

Essential Energy

Placeholder determination for the transitional regulatory control period 2014–15

April 2014



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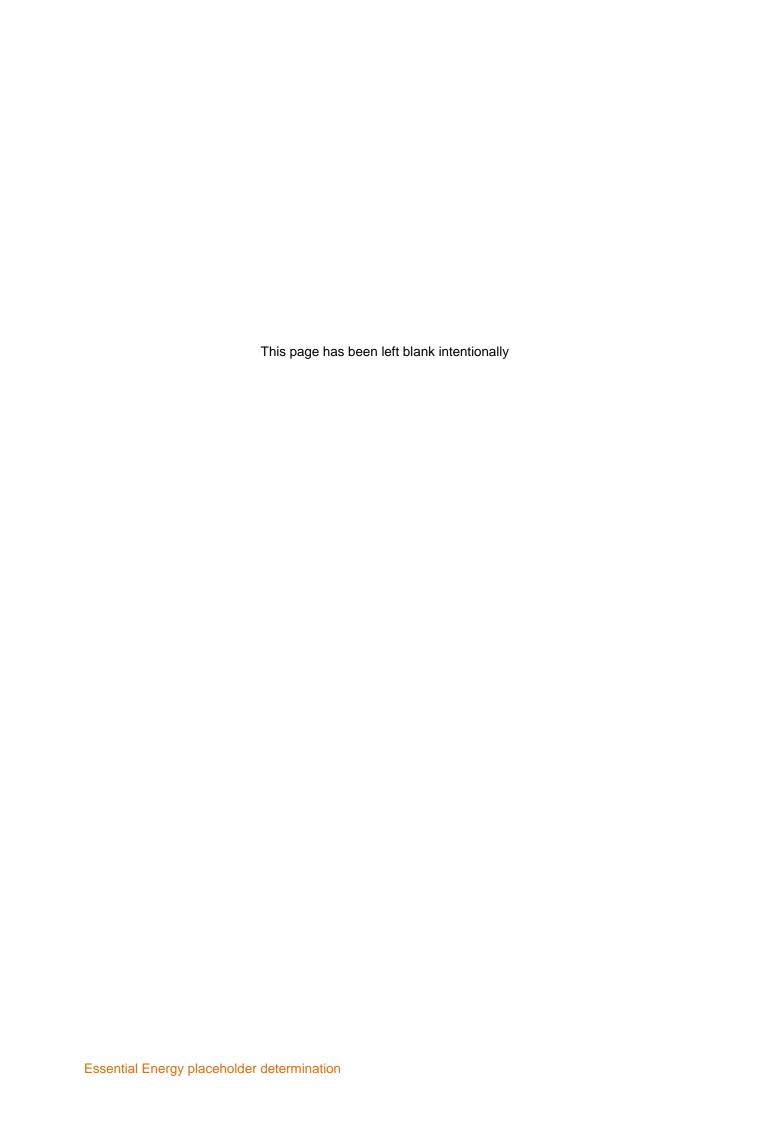
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AER reference: 52294

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1 The AER's Determination for Essential Energy

Clause 6.12.1 (as modified by clauses 11.55 and 11.56) and clauses 11.56.1 and 11.56.3 of the National Electricity Rules (NER) give the AER the role to determine the following for Essential Energy.

1.1 Length of regulatory control period

The AER determines that the transitional regulatory control period will be one year, commencing on 1 July 2014 and ending on 30 June 2015.

1.2 Classification of services

The AER determines that, for the transitional regulatory control period, services provided by Essential Energy should be grouped and classified as set out in table 1.1. This is consistent with the Stage 1 framework and approach paper, which is a modification of the classification of services in the current regulatory control period.¹

AER, Stage 1 framework and approach paper – Ausgrid, Endeavour Energy and Essential Energy, March 2013.

Table 1.1 AER determination for the classification of distribution services for Essential Energy

AER service group	Proposed classification of distribution services	Proposed classification of direct control services
Network services (excluding emergency recoverable works which are unclassified)	Direct control	Standard control
Connection services		
Premises connections	Unclassified	
Extensions	Unclassified	
Augmentations	Direct control	Standard control
Metering services		
Types 1 to 4	Unclassified	
Types 5 to 6:		
a. Installation services	Unclassified	
b. Meter provision, maintenance, reading and data services	Direct control	Alternative control
Type 7	Direct control	Standard control
Ancillary network services (excluding customer specific services which are unclassified)	Direct control	Alternative control
Public lighting services	Direct control	Alternative control

Source: AER analysis.

1.3 Incentive schemes

The AER determines that the efficiency benefit sharing scheme (EBSS) that will apply to Essential Energy for the transitional regulatory control period is that applied to Essential Energy in the current regulatory control period, with modifications to align it with version 2 of the EBSS and applied as if the transitional regulatory control period was the first year of the subsequent regulatory control period. This is consistent with the Stage 2 framework and approach paper.²

AER, Stage 2 framework and approach paper – Ausgrid, Endeavour Energy and Essential Energy, January 2014.

The AER determines that no:

- capital expenditure sharing scheme (CESS), or
- small scale investment scheme,

is to apply to Essential Energy in the transitional regulatory control period.

The AER determines that Part A of the demand management innovation allowance (DMIA), which applied to Essential Energy in the current regulatory control period, applies to Essential Energy in the transitional regulatory control period. However, Part B of the DMIA and the D-Factor scheme for NSW distributors do not apply in the transitional regulatory control period. The DMIA is a component of the demand management incentive scheme (DMIS). The rules have since changed the name from DMIS to demand management and embedded generation connection incentive scheme (DMEGCIS).

The revenue rewards and penalties of the service target performance incentive scheme (STPIS) did not apply to Essential Energy in the current regulatory control period and the AER determines that they will not apply in the transitional regulatory control period. However, the reporting obligations did apply in the current regulatory control period and the AER determines that they continue to apply.

1.4 Appropriate amounts, values or inputs

The AER determines that all appropriate amounts, values and inputs are as set out in this determination.

1.5 Control mechanisms

Standard control services

The relevant control mechanism and formulae for standard control services is as set out in the Stage 1 framework and approach paper.³ The AER determines to apply a revenue cap with a basis of CPI-X form to standard control services for the transitional regulatory control period.

Alternative control services

The AER determines to apply price cap regulation to alternative control services in the transitional regulatory control period. Alternative control service prices in the transitional regulatory control period must be the current prices escalated by CPI.⁴

The AER determines to apply the following formulae to alternative control services, which remain classified as alternative control services. The AER considers that the formula gives effect to the cap on the prices of individual services:

$$\overline{p}_i^t \ge p_i^t$$
 i=1,...,n and t=1,2,3,4

$$\overline{p}_i^t = \overline{p}_i^{t-1}(1 + CPI_t)(1 - X_i^t) + A_i^t$$

AER, Stage 1 framework and approach paper – Ausgrid, Endeavour Energy and Essential Energy, March 2013.

NER, clause 11.56.3(j).

Where:

 \overline{p}_{i}^{t} is the cap on the price of service i in year t

 p_i^t is the price of service i in year t

 $\ensuremath{\mathit{CPI}}_{\scriptscriptstyle{t}}$ is the percentage increase in the consumer price index.

 X_i^t is the X-factor for service i in year t. For 2014–15, X_i^t is set at zero.

 \overline{p}_i^0 is the cap on the price of service i in the transitional regulatory control period. As specified in the transitional rules, \overline{p}_i^0 will be prices from the final year of the 2009–14 regulatory control period escalated by CPI.

