

Customer connections

1/4

Introduction

Every year, customers request 26,000 new or altered connections from ETSA Utilities. These requests can range from a new house, shopping centre or major project anywhere in South Australia.

This fact sheet outlines charges and processes relating to creation and modification of customer connections, and indicates how customers can obtain more information.

We appreciate that this is a complex matter and if you would like further explanation as to how these charges and processes may relate to your situation, please contact the appropriate ETSA Utilities staff member, as listed on page three of this document.

Cost of connections

The South Australian Electricity Distribution Code, determined and issued by the Essential Services Commission of South Australia (ESCOSA), regulates how the costs of connections are shared between ETSA Utilities and customers.

Sometimes these costs are obvious, such as the installation of new poles, wires, transformers, or other equipment to enable the supply of electricity.

However, all customers use capacity in the existing network proportional to their demand for electricity. In some cases the network requires immediate upgrading, and in other cases, this happens in the following years.

Immediate upgrading is required when new or increased customer loads (demands) trigger or bring forward work required to increase the available capacity within the local distribution network. Such 'augmentation' work may relate to the upgrade of powerlines, substations, and so on.

Some useful terminology is explained below:

Demand

The demand (in kVA) that a customer places on the network.

Connection Assets

Electrical infrastructure directly related to the connection of the customer to the electricity network.

Augmentation

Upgrade of the distribution network capacity in order to meet customer demand.

Extension

A new powerline between the existing network and the customer's connection point.

SWER

Single Wire Earth Return.

Allowances and rebates

All customers contribute towards new customer connections and background augmentation of the network. This contribution is via the Distribution Use of System (DUoS) charges that are part of customers' retail bills.

The contribution recognises that:

- all customers' demand for electricity grows slightly each year due to installation/increased use of appliances or equipment; and
- new customers increase the revenue received by ETSA Utilities which benefits all customers in the longer term.

Charges for connections

The amount that customers need to pay towards connections (including augmentations and extensions, if any) is the difference between the calculated costs (but only for those above the demand allowance) and the revenue rebate.

In many cases the rebate is sufficient to cover the cost of a standard new connection of a minor nature and there is no charge to the customer.

However, those connections and modifications that are more significant in nature, and have material impacts on the performance, management or costs of the network, or on other customers, may attract charges in line with their costs. Generally, these situations relate to:

- larger commercial or industrial connections;
- connections of new subdivisions; or
- customers who require additions or extensions to the network to supply the connection point.

Charges are calculated in line with transparent and standardised methodologies as established by ESCOSA and are based on 'user-pays' principles.

The following sections describe charges and associated processes in more detail.

Minor connections

As indicated above, ETSA Utilities may not charge the customer for a standard residential connection to the network of a minor nature¹. However, for certain special services related to small customer connections, such as meter alterations, service alterations, temporary services or service relocations, standard fees apply.

These fees must be 'fair and reasonable' in accordance with the guidelines of ESCOSA and are listed in the Excluded Services Pricing Schedule on our website at: www.etsautilities.com.au

For further information please contact ETSA Utilities on: 13 12 61 or visit our website at: www.etsautilities.com.au

Customer connections

2/4

Minor Connections

Work	Charge
Standard / warranted service pit connection (connecting to an existing service pit)	Nil
Connection of upgraded service—unwarranted (2W to 4W underground with basic meter)	Standard charge
Temporary service (80 amp single phase)	Standard charge
Additional service pit (ie, if a landowner splits an allotment)	Full cost – rebate
Relocate a service pit	Full cost

Major connections

New major connections often entail significant costs that are specific to connecting that customer to the distribution system. These costs relate to:

- the connection assets themselves;
- any extension assets required between the network and the connection point; or
- any augmentation works that are triggered by the connection.

In all cases, ETSA Utilities provides a rebate to the customer, recognising that the new asset will result in additional Distribution Use of System (DUoS) revenues to ETSA Utilities.

In some cases, where the connection is made to an extension paid for by an existing customer, the new customer may need to make a contribution payment to offset the cost previously borne by the existing upstream customer. This contribution is returned to the upstream customer.

