G69 as half-hour AMD data becomes available.

## 2.5. Setting of the Chargeable Capacity

For Price Categories subject to a Fixed Capacity Charge the AMD will be used to set the Chargeable Capacity for the following Pricing Year. The Chargeable Capacity will be:

- Rounded to one decimal place
- Notified to Retailers along with the annual pricing information prior to the end of January each year – 40 business days' notice
- Populated on the Registry in the Chargeable Capacity field in the Pricing area of the Registry shortly after 1st April

Under normal circumstances Price Category & Chargeable Capacity changes resulting from the Annual AMD Assessment will only take affect from the start of the following Pricing Year. Given that there is a potential 7-month delay between the annual AMD assessment and associated updating of the pricing for a Site, in situations where the existing Chargeable Capacity assessment and most recent AMD assessment are materially different, BEL may decide at its discretion to bring forward a Price Category and/or Charge Capacity change.

Under normal circumstances BEL will not backdate pricing changes which involve a change in the Chargeable Capacity. Our preference is that Chargeable Capacity changes are effective at the start of the next Calendar Month to facilitate billing using the replacement methodology**.** In circumstances where there has been a material increase in the AMD due to an upgrade of supply capacity or otherwise, BEL reserves the right to reassess and update the Chargeable Capacity subject to a suitable notification period.

In situations where a Site will be eligible for a downgrade following a change of use at a Site, BEL requests that the Consumer and/or Retailer contact BEL in advance or as soon as possible following when the change occurs, so that the required pricing change can be put in place. All pricing upgrades and downgrades will be subject to future review to ensure that Consumer's change in network use is not temporary and BEL charging is appropriate.

## 2.6. Chargeable Capacity for New Connections & Upgrades

For new connections and upgrades that will be subject to Fixed Capacity Charges, as standard practice the Chargeable Capacity will initially be set at half of the connections requested Connection Capacity, or a more appropriate estimate as determined by BEL. As soon as actual measured AMD data becomes available the Chargeable Capacity used for billing will be updated.

## 2.7. Transitional Pricing Arrangements

As part of the pricing analysis work BEL undertook prior to the implementation of AMD based pricing for the 2021/22 financial year, it was found that a small number of Consumer's were being significantly undercharged and would experience significant change increases. In order to limit the charge increases experienced by Consumer's it was deemed appropriate to apply a 25% year-on-year cap by implementing the transitional pricing arrangements detailed in this Section.

All Consumer's subject to transitional pricing arrangements are subject to a Fixed Capacity Charge ($/kW/Day). Transitional pricing is implemented by reducing the Chargeable Capacity from the actual AMD so that charge increases are capped at 25%, and BEL maintains a register of Sites which are subject to transitional pricing. Once a Consumer's connection on the transitional pricing register is no longer subject to charge capping, the connection will no longer be eligible for transitional pricing and will be removed from the register. Connections which experience material changes to AMD (increase or decrease) due to upgrades/downgrades or simply change of use will no longer be eligible for transitional pricing. It is expected that for the vast majority of Consumer's subject to charge capping transitional pricing arrangements will be completed within 3 years – ending prior or at the end of the 2023/24 financial year.

Sites subject to transitional pricing arrangements will be indicated in the Pricing Area of the Registry using the 'Distributor Installation Details' field as identified by the red box in Figure 1. This field will be populated with the actual Chargeable Capacity (kW) which would apply if the Site was not subject to transitional pricing. If the Site is not subject to transitional pricing arrangements, the 'Distributor Installation Details' field will be blank/null. BEL does not use the 'Distributor Installation Details' for any other purpose other than for indicating transitional pricing arrangements.

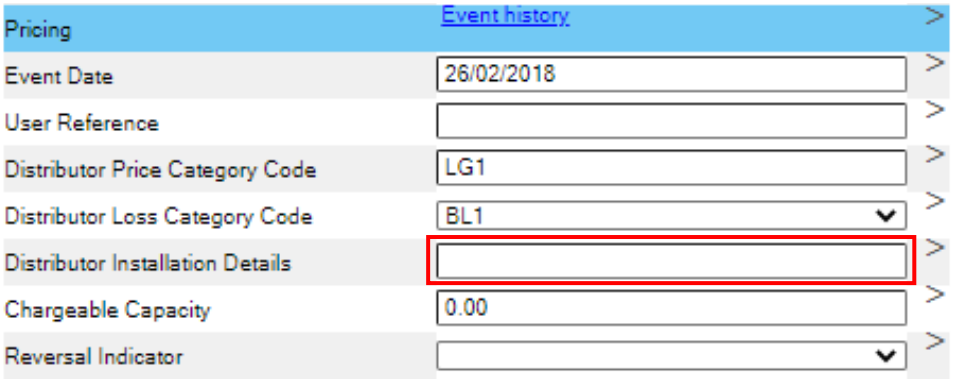


**Figure 1 Distributor Installation Details – Pricing Area of the Registry**

## 2.8. Updating of Registry Pricing Data Effective 1st April

The Pricing Area of the Registry (Figure 1**Error! Reference source not found.**) will be updated on or s hortly after 1st April each year with the information indicated in Table 1.

| # | Field Description | Details |
|---|---|---|
| 1 | **Effective Date** | 1/4/2022* |
| 1 | **Distributor Price Category Code** | Price Category Code effective 1/4/2022* |
| 2 | **Distributor Loss Category Code** | Loss Category Code effective 1/4/2022* |
| 3 | **Distributor Installation Details** | AMD (kW) if the ICP is subject to transitional pricing arrangements (otherwise blank/null).<br>This would be the Chargeable Capacity if the ICP was not subject to transitional pricing. |
| 4 | **Chargeable Capacity** | Chargeable Capacity (kW) for Sites subject to a Fixed Capacity Charge (otherwise blank/null) |

**Table 1 Electricity Registry Pricing Data**
***Effective Date for the start of the 2022/23 Pricing Year**

This information will be provided to Retailers in the form of a spreadsheet as part of BEL's Annual Pricing Notification made to Retailers.

## 2.9. Updating & Backdating of Registry Pricing Data

To facilitate the billing of Fixed Capacity Charges BEL intends to make changes to the Chargeable Capacity on the Registry with an event date of the first day of the month. For Registry Price Category changes which do not involve a change in the Chargeable Capacity these can now be backdated by more than 3 business days following the recent change the Authority has made to the Code as part of the Code Review Programme 4 Decision[1]. In all cases BEL intends to act in a reasonable manner and to take into consideration all factors on a case-by-case basis when making Registry Pricing Attribute changes and their backdating.

For Non-Residential ICPs (all PCCs except for RSU & RLU), the vast majority of Registry Pricing Attribute changes will occur on 1st April each year following our annual AMD reassessment pricing notification to Retailers.

In a limited number of cases, it may be necessary to make a Registry Pricing Attribute change during a Pricing Year due to a change of use at a Site which necessitates a Capacity/Pricing downgrade/upgrade. Such a change could be either initiated by a Retailer/Customer request or alternatively at the discretion of BEL where there has been a material change of use at a Site.