 A_i^t is an adjustment factor. Likely to include, but not limited to adjustments for residual charges when customers choose to replace assets before the end of their economic life. For 2014–15 A_i^t is set at zero.

Applying the formula above, the list of prices set out in Appendix A are the charges that will apply for Essential Energy's alternative control services for the transitional regulatory control period.

1.6 Manner of demonstration of compliance with the control mechanism

The manner of demonstration of compliance with a relevant control mechanism is as set out in the Stage 1 framework and approach paper.⁵

1.7 Pass throughs

The AER determines that pass through events for the transitional regulatory control period will be:

- the same additional pass through events that were decided in the distribution determination for the current regulatory control period for Essential Energy; and
- the "terrorism event" as defined in the Rules immediately prior to the date the National Electricity Amendment (Cost pass through arrangements for Network Service Providers) Rule 2012 came into force.

1.8 Negotiating framework

The AER determines that the negotiating framework that is to apply to Essential Energy for the transitional regulatory control period is the negotiating framework that was approved as part of the distribution determination for the current regulatory control period for Essential Energy.

⁵ AER, Stage 1 framework and approach paper – Ausgrid, Endeavour Energy and Essential Energy, March 2013.

1.9 Negotiated distribution service criteria

The AER determines that the negotiated distribution service criteria for Essential Energy for the transitional regulatory control period are the negotiated distribution service criteria that were specified as part of the distribution determination for the current regulatory control period for Essential Energy.

1.10 Assigning retail customers to tariff classes

The AER determines that the procedures for assigning retail customers to tariff classes or reassigning retail customers from one tariff class to another, including any applicable restrictions, are the same as those specified as part of the distribution determination for the current regulatory control period for Essential Energy.

1.11 Depreciation

The AER determines to use the same depreciation approach which applies in the current regulatory control period to establish the regulatory asset base at the commencement of the subsequent regulatory control period.

1.12 Reporting on recovery of charges and adjustments

The AER determines that Essential Energy is to report on its recovery of designated pricing proposal charges and on the adjustments to be made to subsequent pricing proposals in the same manner as during the current regulatory control period for Essential Energy.

1.13 Reporting on the recovering of jurisdictional scheme amounts and adjustments

The AER determines that Essential Energy is to report to the AER on its recovery of jurisdictional scheme amounts and on the adjustments to be made to subsequent pricing proposals in the same manner as during the current regulatory control period.

1.14 Annual revenue requirement

The AER does not approve Essential Energy's annual revenue requirement proposal. The AER is not satisfied that the amount is such that the recovery of it by Essential Energy is reasonably likely to minimise variations in prices between the relevant regulatory control periods and years.

The AER approves \$1292 million (\$ nominal) as the annual revenue requirement for Essential Energy's distribution network for the transitional regulatory control period which the AER is satisfied meets the applicable requirements of the NER.

1.15 Connection policy

The AER determines that the connection policy in Appendix B will apply to Essential Energy for the transitional regulatory control period.

Appendices

A Alternative control service price list

A.1 Essential Energy—public lighting

Table A.1 Essential Energy—public lighting—2014–15 tariffs (\$, nominal, exc GST)

Tariff Code	Description	Dedicated Pole	2014–15 Tariff
FLU0010-ST-0010-002-B	Fluorescent 9	SHARED OR NO POLE	43.65
FLU0010-ST-0110-001-B	Fluorescent 9	SHARED OR NO POLE	56.29
FLU0010-ST-0990-001-B	Fluorescent 9	STEEL POLE	188.24
FLU0010-ST-0990-002-B	Fluorescent 9	STEEL POLE	55.17
FLU0020-ST-0010-001-B	Fluorescent 11	SHARED OR NO POLE	70.28
FLU0030-ST-0110-002-B	Fluorescent 13	SHARED OR NO POLE	43.65
FLU0040-ST-0010-002-B	Fluorescent 15	SHARED OR NO POLE	43.65
FLU0050-ST-0010-001-B	Fluorescent 20	SHARED OR NO POLE	70.28
FLU0050-ST-0010-002-B	Fluorescent 20	SHARED OR NO POLE	43.65
FLU0050-ST-0110-002-B	Fluorescent 20	SHARED OR NO POLE	43.65
FLU0050-ST-0740-001-B	Fluorescent 20	SHARED OR NO POLE	80.56
FLU0050-ST-0810-002-B	Fluorescent 20	WOOD POLE	56.13
FLU0050-ST-0990-001-B	Fluorescent 20	STEEL POLE	188.24
FLU0050-ST-0990-002-B	Fluorescent 20	STEEL POLE	55.17
FLU0050-ST-1000-001-B	Fluorescent 20	STEEL POLE	198.52
FLU0050-ST-1260-002-B	Fluorescent 20	WOOD POLE	56.13
FLU0050-ST-1500-002-B	Fluorescent 20	STEEL POLE	55.17
FLU0060-ST-0010-001-B	Fluorescent Twin 20	SHARED OR NO POLE	77.10
FLU0060-ST-0010-002-B	Fluorescent Twin 20	SHARED OR NO POLE	50.47
FLU0060-ST-0010-004-B	Fluorescent Twin 20	SHARED OR NO POLE	50.66

FLU0060-ST-0740-001-B	Fluorescent Twin 20	SHARED OR NO POLE	87.38
FLU0060-ST-0740-002-B	Fluorescent Twin 20	SHARED OR NO POLE	50.47
FLU0060-ST-0810-001-B	Fluorescent Twin 20	WOOD POLE	141.88
FLU0060-ST-0810-002-B	Fluorescent Twin 20	WOOD POLE	62.95
FLU0060-ST-0830-002-B	Fluorescent Twin 20	SHARED OR NO POLE	50.47
FLU0060-ST-0990-001-B	Fluorescent Twin 20	STEEL POLE	195.06
FLU0060-ST-0990-002-B	Fluorescent Twin 20	STEEL POLE	61.99
FLU0060-ST-1000-002-B	Fluorescent Twin 20	STEEL POLE	61.99
FLU0060-ST-1260-002-B	Fluorescent Twin 20	WOOD POLE	62.95
FLU0060-ST-1500-002-B	Fluorescent Twin 20	STEEL POLE	61.99
FLU0070-ST-0010-001-B	Fluorescent 3x20	SHARED OR NO POLE	83.92
FLU0070-ST-0010-002-B	Fluorescent 3x20	SHARED OR NO POLE	57.30
FLU0070-ST-0010-004-B	Fluorescent 3x20	SHARED OR NO POLE	57.50
FLU0070-ST-0990-001-B	Fluorescent 3x20	STEEL POLE	201.88
FLU0070-ST-0990-002-B	Fluorescent 3x20	STEEL POLE	68.81
FLU0070-ST-1000-002-B	Fluorescent 3x20	STEEL POLE	68.81
FLU0080-ST-0010-001-B	Fluorescent 4x20	SHARED OR NO POLE	90.74
FLU0080-ST-0010-002-B	Fluorescent 4x20	SHARED OR NO POLE	64.12
FLU0080-ST-0990-001-B	Fluorescent 4x20	STEEL POLE	208.70
FLU0080-ST-0990-002-B	Fluorescent 4x20	STEEL POLE	75.63
FLU0100-ST-0010-001-B	Fluorescent 26	SHARED OR NO POLE	70.28
FLU0100-ST-0010-002-B	Fluorescent 26	SHARED OR NO POLE	43.65
FLU0100-ST-0010-004-B	Fluorescent 26	SHARED OR NO POLE	43.81
FLU0100-ST-0990-002-B	Fluorescent 26	STEEL POLE	55.17

