

# Installation guide for load control for non-domestic applications



Part of the Energy Queensland Group

The purpose of this guide is to assist electrical contractors to submit requests on behalf of customers to move to a non-domestic load control tariff, and to understand some of the key technical requirements. As of 1 July 2020, there are three new network load control tariffs available to businesses as a primary tariff (where all appliances are on load control) or secondary tariff (where at least one, but not all, of the appliances are on load control). The full suite of load control tariffs now available in the Ergon and Energex Network areas\* are:

- Small Customer Primary Load Control – Business
- Small Customer Secondary Load Control – Business or Residential
- Large Customer Primary Load Control – Business
- Large Customer Secondary Load Control – Business

\*Availability of these tariffs at the retail level is subject to a customer's electricity retailer offering these tariffs to their customers.

Previously, load control tariffs were only available for residential and small business customers for appliances like hot water systems and pool pumps, as a secondary tariff. As part of developing these new tariffs, the type of equipment permitted to be connected to load control tariffs has been expanded. For the Primary Load Control tariffs, equipment can be hard wired or non-hard wired, as long as they cannot be moved to another tariff on-site during a supply interruption on the load control tariff. For the Secondary Load Control tariffs, most equipment must be hard wired, with the following exceptions that can be supplied through a dedicated circuit:

- Small Customer Secondary Load Control (residential premises) – pool filtration equipment and electric vehicle chargers
- Small Customer Secondary Load Control (business premises) – pool filtration equipment
- Large Customer Secondary Load Control – pool filtration equipment

Note: Controlled Supply called Volume Night (often referred to as tariff 31) is still only for small Business and Residential customers.

Contractors are reminded that in addition to technical requirements, tariff eligibility rules also apply for load control tariffs. These include:

- Eligibility for the Large Customer (using more than 100MWh/year) Load Control tariff is restricted to customers located in an area that relevant network business is able to remove / reinstate supply through the distributor's standard load control signalling technology - the majority of Queensland has the communication system active. Customer or electrical contractors can enter their National Meter Identifier (NMI) into a search tool on the Energex ([www.energex.com.au/loadcontrolltariffs](http://www.energex.com.au/loadcontrolltariffs)) or Ergon ([www.ergon.com.au/loadcontrolltariffs](http://www.ergon.com.au/loadcontrolltariffs)) website to check if they are in an eligible area. The NMI can be found on the customer's retail electricity bill. Small customers (using less than 100MWh/year) and residential customers are exempt from this requirement;

- Sites must have a compliant meter box and switchboard that is suitable to install a new meter (if required), a load control receiver, and contactor (if required – refer to QECM section 7.3).
- Equipment connected to a control tariff shall not be connected to a tariff other than the control tariff - Qld Electricity Connection Manual 2.13.3 (c).

The load control tariffs listed above guarantee supply for a minimum of 18 hours per day, however supply interruptions under the tariffs will vary based on location and network needs. Full eligibility and tariff rules can be found in the respective Annual Pricing Proposals, available on the [Ergon Energy](#) or [Energex](#) websites.

As there have been changes to the Electrical Partners Portal to accommodate the new load control tariffs, it is important that the Electrical Contractors who are submitting applications to move to a load control tariff are familiar with how to complete the Electrical Partners Portal. A summary of the key sections are highlighted below.

As the connection of large non-domestic equipment to load control tariffs has not been common to date, this guide also highlights some of the key sections of the Queensland Electricity Connection Manual (QECM) that are relevant to non-domestic load control applications. These references are provided as a guide only – electrical contractors are strongly advised to refer to, and be familiar with, all relevant sections of the [Queensland Electricity Connection Manual \(QECM\)](#). In addition, a supplement to the QECM (Load Control Tariff Wiring Diagrams for Business) has been produced to provide the wiring diagrams to demonstrate compliant connection arrangements for these non-domestic load control tariffs. This document can be found at [www.ergon.com.au/loadcontroltariffs](http://www.ergon.com.au/loadcontroltariffs) or [www.energex.com.au/loadcontroltariffs](http://www.energex.com.au/loadcontroltariffs)