In terms of the BEL business process and timing of the Registry Pricing Attribute changes, two specific cases have been identified, as explained below:

**Case 1:** In the situation where a Registry Pricing Attribute change is required during the Pricing Year these changes can be made on any day of the month in the following situations:

- A Registry Chargeable Capacity change is **not** required
- Or a Fixed Capacity Charge is currently **not** being applied – the change cannot be backdated by more than 3 business days
- Or a Fixed Capacity Charge will **no** longer be applied

**Case 2:** In all other situations:

- A Registry Chargeable Capacity change is required
- And a Fixed Capacity Charge is currently being applied and will continue to be applied
- Registry Pricing Attributes changes will only be made effective on the 1st of day of the month (but not back dated by more than 3 business days as currently required by the Code)

The primary reasons for making the **Case 1** & **Case 2** distinction is so that:

- No confusion exists as to the correct Chargeable Capacity value which is to be applied in any month – the same Chargeable Capacity value will apply for the entire month
- To facilitate billing using the replacement data methodology

Note that:

- So long as BEL is unable to back date Registry Chargeable Capacity changes by more than 3 business days, the vast majority of **Case 2** changes will need to be delayed until the first day of the following month

[1] https://www.ea.govt.nz/development/work-programme/operational-efficiencies/code-review-programme/development/code-review-programme-2019/

- For the avoidance of doubt BEL makes that clarification that a PCC and associated Chargeable Capacity change can be made on any day of the month if this change marks the beginning or ending of a Fixed Capacity Charge e.g. this is a **Case 1** situation
- If a Registry Pricing Attribute change involves a PCC change the Loss Code will also be changed on the same date as the PCC change

# 3. Price Categories

In determining which Price Category should apply to an ICP, the Distributor will have regard to the Consumer's Connection, the information provided by the Consumer or their representative with respect to the expected load, the Consumer's demand profile and Capacity requirements and any other relevant factors. The process for the Price Category of an ICP to be changed by the Distributor or at the request of the Retailer, Consumer or the Consumer's agent is described in the relevant Retailer Agreement (including the required notification and response periods).

## 3.1. Residential Price Categories

Residential Price Category Codes for the 2022/23 Pricing Year are detailed in Table 2.

| Price Category 2022/23 | Price Category / Connection Description | Anytime Maximum Demand (AMD) | No. of Connections | Fixed Charge Type |
|---|---|---|---|---|
| RSU | Residential Standard User | AMD ≤ 15kW | 1,484 | $/Con/Day |
| RLU | Residential Low-User | AMD ≤ 15kW | 2,659 | $/Con/Day |

**Table 2 Residential Price Category Codes & Renaming**

## 3.2. Non-Residential Price Categories

Non-Residential Price Category Codes for the 2022/23 Pricing Year are detailed in Table 3. With the exception of the Price Categories G15 & STL the AMD is also to be used as the Chargeable Capacity which determines the Fixed Charge – applied as a Fixed Capacity Charge ($/kW/Day). For Price Categories G15 & STL the Fixed Charge continues to be applied as a Fixed Daily Charge ($/Con/Day).

| Price Category 2022/23 | Price Category / Connection Description | Anytime Maximum Demand (AMD) | No. of Connections | Fixed Charge Type |
|---|---|---|---|---|
| G15 | General Connection – Small | AMD ≤ 15kW | 408 | $/Con/Day |
| STL | Streetlight Connection | AMD ≤ 15kW | 46 | $/Con/Day |
| G69 | General Connection – Medium | 69kW ≥ AMD > 15kW | 86 | $/kW/Day |
| DFM | Dairy Farm Connection | | 67 | $/kW/Day |
| GHH | General Connection – Large | 1,000kW ≥ AMD > 69kW | 6 | $/kW/Day |
| STK | Large Industrial Connection | AMD > 1,000kW | 1 | $/kW/Day |

**Table 3 Non-Residential Price Categories**

# 4. Price Schedule & Application

This Section provides a wide range of information including the Delivery Price Schedule and associated information which describes how our pricing should be applied by Retailers. This includes the appropriate Meter Register Content Codes, description of Pricing Options where these exist, and Billing Data requirements.

## 4.1. Price Types & Price Component Codes

BEL's convention for the naming of Price Component Codes (Price Codes) is as follows:

*Price Component Code = "Price Category Code" & "_" & "Price Type"*

where the Price Types are given in Table 4.

| Price Type | Charge Type | Description | EIEP Direction | Units | Standard Meter Register Content Codes |
|---|---|---|---|---|---|
| **FD** | Fixed | Daily Charge | | $/Con/Day | |
| **FC** | Fixed | Capacity Charge | | $/kW/Day | |
| **UN** | Variable | Uncontrolled Volume | X | $/kWh | UN |
| **CN** | Variable | Controlled Volume | X | $/kWh | CN |
| **IN** | Variable | All Inclusive Volume | X | $/kWh | IN |
| **D** | Variable | Day Volume | X | $/kWh | D |
| **N** | Variable | Night Volume | X | $/kWh | N, NO |
| **SL** | Variable | Streetlight Volume | X | $/kWh | SL |
| **EG** | Variable | Distributed Generation Volume | I | $/kWh | EG |

**Table 4 Price Types 2022/23**

An example of the Price Codes for Price Category RSU using this standard format is given in Table 5.

| Price Category | Price Type | Price Code |
|---|---|---|
| **RSU** | FD | RSU_FD |
| **RSU** | UN | RSU_UN |
| **RSU** | CN | RSU_CN |
| **RSU** | IN | RSU_IN |
| **RSU** | D | RSU_D |
| **RSU** | N | RSU_N |
| **RSU** | EG | RSU_EG |

**Table 5 Price Category RSU Price Component Codes 2022/23**

## 4.2. Delivery Price Schedule 2022/23 – Residential

All charges are exclusive of GST.

| Price Code 2022/23 | Fixed / Variable | Price Code Description | Explanation / Details | 2022/23 Price ($) | Unit of Measure |
|---|---|---|---|---|---|
| **Residential Standard User Connections** | | | | | |
| **RSU_FD** | F | Daily Charge | | 1.4700 | $/Con/Day |
| **RSU_UN** | V | Uncontrolled | Available 24 hours a day | 0.0918 | $/kWh |
| **RSU_CN** | V | Controlled | For use with the Uncontrolled consumption category for control of hot water and storage heaters | 0.0574 | $/kWh |
| **RSU_IN** | V | All Inclusive | Storage water heating must be subject to control | 0.0849 | $/kWh |
| **RSU_D** | V | Day | Day Rate for Day/Night rate 0700-2300 (16 hours) | 0.1056 | $/kWh |
| **RSU_N** | V | Night | Night Rate for Day/Night rate 2300-0700 (8 hours) | 0.0422 | $/kWh |
| **RSU_EG** | V | Generation | Distributed/Embedded Generation | 0.0000 | $/kWh |
| **Residential Low User Connections** | | | | | |
| **RLU_FD** | F | Daily Charge | | 0.3000 | $/Con/Day |
| **RLU_UN** | V | Uncontrolled | Available 24 hours a day | 0.1432 | $/kWh |
| **RLU_CN** | V | Controlled | For use with the Uncontrolled consumption category for control of hot water and storage heaters | 0.1074 | $/kWh |
| **RLU_IN** | V | All Inclusive | Storage water heating must be subject to control | 0.1360 | $/kWh |
| **RLU_D** | V | Day | Day Rate for Day/Night rate 0700-2300 (16 hours) | 0.1718 | $/kWh |
| **RLU_N** | V | Night | Night Rate for Day/Night rate 2300-0700 (8 hours) | 0.0501 | $/kWh |
| **RLU_EG** | V | Generation | Distributed/Embedded Generation | 0.0000 | $/kWh |

**Table 6 Residential Price Category Price Components 2022/23**

## 4.3. Delivery Price Schedule 2022/23 – Non-Residential

All charges are exclusive of GST.

