

# Electricity delivery pricing policy

Applicable from 1 April 2024

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# **Pricing policy**

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### 1. Introduction and overview

EA Networks is the trading name of Electricity Ashburton Limited. We are a locally owned cooperative network company providing electricity delivery services in the Mid Canterbury area, between the Rakaia and Rangitata rivers, including the townships of Ashburton and Methven, and extending into the foothills of the Southern Alps.

This document is intended for electricity retailers. It sets out the basis for charging for our electricity delivery services, applicable from 1 April 2024, as referenced in our distributor agreements with retailers via our pricing schedule. It provides details on the process and methods we use to set chargeable quantities, apply prices, and invoice charges. We generally update this document each year to reflect any changes in our pricing policy.

Details on how we set our pricing structure and derive prices are provided in our separate Pricing Methodology document.

Charges apply to connections (ICPs) in five categories, in summary:

Category	Description	Charges
General supply	All residential and small business connections, with sub-categories for different capacity supplies, and a range of volume price options	Fixed daily charge (\$/con/day) in 5 sub-categories, plus volume charges with anytime and controlled options (\$/kWh)
Irrigation	Irrigation connections with a pumping capacity greater than 20kW (and optional for smaller irrigation connections)	Capacity based daily charges (\$/kW/day) based on input rating of electric motors
Industrial	Industrial connections with category 3+ metering (generally greater than 500A supply)	Combination of a fixed daily charge and demand charges (\$/kVA/day)
Large Users	Individually priced major customer connections	Combination of fixed daily charges (\$/day) and demand charges (\$/kVA/day)
Generation Individually priced major generation connections		Fixed daily charges (\$/day)

The following sections of this document set out how we:

- determine which pricing category applies for each connection, and
- calculate and apply chargeable quantities for each connection category.

We invoice all charges monthly to the party who has contracted with us for our delivery service, the electricity retailer in most instances. Monthly charges are applied in an invoice dated at the end of each month for which services are provided, sent out by the 10th working day of the following month, and due for payment on the 20th. As well as the current month's charges, we apply washups using any updated information we have received for charges 3, 7 and 14 months prior.

Volume (\$/kWh) and metered demand (\$/kVA/day and \$/kW/day) based charges are applied based on metering information provided by retailers in EIEP1 and EIEP3 files. Fixed daily charges and capacity charges (\$/kVA/day and \$/kW/day) are applied based on records maintained on the Electricity Authority's Registry.



Connection specific fixed, demand and capacity based daily charges are not generally applied in respect of periods where a connection is not energised. Generally, this means that we apply charges to the retailer recorded on the Electricity Authority's registry for connections with status code 002 (energised), 888 (distributor only connection) and those with a status reason code of 5 (reconciled elsewhere). We may also apply charges where we determine that a connection is energised but the registry has not been updated.

To ensure we can accurately track and manage connections, for the equitable application of our fixed charges, and to meet the requirements under the Electricity Industry Participation Code (Code), the following requirements apply:

- each separate connection to our network must have its own ICP,
- each ICP can have a maximum of three network service fuses, with no more than one on each phase (additional fused supplies will be treated as separate ICPs), and
- the metering for an ICP must be at a single location.

Existing connections that are not aligned with these requirements will be split into separate ICPs under our ongoing work programme. Some limited exceptions apply, for example, where multiple fuses are required to meet large industrial loads.

# 2. General Supplies

Our general supply category includes all temporary connections, residential connections and most business connections, including a number of sites with half-hour interval metering, but excludes connections that belong to the other connection categories (those in the streetlighting, irrigation, large user and generation connection categories).

### Fixed daily charges

The category is split into sub-categories to cater for connections with different supply capacities. Each category attracts a different fixed daily charge which is applied on a \$/ICP/day basis.