FLU0100-ST-1000-002-B	Fluorescent 26	STEEL POLE	55.17
FLU0110-ST-0010-002-B	Fluorescent 2x26	SHARED OR NO POLE	50.47
FLU0120-ST-0990-002-B	Fluorescent 6x36	STEEL POLE	61.99
FLU0130-ST-0001-001-B	Fluorescent 40	NO CAPITAL	42.21
FLU0130-ST-0010-001-B	Fluorescent 40	SHARED OR NO POLE	68.83
FLU0130-ST-0010-002-B	Fluorescent 40	SHARED OR NO POLE	42.21
FLU0130-ST-0010-003-B	Fluorescent 40	SHARED OR NO POLE	114.01
FLU0130-ST-0010-004-B	Fluorescent 40	SHARED OR NO POLE	42.36
FLU0130-ST-0110-001-B	Fluorescent 40	SHARED OR NO POLE	54.85
FLU0130-ST-0110-002-B	Fluorescent 40	SHARED OR NO POLE	42.21
FLU0130-ST-0740-001-B	Fluorescent 40	SHARED OR NO POLE	79.11
FLU0130-ST-0740-002-B	Fluorescent 40	SHARED OR NO POLE	42.21
FLU0130-ST-0810-001-B	Fluorescent 40	WOOD POLE	133.61
FLU0130-ST-0810-002-B	Fluorescent 40	WOOD POLE	54.69
FLU0130-ST-0810-004-B	Fluorescent 40	WOOD POLE	54.88
FLU0130-ST-0820-002-B	Fluorescent 40	SHARED OR NO POLE	42.21
FLU0130-ST-0990-001-B	Fluorescent 40	STEEL POLE	186.80
FLU0130-ST-0990-002-B	Fluorescent 40	STEEL POLE	53.72
FLU0130-ST-0990-003-B	Fluorescent 40	STEEL POLE	375.86
FLU0130-ST-1000-001-B	Fluorescent 40	STEEL POLE	197.08
FLU0130-ST-1000-002-B	Fluorescent 40	STEEL POLE	53.72
FLU0130-ST-1260-001-B	Fluorescent 40	WOOD POLE	143.89
FLU0140-ST-0010-001-B	Fluorescent 2x40	SHARED OR NO POLE	74.21
FLU0140-ST-0010-002-B	Fluorescent 2x40	SHARED OR NO POLE	47.59

FLU0140-ST-0010-004-B	Fluorescent 2x40	SHARED OR NO POLE	47.76
FLU0140-ST-0740-002-B	Fluorescent 2x40	SHARED OR NO POLE	47.59
FLU0140-ST-0810-001-B	Fluorescent 2x40	WOOD POLE	138.99
FLU0140-ST-0810-002-B	Fluorescent 2x40	WOOD POLE	60.07
FLU0140-ST-0820-002-B	Fluorescent 2x40	SHARED OR NO POLE	47.59
FLU0140-ST-0830-002-B	Fluorescent 2x40	SHARED OR NO POLE	47.59
FLU0140-ST-0990-001-B	Fluorescent 2x40	STEEL POLE	192.18
FLU0140-ST-0990-002-B	Fluorescent 2x40	STEEL POLE	59.10
FLU0140-ST-1260-002-B	Fluorescent 2x40	WOOD POLE	60.07
FLU0150-ST-0010-001-B	Fluorescent 3x40	SHARED OR NO POLE	79.59
FLU0150-ST-0010-002-B	Fluorescent 3x40	SHARED OR NO POLE	52.97
FLU0150-ST-0810-002-B	Fluorescent 3x40	WOOD POLE	65.44
FLU0150-ST-0990-002-B	Fluorescent 3x40	STEEL POLE	64.48
FLU0150-ST-1000-002-B	Fluorescent 3x40	STEEL POLE	64.48
FLU0160-ST-0010-001-B	Fluorescent 4x40	SHARED OR NO POLE	84.97
FLU0160-ST-0010-002-B	Fluorescent 4x40	SHARED OR NO POLE	58.34
FLU0160-ST-0810-002-B	Fluorescent 4x40	WOOD POLE	70.82
FLU0160-ST-0830-002-B	Fluorescent 4x40	SHARED OR NO POLE	58.34
FLU0160-ST-0990-001-B	Fluorescent 4x40	STEEL POLE	202.93
FLU0160-ST-0990-002-B	Fluorescent 4x40	STEEL POLE	69.86
FLU0160-ST-1000-002-B	Fluorescent 4x40	STEEL POLE	69.86
FLU0170-ST-0010-002-B	Fluorescent 6x40	SHARED OR NO POLE	69.10
FLU0180-ST-0010-001-B	Fluorescent 58	SHARED OR NO POLE	68.83
FLU0190-ST-0010-001-B	Fluorescent 2x58	SHARED OR NO POLE	74.21

FLU0190-ST-0010-002-B	Fluorescent 2x58	SHARED OR NO POLE	47.59
FLU0190-ST-0010-004-B	Fluorescent 2x58	SHARED OR NO POLE	47.76
FLU0200-ST-0010-002-B	Fluorescent 4x58	SHARED OR NO POLE	58.34
FLU0220-ST-0990-002-B	Fluorescent 65	STEEL POLE	53.72
FLU0240-ST-0010-001-B	Fluorescent 80	SHARED OR NO POLE	68.83
FLU0240-ST-0010-002-B	Fluorescent 80	SHARED OR NO POLE	42.21
FLU0240-ST-0010-004-B	Fluorescent 80	SHARED OR NO POLE	42.36
FLU0240-ST-0810-002-B	Fluorescent 80	WOOD POLE	54.69
FLU0240-ST-0810-004-B	Fluorescent 80	WOOD POLE	54.88
FLU0240-ST-0990-001-B	Fluorescent 80	STEEL POLE	186.80
FLU0240-ST-0990-002-B	Fluorescent 80	STEEL POLE	53.72
FLU0240-ST-0990-004-B	Fluorescent 80	STEEL POLE	53.92
FLU0240-ST-1000-002-B	Fluorescent 80	STEEL POLE	53.72
FLU0240-ST-1260-002-B	Fluorescent 80	WOOD POLE	54.69
FLU0250-ST-0010-001-B	Fluorescent 2x80	SHARED OR NO POLE	74.21
FLU0250-ST-0010-002-B	Fluorescent 2x80	SHARED OR NO POLE	47.59
FLU0260-ST-0010-002-B	Fluorescent 3x80	SHARED OR NO POLE	52.97
FLU0270-ST-0010-002-B	Fluorescent 4x80	SHARED OR NO POLE	58.34
FLU0300-ST-0010-002-B	Fluorescent 2x125	SHARED OR NO POLE	47.59
FLU0350-ST-1620-001-B	Compact Fluorescent 1x42	SHARED OR NO POLE	69.97
FLU0350-ST-1620-002-B	Compact Fluorescent 1x42	SHARED OR NO POLE	40.32
FLU0350-ST-1620-003-B	Compact Fluorescent 1x42	SHARED OR NO POLE	119.54
FLU0350-ST-1620-004-B	Compact Fluorescent 1x42	SHARED OR NO POLE	40.46
FLU0350-ST-1630-002-B	Compact Fluorescent 1x42	SHARED OR NO POLE	40.32