The customer's payment (CP) is determined according to the following formula:
 $CP = (C + E + A + CC) - R$

where

- C = connection cost
- E = extension cost (if any)
- A* = augmentation cost (if any)
- CC** = customer contribution to upstream customer (if any), and
- R = ETSA Utilities' DUoS revenue rebate.

* See bottom right for an explanation of Augmentation costs.

** This relates to 'upstream' customers who may have singly or significantly funded a recent network extension. If a customer subsequently connects to that extension (thereby receiving a benefit from the extension), an equitable part payment to that upstream customer will be calculated according to a standard methodology.

Examples of major connections

Example 1

A customer sought a connection of 130kVA of load. This work required the installation of a new high voltage pole, a 200kVA pole mounted transformer supplying an overhead road crossing to a new pole, and pole mounted service.

The customer received the capacity allowance of 90kVA which reduced the augmentation component to 40kVA (ie, 130kVA – 90kVA).

Rebates: The customer received rebates of \$1200 (Distributors Rebate) and \$8,800 from the calculated DUoS component of the rebate. According to the formula, $CP = (C + E + A + CC) - R$, where:

$$\begin{aligned} C &= \$40,000 \\ E &= \$5,000 \\ A &= (40kVA \times \$135) = \$5,400 \\ CC &= \$0 \\ R &= \$10,000 (\$1,200 + \$8,800) \\ CP &= (\$40,000 + \$5,000 + \$5,400) - \$10,000 = \$40,400 \end{aligned}$$

Therefore the customer payment is \$40,400.

Example 2

The commercial customer's existing demand was 1400kVA and they sought connection of an additional 500kVA of load. The customer, having previously received the capacity allowance of 90kVA, was charged the full augmentation component of 500kVA.

The work required the installation of high voltage underground straight joints and cables, a high voltage switching cubicle and a 1000kVA padmounted transformer.

Rebates: The customer had already received the \$1,200 (Distributors Rebate) so only receives \$19,800 from the calculated DUoS component of the rebate. According to the formula, $CP = (C + E + A + CC) - R$, where:

$$\begin{aligned} C &= \$30,000 \\ E &= \$170,000 \\ A &= (500kVA \times \$135) = \$67,500 \\ CC &= \$0 \\ R &= \$21,000 (\$19,800 + \$1,200) \\ CP &= (\$30,000 + \$170,000 + \$67,500) - \$19,800 = \$247,700 \end{aligned}$$

Therefore the customer payment is \$247,700.

Augmentation

The augmentation cost is based on an individual customer's increase in maximum demand (in kVA).

Customers are charged augmentation when their total demand for electricity exceeds their allowance of 90kVA (25kVA for SWER) per property. The standard augmentation charge per kVA applies except where either of the following criteria are met:

- Is the increase in maximum demand more than 5% of the local substation's rated capacity? (Substation thresholds are published at www.etsautilities.com.au), or
- Is the connection located more than 15km from a substation?

For further information please contact ETSA Utilities on: 13 12 61 or visit our website at: www.etsautilities.com.au

Customer connections

3/4

Under both criteria, the augmentation charge is calculated according to a simple standard rate: $A = D \times f$, where

- D = increase in maximum demand minus augmentation allowance (90 or 25kVA)
- f = standard rate (as at June 2009, \$135/kVA, increasing annually by CPI).

If either threshold criterion is met, then the augmentation charge is calculated based on the sum of the impacts on upstream network components, specific to the substation in question. These calculations will be made by ETSA Utilities.

Contestable design and construction

The design and construction of assets that can be built in isolation to the existing distribution network is contestable work, which means the customer may call for tenders for this work in accordance with clause 3.4 of the Electricity Distribution Code. However, customers will need our technical specifications for this work before calling for tenders.