Category	Price category code/ Price component code	Criteria / Capacity	Voltage
General supply – 8 kVA	GS05	Up to single phase 32 amps (or ≤ 8 kVA)	230V
General supply – 20 kVA	GS20	Greater than single phase 32 amps and up to:  • Single phase 80 amps • Two phase 45 amps • Three phase 32 amps (or ≤ 22 kVA)	230V, 400V or 460V
General supply – 50 kVA	GS50	Three phase 33 amps to 63 amps (or ≤ 50 kVA)	400V
General supply – 100 kVA	G100	Three phase 64 amps to 160 amps (or ≤ 110 kVA)	400V
General supply – 150 kVA	G150	Three phase 161 amps to 250 amps (or ≤ 173 kVA)	400V
General supply – 300 kVA	G300	Three phase 251 amps to 500 amps (or ≤ 345 kVA)	400V

For non-standard configurations, EA Networks will determine the connection category on a case-by-case basis. The maximum fuse size for a single-phase connection is 80 amps (some existing historical exceptions apply). Multi-phase connections can have different fuse sizes for each phase, but the difference between any two phases must not exceed 80 amps.

### **Volume charges**

In addition to the fixed daily charge, each connection will attract one or more of our volume charges applied on a \$/kWh basis as detailed in the table below:

Volume component	Price component code	Description	Valid register content codes, and period of availability
Anytime supply	GUEN	Unmetered supply Uncontrolled supply Inclusive supply (closed)	UML UN24 IN16
Controlled 16h supply	GCOP	Controlled water heating supply.  On for at least 16 hours per day.	CN16
Night only supply	GNEN	Night water heating supply. On for 8 hours between 9pm and 7am every night.	CN08, NO08
Night boost supply	G10N	Night with day boost water heating. On for 8 hours between 9pm and 7am every night, plus a three-hour boost between noon and 5pm each day.	CN11, NB11
Day (of DNW)	GDAY	The day part of a day / night and weekend meter. Applies 7am to 9pm Monday to Friday.	WDD14/WED14/N10 (three register) Or
Night & Weekend (of DNW)	GNWE	The night & weekend part of a day / night and weekend meter. Applies 9pm to 7am and all weekend.	WE24/WD14 (two register)
Anytime injection	GEDG	Injection from embedded generation	EG24

### Note:

- Controlled and day/night options are not available for connections in G100, G150 and G300. All volumes for
  these subcategories will be billed at the anytime supply (GUEN) price. However, controlled options (GCOP,
  GNEN, G10N) remain available for ICPs utilising the option as at 31 March 2023.
- Codes valid for metering installations established prior to 1 April 2018 are shown in grey.
- The Day vs night and weekend option is only available where the meter is configured with physical day vs night and weekend registers (as recorded on the Registry), or where the customer is on a suitably matched day vs night and weekend retail pricing plan (in which case the half hour data from an advanced meter may be accumulated and reported against the day vs night and weekend price component codes). D16/N8 meters may be reported as GDAY/GNWE (noting that this will not provide the benefit of the lower price during weekend days).
- All register content codes and period of availability combinations that do not match the combinations in the table above must be reported as GUEN. In particular, meters configured as an inclusive supply (IN16 or similar) attract the Anytime GUEN price.
- For commercial connections where half hour volumes are reported EIEP3 format, volume pricing will be applied using the Anytime GUEN price.

# Ripple signals for controlled tariffs

Volume based pricing for the controlled tariff options noted above is conditional on the relevant metered loads being connected via an appropriately configured 283 Hz Decabit ripple relay receiver. The designated ripple channels, switching times and service levels are set out in the following table.

