



# **Powerco Limited – Electricity Pricing Policy**

As referenced by Powerco Network Agreements

Electricity Pricing Schedule

Loss Factors

Billing and Settlement Process

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**Effective: 1 April 2021**

**Version: 1.0**

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# General terms and conditions



## Introduction

This Pricing Policy applies to the Distributor's Networks effective from 1 April 2021.

The Pricing Schedule (Section One of this Pricing Policy) is referenced by Schedule 7 of all Network Agreements.

The Billing and Settlement Process (Section Three of this Pricing Policy) is referenced by Schedule 2 of all Network Agreements.

Where any provision of this Pricing Policy conflicts with the provisions of any Network Agreement, the Network Agreement will prevail.

Unless the context otherwise requires, terms used in this Pricing Policy have the meanings defined in the Network Agreement. Some additional terms are defined in Part A of the Pricing Schedule and they apply throughout this Pricing Policy. Other additional terms are defined where required in Parts B and C of the Pricing Schedule and apply to the relevant part only.

## Section One: Electricity Pricing Schedule

### Part A: General Terms and Conditions

#### 1.0 Introduction

- 1.1 This Pricing Schedule applies to the Distributor's Networks and sets the prices for use of the Network effective from 1 April 2021
- 1.2 This Pricing Schedule is made up of five parts:
  - Part A – Price Categories applying to both the Western and Eastern regions;
  - Part B – Price Categories for the Western Region only;
  - Part C – Price Categories for the Eastern Region only;
  - Part D – Meter Configuration;
  - Part E – Streetlights / Unmetered Supply

#### 2.0 Interpretation

- 2.1 All charges are exclusive of GST
- 2.2 All times stated in this Pricing Schedule are in New Zealand Daylight Saving Time

#### 3.0 Definitions

- 3.1 **“Anytime Maximum Demand”** (AMD) means the single highest kW peak occurring any time in the 12-month period from 1 September 2019 to 31 August 2020, the result of which is applied in the subsequent Price Year commencing 1 April 2021.
- 3.2 **“Avoided Cost of Transmission”** (ACOT) is the amount equal to the theoretical reduction in Transpower's annual charges payable by Powerco, arising as a direct result of the Generator being connected to Powerco's Network
- 3.3 **“Calendar Year”** is a one-year period that begins on 1 January and ends 31 December

- 3.4 “**Code**” see “Electricity Industry Participation Code”
- 3.5 “**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
- 3.6 “**Consumer**” means a purchaser of electricity from the Retailer where the electricity is delivered via the Distribution Network
- 3.7 “**Consumption Data**” means data, provided by the Retailer to the Distributor in the EIEP format as required under the Network Agreement, showing details of the measured electricity consumption on the Distribution Network(s) to which the Network Agreement applies
- 3.8 “**Consumption Data Due Date**” means the date the Retailer must provide Consumption Data
- 3.9 “**Consumption Month**” means the month to which Consumption Data relates
- 3.10 “**Controlled Price Category**” or “**Controlled Tariff Option**” means a Price Category or Tariff Option allocated to an ICP where the ICP meets the criteria set out in paragraph 32 of this Pricing Policy
- 3.11 “**Current Month**” means the month in which the charges to the Retailer are being invoiced
- 3.12 “**Customer**” means a direct customer or a Retailer (where the Retailer is the customer)
- 3.13 “**Customised Price Path (CPP)**” means Powerco’s compliance with clause 8 of the Powerco Limited Electricity Distribution Customised Price-Quality Path Determination 2018, issued pursuant to Part 4 of the Commerce Act 1986
- 3.14 “**Default Interest**” means interest on the amount payable, at the Default Interest Rate, from the due date for payment until the date of payment of that amount to the relevant party accruing on a daily basis and compounded monthly
- 3.15 “**Default Interest Rate**” means the Interest Rate plus 5% per annum, provided that the Default Interest Rate must not be less than 5% per annum
- 3.16 “**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
- 3.17 “**Demand**” means the rate of expending electrical energy expressed in kilowatts (kW) or kilovolt amperes (kVA)
- 3.18 “**Distributed Generation**” or “**Embedded Generation**” means electricity generation that is connected and distributed within the Network
- 3.19 “**Distributed Generator**” or “**Embedded Generator**” means an electricity generation plant producing Embedded Generation
- 3.20 “**Distribution Network**” or “**Network**” means:

The Distribution Network is connected to the Transpower transmission grid at the following GXPs:

<b>EASTERN REGION: VALLEY</b>	Hinuera (HIN0331) Kinleith (KIN0331 & KIN0112) Kopu (KPU0661) Piako (PAO1101) Waihou (WHU0331) Waikino (WKO0331)
<b>EASTERN REGION: TAURANGA</b>	Tauranga (TGA0111 and TGA0331) Mt Maunganui (MTM0331) Te Matai (TMI0331) Kaitemako (KMO0331)
<b>WESTERN REGION: WAIRARAPA</b>	Greytown (GYT0331) Masterton (MST0331)
<b>WESTERN REGION: MANAWATU</b>	Bunnythorpe (BPE0331) Linton (LTN0331) Mangamaire (MGM0331)
<b>WESTERN REGION: TARANAKI</b>	Carrington (CST0331) Huirangi (HUI0331) Hawera (HWA0331) Opunake (OPK0331) Stratford (SFD0331)
<b>WESTERN REGION: WANGANUI</b>	Brunswick (BRK0331) Marton (MTN0331) Mataroa (MTR0331) Ohakune (OKN0111) Wanganui (WGN0331) Waverley (WVY0111)

- 3.21 **“Distributor”** means Powerco Limited, as the operator and owner of the Distribution Networks, and includes its subsidiaries, successors and assignees
- 3.22 **“EIEP”** means the regulated and non-regulated Electricity Information Exchange Protocols published by the Electricity Authority
- 3.23 **“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
- 3.24 **“Electrical System”** means the Distributor’s overhead and underground electricity distribution and sub-transmission power system network.
- 3.25 **“Embedded Network”** means an electricity distribution network that is owned by someone other than the Distributor, where Consumers have ICPs allocated and managed by the embedded network owner (or another Code participant appointed for the purpose), and consumers within the network have the ability to switch Retailers

- 3.26 **“Full Replacement File” (R)** means a Consumption Data file that is intended to fully replace a previously submitted Initial File in EIEP1
- 3.27 **“Grid Exit Point” (GXP)** means a point of connection between Transpower’s transmission system and the Distributor’s Network
- 3.28 **“GST”** means Goods and Services Tax, as defined in the Goods and Services Tax Act 1985
- 3.29 **“Half-Hour Metering” (HHR)** see **“Time-Of-Use Metering” (TOU)**
- 3.30 **“High-Voltage” (HV)** means voltage above 1,000 volts, generally 11,000 volts, for supply to Consumers
- 3.31 **“High-Voltage (HV) Metering Units”** means the collective term used to describe the Voltage Potential and Current Transformers used primarily for transforming and isolating high voltages and currents into practical and readable quantities for use with revenue-metering equipment. In most instances, the meter is not Powerco-owned.
- 3.32 **“Initial File” (I)** means the initial Consumption Data reported for an ICP, for a specific consumption period in EIEP1 or EIEP3 format
- 3.33 **“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
- 3.34 **“Interest Rate”** means, on any given day, the rate (expressed as a percentage per annum and rounded to the nearest fourth decimal place) displayed on Reuters’ screen page BKBM (or its successor page) at or about 10:45am on that day as the bid rate for three-month bank-accepted bills of exchange. If no such rate is displayed or that page is not available, the average (expressed as a percentage per annum and rounded up to the nearest fourth decimal place) of the bid rates for three-month bank-accepted bills of exchange quoted at or around 10.45am on that day by each of the entities listed on the Reuters’ screen page when the rate was last displayed or, as the case may be, that page was last available.
- 3.35 **“kVA”** means kilovolt-ampere
- 3.36 **“kVAh”** means kilovolt-ampere hour
- 3.37 **“kVA<sub>r</sub>”** means kilovolt-ampere reactive
- 3.38 **“kW”** means kilowatt
- 3.39 **“kWh”** means kilowatt hour
- 3.40 **“Lighting Control Equipment”** means any equipment (including meters, receivers, relays, and ripple control receivers) wherever situated within a Region, designed to receive control signals for council or NZTA street lighting, or under-verandah lights
- 3.41 **“Load Control Equipment”** means any equipment (including meters, receivers, relays, and ripple control receivers) wherever situated within a region, designed to receive Load Management Service signals. (Equipment designed to receive signals

to control street lighting is not considered to be Load Control Equipment and is defined as Lighting Control Equipment).

- 3.42 **“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 within any Region
- 3.43 **“Low Fixed Price Categories”** means the Low Fixed Charges for Delivery Charges described in paragraphs 23 and 25 and subject to the conditions set out in paragraph 29 of this Pricing Policy
- 3.44 **“Low Fixed Tariff Options”** means the Low-Fixed Tariff options for Delivery Charges described in paragraphs 23 and 25 and subject to the conditions set out in paragraph 29 of this Pricing Schedule
- 3.45 **“Low Voltage” (LV)** means voltage of value up to 1,000 volts, generally 230 or 400 volts for supply to Consumers
- 3.46 **“MVA”** means megavolt-ampere
- 3.47 **“Network Agreement”** means the Default Distributor Agreement, or any alternative agreements entered into pursuant to the Code, of which this Pricing Policy forms a part
- 3.48 **“Optimised Deprival Value” (ODV)** means, in respect of the Distributor’s assets, the value attributed by applying the ODV methodology as set out in the Handbook for Optimised Deprival Valuation of System Fixed Assets of Electricity Line Businesses published by the Commerce Commission in 2004
- 3.49 **“Optimised Depreciated Replacement Cost” (ODRC)** is an estimate of the ORC value, less an allowance for depreciation that reflects the age of the asset
- 3.50 **“On Peak Demand” (OPD)** is the average of Consumer’s demand during the 100 regional peak periods as observed and notified by Transpower. The 100 regional peak periods will be between 1 September 2019 and 31 August 2020 for the Price Year effective 1 April 2021. The OPD is used in calculating the Delivery Charges of a Consumer on Price Categories such as V40, T50, V60, T60 in the Eastern region and E100, E300 and SPECIAL Price Categories in the Western region.
- 3.51 **“Optimised Replacement Cost” (ORC)** is an estimate of the current cost of replacing the asset with one that can provide the required service in the most efficient way. Under this approach, asset values are adjusted if assets exhibit excess capacity, are over-engineered, are poorly designed (compared with modern technology) or are poorly located.
- 3.52 **“Partial Replacement File” (X)** means a Consumption Data file that adds additional ICP consumption records to a previously submitted Initial File and/or replaces specific ICPs records within the EIEP1 or EIEP3 file only
- 3.53 **“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

- 3.54 **“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 (ICP) is allocated
- 3.55 **“Powerco”** means Powerco Limited and any of its subsidiaries, successors, and assignees
- 3.56 **“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
- 3.57 **“Pricing Policy”** refers to this overall document, which is referenced in Schedules 2 and 7 of the Network Agreements
- 3.58 **“Pricing Schedule”** refers to Section One of this document
- 3.59 **“Price Year”** means the 12-month period between 1 April and 31 March
- 3.60 **“Processing Month”** means the month in which the Distributor processes the relevant data files
- 3.61 **“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
- 3.62 **“Recoverable Costs”** has the meaning defined in the Electricity Distribution Services Input Methodologies Determination 2012, issued pursuant to Part 4 of the Commerce Act 1986
- 3.63 **“Region”** means the Eastern Region or the Western Region as the case may be
- 3.64 **“Registry”** means the Electricity Authority central Registry
- 3.65 **“Replacement Data”** means Full Replacement Files or Partial Replacement Files
- 3.66 **“Residential Connection” or “Residential Connections”** means a premise that:
- (a) Is used or intended for occupation mainly as a place of residence (for example, not mainly as a business premises);
  - (b) 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);
  - (c) Is a domestic premises as defined by Section 5 of the Electricity Industry Act 2010;
  - (d) Is not a building ancillary to a person’s principal place of residence (for example, a shed or garage) that is separately metered; and,
  - (e) Is not exempted from Low-Usage Tariff Option coverage under an exemption granted under the Electricity (Low-Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004
- 3.67 **“Retailer”** means the supplier of electricity to Consumers with installations connected to the Distribution Network

- 3.68 **“Tariff Option”** means the price option within a Price Category where such a Price Category provides for Retailer choice amongst two or more options, subject to a particular configuration of metering and Load Control Equipment
- 3.69 **“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. For the purposes of this document *TOU Metering* means a metering installation category of 2 or greater, as per the categories defined in the Code, that is capable of recording kVAr and/or kVAh.
- 3.70 **“Trader”**- see Retailer
- 3.71 **“Transmission Rental Rebates”** means the economic value adjustment and the loss and constraint excesses rebated to the Distributor, in respect of a Distribution Network, by Transpower
- 3.72 **“Uncontrolled Price Category”** or **“Uncontrolled Tariff Option”** means a Price Category or Tariff Option allocated to an ICP where the ICP does not meet the criteria set out in paragraph 31

## 4.0 ICP Status

- 4.1 The status of an ICP, as recorded on the Registry, is managed by Distributors and Retailers. The ICP lifecycle, billing status and when charges are applicable for each status is detailed below:
- (a) New (999) – Newly created ICP. Delivery Charges do not apply.
  - (b) Ready (000) – Network status is electrically connected, Delivery Charges applicable
  - (c) Active (002) – Energised. Electricity is flowing, Delivery Charges applicable
  - (d) Inactive (001)
    - I. 04 – Electrically disconnected vacant property. Fuse or link removed. Electricity cannot flow. Delivery Charges do not apply.
    - II. 05 – Reconciled elsewhere. Delivery Charges do not apply.
    - III. 06 – Electrically disconnected ready for decommissioning. Delivery Charges do not apply.
    - IV. 07 – Electrically disconnected remotely by AMI meter. Delivery charges do not apply.
    - V. 08 – Electrically disconnected at pole fuse. Delivery charges do not apply.
    - VI. 09 - Electrically disconnected due to meter disconnected. Delivery charges do not apply.
    - VII. 10 - Electrically disconnected at meter box fuse. Delivery charges do not apply.
    - VIII. 11 - Electrically disconnected at meter box switch. Delivery charges do not apply.
    - IX. 12 – New connection in Progress. Transitory connection state, fuse pending installation. Delivery Charges do not apply.

- (e) Decommissioned (003)
  - I. 01 – Set up in error. Delivery Charges no longer apply.
  - II. 02 – Installation dismantled – supply physically dismantled, meets requirements of Powerco permanent disconnection standard. Delivery Charges do not apply.
  - III. 03 – ICP amalgamation. Delivery Charges no longer apply.