| Price Code 2022/23 | Fixed / Variable | Price Code Description | Explanation / Details | 2022/23 Price ($) | Unit of Measure |
|---|---|---|---|---|---|
| **General Connections – Small** | | | | | |
| **G15_FD** | F | Daily Charge | | 2.3100 | $/Con/Day |
| **G15_UN** | V | Uncontrolled | Available 24 hours a day | 0.1078 | $/kWh |
| **G15_CN** | V | Controlled | For use with the Uncontrolled consumption category for control of hot water and storage heaters | 0.0674 | $/kWh |
| **G15_D** | V | Day | Day Rate for Day/Night rate 0700-2300 (16 hours) | 0.1240 | $/kWh |
| **G15_N** | V | Night | Night Rate for Day/Night rate 2300-0700 (8 hours) | 0.0496 | $/kWh |
| **G15_EG** | V | Generation | Distributed/Embedded Generation | 0.0000 | $/kWh |
| **Streetlight Connections** | | | | | |
| **STL_FD** | F | Daily Charge | | 2.2500 | $/Con/Day |
| **STL_SL** | V | Streetlight | Lighting | 0.1055 | $/kWh |
| **General Connections – Medium** | | | | | |
| **G69_FC** | F | Capacity Charge | | 0.5089 | $/kW/Day |
| **G69_UN** | V | Uncontrolled | Available 24 hours a day | 0.0873 | $/kWh |
| **G69_CN** | V | Controlled | For use with the Uncontrolled consumption category for control of hot water and storage heaters | 0.0546 | $/kWh |
| **G69_D** | V | Day | Day Rate for Day/Night rate 0700-2300 (16 hours) | 0.1004 | $/kWh |
| **G69_N** | V | Night | Night Rate for Day/Night rate 2300-0700 (8 hours) | 0.0402 | $/kWh |
| **G69_EG** | V | Generation | Distributed/Embedded Generation | 0.0000 | $/kWh |
| **Dairy Farm Connections** | | | | | |
| **DFM_FC** | F | Capacity Charge | | 0.3950 | $/kW/Day |
| **DFM_UN** | V | Uncontrolled | Available 24 hours a day | 0.0832 | $/kWh |
| **DFM_CN** | V | Controlled | For use with the Uncontrolled consumption category for control of hot water and storage heaters | 0.0520 | $/kWh |
| **DFM_D** | V | Day | Day Rate for Day/Night rate 0700-2300 (16 hours) | 0.0957 | $/kWh |
| **DFM_N** | V | Night | Night Rate for Day/Night rate 2300-0700 (8 hours) | 0.0383 | $/kWh |
| **DFM_EG** | V | Generation | Distributed/Embedded Generation | 0.0000 | $/kWh |

| Price Code 2021/22 | Fixed / Variable | Price Code Description | Explanation / Details | 2021/22 Price ($) | Units of Measure |
|---|---|---|---|---|---|
| **General Connections Large** | | | | | |
| **GHH_FC** | F | Capacity Charge | | 0.7375 | $/kW/Day |
| **GHH_UN** | V | Uncontrolled | Available 24 hours a day | 0.0725 | $/kWh |
| **GHH_D** | V | Day | Day Rate for Day/Night rate 0700-2300 (16 hours) | 0.0834 | $/kWh |
| **GHH_N** | V | Night | Night Rate for Day/Night rate 2300-0700 (8 hours) | 0.0334 | $/kWh |
| **GHH_EG** | V | Generation | Distributed/Embedded Generation | 0.0000 | $/kWh |
| **Large Industrial Connection** | | | | | |
| **STK_FC** | F | Capacity Charge | | 0.7129 | $/kW/Day |
| **STK_D** | V | Day | Day Rate for Day/Night rate 0700-2300 (16 hours) | 0.0799 | $/kWh |
| **STK_N** | V | Night | Night Rate for Day/Night rate 2300-0700 (8 hours) | 0.0320 | $/kWh |

**Table 7 Non-Residential Price Category Price Components 2022/23**

## 4.4. Network Time Definitions

All times stated in this Pricing Schedule are in New Zealand Daylight Saving Time.

| Description | Time of Day |
|---|---|
| Day Period | 07:00 – 23:00 |
| Night Period | 23:00 – 07:00 |

**Table 8 Network Day/Night Period Definitions**

## 4.5. Meter Configurations

Given the presence of legacy Register Content Codes, BEL explicitly defines the price assignment to Meter Register Content Codes in Table 9. Where controlled load has an 8-hour period of availability, it is assigned against the night price. The scheduling of this load is in alignment with the Day/Night ripple control schedule. All other controlled load registers (with more than a minimum 8 hours of availability) are assigned against the controlled price. All Residential Inclusive meter registers are assigned to the All-Inclusive price, whilst commercial inclusive meter registers are assigned to the Uncontrolled price as an inclusive commercial price is not available.

| Energy Flow Direction | Register Content Code | Registry Period of Availability | BEL Load Control Period of Availability | Price Component Subcode |
|---|---|---|---|---|
| I | EG | 24 | 24 | EG |
| X | CN | 8 | 8 | N |
| | | 11 | 16 | CN |
| | | 12 | | |
| | | 16 | | |
| | | 17 | | |
| | | 18 | | |
| | | 19 | | |
| | | 22 | | |
| | D | 14 | 14 | UN[2] |
| | | 16 | 16 | D |
| | DIN | 8 | 8 | |
| | | 10 | 8 | |
| | | 16 | 16 | |
| | IN | 8 | 8 | IN[3] |
| | | 16 | 16 | |
| | | 17 | 16 | |
| | | 19 | | |
| | N | 8 | 8 | N |
| | | 10 | 10 | UN[2] |
| | NB | 10 | 10 | CN |
| | NIN | 8 | 8 | N |
| | | 10 | 8 | N |
| | | 16 | 16 | N |
| | NO | 8 | 8 | N |
| | SL | 12 | 12 | SL |
| | UN | 24 | 24 | UN |

**Table 9 Residential Price Category Price Components 2022/23**

[2] The combination of Day 14 and Night 10 register period of availability are not eligible for Day Night Pricing.
[3] Residential inclusive register volume is assigned to the Inclusive price, however commercial inclusive register volume is assigned to the Uncontrolled price.

## 4.6. Price Option Descriptions

BEL provides a range of Uncontrolled, Controlled, Inclusive and Day/Night price options to specific Price Categories. The assignment of price options is described in detail in Table 10 taking into account the range of meter register configurations available on the BEL network.

| Price Description | Price Component Code | Register Content Code | Description |
|---|---|---|---|
| Uncontrolled | UN | UN24<br>D14/N10 | Continuous 24-hour supply |
| All-Inclusive | IN | IN16 | 24-hour single load register meter combined with a downstream control relay. BEL control schedules include only 8 and 16-hour minimum periods of availability (except for streetlights). |
| Day/Night | D/N | D16/N8,<br>DIN16/NIN16,<br>NO8, CN8 | Where a time split is available on the customer load at 23:00 and 07:00 every day, volume may be submitted as day and night respectively. This includes Inclusive registers where day and night are split, and Night Only / controlled 8-hour registers.<br>Time splits other than this must be negotiated with BEL prior to use. |
| Controlled | CN | CN16 | Electricity is available (under normal circumstances) for a minimum of 16 hours per day (except for streetlights). Controlled load appliances must be permanently wired and not able to be supplied from uncontrolled meter registers |
| Streetlight | SL | SL12 | Streetlight specific ICPs are allocated the streetlight price, with a nominal period of availability of 12 hours per day. |
| Distributed Generation | EG | EG24 | Embedded generation must comply with BEL's Distributed Generation Policy. The period of availability is required to be 24 hours. |

**Table 10 Residential Price Category Price Components 2022/23**

## 4.7. AMI Price Assignment

For the avoidance of doubt, where AMI interval data, or less than 16-hour day duration registers are used to produce EIEP1 volume data, any transition between Day/Night and Uncontrolled price assignment inter-alia, require consultation with BEL. This is to limit complexity of EIEP1 billing. Where a Trader varies price assignment without consultation, the energy will be invoiced as uncontrolled load.

## 4.8. Variable/Volume/Consumption Price Ratios

Historically the differential between BEL's Volume Prices e.g. Uncontrolled/Controlled & Day/Night have been wide and different for each Price Category. Starting from 1 April 2021 the ratios between our Volume Prices have been standardised across all Price Categories and a 3-year plan to reduce the differentials between Volume Prices was put in place.

