Final Decision

Power and Water Corporation Electricity Distribution Determination 2024 to 2029 (1 July 2024 to 30 June 2029)

Attachment 18 Connection Policy

April 2024



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Inquiries about this publication should be addressed to:

Australian Energy Regulator GPO Box 3131 Canberra ACT 2601

Email: aerinquiry@aer.gov.au

Tel: 1300 585 165

AER reference: AER212492

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Connection Policy

2024 - 2029



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1. Introduction

1.1 Power and Water Corporation

Power and Water Corporation (Power and Water) is the Government Owned Corporation responsible for the provision of electricity networks and water and sewerage services across the Northern Territory (NT).

This document refers to Power and Water in its capacity as a distribution network service provider of regulated electricity services, licensed by the Utilities Commission under the *Electricity Reform Act*. References to defined terms within this document have been italicised.

1.2 Purpose and Scope of Document

This Connection Policy (the Policy) sets out the circumstances in which Power and Water requires a *retail* customer or real estate developer to pay a connection charge for establishing a new connection or making a connection alteration, and how these charges are calculated for the provision of connection services. The Policy provides the framework for connection charges that will be included in a connection offer to connection applicants.

The Policy applies to connections requested from 1 July 2024 for new or modified connections during 2024–29 regulatory control period (1 July 2024 to 30 June 2029 inclusive).

The Policy was prepared in accordance with the:

- NT National Electricity Rules (NT NER) Chapter 6 Rule 6.7A.1 (a);
- connection charge principles set out in Part E of Chapter 5A of the NT NER;
- connection charge guidelines for electricity retail customers published by the Australian Energy Regulator (AER); and
- AER's Framework and Approach decision for the proposed classification of services for the 2024–29 regulatory control period.

The Policy applies only to *connection applicants* for electrical installations in the local electricity systems as defined in Schedule 2 to the *National Electricity (Northern Territory) (National Uniform Legislation) Act*. At the time of writing, these local electricity systems are:

- Darwin-Katherine Electricity System;
- Tenant Creek Electricity System; and
- Alice Springs Electricity System.

Note:

This Policy does not apply to connections to the network by registered participants or intending registered participants in the wholesale market. These connections are covered by Chapter 5 of the NT NER.

This Policy would also apply to any regulated stand alone power systems (SAPS) established by Power and Water in the Northern Territory. At the time of publication there are no regulated SAPS in the Northern Territory and no plans to introduce any regulated SAPS.

1.3 Contact Details for Further Information

For further information about this Policy, please contact:



Executive General Manager Power Services, Power and Water Corporation

GPO Box 1921

Darwin NT 0801

Phone: (08) 8924 5400

Email: customerservice@powerwater.com.au

2. Who is a Connection Applicant?

A connection applicant is typically one of the following:

- a retail customer;
- a retailer or other person acting on behalf of a retail customer; or
- a real estate developer.

3. What are Connection Services?

Connection services involve the following types of work:

- connecting a home, business or other premises to the electricity distribution network (new connection);
- extending or increasing the capacity of the existing network to reach a connection applicant
 (extension or shared network augmentation) where adequate supply is not available to make a
 new connection; or
- enhancing aspects of an existing connection.

There are two types of *connection services* offered by Power and Water:

- basic connection services; or
- negotiated connection services.

Under Chapter 5A of the NT NER there is also the possibility of standard connection services, although this has not been offered to date by Power and Water.

Power and Water also offers two connection services to manage other activities associated with connections:

- enhanced connection services; and
- connection management services.

3.1 Basic Connection Services

In general, basic connection services include:

- connection of *residential* and small non-residential premises where:
 - supply is available (i.e. there is a power asset (overhead or underground) available at the required voltage and with sufficient capacity for the proposed connection);
 - o no network augmentation required; and



- the maximum demand of the electrical installation is less than or equal to 100 amps per phase;
- connection of micro embedded generation (e.g. solar PV installations) or storage with total system capacity as per the requirements of AS4777 (Grid connection of energy systems via inverters installation requirements) that are: (1) smaller than 30 kVA 3-phase or 10 kVA single-phase; and (2) consistent with Power and Water's process regarding small inverter connected generators,¹ where there is no network augmentation required.