Purpose		Ripple signal code	Control method		Fixed switching times			Register Configuration Code	Network price component code	Detail/Service level
Uncontrolled load NA			Uncontrolled	ontrolled				UN24	GUEN	
Uncontro	olled injecti	NA	Uncontrolled					EG24	GEDG	
		100 - 00 100 - 01		7:45 off (Mon to Fri)	10:15 on (Mon to Fri)	16:45 off (Mon to Fri)	19:15 on (Mon to Fri)			Controlled for daily peaks, and controlled
		100 - 02 100 - 03 100 - 04		8:00 off (Mon to Fri)	10:30 on (Mon to Fri)	17:00 off (Mon to Fri)	19:30 on (Mon to Fri)			for longer in response to seasonal peaks. Also used to maintain network security,
	Controlled	100 - 05 100 - 06 100 - 07 100 - 08	Dynamic and time based	8:15 off (Mon to Fri)	10:45 on (Mon to Fri)	17:15 off (Mon to Fri)	19:45 on (Mon to Fri)	CN16	GCOP	facilitate planned maintenance, and restore supply following faults. Target to be off for no more than 8 hours per day (and usually off for no more than 4 hours in any 8 hour period).
Load Control		100 - 09 100 - 10 100 - 11			,	17:30 off (Mon to Fri)	, ,			
	Night boost	103 - 15 103 - 16 103 - 17 110 - 56	Time based	22:20 on 22:25 on 22:30 on 22:35 on	6:20 off 6:25 off 6:30 off 6:35 off	13:00 on 13:10 on 13:20 on 13:30 on	16:00 off 16:10 off 16:20 off 16:30 off	NB11 (was CN11)	G10N	On for 8 hours between 9pm and 7am every night, plus a 3 hour boost between noon and 5pm each day.
	Night only	110 - 51 110 - 52 110 - 53 110 - 54 110 - 55	Time based	22:40 on 22:45 on 22:50 on 22:55 on 23:00 on	6:40 off 6:45 off 6:50 off 6:55 off 7:00 off			NO08 (was CN08)	GNEN	On for 8 hours between 9pm and 7am every night.
Tariff control	Day, Night & Weekend	110 - 50	Time based	21:00 on (Mon to Fri)	7:00 off (Mon to Fri)			WE24 (Low) WD14 (Normal)	GNWE GDAY	Day, night and weekend
	U/V	108 - 49							MCRU (Verandah) MCRF (Flood)	Under verandah lighting in all areas
		108 - 40								Ashburton East A
		108 - 41								Ashburton East B
		108 - 42								Ashburton West A
Public		108 - 43	Photocell							Ashburton West B
Lighting	Street	108 - 44							MCSL (Street)	Ashburton West C
	lighting	108 - 45							MCRF (Flood)	Tinwald, Hinds, Mayfield
		108 - 46								Ashburton East C
		108 - 47								Methven, Mt Somers
		108 - 48								Ashburton West D, Rakaia, Fairton

## Other charges

In further addition to fixed daily charges and volume charges above, a small number of ICPs attract daily fixture charges, reflecting the maintenance of additional fixtures. Note that volumes for unmetered fixtures must still be reported.

Other charges	Price component code	Description
Unmetered streetlighting	MCSL	Maintenance of unmetered streetlight fittings connected to a general supply
Unmetered floodlighting	MCRF	Maintenance of unmetered floodlighting fittings connected to a general supply
Unmetered verandah lighting	MCRU	Maintenance of unmetered under verandah fittings connected to a general supply

The "installation details" field on the Registry records ICPs that attract additional charges. For example, an entry of "MCRF2" shows that the ICP attracts 2 unmetered floodlight daily fixture charges.

### Changes in 2024

Effective 1 April 2024, the new G300 category was established and ICPs in the G150 category with a capacity greater than 345 kVA were shifted in to G300.

# 3. Irrigation Supplies

We provide a specific irrigation pricing category which is mandatory for irrigation connections with a pump capacity greater than 20kW (including irrigation connections that are maintained as a back-up and rarely used), except that:

- irrigation connections greater than 20kW in place prior to 30 October 2013 that are in the General Supply category may remain in the General Supply category (and if switched to the Irrigation Supply category, must remain in the category),
- irrigation connections that are less than or equal to 20kW have the option to switch between the appropriate general supply and irrigation categories on the condition that they stay in that option for a minimum of 12 months, and
- irrigation for sports fields (including golf courses) and flood pumps are not classified as irrigation connections.

For the above categorisation, the capacity considered is the combined capacity of the water pumping motors at the connection, based on the first of:

- the kW electrical input rating where this is shown on the motor nameplate, or
- the kW output rating on the nameplate multiplied by 1.085, or
- the horsepower output rating of the motor multiplied by 0.81.

