



Aurora Energy – Distribution Tariffs

Network Tariff Application Guide for Period 4 – 1 July 2010 to 30 June 2011

To apply from 1 July 2010

UNCONTROLLED WHEN PRINTED

COPYRIGHT © AURORA ENERGY PTY LTD, ABN 85 082 464 622, ALL RIGHTS RESERVED

This document is protected by copyright vested in Aurora Energy Pty Ltd. No part of the document may be reproduced or transmitted in any form by any means including, without limitation, electronic, photocopying, recording or otherwise, without the prior written permission of Aurora Energy. No information embodied in the documents which is not already in the public domain shall be communicated in any manner whatsoever to any third party without the prior written consent of Aurora Energy. Any breach of the above obligations may be restrained by legal proceedings seeking remedies including injunctions, damages and costs.

CONTACT

This document is the responsibility of the Commercial Management Group within the Network Division of Aurora Energy Pty Ltd (ABN 85 082 464 622). Please contact the indicated owner of the document with any queries or suggestions.

REVIEW DATE

This document is due for review not later than 30 April 2011

RESPONSIBILITIES

DOCUMENT OWNER

*Mr Leigh Mayne
Aurora Energy Pty Ltd
177 Main Road
Moonah TAS 7009
Phone: (03) 6271 6544
email: leigh.mayne@auroraenergy.com.au*

IMPLEMENTATION

Commercial Management – Commercial Team

AUDIT

Periodic audits to establish conformance with this document will be conducted by Aurora's Commercial Management Group.

COMPLIANCE

All Group Managers

DOCUMENT MANAGEMENT

Commercial Management – Commercial Team

DISCLAIMER

This document is for generating internal and external information belonging to Aurora Energy acting in its capacity as a Distribution Network Service Provider in the state of Tasmania only and it may or may not contain all available information on the subject matter this document purports to address. The information contained in this document is subject to review and Aurora Energy may amend this document at any time. Amendments will be indicated in the Amendment Table, but Aurora Energy does not undertake to keep this document up to date.

To the maximum extent permitted by law, Aurora Energy makes no representation or warranty (express or implied) as to the accuracy, reliability, or completeness of the information contained in this document, or its suitability for any intended purpose. Aurora Energy (which, for the purposes of this disclaimer, includes all of its related bodies corporate, its officers, employees, contractors, agents and consultants, and those of its bodies corporate) shall have no liability for any loss or damage (be it direct or indirect, including liability by reason of negligence or negligent misstatement) for any statements, opinions, information or matter (expressed or implied) arising out of, contained in, or derived from, or for any omissions from, the information in this document.

AURORA ENERGY PTY LTD

Network Tariffs – Period 4

Version History

Version No	Date of Revision	Authorised By	Details of Amendment
1.0	May 2010	Network Regulation Manager	Initial Version
2.0	May 2010	Group Manager – Commercial Management	Final Version
2.0	May 2010	General Manager - Network	Approved for publication

Amendments to each version of this document will be tracked through Aurora's document management system.

CONTENTS

1. Application of Network Tariffs	3
1.1. Goods and Service Tax (GST)	3
1.2. Time Zones.....	3
1.3. Metering Services	3
1.4. Choice of Network Charges	3
1.5. Changes of Tariff	3
1.6. Obsolete Tariffs	3
1.7. Mid Month Change of Retailer of Choice.....	4
1.8. Standby Electricity Supply.....	4
1.9. Embedded Generation	4
1.10. Published Network Tariffs	4
2. LV General Network (N01).....	6
3. LV General Network - Business – (N02).....	6
4. LV General Network - Business – Nursing Homes (N02a)	6
5. LV General Network – Business – Same Curtilage (N02b)	6
6. Uncontrolled Energy (N05).....	7
6.1. Requirements of Water Heating Systems	7
6.2. Requirements of Residential Space Heating Systems	8
6.3. Requirements of Domestic Indoor Pool Heating Systems	9
6.4. Domestic Spa Systems.....	9
7. Controlled Energy (N06).....	9
7.1. General Conditions.....	9
7.2. Time of Use Availability.....	10
7.3. Requirements of Water Heating Systems	10
8. LV Controlled Heating (N06a).....	11
8.1. General Conditions.....	11
8.2. Time of Use Availability.....	11
8.3. Requirements of Water Heating Systems	11
9. LV Pay as You Go (N13)	12
10. LV General Residential Time of Use Tariff (N13r).....	12
10.1. Use of System Charges	13
10.2. Requirements of Water Heating Systems	13
10.3. Time of Use Periods	14
11. LV General Business Time of Use Tariff (N13b)	14
11.1. Use of System Charges	14

11.2. Requirements of Water Heating Systems	15
11.3. Time of Use Periods	15
12. Small LV Unmetered Supplies (N07).....	15
13. LV Day/Night (Irrigation) (N08)	16
14. All times are in Australian Eastern Standard Time.LV Time of Use Irrigation Tariff (N08a)	16
14.1. Use of System Charges	17
14.2. Time of Use Periods	17
15. LV Metered Demand (kW) (N03)	17
16. LV Metered Demand (kVA) (N09)	18
17. HV Metered Demand (kVA) (N10)	18
18. HV Specified Demand with Time of Use Energy (N10s)	18
18.1. Use of System Charges	19
18.2. Negotiation of “Specified Demand”	19
18.3. Calculation of NUoS Charges for Specified Demand.....	19
18.4. Time of Use Periods	20
19. HV Metered Demand (kW) (N11).....	20
20. HV Specified Demand in excess of 2.0 MVA (N15)	21
20.1. Use of System Charges	21
20.2. Negotiation of “Specified Demand”	21
20.3. Calculation of NUoS Charges for Specified Demand Tariffs	22
20.4. Time of Use Periods	22
21. Street Lighting (N20)	23
22. HV Individual Tariff Calculation	23
23. Other Matters	24
23.1. Reassignment of Network Tariffs	24
23.2. Maximum Demand Application	24
24. Definitions	26
25. References	28

1. Application of Network Tariffs

1.1. Goods and Service Tax (GST)

The network use of system prices and regulated Network Tariffs listed in this document, unless otherwise stated, are exclusive of GST.