## 5.0 Selection of Price Category

- 5.1 The Distributor will be entitled to determine which Price Category will apply to an ICP. In determining which Price Category should apply to an ICP, the Distributor will consider the Consumer's Connection, the information provided by the Consumer or their representative before application as to the expected load, the Consumer's demand profile and capacity requirements and any other relevant factors.
- 5.2 If the Retailer reasonably considers that a Price Category has been inappropriately allocated to an ICP, the Retailer will notify the Distributor and the Distributor will advise the Retailer, within 10 working days, whether or not it agrees to allocate a different Price Category to that ICP. The Retailer will provide the Distributor with the reasons why it considers the Price Category has been inappropriately allocated to the ICP, and the Distributor will provide to the Retailer information relevant to its decision.
- 5.3 Where the Distributor reasonably considers that a different Price Category should be allocated to a particular ICP:
  - (a) The Distributor will notify the Retailer accordingly, including the reasons why it considers the Price Category allocated to the ICP should be changed; and
  - (b) Unless the Retailer is able to provide evidence to the Distributor's reasonable satisfaction within 10 working days of the Distributor's notice that the current Price Category is appropriate, the Distributor will be entitled to allocate the Price Category that it considers appropriate to that ICP and to commence charging the Retailer for Distribution Services in accordance with that Price Category after a further 40 working days; and
  - (c) The Distributor will provide to the Retailer information relevant to its decision.

## 6.0 Transmission Rental Rebates (aka Loss and Constraint Excess)

- 6.1 Powerco receives Loss and Constraint Excess payments from Transpower each month. These are distributed as follows:
  - (a) Allocated to Customers in proportion to their respective kWh volumes, by Region, and credited to using the initial billing volumes that correspond with the TPNZ credit note month.
  - (b) These payments will not be subject to revisions if the underlying Retailer's initial billing volumes change

## 7.0 New Subdivision Charges

- 7.1 Subject to the Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004, where the Distributor extends the Distribution Network to

establish new Connections in a subdivision development, the Distributor may notify charges that will apply specifically to those new Connections and the dates from which such charges are to be effective

## 8.0 Miscellaneous Matters

8.1 The following charges are payable by the Retailer or Customer, although may be waived at the Distributor’s discretion:

MISCELLANEOUS FEES	CHARGE
<p><b>A Price Category or Tariff Option Change Fee:</b> Payable by the requesting Retailer when a current Consumer’s Price Category or Tariff Option is changed more than once in any Calendar Year</p>	<p>\$30 per Point of Connection (payable for the second and each subsequent change)</p>
<p><b>B Incorrect or Incomplete Consumption Data Fee:</b> Payable where Consumption Data, to be provided by the Retailer to the Distributor, does not comply with the requirements of the Network Agreement. It will be charged on the basis of the actual time spent by a billing analyst or the cost of engaging external consultants/experts to review, correct, validate and reconcile the information.</p>	<p>\$100 per hour</p>
<p><b>C Late Consumption Data Fee:</b> Payable where the Consumption Data required to be provided by the Retailer to the Distributor is received by the Distributor after the due date for the receipt of that Consumption Data. The charge is based on the Distributor’s cost of funds and the cost of using billing analysts to address the delay.</p>	<p>The reasonable costs incurred by the Distributor (including costs associated with late receipt of payment due to late invoicing) as a result of the late data supply. \$100 per hour for each billing analyst’s hour required to address the late supply of data.</p>
<p><b>D Ad hoc Report Fee:</b> Payable where a Retailer requests an ad hoc report that is not generally supplied by the Distributor</p>	<p>\$100 per hour or such other fee as may be agreed</p>
<p><b>E Non-Network Fault Fee:</b> All non-Electrical Systems fault work, or Retailer or Customer services not listed above</p>	<p>Charged to the Customer on a time and materials basis, at market rates, subject to a minimum of \$150</p>
<p><b>F Seasonal and Temporary Disconnection Fee:</b> Charges to consumers are allocated on the basis of a full Price Year, and therefore intended to apply for a period of 12 months. Where an installation is disconnected and subsequently reconnected within a 12-month period, the Distributor may apply a connection fee equivalent to the fixed charges applicable during the period of disconnection.</p>	<p>A fee equivalent to the fixed charges applicable during the period of disconnection</p>

MISCELLANEOUS FEES	CHARGE
<b>G Temporary Safety Disconnections:</b> No fee is applicable for a temporary safety disconnection conducted by the Distributor in accordance with the conditions set out in Powerco standards 170S008	Free

## 9.0 Distributed/Embedded Generation

- 9.1 Any person wanting to connect a Distributed/Embedded Generator to the Network must apply to the Distributor for consent to such connection. All applications for the connection of Distributed/Embedded Generators to the Network will be assessed by the Distributor on a case-by-case basis, having regard to Part 6 of the Electricity Industry Participation Code 2010, Powerco's Distributed Generation Policy and the circumstances that apply in each case.
- 9.2 Powerco's Distributed Generation Policy is published on Powerco's website at: <https://www.powerco.co.nz/get-connected/distributed-generation/>
- 9.3 Any Distributed/Embedded Generator connected to the Network is subject to Part 6 of the Electricity Industry Participation Code 2010 and Powerco's Distributed Generation Policy, or a separate Distributed/Embedded Generation Network Connection Agreement between the Distributor, the party wanting to connect the Distributed/Embedded Generator and, if appropriate, the Retailer.
- 9.4 Export volumes for Distributed Generation connections must be submitted as directional volume within the EIEP1 or EIEP3 Consumption files (no "netting off" should apply to the load or generation volumes in these files)
- 9.5 Power Factor – Any Distributed Generation connection with a power factor of less than 0.95 lagging may attract a power factor charge as detailed in paragraphs 20 and 27. For full details, please refer to Powerco's Distributed Generation Policy.

## 10.0 Embedded Networks

- 10.1 Any person wanting to connect a new Embedded Network to the Network must apply to the Distributor for consent to such connection, and comply with Powerco's Network Connection Standard and Embedded Network Standard. All applications for the connection of an Embedded Network to the Network will be assessed by the Distributor on a case-by-case basis, having regard to the circumstances that apply in each case.
- 10.2 Any new Embedded Network connected to the Network will be subject to Powerco's Network Connection Standard, and a separate agreement between the Distributor and the party wanting to connect the Embedded Network and, if appropriate, the Retailer.
- 10.3 The Price Category for an Embedded Network will be determined on the combined installed or connected capacity, which may result in asset-based pricing being applied. The pricing may include a minimum level of chargeable demand applied to the connection, along with other terms as part of the separate agreement referred to above.

## 11.0 Asset-Based Pricing Methodology

- 11.1 This pricing methodology applies to large Powerco Consumers in the Eastern and Western Regions and others that opt for an asset-based price. Powerco groups its large Consumers into the following categories (termed “load groups”):
- T50: Tauranga region, 300 kVA to 1,499 kVA installed capacity;
  - T60: Tauranga region, 1,500 kVA or higher installed capacity;
  - V40: Valley region, 300 kVA to 1,499 kVA installed capacity;
  - V60: Valley region, 1,500 kVA or higher installed capacity; and
  - SPECIAL: Western Region 1,500 kVA or higher installed capacity
- Other Consumers to whom asset-based pricing may apply include;
- Generation Connections;
  - Public Electric Vehicle Charging Stations; and
  - Bypass pricing
- 11.2 The methodology for setting Delivery Charges under asset-based pricing comprises the following components:
- Measurement of Consumer demand;
  - Asset valuation and allocation;
  - Return of and on capital;
  - Allocation of maintenance costs; and
  - Allocation of indirect costs (fixed and variable)
- 11.3 Asset-based charges to Consumers are allocated on the basis of a full Price Year and therefore apply for the full Price Year
- 11.4 Powerco charges Consumers according to their level of demand, which is measured as Anytime Maximum Demand (AMD) and On Peak Demand (OPD). The demands applied to new Consumers are estimated as per clause 11.11, and will revert to actual values for subsequent Price Years.
- 11.5 Powerco’s Delivery Charges involve valuing the assets used to supply the service, using either the ORC or ODRC methods. Whether the ORC or ODRC methodology is adopted depends on the Consumer load group. For load groups T50 and V40 the ODRC methodology is used. For Price Categories T60, V60, and SPECIAL, the ORC methodology is used.
- 11.6 Powerco’s asset-based pricing involves allocating assets into two categories, namely onsite assets and upstream assets, to different Consumers:
- (a) On-site assets are dedicated assets behind the Point of Connection and normally include transformers and switch gear. These assets are allocated fully to the Consumer to whom they relate.
  - (b) Upstream assets are the meshed assets of the network. These assets are shared between a number of Consumers and generally may be categorised as: feeder assets; substation assets; subtransmission assets; and Grid Exit Point (GXP) assets. These assets are allocated across the Consumers that they serve.

- 11.7 Powerco's charges are determined to obtain a return on the capital it has invested. In the asset allocation process, an annual rate of return is sought on the asset valuations attributed to each Consumer. The rate of return is equivalent to Powerco's prevailing Weighted Average Cost of Capital (WACC) plus allowances for additional commercial based factors. This WACC is an estimate of Powerco's overall cost of capital, inclusive of equity and debt. For those assets valued using ORC, Powerco uses a 45 year annuity factor to obtain a return of and on the capital it has invested (as measured by ORC). For those assets valued using ODRC, Powerco applies the rate of return to the ODRC values to obtain a return on its capital invested, and uses a straight-line depreciation charge to obtain a return of its capital.
- 11.8 Maintenance costs of on-site and upstream assets are allocated directly to T60, V60 and SPECIAL customers. T50 and V40 customers however are allocated on the basis of the load group's ODV relative to the total applicable GXP's ODV. These costs are dispersed amongst the Consumers within the load group on the basis of the Consumers' AMD relative to the aggregated AMD of the load group.
- 11.9 Indirect costs are all costs of Powerco's electricity business excluding transmission, maintenance, interest and tax. Indirect costs are allocated to the load group on the basis of the load group's total ODV relative to the total applicable GXP's ODV. Seventy percent of the charges are recovered as a fixed equal charge to each Consumer in the load group. The remaining 30% of the charges are recovered on the basis of the Consumer's OPD (as measured using Transpower's methodology) relative to the aggregated OPD of the load group at each GXP.
- 11.10 Powerco's transmission service charges are based on Transpower's charges, which it determines using the current Transmission Pricing Methodology ("TPM"), which has been approved by the Electricity Authority. The TPM is used to recover the full economic costs of Transpower's services. Transpower charges Powerco at each GXP using the TPM. The TPM includes connection and interconnection charges. Powerco allocates these charges in the following manner:
- (a) Connection charges: Powerco allocates Transpower's connection charges on the basis of the Consumer's demand which in this case is measured by AMD. Where a Consumer is both an off-take Consumer and an injection Consumer at a connection location, connection charges for that location are calculated separately for that Consumer as an off-take Consumer and an injection Consumer. Powerco also allocates charges from Embedded Generators to its Consumers. This charge may include a connection charge and an ACOT charge. These charges are allocated by Powerco to its Consumers on the same basis as Powerco allocates Transpower's connection and interconnection charges.
  - (b) Interconnection charges: Powerco allocates Transpower's interconnection charges to its Customers based on the Consumer's OPD by Transpower's interconnection rate.
- 11.11 When a Powerco Consumer enters an asset-based load group the following policies apply:
- Powerco will estimate the OPD and AMD for the new or upgraded site. This estimate will be based on an assessment of the plant and machinery located on the site, demand from similar sites across the industry and any estimates of demand provided by the Consumer.

- The estimated demand will apply for the current Price Year (i.e. between the later of 1 April or the connection date for the upgraded assets and 31 March of the subsequent year).
- The estimated demand will assume full demand from the time of the installation of the asset (rather than ramping up over a period of time), unless otherwise agreed between Powerco and the Consumer, or their representative, at the time of Powerco's approval of the request for site connection or alteration.
- The estimated demand will continue to apply in the subsequent year if the upgraded site has not been connected and operational for the full duration of the applicable measurement period, unless otherwise agreed between Powerco and the Consumer or their representative, at the time of Powerco approval of the request for site connection or alteration.
- New prices will be effective from network livening (i.e. Ready status).

11.12 The following Powerco policies apply when a site exits an asset-based load group or revision to charges is requested:

- If a Consumer intends exiting a site, and the Retailer is notified of this intention, the Retailer must notify Powerco as soon as practical so that final charges can be determined and levied in the forthcoming billing run.
- Powerco, at its discretion, may allow a Consumer to exit the load group when the site downgrades its installed capacity. Alternatively, Powerco may require the site to continue to the end of the Price Year in the current load group at the current peaks, for instance if an upgrade to the site has only recently occurred.
- Powerco may leave the Consumer in the same load group and down-grade peak estimates in instances where there is no removal of on-site assets but there will be a reduction in loading on the Network.
- Where there is a bona fide change in Consumer at a premises (i.e. new entity), the Retailer may apply for, and Powerco will at its discretion undertake, a review of the asset-based charges once during the Price Year to reflect the change arising from an alternation in AMD and the expected change in OPD.

## 12.0 Building Block Methodology (“BBM”) Asset-Based Pricing

12.1 This pricing methodology applies to very large (>4MVA) Customers in both Regions. These Customers will have a direct contractual relationship with Powerco for a defined term. BBM asset-based pricing will be available primarily to Customers where:

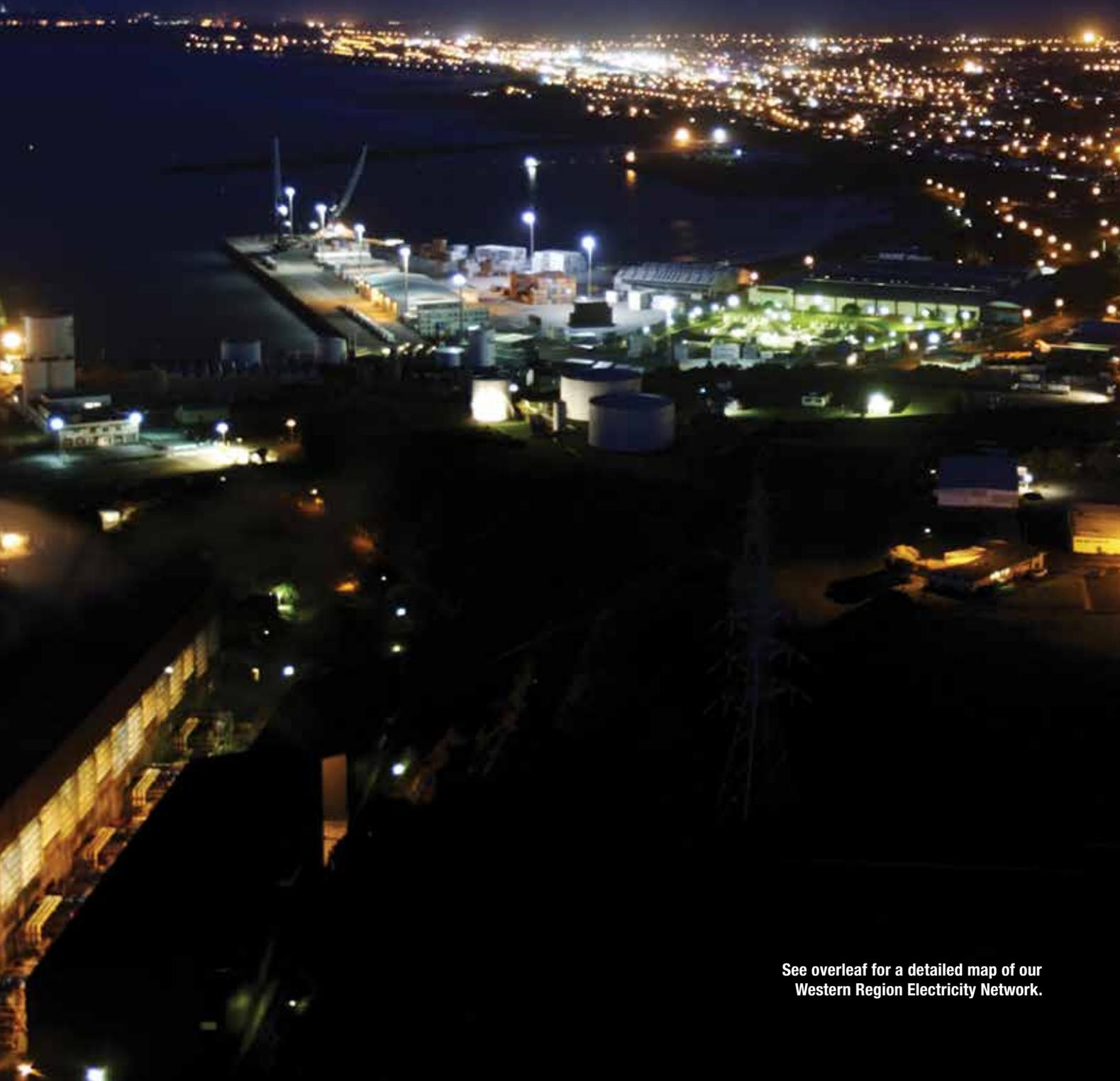
- A step change development and consequently investment is needed, but the increase in Customers demand may not be as significant; or
- A new Customer connection requires significant investment