### Chargeable capacity

Connections in the Irrigation Supply category attract a fixed daily charge per kW of chargeable capacity (\$/kW/day). The chargeable capacity is set to the kW capacity of the water pumping motors determined above, with a further allowance for associated loads being added as follows:

- electric pivot drives will be added at the rate of 0.5kW per span,
- air conditioning will be added at the input rating for the unit (in kW),
- stock and domestic water supply pumps up to 5kW will not be added, and
- electric fence, pump shed lighting, 3 pin utility socket will not be added.

Metered loading levels are monitored on a monthly basis, and where observed loading levels exceed the assessment above, the chargeable capacity will instead be set to the highest observed loading level. Where a metered assessment leads to a change in chargeable capacity, it will be applied from the first of the month following the date the assessment was made.

The resulting chargeable kW is subject to a minimum of 10kW, and is rounded to the nearest kW.



Where the chargeable kW has been established using a previous approach, that prior approach will remain valid until it is reviewed using the current approach or until a higher metered loading level is observed (and changes will not be backdated). EA Networks will determine the chargeable capacity for non-standard configurations.

Where EA Networks is involved with upgrade or downgrade work at an ICP the chargeable capacity will normally be adjusted as part of this process. Where equipment is changed without our involvement, the customer can request a review of the chargeable capacity via their retailer – we usually require a service request for an upgrade or downgrade (which is chargeable), and we will inspect the equipment installed and adjust the fused capacity accordingly.

Connections in this category are required to remain as dedicated irrigation connections and must remain separate from other types of load (e.g. an irrigation connection and a house cannot be combined into a single supply).

Irrigation connections are split between the following two subcategories for the daily capacity charge:

### Daily capacity charge

Category	Price category code/ Price component code	Description
Irrigation	ISCH	Standard irrigation connections
Irrigation without harmonic mitigation	ISCF	Irrigation connections that have not had harmonic mitigation equipment installed to EA Network's satisfaction, or where harmonic mitigation equipment has failed.

### **Volume charges**

Irrigation connections are currently "nil rated" for volume (kWh) charges, and volumes must be reported in EIEP1 or EIEP3 files as follows:

Volume component	Price component code	Description	Valid register content codes, and period of availability
All supply options	IUEN	All metering configurations	UN24 D16, N8
Anytime injection	IUDG	Injection from embedded generation	EG24

# 4. Industrial Supply

We maintain an industrial supply category for large connections that take supply in bulk. Charges are based on the level of capacity (in kVA) that we maintain and reserve for each customer's use.

In some situations, an ICP will be eligible for either a General Supply category or the Industrial Supply category, and in these situations the customer may elect which category the ICP will belong to on the condition that it stays in that option for a minimum of 12 months.

General eligibility criteria are:

- 11kV and 22kV connections (except those identified as large users below) will be categorised as Industrial Supply
- 400V connections with a capacity greater than 3 phase 500 amps will be categorised as Industrial Supply
- Connections with a capacity of more than 3 phase 300 amps may elect to be in the Industrial Supply category subject to maintaining category 3+ metering (as defined in table 1 of Schedule 10.1 of the Code)

A number of ICPs with a capacity less than the 3 phase 300 amp minimum remain in the category. Following the transition away from volume-based charges in the general supply category, we plan to transition these to the general supply category.

Low voltage Industrial Supply connections are assigned the ICMD price category code on the registry and attract two charges:

	Price component code	Description
Fixed charge	IFIX	Fixed daily charge applying to each ICP in the category
Booked capacity	IBOK	Booked capacity charge, based on the capacity reserved for use at the connection as recorded in the chargeable capacity on the registry.

High voltage 11kV or 22kV Industrial Supply connections are assigned the ICMH price category code on the registry and attract two charges:

	Price component code	Description
Fixed charge	IFIX	Fixed daily charge applying to each ICP in the category
Booked capacity HV	ІВОН	Booked capacity charge, based on the capacity reserved for use at the connection as recorded in the chargeable capacity on the registry.