FLU0350-ST-1630-003-B	Compact Fluorescent 1x42	SHARED OR NO POLE	151.81
FLU0350-ST-1630-004-B	Compact Fluorescent 1x42	SHARED OR NO POLE	40.46
FLU0350-ST-1640-002-B	Compact Fluorescent 1x42	SHARED OR NO POLE	40.32
FLU0350-ST-1640-003-B	Compact Fluorescent 1x42	SHARED OR NO POLE	184.09
FLU0350-ST-1640-004-B	Compact Fluorescent 1x42	SHARED OR NO POLE	40.46
FLU0350-ST-1650-002-B	Compact Fluorescent 1x42	SHARED OR NO POLE	40.32
FLU0350-ST-1650-003-B	Compact Fluorescent 1x42	SHARED OR NO POLE	216.36
FLU0350-ST-1650-004-B	Compact Fluorescent 1x42	SHARED OR NO POLE	40.46
FLU0350-ST-1660-002-B	Compact Fluorescent 1x42	WOOD POLE	52.80
FLU0350-ST-1660-003-B	Compact Fluorescent 1x42	WOOD POLE	270.25
FLU0350-ST-1660-004-B	Compact Fluorescent 1x42	WOOD POLE	52.99
FLU0350-ST-1670-002-B	Compact Fluorescent 1x42	WOOD POLE	52.80
FLU0350-ST-1670-003-B	Compact Fluorescent 1x42	WOOD POLE	302.52
FLU0350-ST-1670-004-B	Compact Fluorescent 1x42	WOOD POLE	52.99
FLU0350-ST-1680-002-B	Compact Fluorescent 1x42	WOOD POLE	52.80
FLU0350-ST-1680-003-B	Compact Fluorescent 1x42	WOOD POLE	334.79
FLU0350-ST-1680-004-B	Compact Fluorescent 1x42	WOOD POLE	52.99
FLU0350-ST-1690-002-B	Compact Fluorescent 1x42	WOOD POLE	52.80
FLU0350-ST-1690-003-B	Compact Fluorescent 1x42	WOOD POLE	367.07
FLU0350-ST-1690-004-B	Compact Fluorescent 1x42	WOOD POLE	52.99
FLU0350-ST-1700-001-B	Compact Fluorescent 1x42	STEEL POLE	187.94
FLU0350-ST-1700-002-B	Compact Fluorescent 1x42	STEEL POLE	51.83
FLU0350-ST-1700-003-B	Compact Fluorescent 1x42	STEEL POLE	381.40
FLU0350-ST-1700-004-B	Compact Fluorescent 1x42	STEEL POLE	52.02

FLU0350-ST-1710-002-B	Compact Fluorescent 1x42	STEEL POLE	51.83
FLU0350-ST-1710-003-B	Compact Fluorescent 1x42	STEEL POLE	413.67
FLU0350-ST-1710-004-B	Compact Fluorescent 1x42	STEEL POLE	52.02
FLU0350-ST-1720-002-B	Compact Fluorescent 1x42	STEEL POLE	51.83
FLU0350-ST-1720-003-B	Compact Fluorescent 1x42	STEEL POLE	445.94
FLU0350-ST-1720-004-B	Compact Fluorescent 1x42	STEEL POLE	52.02
FLU0350-ST-1730-002-B	Compact Fluorescent 1x42	STEEL POLE	51.83
FLU0350-ST-1730-003-B	Compact Fluorescent 1x42	STEEL POLE	478.21
FLU0350-ST-1730-004-B	Compact Fluorescent 1x42	STEEL POLE	52.02
FLU0355-ST-1980-003-B	Compact Fluorescent 1x32	SHARED OR NO POLE	119.29
FLU0355-ST-1980-004-B	Compact Fluorescent 1x32	SHARED OR NO POLE	40.31
FLU0355-ST-1990-003-B	Compact Fluorescent 1x32	SHARED OR NO POLE	151.46
FLU0355-ST-1990-004-B	Compact Fluorescent 1x32	SHARED OR NO POLE	40.31
FLU0355-ST-2000-003-B	Compact Fluorescent 1x32	SHARED OR NO POLE	183.64
FLU0355-ST-2000-004-B	Compact Fluorescent 1x32	SHARED OR NO POLE	40.31
FLU0355-ST-2010-003-B	Compact Fluorescent 1x32	SHARED OR NO POLE	215.81
FLU0355-ST-2010-004-B	Compact Fluorescent 1x32	SHARED OR NO POLE	40.31
FLU0355-ST-2020-003-B	Compact Fluorescent 1x32	WOOD POLE	270.00
FLU0355-ST-2020-004-B	Compact Fluorescent 1x32	WOOD POLE	52.83
FLU0355-ST-2030-003-B	Compact Fluorescent 1x32	WOOD POLE	302.17
FLU0355-ST-2030-004-B	Compact Fluorescent 1x32	WOOD POLE	52.83
FLU0355-ST-2040-003-B	Compact Fluorescent 1x32	WOOD POLE	334.35
FLU0355-ST-2040-004-B	Compact Fluorescent 1x32	WOOD POLE	52.83
FLU0355-ST-2050-003-B	Compact Fluorescent 1x32	WOOD POLE	366.52

FLU0355-ST-2050-004-B	Compact Fluorescent 1x32	WOOD POLE	52.83
FLU0355-ST-2060-003-B	Compact Fluorescent 1x32	STEEL POLE	381.14
FLU0355-ST-2060-004-B	Compact Fluorescent 1x32	STEEL POLE	51.87
FLU0355-ST-2070-003-B	Compact Fluorescent 1x32	STEEL POLE	413.32
FLU0355-ST-2070-004-B	Compact Fluorescent 1x32	STEEL POLE	51.87
FLU0355-ST-2080-003-B	Compact Fluorescent 1x32	STEEL POLE	445.49
FLU0355-ST-2080-004-B	Compact Fluorescent 1x32	STEEL POLE	51.87
FLU0355-ST-2090-003-B	Compact Fluorescent 1x32	STEEL POLE	477.67
FLU0355-ST-2090-004-B	Compact Fluorescent 1x32	STEEL POLE	51.87
FLU0360-ST-1740-002-B	T5 2x14W	SHARED OR NO POLE	40.75
FLU0360-ST-1740-003-B	T5 2x14W	SHARED OR NO POLE	135.10
FLU0360-ST-1740-004-B	T5 2x14W	SHARED OR NO POLE	40.90
FLU0360-ST-1750-002-B	T5 2x14W	SHARED OR NO POLE	40.75
FLU0360-ST-1750-003-B	T5 2x14W	SHARED OR NO POLE	182.50
FLU0360-ST-1750-004-B	T5 2x14W	SHARED OR NO POLE	40.90
FLU0360-ST-1760-002-B	T5 2x14W	SHARED OR NO POLE	40.75
FLU0360-ST-1760-003-B	T5 2x14W	SHARED OR NO POLE	229.89
FLU0360-ST-1760-004-B	T5 2x14W	SHARED OR NO POLE	40.90
FLU0360-ST-1770-002-B	T5 2x14W	SHARED OR NO POLE	40.75
FLU0360-ST-1770-003-B	T5 2x14W	SHARED OR NO POLE	277.28
FLU0360-ST-1770-004-B	T5 2x14W	SHARED OR NO POLE	40.90
FLU0360-ST-1780-002-B	T5 2x14W	WOOD POLE	53.23
FLU0360-ST-1780-003-B	T5 2x14W	WOOD POLE	285.81
FLU0360-ST-1780-004-B	T5 2x14W	WOOD POLE	53.42