12.2 The BBM asset-based pricing comprises the following input components:

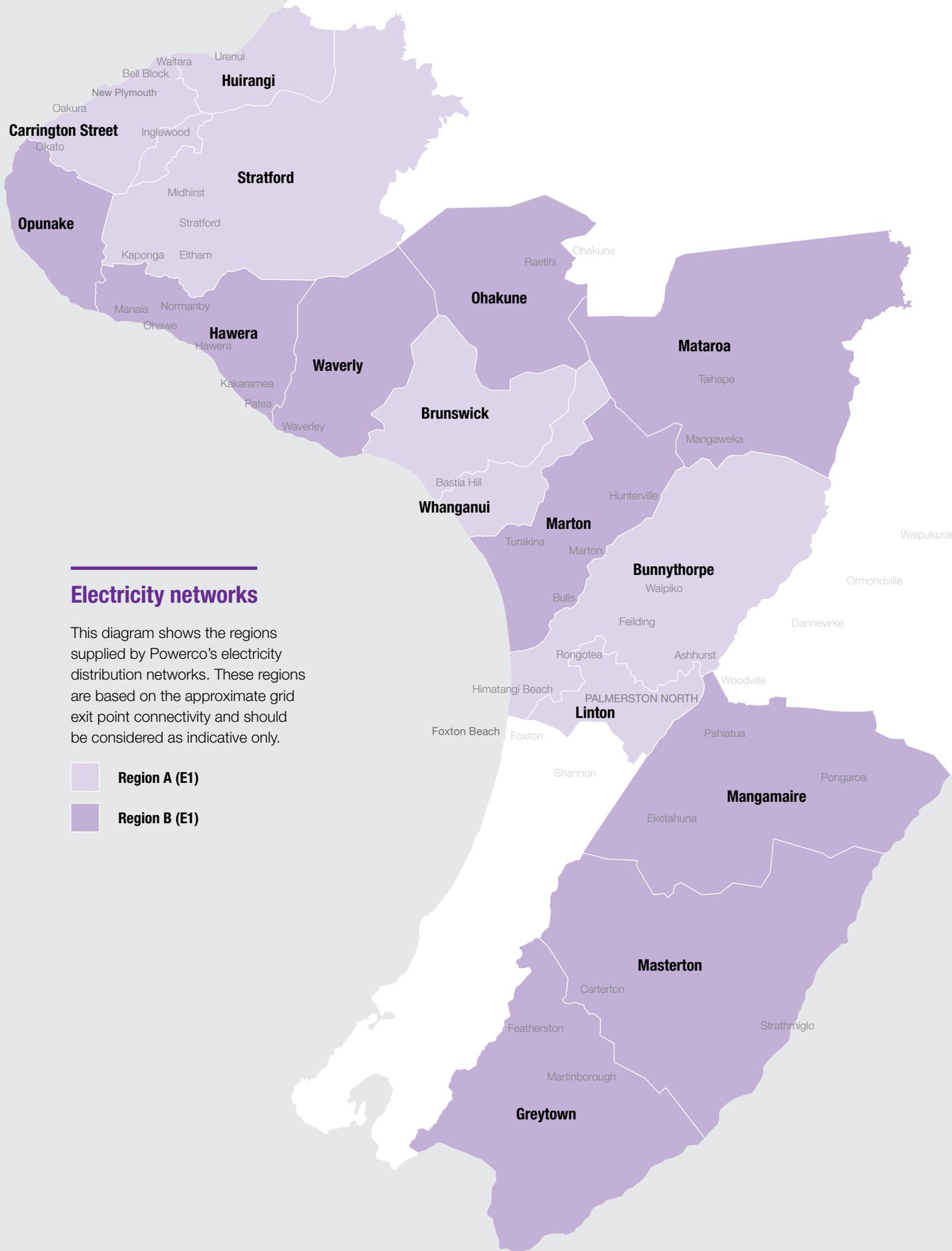
- Return on capital investment, plus accounting depreciation in period or year;

- Sub-transmission cost allocation of direct and indirect costs for sub-transmission asset utilisation in period or year;
- Operating and maintenance costs;
- Tax adjustment; and
- Pass through of Recoverable Costs such as transmission charges

# Western Region



See overleaf for a detailed map of our Western Region Electricity Network.



## Electricity networks

This diagram shows the regions supplied by Powerco's electricity distribution networks. These regions are based on the approximate grid exit point connectivity and should be considered as indicative only.

- Region A (E1)**
- Region B (E1)**

## Part B: Western Region

### 13.0 Application

13.1 This Part applies to the Western Region Network only

### 14.0 Price Categories: E1CA, E1CB, E1UCA and E1UCB

14.1 E1CA, E1UCA, E1CB, and E1UCB apply to Connections on any of the Western Region Distribution Networks that are of a capacity of 100 kVA or less, and are collectively referred to in this section as the “E1 Price Category”

14.2 E1CA and E1CB are only available for those Connections that meet the criteria for a Controlled Tariff Option set out in paragraph 32

14.3 Powerco may, at its discretion, place ICPs with a connection capacity of greater than 100 kVA into the E1 Price Category

14.4 Calculation of Charges for E1 Price Category:

(a) Volume ERP (peak), ERD (day) and ERN (night), and Demand (ERL) Charges:

- I. All demand and volume-based quantities for the E1 Price Category will be based on reconciliation information provided by the RM for volume reconciliation purposes and will be at the GXP (i.e. installation-metered volumes adjusted by applicable local Distribution Network loss factor and unaccounted for electricity).
- II. The quantities from 16.4 (a)(I) above are used to determine the E1 Price Category volume charges (ERP, ERD, and ERN) and each Retailer’s share of the E1 demand charge (ERL charge) at each GXP, by subtracting the SPECIAL, E300, and E100 half-hour loads, adjusted by the applicable Network Distribution loss factors.
- III. Should revisions to quantities as part of the RM revision cycle occur, these will be charged, or rebated, as appropriate per section 5 of the Billing and Settlement Process
- IV. E1 ERP (peak), ERD (day), and ERN (night) Volume Charges:

For the determination of the kWh volumes, the following periods are used:

- Peak, defined as weekdays (Mon-Fri including public holidays) 07:00-11:00 and 17:00-21:00.
- Day, defined as weekdays (Mon-Fri including public holidays) from 11:00 hrs to 17:00, and 21:00-23:00, weekends 07:00-23:00.
- Night, defined as the eight-hour period from 23:00 hrs to 07:00 hrs daily (weekdays and weekends).

(b) E1 Fixed Charge (FDC): A fixed daily charge will be applied to the number of ICPs a Retailer has for each day during the billing month for each of the E1 Price Categories, as per paragraph 4.1.

- (c) Extent of Control E1CA and E1CB Price Category  
Under normal supply circumstances, supply can be controlled at any time for a maximum of seven hours per day. Under abnormal supply or operating circumstances (e.g. where there is a shortage or anticipated shortage of electricity), control may be for greater than seven hours per day.

#### 14.5 Unmetered Streetlights

Refer to the Electricity Pricing Schedule, Part E of this document

### 15.0 Price Category: E100

15.1 E100 applies to a Connection on any of the Western Region Distribution Networks with a capacity of greater than 100 kVA and less than or equal to 300 kVA, which has been approved by the Distributor and is subject to the following conditions:

- (a) The Connection must have installed TOU metering and is subject to a minimum chargeable demand of 30 kW per month, and;
- (b) The E100 Price Category is not available as a Price Category for Residential Connections

#### 15.2 Calculation of E100 Charge:

- (a) E100 Network Asset Charge (FDC)
  - I. The FDC charges apply to each ICP connected in the E100 Price Category
- (b) E100 Demand Charge (E1DIST)
  - I. The chargeable demand for the E100 Distribution Demand Charge (E1DIST) is based on the Anytime Maximum Demand (AMD) of a given connection and will be determined using the individual Connection's kWh half-hour volume data
  - II. The chargeable AMD for the E1DIST charge will be 30 kW or the actual demand, whichever is the higher
  - III. Where an E100 Connection changes Retailer, the applicable AMD will be transported with the Connection to the new Retailer
  - IV. For new E100 Connections, where less than 12 months data is available, the chargeable AMD will be estimated by the Distributor based on an assessment of the plant and machinery located on the site, demand from similar sites across the industry and any estimates of demand provided by the Consumer
- (c) E100 Transmission Demand Charge (E1TRAN)
  - I. The chargeable demand for the E100 Transmission Demand Charge (E1TRAN) is based on the On Peak Demand (OPD) of a given connection and will be determined using the individual Connection's kWh half-hour volume data

- II. Where an E100 Connection changes Retailer, the applicable OPD will be transported with the Connection to the new Retailer
- III. The chargeable OPD for the E1TRAN charge will be 0 kW or the actual demand, whichever is the higher
- IV. For new E100 Connections, where less than 12 months data is available, the chargeable OPD will be estimated by the Distributor based on an assessment of the plant and machinery located on the site, demand from similar sites across the industry and any estimates of demand provided by the Consumer

## 16.0 Price Category: E300

16.1 E300 applies to a Connection on any of the Western Region Distribution Networks with a capacity of greater than 300 kVA, which has been approved by the Distributor and is subject to the following conditions:

- (a) The capacity is calculated as the sum of all installed transformer capacities (nameplate rating), where those transformers are dedicated to the Connection
- (b) The Connection must have TOU metering installed, and is subject to a minimum chargeable demand of 100 kW per month, and;
- (c) The E300 Price Category is not available for Residential Connections

16.2 Calculating E300 Charges:

- (a) E300 Network Asset Charges (FDC)
  - I. The E300 FDC chargeable capacity shall be the greater of 300 kVA or the sum of all nameplate kVA ratings of distribution transformers that supply the Connection, irrespective of ownership of the distribution transformers
  - II. If the deliverable capacity is restricted to a lower level by an approved item of the Distributor's plant then, at the Distributor's discretion, the FDC installed transformer capacity will be the maximum deliverable capacity in kVA and shall not be less than 300 kVA. (Connections subject to such a reduction will be listed as E300R on the Registry)
- (b) E300 Distribution Demand Charge (E3DIST)
  - I. The chargeable demand for the E300 Distribution Demand Charge (E3DIST) is based on the Anytime Maximum Demand (AMD) of a given connection and will be determined using the individual Connection's kWh half-hour volume data
  - II. The chargeable AMD for the E3DIST charge will be 100 kW or the actual demand, whichever is the higher
  - III. Where an E300 Connection changes Retailer, the applicable AMD will be transported with the Connection to the new Retailer

- IV. For new E300 Connections, where less than 12 months' data is available, the chargeable AMD will be estimated by the Distributor based on an assessment of the plant and machinery located on the site, demand from similar sites across the industry and any estimates of demand provided by the Consumer
- (c) E300 Transmission Demand Charge (E3TRAN)
  - I. The chargeable demand for the E300 Transmission Demand Charge (E3TRAN) is based on the On Peak Demand (OPD) of a given connection and will be determined using the individual Connection's kWh half-hour volume data
  - II. Where an E300 Connection changes Retailer, the applicable OPD will be transported with the Connection to the new Retailer
  - III. The chargeable OPD for the E3TRAN charge will be 0 kW or the actual demand, whichever is the higher
  - IV. For new E300 Connections, where less than 12 months' data is available, the chargeable OPD will be estimated by the Distributor based on an assessment of the plant and machinery located on the site, demand from similar sites across the industry and any estimates of demand provided by the Consumer

## 17.0 Price Category: SPECIAL (Asset-Based Pricing)

- 17.1 The Price Category of SPECIAL applies to large commercial / industrial Consumers in the Western Region and the charges are determined on an individual basis
- 17.2 The SPECIAL Price Category typically applies for Consumers with an installed capacity of 1,500 kVA or higher
- 17.3 The SPECIAL Price Category may also apply to selected Generation and connections at risk of by-pass
- 17.4 For further information on asset-based pricing please refer to paragraph 11

## 18.0 Western Region Price Categories and Prices

### Price Categories: E1UCA, E1UCB, E1CA and E1CB – All Residential and General Connections (non-TOU and TOU metered) with installed capacity of 100 kVA or less