For technical queries, email Ergon Network on [networkenquiries@ergon.com.au](mailto:networkenquiries@ergon.com.au) or call the Contractors Hotline on 1800 237 466 (Monday to Friday 7.30am – 4.00pm). For customers in the Energex network area please email [custserve@energex.com.au](mailto:custserve@energex.com.au) or call the Contractors Hotline on 1300 762 397 (Monday to Friday 7.30am – 4.00pm).

For retail tariff eligibility enquiries, please contact your electricity retailer.



# Electrical Partners Portal

## Requesting non-domestic load control

The following is general advice on how to lodge requests for load control in the Energex or Ergon Energy Portals. An Electrical Contractor or applicant can lodge a request for non-domestic load control via the Electrical Partners portal by lodging either a New Connection or Electrical Work Request (EWR), depending on the customers circumstances.

The following network tariffs are apply to the non-domestic load control tariffs:

Tariff Description	Ergon Network Tariff Code	Equivalent Ergon Retail Tariff (if applicable)	Energex Network Tariff Code
Small Business Primary Load Control	BPLC	T34	5700
Large Primary Load Control	LPLC	T60A	5800
Large Secondary Load Control	LSLC	T60B	5900

When to submit an:

EWR	New Connect
Existing customers who wish to forfeit their existing Primary/General supply network tariff/s  OR Existing customers wishing to request the <b>Large Secondary load</b> control tariff – Ergon Energy LSLC / Energex 5900	Customers who wish to retain their existing Primary/General Supply network tariff/s but wish to add another connection to take advantage of the non-domestic Primary Load Control tariff options.  <b>Note:</b> An EWR will also be required once the New Connect is approved.

## How to lodge a Connect request for non-domestic load control

1. Use the relevant Service Selection:

For Ergon Energy:

- **New Connection**
  - Provision of New Network Connection (No Existing Service) > Permanent Position
- **Change to an Existing Connection**
  - Increase to an Existing Connection Capacity OR
  - Change of Supply Type OR
  - Change to the number of Phases at the Premises



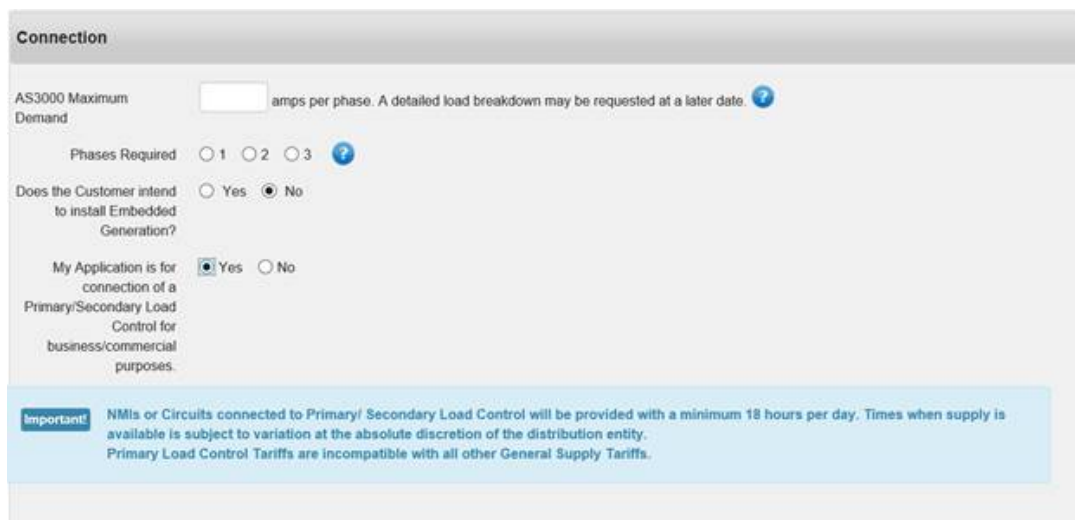
## For Energex

- **New Connection**
  - Permanent Supply
- **Change to an Existing Connection**
  - Relocate / Increase existing Permanent Connection