1.2. Time Zones

All times reflected in this document are in Australian Eastern Standard Time (AEST.)

1.3. Metering Services

The standard charge for the provision of metering services may apply, depending upon the contestability status of the customer.

Where a customer has entered into a market contract in accordance with the Contestable Customer Regulations the standard metering services charge will not apply. Charges for the provision metering services will apply should Aurora be appointed as the Metering Provider (MP) and will be negotiated in accordance with the MP contract.

In all other cases the standard metering services charge will apply.

1.4. Choice of Network Charges

It is a matter for the customer's retailer of choice to determine the Network Tariff that is appropriate for their needs. Transfers between Network Tariffs will apply from the beginning of the normal billing period following the month in which written advice is received and transfers will not have any retrospective effect.

Aurora Energy reserves the right to review a customer's Network Tariff in the event of any electrical load changes and will notify the customer's retailer of choice regarding any resulting Network Tariff pricing changes. The final decision on the appropriate Network Tariff shall be at the discretion of Aurora Energy.

There will be instances where a customer may have a separate connection agreement with Aurora Energy and in these instances Aurora may directly invoice the customer for network use and the customer's retailer of choice will only provide energy related commercial services.

1.5. Changes of Tariff

Customers seeking tariff reassignment must remain on the reassigned tariff for a minimum twelve (12) month period unless otherwise agreed with Aurora.

1.6. Obsolete Tariffs

Retailers of choice and customers who choose to transfer from an obsolete Network Tariff will lose all rights to all obsolete Network Tariffs at that premise, i.e. the entire site will be required to move to currently available published Network Tariffs.

1.7. Mid Month Change of Retailer of Choice

When a customer elects to change their retailer of choice at any time during a calendar month, Network Use of System (NUoS) invoices will be allocated pro-rata between the retailers involved.

NUoS invoices will use the “actual readings” obtained on the day of transfer.

Unmetered electricity supplies will be transferred on a pro rata basis based on the number of days in the month the customer was contracted with each retailer. It will not be possible to transfer unmetered electricity supplies between Retailers on the same business day.

1.8. Standby Electricity Supply

Where customers with critical electricity supply needs have a requirement for standby electricity supply capability, applicable network charges will be negotiated on the basis of the assets involved and the amount of feeder capacity required to be kept in reserve to accommodate the standby supply.

1.9. Embedded Generation

Network Use of System (NUoS) charges for Embedded Generation will be individually calculated. (Refer to Section 18)

1.10. Published Network Tariffs

Published Network Tariff applications depend on a number of facets including annual electrical energy consumption measured at the connection point, the supply voltage measured at the connection point, the method of connection to Aurora’s distribution network and the type of meter(s) installed at the customer’s installation.

Aurora Energy’s current published Network Tariff prices can be found on our website at:

http://www.auroraenergy.com.au/electricity_network/network_tariffs/current_network_tariffs.asp

Aurora's Period 4 Network Tariffs are:

Description	Aurora Code	MSATS Code	Type
Low Voltage General Network - Residential	N01	AuResGen	Published Tariff
Low Voltage General Network - Business	N02	AuBLVGen	Published Tariff
General Network – Business – Nursing Homes	N02a	AuBLVNurse	Published Obsolete Tariff
General Network – Business – Same Curtilage	N02b	AuBLVCurt	Published Obsolete Tariff
Low Voltage Metered Demand (kW)	N03	AuBLVDmKW	Published Obsolete Tariff
Uncontrolled Energy Tariff	N05	AuHeatUnco	Published Tariff
Controlled Energy Tariff	N06	AuHeatCont	Published Tariff
Controlled Energy	N06a	AuHeatConn	Published Tariff
Small Low Voltage Unmetered Supplies	N07	AuUMS	Published Tariff
Low Voltage Day/Night (Irrigation)	N08	AuIrrig	Published Obsolete Tariff
LV Irrigation Time of Use	N08a	AuIrrigTou	Published Tariff
Low Voltage Metered Demand (kVA)	N09	AuBLVDMKVA	Published Tariff
High Voltage Metered Demand (kVA)	N10	AuBHVDmKVA	Published Obsolete Tariff
HV kVA Specified Demand, Time of Use	N10s	AuHVSpecDm	Published Tariff
High Voltage Metered Demand (kW)	N11	AuBHVDmKW	Published Obsolete Tariff
Low Voltage Pay as You Go	N13	AuPAYG	Published Obsolete Tariff
LV Time of Use, Business	N13b	AuBusToU	Published Tariff
LV Time of Use, Residential	N13r	AuResToU	Published Tariff
High Voltage with Specified Demand in excess of 2.0MVA	N15	AuCHVDm2	Published Tariff
Street Lighting	N20	AuUmSsl	Published Tariff
High Voltage Individual Tariff Calculation (ITC) Customers		AuSpcCust1	Negotiated Tariff.

2. LV General Network (N01)

(MSATS Code – AuResGen)

This tariff is for low voltage installations that are premises used wholly or principally as private residential dwellings. A private residential dwelling is a house, flat, home unit, town house or similar qualifying residential premise.

There are no restrictions on the use of the supply (i.e. may be used for general power, heating, water heating, etc.)

Farm outbuildings may be connected on this tariff provided that the connection is through the meters for the farm residence.

A Type 6 meter is the minimum required for installations on this tariff.