The Volume Price ratios which apply in 2022/23 are detailed in Table 11 as well as the values we intend to use in 2023/24. The 2022/23 ratios have been applied to all Price Categories except for

the Residential Low User category, as compliance with the Low Fixed Charge (LFC) Regulations 2004 requires the ratios for this category to be increased from the standard values.

| # | Volume Price Ratio | 2022/23 | 2023/24 |
|---|---|---|---|
| 1 | Controlled / Uncontrolled | 0.625 | 0.750 |
| 2 | All Inclusive / Uncontrolled | 0.925 | 0.950 |
| 3 | Day / Uncontrolled | 1.150 | 1.100 |
| 4 | Night / Uncontrolled | 0.460 | 0.550 |
| 5 | Day / Night | 2.500 | 2.000 |

**Table 11 Standard Variable/Volume/Consumption Price Ratios**

Given that BEL has a Pricing Strategy which seeks to preserve incentives for managed water heating load and off-peak network consumption the 2023/24 ratios given in Table 11**Error! Reference source not found.** are considered to represent the lowest Volume Price differentials which will satisfy this objective.

## 4.9. Billing Data Requirements

BEL requires data files for non half-hour billed ICPs to be provided in the latest regulated version of the EIEP1 and EIEP3 protocols for half hourly data. The file character encoding format UTF-8 is recommended.

BEL requires EIEP1 data files in 'Replacement Normalised' format, which has been mandated as the standard methodology for Distributor → Retailer billing by the Electricity Authority from 1st April 2021.

BEL uses the underscore '_' character as a separator between the price category and price option to define price component codes for non-half hourly data from 1st April 2021. Variable consumption should be provided to BEL as detailed in Table 12.

| Price Category | Price Option | EIEP1 Price Component Code | File Type |
|---|---|---|---|
| RSU | UN | RSU_UN | EIEP1 |
| | CN | RSU_CN | |
| | IN | RSU_IN | |
| | D | RSU_D | |
| | N | RSU_N | |
| | EG | RSU_EG | |

| Price Category | Price Option | EIEP1 Price Component Code | File Type |
|---|---|---|---|
| RLU | UN | RLU_UN | EIEP1 |
| | CN | RLU_CN | |
| | IN | RLU_IN | |
| | D | RLU_D | |
| | N | RLU_N | |
| | EG | RLU_EG | |
| G15 | UN | G15_UN | EIEP1 |
| | CN | G15_CN | |
| | D | G15_D | |
| | N | G15_N | |
| | EG | G15_EG | |
| STL | SL | STL_SL | EIEP1 |
| G69 | UN | G69_UN | EIEP1 |
| | CN | G69_CN | |
| | D | G69_D | |
| | N | G69_N | |
| | EG | G69_EG | |
| DFM | UN | DFM_UN | EIEP1 |
| | CN | DFM_CN | |
| | D | DFM_D | |
| | N | DFM_N | |
| | EG | DFM_EG | |
| GHH | UN | GHH_UN | EIEP3 |
| | D | GHH_D | |
| | N | GHH_N | |
| | EG | GHH_EG | |
| STK | D | STK_D | EIEP3 |
| | N | STK_N | |

**Table 12 Residential Price Category Price Components 2022/23**

## 4.10. Load Control Schedules

BEL's load control schedules are presented in Table 13. The additional legacy load control schedules detailed in Table 14 are currently under review and BEL's intention is that these are phased out of operation.

Geographical assignment of master command '102' codes are summarised in Table 15.

| Commands | | Description | Schedule | | | | | |
|---|---|---|---|---|---|---|---|---|
| Individual | Master | | ON | OFF | ON | OFF | ON | OFF |
| 10 | 102 | domestic off peak 16 | 0:00 | | | | | |
| 11 | 102 | domestic off peak 16 | 0:00 | | | | | |
| 12 | 102 | domestic off peak 16 | 0:00 | | | | | |
| 13 | 102 | domestic off peak 16 | 0:00 | | | | | |
| 14 | 102 | domestic off peak 16 | 0:00 | | | | | |
| 15 | 103 | domestic off peak 16 | 0:00 | | | | | |
| 16 | 103 | clock tower | 19:00 | 0:00 | | | | |
| 17 | 103 | business off peak 16 | 0:00 | 18:00 | | | | |
| 18 | 103 | business off peak 16 | 0:00 | 18:00 | | | | |
| 19 | 103 | business off peak 16 SPECIAL | 22:00 | 4:00 | 6:00 | 13:00 | 16:00 | 20:00 |
| 40 | 108 | domestic nightsave 8 (2 rate meter) | 23:00 | 7:00 | | | | |
| 41 | 108 | domestic nightsave 8 (load:water) | 23:00 | 7:00 | | | | |
| 42 | 108 | domestic nightsave 8 (load:heat) | 23:00 | 7:00 | | | | |
| 43 | 108 | domestic nightsave 8 (load:water) | 23:00 | 7:00 | | | | |
| 44 | 108 | domestic nightsave 8 (load:heat) | 23:00 | 7:00 | | | | |
| 45 | 108 | business nightsave 8 (2 rate meter) | 23:00 | 7:00 | | | | |
| 46 | 108 | business nightsave 8 (load:water) | 23:00 | 7:00 | | | | |
| 47 | 108 | business nightsave 8 (load:heat) | 23:00 | 7:00 | | | | |
| 48 | 108 | business nightsave 8 (load:water) | 23:00 | 7:00 | | | | |
| 49 | 108 | business nightsave 8 (load:heat) | 23:00 | 7:00 | | | | |
| 55 | 111 | business streetlighting | BLOCK | | 8:00 | | | |
| 56 | 111 | business streetlighting | UNBLOCK | | 16:30 | | | |
| 57 | 111 | business under veranda lighting | | | | | | |
| 58 | 111 | private security lighting | | | | | | |

**Table 13 Load Control Schedules**

| Commands | | Description | | Schedule | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Individual | Master | | | ON | OFF | ON | OFF | ON | OFF |
| **0** | 100 | domestic | priority controlled 22 | 20:00 | 18:00 | | | | |
| **1** | 100 | domestic | priority controlled 22 | 20:00 | 18:00 | | | | |
| **2** | 100 | business | priority controlled 22 | 20:00 | 18:00 | | | | |
| **3** | 100 | business | priority controlled 22 | 20:00 | 18:00 | | | | |
| **4** | 100 | | | 20:00 | 18:00 | | | | |
| **5** | 101 | domestic | continuous 20 | 21:00 | 17:00 | | | | |
| **6** | 101 | domestic | continuous 20 | 21:00 | 17:00 | | | | |
| **7** | 101 | business | continuous 20 (future) | 21:00 | 17:00 | | | | |
| **8** | 101 | business | continuous 20 (future) | 21:00 | 17:00 | | | | |
| **9** | 101 | | | 21:00 | 17:00 | | | | |
| **20** | 104 | domestic | economy 14 | 23:00 | 7:00 | 13:00 | 16:00 | 19:00 | 22:00 |
| **21** | 104 | domestic | economy 14 | 23:00 | 7:00 | 13:00 | 16:00 | 19:00 | 22:00 |
| **22** | 104 | business | economy 14 | 23:00 | 7:00 | 13:00 | 16:00 | 19:00 | 22:00 |
| **23** | 104 | business | economy 14 | 23:00 | 7:00 | 13:00 | 16:00 | 19:00 | 22:00 |
| **24** | 104 | | | 23:00 | 7:00 | 13:00 | 16:00 | 19:00 | 22:00 |
| **25** | 105 | domestic | super economy 12 | 23:00 | 7:00 | 13:00 | 17:00 | | |
| **26** | 105 | domestic | super economy 12 | 23:00 | 7:00 | 13:00 | 17:00 | | |
| **27** | 105 | business | super economy 12 | 23:00 | 7:00 | 13:00 | 17:00 | | |
| **28** | 105 | business | super economy 12 | 23:00 | 7:00 | 13:00 | 17:00 | | |
| **29** | 105 | | | 23:00 | 7:00 | 13:00 | 17:00 | | |
| **30** | 106 | dom/bus | storeheat 10 (2 rate meter) | | | | | | |
| **31** | 106 | domestic | storeheat 10 (load:heat) | 1:00 | 7:00 | 13:30 | 17:30 | | |
| **32** | 106 | domestic | storeheat 10 (load:heat) | 1:00 | 7:00 | 13:30 | 17:30 | | |
| **33** | 106 | business | storeheat 10 (load:heat) | 1:00 | 7:00 | 13:30 | 17:30 | | |
| **34** | 106 | business | storeheat 10 (load:heat) | 1:00 | 7:00 | 13:30 | 17:30 | | |
| **35** | 107 | dom/bus | waterheat 10 (2 rate meter) | | | | | | |
| **36** | 107 | domestic | waterheat 10 (load:water) | 2:30 | 7:30 | 9:00 | 11:30 | 15:00 | 17:30 |
| **37** | 107 | domestic | waterheat 10 (load:water) | 2:30 | 7:30 | 9:00 | 11:30 | 15:00 | 17:30 |
| **38** | 107 | business | waterheat 10 (load:water) | 2:30 | 7:30 | 9:00 | 11:30 | 15:00 | 17:30 |
| **39** | 107 | business | waterheat 10 (load:water) | 2:30 | 7:30 | 9:00 | 11:30 | 15:00 | 17:30 |