FLU0360-ST-1790-002-B	T5 2x14W	WOOD POLE	53.23
FLU0360-ST-1790-003-B	T5 2x14W	WOOD POLE	333.20
FLU0360-ST-1790-004-B	T5 2x14W	WOOD POLE	53.42
FLU0360-ST-1800-002-B	T5 2x14W	WOOD POLE	53.23
FLU0360-ST-1800-003-B	T5 2x14W	WOOD POLE	380.60
FLU0360-ST-1800-004-B	T5 2x14W	WOOD POLE	53.42
FLU0360-ST-1810-002-B	T5 2x14W	WOOD POLE	53.23
FLU0360-ST-1810-003-B	T5 2x14W	WOOD POLE	427.99
FLU0360-ST-1810-004-B	T5 2x14W	WOOD POLE	53.42
FLU0360-ST-1820-002-B	T5 2x14W	STEEL POLE	52.27
FLU0360-ST-1820-003-B	T5 2x14W	STEEL POLE	396.95
FLU0360-ST-1820-004-B	T5 2x14W	STEEL POLE	52.46
FLU0360-ST-1830-002-B	T5 2x14W	STEEL POLE	52.27
FLU0360-ST-1830-003-B	T5 2x14W	STEEL POLE	444.35
FLU0360-ST-1830-004-B	T5 2x14W	STEEL POLE	52.46
FLU0360-ST-1840-002-B	T5 2x14W	STEEL POLE	52.27
FLU0360-ST-1840-003-B	T5 2x14W	STEEL POLE	491.74
FLU0360-ST-1840-004-B	T5 2x14W	STEEL POLE	52.46
FLU0360-ST-1850-002-B	T5 2x14W	STEEL POLE	52.27
FLU0360-ST-1850-003-B	T5 2x14W	STEEL POLE	539.14
FLU0360-ST-1850-004-B	T5 2x14W	STEEL POLE	52.46
FLU0370-ST-1860-002-B	T5 2x24W	SHARED OR NO POLE	58.64
FLU0370-ST-1860-003-B	T5 2x24W	SHARED OR NO POLE	149.07
FLU0370-ST-1860-004-B	T5 2x24W	SHARED OR NO POLE	49.24

FLU0370-ST-1870-002-B	T5 2x24W	SHARED OR NO POLE	58.64
FLU0370-ST-1870-003-B	T5 2x24W	SHARED OR NO POLE	202.11
FLU0370-ST-1870-004-B	T5 2x24W	SHARED OR NO POLE	49.24
FLU0370-ST-1880-002-B	T5 2x24W	SHARED OR NO POLE	58.64
FLU0370-ST-1880-003-B	T5 2x24W	SHARED OR NO POLE	255.14
FLU0370-ST-1880-004-B	T5 2x24W	SHARED OR NO POLE	49.24
FLU0370-ST-1890-003-B	T5 2x24W	SHARED OR NO POLE	308.17
FLU0370-ST-1900-002-B	T5 2x24W	WOOD POLE	71.12
FLU0370-ST-1900-004-B	T5 2x24W	WOOD POLE	61.76
FLU0370-ST-1910-002-B	T5 2x24W	WOOD POLE	71.12
FLU0370-ST-1910-003-B	T5 2x24W	WOOD POLE	352.82
FLU0370-ST-1910-004-B	T5 2x24W	WOOD POLE	61.76
FLU0370-ST-1920-002-B	T5 2x24W	WOOD POLE	71.12
FLU0370-ST-1920-003-B	T5 2x24W	WOOD POLE	405.85
FLU0370-ST-1920-004-B	T5 2x24W	WOOD POLE	61.76
FLU0370-ST-1930-002-B	T5 2x24W	WOOD POLE	71.12
FLU0370-ST-1930-003-B	T5 2x24W	WOOD POLE	458.88
FLU0370-ST-1930-004-B	T5 2x24W	WOOD POLE	61.76
FLU0370-ST-1940-002-B	T5 2x24W	STEEL POLE	70.16
FLU0370-ST-1940-003-B	T5 2x24W	STEEL POLE	410.93
FLU0370-ST-1940-004-B	T5 2x24W	STEEL POLE	60.79
FLU0370-ST-1950-002-B	T5 2x24W	STEEL POLE	70.16
FLU0370-ST-1950-003-B	T5 2x24W	STEEL POLE	463.96
FLU0370-ST-1950-004-B	T5 2x24W	STEEL POLE	60.79

FLU0370-ST-1960-003-B T5 2x24W STEEL POLE 51	6.99
FLU0370-ST-1960-004-B T5 2x24W STEEL POLE	60.79
FLU0370-ST-1970-002-B T5 2x24W STEEL POLE 7	70.16
FLU0370-ST-1970-003-B T5 2x24W STEEL POLE 57	70.02
FLU0370-ST-1970-004-B T5 2x24W STEEL POLE	60.79
HPS0010-ST-0040-001-B High Pressure Sodium 50 SHARED OR NO POLE	88.11
HPS0010-ST-0040-002-B High Pressure Sodium 50 SHARED OR NO POLE	39.59
HPS0010-ST-0040-004-B High Pressure Sodium 50 SHARED OR NO POLE	39.73
HPS0010-ST-0090-002-B High Pressure Sodium 50 SHARED OR NO POLE	39.59
HPS0010-ST-0350-001-B High Pressure Sodium 50 WOOD POLE 13	32.89
HPS0010-ST-0350-002-B High Pressure Sodium 50 WOOD POLE	52.07
HPS0010-ST-0360-001-B High Pressure Sodium 50 STEEL POLE 18	86.07
HPS0010-ST-0360-002-B High Pressure Sodium 50 STEEL POLE	51.10
HPS0010-ST-0730-002-B High Pressure Sodium 50 STEEL POLE	51.10
HPS0010-ST-0750-001-B High Pressure Sodium 50 SHARED OR NO POLE	92.46
HPS0010-ST-0890-002-B High Pressure Sodium 50 SHARED OR NO POLE	39.59
HPS0010-ST-0910-002-B High Pressure Sodium 50 WOOD POLE	52.07
HPS0010-TA-0090-001-B High Pressure Sodium 50 SHARED OR NO POLE	31.35
HPS0010-TA-0090-002-B High Pressure Sodium 50 SHARED OR NO POLE	31.17
HPS0010-TA-0090-003-B High Pressure Sodium 50 SHARED OR NO POLE 17	1.66
HPS0010-TA-0140-001-B High Pressure Sodium 50 WOOD POLE 12	26.13
HPS0010-TA-0140-002-B High Pressure Sodium 50 WOOD POLE	3.64
HPS0010-TA-0170-001-B High Pressure Sodium 50 STEEL POLE 17	9.31