### **Booked capacity**

The booked capacity reflects the capacity that we reserved for use at the connection. It is generally set to the capacity requested when a customer first connects, then increased or reduced when an upgrade or downgrade is requested by the customer.

Upgrades or downgrades are initiated via a network application where there is to be a permanent increase or decrease in demand as a result of changes in usage at the premise. This allows us to consider what upgrades or changes might be required and the terms on which this can be provided. Surplus capacity over and above the booked capacity (including surplus capacity established following an application to reduce the booked capacity) is not reserved for the customer's future use, and we may:

- utilise the capacity to provide supply to other customers,
- remove assets that provide the additional capacity, or resize assets, and/or
- physically restrict the capacity available to the customer (for example, with fusing) to reflect the reduced booked capacity.

Customers may apply for a reduction in the booked capacity where loading levels remain materially lower (for example, following a permanent change in behaviour), and where this is evident in prior loading levels. Reductions will not be provided within 3 years after a connection is first commissioned or upgraded to provide additional capacity requested by the customer. Reductions are not backdated. As noted above, any surplus capacity created by any such reduction is not reserved for the customer's future use.

Any increase or request for an increase within 12 months of a reduction being applied will, in addition to any other terms, include a requirement to pay the additional amount had the original reduction not been applied (but capped at the requested level, if this is lower than the original level).

In the absence of an upgrade, where we observe that a customer exceeds the booked capacity we may:

- where additional capacity can be provided without further network upgrades or capacity contribution requirements, provide notice and adjust the booked capacity to reflect the higher loading level (and the higher chargeable capacity will apply as a minimum for the following 12 months), or
- contact the customer to discuss upgrades and/or terms on which the higher capacity can be provided, and provide the option to adjust consumption to remain below the booked capacity limit.

### **Volume charges**

Industrial Supplies are currently "nil rated" for volume (kWh) charges. However, to monitor consumption against the booked capacity charge, half hour real (kWh) and reactive (kVArh) loading and injection levels must be reported in EIEP3 files.



# 5. Large Users

We maintain a large user category to cater for large connections with specific and non-standard electricity supply requirements. Charges for each ICP are independently set.

Each ICP attracts a fixed daily charge as well as a booked capacity charge. The booked capacity charge is operated on the same basis described for Industrial Supplies in the section above.

Category	Price category code	Price component code	Description
ANZCO Seafield	LUCM	LUCM	Fixed daily charge (\$/day)
(ICP 0000012427EA1FE)		LCCM	Booked capacity charge (\$/kVA/day)
Talley's Fairfield 11kV	LUPP	LUPP	Fixed daily charge (\$/day)
(ICP 0000018651EA16B)		LCPP	Booked capacity charge (\$/kVA/day)
Talley's Ashburton	LUP2	LUP2	Fixed daily charge (\$/day)
(ICP 0000013560EA635)		LCP2	Booked capacity charge (\$/kVA/day)
Talley's Fairfield 22kV	LUP3	LUP3	Fixed daily charge (\$/day)
(ICP 0000034433EA654)		LCP3	Booked capacity charge (\$/kVA/day)
Mt Hutt Ski Area	LUMH	LUMH	Fixed daily charge (\$/day)
(ICP 0000018649EA9D2)		LCMH	Booked capacity charge (\$/kVA/day)
Highbank Pumps	LUHP	LUHP	Fixed daily charge (\$/day)
(ICP 0000030409EA5BD)		LCHP	Booked capacity charge (\$/kVA/day)
Marley	LURX	LURX	Fixed daily charge (\$/day)
(ICPs 0000012703EAEA2 & 0000031792EA62D)		LCRX	Booked capacity charge (\$/kVA/day)

# **Volume charges**

Large Users are currently "nil rated" for volume (kWh) charges. However, to monitor consumption against the booked capacity charge, half hour real (kWh) and reactive (kVArh) loading and injection levels must be reported in EIEP3 files.

# 6. Generation

Our generation category caters for large scale generation plant connected to the network with specific and non-standard electricity injection requirements. Charges for each ICP are independently set.