**Table 14 Legacy Load Control Schedules to be phased out of operation**

| Command | Area Code | Description |
|---|---|---|
| 10 | 1 | CARTERS BEACH |
| | 2 | ESPLANADE / ADDERLEY |
| | 3 | PALMERSTON STREET NORTH |
| | 4 | PALMERSTON STREET SOUTH |
| | 5 | RUSSELL STREET NORTH |
| | 6 | RUSSELL STREET SOUTH |
| | 7 | QUEEN STREET NORTH |
| | 8 | QUEEN STREET SOUTH |
| | 9 | PEEL STREET NORTH |
| 11 | 10 | PEEL STREET SOUTH |
| | 11 | ROMILLY STREET NORTH |
| | 12 | ROMILLY STREET SOUTH |
| | 13 | DERBY STREET NORTH |
| | 14 | DERBY STREET SOUTH |
| | 15 | COATES, FORBES, SHELLSWELL STREETS, SNODGRASS, UTOPIA ROAD |
| 12 | 16 | ROEBUCK, STOUTY, BALANCE STREET, NINE MILE, STAFFORD STREET |
| | 17 | EASTONS ROAD, McKENNA ROAD, SEGEANTS HILL, STEVEN ROAD, EXCELSIOR ROAD, KEW ROAD, ABATTOIR ROAD |
| | 18 | DOMETT STREET |
| | 20 | BENTHAM, WEBB, DISRAELI, HASELDEN STREETS |
| | 21 | MILL, FONBLANQUE STREETS |
| | 22 | RINTOUL, COLVIN, LARSEN STREETS, RILEY, GOTHARD, SCANLON PLACE |
| 13 | 23 | WAKEFIELD STREET, LUFF PLACE |
| | 24 | BROUGHAM STREET, DELLACA PLACE |
| | 25 | LYNDHURST, HENLEY, HUNTER STREET, ROCHFORT PLACE, HARKNESS PLACE |
| | 35 | PAKINGTON, OROWAITI, COBDEN STREETS |
| | 36 | LYTTELTON, CHAMBERLAIN, BRIGHT, GLADSTONE STREETS |
| 14 | 26 | HECTOR |
| | 27 | NGAKAWAU |
| | 28 | GRANITY |
| | 29 | GRANITY |
| | 30 | MILLERTON, STOCKTON, DENNISTON |
| | 31 | BIRCHFIELD, OROWAITI BRIDGE TO KERRS CROSSING & RETURN |
| | 37 | WAIMANGAROA |
| | 38 | WAIMANGAROA |
| | 39 | MAJOR CONSUMER'S |
| | 40 | MOKIHINUI |
| | 41 | SEDDONVILLE |
| 15 | 1 | CARTERS BEACH |
| | 32 | BULLER BRIDGE, OKARI, CAPE FOULWIND, RETURN |
| | 33 | CARTERS BEACH (PART) |
| | 34 | CHARLESTON |
| | 48 | WILSONS LEAD ROAD |
| | 50 | PUNAKAIKI |
| 14 | 42 | CORBYVALE, KARAMEA BRIDGE |
| | 43 | KARAMEA BRIDGE TO POST OFFICE |
| | 44 | POST OFFICE / KARAMEA |
| | 45 | OPARARA |
| | 46 | LITTLE WANGANUI SUBSTATION |

**Table 15 Geographical assignment of ripple control commands (Master 102, 16 hours).**

# 5. Loss Factors

The Reconciliation Loss Factors (Loss Factors) are used in the Electricity Market to account for the losses which occur when electricity is conveyed across the Distribution Network.

Loss factors may be reviewed and amended by the Distributor from time to time, on reasonable notice to the Retailer and not less notice than specified in the applicable Retailer Agreement, to ensure that they accurately account for losses, so far as reasonably possible, and the Distributor is meeting its compliance obligations.

## 5.1. Residential and General Connection Loss Code

BEL utilises Segmented Loss Factors which means that a unique Loss Code is used for each Price Category. The purpose of this is to facilitate the aggregate reporting of half hour reconciliation data for each Price Category. The value of the Segmented Loss Factors for 2022/23 and given in Table 17 are unchanged from their 2021/22 values.

| Price Category Code | New Loss Code | Loss Factor Consumption | Loss Factor Generation | Start Date |
|---|---|---|---|---|
| RSU | LC_RSU | 1.0782 | 1.0000 | 1/4/2021 |
| RLU | LC_RSU[4] | 1.0782 | 1.0000 | 1/4/2021 |
| G15 | LC_G15 | 1.0782 | 1.0000 | 1/4/2021 |
| STL | LC_STL | 1.0782 | 1.0000 | 1/4/2021 |
| G69 | LC_G69 | 1.0782 | 1.0000 | 1/4/2021 |
| DFM | LC_DFM | 1.0782 | 1.0000 | 1/4/2021 |
| GHH | LC_GHH | 1.0782 | 1.0000 | 1/4/2021 |
| STK | LC_STK | 1.0782 | 1.0000 | 1/4/2021 |

**Table 16 Segmented Loss Factor Codes 2022/23**

## 5.2. ICP Specific Loss Code

BEL makes use of one ICP Specific Loss Code (LC_ROC) as detailed in Table 17. The value of the ICP Specific Loss Factors remains unchanged from the value used in 2021/22.

| ICP | New Loss Code | Loss Factor Consumption | Loss Factor Generation | Start Date |
|---|---|---|---|---|
| 0003146255BU6E0 | LF_ROC | 1.0782 | 0.9964 | 1/4/2021 |

**Table 17 New ICP Specific Loss Factor Codes 2022/23**

[4] The same Loss Code is being used for Price Categories RSU & RLU

# 6. Billing & Settlement Process

## 6.1. General

The following sections detail BEL's billing and settlement processes. Both the Distributor and the Retailer recognise that the process of calculating accurate charges is dependent on the prompt and accurate supply of information by the Retailer to the Distributor.

ICP-based billing is the billing methodology/process used by BEL and all ICPs are currently billed via the Retailer – no direct billing takes place.