Based on the above definition and scope, basic connection services do not apply to:

- real estate developers:
- residential and non-residential customers with maximum demand of the electrical installation greater than 100 amps per phase; or
- embedded generating unit operators that are not micro embedded generators.

3.2 Negotiated Connection Services

Negotiated connection services are those *connection services* that do not meet the definition of a *basic connection service* or where the *connection applicant* elects to negotiate the terms upon which the connection is provided. Under the NT NER, Power and Water may charge a *connection applicant* a reasonable fee to cover expenses directly and reasonably incurred in assessing the applicant's *connection application* and making a negotiated *connection offer*.

Negotiated connection services may include:

- large embedded generators (30 kVA 3-phase or above and 10kVA single-phase or above);
- dedicated services that only supply the *connection applicant* that are more than one span of low voltage overhead or 25 metres of low voltage underground cable, at the time of application;
- connection services that do not meet the least cost technically acceptable (LCTA) connection standard for the capacity requirements of the connection applicant;
- connections that are made to an existing part of the Power and Water network that is subject to a pioneer scheme; and
- temporary low voltage connections that need network augmentation works.

Examples of negotiated connection services may include:

- extension of the existing high voltage and low voltage networks, including suitable substations;
- establishment of a dedicated zone substation and/or high voltage feeder(s);
- connections to a real estate development;
- an embedded generator that is not a micro embedded generator;
- *augmentation* of the shared network only if the requested increase in demand is greater than planned for by Power and Water;
- public lighting; and
- public electric vehicle charging facilities.

There are three potential components to negotiated connection services:

Power and Water's small inverter connected generators process can be found at powerwater.com.au/solar



- Premises connections for services to connect or modify the existing connection of a connection applicant's home, business, or other premises to Power and Water's distribution network, such as the overhead services main to connect a house's point of connection to Power and Water's distribution network. Premises connection assets are mostly situated within the customer's property and serve only the specific customer.
- Extensions for connections that require the addition of assets outside the present boundaries of Power and Water's distribution network to connect the connection applicant. Extensions may be used to connect subsequent customers, where appropriate.
- Shared network augmentation for connections where the additional demand would require work to enlarge or increase the capacity of the upstream shared network either immediately or in the future beyond what is planned for by Power and Water.

3.3 Enhanced Connection Services

Enhanced connection services are connection services provided at the request of a customer or third party to provide service levels other than that are associated with the lest cost technically acceptable option, for example:

- provided with higher quality of reliability standards, or lower quality of reliability standards (where permissible) than required by the NER or any other applicable regulatory instruments; or
- in excess of levels of service or plant ratings required to be provided by the distributor.

Enhanced connection services include enhancements for both consumption and export. Connection charges for enhanced connection services provided by Power and Water will be in accordance with Power and Water's published Pricing Schedule for Connection Charges for Alternative Control Services.

3.4 Connection Management Services

Connection Management services include all activities that relate to customer connection applications and managing connections on an ongoing basis. This includes:

- connection application related services; and
- connection point management services.

Connection charges for Connection Management Services provided by Power and Water will be in accordance with Power and Water's published Pricing Schedule for Connection Charges for Alternative Control Services.

4. Types of Customer Contracts

There are two types of connection contracts:

- a (physical) connection contract associated with establishing or altering the physical *connection* to the *distribution network* (described within this Policy); and
- a customer (supply) connection contract associated with the ongoing supply of electricity to a *retail* customer's premises. This contract is normally deemed to apply and the customer does not need to



sign or agree to the contract.² It commences upon energisation or when a customer starts consuming energy.

4.1 (Physical) Connection Contract – Establishing or Altering a Physical Connection

There are two types of physical connection contracts for establishing or altering connections:

- **Model standing offer (MSO)** that must be approved by the AER and can be accepted by a *retail customer*, either by:
 - accepting the terms and conditions of the MSO when they make an application for a new or altered connection (i.e. an expedited process); or
 - o formally receiving and accepting a connection offer.
- Negotiated connection contract where a connection applicant wants to negotiate for contract
 conditions different to that contained in the MSO, Power and Water will negotiate the terms and
 conditions with a connection applicant, including the price of the connection offer. A formal offer
 by Power and Water and acceptance of the connection contract by the connection applicant occurs
 via this process.