Category	Price category code	Price component code	Description
Highbank generation (ICP 0000026335EA378)	LUHB	LUHB	Fixed charge (\$/day)
Montalto generation (ICP 0000011249EA973)	LUMO	LUMO	Fixed charge (\$/day)
Cleardale generation (ICP 0000030395EA646)	LUCD	LUCD	Fixed charge (\$/day)
Lavington generation (ICP 0000032737EA19D)	LULN	LULN	Fixed charge (\$/day)
Rosedale generation (ICP 0000034889EAA7B)	LURD	LURD	Fixed charge (\$/day)

# **Volume charges**

Generation connections are currently "nil rated" for volume (kWh) charges. However, to monitor export and load against contracted capacity, half hour real (kWh) and reactive (kVArh) loading and injection levels must be reported in EIEP3 files.

# 7. Changes between categories

Where an ICP is eligible for more than one category, the customer (or the customer's retailer) may request a change in category (by email to <a href="retailenquiry@eanetworks.co.nz">retailenquiry@eanetworks.co.nz</a>). Changes are not generally backdated. Connections must remain in an elected category for at least one year before changing category.

Customers wishing to change between the General Supply subcategories can do so by applying for an alteration on our website at <a href="https://www.eanetworks.co.nz/apply/electricity-network-alteration-connection-request/">https://www.eanetworks.co.nz/apply/electricity-network-alteration-connection-request/</a> to get fusing upgraded or downgraded. There is no minimum period and changes can be requested at any time. Standard fuse changes are charged at \$80 + GST in urban areas and \$120 + GST in rural areas (additional costs are passed on where other equipment needs to be changed). Note:

- upgrades are subject to a check on the capacity of the service mains and associated equipment,
- electricity retailers may need to change metering equipment if the capacity is moved above or below 100 amps,
- we recommend getting an electrician to check loading levels (including on each phase) before seeking a downgrade.

When selecting a connection category, please note that if loading levels cause network fusing to operate, we generally provide the first fuse replacement free-of-charge. Any subsequent fuse replacement will attract a service charge. To reduce the delay and inconvenience from network fuse replacement, and to avoid service charges, we recommend installing customer operated circuit breaker protection that will prevent network fuse operation.

### 8. Transmission rental rebates

EA Networks receives loss and constraint rental rebates from Transpower. For rebates received in respect of periods after 1 April 2023, we will pass the net rebate amount on to retailers and directly contracted customers in proportion to the transmission charges applied. Prior to this date the rebates were used to offset the cost of the electricity delivery service, and are not passed on as a specific separate payment.

The rebate is applied in proportion to the transmission charge component within each retailer and directly contracted customer initial (W0) invoice as a separate line item in the invoice (and not showing in any EIEP file).

The credit entry shows the transmission charge total, the transmission charge total across all retailers, and the total rebate pool.

Transpower applies rebates to us with a delay of one month. Aligning with this, for example, the credit in our May invoice (produced early June), will pass through April rebates based on transmission W0 billing applied in April. We receive additional rebates via Orion in relation to our Upper Rakaia embedded network. These will be passed through in a similar way but with an additional delay.



Once applied, rebates will not be washed up, however:

- delayed rebates, or corrections to rebates will be applied using the latest wash up applied in respect of the month to which a rebate relates, and
- where a special one month wash up is being applied (W1), the charges in that wash up will be used to allocate the rebate in preference to the W0 charges.

We have adopted this methodology to align with the requirements and intent of the Code obligations to pass through the rebates. Wash ups are not applied as the amounts would be small, and they would create discrepancies in situations where some retailer charges are washed up and others are not. We do not deduct any amount for administering this pass through of rebates.

# 9. Billing and invoicing

Consistent with the provisions in our distributor agreements, monthly charges are applied in an invoice dated the end of the month for which services are provided, which is sent out by the 10th working day of the following month, and due for payment on the 20th (or the following business day, if the 20th is not a business day).