3. LV General Network - Business – (N02)

(MSATS Code – AuBLVGen)

This is the basic, low voltage Network Tariff for installations that are not private residential dwellings. A private residential dwelling is a house, flat, home unit, town house or similar qualifying residential premise.

There are no restrictions on the use of the supply (i.e. may be used for general power, heating, water heating, etc.)

A Type 6 meter is the minimum required for installations on this tariff.

4. LV General Network - Business – Nursing Homes (N02a)

(MSATS Code – AuBLVNurse)

This Network Tariff is Obsolete and therefore no longer available to new customers

This low voltage Network Tariff is applicable only to those businesses registered as Aged Care facilities.

There are no restrictions on the use of the supply (i.e. may be used for general power, heating, water heating, etc.).

A Type 6 meter is the minimum required for installations on this tariff.

This tariff is obsolete, with no new connections allowed from 1 July 2008.

Please Note: Customers who choose to transfer off any one Obsolete tariff for an installation will lose all rights to all Obsolete tariffs for that installation, i.e. the entire installation will be required to move to currently available published tariffs.

5. LV General Network – Business – Same Curtilage (N02b)

(MSATS Code – AuBLVCurt)

This Network Tariff is Obsolete and therefore no longer available to new customers

This low voltage Network Tariff is for rural customers having a single connection point but requiring more than one meter due to site layout.

The single connection point must supply an installation qualifying for, and being supplied on the General Network - Residential tariff N01.

There are no restrictions on the use of the supply (i.e. may be used for general power, heating, water heating, etc.)

A Type 6 meter is the minimum required for installations on this tariff.

This tariff is obsolete, with no new connections allowed from 1 July 2008.

Please Note: Customers who choose to transfer off any one Obsolete tariff for an installation will lose all rights to all Obsolete tariffs for that installation, i.e. the entire installation will be required to move to currently available published tariffs.

6. Uncontrolled Energy (N05)

(MSATS Code – AuHeatUnco)

This Tariff is for low voltage installations.

In installations that are Private Residential Dwellings, this Network Tariff:

- is for water heating and/or residential space heating and/or domestic indoor pool heating only; and
- may only be used if the premises also has a current connection on Network Tariff N01.

In installations that are not private residential dwellings, this Network Tariff:

- is for water heating only; and
- may only be used if the premises also has a current connection on Network Tariff N02 or N02a.

With the exception of thermal-storage space heaters or thermal-storage water heaters, this Network Tariff N05 may not be applied to any apparatus also connected under another Network Tariff.

A private residential dwelling is a house, flat, home unit, town house or similar qualifying residential premise.

A Type 6 meter is the minimum required for installations on this tariff.

6.1. Requirements of Water Heating Systems

In installations that are Private Residential Dwellings, for connection on this Network Tariff, the water heating systems must:

- comply with Australian Standard 1056, Storage Water Heaters; and
- if the delivery rating of the water heating system is less than or equal to 500 litres, have an electric heating unit rating not exceeding 16 Watts per litre; or

- if the delivery rating of the water heating system is greater than 500 litres, have an electric heating unit rating not exceeding 32 Watts per litre.

Where a Private Residential Dwellings has a water storage heater installed, and the delivery rating is greater than 20 litres but less than 100 litres, the limit of 16 Watts per litre may be exceeded by that individual water storage heater. Only one water storage unit, with a delivery rating between 20 and 100 litres, that exceeds the 16 Watts per litre threshold may be installed at a Private Residential Dwelling.

In installations that are not Private Residential Dwellings, for connection on this Network Tariff, the water heating systems must:

- comply with Australian Standard 1056, Storage Water Heaters; and
- if the delivery rating of the water heating system is less than or equal to 500 litres, have an electric heating unit rating not exceeding 16 Watts per litre; or
- if the delivery rating of the water heating system is greater than 500 litres, have an electric heating unit rating not exceeding 32 Watts per litre.

Where a non-private residential installation has two or more water storage heaters installed, and the combined delivery rating is greater than 500 litres, the limit of 32 Watts per litre may be exceeded by an individual water storage heater provided that the ratio of the total wattage of all the water heating units to the total delivery rating does not exceed 32 Watts per litre.

Dairy water heaters containing main and booster heating units may have both heating units connected under this Network Tariff.

Dairy water heaters are not required to comply with the Australian Standard 1056.

The electric heating unit ratings do not apply to dairy water heaters.

6.2. Requirements of Residential Space Heating Systems

Permanently installed wired-in electric heater(s) may be eligible for this Network Tariff on condition that the wiring of any electric heater is installed by a registered electrician in accordance with AS/NZS 3000 wiring rules and associated regulations and acts, and one of the following conditions are met:

- if a residence has a permanently installed wired-in electric heater with an output of 3.5 kW in a living area, on a single functional switch then this, and any additional permanently wired space heaters throughout the residence, may be installed on this tariff; or

- a total rating of at least 5 kW of the same heating system installed throughout the residence. This heating system must be the priority heating system of the main living area and must have a single functional switch in each heated area throughout the residence. However where a ducted heating system is installed, the control switch must be located near the heating unit in order to qualify for this tariff; or
- heating in secondary areas such as bedrooms and hallways if the residence has off peak storage heating in the living area(s) as its priority source of heating. The secondary heating system should be a permanently connected single propriety heating system with a total of 5 kW or more heating capacity.

6.3. Requirements of Domestic Indoor Pool Heating Systems

Private domestic indoor swimming pools are allowed under Network Tariff N05 if an installation:

- complies with the residential space heating system rules as provided above; and
- has an electrical input power limit of 400 watt/m² of surface area.

This Network Tariff will be applied following an electrical works request to Aurora from an electrical contractor. Upon receipt of the electrical works request, the Network Tariff will be applied to a customer's account from the date the meter was changed or the day after the last quarterly read, whichever is the later.