4.2 Customer (Supply) Connection Contract

There are three types of customer connection contracts for the ongoing supply of electricity:

- **Deemed Standard Supply Contract**³ applies to all small customers (i.e. electricity consumption less than 750MWh per annum) unless they have a negotiated customer connection contract (Negotiated customer supply contract see below). The Deemed Standard Supply Contract commences when a customer's premises is energised or when a customer commences consumption of electricity.
- Deemed Large Supply Contract terms and conditions must be approved by the AER. Where a
 Deemed Large Supply Contract has not been approved, the Deemed Standard Supply Contract
 applies to a large customer (i.e. electricity consumption is more than 750MWh per annum) unless
 they have a Negotiated customer supply contract. A Deemed Large Supply Contract commences
 when a customer's premises is energised or when a customer commences consumption of
 electricity.
- **Negotiated customer supply contract** terms and conditions are negotiated between Power and Water and the customer and a fee covering the costs of the negotiation will be charged in advance.

Note: copies of both deemed contracts are available on Power and Water's website.



These contracts are always deemed to apply unless they have been negotiated between Power and Water and the retail customer. If negotiated, they commence when signed by both parties.

Power and Water's DSSC is based on the Model terms and conditions detailed in the National Energy Retail Rules (NERR) Schedule 2.

5. Who Can Provide Connection Services?

5.1 Basic Connection Services

All basic connection services are provided by Power and Water.

5.2 Negotiated Connection Services

Power and Water can provide negotiated connection services to a *connection applicant* or, subject to agreement with Power and Water, the *connection applicant* can choose to undertake some elements of connection works as contestable works as set out below.

The *connection applicant* may choose to use an *accredited service provider* (e.g. electrical consultant / contractor) as an alternative to Power and Water to undertake the design and / or construction work downstream of the connection to Power and Water's existing network, where it can be constructed safely in isolation of Power and Water's existing network. This may include the premises connection and *extension* works component of a negotiated connection service and all reticulation within property developments.

Under this circumstance, the following is required:

- The infrastructure must be designed and constructed to Power and Water standards and guidelines as published on Power and Water's website.
- The connection applicant must create registered electricity easements in favour of Power and
 Water, as required, for the accommodation of the necessary network assets, in accordance with
 Power and Water's <u>Guidelines for Developers of Subdivisions and Electricity Infrastructure (NP020)</u>.
 The costs associated with establishing registered easements will be met by the connection
 applicant.
- The contestable works that are undertaken and funded by the *connection applicant* are to be gifted to Power and Water upon acceptance by Power and Water. Acceptance will include installation audits, satisfactory testing results and making the final connection to works undertaken by Power and Water.
- The *connection applicant* is to provide a warranty on the installed infrastructure covering workmanship and defects for two years.

Power and Water will undertake these works as requested by a *connection applicant* as soon as practicable.

The non-contestable elements of *connection services*, to be undertaken by Power and Water, may include but are not limited to:

- preparation and issue of design specifications;
- review and approval of design undertaken by the connection applicant;
- audit of construction where the connection applicant undertakes the construction works;
- conduct of physical inter-connections to Power and Waters' distribution network;
- commissioning and testing of the constructed connection assets to Power and Waters' distribution network; and
- integrating the newly created connection assets including any *extensions* and *augmentation* into Power and Waters' asset management systems.



6. Shared Network Augmentation

Shared network *augmentation* refers to works on the shared network to increase the capacity of the *distribution network* to supply more than one customer. The types of work under this category include:

- creating new zone substations or increasing the capacity of existing zone substations;
- creating new transmission lines or increasing the capacity of existing transmission lines; and
- increasing the capacity of distribution lines and distribution transformers that supply more than one customer.

All shared network *augmentation* is performed by Power and Water.