HPS0010-TA-0170-002-B	High Pressure Sodium 50	STEEL POLE	42.68
HPS0010-TA-0170-004-B	High Pressure Sodium 50	STEEL POLE	42.83
HPS0010-TA-1180-001-B	High Pressure Sodium 50	SHARED OR NO POLE	75.19
HPS0010-TA-1200-001-B	High Pressure Sodium 50	SHARED OR NO POLE	102.88
HPS0010-TA-1210-001-B	High Pressure Sodium 50	WOOD POLE	139.97
HPS0020-ST-0005-001-B	High Pressure Sodium 70	NO CAPITAL	39.45
HPS0020-ST-0040-001-B	High Pressure Sodium 70	SHARED OR NO POLE	67.97
HPS0020-ST-0040-002-B	High Pressure Sodium 70	SHARED OR NO POLE	39.45
HPS0020-ST-0040-003-B	High Pressure Sodium 70	SHARED OR NO POLE	115.89
HPS0020-ST-0040-004-B	High Pressure Sodium 70	SHARED OR NO POLE	39.59
HPS0020-ST-0170-002-B	High Pressure Sodium 70	STEEL POLE	50.97
HPS0020-ST-0170-004-B	High Pressure Sodium 70	STEEL POLE	51.15
HPS0020-ST-0350-001-B	High Pressure Sodium 70	WOOD POLE	132.75
HPS0020-ST-0350-002-B	High Pressure Sodium 70	WOOD POLE	51.93
HPS0020-ST-0350-003-B	High Pressure Sodium 70	WOOD POLE	266.60
HPS0020-ST-0350-004-B	High Pressure Sodium 70	WOOD POLE	52.12
HPS0020-ST-0360-001-B	High Pressure Sodium 70	STEEL POLE	185.94
HPS0020-ST-0360-002-B	High Pressure Sodium 70	STEEL POLE	50.97
HPS0020-ST-0360-003-B	High Pressure Sodium 70	STEEL POLE	377.74
HPS0020-ST-0360-004-B	High Pressure Sodium 70	STEEL POLE	51.15
HPS0020-ST-0730-001-B	High Pressure Sodium 70	STEEL POLE	198.11
HPS0020-ST-0730-002-B	High Pressure Sodium 70	STEEL POLE	50.97
HPS0020-ST-0730-003-B	High Pressure Sodium 70	STEEL POLE	407.24
HPS0020-ST-0730-004-B	High Pressure Sodium 70	STEEL POLE	51.15

HPS0020-ST-0750-001-B	High Pressure Sodium 70	SHARED OR NO POLE	92.32
HPS0020-ST-0750-002-B	High Pressure Sodium 70	SHARED OR NO POLE	39.45
HPS0020-ST-0750-004-B	High Pressure Sodium 70	SHARED OR NO POLE	39.59
HPS0020-ST-0880-002-B	High Pressure Sodium 70	STEEL POLE	50.97
HPS0020-ST-0880-004-B	High Pressure Sodium 70	STEEL POLE	51.15
HPS0020-ST-0890-001-B	High Pressure Sodium 70	SHARED OR NO POLE	80.15
HPS0020-ST-0890-002-B	High Pressure Sodium 70	SHARED OR NO POLE	39.45
HPS0020-ST-0890-003-B	High Pressure Sodium 70	SHARED OR NO POLE	145.38
HPS0020-ST-0890-004-B	High Pressure Sodium 70	SHARED OR NO POLE	39.59
HPS0020-ST-0910-001-B	High Pressure Sodium 70	WOOD POLE	144.93
HPS0020-ST-0910-002-B	High Pressure Sodium 70	WOOD POLE	51.93
HPS0020-ST-0910-003-B	High Pressure Sodium 70	WOOD POLE	296.09
HPS0020-ST-0910-004-B	High Pressure Sodium 70	WOOD POLE	52.12
HPS0020-TA-0090-001-B	High Pressure Sodium 70	SHARED OR NO POLE	66.97
HPS0020-TA-0090-002-B	High Pressure Sodium 70	SHARED OR NO POLE	36.79
HPS0020-TA-0090-003-B	High Pressure Sodium 70	SHARED OR NO POLE	117.30
HPS0020-TA-0090-004-B	High Pressure Sodium 70	SHARED OR NO POLE	36.92
HPS0020-TA-0140-001-B	High Pressure Sodium 70	WOOD POLE	131.75
HPS0020-TA-0140-002-B	High Pressure Sodium 70	WOOD POLE	49.26
HPS0020-TA-0140-003-B	High Pressure Sodium 70	WOOD POLE	268.01
HPS0020-TA-0140-004-B	High Pressure Sodium 70	WOOD POLE	49.44
HPS0020-TA-0170-001-B	High Pressure Sodium 70	STEEL POLE	184.94
HPS0020-TA-0170-002-B	High Pressure Sodium 70	STEEL POLE	48.30
HPS0020-TA-0170-003-B	High Pressure Sodium 70	STEEL POLE	379.15

HPS0020-TA-0170-004-B	High Pressure Sodium 70	STEEL POLE	48.47
HPS0070-ST-0040-001-B	High Pressure Sodium 100	SHARED OR NO POLE	67.97
HPS0070-ST-0040-002-B	High Pressure Sodium 100	SHARED OR NO POLE	39.45
HPS0070-ST-0350-001-B	High Pressure Sodium 100	WOOD POLE	132.75
HPS0070-ST-0350-002-B	High Pressure Sodium 100	WOOD POLE	51.93
HPS0070-ST-0360-001-B	High Pressure Sodium 100	STEEL POLE	185.94
HPS0070-ST-0360-002-B	High Pressure Sodium 100	STEEL POLE	50.97
HPS0070-ST-0360-004-B	High Pressure Sodium 100	STEEL POLE	51.15
HPS0070-ST-0730-001-B	High Pressure Sodium 100	STEEL POLE	198.11
HPS0070-ST-0730-002-B	High Pressure Sodium 100	STEEL POLE	50.97
HPS0080-ST-0050-001-B	High Pressure Sodium 120	SHARED OR NO POLE	94.38
HPS0080-ST-0050-002-B	High Pressure Sodium 120	SHARED OR NO POLE	44.99
HPS0080-ST-0220-002-B	High Pressure Sodium 120	WOOD POLE	57.47
HPS0080-ST-0310-002-B	High Pressure Sodium 120	STEEL POLE	56.51
HPS0080-ST-0360-002-B	High Pressure Sodium 120	STEEL POLE	56.51
HPS0090-ST-0005-001-B	High Pressure Sodium 150	NO CAPITAL	42.03
HPS0090-ST-0050-001-B	High Pressure Sodium 150	SHARED OR NO POLE	91.42
HPS0090-ST-0050-002-B	High Pressure Sodium 150	SHARED OR NO POLE	42.03
HPS0090-ST-0050-003-B	High Pressure Sodium 150	SHARED OR NO POLE	164.44
HPS0090-ST-0050-004-B	High Pressure Sodium 150	SHARED OR NO POLE	42.18
HPS0090-ST-0220-001-B	High Pressure Sodium 150	WOOD POLE	156.20
HPS0090-ST-0220-002-B	High Pressure Sodium 150	WOOD POLE	54.51
HPS0090-ST-0220-003-B	High Pressure Sodium 150	WOOD POLE	315.15
HPS0090-ST-0220-004-B	High Pressure Sodium 150	WOOD POLE	54.71