6.4. Domestic Spa Systems

Spas are not eligible for Network Tariff N05

7. Controlled Energy (N06)

(MSATS Code – AuEnCont)

This Network Tariff is for low voltage installations.

7.1. General Conditions

In installations that are Private Residential Dwellings, this Network Tariff:

- is for water heating and/or residential space heating and/or other “wired in” appliances as approved by Aurora Network; or
- may be used for heating swimming pools, including those that incorporate a spa. Note that an individual spa from which the water goes to waste after use may not be connected on this Network Tariff; and
- may only be used if the premises also has a current connection on tariff N01.

In installations that are not Private Residential Dwellings, this Network Tariff:

- is for water heating and/or space heating and/or other “wired in” appliances as approved by Aurora; and
- may only be used if the premises also has a current connection on Network Tariff N02, or N02a.

With the exception of thermal-storage space heaters or thermal-storage water heaters, this Network Tariff N06 may not be applied to any apparatus also connected under another Network Tariff.

A private residential dwelling is a house, flat, home unit, town house or similar qualifying residential premise.

In all installations, this Network Tariff N06 may not be used for circuits supplying general-purpose outlets, other than existing outlets supplied on this tariff.

A Type 6 meter is the minimum required for installations on this tariff

7.2. Time of Use Availability

This Network Tariff is a “time of use” tariff. Energy to installations connected on this Network Tariff will be available daily for:

- at least nine hours between 20:00 hours and 07:00 hours the following day; and
- a further two hours between 13:00 hours and 16:30 hours.

Aurora will choose the actual times during the periods that the energy will be available.

7.3. Requirements of Water Heating Systems

In installations that are Private Residential Dwellings, for connection on this Network Tariff, the water heating systems:

- must comply with Australian Standard 1056, Storage Water Heaters; and
- should comply with approved Australian Standards AS 3500.4.1-1997 and 3500.4.2-1997, National Plumbing and Drainage Code, Part 4 Hot Water Supply Systems and all amendments. Non-compliant systems may be refused connection or disconnected.

In installations that are not Private Residential Dwellings, for connection on this Network Tariff, the water heating systems:

- must comply with Australian Standard 1056, Storage Water Heaters; and
- should comply with approved Australian Standards AS 3500.4.1-1997 and 3500.4.2-1997, National Plumbing and Drainage Code, Part 4 Hot Water Supply Systems and all amendments. Non-compliant systems may be refused connection or disconnected.

8. LV Controlled Heating (N06a)

[MSATS Code – AuOffPeak]

This Network Tariff is for low voltage installations.

8.1. General Conditions

In installations that are Private Residential Dwellings, this Network Tariff:

- is for water heating and/or residential space heating and/or other circuits as approved by Aurora.
- may be used for heating swimming pools, including those that incorporate a spa. Note that an individual spa from which the water goes to waste after use may not be connected on this Network Tariff; and
- may only be used if the premises also has a current connection on tariff N01 or N13b.

In installations that are not Private Residential Dwellings, this Network Tariff:

- is for water heating and/or space heating and/or other circuits as approved by Aurora Network.
- may only be used if the premises also has a current connection on Network Tariff N02 or N13b.

A private residential dwelling is a house, flat, home unit, town house or similar qualifying residential premise.

In all installations, this tariff N06a may be used for circuits supplying general-purpose outlets.

A Type 6 meter is the minimum required for installations on this tariff.

8.2. Time of Use Availability

This tariff is a “time of use” tariff. Energy to installations connected on this tariff will be available between 22:00 hours and 07:00 hours the following day.

8.3. Requirements of Water Heating Systems

In installations that are private residential dwellings, for connection on this tariff, the water heating systems:

- must comply with Australian Standard 1056, Storage Water Heaters; and
- should comply with approved Australian Standards AS 3500.4.1:1997 and 3500.4.2:1997, National Plumbing and Drainage Code, Part 4 Hot Water Supply Systems and all amendments; non-compliant systems may be refused connection or disconnected.

In installations that are not private residential dwellings, for connection on this tariff, the water heating systems:

- must comply with Australian Standard 1056, Storage Water Heaters; and
- should comply with approved Australian Standards AS 3500.4.1:1997 and 3500.4.2:1997, National Plumbing and Drainage Code, Part 4 Hot Water Supply Systems and all amendments; non-compliant systems may be refused connection or disconnected.

9. LV Pay as You Go (N13)

(MSATS Code – AuPAYG)

This Network Tariff is Obsolete and therefore no longer available to new customers

This tariff is for low voltage installations that are premises used wholly or principally as private residential dwellings. A private residential dwelling is a house, flat, home unit, town house or similar qualifying residential premise.

There are no restrictions on the use of the supply (i.e. may be used for general power, heating, water heating, etc.).

This Network Tariff may not be used in conjunction with any other Network Tariff.

This Network Tariff is obsolete with no new connections allowed from 1 July.

Please Note: Customers who choose to transfer off any one Obsolete tariff for an installation will lose all rights to all Obsolete tariffs for that installation, i.e. the entire installation will be required to move to currently available published tariffs.

Metering for this tariff is provided by Aurora Retail.

10. LV General Residential Time of Use Tariff (N13r)

(MSATS Code – AuResTou)

This tariff is for low voltage installations that are premises used wholly or principally as private residential dwellings. A private residential dwelling is a house, flat, home unit, town house or similar qualifying residential premise.

There are no restrictions on the use for the supply.

Note: Farm outbuildings may be connected on this tariff provided that the connection is through the meters for the farm residence.

A site that is supplied under this tariff may move to Network Tariff N01.

A meter capable of recording time of use data is required for installations on this tariff.