Power and Water produces an annual update to its Transmission and Distribution Annual Plan that considers the forecast changes in electricity demand to all parts of the network and develops an efficient investment plan to meet the required reliability for that demand. Any increase in capacity by a *connection applicant* that causes a demand increase beyond the expected incremental demand forecast within the planning horizon will be treated as a negotiated connection service, and there will be a shared network augmentation component to the connection service.

The shared network *augmentation* threshold is a demand or capacity threshold below which *retail customers* (other than non-registered embedded generators and real estate developers) will not be required to make a capital contribution towards the cost of any *augmentation* of the *distribution network*. The shared network *augmentation* threshold is the maximum demand of 100 amps per phase.

7. What are the Charges for Connection Services?

This section sets out how Power and Water will calculate charges for basic and negotiated connection services it undertakes. It is important to note that different connection service charges will apply depending on the AER's classification of services.

The connection charges payable to Power and Water will (where applicable) be comprised of the following:

- connection charges for services classified as an alternative control service (ACS) in accordance with Power and Water's published Pricing Schedule for Connection Charges for Alternative Control Service, which includes the premises connections and extensions components of negotiated connection service;
- capital contributions for services classified as a standard control service (SCS) for any shared network augmentation component of a negotiated connection service; and
- Pioneer Reimbursement Scheme charges for extensions to which a pioneer scheme applies.

Connection applicants may also be required to pay a security fee (see section 8 below).

7.1 Connection charges for ACS

Connection services, which are classified as an ACS, are customer specific or customer-requested services with the full costs recovered from the customer requesting that service. Power and Water may also charge additional fees to recover reasonable costs incurred for site inspections to provide a negotiated connection service and to recover the cost of negotiating a connection offer. This charge is based on the least cost technically acceptable construction method.



All connections must be metered except where the energy consumption can be accurately assessed without the need for a meter. Power and Water is responsible for providing types 1–6 metering services,⁴ and these metering services are classified by the AER as an ACS and therefore will be charged separately.

The relevant fees for ACS are set out in Power and Water's published Pricing Schedule, which is approved by the AER.⁵

7.2 Capital contributions for SCS

Basic connection customers are not required to make a capital contribution towards the cost of any augmentation of the distribution network.

When a connection applicant is seeking a connection that does not meet the classification of a basic connection service and that requires *augmentation* of the upstream shared network beyond the demand planned for by Power and Water (i.e. a negotiated connection service with a shared network augmentation component), the *connection applicant* may be required to make a reasonable capital contribution towards the cost of the *augmentation*. The capital contribution (CC) will apply per connection point and will be calculated as follows.

Capital Contribution = Max[ICCS + ICSN - IR(n = X), 0] + \$PS

Where:

X = 15 years for non – residential; 30 years for residential

ICCS = incremental cost customer specific.

ICSN = incremental cost shared networkIR = incremental revenue.

\$PS = any relevant pioneer reimbursement scheme charges.

ICCS = Incremental Cost Customer Specific

These costs are for any standard control services undertaken by or contracted by Power and Water, which are dedicated to the connection applicant.

ICSN = Incremental Cost Shared Network

This term is for the incremental costs of works (either immediate or in the near future) due to the new connection. The types of work under this category include:

- creating new zone substations or increasing the capacity of existing zone substations;
- creating new transmission lines or increasing the capacity of existing transmission lines; and
- increasing the capacity of distribution lines and distribution transformers that supply more than one customer.

These costs will be based on the estimated maximum demand of the connection applicant on a \$ per kVA demand basis (see Appendix A: Shared Network Augmentation Rates for the charge rates).