Price Category Code	Zone	Description	Price Component Code	Delivery Price <sup>1</sup>	Unit of Measure	Data File Type
E1UCA	A	BRK0331, BPE0331, CST0331, HUI0331, LTN0331, SFD0331, WGN0331				
		Daily Charge	E1UCA-FDC	15.00	c/day	
		Peak Charge <sup>2</sup>	E1UCA-ERP	12.52	c/kWh	
		Day (Off-Peak) Charge <sup>3</sup>	E1UCA-ERD	6.42	c/kWh	EIEP1
		Night (Off-Peak) Charge <sup>4</sup>	E1UCA-ERN	6.42	c/kWh	
		Demand Charge <sup>5</sup>	E1UCA-ERL	0	\$/kW/month	
E1UCB	B	GYT0331, HWA0331, MGM0331, MTN0331, MST0331, MTR0331, OKN0111, OPK0331, WVY0111				
		Daily Charge	E1UCB-FDC	15.00	c/day	
		Peak Charge <sup>2</sup>	E1UCB-ERP	14.00	c/kWh	
		Day (Off-Peak) Charge <sup>3</sup>	E1UCB-ERD	8.20	c/kWh	EIEP1
		Night (Off-Peak) Charge <sup>4</sup>	E1UCB-ERN	8.20	c/kWh	
		Demand Charge <sup>5</sup>	E1UCB-ERL	0	\$/kW/month	
E1CA	A	BRK0331, BPE0331, CST0331, HUI0331, LTN0331, SFD0331, WGN0331				
		Daily Charge	E1CA-FDC	0.00	c/day	
		Peak Charge <sup>2</sup>	E1CA-ERP	12.52	c/kWh	
		Day (Off-Peak) Charge <sup>3</sup>	E1CA-ERD	6.42	c/kWh	EIEP1
		Night (Off-Peak) Charge <sup>4</sup>	E1CA-ERN	6.42	c/kWh	
		Demand Charge <sup>5</sup>	E1CA-ERL	0	\$/kW/month	
E1CB	B	GYT0331, HWA0331, MGM0331, MTN0331, MST0331, MTR0331, OKN0111, OPK0331, (excluding WVY0111)				
		Daily Charge	E1CB-FDC	0.00	c/day	
		Peak Charge <sup>2</sup>	E1CB-ERP	14.00	c/kWh	
		Day (Off-Peak) Charge <sup>3</sup>	E1CB-ERD	8.20	c/kWh	EIEP1
		Night (Off-Peak) Charge <sup>4</sup>	E1CB-ERN	8.20	c/kWh	
		Demand Charge <sup>5</sup>	E1CB-ERL	0	\$/kW/month	

1. Please note these charges are excluding GST
2. Peak Charge applies to GXP kWh quantities for Weekdays (Mon-Fri including public holidays) from 07:00-11:00 and 17:00-21:00
3. Day (Off-Peak) Charge applies to GXP kWh quantities for Weekdays (Mon-Fri including public holidays) from 11:00-17:00 and 21:00-23:00, Weekends from 07:00-23:00
4. Night (Off-Peak) Charge applies to GXP kWh quantities for Weekdays and Weekends from 23:00-07:00
5. Demand Charge set to zero from 1 April 2019

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
12am-7am	Night	Night	Night	Night	Night	Night	Night
7am-11am	Peak	Peak	Peak	Peak	Peak	Day	Day
11am-5pm	Day	Day	Day	Day	Day	Day	Day
5pm-9pm	Peak	Peak	Peak	Peak	Peak	Day	Day
9pm-11pm	Day	Day	Day	Day	Day	Day	Day
11pm-12am	Night	Night	Night	Night	Night	Night	Night

## Price Category: E100

### Commercial TOU Connections with installed capacity of 101 – 300 kVA

Price Category Code	Zone	Description	Price Component Code	Delivery Price <sup>1</sup>	Unit of Measure	Data File Type
E100	ALL	Daily Charge	E100-FDC	9.90	\$/ICP/day	EIEP3
		HV Metering Charge <sup>2</sup>	E100-CT/VT	8.06	\$/units/day	
		Variable Charge	E100-KWH	0	\$/kWh	
		Power Factor Charge <sup>4</sup>	E100-PFC	7.00	\$/kVAr/month	
		Projected Charge	E100-KWH-PROJ	0	\$/kWh	
E100	A	CST0331, HUI0331, SFD0331				
E100	B	Distribution Charge	E100-E1DISTA	0.3036	\$/kW/day	EIEP3
		Transmission Charge <sup>3</sup>	E100-E1TRANA	0.3865	\$/kW/day	
E100	B	HWA0331				
		Distribution Charge	E100-E1DISTB	0.6025	\$/kW/day	EIEP3
Transmission Charge <sup>3</sup>	E100-E1TRANB	0.4095	\$/kW/day			
E100	C	WVY0111				
		Distribution Charge	E100-E1DISTC	0.4673	\$/kW/day	EIEP3
Transmission Charge <sup>3</sup>	E100-E1TRANC	0.4095	\$/kW/day			
E100	D	OPK0331				
		Distribution Charge	E100-E1DISTD	0.4758	\$/kW/day	EIEP3
Transmission Charge <sup>3</sup>	E100-E1TRAND	0.4095	\$/kW/day			
E100	E	BRK0331, WGN0331				
		Distribution Charge	E100-E1DISTE	0.3544	\$/kW/day	EIEP3
Transmission Charge <sup>3</sup>	E100-E1TRANE	0.3325	\$/kW/day			
E100	F	MTN0331				
		Distribution Charge	E100-E1DISTF	0.4258	\$/kW/day	EIEP3
Transmission Charge <sup>3</sup>	E100-E1TRANF	0.3125	\$/kW/day			
E100	G	MTR0331, OKN0111				
		Distribution Charge	E100-E1DISTG	0.5801	\$/kW/day	EIEP3
Transmission Charge <sup>3</sup>	E100-E1TRANG	0.4095	\$/kW/day			
E100	H	MST0331, GYT0331				
		Distribution Charge	E100-E1DISTH	0.5224	\$/kW/day	EIEP3
Transmission Charge <sup>3</sup>	E100-E1TRANH	0.4215	\$/kW/day			
E100	I	BPE0331, LTN0331				
		Distribution Charge	E100-E1DISTI	0.3027	\$/kW/day	EIEP3
Transmission Charge <sup>3</sup>	E100-E1TRANI	0.3295	\$/kW/day			
E100	J	MGM0331				
		Distribution Charge	E100-E1DISTJ	0.3817	\$/kW/day	EIEP3
Transmission Charge <sup>3</sup>	E100-E1TRANJ	0.4215	\$/kW/day			

1. Please note these charges are excluding GST

2. HV metering charges (also known as CT/VT charges) only apply to consumers with HV metering (as denoted on the registry)

3. Transmission Prices include Transmission charges and other recoverable costs such as council rates and industry levies

4. Applies to all connections – see paragraph 20

**Price Category: E300/E300R**  
**Commercial TOU Connections with installed capacity of greater than 300 kVA**

Price Category Code	Zone	Description	Price Component Code	Delivery Price <sup>1</sup>	Unit of Measure	Data File Type
E300	ALL	Fixed Capacity Charge	E300-FDC	0.062	\$/kVA/day	EIEP3
		HV Metering Charge <sup>2</sup>	E300-CT/VT	8.06	\$/units/day	
		Variable Charge	E300-KWH	0	\$/kWh	
		Power Factor Charge <sup>4</sup>	E300-PFC	7.00	\$/kVAr/month	
		Projected Charge	E300-KWH-PROJ	0	\$/kWh	
E300	A	CST0331, HUI0331, SFD0331				
E300	A	Distribution Charge	E300-E3DISTA	0.1506	\$/kW/day	EIEP3
		Transmission Charge <sup>3</sup>	E300-E3TRANA	0.3865	\$/kW/day	
E300	B	HWA0331				
E300	B	Distribution Charge	E300-E3DISTB	0.2378	\$/kW/day	EIEP3
		Transmission Charge <sup>3</sup>	E300-E3TRANB	0.4095	\$/kW/day	
E300	C	WVY0111				
E300	C	Distribution Charge	E300-E3DISTC	0.4741	\$/kW/day	EIEP3
		Transmission Charge <sup>3</sup>	E300-E3TRANC	0.4095	\$/kW/day	
E300	D	OPK0331				
E300	D	Distribution Charge	E300-E3DISTD	0.2672	\$/kW/day	EIEP3
		Transmission Charge <sup>3</sup>	E300-E3TRAND	0.4095	\$/kW/day	
E300	E	BRK0331, WGN0331				
E300	E	Distribution Charge	E300-E3DISTE	0.1508	\$/kW/day	EIEP3
		Transmission Charge <sup>3</sup>	E300-E3TRANE	0.3325	\$/kW/day	
E300	F	MTN0331				
E300	F	Distribution Charge	E300-E3DISTF	0.2147	\$/kW/day	EIEP3
		Transmission Charge <sup>3</sup>	E300-E3TRANF	0.3125	\$/kW/day	
E300	G	MTR0331, OKN0111				
E300	G	Distribution Charge	E300-E3DISTG	0.3617	\$/kW/day	EIEP3
		Transmission Charge <sup>3</sup>	E300-E3TRANG	0.4095	\$/kW/day	
E300	H	MST0331, GYT0331				
E300	H	Distribution Charge	E300-E3DISTH	0.3092	\$/kW/day	EIEP3
		Transmission Charge <sup>3</sup>	E300-E3TRANH	0.4215	\$/kW/day	
E300	I	BPE0331, LTN0331				
E300	I	Distribution Charge	E300-E3DISTI	0.2126	\$/kW/day	EIEP3
		Transmission Charge <sup>3</sup>	E300-E3TRANI	0.3295	\$/kW/day	
E300	J	MGM0331				
E300	J	Distribution Charge	E300-E3DISTJ	0.2252	\$/kW/day	EIEP3
		Transmission Charge <sup>3</sup>	E300-E3TRANJ	0.4215	\$/kW/day	

1. Please note these charges are excluding GST  
 2. HV metering charges (also known as CT/VT charges) only apply to consumers with HV metering (as denoted on the registry)  
 3. Transmission Prices include Transmission charges and other recoverable costs such as council rates and industry levies  
 4. Applies to all connections – see paragraph 20

**Price Category: SPECIAL / SPECIALN<sup>4</sup> Applies to Connections on non-standard pricing**

Price Category Code	Zone	Description	Price Component Code	Delivery Price <sup>1</sup>	Unit of Measure	Data File Type
SPECIAL / SPECIALN	ALL	Fixed Distribution Charge	SPECIAL-DIST	POA	\$/day	EIEP3
		Fixed Transmission Charge <sup>3</sup>	SPECIAL-TRANS	POA	\$/day	
		Variable Charge	SPECIAL-KWH	0	\$/kWh	
		Projected Charge	SPECIAL-KWH-PROJ	0	\$/kWh	
		Power Factor Charge <sup>4</sup>	SPECIAL-PFC	7.00	\$/kVAr/month	
		HV Metering Unit Charge <sup>2</sup>	SPECIAL-CT/VT	8.06	\$/units/day	

1. Please note these charges are excluding GST

2. HV metering charges (also known as CT/VT charges) only apply to consumers with HV metering (as denoted on the registry)

3. Transmission Prices include Transmission charges and other recoverable costs such as council rates and industry levies

4. Power factor charges do not apply for any ICP on a price category ending in "N"

**19.0 Data File Requirements**

- 19.1 Powerco requires data files for non-half hourly ICPs to be provided in the latest regulated version of the EIEP1 and EIEP3 protocols for half hourly data.
- 19.2 Powerco requires EIEP1 submission files from Retailers to be in the "Replacement Normalised" format, which aligns to the Reconciliation Manager process.
- 19.3 From 1 April 2021, Powerco no longer allows EIEP1 submission files in the "Incremental Normalised" format. It is expected that all Retailers implement a transition plan to move away from "Incremental Normalised" to "Replacement Normalised" prior to this date.
- 19.4 Powerco uses the dash symbol (-) as a separator between the Price Category and the tariff option for non-half hourly data, as of 1 April 2020. Prior to this date the tilde symbol (~) was used as a separator. Fixed charges and variable consumption should be provided to Powerco via the EIEP1 file as follows:

Price Category Code	Description	Tariff Option	Price Component Code	Register Content Code / Period of Availability	Availability
E1CA	Daily Charge - Controlled	FDC	E1CA-FDC		
	Uncontrolled	24UC	E1CA-24UC	UN24 D16 / N8	24 hours per day
	All Inclusive	AICO	E1CA-AICO	IN17 DIN16 / NIN8	17 hours per day
	TOU Peak - Uncontrolled	PEAK	E1CA-PEAK	UN24 D16 / N8	24 hours per day
	TOU Off-Peak - Uncontrolled	OFPK	E1CA-OFPK	UN24 D16 / N8	24 hours per day
	TOU Peak – All Inclusive	PKIN	E1CA-PKIN	IN17	24 hours per day
	TOU Off-Peak – All Inclusive	OPIN	E1CA-OPIN	IN17	24 hours per day
	Controlled	CTRL	E1CA-CTRL	CN17	17 hours per day
	Night Only	NITE	E1CA-NITE	CN8 & NO8	23:00 - 07:00
	Night with Boost <sup>1</sup>	NITE	E1CA-NITE	CN9 & NB9	23:00 - 07:00 14:00 - 15:00
	Unmetered	UNML	E1CA-UNML		
E1CB	Distributed Generation	24DG	E1CA-24DG	EG24	24 hours per day
	Daily Charge - Controlled	FDC	E1CB-FDC		
	Uncontrolled	24UC	E1CB-24UC	UN24 D16 / N8	24 hours per day

Price Category Code	Description	Tariff Option	Price Component Code	Register Content Code / Period of Availability	Availability
	All Inclusive	AICO	E1CB-AICO	IN17 DIN16 / NIN8	17 hours per day
	TOU Peak - Uncontrolled	PEAK	E1CB-PEAK	UN24 D16 / N8	24 hours per day
	TOU Off-Peak - Uncontrolled	OFPK	E1CB-OFPK	UN24 D16 / N8	24 hours per day
	TOU Peak – All Inclusive	PKIN	E1CB-PKIN	IN17	24 hours per day
	TOU Off-Peak – All Inclusive	OPIN	E1CB-OPIN	IN17	24 hours per day
	Controlled	CTRL	E1CB-CTRL	CN17	17 hours per day
	Night Only	NITE	E1CB-NITE	CN8 & NO8	23:00 - 07:00
	Night with Boost <sup>1</sup>	NITE	E1CB-NITE	CN9 & NB9	23:00 - 07:00 14:00 - 15:00
	Unmetered	UNML	E1CB-UNML		
	Distributed Generation	24DG	E1CB-24DG	EG24	24 hours per day
	Daily Charge - Uncontrolled	FDC	E1UCA-FDC		
E1UCA	Uncontrolled	24UC	E1UCA-24UC	UN24 D16 / N8	24 hours per day
	TOU Peak – Uncontrolled	PEAK	E1UCA-PEAK	UN24 D16 / N8	24 hours per day
	TOU Off-Peak - Uncontrolled	OFPK	E1UCA-OFPK	UN24 D16 / N8	24 hours per day
	Night Only	NITE	E1UCA-NITE	CN8 & NO8	23:00 - 07:00
	Night with Boost <sup>1</sup>	NITE	E1UCA-NITE	CN9 & NB9	23:00 - 07:00 14:00 - 15:00
	Unmetered	UNML	E1UCA-UNML		
	Distributed Generation	24DG	E1UCA-24DG	EG24	24 hours per day
	Daily Charge - Uncontrolled	FDC	E1UCB-FDC		
E1UCB	Uncontrolled	24UC	E1UCB-24UC	UN24 D16 / N8	24 hours per day
	TOU Peak - Uncontrolled	PEAK	E1UCB-PEAK	UN24 D16 / N8	24 hours per day
	TOU Off-Peak - Uncontrolled	OFPK	E1UCB-OFPK	UN24 D16 / N8	24 hours per day
	Night Only	NITE	E1UCB-NITE	CN8 & NO8	23:00 - 07:00
	Night with Boost <sup>1</sup>	NITE	E1UCB-NITE	CN9 & NB9	23:00 - 07:00 14:00 - 15:00
	Unmetered	UNML	E1UCB-UNML		
	Distributed Generation	24DG	E1UCB-24DG	EG24	24 hours per day

1. Boost is not available in all areas, and is closed to new connections and meter replacements – refer to paragraphs 35 & 36

Note: AICO is now closed to new connections and existing connections with a meter replacement as per paragraph 33

## 20.0 Power Factor Charges

- 20.1 If a Consumer's power factor at a Connection is less than 0.95 lagging, the Distributor will charge the power factor charge set out in the tables in Western Region Charges
- 20.2 The kVAr chargeable quantity is the largest monthly difference between the kVAr amount recorded in any one half-hour period, and one third of the kW demand recorded in the same half-hour period. The charge is applicable only during weekdays, between 7am and 8pm (trading periods 15 to 40 inclusive).
- 20.3 The power factor charge will be applicable only for Consumers with TOU metering. For the Western Region, this will be Price Categories E100, E300, E300R, and SPECIAL.
- 20.4 The Distributor, at its discretion, may elect not to levy power factor charges on a particular ICP. This will be through moving the ICP to a Price Category ending with "N". For instance, an ICP with the Price Category SPECIAL would be moved to Price Category "SPECIALN", where no power factor charges are being levied.