10.1. Use of System Charges

The Use of System charges applicable for this tariff are composed of the following charging components:

- a) DUOS
 - (i) A fixed daily charge; and
 - (ii) An energy-based charge; the rate of the energy charge varies according to the time of day at which energy is consumed, with the periods being as identified in Table 1.
- b) TUOS
 - (i) An energy-based charge; the rate of the energy charge varies according to the time of day at which energy is consumed, with the periods being as identified in Table 1.
- c) Metering
 - (i) A charge for the provision of metering services may apply, depending upon whether or not Aurora is appointed as Metering Provider.

10.2. Requirements of Water Heating Systems

For connection on this tariff, water heating systems:

- must comply with Australian Standard 1056, Storage Water Heaters; and
- should comply with approved Australian Standards AS 3500.4.1:1997 and 3500.4.2:1997, National Plumbing and Drainage Code, Part 4 Hot Water Supply Systems and all amendments; non-compliant systems may be refused connection or disconnected.

10.3. Time of Use Periods

The table below sets out the Time of Use periods applicable to Tariff N13r

Table 1: Time Periods for Residential Time of Use Tariff

Time Period	Tariff Rate
Week Day (0700 – 1100) (Monday – Friday)	Peak
Week Day (1100 – 1630) (Monday – Friday)	Shoulder
Week Day (1630 – 2200) (Monday – Friday)	Peak
Weekend Day (0700 – 2200) (Saturday & Sunday)	Shoulder
Any Day (2200 – 0700) (Monday – Sunday)	Off-peak

11. LV General Business Time of Use Tariff (N13b)

(MSATS Code – AuBusTou)

This is the basic, time of use LV Network Tariff for installations that are not private residential dwellings. A private residential dwelling is a house, flat, home unit, town house or similar qualifying residential premise.

There are no restrictions on the use of the supply (i.e. may be used for general power, heating, water heating, etc.)

A site that is supplied under this tariff may not move to Network Tariffs N02a or N02b.

A meter capable of recording time of use data is required for installations on this tariff.

11.1. Use of System Charges

The Use of System charges applicable for this tariff is composed of the following charging components:

- a) DUOS
 - (i) A fixed daily charge; and
 - (ii) An energy based charge; the rate of the energy charge varies according to the time of day at which energy is consumed, with the periods being identified in Table 2
- b) TUOS
 - (i) An energy-based charge; the rate of the energy charge varies according to the time of day at which energy is consumed, with the periods being as identified in [Table 2](#).

c) Metering

- (i) A charge for the provision of metering services may apply, depending upon whether or not Aurora is appointed as Metering Provider.

11.2. Requirements of Water Heating Systems

For connection on this tariff, water heating systems:

- must comply with Australian Standard 1056, Storage Water Heaters; and
- should comply with approved Australian Standards AS 3500.4.1 - 1997 and 3500.4.2:1997, National Plumbing and Drainage Code, Part 4 Hot Water Supply Systems and all amendments; non-compliant systems may be refused connection or disconnected.

11.3. Time of Use Periods

The table below sets out the Time of Use periods applicable to Tariff N13b

Table 2: Time Periods for LV General Business Time of Use Tariff

Time Period	Tariff Rate
Week Day (0700 – 2200) (Monday – Friday)	Peak
Weekend Day (0700 – 2200) (Saturday & Sunday)	Shoulder
Any Day (2200 – 0700) (Monday – Sunday)	Off-peak

12. Small LV Unmetered Supplies (N07)

(MSATS Code – AuUMS)

This Network Tariff is for small, low voltage, low demand installations with a relatively constant load profile. For example:

- illuminated street signs;
- public telephone kiosks;
- electric fences;
- two-way radio transmitters;
- fixed steady wattage installations;
- traffic lights; or
- level crossings.

All installations on this Network Tariff must have all components permanently connected. For the avoidance of doubt, an installation containing a power point does not qualify for this Network Tariff N07.

Exception: Shows & public functions qualify for this Network Tariff N07. Shows and public functions on this Network Tariff may have installed power points.

13. LV Day/Night (Irrigation) (N08)

(MSATS Code – AuIrrig)

This Network Tariff is Obsolete and therefore no longer available to new customers

This Network Tariff is for primary producers' business installations that are used solely for the irrigation of crops, which must be classified as ANZSIC class 01.

A Type 6 meter is the minimum required for installations on this tariff.

This tariff is Obsolete; no new connections are allowed on this tariff after 1 July 2009.

Existing sites that are connected on Network Tariff N08 at 1 July 2009 may remain on that tariff.

Please note: Customers who choose to transfer off any one Obsolete tariff for and installation will lose all rights to all Obsolete tariffs for that installation, i.e. the entire installation will be required to move to currently available tariffs.

13.1.1. Time of Use Availability

This tariff is a simple “time of use” tariff, with different rates for “peak” and “off-peak” consumption.

The off-peak rate will be available daily for not less than ten hours between 20:00 hours and 07:00 hours the following day. In general, the “window” will be of 10 hour's duration. Subject to network constraints and at the discretion of Aurora, an 11 hour window may be available upon request.

To provide a “staggered start” to ensure distribution network stability, the off-peak window for individual customers will start between 20:00 and 21:00, and end between 06:00 and 07:00 the following day.

Aurora will arrange the start and finish times.

All times are in Australian Eastern Standard Time.

14. All times are in Australian Eastern Standard Time.LV Time of Use Irrigation Tariff (N08a)

(MSATS Code – AuIrrigTou)

This Network Tariff is for primary producers' business installations that are used solely for the irrigation of crops, which must be classified as ANZSIC class 01.

A meter capable of recording time of use data is required for installations on this tariff.