⁴ Type 5 meters are currently not approved for use in the Northern Territory. When referring to types 1 to 6 metering services, this includes services relating to pre-payment meters

⁵ Power and Water's Pricing Schedule is available at powerwater.com.au/networkpricing

IR = Incremental Revenue

The incremental revenue will be the net present value of the expected distribution use of system (DUoS) charges that we expect to recover from the customer. When estimating the incremental revenue, Power and Water will remove the component attributable to augmentation and the operational and maintenance costs from the network tariff

When calculating the incremental revenue, Power and Water will apply the following:

- Forecast DUoS revenue will be based on the price path set out in the AER determination for the 1 July 2024 to 30 June 2029 period and the relevant tariffs as set out in the approved Pricing Proposal and Tariff Structure Statement. For the period from 1 July 2029, Power and Water will assume a constant tariff in real terms.
- A discount rate based on Power and Water's approved regulatory weighted average cost of capital
 converted into pre-tax terms using the estimated average effective tax rate for the regulatory control
 period as set out in the AER determination for the 1 July 2024 to 30 June 2029 period.
- If the connection applicant is a residential customer, then an assumed connection life of 30 years applies when calculating the expected DUoS charges recoverable from the connection applicant
- If the connection applicant is a business customer, then an assumed connection life of 15 years will
 apply when calculating the expected DUoS charges recoverable from the connection applicant.
 However, where a 15 year connection life does not reflect a reasonable estimate of the time that the
 connection will remain in service, Power and Water may apply an alternative assumed connection
 period.

\$PS = Any relevant pioneer reimbursement scheme charges

For new customer connections to an existing dedicated network *extension* where a Pioneer Reimbursement Scheme applies, the new customer may be required to pay a connection charge to refund a portion of the costs of the *original customer* who contributed to the dedicated network *extension* (section 7.3).

7.3 Pioneer Reimbursement Scheme

An *original customer* who has been provided with a connection service with an extension component is entitled to have some of their costs reimbursed by Power and Water if a *subsequent customer*(s) connects to that network *extension* within seven years of the asset being energised.

When an independent service provider or accredited service provider performs an extension and the cost of the extension is unknown to Power and Water, the pioneer scheme will use an estimate of the amount it would have charged the original customer to perform the extension.

Power and Water may recover the refund amount from the *subsequent customer* as part of the *connection charges* paid by the *original customer*. Power and Water will pay the refund as soon as practicable after the *subsequent customer* pays Power and Water the refunded amount.

Power and Water will pay the refund to either:

• the current owner of the original premises, if the original premises is owned by a single entity; or



 where two or more connection applicants have jointly procured and/or funded the original works, the rebates will be divided between the current owners in accordance with the proportions in which they procured and/or funded the works.

The reimbursement payable under the pioneer scheme by a *subsequent customer* to the *original customer* is calculated as:

$$(\$PS) = (Asset Value) \times (Asset Fraction) \times (Capacity Fraction)$$

 Asset Value - the current original connection applicant(s) funded value of the network extension assets, depreciated on a straight-line basis over a 20 year period.

(Asset Value) = (Original Applicant(s) Funded Value)
$$\times \left[1 - \frac{(Asset Age)}{20}\right]$$

Asset and Capacity Fractions - the share of the common part of the extension used by the subsequent
customer relative to other connection applicant(s) already supplied by the extension in terms of
maximum capacity, and/or other physical attributes (e.g. length) as applicable.

(Asset Fraction) =
$$\frac{\sum_{k=1}^{n} (\text{Length of Common Segment})_k}{(\text{Total Length})}$$

$$(Capacity Fraction) = \frac{(Est Max Demand)}{(Est Max Demand) + (Existing Max Demand)}$$

The pioneer scheme commences on the date the *extension* asset is energised by Power and Water. The reimbursement amount is determined at the date the *subsequent customer* accepts the connection offer.

If Power and Water's pioneer scheme calculates a total refund to all customers already connected to an *extension* that is less than \$1,260 (\$2022) adjusted subsequently for CPI, then Power and Water is not required to make a pioneer scheme refund.

If the *extension* assets were constructed to a higher standard or capacity than the least cost technically acceptable standard required by Power and Water, then only the cost of constructing the *extension* to the standard required will be subject to the pioneer scheme.

Any pioneer scheme applied to *real estate developments* would only apply to customers connecting to the *extension* assets outside the pioneer developer's site boundary and not to premises connecting within the development.

8. Security Fee

Power and Water may require the payment of a security fee if it determines there is a reasonable risk that it may not earn the estimated incremental revenue from the provision of *connection services*. The amount of the security fee will not be greater than the amount of the incremental revenue, which Power and Water has assessed as having a risk of not being recovered.