Within each invoice we also wash-up prior period charges in line with the reconciliation manager's revision cycle, as follows:

Wash up number	Description
W0	Initial charges for the current month
W3	Wash up charges for the month that falls 3 months prior to the current month
W7	Wash up charges for the month that falls 7 months prior to the current month
W14	Wash up charges for the month that falls 14 months prior to the current month

We issue an EIEP1 file using the RM Normalised format to support each month covered by an invoice. Consistent with the RM Normalised format, wash ups are applied by reversing the total of all previous charges for the month in question and reapplying charges using:

- update (or corrected) prices for that period,
- updated retailer, price category and energisation status recorded on the registry, and
- updated volume information files (EIEP1 and EIEP3) supplied by the retailer (and where an
  updated file has not been provided by the retailer, the most recently provided file will be reused).

Note that volume charges are applied to the retailer that reports the volume to us within the EIEP1 and EIEP3 files, rather than the retailer recorded on the registry. For example, discrepancies sometimes occur where an ICP switches to a new retailer, and the switch date on the registry does not match the consumption period in the EIEP1 file. In this situation, the retailer will be charged for the consumption that it has reported to us.

Invoices are emailed to the email addresses nominated by each retailer. EIEP1 files are transmitted via the registry SFTP hub.

### 9.1. Data and metering requirements

### EA Networks' invoicing uses:

- Retailer and status information sourced from the Registry to apply fixed and capacity-based charges. In limited situations, Registry records are known to be incorrect may be overridden. For example, where a new ICP is known to be energised but the Registry has not been updated, the ICP may be included as if it is energised.
- Network pricing information which EA Networks maintains on the Registry, including:
  - Price category code,
  - o Chargeable capacity (for ICPs in the Irrigation Supply category), and
  - o Installation details (for ICPs that attract fixture charges).
- Volume information provided by retailers in EIEP1 and EIEP3 files (see below). In limited situations, where an ICP is known to be energised but no volume information is supplied, an estimated volume may be used in the invoice (and entries are marked as ES in the meter read status field of the supporting EIEP1 file). Estimates are generally set as follows:

Category	Price category code/ Price component code	Default monthly estimate (kWh)
General supply – less than 5kVA	GS05/GUEN	200 kWh
General supply – 20 kVA	GS20/GUEN	700 kWh
General supply – 50 kVA	GS50/GUEN	1,500 kWh
General supply – 100 kVA	G100/GUEN	6,500 kWh
General supply – 150 kVA	G150/GUEN	12,000 kWh

(This use of estimates is not a substitute for supplying volume information required under our default distributor agreement, and we will monitor compliance with the aim of minimising use of estimates)

- Where an estimate is provided by a retailer, we will generally accept and use that for billing, rather than applying our own estimate. Where estimates remain in the final W14 wash up, retailers may submit a replacement EIEP1 file and request an additional wash up to replace estimates with actual volumes (within the 18-month window provided in our default distributor agreement).
- Volume information is provided using the RM Normalised method, where corrections are
  applied as wash ups in the month to which the correction relates. With this approach
  negative volumes are not a possible outcome, and cannot represent a legitimate estimate
  (or forward estimate) of usage at an ICP. Any negative volumes reported are excluded from
  the billing process, and the estimates noted above are instead applied.
- Prices set out in EA Networks' delivery price schedule available at https://www.eanetworks.co.nz/disclosures/.



EA Networks requires retailers to provide initial EIEP1 files and EIEP3 files via the Registry hub by 5pm on the 5<sup>th</sup> business day of the month following the month for which the file relates. On or prior to this time, the retailer must also provide replacement files where it has revision information that was submitted to the reconciliation manager in the prior month in respect of the RM's R3, R7 or R14 reconciliations.

### Metering requirements

EA Networks requires that:

- · retailers ensure that metering meets the requirements in the Code,
- all ICPs that have embedded generation capable of exporting (that is, synchronised generation or batteries), must also have separate export metering,
- export must not be gifted, and must be submitted to the Reconciliation Manager for reconciliation, and
- export must not be taken to offset load.

Connections in the Industrial and Large User categories must have half hour real (kWh) and reactive (kVArh) metering as a minimum (and in this situation reactive metering must only record inductive reactive load, where the power factor is lagging).