# Eastern Region



See overleaf for a detailed map of our Eastern Region Electricity Network.



## Electricity networks

This diagram shows the regions supplied by Powerco's electricity distribution networks. These regions are based on the approximate grid exit point connectivity and should be considered as indicative only.

-  Tauranga
-  Valley

## Part C: Eastern Region

### 21.0 Application

21.1 This part applies to the Eastern Region Network only

### 22.0 Price Categories: Valley Distribution Network

22.1 The Valley Distribution Network Price Categories and Tariff Options described below are subject to the conditions set out in paragraphs 22, 26 to 30, and elsewhere in this document

22.2 A Retailer supplying a Consumer may change that Consumer from a Price Category or a Tariff Option to another Price Category or Tariff Option only once in any period of 12 consecutive months. For example, a residential Consumer changing to a Low Fixed Charge Price Category from a General Price Category and changing back to a General Price Category within a 12-month period would incur a price category change fee as set out in paragraph 8.1(A).

22.3 Valley Distribution Network Time Zone Definitions:

Valley Distribution Network	
Day	07:00am – 11:00pm
Night	11:00pm – 07:00am
TOU Peak Period	Weekdays (Monday-Friday including public holidays) 07:00am–11:00am (periods 15 to 22) and 5:00pm – 9:00pm (periods 35 to 42)
TOU Off-Peak Period	Weekdays (Monday-Friday including public holidays) 11:00am – 5:00pm (periods 23 to 34) and 9:00pm – 7:00am (periods 43 to 14) Weekends (Saturday & Sunday) all day and night

## 23.0 Valley Price Categories and Prices

Price Category Code	Description	Price Component Code	Register Content Code/ Period of Availability	Data File Format Availability	Delivery Price <sup>1</sup>	Unit of Measure
<b>V01</b>	<b>Unmetered Load<sup>2</sup></b>			<i>EIEP1</i>		
	Daily Charge	V01			0.00	c/day
	Variable Charge	V01-UNML			11.01	c/kWh
	Projected Charge	V01-UNML-PROJ			11.01	c/kWh
<b>V02</b>	<b>Unmetered Streetlights (NZTA / Council only)</b>			<i>EIEP1</i>		
	Daily Charge	V02			15.31	c/fixture/day
	Variable Charge	V02-UNML			0.00	c/kWh
<b>V05S</b>	<b>Residential Low Fixed Charges<sup>3</sup></b>			<i>EIEP1</i>		
	Daily Charge	V05S			15.00	c/day
	Uncontrolled	V05S-24UC	UN24 D16 / N8	24 hrs per day	10.47	c/kWh
	All Inclusive <sup>6</sup>	V05S-AICO	IN17 DIN16 / NIN8	17 hrs per day	10.16	c/kWh
	Controlled	V05S-CTRL	CN17	17 hrs per day	7.65	c/kWh
	Night Only	V05S-NITE	CN8 & NO8	23:00-07:00	6.10	c/kWh
	Unmetered	V05S-UNML			11.01	c/kWh
	Distributed Generation	V05S-24DG	EG24	24 hrs per day	0.00	c/kWh
	Projected Charge	V05S-24UC-PROJ			10.47	c/kWh
	TOU Peak <sup>7</sup> - Uncontrolled	V05S-PEAK	UN24 / 7304 PK8 / 7304	24 hrs per day	16.74	c/kWh
	TOU Off-Peak <sup>7</sup> - Uncontrolled	V05S-OFPK	UN24 / 7304 OP16 / 7304	24 hrs per day	7.57	c/kWh
	TOU Peak <sup>7</sup> - All Inclusive	V05S-PKIN	IN17 / 7304 PK8 / 7304	24 hrs per day	16.29	c/kWh
	TOU Off-Peak <sup>7</sup> - All Inclusive	V05S-OPIN	IN17 / 7304 OP16 / 7304	24 hrs per day	7.46	c/kWh
<b>V06S</b>	<b>General (up to and including 3 Phase 60 amps)</b>			<i>EIEP1</i>		
	Daily Charge	V06S			85.00	c/day
	Uncontrolled	V06S-24UC	UN24 D16 / N8	24 hrs per day	7.28	c/kWh
	All Inclusive <sup>6</sup>	V06S-AICO	IN17 DIN16 / NIN8	17 hrs per day	6.97	c/kWh
	Controlled	V06S-CTRL	CN17	17 hrs per day	4.46	c/kWh
	Night Only	V06S-NITE	CN8 & NO8	23:00-07:00	2.91	c/kWh
	Unmetered	V06S-UNML			11.01	c/kWh
	Distributed Generation	V06S-24DG	EG24	24 hrs per day	0.00	c/kWh
	Projected Charge	V06S-24UC-PROJ			7.28	c/kWh
	TOU Peak <sup>7</sup> - Uncontrolled	V06S-PEAK	UN24 / 7304 PK8 / 7304	24 hrs per day	13.55	c/kWh
	TOU Off-Peak <sup>7</sup> - Uncontrolled	V06S-OFPK	UN24 / 7304 OP16 / 7304	24 hrs per day	4.38	c/kWh
	TOU Peak <sup>7</sup> - All Inclusive	V06S-PKIN	IN17 / 7304 PK8 / 7304	24 hrs per day	13.10	c/kWh
	TOU Off-Peak <sup>7</sup> - All Inclusive	V06S-OPIN	IN17 / 7304 OP16 / 7304	24 hrs per day	4.27	c/kWh
<b>V22<sup>10</sup></b>	<b>Commercial (Greater than 3 Phase 60amps to 3 phase 250 amps)</b>			<i>EIEP1</i>		

Price Category Code	Description	Price Component Code	Register Content Code/ Period of Availability	Data File Format Availability	Delivery Price <sup>1</sup>	Unit of Measure
	Daily Charge	V22			9.91	\$/day
	Uncontrolled	V22-24UC	UN24 D16 / N8	24 hrs per day	6.05	c/kWh
	Distributed Generation	V22-24DG	EG24	24 hrs per day	0.00	c/kWh
	Projected Charge	V22-24UC-PROJ			6.05	c/kWh
<b>V28</b>	<b>Commercial (200 – 299 kVA)</b>			<i>EIEP3</i>		
	Daily Charge	V28			26.00	\$/day
	Uncontrolled	V28-24UC		24 hrs per day	4.75	c/kWh
	Power Factor Charge <sup>4</sup>	V28-PFC			7.00	\$/kVAr/mth
	Projected Charge	V28-24UC-PROJ			4.75	c/kWh
<b>V28N<sup>4</sup></b>	<b>Commercial (200 – 299 kVA)</b>			<i>EIEP1</i>		
	Daily Charge	V28N			26.00	\$/day
	Uncontrolled	V28N-24UC	UN24 D16 / N8	24 hrs per day	4.75	c/kWh
	Distributed Generation	V28N-24DG	EG24	24 hrs per day	0.00	c/kWh
	Projected Charge	V28N-24UC-PROJ			4.75	c/kWh
<b>V40 / V40N<sup>4,9</sup></b>	<b>Large Commercial (300 – 1,499 kVA)</b>			<i>EIEP3</i>		
	Distribution Charge	V40-DIST			POA	\$/day
	Transmission Charge <sup>5</sup>	V40-TRANS			POA	\$/day
	Variable Charge	V40-KWH			0.00	\$/kWh
	Power Factor Charge <sup>4</sup>	V40-PFC			7.00	\$/kVAr/mth
<b>V60 / V60N<sup>4</sup></b>	<b>Large Commercial (≥ 1,500 kVA)</b>			<i>EIEP3</i>		
	Distribution Charge	V60-DIST			POA	\$/day
	Transmission Charge <sup>5</sup>	V60-TRANS			POA	\$/day
	Variable Charge	V60-KWH			0.00	\$/kWh
	Power Factor Charge <sup>4</sup>	V60-PFC			7.00	\$/kVAr/mth

1. Please note these charges are excluding GST
2. Please refer to the Eastern unmetered supply schedule for additional information for unmetered ICP charges
3. These Price Categories and associated tariff options are only available to Residential Connections
4. Power factor charges do not apply for any ICP on a Price Category ending in "N"
5. Transmission Prices include Transmission charges and other recoverable costs such as council rates and industry levies
6. AICO is now closed as per paragraph 33
7. TOU Peak and Off-Peak times defined in paragraph 22.3
8. Conditional tariff options are only available for retailers who have been granted an exemption to TOU charges
9. Effective 1 April 2020, V40 / V40N ICPs are subject to a minimum AMD of 100 kW. See paragraph 30.4 for details
10. The V24 Price Category was replaced by V22 effective 1 April 2021, to align with T22 in the Tauranga

## 24.0 Price Categories: Tauranga Distribution Network

- 24.1 The Tauranga Distribution Network Price Categories and Tariff Options described below are subject to the conditions set out in paragraphs 24 to 30 and elsewhere in this document
- 24.2 A Retailer supplying a Consumer may change that Consumer from a Price Category or a Tariff Option to another Price Category or Tariff Option only once in any period of 12 consecutive months. For example, a residential Consumer changing to a Low Fixed Charge Price Category from a General Price Category and changing back to a General Price Category within a 12-month period would incur a Price Category Change Fee as set out in paragraph 8.1(A).
- 24.3 Tauranga Distribution Network Time Zone Definitions:

Tauranga Distribution Network	
Winter	1 May – 30 September
Summer	1 October – 30 April
Day	07:00am – 11:00pm
Night	11:00pm – 07:00am
TOU Peak Period	Weekdays (Monday-Friday including public holidays) 07:00am–11:00am (periods 15 to 22) and 5:00pm – 9:00pm (periods 35 to 42)
TOU Off-Peak Period	Weekdays (Monday-Friday including public holidays) 11:00am – 5:00pm (periods 23 to 34) and 9:00pm – 7:00am (periods 43 to 14) Weekends (Saturday & Sunday) all day and night

## 25.0 Tauranga Price Categories and Prices

Price Category Code	Description	Price Component Code	Register Content Code/ Period of Availability	Data File Format Availability	Delivery Price <sup>1</sup>	Unit of Measure
<b>T01</b>	<b>Unmetered Load<sup>2</sup></b>			<i>EIEP1</i>		
	Daily Charge	T01			0.00	c/day
	Variable Charge	T01-UNML			10.50	c/kWh
	Projected Charge	T01-UNML-PROJ			10.50	c/kWh
<b>T02</b>	<b>Unmetered Streetlights (NZTA / Council only)</b>			<i>EIEP1</i>		
	Daily Charge	T02			15.30	c/fixture/day
	Variable Charge	T02-UNML			0.00	c/kWh
<b>T05S</b>	<b>Residential Low Fixed Charges<sup>3</sup></b>			<i>EIEP1</i>		
	Daily Charge	T05S			15.00	c/day
	Uncontrolled	T05S-24UC	UN24 D16 / N8	24 hrs per day	9.90	c/kWh
	All Inclusive <sup>6</sup>	T05S-AICO	IN17 DIN16 / NIN8	17 hrs per day	9.50	c/kWh
	Controlled	T05S-CTRL	CN17	17 hrs per day	6.69	c/kWh
	Night Only	T05S-NITE	CN8 & NO8	23:00-07:00	5.72	c/kWh
	Night with Boost	T05S-NITE	CN9 & NB9	23:00-07:00 14:00 -14:30	5.72	c/kWh
	Unmetered	T05S-UNML			10.50	c/kWh
	Distributed Generation	T05S-24DG	EG24	24 hrs per day	0.00	c/kWh
	Projected Charge	T05S-24UC-PROJ			9.90	c/kWh
	TOU Peak <sup>7</sup> - Uncontrolled	T05S-PEAK	UN24 / 7304 PK8 / 7304	24 hrs per day	15.97	c/kWh
	TOU Off-Peak <sup>7</sup> - Uncontrolled	T05S-OFPK	UN24 / 7304 OP16 / 7304	24 hrs per day	6.64	c/kWh
	TOU Peak <sup>7</sup> - All Inclusive	T05S-PKIN	IN17 / 7304 PK8 / 7304	24 hrs per day	15.51	c/kWh
	TOU Off-Peak <sup>7</sup> – All Inclusive	T05S-OPIN	IN17 / 7304 OP16 / 7304	24 hrs per day	6.55	c/kWh
<b>T06S</b>	<b>General (up to and including 3 Phase 60 amps)</b>			<i>EIEP1</i>		
	Daily Charge	T06S			85.00	c/day
	Uncontrolled	T06S-24UC	UN24 D16 / N8	24 hrs per day	6.71	c/kWh
	All Inclusive <sup>6</sup>	T06S-AICO	IN17 DIN16 / NIN8	17 hrs per day	6.31	c/kWh
	Controlled	T06S-CTRL	CN17	17 hrs per day	3.50	c/kWh
	Night Only	T06S-NITE	CN8 & NO8	23:00-07:00	2.53	c/kWh
	Night with Boost	T06S-NITE	CN9 & NB9	23:00 - 07:00 14:00 - 14:30	2.53	c/kWh
	Unmetered	T06S-UNML			10.50	c/kWh
	Distributed Generation	T06S-24DG	EG24	24 hrs per day	0.00	c/kWh
	Projected Charge	T06S-24UC-PROJ			6.71	c/kWh
	TOU Peak <sup>7</sup> – Uncontrolled	T06S-PEAK	UN24 / 7304 PK8 / 7304	24 hrs per day	12.78	c/kWh
	TOU Off-Peak <sup>7</sup> - Uncontrolled	T06S-OFPK	UN24 / 7304 OP16 / 7304	24 hrs per day	3.45	c/kWh
	TOU Peak <sup>7</sup> - All Inclusive	T06S-PKIN	IN17 / 7304 PK8 / 7304	24 hrs per day	12.32	c/kWh