Power and Water may require an applicant to make a prepayment, or provide an unconditional, irrevocable bank guarantee (or equivalent financial instrument), under terms acceptable to Power and Water. The bank guarantee or other financial instrument must guarantee the portion of revenue that Power and Water

considers to be at risk of not being recovered (excluding the operating and maintenance component) while providing services to the *connection applicant*.

Circumstances where Power and Water may require a security fee, include but are not limited to, the following:

- the connection applicant is a connection applicant or concurrent multiple applicants; and
- the forecast capital costs associated with the new connection including augmenting the shared network exceed \$100,000 for any connection applicant.

If Power and Water determine there is reasonable risk that an extension or upgrade will not proceed, Power and Water may require a *connection applicant* to enter into an Early Works Agreement and provide an unconditional, irrevocable bank guarantee (or equivalent financial instrument), under terms acceptable to Power and Water, to cover the costs incurred during the design, construction and commissioning phases of the project.

Where a *connection applicant* is required to provide security under this clause, they will be required to provide such security before the commencement of works to connect to Power and Water's network.

The Security Fee will be progressively released annually to the applicant as the incremental revenue is realised. Where the security fee is provided as an upfront payment, Power and Water will rebate the security fee via annual instalments and will pay interest on the security fee commensurate to the manner in which the security fee is treated by Power and Water.

9. Prepayments

For works undertaken by Power and Water with a value greater than \$6,300 (Real 2022), the payment of the *connection charges* will be recovered through a single up-front payment from the *connection applicant*. The payment must be made to Power and Water before the related works commence, unless otherwise negotiated with the *connection applicant*. For staged construction works, partial prepayments for works with a value greater than \$6,300 may be applied by Power and Water.

10. Embedded Generators and energy storage systems

Non-registered embedded generators are not eligible for the exemption from being charged for *augmentation* (insofar as it involves more than an *extension*) and must pay the full costs of removing network constraints that are specific to the connection of the embedded generation.

For the purposes of this Policy, energy storage (e.g. batteries) which both charge from Power and Water's network and discharge / generate back into the network, is considered as load when charging and embedded generation when discharging. The predominant purpose of the connection will be taken into consideration when deciding what connection charges will apply.



11. Real Estate Development

For the purposes of this Policy, *real estate development* includes the commercial development of land, such as:

- subdivision of a block of land into more than one premises;
- construction of commercial and / or industrial premises (e.g. shopping centres); or
- construction of multiple new residential premises.

All *real estate development* connections will be processed as a negotiated connection service, with any premises connection and extension component classified as ACS, and any shared network augmentation component classified as SCS.

12. When Can Static Zero Export Limits Apply?

The circumstances in which Power and Water may offer an application for a new *micro embedded generators*, or alteration to an existing *micro embedded generator*, a connection with a static zero export limit condition are outlined below.

A static zero export limit means that a customer is prevented from accessing the network to export electricity at any time.

Power and Water is required to offer to provide *basic connection services* on specified terms and conditions for *micro embedded generators*, or negotiate a *connection contract* with a *connection applicant*. However, the connection of a *micro embedded generator* to the *distribution network* does not of itself guarantee the ability to export electricity.

The AER's connection charge guidelines specify the conditions under which we may apply a static zero export limit.

Power and Water will apply a static zero export limit condition for *basic connection services* or a negotiated *connection contract* (for new or significantly altered connections after 1 July 2024) when:

- the export from the *micro embedded generator* will have a high probability of resulting in Power and Water either not meeting a regulatory obligation (such as a voltage level or power quality standard), or not being able to maintain the *distribution network* within its technical limits; and
- the cost of augmenting the *distribution network* to allow a reasonable export capacity level by the *connection applicant* more than marginally outweighs the benefits arising from providing the additional export capacity (taking into consideration the expected future new *micro embedded generation* outputs that will be able to export to the *distribution network* arising from the augmentation, and unless the *connection applicant* elects to fund the necessary network augmentation);

Or when:

requested by the connection applicant.

Power and Water may establish a standard assessment policy to undertake the above assessment and, if so, must publish it on Power and Water's website.