Connections in the Generation category, and all other connections that have 100kW of generation or more, must have full four quadrant half hour metering, measuring real load and export (kWh), as well as inductive reactive load and capacitive reactive export (kVArh). In all cases, load and export must be recorded separately and not offset each other, including where both load and export occur within the same half hour period.

An ICP represents a fixed point of supply on our network. ICPs and associated metering cannot be shifted to an alternative point of supply. Each new point of supply will be issued with a new ICP, and appropriate metering must be installed.

### **EIEP1** requirements

EIEP1 files must be provided in the "replacement RM normalised" reporting methodology with a file type of "ICPMMRM", and must include all ICPs with a Registry metering category of 0, 1, 2 or 9 (excluding any ICPs reported under the EIEP3 below). The first report for a particular month must have a file status of "I", and all subsequent revision files must have a file status of "R".

File status "X" (partial replacement) must not be used, and ICPHHAB files (for half-hour metered ICPs) are not required.

EIEP1 is a regulated file format specified here:

https://www.ea.govt.nz/documents/174/EIEP1 Detailed ICP billing and volume information.pdf

### **EIEP2** requirements

EIEP2 files are not required for EA Networks' invoicing and should not be supplied.



### **EIEP3** requirements

EIEP3 files must include all ICPs with a Registry metering category of 3, 4 or 5 and for ICPs in the irrigation category that have advanced metering, and is optional for other ICPs with category 1 and 2 metering. The first report for a particular month must have a file status of "I", and all subsequent revision files must have a file status of "R" (full replacement) or "X" (partial replacement).

We have a strong preference for half hour information in respect of multiple ICPs to be combined into a single EIEP3 file, and for I (initial) and R (full replacement) files only.

Where an "R" file is supplied for a single ICP, it will be taken as replacing half hour information only for that ICP. Where an "R" file is supplied with more than one ICP, then all previous half hour information for all ICPs for the particular month will be replaced with the information in the file.

EIEP3 files must include real energy (kWh) and reactive energy (kVArh) readings by half hour for load, and where measured, for injection. Apparent energy (kVAh) is not required.

EIEP3 is a regulated file format specified here:

https://www.ea.govt.nz/documents/184/EIEP3\_Half\_hour\_metering\_information.pdf

# 10. Glossary of terms

Code means the Electricity Industry Participation Code 2010 available at <a href="https://www.ea.govt.nz/code-and-compliance/the-code/">https://www.ea.govt.nz/code-and-compliance/the-code/</a>.

EIEP means electricity information exchange protocol. These are a set of standardised file formats intended for transferring information between electricity industry participants.

ICP or "connection" means a point of supply or connection to our network, which is represented by a unique ICP number in the format 0000026335EA378.

kVA means kilovolt amperes, a measure of apparent demand (which is the vector combination of real demand in kW and reactive demand in kVAr).

kVAr means kilovolt amperes reactive, a measure of reactive demand (where current flows are out of step with alternating voltage, using up available capacity without delivering any real power).

kW means kilowatts, a measure of electrical demand, or the rate at which energy is being used (an average of this can also be represented as kWh/h).

kWh means kilowatt hours, a measure of energy.

Metering category means the highest category of certified metering components installed at an ICP as defined in table 1 of Schedule 10.1 of the Code (see

https://www.ea.govt.nz/documents/3488/Code - Part 10 - Metering - 1 August 2023 - EIPCA System Operation Documents 2023.pdf#page=45)

Registry means the national database of information on every point of connection (ICP) which is operated by the Electricity Authority and available here <a href="https://www.electricityregistry.co.nz/">https://www.electricityregistry.co.nz/</a>. Registry information recorded for individual ICPs is publicly available here <a href="https://www.ea.govt.nz/consumers/your-power-data-in-your-hands/my-meter/">https://www.ea.govt.nz/consumers/your-power-data-in-your-hands/my-meter/</a>

Retailer means an electricity retailer or trader that is a retail participant under the Code and has a distributor agreement with EA Networks.