## 2. Complete the Connect Form as required.

- It is important that the **AS3000 Maximum demand** field is completed accurately to ensure the request is assessed appropriately. The **Change Details** section is where non-domestic load control is requested.
- Select **Yes** to *My Application is for connection of Primary/Secondary Load Control for business/commercial purposes.*

## Ergon Portal



**Connection**

AS3000 Maximum Demand  amps per phase. A detailed load breakdown may be requested at a later date. ?

Phases Required  1  2  3 ?

Does the Customer intend to install Embedded Generation?  Yes  No

My Application is for connection of a Primary/Secondary Load Control for business/commercial purposes.  Yes  No

**Important!** NMIs or Circuits connected to Primary/ Secondary Load Control will be provided with a minimum 18 hours per day. Times when supply is available is subject to variation at the absolute discretion of the distribution entity. Primary Load Control Tariffs are incompatible with all other General Supply Tariffs.

## Energex Portal



**Connection Details**

AS3000 Maximum Demand:  amps per phase. A detailed load breakdown may be requested at a later date. ?

Phases Required  1  2  3 ?

Is electricity supply available to your property from the existing Energex network?  Yes  No

Pole/Pillar No.

Number of Connections required at this point   
If this is a bulk metering site, please respond with "1" to the Number of NMIs.

My Application is for connection of a Primary/Secondary Load Control for business/commercial purposes.  Yes  No

**Important!** NMIs or Circuits connected to Primary/ Secondary Load Control will be provided with a minimum 18 hours per day. Times when supply is available is subject to variation at the absolute discretion of the distribution entity. Primary Load Control Tariffs are incompatible with all other General Supply Tariffs.



3. Provide details of the non-domestic Equipment and/or Pump(s).

- If the equipment is to be connect is pumping loads only, select “Yes” to *Pumps Required*
- If there is other equipment planned to be connected, select “Yes” to *Non-Domestic Equipment*

**Important!** NMs or Circuits connected to Primary/ Secondary Load Control will be provided with a minimum 18 hours per day. Times when supply is available is subject to variation at the absolute discretion of the distribution entity. Primary Load Control Tariffs are incompatible with all other General Supply Tariffs.

Non Domestic Equipment required?  Yes  No

Pumps Required?  Yes  No

- Complete the requested information on the Non Domestic Equipment and/or Pumps

**Note:** Failure to add details in these sections when required will slow down the application assessment process.

4. Complete the remained of the form including declaration, and submit the Connect.

For an existing connected site, the electrical contractor most commonly will only need to submit an EWR.

### How to lodge an EWR for non-domestic load control

1. Select the appropriate Service depending on the customer’s request.
2. The new non-domestic load control tariffs are only available to **Business** customers; therefore, the non-domestic load control tariffs are only available when the **Installation Type = Business** as per screen shots below