14.1. Use of System Charges

The Use of System charges applicable for this tariff is composed of the following charging components:

- a) DUOS
 - (i) A fixed daily charge; and
 - (ii) An energy-based charge; the rate of the energy charge varies according to the time of day at which energy is consumed, with the periods being as identified in [Table 3](#).
- b) TUOS
 - (i) An energy-based charge; the rate of the energy charge varies according to the time of day at which energy is consumed, with the periods being as identified in [Table 3](#).
- c) Metering
 - (i) A charge for the provision of metering services may apply, depending upon whether or not Aurora is appointed as Metering Provider.

14.2. Time of Use Periods

The table below sets out the Time of Use periods applicable to Tariff N08a

Table 3: Time Periods for Time of Use Irrigation Tariff

Time Period	Summer (1 Oct – 31 Mar)	Winter (1 Apr – 30 Sep)
Week Day (0700 – 2200) (Monday – Friday)	Shoulder	Peak
Weekend Day (0700 – 2200) (Saturday & Sunday)	Off-peak	Shoulder
Any Day (2200 – 0700) (Monday – Sunday)	Off-peak	Off-peak

15. LV Metered Demand (kW) (N03)

(MSATS Code – AuBLVDmKW)

This Network Tariff is Obsolete and therefore no longer available to new customers

This Network Tariff is for installations taking low voltage 3-phase supply.

There are no restrictions on the use of the supply (i.e. may be used for general power, heating, water heating, etc.).

This tariff is Obsolete with no new connections allowed. The replacement LV demand tariff is N09.

Please note: that customers that choose to transfer off any one Obsolete tariff for an installation will lose all rights to all Obsolete tariffs for that installation, i.e. the entire installation will be required to move to currently available published tariffs.

A Type 6 meter is the minimum required for installations on this tariff.

16. LV Metered Demand (kVA) (N09)

(MSATS Code – AuBLVDMKVA)

This Network Tariff is for installations taking low voltage 3-phase supply.

There are no restrictions on the use of the supply; that is, electricity taken on this tariff may be used for general power, heating, water heating, etc.

A Type 6 meter is the minimum required for installations on this tariff.

17. HV Metered Demand (kVA) (N10)

(MSATS Code – AuBHVDmKVA)

This Network Tariff is Obsolete and therefore no longer available to new customers

This tariff is for customers taking no HV single or dual phase supply.

There are no restrictions on the use of the supply; that is, the electricity may be used for general power, heating, water heating, etc.

The customer must supply its own transformers & switchgear for installations connected on this tariff.

Metering of consumption is at the HV connection point.

This tariff is Obsolete; no new connections are allowed on this tariff.

Please note: Customers who choose to transfer off any one Obsolete tariff for an installation will lose all rights to all Obsolete tariffs for that installation, i.e. the entire installation will be required to move to currently available tariffs.

18. HV Specified Demand with Time of Use Energy (N10s)

(MSATS Code – AuHVSPECdM)

This Network Tariff is applicable to all qualifying sites that are connected to the Aurora distribution network on or after 1 July 2009. Existing qualifying sites may transfer to this Network tariff on or after 1 July 2009.

A site qualifies for this Network Tariff if:

- connection is made to this site at HV; and
- the expected ATMD of the site is less than 2 MVA.

A site connected to the Aurora distribution network with this Network Tariff is not eligible for any other Network Tariff.

A meter capable of recording “interval data” is required for installations on this tariff.

18.1. Use of System Charges

The Use of System charges applicable for this tariff is composed of the following charging components:

- a) DUOS
 - (i) A fixed daily charge; and
 - (ii) An energy-based charge; the rate of the energy charge varies according to the time of day at which energy is consumed, with the periods being as identified in [Table 4](#); and
 - (iii) A demand-based charge calculated according to the method given in the General Terms and Conditions for Network Tariffs for the calculation of charges for Specified Demand tariffs. For the purposes of this calculation, the Excess Demand rate is ten times the Specified Demand rate.
- b) TUOS
 - (i) An energy-based charge; the rate of the energy charge varies according to the time of day at which energy is consumed, with the periods being as identified in [Table 4](#); and
 - (ii) A demand-based charge calculated according to the method given in the General Terms and Conditions for Network Tariffs for the calculation of charges for Specified Demand tariffs. For the purposes of this calculation, the Excess Demand rate is ten times the Specified Demand rate.
- c) Metering
 - (i) A charge for the provision of metering services may apply, depending upon whether or not Aurora is appointed as Metering Provider.

18.2. Negotiation of “Specified Demand”

Customers on Network Tariff N10s are able to agree with Aurora a “Specified Demand” for their electrical installation.

Once agreed this value is used in the calculation of charges for the following period.

Negotiation of “Specified Demand” for subsequent periods should be completed at least two months prior to the end of the last negotiated period.

Renegotiation of specified demand is limited to one occurrence each twelve months or as otherwise agreed with Aurora.

18.3. Calculation of NUoS Charges for Specified Demand

The demand-based charges for an installation on Network Tariff N10s would be calculated monthly as follows:

- a) the monthly demand-based charge is the sum of the daily demand-based charges for the month;
- b) the daily demand-based charges are:
 - (i) if any daily ATMD in the month is less than or equal to 100% of the Nominated Demand, the demand charge for the day will be equal to the specified demand multiplied by the specified demand rate; or
 - (ii) if the daily ATMD is greater than the Nominated Demand, but not greater than 120% of the Nominated Demand, then the demand charge for the day will be the maximum demand multiplied by the specified demand rate; or
 - (iii) if any daily maximum demand in the month is greater than the Nominated Demand by 120%, the daily demand charge will be the sum of:
 - 120% of the specified demand multiplied by the specified demand rate; and
 - the difference between the maximum demand and 120% of the specified demand multiplied by the excess demand rate;
 - (iv) the excess demand rate is ten times the specified demand rate.