Power and Water will not apply a static zero export limit if the *micro embedded generator* has a suitable dynamic response system as specified by Power and Water for a particular location, except where a



connection applicant specifically seeks a static zero export limit connection condition. Power and Water must use its best endeavours to identify and specify suitable dynamic response systems for all locations in Power and Water's distribution area.

When a static zero export limit condition is offered by Power and Water as necessary, in the *connection* offer, Power and Water will inform the *connection* applicant of:

- the technical and economic considerations that led to the static zero export limit condition being applied;
- their option to install a suitable dynamic response system if available and as specified by Power and Water to avoid a static zero export limit condition being applied;
- how to access an independent technical review of Power and Water's reasons for applying the static zero limit condition;
- their option to raise a dispute with Power and Water (see section 13 below) and other dispute resolution channels available; and
- their option to seek a review of the static zero export limit condition five years after the initial connection is completed.

If the connection applicant seeks a review of the static zero export limit condition after five years of completing the initial connection and, following this review, Power and Water assesses applying a static zero export limit condition is no longer justified based on the above circumstances, Power and Water will inform the connection applicant that they can reapply to have their static zero export limit condition lifted.

Power and Water will review static zero export limit conditions applied on existing *micro embedded generators* following any network augmentation works designed to expand the export hosting capacity of the *distribution network* in a particular location. If additional export capacity becomes available as a result of that augmentation, Power and Water will inform the relevant *connection applicant* that they can reapply to have their static zero export limit condition lifted.

Where a connection applicant for a *negotiated connection service* wishes to fund shared network augmentation to remove a static zero network limit, the customer may be required to make a capital contribution towards the cost of augmenting the network. This capital contribution would be determined based on the difference between the actual cost of the network augmentation and the net present value over the connection life of the export charge revenue received from the customer and any projected future micro embedded generator connections. Power and Water is not proposing export charges for this regulatory period. Therefore, the customer would be required to pay the full actual cost of augmenting the shared network.

13. Dispute Resolution

Any dispute with Power and Water in relation to connection offers will be managed in accordance with Power and Water's standard complaints and dispute resolution procedure, details of which are available on our website. Power and Water will make every endeavour to resolve connection disputes in a timely manner. This includes informing the *connection applicant* on whether there are alternative dispute resolution channels available to help negotiate a suitable export limit other than a static zero export limit (see section 12 above).

Where agreement on the terms and conditions of the connection offer cannot be reached, the AER may consider and make determinations regarding connection disputes under Part 10 of the National Electricity



Law. Information on the AER's customer connection dispute resolution process is available on the AER's website: www.aer.gov.au



14. Definitions and Glossary

The following definitions and terms are provided to assist a connection applicant in understanding some of the terminology that may be used in relation to connections and interpreting this Policy.

Table 1 Definitions and Glossary

Term	Definition
Accredited Service Provider	A service provider who has been accredited by Power and Water in accordance with its relevant policies to design, construct, install and commission electricity distribution system assets.
ACS	Alternative Control Services
AER	Australian Energy Regulator
Augmentation	Work to enlarge the system or increase the capacity to transmit or distribute effectively.
Basic Connection Service	A connection service related to a connection (or a proposed connection) between a distribution system and a retail customer's premises (excluding a non-registered embedded generator's premises) in the following circumstances:
	 (a) either: the retail customer is typical of a significant class of retail customers who have sought, or are likely to seek, the service; or the retail customer is, or proposes to become, a micro embedded generator; and the provision of the service involves minimal or no augmentation of the distribution network; and a model standing offer has been approved by the AER for providing that service as a basic connection service.
Business customer	A customer who is a <i>non-residential customer</i> .
Connection	A physical link between a distribution network and a retail customer's premises to allow the flow of energy.
Connection alteration	Any kind of alteration to an existing connection including, but not limited to, an addition, upgrade, extension, expansion or augmentation.
Connection applicant	 An applicant for a connection service from one of the following categories: a retail customer; or retailer or other person acting on behalf of the customer; or