## 6.2. Submission of Billing Data

Retailers must provide Initial Billing Data for the Report Month on or before the 5th working day of the Processing Month (Billing Data Due Date). Revision Billing Data must be provided prior to the start of the Processing Month. The Report Month and Processing Month Billing Schedule is detailed in Table 18.

Billing Data must be normalised using the Replacement Normalised methodology. Normalised data is adjusted to reflect a start and end date that matches the start and end date of Report Month (Calendar Month) to be billed.

Each Retailer should submit Billing Data to the Distributor via the Registry Data Hub. Files delivered to BEL must be compliant with the format of the latest regulated version EIEP1 and EIEP3 protocols. Each Retailer must upload a single EIEP1 Initial data file, which includes records for all its ICPs on the Distributor's Network.

If, by the Billing Data Due Date, Retailers have not submitted Initial Billing Data that complies with the latest regulated version of the EIEP1 and EIEP3 protocols (or have not submitted Initial Billing Data at all) then the Initial Billing Data may not be accepted for billing and the Distributor may estimate the charges to be invoiced to the Retailer.

## 6.3. Invoicing & Payment

BEL will provide Retailers with a **single** invoice each month which aggregates the EIEP1 returns (combined ICPNHH & ICPHHR) across all Revisions as follows:

- **Invoice**

  *Filename:* *BUEL_E_XXXX_YYYYMM_Invoice.pdf*
  *XXXX:* *Receiving Participant Code e.g. CTCT*
  *YYYYMM:* *Billing Month e.g. 202104*

  The amount of the single invoice each month will be the aggregation of:

  - Initial billings (Revision 0)
  - **plus**, Replacement billings (Revision 3, 7 or 14)
  - **less**, replaced billings (previous initial or replacement billings)

  The detail on the invoice will be as per our existing 2020/21 format which provides a summary of the EIEP1 returns at the Price Category and Fixed/Variable Charge levels. It is

noted that this invoice format does not provide any information about the billing amounts associated with the initial, replacement & replaced Billing Data.

In addition to the invoice BEL will provide additional monthly billing reports as follows:

- **Line Charge Report**

  *Filename:* *BUEL_E_XXXX_YYYYMM_RZ_Line_Charge_Report.pdf*
  *XXXX:* *Receiving Participant Code e.g. CTCT*
  *YYYYMM:* *Billing Month e.g. 202104*
  *RZ:* *Revision Number e.g. R0 or R3*

  A report for each initial and replacement billing (combined ICPNHH & ICPHHR) aggregated at the Price Category and Price Component levels. This is the same as our existing Line Charge Summary Report which we provide to Retailers with the addition of the Revision number.

- **Replacement Billing Report**

  *Filename:* *BUEL_E_XXXX_YYYYMM_RM_SUM_Report.pdf*
  *XXXX:* *Receiving Participant Code e.g. 202104*
  *YYYYMM:* *Billing Month e.g. 202104*

  A report which aggregates the EIEP1 returns at the Revision level e.g. Initial, Replacement & Replaced Billings (credit), with separate details for ICPNHH and ICPHRR returns.

The invoice for the Billing Month including the revision billing differential for previous months will be sent to the Retailer by the 10th working day of the Payment Month, and will be payable on the 20th day of that same month.

If the Distributor fails to send an invoice to the Retailer by the 10th working day of the Payment Month, then the due date for payment will be extended by one working day for each working day that the invoice is late.

## 6.4. Revision Cycles and Reconciliation

For billing using the replacement methodology (ICPMMRM) BEL's standard practice is as follows:

- Process/bill ICPMMRM Revision 0
- Process/bill ICPMMRM Replacement Revision 3

In situations where Retailers commonly request BEL to bill replacement ICPMMRM Revision 7, or it is common for there to be a material difference between Revision 3 and Revision 7, BEL may request that we only process/bill ICPMMRM Revision 7 e.g. Revision 3 is not processed/bill.

In situations where the monthly billing amount is very low, BEL may request that we either:

- Only process/bill ICPMMRM Revision 0 data
- Process/bill replacement data on an annual or bi-annual basis as a part of a bulk replacement billing process, with settlement occurring in the appropriate Pricing Year

BEL does not require Retailers to provide ICPMMRM Revision 1 data.

The Revision Billing Schedule for 2022/23 is shown in Table 18.

| Processing Month | Revision | Report Month | | Processing Month | Revision | Report Month |
|---|---|---|---|---|---|---|
| **Apr-22** | Initial | March 2022 | | **Oct-22** | Initial | September 2022 |
| | R3 | December 2021 | | | R3 | June 2022 |
| | R7 | August 2021 | | | R7 | February 2022 |
| | R14 | January 2021 | | | R14 | July 2021 |
| **May-22** | Initial | April 2022 | | **Nov-22** | Initial | October 2022 |
| | R3 | January 2022 | | | R3 | July 2022 |
| | R7 | September 2021 | | | R7 | March 2022 |
| | R14 | February 2021 | | | R14 | August 2021 |
| **Jun-22** | Initial | May 2022 | | **Dec-22** | Initial | November 2022 |
| | R3 | February 2022 | | | R3 | August 2022 |
| | R7 | October 2021 | | | R7 | April 2022 |
| | R14 | March 2021 | | | R14 | September 2021 |
| **Jul-22** | Initial | June 2022 | | **Jan-23** | Initial | December 2022 |
| | R3 | March 2022 | | | R3 | September 2022 |
| | R7 | November 2021 | | | R7 | May 2022 |
| | R14 | April 2021 | | | R14 | October 2021 |
| **Aug-22** | Initial | July 2022 | | **Feb-23** | Initial | January 2023 |
| | R3 | April 2022 | | | R3 | October 2022 |
| | R7 | December 2021 | | | R7 | June 2022 |
| | R14 | May 2021 | | | R14 | November 2021 |
| **Sep-22** | Initial | August 2022 | | **Mar-23** | Initial | February 2023 |
| | R3 | May 2022 | | | R3 | November 2022 |
| | R7 | January 2022 | | | R7 | July 2022 |
| | R14 | June 2021 | | | R14 | December 2021 |

**Table 18 Revision Billing Schedule**

## 6.5. Electronic Transfer of Data & Invoice Returns

BEL's preferred method of returning data and invoices to Retailers is using a single zip file bundle (transferred via the Registry Data Hub) for each billing month as per the following details:

*Filename:* *BUEL_E_XXXX_EIEP_YYYYMM_YYYYMMDD_HHMM.pdf*
*XXXX:* *Receiving Participant Code*
*YYYYMM:* *Billing Month e.g. 202104*
*YYYYMMDD:* *Date e.g. 20210411*
*HHMM:* *Hour + Minutes e.g. 1134*

*Zip File Contents:*

- Invoice – *BUEL_E_XXXX_YYYYMM_Invoice.pdf*
- EIEP1 Returns e.g. ICPNHH & ICPHHR as separate EIEP1 data files
- Line Charge Report – *BUEL_E_XXXX_YYYYMM_RZ_Line_Charge_Report.pdf*
- Replacement Billing Report – *BUEL_E_XXXX_YYYYMM_RM_SUM_Report.pdf*

BEL also accommodates Retailer's preferences for data & invoice returns which differ from that described above, including:

- EIEP1 returns as individual files via the Registry Data Hub
- Emailing of data & invoices to nominated email addresses BEL has on record

EIEP1 replaced billing returns are provided to the Retailer at the month of the initial or replacement billing and will not be returned a second time at the month they are replaced.

# 7. Annual Pricing Notification (APN)

BEL notifies Retailers of our annual pricing changes applicable from the 1st April each year prior to end of January (requirement of 40 business days' notice).