18.4. Time of Use Periods

The table below sets out the Time of Use periods applicable to Tariff N10s

Table 4: Time Periods Specified Demand with Time of Use Energy

Time Period	Summer (1 Oct – 31 Mar)	Winter (1 Apr – 30 Sep)
Week Day (0700 – 2200) (Monday – Friday)	Shoulder	Peak
Weekend Day (0700 – 2200) (Saturday & Sunday)	Off-peak	Shoulder
Any Day (2200 – 0700) (Monday – Sunday)	Off-peak	Off-peak

19. HV Metered Demand (kW) (N11)

(MSATS Code – AuBHVDmKW)

This Network Tariff is Obsolete and therefore no longer available to new customers

This tariff is for customers taking HV supply.

There are no restrictions on the use of the supply.

The customer must supply its own transformers & switchgear for installations connected on this tariff.

Metering of consumption is at the HV connection point.

This tariff is Obsolete; no new connections are allowed on this tariff.

Please note: Customers who choose to transfer off any one Obsolete tariff for an installation will lose all rights to all Obsolete tariffs for that installation, i.e. the entire installation will be required to move to currently available published tariffs.

20. HV Specified Demand in excess of 2.0 MVA (N15)

(MSATS Code – AuCHVDm2)

This Network Tariff applies to contestable customers, with a demand in excess of 2.0 MVA, supplied directly from the Aurora distribution network, with no Aurora Network-owned assets beyond the connection point.

The customer must supply its own transformers & switchgear for installations connected on this Network Tariff.

Metering of consumption is at the high voltage connection point.

20.1. Use of System Charges

The Use of System charges applicable for this tariff is composed of the following charging components:

- a) DUOS
 - (i) A fixed daily charge; and
 - (ii) An energy-based charge; the rate of the energy charge varies according to the time of day at which energy is consumed, with the periods being as identified in [Table 4](#); and
 - (iii) A demand-based charge calculated according to the method given in the General Terms and Conditions for Network Tariffs for the calculation of charges for Specified Demand tariffs. For the purposes of this calculation, the Excess Demand rate is ten times the Specified Demand rate.
- b) TUOS
 - (i) An energy-based charge; the rate of the energy charge varies according to the time of day at which energy is consumed, with the periods being as identified in [Table 4](#); and
 - (ii) A demand-based charge calculated according to the method given in the General Terms and Conditions for Network Tariffs for the calculation of charges for Specified Demand tariffs. For the purposes of this calculation, the Excess Demand rate is ten times the Specified Demand rate.

20.2. Negotiation of “Specified Demand”

Customers on Network Tariff N15 are able to agree with Aurora a “Specified Demand” for their electrical installation.

Once agreed this value is used in the calculation of charges for the following period.

Negotiation of “Specified Demand” for subsequent periods should be completed at least two months prior to the end of the last negotiated period.

Renegotiation of specified demand is limited to one occurrence each twelve months or as otherwise agreed with Aurora.

20.3. Calculation of NUoS Charges for Specified Demand Tariffs

The demand-based charges for an installation on the Network Tariff N15 would be calculated monthly as follows:

- a) the monthly demand-based charge is the sum of the daily demand-based charges for the month;

The daily demand-based charges are:

- (i) if any daily ATMD in the month is less than or equal to 100% of the Nominated Demand, the demand charge for the day will be equal to the specified demand multiplied by the specified demand rate; or
- (ii) if any daily ATMD in the month is greater than the Nominated Demand, the daily demand charge will be the sum of:
 - the specified demand multiplied by the specified demand rate; and
 - the difference between the ATMD and the specified demand multiplied by the excess demand rate;
- (iii) the excess demand rate is five times the specified demand rate.

20.4. Time of Use Periods

The table below sets out the Time of Use periods applicable to Tariff N15

Table 5: Time of Use Periods HV Specified Demand >2MVA

Time Period	Summer (1 Oct – 31 Mar)	Winter (1 Apr – 30 Sep)
Week Day (0700 – 2200) (Monday – Friday)	Shoulder	Peak
Weekend Day (0700 – 2200) (Saturday & Sunday)	Off-peak	Shoulder
Any Day (2200 – 0700) (Monday – Sunday)	Off-peak	Off-peak

21. Street Lighting (N20)

(MSATS Code – AuUmsSl)

This Network Tariff is available to councils and road authorities.

The street lighting tariff rate is based on a “use of system charge” and is charged on a per lamp wattage rate. The Network Tariff charge is incorporated into the final aggregated street light charge, which is published for all light types.

There are no energy charges.

This Network Tariff does not include charges for the installation and/or replacement of lamps. Costs for installation or replacement of lamps are an additional charge.

22. HV Individual Tariff Calculation

(MSATS Code – AuSpcCust1)

Individual Tariff Calculation (ITC) network prices will typically apply to customers with an electrical demand in excess of 2.0 MVA or where a customer’s circumstances in a pricing zone identifies that the average shared network charge to be meaningless or distorted. Individually calculated customer network charges are determined by modelling the connection point requirements as requested by the customer or their agents.

ITC prices are based on actual Transmission Use of System (TUoS) charges for the relevant transmission connection point, plus charges associated with the actual shared distribution network utilised for the electricity supply, plus connection charges based on the actual connection assets utilised. This provides the greatest cost reflectivity for this type of customer and is feasible since the number of such customers is relatively small.

ITC pricing is also justified by virtue of the shared distribution network assets being designated specifically to meet the requirements of these customers. Where the designation of shared network assets is difficult due to the specific connectivity of the customer, Aurora will apply ITC pricing on a mutually agreed basis.

ITC pricing can also be influenced by the load factor of the Customer’s installation.