Price Category Code	Description	Price Component Code	Register Content Code/ Period of Availability	Data File Format Availability	Delivery Price <sup>1</sup>	Unit of Measure
	TOU Off-Peak <sup>7</sup> – All Inclusive	T06S-OPIN	IN17 / 7304 OP16 / 7304	24 hrs per day	3.36	c/kWh
<b>T22</b>	<b>Commercial (Greater than 3 Phase 60amps to 3 phase 250 amps)</b>			<i>EIEP1</i>		
	Daily Charge	T22			9.99	\$/day
	Uncontrolled	T22-24UC	UN24 D16 / N8	24 hrs per day	6.38	c/kWh
	Controlled	T22-CTRL	CN17	17 hours per day	3.49	c/kWh
	Night Only	T22-NITE	CN8 & NO8	23:00 - 07:00	2.83	c/kWh
	Night with Boost	T22-NITE	CN9 & NB9	23:00 - 07:00 14:00 - 14:30	2.83	c/kWh
	Distributed Generation	T22-24DG	EG24	24 hrs per day	0.00	c/kWh
	Projected Charge	T22-24UC-PROJ			6.38	c/kWh
<b>T28<sup>10</sup></b>	<b>Commercial (200 – 299 kVA)</b>			<i>EIEP3</i>		
	Daily Charge	T28			25.00	\$/day
<b>TOU Metering Only</b>	Uncontrolled	T28-24UC		24 hrs per day	4.66	c/kWh
	Power Factor Charge <sup>4</sup>	T28-PFC			7.00	\$/kVAr/mth
	Projected Charge	T28-24UC-PROJ			4.66	c/kWh
<b>T28N<sup>4,10</sup></b>	<b>Commercial (200 – 299 kVA)</b>			<i>EIEP1</i>		
	Daily Charge	T28N			25.00	\$/day
	Uncontrolled	T28N-24UC	UN24 D16 / N8	24 hrs per day	4.66	c/kWh
	Distributed Generation	T28N-24DG	EG24	24 hrs per day	0.00	c/kWh
	Projected Charge	T28N-24UC-PROJ			4.66	c/kWh
<b>T50 / T50N<sup>4,9</sup></b>	<b>Large Commercial (300 – 1,499 kVA)</b>			<i>EIEP3</i>		
	Distribution Charge	T50-DIST			POA	\$/day
	Transmission Charge <sup>5</sup>	T50-TRANS			POA	\$/day
	Variable Charge	T50-KWH			0.00	\$/kWh
	Power Factor Charge <sup>4</sup>	T50-PFC			7.00	\$/kVAr/mth
<b>T60 / T60N<sup>4</sup></b>	<b>Large Commercial (≥ 1,500 kVA)</b>			<i>EIEP3</i>		
	Distribution Charge	T60-DIST			POA	\$/day
	Transmission Charge <sup>5</sup>	T60-TRANS			POA	\$/day
	Variable Charge	T60-KWH			0.00	\$/kWh
	Power Factor Charge <sup>4</sup>	T60-PFC			7.00	\$/kVAr/mth

1. Please note these charges are excluding GST

2. Please refer to the Eastern unmetered supply schedule for additional information for unmetered ICP charges

3. These Price Categories and associated Tariff Options are only available to Residential Connections

4. Power factor charges do not apply for any ICP on a Price Category ending in "N"

5. Transmission Prices include Transmission charges and other recoverable costs such as council rates and industry levies

6. AICO is now closed as per paragraph 33

7. TOU Peak and Off-Peak times defined in paragraph 24.3

8. Conditional tariff options are only available for retailers who have been granted an exemption to TOU charges

9. Effective 1 April 2020, T50 & T50N ICPs are subject to a minimum AMD of 100 kW. See paragraph 30.4 for details

10. The T24 and T24N Price Categories were replaced by T28 and T28N effective 1 April 2021

## 26.0 Data File Requirements

- 26.1 Powerco requires data files for non-half hourly ICPs to be provided in the latest regulated version of the EIEP1 and EIEP3 protocols for half hourly data
- 26.2 Powerco requires EIEP1 submission files from Retailers to be in the “Replacement Normalised” format, which aligns to the Reconciliation Manager process
- 26.3 From 1 April 2021, Powerco no longer allows EIEP1 submission files in the "Incremental Normalised" format. It is expected that all Retailers implement a transition plan to move away from "Incremental Normalised" to "Replacement Normalised" prior to this date.
- 26.4 Powerco uses the dash (-) as a file separator between the Price Category and the Tariff Option for non-half hourly data, as of 1 April 2020. Prior to this the tilde (~) was used as a separator. Variable consumption should be provided to Powerco as follows:

Price Category	Tariff Option	EIEP1 Data file should contain	Data file type required
V05S	NITE	V05S-NITE	EIEP1
	24UC	V05S-24UC	
	CTRL	V05S-CTRL	
	AICO	V05S-AICO	
	UNML	V05S-UNML	
	24DG	V05S-24DG	
	PEAK	V05S-PEAK	
	OFFPK	V05S-OFFPK	
	PKIN	V05S-PKIN	
	OPIN	V05S-OPIN	
V06S	NITE	V06S-NITE	EIEP1
	24UC	V06S-24UC	
	CTRL	V06S-CTRL	
	AICO	V06S-AICO	
	UNML	V06S-UNML	
	24DG	V06S-24DG	
	PEAK	V06S-PEAK	
	OFFPK	V06S-OFFPK	
	PKIN	V06S-PKIN	
	OPIN	V06S-OPIN	
V22	24UC	V22-24UC	EIEP1
	24DG	V22-24DG	
V28N	24UC	V28N-24UC	EIEP1 (NHH only)
	24DG	V28N-24DG	
T05S	NITE	T05S-NITE	EIEP1
	24UC	T05S-24UC	
	CTRL	T05S-CTRL	
	AICO	T05S-AICO	
	UNML	T05S-UNML	
	24DG	T05S-24DG	
	PEAK	T05S-PEAK	
	OFFPK	T05S-OFFPK	
	PKIN	T05S-PKIN	
	OPIN	T05S-OPIN	

Price Category	Tariff Option	EIEP1 Data file should contain	Data file type required
T06S	NITE	T06S-NITE	EIEP1
	24UC	T06S-24UC	
	CTRL	T06S-CTRL	
	AICO	T06S-AICO	
	UNML	T06S-UNML	
	24DG	T06S-24DG	
	PEAK	T06S-PEAK	
	OFFPK	T06S-OFFPK	
	PKIN	T06S-PKIN	
OPIN	T06S-OPIN		
T22	24UC	T22-24UC	EIEP1
	CTRL	T22-CTRL	
	NITE	T22-NITE	
	24DG	T22-24DG	
T28N	24UC	T28N-24UC	EIEP1 (NHH only)
	24DG	T28N-24DG	

## 27.0 Power Factor Charges

- 27.1 If a Consumer's power factor at a Connection is less than 0.95 lagging, the Distributor will charge a power factor charge of \$7.00kVAr/month in respect of the Consumer
- 27.2 The kVAr chargeable quantity represents the largest monthly difference between the kVAr amount recorded in any one half-hour period, and one third of the kW demand recorded in the same half-hour period. The charge is applicable only during weekdays, between 7 am and 8 pm (trading periods 15 to 40 inclusive).
- 27.3 The Distributor, subject to paragraph 27.1 and 27.4, will apply power factor charges for all Consumers with TOU metering in the Price Categories V28, V40, V60, T28, T50 and T60.
- 27.4 The Distributor, at its discretion, may elect not to levy power factor charges on a particular ICP. This will be through moving the ICP to a Price Category ending with "N". For instance, an ICP with the Price Category V28 would be moved to Price Category "V28N", where no power factor charges are being levied.

## 28.0 Conditions: Builder's Temporary Supply

- 28.1 In the Eastern region, builder's supply Connections must only be the Price Categories "T06S" or "V06S". Powerco will not accept these Connections on the Price Categories "T05S" or "V05S" as builder's supplies are not considered Residential Connections.
- 28.2 Powerco will not accept temporary builder's supplies Connections as unmetered Connections
- 28.3 Powerco requires an ICP for each and every temporary connection. Therefore, sites with multiple temporary supplies require separate ICPs to be established for each point of connection.
- 28.4 Builder's Temporary Supplies are available for a period of up to six months

## 29.0 Conditions: Low-Usage Price Categories and Tariff Options

- 29.1 The Low-Usage Price Categories for the Eastern Region (T05S and V05S) are available to the Retailer only:
- For Residential Connections that are supplied electricity;
  - In conjunction with the Retailer's Consumer Low-Usage Tariff Option that complies with the requirements of the Electricity (Low Fixed Tariff Option for Domestic Consumers) Regulations 2004;
  - If the Distributor's prior approval (that approval not to be unreasonably withheld) of the Retailer's process for ascertaining that the relevant Consumer is eligible for the Low Usage Tariff Option has been given;

Subject to the condition that if the Distributor becomes aware that a Low-Usage Tariff Option has been made available to, or is being applied by, a Retailer other than in accordance with this paragraph, the Distributor may remove the relevant Consumer from the Low-Usage Tariff Option to another Price Category and adjust the charges accordingly.

Such adjustment to the charges may include recovery from the Retailer of any underpayment by the Retailer resulting from the Low-Usage Tariff Option being applied other than in accordance with this Pricing Schedule, together with interest, calculated at the Interest Rate on the first day of the period during which the Low-Usage Tariff Option was incorrectly applied, until the day on which the underpayment is recovered by the Distributor.

### **30.0 Conditions: Asset Specific Delivery Charges**

- 30.1 Asset specific Delivery Charges will apply to Consumers that have installed capacity of 300 kVA or greater, but may also be applied to smaller Connections where applicable – for instance if a backup supply is required, or there is significant generation at the site
- 30.2 Daily charges for Price Categories V40, V60, T50 and T60 are subject to periodic review based on site-specific information, including electricity demand and volume data
- 30.3 Asset Specific Delivery Charges (V40, V60, T50 and T60) charged pursuant to the Network Agreement will be disclosed upon request to the Consumer to which these charges apply, or to the Consumer's current Retailer
- 30.4 As of 1 April 2020, the chargeable AMD for the V40 and T50 Price Categories is 100 kW or the actual demand, whichever is the higher. This change introduced a minimum demand level (consistent with the methodology in Powerco's Western Region), which ensures the cost of providing upstream distribution capacity is adequately recovered.

# Meter configuration



## Part D: Meter Configuration

### 31.0 Controlled Price Category and Price Component conditions

31.1 For the Western and Eastern regions:

- (a) Consumers allocated to a Controlled Price Category or Controlled Tariff Option will have their load controlled by:
  - I. The Distributor:
    - For the purposes of grid and network security;
    - For the purposes of optimising transmission charges; or
    - In abnormal supply or operating circumstances (e.g. a shortage or anticipated shortage of electricity); and
  - II. The Distributor, acting on the instruction of the Instructing Retailer within these areas for other purposes
- (b) If the Retailer is not agreeable to its Consumers' load being controlled by the Distributor for the purposes and in the circumstances set out in paragraph 32, the Retailer must choose or request the Distributor to allocate the Consumer to an Uncontrolled Price Category or Uncontrolled Tariff Option.
- (c) All Consumers in Controlled Price Categories or Controlled Tariff Options as at 1 April 2021 have, via their Retailer, agreed to assign to the Distributor the whole of the right to control the load (for whatever purpose)

31.2 To be eligible for the Controlled Price Category or Controlled Tariff Option, the Retailer must ensure that the Consumer has Load Control Equipment that:

- (a) Is, and will continue to be, in working order;
- (b) When in operation, will result in a reduction in the Consumer's demand, where such load reduction is instantaneously available at the time of load-shedding operation. For example, by controlling the supply of electricity to those of the Consumer's goods (including, without limitation, Consumer goods or capital goods) that consume or intend to consume electricity to be controlled;
- (c) Will be activated by the Distributor's load-signalling equipment (both pilot wire (cascade) and ripple control signalling equipment);
- (d) Will not block or interfere with the Distributor's load-signalling equipment; and
- (e) Does not solely consist of a controlled Night meter.

31.3 No Controlled Price Category or Controlled Tariff Option is available at those GXP's where the Distributor does not have operational Load Control Equipment. Currently there is no operational Load Control Equipment at the Waverley GXP.

### 32.0 Conditions: Description of Controlled Options

- 32.1 The eligibility criteria in the following paragraph applies to all controlled options (including AICO and CTRL) and must be satisfied
- 32.2 Examples of Consumer appliances for a Controlled Tariff Option can include but are not limited to:
- Hot water cylinders;
  - Electric kilns, or;
  - Any appliances representing a significant proportion of the Consumer's demand that may be controlled without increasing the Consumer's uncontrolled demand.
- 32.3 For an ICP to be eligible for Controlled only (CTRL) Tariff Option the following eligibility criteria apply and must be satisfied:
- (a) There is only one Point of Connection at the premises;
  - (b) There is only one meter and such meter has only one register, or a single element with single register on an advanced meter;
  - (c) All load at the premises must be controllable; and
  - (d) The Load Control Equipment when in operation must result in the reduction to zero of all controllable load.

### 33.0 Conditions: All Inclusive (AICO)

- 33.1 The "All Inclusive" metering configuration and tariff option (AICO) is closed for all new connections from April 2017, noting that:
- The AICO tariff option is still available for any connections with a meter installed prior to 1 April 2017;
  - For any subsequent meter replacement after this date, the existing "All Inclusive" metering configuration must be replaced with an equivalent "Uncontrolled" and "Controlled" metering configuration.
  - The Distributor may apply the equivalent uncontrolled Price Category if "All Inclusive" metering is installed.

### 34.0 Conditions: Description of Night (NITE) Only Supply

- 34.1 For an ICP to be eligible for the night only supply (NITE) Tariff Option, the following additional eligibility criteria applies and must be satisfied:
- (a) The load on the consumer appliances to be controlled are permanently wired and recorded onto a separate meter (the "NITE" supply meter) or to a separate element with a single register on an advanced meter and such element is connected to a ripple control relay;
  - (b) No uncontrolled appliances are connected to the NITE supply meter; and
  - (c) The Load Control Equipment when in operation must result in the reduction to zero of all load connected to the NITE supply meter.