The annual pricing notification typically consists of the following information:

- **Information for Retailers**
  A document explaining our annual pricing notification and pricing changes
- **Distribution Pricing Policy**
  Updated BEL Distribution Pricing Policy (this document) available from our website here
- **EIEP12 PRICE Data File**
  *Filename: BUEL_E_XXXX_PRICE_YYYYMM_YYYYMMDD_ 1000.txt*
- **Register Price Data (RGSTPD) Information**
  *Filename: BUEL_E_XXXX_RGSTPD_YYYYMM_YYYYMMDD.txt*
  A spreadsheet which contains the data which will be used to update the Registry Price Data (RGSTPD) for a Retailers specific Non-Residential ICPs (effective 1st April) including the Price Category Code and Chargeable Capacity if applicable. If this spreadsheet is not provided to the Retailer, the Retailer currently has no Non-Residential ICPs.

This information (except for the Pricing Policy) is bundled into a zip file and sent to Retailers via the Registry Data Hub and emailed to the nominated pricing notification email addresses BEL has on record as follows:

- **Annual Pricing Notification (APN) Zip Bundle**
  *Filename: BUEL_E_XXXX_APN_YYYYMM_YYYYMMDD_1000.zip*

# 8. Explanation for the Adoption of AMD Based Pricing

BEL made a decision to significantly change its pricing from the beginning of the 2021/22 Pricing Year, including the adoption of Anytime Maximum Demand (AMD) based Pricing Structure. This decision warrants explanation as it differs from that of a conventional Connection Capacity based Pricing Structure.

While AMD (annual or monthly) pricing currently exists, it is typically reserved for large commercial/industrial Consumer's and is often used in conjunction with a Fixed Charge based on the Connection Capacity. It is noted that BEL has AMD based Fixed Capacity Charges in place for Consumer's > 100kW since 2012-13.

In our pricing implementation AMD is primarily being used for the purposes of allocating the fixed costs associated with our network. As AMD is being used as a replacement for Connection Capacity, it is not a targeted demand charge levied on Consumer's that use the network during periods of congestion. Charges which are targeted at Consumer's that use the network during peak periods will be the subject of further pricing reform work which we intend to undertake in the future, as the need arises.

In this Section BEL presents our case for AMD based pricing and fully explains our reasons for adopting this approach to pricing. In addition, we highlight some of the issues associated with the Authority's views on Distribution Pricing and the outdated concept of Connection Capacity.

## 8.1. Pricing Options Available to BEL

The pricing changes BEL made in 2021/22 addressed issues with our pricing for Non-Residential Consumer's that had their origins in the Monthly Maximum Demand (MMD) pricing system BEL had in place in the 1990's. Following deregulation of the industry in the late 1990's and the sale of BEL's retail business, the MMD pricing system was replaced with a pseudo Connection Capacity based system with wide Connection Capacity bands. Given that delivery charges at the time were heavily weighted towards variable/consumption charges, these wide capacity bands, and the incorrect categorisation of Consumer's, were of limited consequence.

As BEL sought to increase the proportion of fixed charges to 50% of total revenue during the period 2017/18 – 2020/21, the categorisation/charging inconsistencies which existed between some Non-Residential Consumer's became increasingly material and problematic. In terms of rectifying this situation, three options were identified on which to base our Pricing Structures (Price Categories & Fixed Capacity Charges):

- **Connection Capacity** – The physical Connection Capacity originally requested by the Consumer subject to subsequent physical and/or pricing upgrades/downgrades
- **Anytime Maximum Demand (AMD)** – The Connection Capacity actually used by the Consumer – in this case the parameter of interest is the half-hour AMD
- **Banded Anytime Maximum Demand (AMD)** – Essentially a variant of the above 2 options where the AMD is rounded up into increments which are either:

- The standard Connection Capacity increments determined by the available physical electrical supply components e.g. fuse and/or transformer size
- Increments which are smaller than the standard Connection Capacity increments for pricing purposes e.g. **not** restricted to the fuse and/or transformer size

As BEL's fixed charges have historically not been accurately charged based on the actual Connection Capacity there was a very limited justification and ability for BEL to adopt a Pricing Structure which was based on this parameter. For example, in many historic cases the actual Connection Capacity requested is unknown, and because charges have not been accurately based on this quantity it has not been subject to the standard upgrade/downgrade process. While Banded AMD pricing was considered as an alternative there is also limited justification for using this as a basis for pricing for the same reasons associated with Connection Capacity pricing. As a result, BEL deemed it necessary and most appropriate to reset our Non-Residential Price Categories using Anytime Maximum Demand (AMD).

While Connection Capacity and AMD are different quantities, they are also in many ways similar/equivalent. Provided that a Consumer's supply equipment is not underrated, the Connection Capacity should be the AMD rounded up to the next available size of physical Connection Capacity. In the limit as the discrete increments between the available Connection Capacities is reduced to zero, the Connection Capacity will approach the AMD. As a result, BEL considers that the existing use of Connection Capacity is essentially a special case within a broader AMD based pricing framework.

Given that AMD provides inherent benefits over Connection Capacity for the implementation of Distribution Pricing Structures (as described in the following sections), BEL is of the view that for the purposes of pricing Connection Capacity is currently being used in the industry as a proxy for AMD. Consumer's are very well versed with the concept of user pays as a basis for pricing and charging, and in terms of electricity AMD (not Connection Capacity) represents their use of the network. Furthermore, as Smart Meters are now commonplace, and half-hour consumption should be readily available, AMD is able to be determined cost-effectively and half-hourly demand data should be made available to Distributors monthly for network management and pricing purposes.

The following sections delve into the areas of Connection Capacity based pricing, AMD based pricing, and the Distribution Pricing Principles in more detail.

## 8.2. Connection Capacity Based Pricing

The standard method of defining & determining Price Categories for Commercial/Industrial connections is by using the Connection Capacity:

> *A Consumer's Connection Capacity (or Capacity) can be defined as the upper limit on the amount of power that the Consumer is able to draw from the distribution network. Capacity is measured in kW and may be physical (i.e. the physical capacity of the connection to the premises) or contractual (where a Consumer contracts for a certain capacity to be available).*

While we agree that the Connection Capacity is a very important aspect of a Consumer's connection, after consideration of the alternatives, BEL is of the view that it is not necessarily the most appropriate on which to base the Fixed Charges paid by Consumer's for the following reasons:

- A significant disconnect can exist between the Connection Capacity and actual use (AMD), and as a result the allocation of upstream assets to Consumer's based on Connection Capacity can often be neither fair and/or cost-reflective
- The half-hour data provided to BEL by Retailers has enabled us to identify Dairy farm Sites which have a 3-4 fold variation in the utilisation of the dedicated transformer in relative terms – ranging from 40% utilisation to 150% utilisation. Under a standard Connection Capacity based pricing one Site would experience 3-4 times higher Fixed Charges, on a relative basis, for essentially the same service.
- The Connection Capacity of new connections is often significantly overrated/oversized as this is the position of least consequence in terms of ensuring new plant can be successfully commissioned
- Constraining Consumer's Fixed Charges to the Connection Capacity – essentially a function of the arbitrary and discrete sizes of electrical components (fuses & transformers) – which cannot be tailored to the Consumer's exact requirements, represents an unnecessary pricing constraint
- In terms of the performance of fuses & transformers these components can operate for extended periods of time above their nominal or continuous rating, and as a result Connection Capacity is a quantity that is dependent on the duration of any overrated load
- The commonly referred to Connection Capacity is best described as the long-term or continuous load which can be drawn from the network without the Consumer experiencing power quality issues and/or the connection failing
- The primary purpose of fuses is to protect the network supply components, the Consumer's installation under fault conditions, and to ensure the safe delivery of electricity – there is no hard cut-off under normal operating conditions
- Typical Connection Capacity based Pricing Structures have wide bands and significant jumps between the Fixed Charges at the boundaries of the Price Categories. These jumps becoming more significant as the proportion of revenue collect via Fixed Charges is increased.
- Connection Charge based pricing means that a small AMD reduction resulting in a Connection Capacity and pricing downgrade – because the Consumer's installation is operating in close proximity to a Price Category break point – is valued much more highly than one that doesn't result in a downgrade (valued at zero). Charge decreases resulting from AMD reduction are therefore somewhat arbitrary in nature and BEL sees no reason why these small AMD reductions should not be equally valued across Consumer's.