ITC pricing for customers with electrical demand that is less than 2.0 MVA could occur where:

- a customer has a dedicated supply system that is different and separate from the remainder of the supply network;
- there are only a small number of customers in a supply system making average prices inappropriate; or

- inequitable treatment of otherwise comparable customers arises from the electrical demand lower limit of 2.0 MVA. Selection of these customers will be at Aurora's discretion.

Distribution network tariff charges for Embedded Generation will always be treated on an individually calculated basis.

23. Other Matters

23.1. Reassignment of Network Tariffs

Customers seeking Network Tariff reassignment must remain on the reassigned Network Tariff for a minimum twelve (12) month period.

This condition prevents customers from changing Network Tariffs to take advantage of seasonal variations in prices according to their individual load; thereby bypassing payment that reflects use of the distribution network over a full twelve (12) month cycle.

Customers seeking tariff reassignment must:

- a) be eligible for tariff reassignment; and
- b) provide Aurora with 1 month notification period; and
- c) pay the applicable tariff alteration fee.

A tariff reassignment request may be made:

- a) through the customer's retailer; where;
 - (i) the retailer will notify Aurora; or
- b) through Aurora, where
 - (i) Aurora will advise the customer's retailer.

Exceptions to the above conditions will only be made at Aurora's discretion where it can be demonstrated that to not do so would result in unreasonable penalties or impose hardship on the customer.

Customers who choose to transfer from an obsolete Network Tariff will lose all rights to all obsolete Network Tariffs at that premise, i.e. the entire site will be required to move to currently available published Network Tariffs.

23.2. Maximum Demand Application

For the purposes of determining a customer's maximum demand for Network Tariff application the following rules will apply.

23.2.1. Definition of Maximum Demand

Maximum demand means the electrical demand measured in kiloVoltAmps (kVA) or kiloWatts (kW) and is calculated as the energy consumption recorded over the demand integration period divided by the demand integration period in hours. The value is used for setting the maximum demand charges to be paid by the customer to the distributor each billing period.

23.2.2. Increases in Electrical Demand

Where a customer requires a change in Network Tariff due to an increase in electrical demand at a connection point, the customer must submit a written request to Aurora Energy. The increased level of electrical demand shall apply from the requested date or as near as possible thereafter, subject to any required works being completed by Aurora.

23.2.3. Temporary Increases in Maximum Demand

Temporary increases in electrical demand will:

- be subject to negotiation and approval by Aurora;
- be defined in terms of “additional demand” for a specific period and charged at an agreed Demand Charge rate;
- apply for one full billing period, except in the case of commissioning of new plant, in which case the duration of the temporary increase may be extended for the duration of the commissioning period; and
- be limited to one occurrence each twelve months or as otherwise agreed with Aurora.

23.2.4. Reduction in Maximum Demand

Where a customer requires a change in Network Tariff due to a reduction in electrical demand at their connection point, the customer must provide six (6) months written advice to Aurora detailing their new requirement. Aurora must notify the customer in writing within sixty (60) days advising the revised charges.

However, following the installation by a customer of load management equipment approved by Aurora Energy or the implementation of a demand management initiative approved by Aurora, the six (6) month notice period referred to above may be reduced at the discretion of Aurora.

24. Definitions

Any Time Maximum Demand (ATMD)	
Connection Point	In relation to a Customer, the point at which electricity leaves the Distribution System for delivery to the Customer provided that where the Customer's Electrical Installation is not directly connected to the Distribution System, the Connection Point is the point at which the electricity last leaves the Distribution System before being delivered to the Customer, whether or not the electricity passes through facilities owned or operated by another person before being delivered to the Customer.
Distribution Network	The authorised distribution network operated by Aurora Energy under the terms of its license issued by the Tasmanian Energy Regulator.
Distribution Use of System (DUoS)	A charge to a distribution network user for use of the distribution system for the conveyance of electricity.
ITC	Has the meaning "Individual Tariff Calculation".
Embedded Generation	Is a generation unit connected within a distribution system and not having direct access to a transmission system.
Irrigation	The provision of water pumping capability that facilitates primary production.
Load Factor	This is the ratio of a customer's average electrical load divided by the maximum electrical load.
National Electricity Market (or NEM)	As defined in the Tasmanian Electricity Code.
Nominated Demand	The value of electrical demand of the site to which the Specified Demand Network Tariff applies as nominated by the operator of that site to Aurora.
Obsolete Tariffs	Tariffs that have been superseded but remain in place until such time as they are rescinded or the electrical configuration of a customer's installation is altered.
Published Tariffs	Those Network Tariffs published from time to time, usually annually, by Aurora Energy.
Private Residential Dwelling	A reference to a private residential dwelling is a house, unit, town house or apartment and is a reference to an establishment that, in the reasonable opinion of Aurora Energy is not classifiable under the Australian and New Zealand Standard Industrial Classification (ANZSIC). The ANZSIC system is based on businesses, and it is used to classify businesses. It includes any organisation, which provides goods and services, including companies, non-profit organisations, government departments and enterprises.
Retailer of Choice	The customer's current or chosen electricity retailer.
Supply Voltage	The nominal voltage measured at the connection point.
Time of Use	A tariff application that has variable rates dependent on the time of day electricity is consumed.

Transmission Use of System	The charges associated with the services provided by a transmission system that are associated with the conveyance of electricity through the transmission system.
----------------------------	--

25. References

Aurora Energy Published Network Tariff Rates

http://www.auroraenergy.com.au/electricity_network/network_tariffs/current_network_tariffs.asp

Report on Formation and Introduction of Network Tariffs

http://www.auroraenergy.com.au/electricity_network/network_tariffs/current_network_tariffs.asp

Australian Energy Regulator

<http://www.aer.gov.au/>

National Electricity Market Management Company

<http://www.nemmco.com.au/>

Transend Networks Pty Ltd

<http://www.transend.com.au/>