HPS0090-ST-0310-001-B	High Pressure Sodium 150	STEEL POLE	195.79
HPS0090-ST-0310-002-B	High Pressure Sodium 150	STEEL POLE	53.55
HPS0090-ST-0310-003-B	High Pressure Sodium 150	STEEL POLE	398.16
HPS0090-ST-0310-004-B	High Pressure Sodium 150	STEEL POLE	53.74
HPS0090-ST-0690-001-B	High Pressure Sodium 150	STEEL POLE	215.23
HPS0090-ST-0690-002-B	High Pressure Sodium 150	STEEL POLE	53.55
HPS0090-ST-0690-003-B	High Pressure Sodium 150	STEEL POLE	445.47
HPS0090-ST-0690-004-B	High Pressure Sodium 150	STEEL POLE	53.74
HPS0090-ST-0710-001-B	High Pressure Sodium 150	STEEL POLE	234.68
HPS0090-ST-0710-002-B	High Pressure Sodium 150	STEEL POLE	53.55
HPS0090-ST-0710-004-B	High Pressure Sodium 150	STEEL POLE	53.74
HPS0090-ST-0720-001-B	High Pressure Sodium 150	STEEL POLE	254.13
HPS0090-ST-0720-002-B	High Pressure Sodium 150	STEEL POLE	53.55
HPS0090-ST-0720-003-B	High Pressure Sodium 150	STEEL POLE	540.09
HPS0090-ST-0720-004-B	High Pressure Sodium 150	STEEL POLE	53.74
HPS0090-ST-0980-001-B	High Pressure Sodium 150	WOOD POLE	175.65
HPS0090-ST-0980-002-B	High Pressure Sodium 150	WOOD POLE	54.51
HPS0090-ST-0980-004-B	High Pressure Sodium 150	WOOD POLE	54.71
HPS0090-ST-1010-001-B	High Pressure Sodium 150	SHARED OR NO POLE	110.87
HPS0090-ST-1010-002-B	High Pressure Sodium 150	SHARED OR NO POLE	42.03
HPS0090-ST-1010-003-B	High Pressure Sodium 150	SHARED OR NO POLE	211.75
HPS0090-ST-1010-004-B	High Pressure Sodium 150	SHARED OR NO POLE	42.18
HPS0090-ST-1360-001-B	High Pressure Sodium 150	R/BOUT COLUMN	327.25
HPS0090-ST-1360-002-B	High Pressure Sodium 150	R/BOUT COLUMN	53.55

HPS0090-ST-1360-004-B	High Pressure Sodium 150	R/BOUT COLUMN	53.74
HPS0090-ST-1370-002-B	High Pressure Sodium 150	R/BOUT COLUMN	53.55
HPS0090-TA-0050-001-B	High Pressure Sodium 150	SHARED OR NO POLE	95.05
HPS0090-TA-0050-002-B	High Pressure Sodium 150	SHARED OR NO POLE	45.66
HPS0090-TA-0050-003-B	High Pressure Sodium 150	SHARED OR NO POLE	168.08
HPS0090-TA-0050-004-B	High Pressure Sodium 150	SHARED OR NO POLE	45.82
HPS0090-TA-0220-001-B	High Pressure Sodium 150	WOOD POLE	159.83
HPS0090-TA-0220-002-B	High Pressure Sodium 150	WOOD POLE	58.14
HPS0090-TA-0220-003-B	High Pressure Sodium 150	WOOD POLE	318.79
HPS0090-TA-0310-001-B	High Pressure Sodium 150	STEEL POLE	199.41
HPS0090-TA-0310-002-B	High Pressure Sodium 150	STEEL POLE	57.17
HPS0090-TA-0310-003-B	High Pressure Sodium 150	STEEL POLE	401.80
HPS0090-TA-0690-001-B	High Pressure Sodium 150	STEEL POLE	218.86
HPS0090-TA-1010-001-B	High Pressure Sodium 150	SHARED OR NO POLE	114.49
HPS0090-TA-1370-001-B	High Pressure Sodium 150	R/BOUT COLUMN	350.32
HPS0100-ST-0060-001-B	High Pressure Sodium 220	SHARED OR NO POLE	101.71
HPS0100-ST-0060-002-B	High Pressure Sodium 220	SHARED OR NO POLE	52.13
HPS0100-ST-0230-001-B	High Pressure Sodium 220	WOOD POLE	166.49
HPS0100-ST-0230-002-B	High Pressure Sodium 220	WOOD POLE	64.61
HPS0100-ST-0320-001-B	High Pressure Sodium 220	STEEL POLE	206.08
HPS0100-ST-0320-002-B	High Pressure Sodium 220	STEEL POLE	63.64
HPS0100-ST-0390-002-B	High Pressure Sodium 220	STEEL POLE	63.64
HPS0100-ST-0430-001-B	High Pressure Sodium 220	STEEL POLE	245.37
HPS0100-ST-0610-001-B	High Pressure Sodium 220	SHARED OR NO POLE	109.55

HPS0100-ST-0610-002-B	High Pressure Sodium 220	SHARED OR NO POLE	52.13
HPS0100-ST-0760-001-B	High Pressure Sodium 220	WOOD POLE	186.14
HPS0100-ST-0930-002-B	High Pressure Sodium 220	WOOD POLE	64.61
HPS0100-ST-1020-002-B	High Pressure Sodium 220	SHARED OR NO POLE	52.13
HPS0100-ST-1070-001-B	High Pressure Sodium 220	WOOD POLE	174.33
HPS0100-ST-1070-002-B	High Pressure Sodium 220	WOOD POLE	64.61
HPS0100-ST-1120-002-B	High Pressure Sodium 220	STEEL POLE	63.64
HPS0100-ST-1160-002-B	High Pressure Sodium 220	WOOD POLE	64.61
HPS0110-ST-0005-001-B	High Pressure Sodium 250	NO CAPITAL	43.36
HPS0110-ST-0060-001-B	High Pressure Sodium 250	SHARED OR NO POLE	92.94
HPS0110-ST-0060-002-B	High Pressure Sodium 250	SHARED OR NO POLE	43.36
HPS0110-ST-0060-003-B	High Pressure Sodium 250	SHARED OR NO POLE	166.26
HPS0110-ST-0060-004-B	High Pressure Sodium 250	SHARED OR NO POLE	43.52
HPS0110-ST-0230-001-B	High Pressure Sodium 250	WOOD POLE	157.73
HPS0110-ST-0230-002-B	High Pressure Sodium 250	WOOD POLE	55.84
HPS0110-ST-0230-003-B	High Pressure Sodium 250	WOOD POLE	316.97
HPS0110-ST-0230-004-B	High Pressure Sodium 250	WOOD POLE	56.04
HPS0110-ST-0320-001-B	High Pressure Sodium 250	STEEL POLE	197.31
HPS0110-ST-0320-002-B	High Pressure Sodium 250	STEEL POLE	54.88
HPS0110-ST-0320-003-B	High Pressure Sodium 250	STEEL POLE	399.97
HPS0110-ST-0320-004-B	High Pressure Sodium 250	STEEL POLE	55.07
HPS0110-ST-0390-001-B	High Pressure Sodium 250	STEEL POLE	216.96
HPS0110-ST-0390-002-B	High Pressure Sodium 250	STEEL POLE	54.88
HPS0110-ST-0390-003-B	High Pressure Sodium 250	STEEL POLE	447.77