While the use of Connection Capacity for pricing purposes has significant shortcomings it clearly remains the most suitable parameter on which to base the charges for Connection Assets such as dedicated transformers.

## 8.3. Anytime Maximum Demand Based Pricing

BEL is of the view that Anytime Maximum Demand (AMD) has distinct advantages for the implementation of Distribution Pricing Structures as it represents actual network use, rather than the potential to use the network (Connection Capacity), and as a result it is a fairer and much more cost-reflective for the allocation of the costs associated with shared upstream assets.

The Anytime Maximum Demand (AMD) is a very important parameter of a Distribution Network connection for which distributors currently have very limited visibility. Readily accessible AMD data would open significant opportunities for Distributors to improve their practices in the areas of asset management & pricing as follows:

- Being able to easily determine if connections are in the appropriate Price Category and are subject to the correct distribution pricing
- While Consumer's with overrated connections can be subject to connection & pricing downgrades, in many situations it is difficult for the Distributor or Consumer to know if this is a viable option if no AMD data is available
- Once AMD information is readily available for making a pricing decision (Price Category assignment) why not also use this information for application of pricing e.g. using AMD to set the Chargeable Capacity?
- AMD based pricing ensures that AMD reductions by Consumer's are valued similarly regardless of where the operation of a Consumer's installation sits within a Price Categories AMD or Connection Capacity band

The materiality of a Connection Capacity vs AMD based Fixed Charge difference increases as the Fixed Charge Ratio is increased – BEL has a policy of 50% Fixed Charges.

## 8.4. Authority's Response to BEL's Pricing

BEL is aware that our use of AMD rather than Connection Capacity as the parameter on which our pricing and fixed charges are based is contrary to the Authority's Pricing Principles in terms of allocating Residual Costs in a manner which 'least distorts network use'. The Authority was made aware of our intention to implement AMD based pricing in October 2020 by way of a copy of our Retailer consultation document being provided for comment (this document contained the vast majority of the detail contained within this Appendix).

In a response by letter the Authority stated the following:

> *As you have foreshadowed in your paper, the Authority is concerned about the core change proposed in your consultation document, ie, a shift to an anytime maximum demand (AMD) based pricing structure. We would welcome the opportunity to better understand your proposal and thinking, but our initial view is that this approach would likely be contrary to the Authority's distribution pricing principles. This is based on the understanding that:*
>
> - *BEL's network is generally not near to capacity*

- *Increases or decreases in customers' maximum demands are therefore unlikely to impact the economic costs of the network*
- *But an AMD based pricing structure nonetheless incentives customers to reduce demand.*

*We are concerned therefore that, on the face of it, BEL's proposed pricing structure would be likely to distort network use, by creating incentives to reduce maximum demands even if the network is not congested and by prompting investment (eg, in batteries) for the purpose of cost shifting between customers.*

*On a related point, we note that your consultation refers to balancing pricing with fairness and equity considerations. It is difficult for us to comment on these as the paper does not then lay out exactly how those considerations are applied, and what trade-off with efficient pricing is being made. We would welcome more information from you on this point. Without this clarity, the risk we see is that these fairness judgements, while intuitively appealing, may in fact lead to poorer outcomes for Consumer's in aggregate over time (including Consumer's who are least able to afford it, due to continued cost shifting incentives).*

While our decision to base our pricing on AMD is very much a consequence of the historic MMD pricing structures BEL had in place, and therefore somewhat forced upon us, we are also of the view that the Authority has an overly weighted focus on pricing which 'least distorts network use', with there being a distinct trade-off against pricing which is fair and equitable, and in our view this is not being acknowledged or given sufficient consideration by the Authority.

BEL has no issue with the Authority's reasoning for promoting pricing which 'least distorts network use' e.g. so that Consumer's are not provided with incentives to make investments in disruptive technology which simply results in fixed costs being shifted on to other network users. We do however question if this overall objective can be actually be achieved using Connection Capacity based pricing, or by any alternative means, and/or whether the outdated concept of Connection Capacity (for pricing purposes) is being used by the Authority as a means of practically implementing its economic ideology. BEL is concerned that pricing being promoted by the Authority will introduce undesirable outcomes in relation to fairness and equity – this being an area which is not being given sufficient consideration.

In terms of our overall views on Distribution Pricing we would like to emphasise the following points:

- User pays is a concept that Consumer's are very familiar with and it is a fair way to allocate the costs of shared upstream assets (the vast majority of assets) – using Connection Capacity as a basis on which to allocate these costs is inappropriate
- Given that Connection Capacity is subject to physical/pricing upgrades/downgrades, incentives for Consumer's to distort their use of the network (e.g. reduce peak demand) exist in a Connection Capacity based pricing as Connection Capacity is not actually a fixed quantity
- As the proportion of Fixed Charges is increased, the charging arbitrage which exists between Connection Capacity increments and Price Categories increases, thereby increasing the likelihood of charging inconsistencies developing

- The fairness and equity considerations BEL has identified are visible to Consumer's in the short term e.g. what Consumer's pay this year rather than the Authority's longer term view, and it is noted that the former is very important to Consumer's
- BEL is of the view that in terms of following Good Electricity Industry Practice, and being a prudent network operator, it is in our interests (and in the interests of our Consumer's) to maintain incentives for Consumer's to reduce their peak demand. This is especially the case given the expected growth in the use of electricity with the adoption of EV's and the de-carbonisation of the economy.
- BEL has settled on making our overall Fixed Charge proportion 50%, and we are of the view this provides a good balance between fixed and variable charges, and is entirely justifiable and reasonable level of fixed charging
- It is simply not possible for Distributors to prevent network Consumer's investing in disruptive technology and reducing their electricity costs

The changes BEL have decided to implement will ensure that our pricing is fairer and more equitable as the fixed charges for Consumer's with an AMD >15kW are proportional to their demand and the Connection Capacity which is actually used. It is very clear to BEL (and our Consumer's) that this will result in better pricing outcomes in terms of fairness and equity considerations. We give this particular importance as a Consumer Owned Trust.

It is noted that the approach we have taken to the resetting of our pricing using AMD is analogous to the method which will be used to reset the Transmission Pricing Methodology (TPM) and the allocation of Residual Costs. While the notion of fixing the AMD (and Residential Cost allocation) in perpetuity (subject to 'material' change) is considered workable at the TPM level, BEL contends that it is neither practical nor implementable at the Distribution level. In terms of promoting its economic ideology, BEL contends that the Authority could perhaps consider how network use can be best determined and the allocation of Residual Costs undertaken.

On a final note, BEL would welcome the Authority reopening its work on Distribution Pricing with a view towards taking a much more holistic approach which considers the important real world and practical implementation issues we have raised. We agree with the Authority that Distribution Pricing is a very important part of the industry, as a significant proportion of the costs associated with supplying electricity to end use Consumer's are associated with the Distribution Network.

## 8.5. Distribution Pricing Consultation Submission November 2021

The Authority issued the consultation 'Supporting Reform to Efficient Distribution Pricing' in September 2021. BEL's submission available here highlighted the inherent economic inefficiency associated with the approach to Distribution Pricing (100% non-responsive fixed charges) which the Authority considers to be the most appropriate for unconstrained networks. BEL looks forward to the Authority taking the matters we have raised in account in their decision paper.