Ergon Portal

Metering Required

**Important!** Please note: All CT metering requests will require an appointment.

Installation Type

Meters

Network Tariffs Required

Energex Portal

Number of Meters

Single Rate

Two Rate

Installation Type

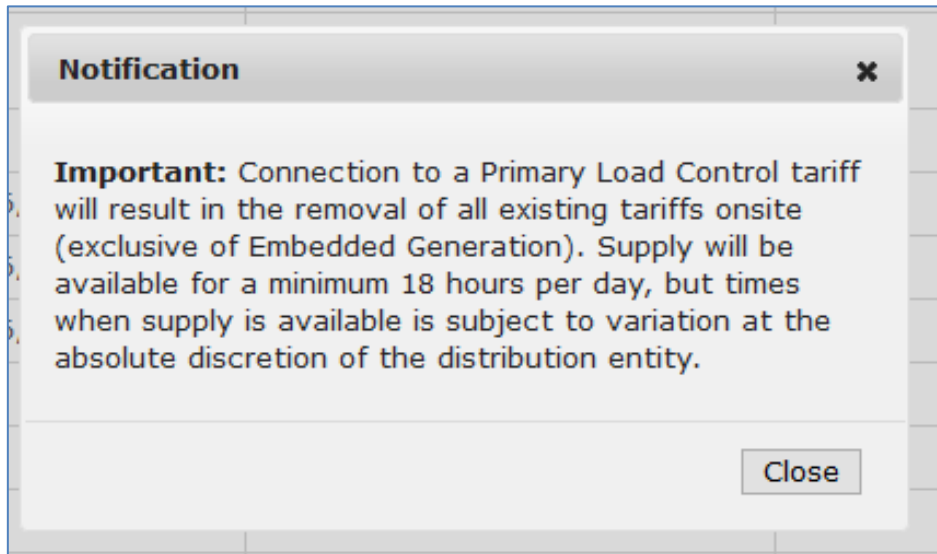
Meters

Network Tariffs Required

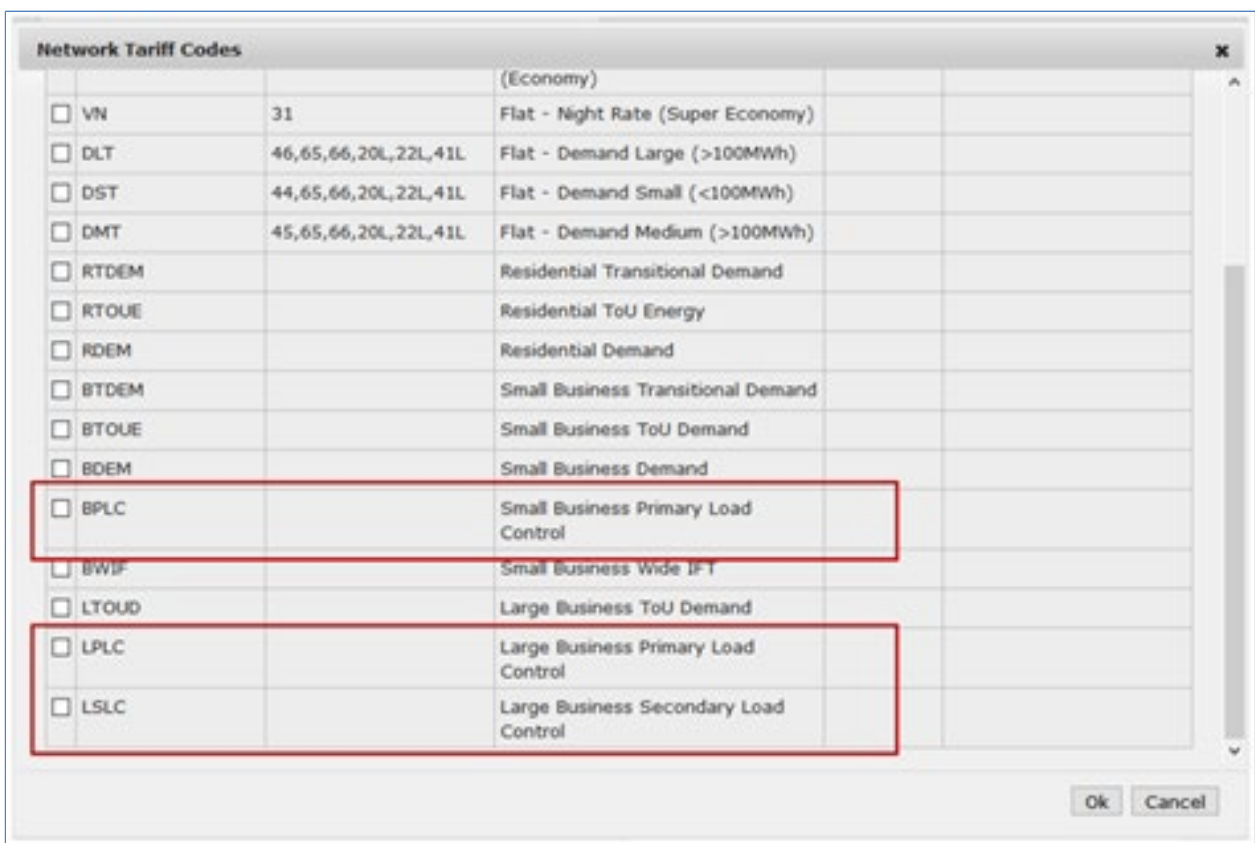


3. Select the button **Select Tariff Code(s)**

Choose the desired tariff – a warning message will appear to confirm the applicant is aware of the tariff's constraints



In the Ergon Network area, the non-domestic load control tariffs are:



In the Energex Network area, the non-domestic load control tariffs are:

Network Tariff Code	Equivalent Retail Tariff	Description	Time Of Use	High Rate Operating Times
<input type="checkbox"/> 3600	N/A	Small Business Demand		
<input type="checkbox"/> 3800	N/A	Small Business Transitional Demand		
<input type="checkbox"/> 5700	N/A	Small Business Primary Load Control		
<input type="checkbox"/> 5800	N/A	Large Business Primary Load Control		
<input type="checkbox"/> 5900	N/A	Large Business Secondary Load Control		
<input type="checkbox"/> 7200	N/A	LV Demand		
<input type="checkbox"/> 7500	N/A	Solar PV (net metering - Inverter 5kw or less and no Government Rebate)		
<input type="checkbox"/> 8100	N/A	Demand Large		
<input type="checkbox"/> 8300	41	Demand Small		
<input type="checkbox"/> 8400	11	Residential General Light and Power		
<input type="checkbox"/> 8500	20	Business General Light and Power		
<input type="checkbox"/> 9000	31	Controlled Supply - Night Rate - Super Economy (8 hour min supply)		
<input type="checkbox"/> 9100	33	Controlled Supply - Economy (18 hour min supply)		