Term	Definition
	real estate developer.
Connection charge	A charge applied by Power and Water for a connection service.
Connection charge guideline	The Australian Energy Regulator's Connection Charge Guidelines for electricity retail customers, published under Chapter 5A of the National Electricity Rules.
Connection service	Means either or both of the following:
	(a) a service relating to a new connection for premises;(b) a service relating to a connection alteration for premises,
	but, to avoid doubt, does not include a service of providing, installing or maintaining a metering installation for premises.
Contestable service	A service is contestable if the laws of the participating jurisdiction in which the service is to be provided permit the service to be provided by more than one supplier as a contestable service or on a competitive basis.
Distribution network	The 22kV and 11kV electricity system owned and operated by Power and Water.
Distribution substation	A modular 22kV or 11kV to low voltage ground mounted transformer and switching assembly to provide capacity and facilitate connection of multiple supplies and customers.
Embedded Generator	A Generator who owns, operates or controls an embedded generating unit.
Extension	An augmentation that requires the connection of a power line or facility outside the present boundaries of the transmission or distribution network owned, controlled or operated by Power and Water.
Low voltage network	The 400V / 230V electricity system connecting low voltage supplied customers.
Micro Embedded Generator	A small customer, large customer or MSGA customer who operates, or proposes to operate, an embedded generating unit for which a micro EG connection is appropriate.
MSO	Model Standing Offer means a document approved by the AER as a model standing offer to provide basic connection services or as a model standing offer to provide standard connection services.



Term	Definition
MSGA customer	Means a person who owns, operates or controls, or proposes to operate or control, a small generating unit and who has an agreement with a Market Small Generation Aggregator relating to the small generating unit under which the Market Small Generation Aggregator is financially responsible for the market connection point at which the small generating unit is connected to the national grid.
Network coupling point	The point at which connection assets join a distribution network, used to identify the distribution service price payable by a Customer.
Non-Registered Embedded Generator	An embedded generator that is neither a micro embedded generator nor a Registered Participant.
Non-residential Customer	A customer who is not a <i>residential customer</i> .
NT NER	Northern Territory National Electricity Rules
Original customer	The connection applicant who triggered the requirement and paid for the construction of an extension asset.
Peak demand	A connection service's electricity demand, megawatts, in the region during the period, determined in accordance with the National Electricity Rules.
Peak Coincident Demand	A connection service's electricity demand at times when the network or relevant segment is experiencing its maximum Demand.
Real Estate Developer	A person who carries out a real estate development.
Real Estate Development	The commercial development of land including its development in 1 or more of the following ways:
	(a) Subdivision of a block of land into more than one premises;(b) the construction of commercial or industrial premises (or both);(c) the construction of multiple new residential premises.
Regulated stand alone power system	Has the same meaning as defined in the National Electricity Rules.
Residential customer	A customer who purchases electricity principally for personal, household or domestic use at premises.
Retail customer	A person who is one or more of the following:
	(a) a small customer;
	(b) a large customer;(c) a micro embedded generator; or



Term	Definition
	(d) a non-registered embedded generator, other than a non-registered embedded generator who has made an election under clause 5A.A.2(c) for connection under Chapter 5 of the NT NER.
Standard Connection Service	A connection service (other than a basic connection service) for a particular class (or sub-class) of connection applicant and for which a model standing offer has been approved by the AER.
scs	Standard Control Services that are central to electricity supply and therefore relied on by most (if not all) customers such as building and maintaining the shared distribution network. These services are regulated by the AER.
Static zero export limit	Has the same meaning as in the National Electricity Rules.
Subsequent customer	A connection applicant, other than the original customer, who connects to an extension subject to the pioneer scheme.
Zone substation	A substation for the purpose of connecting a distribution network to a sub-transmission network.

A. Shared Network Augmentation Rates

	Unit rate (\$/kVA)		
	Connection to low voltage	Connection to high voltage	
Residential and residential real estate developers	863	668	
Business tariff customers	591	457	

These unit rates will be escalated from \$2024 for subsequent years by the Consumer Price Index.



Contact

Executive General Manager Power Services, Power and Water Corporation

GPO Box 1921

Darwin NT 0801

Phone: (08) 8924 5400

powerwater.com.au