## 35.0 Existing Load Control Signals by Region

GXP	CN8 NO8	CN9 NB9	CN17 / IN17 DIN16 / NIN8	CN23	UN24 D16 / N8
<b>EASTERN REGION – VALLEY</b>					
Hinuera (HIN0331)	✓	✗	✓	✗	✓
Kinleith (KIN0331 & KIN0112)	✓	✗	✓	✗	✓
Kopu (KPU0661)	✓	✗	✓	✗	✓
Piako (PAO1101)	✓	✗	✓	✗	✓
Waihou (WHU0331)	✓	✗	✓	✗	✓
Waikino (WKO0331)	✓	✗	✓	✗	✓
<b>EASTERN REGION – TAURANGA</b>					
Tauranga (TGA0111 and TGA0331)	✓	✓	✓	✓	✓
Mt Maunganui (MTM0331)	✓	✓	✓	✓	✓
Te Matai (TMI0331)	✓	✓	✓	✓	✓
Kaitemako (KMO0331)	✓	✓	✓	✓	✓
<b>WESTERN REGION – WAIRARAPA</b>					
Greytown (GYT0331)	✓	✓	✓	✗	✓
Masterton (MST0331)	✓	✓	✓	✗	✓
<b>WESTERN REGION – MANAWATU</b>					
Bunnythorpe (BPE0331)	✓	✓	✓	✗	✓
Linton (LTN0331)	✓	✓	✓	✗	✓
Mangamaire (MGM0331)	✓	✗	✓	✗	✓
<b>WESTERN REGION – TARANAKI</b>					
Carrington (CST0331)	✓	✓	✓	✗	✓
Huirangi (HUI0331)	✓	✗	✓	✗	✓
Hawera (HWA0331)	✓	✓	✓	✗	✓
Opunake (OPK0331)	✓	✓	✓	✗	✓
Stratford (SFD0331)	✓	✗	✓	✗	✓
<b>WESTERN REGION – WHANGANUI</b>					
Brunswick (BRK0331)	✓	✗	✓	✗	✓
Marton (MTN0331)	✓	✗	✓	✗	✓
Mataroa (MTR0331)	✓	✗	✓	✗	✓
Ohakune (OKN0111)	✓	✗	✓	✗	✓
Wanganui (WGN0331)	✓	✗	✓	✗	✓
Waverley (WVY0111)	-	-	-	-	✓

✓ Control signal available

✗ Control Signal not available

- No load control available

Note: Metering configuration code CN9 / NB9 is closed to new connections.

Note: CN23 is closed to new connections including meter replacements

## 36.0 Tariff Option Descriptions & Conditions

Tariff Description	Tariff Option	Register Content Code	Description
Uncontrolled	24UC	UN24 D16 / N8	A 24-hour continuous supply Also applies for both registers on Day/Night meters (with or without associated controllable load)
All-inclusive single meter option –refer to conditions in paragraph 33	AICO	IN17 DIN16 / NIN8	A 24-hour supply and a mandatory additional controllable supply. Available only for single meter, single register configurations. If the single meter has two registers, then consumption must be submitted as 24UC and CTRL. Under normal supply circumstances, electricity is usually available to controlled Consumer appliances for at least 17 hours per day. Under abnormal supply or operating circumstances (e.g. where there is a shortage or anticipated shortage of electricity) control of the controllable supply may be for greater than seven hours per day (e.g. 22 hours per day). If no additional controllable supply, the ICP must be allocated as 24UC
TOU Peak / Off-peak - Uncontrolled	PEAK / OFPK	UN24 / 7304	Refer “Uncontrolled” description
TOU Peak / Off-peak – All Inclusive	PKIN / OPIN	IN17 / 7304	Refer “All Inclusive” description
Controlled	CTRL	CN17  CN23	Electricity under normal supply circumstances is usually available for at least 17 hours per day Under abnormal supply or operating circumstances (e.g. where there is a shortage or anticipated shortage of electricity), control may be for greater than seven hours per day (e.g. 22 hours per day) CN23 closed to new connections including meter replacements
Night supply only	NITE	CN8 NO8	Available only for appliances permanently wired to a separate meter. Controlled option with power between the hours of 2300 to 0700. Consumer’s with separately controlled Night meters and no other form of controllable supply are not eligible for a Controlled Price Category.
Night with boost  Closed to new connections.	NITE	CN9 NB9	Available only for appliances permanently wired to a separate meter  Controlled option with power between the hours of 2300 to 0700, plus a minimum “boost period” of 60 minutes, generally between 14:00-15:00  Appliances must not draw current outside of these hours  Consumer’s with separately controlled Night meters and no other form of controllable supply are not eligible for a Controlled Price Category
Distributed Generation	24DG	EG24	Available only to Connections that are capable of exporting onto the Distributor’s Network and do not have Time of Use Meters. This Tariff Option is to only apply to the separately metered export volumes. To be eligible for this Tariff Option the connection must comply with the Distributors Distributed Generation policy (per paragraph 9).

## 37.0 Conditions: Metering Requirements

- 37.1 Consumers on the Valley Distribution Network with a load of greater than 300 kVA must have, in the Distributor’s opinion, appropriate TOU Metering.
- 37.2 Consumers on the Tauranga Distribution Network with a load of greater than 300 kVA must have, in the Distributor’s opinion, appropriate TOU Metering.

### **38.0 Conditions: Meter Register Code Reporting**

- 38.1 Within each Price Category, there may be more than one variable charge available for use. For each Price Category there will be a unique Tariff Option with a unique meter register code.

For some Price Categories it will be possible for a Consumer to be connected to multiple supply options, each with its own meter register. Such an ICP will have one Price Component Code for each unique meter register code.

Each monthly volume quantity submitted will then incorporate, for that ICP, a volume for each selected variable Delivery Charge category. Each volume will then be associated with a Tariff Option (AICO, CTRL, 24UC, NITE, etc).

- 38.2 For the V40, V60, T50 or T60 Price Categories, volumes are to be submitted monthly via the EIEP3 file format.
- 38.3 Volume is submitted for Price Categories other than V40, V60, V601, T50 or T60 under the "KWH" Tariff Option, this volume will be charged at the highest value in the available Tariff Option for that Price Category, generally 24UC.



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# Streetlights / Unmetered supply



## Part E: Streetlights / Unmetered Supply

### 39.0 Introduction

39.1 Unmetered supply charges are detailed in paragraphs 18, 23 and 25. This section provides Retailers with information relating to charging unmetered ICPs

### 40.0 Western Region

40.1 The Western Region has GXP based pricing and as such unmetered volumes are included in the reconciled volumes. This negates the need for specific unmetered charges in this pricing region. However, Powerco does require streetlight information in relation to streetlights, and Retailer’s obligations are detailed in paragraph 40.2.

40.2 Unmetered Streetlights:

- (a) Powerco must receive (on a monthly basis) the streetlight or other unmetered load database from the Retailer, or council / New Zealand Transport Agency (NZTA) (or both) as agreed, by the fourth working day of the calendar month
- (b) Where Powerco has not received the streetlight database as required, or no longer holds confidence in the quantities detailed by the Retailer or council / NZTA (or both), Powerco will estimate, on a reasonable endeavours basis, the light fitting quantity
- (c) Where the data is found to not be an accurate reflection of the streetlights that are installed, Powerco may apply additional charges as per section 9.1 in recognition of the costs it incurs through the provision of inaccurate data
- (d) The requirements of 40.2 (a) – 40.2 (c) above do not apply to lights where evidence has been provided to Powerco that all consumption is metered by certified revenue metering installations

40.3 Price Category: Streetlight Lighting Control Equipment Charge

- (a) The Distributor owns Lighting Control Equipment attached to or associated with streetlights in the Western Region
- (b) The Lighting Control Equipment charge for the use of each Distributor streetlight Lighting Control Equipment is:

Daily charge per streetlight Lighting Control Equipment

\$0.1185 dollars per Lighting Control Equipment per day

### 41.0 Eastern Region - Conditions

41.1 The unmetered Price Categories are not available for Residential Connections

41.2 The Distributor does not allow Unmetered Supply (such as streetlights) to be shared across multiple points of connection for new connections

- 41.3 The Unmetered Price Categories are not available for new under-verandah lighting and private streetlight connections from 1 April 2015 (i.e. all new connections must be metered)
- 41.4 Unmetered supply charges are allocated as:
- (a) V01 and T01 – Unmetered load such as council flow meters, pumps, cameras, small telecommunication cabinets and others. The Distributor will determine eligibility for this Price Category via Powerco’s connections process and policy.
  - (b) V02 and T02 – Council/NZTA streetlighting
- 41.5 Streetlight databases must be received as follows:
- (a) Powerco must receive monthly the streetlight or other unmetered load database from the Retailer or council (or both) as agreed, by the fourth working day of the calendar month
  - (b) Where Powerco has not received the streetlight database as required, or no longer holds confidence in the quantities detailed by the Retailer or council (or both), Powerco will estimate, on a reasonable endeavours basis, the light fitting quantity
- 41.6 Where a permanent unmetered supply’s connected capacity requirement exceeds 5kVA, single phase metering is necessary. Streetlighting is excluded on approval via Powerco’s connections process and policy.
- 41.7 Volume data for all unmetered ICPs must be included in a traders EIEP1 file using the appropriate Price Category and Tariff Option of UNML. For example, T01-UNML or T02-UNML.
- 41.8 Where a metered ICP also has load which is unmetered (such as under-verandah lighting, private lights or signage) the unmetered volume data must be submitted in the Trader’s EIEP1 file using the relevant Price Category and the Tariff Option UNML. For example, an ICP on the T06S Price Category should have the code T06S-UNML for all unmetered load associated with that ICP.

## 42.0 Eastern Region - Process

- 42.1 Charge codes are allocated to each ICP depending on the type of installation or supply it has installed. Some ICPs may have several installations under the same charge code and/or a variety of charge codes associated with it.
- 42.2 The Distributor will populate the electricity Registry with the equipment wattage and operating hours according to the Electricity Authority Unmetered Load Guidelines:
- (a) From 1 April 2018 the load factor in the Registry unmetered load description field is 0% (prior to 1 April 2018 this factor was set to 10%); and
  - (b) Total equipment wattage is equal to the equipment wattage (including ballast if applicable) multiplied by the quantity of fixtures installed.
- 42.3 Unmetered streetlights not reconciled as part of a Distributor Unmetered Load (DUML) will have a ballast figures applied as per the standardised table of streetlight

wattages published by the Electricity Authority

<https://www.ea.govt.nz/dmsdocument/22161-standardised-table-of-streetlight-wattages>

- 42.4 Charges for Council and New Zealand Transport Agency (NZTA) unmetered streetlighting (V02 and T02) are determined by:
- (a) Fixed Charge - quantity (number of light fixtures connected) multiplied by the unmetered supply Fixed Charge per day (V02 and T02); and
  - (b) Powerco will estimate streetlight-fitting quantities and apply a penalty in instances where streetlight database information is not provided or updated as required.
- 42.5 Charges for V01 and T01 unmetered supply (other than council and NZTA streetlighting covered by V02 and T02) are determined on:
- (a) The equipment wattage (including ballast if applicable);
  - (b) Operating hours (number of hours the equipment is consuming electricity); and
  - (c) The quantity of fixtures/equipment installed.

### 43.0 Eastern Region - Calculation

- 43.1 **Unmetered Streetlights Fixed Charge Calculation** (Council/NZTA Streetlights on T02 or V02 Price Categories) = [The quantity of equipment installed] x [Days in Month] x [Delivery Price]
- 43.2 **Unmetered Load kWh Calculation** (excluding Council/NZTA Streetlights) = [The quantity of equipment installed] x [Wattage plus ballast (if applicable)] x [Days in Month] x [Operating Hours] / 1,000
- (a) For example: 2 x 50W Lights + Ballast of 11W, 31 days in month, 12 daily operating hours =  $\{[2 \times (50 + 11)] \times 31 \times 12\} / 1,000 = 45.38$  kWh.
- 43.3 **Unmetered Load Charge Calculation** (excluding Council/NZTA Streetlights) = Unmetered Load kWh Calculation (kWh) x Delivery Price.
- (a) For example: 1 x 100W appliance, 31 day month, 8 daily operating hours =  $(1 \times 100 \times 31 \times 8) / 1,000 = 24.80$  kWh.
- 43.4 Shared Unmetered Load: If the Unmetered load is shared across multiple ICPs then the consumption determined in the equations above should be divided by the number of ICPs sharing the load. This figure should then be applied to every ICP sharing that unmetered load.



# Additional information



## Contents

### Schedule 11

Loss factors

### Schedule 12

Billing and settlement

## Section Two: Loss Factors

### 1.0 General

- 1.1 Losses and 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 Network Agreement, to ensure that they reflect total unaccounted for electricity on the Network as accurately as reasonably possible
- 1.2 The loss factors currently applying at each GXP are described in the tables below

### 2.0 Western Region Loss Factors as at 1 April 2021

- 2.1 Losses are calculated at the balancing area level and then applied to ICPs within that balancing area, depending on the supply voltage
- 2.2 All ICPs that relate to streetlights (including bus shelters and other miscellaneous lighting) will use a loss category and factor from the table below, with an “SL” suffix added to the Category (eg CSTSL). This is to allow specific identification and allocation of volumes that relate to streetlights across the Western Region.
- 2.3 There are some exceptions, mostly large industrial ICPs, to which individual loss factors apply. Please contact Powerco for further information.

Region	GXP	Balancing Area	Low Voltage / 400V Metering		High Voltage / 11kV Metering	
			Category	Loss Factor	Category	Loss Factor
Taranaki	Carrington	BA1WESTPOCOG	CST	1.0700	CST11	1.0250
Taranaki	Huirangi	BA1WESTPOCOG	HUI	1.0700	HUI11	1.0250
Taranaki	Stratford	BA1WESTPOCOG	SFD	1.0700	SFD11	1.0250
South Taranaki	Hawera	BA2WESTPOCOG	HWA	1.0780	HWA11	1.0380
South Taranaki	Opunake	BA2WESTPOCOG	OPK	1.0780	OPK11	1.0380
Wanganui	Brunswick	BA3WESTPOCOG	BRK	1.0900	BRK11	1.0300
Wanganui	Marton	BA3WESTPOCOG	MTN	1.0900	MTN11	1.0300
Wanganui	Mataroa	BA3WESTPOCOG	MTR	1.0900	MTR11	1.0300
Wanganui	Ohakune	BA3WESTPOCOG	OKN	1.0900	OKN11	1.0300
Wanganui	Wanganui	BA3WESTPOCOG	WGN	1.0900	WGN11	1.0300
Wanganui	Waverley	BA3WESTPOCOG	WVY	1.0900	WVY11	1.0300
Manawatu	Bunneythorpe	BA4WESTPOCOG	BPE	1.0850	BPE11	1.036
Manawatu	Linton	BA4WESTPOCOG	LTN	1.0850	LTN11	1.036
Manawatu	Mangamaire	BA5WESTPOCOG	MGM	1.0950	MGM11	1.036
Wairarapa	Greytown	BA6WESTPOCOG	GYT	1.0800	GYT11	1.0120
Wairarapa	Masterton	BA6WESTPOCOG	MST	1.0800	MST11	1.0120

### 3.0 Eastern Region Loss Factors as at 1 April 2021

#### 3.1 Valley Distribution Network:

For ICPs supplied from GXPs at Hinuera, Kinleith, Kopu, Piako, Waihou and Waikino (balancing areas BA2EASTPOCOG, BA3EASTPOCOG, BA4EASTPOCOG, & BA5EASTPOCOG).