We may need further information from the customer in order to prepare these technical specifications, and the customer will also be asked to pay a fee for this work. This fee is outlined under the Excluded Services Pricing Schedule at www.etsautilities.com.au

Where the customer elects to engage a contractor to undertake and complete all or a part of the contestable works, the Terms and Conditions for Network Installation will also apply between the customer and ETSA Utilities. These can be viewed at www.etsautilities.com.au

Offers from ETSA Utilities

ETSA Utilities is required to provide a customer offer within the timeframes outlined in Chapter 3 of the Electricity Distribution Code upon receipt of the necessary information from the customer.

The offer will be pursuant to the requirements of the Code and will outline the charges and rebates for the requested works, commercial terms and conditions, technical specifications, guidelines on contestable construction if applicable and timeframe for the completion of the works.

Upon acceptance of the offer, the customer is to pay no more than 50% of the total amount prior to commencement of the works associated with establishing or modifying the customer's connection, with the balance to be paid at the completion of those works, but prior to connection.

Application form

The customer is required to make an application to ETSA Utilities using the – Application for Quote Augmentation or Extension (form B).

To ensure the final customer connection occurs in a timely manner, the customer must also lodge the – Application for New Electricity Supply & Alteration of Service / Meter or Permanent Removal of Electricity Supply (form A) with their chosen retailer before ETSA Utilities can proceed with their connection. Both forms can be downloaded from: www.etsautilities.com.au.

Assistance

Our staff are available to help customers through the customer connections process.

Builders and Contractors Line

Telephone: 1300 650 014
Facsimile: 1300 650 016

Asset Managers

John Aplin – *Country North*
Telephone: (08) 8682 0567
Mario Pepicelli – *Elizabeth*
Telephone: (08) 8282 1545
James Case – *Adelaide*
Telephone: (08) 8404 5407
Geoff Wegener – *Mount Barker*
Telephone: (08) 8532 8883
Malcolm Farmer – *St Marys*
Telephone: (08) 8275 0902
John Riedel – *South East*
Telephone: (08) 8724 1617

FAQs

What are the augmentation allowances?

All customers are permitted an augmentation allowance, for which customers do not face an augmentation charge:

- Standard allowance = 90kVA (where three phase connections are available)
- SWER = 25kVA (restricted to single phase connections only).

How is kVA calculated from Low Voltage Amps?

$kVA = (\text{volts} \times \text{amps} \times 1.732) / 1000$
 $139kVA = (400\text{volts} \times 200 \text{amps} \times 1.732) / 1000$

When are standard augmentation rates applied?

When a customer exceeds the allowance, and does not satisfy either of two threshold criteria:

- increase in maximum demand greater than 5% of substation capacity; or
- connection located more than 15km from a substation.

Customer connections

4/4

What are the service standards relating to enquiries, offers and tenders?

On receipt of all necessary information, ETSA Utilities must use its best endeavours to make an offer within 20 business days but must not exceed 35 business days unless the work involves augmentation of, or an extension to, a transmission network. Wherever possible, the timeframe should be as agreed between ETSA Utilities and the customer.

ETSA Utilities must prepare a specification within a reasonable time, as agreed with the customer, which should not exceed 20 business days for complex projects and 10 business days for all other cases.

On receipt of an acceptable design and notification that the customer has selected a constructor, ETSA Utilities will liaise with the customer and constructor over the design and construction, program for undertaking works, payments from the customer to the constructor, warranties for work performed and handing over of the assets to ETSA Utilities on completion of the works.

How am I charged for contributions to upstream customers?

A contribution will apply to upstream customers where the extension was built within seven years of the new connection. Contributions to upstream customers are calculated on the cost of the original extension/original customer payment, based on the demand of the original and new customers connected to that extension.

Who owns the assets when they are completed?

ETSA Utilities owns the assets and is required to operate and maintain them for the life of the connection.

Who can I talk to at ETSA Utilities, and when?

Please refer to the previous page for contact details. Business hours are 8 am to 5 pm weekdays.

Where can I find more information?

The ESCOSA website: www.escosa.sa.gov.au has a range of documents, including the Electricity Distribution Code. Chapter 3 of that Code covers the principal areas covered by this fact sheet.