<input type="checkbox"/> 9700	N/A	Solar PV (Gross metering - All Power		

4. Complete the remainder of the form and submit.

## QECM Information

Key sections of the QECM (1 July 2020 version) particularly relevant to load control tariffs include:

**Section 4.1** In general, the maximum demand for primary and secondary loads are to be balanced within 20 Amps of each phase.

**Section 6.3** When an EWR request is received for load control, space provision for a network device is required on the meter panel (refer Drawing QECM 6.1 for details).

**Section 6.5** Revenue meters and network devices shall be capable of being individually isolated on each phase so that safe access can be achieved for electrical work to be undertaken.

**Section 6.6.2** Each revenue meter and network device neutral are to be connected to a separate terminal of a sealable metering neutral link.

**Section 6.12** Metering and network devices are to be affixed to a suitable meter panel with appropriate fixing equipment and within approved mounting heights.

**Section 7.3** Single phase loads greater than 30A resistive and 20A inductive and 3 phase loads will require a contactor supplied by the customer to be installed. The contactor shall be installed in an accessible location within the main switchboard and be sealable. Refer QECM Drawings 7.2, 7.6, 7.8 & 7.9.

In addition, a supplement to the QECM has been produced to provide the wiring diagrams to demonstrate compliant connection arrangements for these non-domestic load control tariffs. This document can be found at [www.ergon.com.au/loadcontroltariffs](http://www.ergon.com.au/loadcontroltariffs) or [www.energex.com.au/loadcontroltariffs](http://www.energex.com.au/loadcontroltariffs)