Consumer Category	Metering Voltage	Category	Loss Factor
Connection capacity of 60 Amps or less (including unmetered Connections)	Low Voltage	VYLALV	1.0814
Connection capacity for greater than 60 Amps, up to and including 160 Amps	Low Voltage	VYMALV	1.0695
Connection capacity greater than 200 Amps	Low Voltage	VYHALV	1.0475
Connection capacity greater than 200 Amps	High Voltage	VYHAHV	1.0330
V60 individually priced Consumers		SPEC	Site -specific (default 1.0330)

#### Explanatory Note:

- Loss factors applicable to T60 Consumers are calculated on a site-by-site basis. Contact Powerco for further information;
- “Low Voltage” means metered at 230V single-phase or 400V three-phase, or unmetered; and
- “High Voltage” means metered at 6.6kV or higher voltage.

#### 3.2 Tauranga Distribution Network:

For ICPs supplied from GXPs at Tauranga, Mt Maunganui, Te Matai and Kaitemako (balancing area BA1EASTPOCOG)

Capacity and Voltage Connection	Loss Category		Loss Factor
	33kV GXP	11kV GXP	
Low-Voltage single-phase and three-phase Connection metered at Low Voltage	TLV3	TLV1	1.055
Transformer or High-Voltage Connection metered at Low Voltage	TXLV3	TXLV1	1.033
Transformer or High-Voltage Connection metered at High Voltage	TXHV3	TXHV1	1.023

#### Explanatory Note:

- Loss factors applicable to T60 Consumers are calculated on a site-by-site basis. Contact Powerco for further information;
- “Low Voltage” means metered at 230V single-phase or 400V three-phase, or unmetered; and
- “High Voltage” means metered at 6.6kV or higher voltage.

## 4.0 Site-Specific Losses

4.1 The following site-specific loss codes and factors apply from 1 April 2021. Please contact Powerco for further information on site specific losses.

### (a) Generation Losses

Loss Code	Loss Factor Consumption	Loss Factor Generation
POCO001	1.070	1.070
POCG002	1.038	1.038
POCG003	1.0	1.0
POCG004	1.038	1.010
POCG005	1.080	1.080
POCG006	1.080	1.080
POCG007	1.040	1.0
POCG008	1.073	1.0
POCG009	1.080	1.080
POCG010	1.080	1.080
POCG011	1.0	1.0
POCG012	1.0652	1.0652
POCG013	1.0	1.0314
POCG014	1.0	1.0
POCG015	1.0	1.0
POCG016	1.0	1.0
POCG017	1.0	1.0
POCG018	1.048	1.048
POCG019	1.070	1.070
POCG020	1.063	1.063
POCG021	1.080	1.080
POCG022	1.063	1.063
POCG023	1.0652	1.0652
POCG024	1.0	1.0169
POCG025	1.0	1.0
POCG026	1.0	1.0
POCG027	1.0652	1.0
POCG028	1.033	1.0
POCG029	1.0	1.0
POCG030	1.0	1.0

### (b) Load Losses

Loss Code	Loss Factor Consumption	Loss Factor Generation
POCO201	1.008	1.0
POCO202	1.011	1.0
POCO203	1.012	1.0
POCO204	1.014	1.0
POCO205	1.015	1.0
POCO206	1.017	1.0

Loss Code	Loss Factor Consumption	Loss Factor Generation
POCO207	1.018	1.0
POCO208	1.0149	1.0
POCO209	1.023	1.0
POCO210	1.024	1.0
POCO211	1.025	1.0
POCO212	1.026	1.0
POCO213	1.029	1.0
POCO214	1.032	1.0
POCO215	1.0864	1.0
POCO216	1.038	1.0

## Section Three: Billing and Settlement Process

### 1.0 General

The following covers Powerco'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 both industry bodies and to the Distributor.

Standard monthly data provision and billing timeline:

<b>1st working day of the month (revision billing)</b>	Retailer must provide Consumption Data in EIEP1 and EIEP3 format (EIEP3 data only if it is missing or originally incorrect) for upcoming revision billing (R3, R7 and R14). Please refer to paragraph 5.3 of this schedule.
<b>5<sup>th</sup> working day by 4:00 pm (initial billing)</b>	Retailer must provide Consumption Data in EIEP1 and EIEP3 format (Consumption Data Due Date) for initial billing
<b>6<sup>th</sup> – 7<sup>th</sup> working day</b>	Invoices produced for direct billed Customers and sent to Retailers or Direct Customers, as applicable
<b>8<sup>th</sup> – 10<sup>th</sup> working day</b>	Initial ICP billing/ GXP billing invoices produced for all Retailers
<b>Last business day of the month</b>	Revision invoices produced for ICP billing and sent to Retailers or direct Customers, as applicable

#### 1.1 Retailer's Responsibility for Points of Connection:

- (a) The Retailer must adhere to the processes set out in the Network Agreement and any relevant Powerco policy when establishing or altering the physical status of a Point of Connection;
- (b) The Distributor will maintain a database of Points of Connection, referenced by Installation Control Points, and aligned to the information held by the Registry appointed under the Code to determine which Retailer is responsible for an Installation Control Point and the status of the Point of Connection; and
- (c) The Retailer may request, for all Installation Control Points for which the Distributor has the Retailer listed as being responsible, an electronic copy of the relevant part of the database.

### 2.0 Submissions – Consumption Data

- 2.1 Initial Billing, each Retailer must provide Consumption Data for the Consumption Month to be billed on or before the 5th working day of the Processing Month (Consumption Data Due Date). For revised billing, please refer to the table above.
- 2.2 Each Retailer is to provide Consumption Data in a replacement normalised format (which is data adjusted to reflect a start and end date that matches the start and end date of Consumption Month to be invoiced).
- 2.3 Consumption Data must be normalised using the Replacement Normalised methodology. Retailers may not use any other submission methodologies (such as Incremental Normalised) without consultation with, and approval by, the Distributor.
- 2.4 Each Retailer should submit Consumption Data to the Distributor via the registry EIEP Transfer Tool. Files delivered to Powerco must be compliant with the format

structure of the latest regulated version EIEP1 and EIEP3 protocols. Each Retailer must upload a single Initial File, which includes records for all ICPs on any of the Distributor's Networks.

- 2.5 If, by the Consumption Data Due Date, Retailers have not submitted an Initial File that complies with the latest regulated version of the EIEP1 and EIEP3 protocols (or have not submitted an Initial File at all) then the Initial File will not be accepted for billing and the Distributor may estimate volume for such record as detailed in paragraph 3.1 (c)
- 2.6 Consumption Data received by the Distributor after the Consumption Data Due Date may be subject to a Late Consumption Data fee set out in paragraph 8.1 of Part A, Section One, of this document

### 3.0 Process by Billing Methodology

#### 3.1 ICP-Based Billing Process

- (a) The ICP based invoice issued to each Retailer will detail the ICP related variable and fixed charges that apply across the Eastern and Western Regions (SPECIAL, E100, E300 & E300R)
- (b) If a Customer is contracted directly with the Distributor via a Network Agreement, it will be denoted on the Registry via the Direct Billed Status field. These Customers are billed directly for Delivery Charges by the Distributor
- (c) The Distributor will calculate Delivery Charges for the Consumption Month based on Consumption Data provided (or estimated) and the number of Active and Ready ICPs on the Distributor's Network. For any ICPs that were Active or Ready during the Consumption Month where Consumption Data has not been provided, is incomplete, materially incorrect or not in the specified format the Distributor may estimate consumption based on:
  - I. The average daily volume for ICPs in the relevant Price Category for the month prior to the Consumption Month, or
  - II. For half-hour metered ICPs, the relevant ICP's consumption from the month prior to the Consumption Month (or the latest available Consumption Month).
- (d) The Distributor will provide an output file of all amounts invoiced with each invoice issued. The detail file will be in the format as specified in the regulated version of the EIEP1 protocol. Any Consumption Data estimated by the Distributor will have a "PROJ" (projection) appended to the relevant tariff option within this output file.

### 3.2 GXP-Based Billing Process

- (a) The invoices issued to each Retailer will detail the volume, demand, and fixed charges in relation to Connections on the E1 Price Category for the Western Region
- (b) Fixed Delivery Charges will be based on the number of ICPs with Active or Ready status that each Retailer has during the Consumption Month

### 3.3 Method of Determining Quantities

- (a) The method and structure of Delivery Charges determines what quantities are required for billing purposes
- (b) The Distributor uses reconciled data from the Reconciliation Manager (RM) to derive the quantities necessary for monthly billing of its GXP based Delivery Charges for the E1 Price Category
- (c) This data is deemed accurate, acceptable to all parties and readily available through the Reconciliation Manager (RM). In using data supplied by the RM, the Distributor applies the RM revision files when generated as part of the RM revision cycle. Should the data not be available from the RM, then the Distributor will produce an estimated invoice based on either the previous month's data or the data for the same month in the previous year, whichever is deemed appropriate by the Distributor (seasonally adjusted at the Distributor's discretion), and this will be adjusted when RM data becomes available.
- (d) In situations where data is not available through the RM (e.g. totally Embedded Generation that is not reconciled), the Distributor will obtain metered data through appropriate agreements and convert to GXP-based data by applying the appropriate Distribution Network loss factor(s)
- (e) To establish the quantities for the E1 Price Category, the quantities relating to the E100, E300, E300R, and SPECIAL Price Categories (adjusted by the appropriate Distribution Network loss factors) are subtracted from the half-hour gross load at the GXP (gross load = busload + Embedded Generation data)
- (f)  $E1 \text{ quantities} = \text{GXP gross load} - \text{sum of half hour adjusted quantities (E100 + E300 + E300R + SPECIAL)}$
- (g) For E100, E300, E300R, and SPECIAL Price Categories, site-metered data provided will be adjusted to GXP-based data by adding the appropriate Distribution Network loss factors. This Time of Use (TOU) metering data should mirror the data being submitted by the Retailer to the RM.
- (h) The Retailer must provide TOU metering data in EIEP3 format to the Distributor or the Distributor's nominated agent within five business days from the end of the prior month (Consumption Data Due Date) for any Connection within the E100, E300, E300R, and SPECIAL Price Categories
- (i) Where the Retailer has been unable to provide EIEP3 files for Western Region E100, E300, E300R, and SPECIAL ICPs, and is unable to provide estimated data, the volume will not be able to be subtracted from the GXP

volumes and therefore will be invoiced within the E1 residual volume. Similarly, inaccurate data, if not corrected prior to the GXP billing process run on business day 8, will impact on and may be included in the Delivery Charges invoiced to the E1 Price Category. This will be subject to subsequent adjustment via the revision cycle.

- (j) TOU metering data received by the Distributor after the Consumption Data Due Date, may be subject to a Late Consumption Data fee set out in paragraph 8.1 of Part A, Schedule One of this document

## 4.0 Payment

- 4.1 The invoice for GXP based Delivery Charges for the Consumption Month and any revision amounts 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
- 4.2 The invoice for ICP based Delivery Charges for the Consumption Month 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
- 4.3 ICP based revision invoices or credit notes are sent throughout the remainder of the Processing Month and will be due for payment on the 20th day of the following month
- 4.4 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
- 4.5 If any part of an invoice is not paid by the due date, Default Interest may be charged on the outstanding amount for the period that the Invoice remains unpaid.

## 5.0 Revision Cycles and Reconciliation

- 5.1 Revision Cycles
  - (a) Both the Distributor and the Retailer recognise that the cyclical nature of meter reading makes it impractical to provide completely accurate figures for consumption for each Point of Connection within the timeframe required for payment of Delivery Charges. It is, therefore, necessary to provide a structure for subsequent revisions of prior billed periods.
  - (b) Each revision cycle will account for changes in fixed and variable Delivery Charges due, based on Retailer switches, status changes, and Replacement Data uploaded by Retailers submitting to Powerco under the Replacement Normalised methodology
  - (c) Any Retailer submitting Replacement Normalised data to Powerco may submit Replacement Data up to 14 months from the Consumption Month to which the Replacement Data relates
  - (d) Where the Distributor reasonably considers that an additional revision cycle is required, it may, at its discretion, perform a 1-month revision in addition to the 3, 7, and 14-month revisions provided for in paragraph 5.3
- 5.2 Replacement Data
  - (a) Replacement Data can be either uploaded via the registry EIEP transfer tool (or provided via previously agreed methods) at any time up to 14 months

from the Consumption Month to which the Replacement Data relates. Replacement and Partial Replacement files will be subject to validation against file format and submission type business rules as applied by the Distributor from time to time and as outlined in paragraphs 2.4 and 2.5. Replacement Data submitted will be reconciled and billed when the Distributor runs its 3, 7, and 14-month revision billing cycles.

- (b) For Incremental normalised submissions (subject to paragraph 2.3), the Retailer is to progressively adjust the volumes in each Retailer billing cycle. Accordingly, only Partial Replacement Files will be accepted. Full Replacement Files will not be accepted under this method unless there has been a material error with the initial file received.
- (c) Incremental Normalised submissions (subject to paragraph 2.3), may include prior period corrections. These volumes will be billed along with the normalised volumes provided in the Current Month submission. Prior period volumes that can be attributed to consumption periods outside the Distributor's revision cycle limit (14 months) will be disregarded.
- (d) For Replacement Normalised submissions, volumes are not progressively revised and are replaced with Full Replacement Files or Partial Replacement Files. As such, the Distributor requires that Retailers submitting under this methodology supply 3, 7 and 14-month revision files. Replacement Data must comply with the latest regulated version of the EIEP1 protocol for full (R Files) and partial (X Files).
- (e) Replacement files for HHR metered data must comply with the latest regulated version of the EIEP3 protocol. Powerco's system processes EIEP3 full replacement files at the ICP level and replaces the volume for only those ICPs which are included in the file. This also applies for partial replacement files.
- (f) For GXP and ICP based billing, volumes will be progressively revised as set out in the revision schedule

5.3 Revision Schedule

Processing Month	Revision Cycle	Report Month	Processing Month	Revision Cycle	Report Month
April 2021	Initial	March 2021	October 2021	Initial	September 2021
	R3	December 2020		R3	June 2021
	R7	August 2020		R7	February 2021
	R14	January 2020		R14	July 2020
May 2021	Initial	April 2021	November 2021	Initial	October 2021
	R3	January 2021		R3	July 2021
	R7	September 2020		R7	March 2021
	R14	February 2020		R14	August 2020
June 2021	Initial	May 2021	December 2021	Initial	November 2021
	R3	February 2021		R3	August 2021
	R7	October 2020		R7	April 2021
	R14	March 2020		R14	September 2020
July 2021	Initial	June 2021	January 2022	Initial	December 2021
	R3	March 2021		R3	September 2021
	R7	November 2020		R7	May 2021
	R14	April 2020		R14	October 2020
August 2021	Initial	July 2021	February 2022	Initial	January 2022
	R3	April 2021		R3	October 2021
	R7	December 2020		R7	June 2021
	R14	May 2020		R14	November 2020
September 2021	Initial	August 2021	March 2022	Initial	February 2022
	R3	May 2021		R3	November 2021
	R7	January 2021		R7	July 2021
	R14	June 2020		R14	December 2020

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