HPS0110-ST-0390-004-B	High Pressure Sodium 250	STEEL POLE	55.07
HPS0110-ST-0430-002-B	High Pressure Sodium 250	STEEL POLE	54.88
HPS0110-ST-0430-004-B	High Pressure Sodium 250	STEEL POLE	55.07
HPS0110-ST-0470-001-B	High Pressure Sodium 250	STEEL POLE	256.25
HPS0110-ST-0470-002-B	High Pressure Sodium 250	STEEL POLE	54.88
HPS0110-ST-0470-003-B	High Pressure Sodium 250	STEEL POLE	543.37
HPS0110-ST-0470-004-B	High Pressure Sodium 250	STEEL POLE	55.07
HPS0110-ST-0510-002-B	High Pressure Sodium 250	R/BOUT COLUMN	54.88
HPS0110-ST-0550-001-B	High Pressure Sodium 250	R/BOUT COLUMN	329.17
HPS0110-ST-0550-002-B	High Pressure Sodium 250	R/BOUT COLUMN	54.88
HPS0110-ST-0550-003-B	High Pressure Sodium 250	R/BOUT COLUMN	685.67
HPS0110-ST-0550-004-B	High Pressure Sodium 250	R/BOUT COLUMN	55.07
HPS0110-ST-0590-001-B	High Pressure Sodium 250	R/BOUT COLUMN	348.82
HPS0110-ST-0590-002-B	High Pressure Sodium 250	R/BOUT COLUMN	54.88
HPS0110-ST-0590-003-B	High Pressure Sodium 250	R/BOUT COLUMN	733.47
HPS0110-ST-0590-004-B	High Pressure Sodium 250	R/BOUT COLUMN	55.07
HPS0110-ST-0610-001-B	High Pressure Sodium 250	SHARED OR NO POLE	100.78
HPS0110-ST-0610-002-B	High Pressure Sodium 250	SHARED OR NO POLE	43.36
HPS0110-ST-0610-003-B	High Pressure Sodium 250	SHARED OR NO POLE	185.46
HPS0110-ST-0610-004-B	High Pressure Sodium 250	SHARED OR NO POLE	43.52
HPS0110-ST-0650-002-B	High Pressure Sodium 250	SHARED OR NO POLE	43.36
HPS0110-ST-0650-004-B	High Pressure Sodium 250	SHARED OR NO POLE	43.52
HPS0110-ST-0760-001-B	High Pressure Sodium 250	WOOD POLE	177.37
HPS0110-ST-0760-002-B	High Pressure Sodium 250	WOOD POLE	55.84

HPS0110-ST-0760-003-B	High Pressure Sodium 250	WOOD POLE	364.77
HPS0110-ST-0760-004-B	High Pressure Sodium 250	WOOD POLE	56.04
HPS0110-ST-0930-001-B	High Pressure Sodium 250	WOOD POLE	197.02
HPS0110-ST-0930-002-B	High Pressure Sodium 250	WOOD POLE	55.84
HPS0110-ST-0930-004-B	High Pressure Sodium 250	WOOD POLE	56.04
HPS0110-ST-0960-001-B	High Pressure Sodium 250	SHARED OR NO POLE	112.59
HPS0110-ST-0960-002-B	High Pressure Sodium 250	SHARED OR NO POLE	43.36
HPS0110-ST-0960-003-B	High Pressure Sodium 250	SHARED OR NO POLE	214.06
HPS0110-ST-0960-004-B	High Pressure Sodium 250	SHARED OR NO POLE	43.52
HPS0110-ST-0970-002-B	High Pressure Sodium 250	SHARED OR NO POLE	43.36
HPS0110-ST-0970-004-B	High Pressure Sodium 250	SHARED OR NO POLE	43.52
HPS0110-ST-1020-002-B	High Pressure Sodium 250	SHARED OR NO POLE	43.36
HPS0110-ST-1070-001-B	High Pressure Sodium 250	WOOD POLE	165.56
HPS0110-ST-1070-002-B	High Pressure Sodium 250	WOOD POLE	55.84
HPS0110-ST-1070-003-B	High Pressure Sodium 250	WOOD POLE	336.17
HPS0110-ST-1070-004-B	High Pressure Sodium 250	WOOD POLE	56.04
HPS0110-ST-1120-001-B	High Pressure Sodium 250	STEEL POLE	205.15
HPS0110-ST-1120-002-B	High Pressure Sodium 250	STEEL POLE	54.88
HPS0110-ST-1120-003-B	High Pressure Sodium 250	STEEL POLE	419.18
HPS0110-ST-1120-004-B	High Pressure Sodium 250	STEEL POLE	55.07
HPS0110-ST-1140-002-B	High Pressure Sodium 250	STEEL POLE	54.88
HPS0110-ST-1160-001-B	High Pressure Sodium 250	WOOD POLE	193.04
HPS0110-ST-1160-002-B	High Pressure Sodium 250	WOOD POLE	55.84
HPS0110-ST-1160-003-B	High Pressure Sodium 250	WOOD POLE	403.17

HPS0110-ST-1330-002-B	High Pressure Sodium 250	STEEL POLE	54.88
HPS0110-ST-1330-004-B	High Pressure Sodium 250	STEEL POLE	55.07
HPS0110-ST-1340-002-B	High Pressure Sodium 250	STEEL POLE	54.88
HPS0110-ST-1340-004-B	High Pressure Sodium 250	STEEL POLE	55.07
HPS0110-ST-1380-002-B	High Pressure Sodium 250	R/BOUT COLUMN	54.88
HPS0110-ST-1380-004-B	High Pressure Sodium 250	R/BOUT COLUMN	55.07
HPS0110-ST-1450-001-B	High Pressure Sodium 250	R/BOUT COLUMN	380.15
HPS0110-ST-1450-002-B	High Pressure Sodium 250	R/BOUT COLUMN	54.88
HPS0110-ST-1450-004-B	High Pressure Sodium 250	R/BOUT COLUMN	55.07
HPS0110-TA-0060-001-B	High Pressure Sodium 250	SHARED OR NO POLE	90.70
HPS0110-TA-0060-002-B	High Pressure Sodium 250	SHARED OR NO POLE	41.11
HPS0110-TA-0060-003-B	High Pressure Sodium 250	SHARED OR NO POLE	164.00
HPS0110-TA-0060-004-B	High Pressure Sodium 250	SHARED OR NO POLE	41.26
HPS0110-TA-0230-001-B	High Pressure Sodium 250	WOOD POLE	155.48
HPS0110-TA-0230-002-B	High Pressure Sodium 250	WOOD POLE	53.59
HPS0110-TA-0230-003-B	High Pressure Sodium 250	WOOD POLE	314.71
HPS0110-TA-0230-004-B	High Pressure Sodium 250	WOOD POLE	53.78
HPS0110-TA-0320-001-B	High Pressure Sodium 250	STEEL POLE	195.06
HPS0110-TA-0320-002-B	High Pressure Sodium 250	STEEL POLE	52.63
HPS0110-TA-0320-003-B	High Pressure Sodium 250	STEEL POLE	397.72
HPS0110-TA-0320-004-B	High Pressure Sodium 250	STEEL POLE	52.82
HPS0110-TA-0390-001-B	High Pressure Sodium 250	STEEL POLE	214.71
HPS0110-TA-0470-001-B	High Pressure Sodium 250	STEEL POLE	254.00
HPS0110-TA-0470-003-B	High Pressure Sodium 250	STEEL POLE	541.11

HPS0110-TA-0590-001-B	High Pressure Sodium 250	R/BOUT COLUMN	346.57
HPS0110-TA-0590-002-B	High Pressure Sodium 250	R/BOUT COLUMN	52.63
HPS0110-TA-0590-003-B	High Pressure Sodium 250	R/BOUT COLUMN	731.21
HPS0110-TA-0590-004-B	High Pressure Sodium 250	R/BOUT COLUMN	52.82
HPS0110-TA-0960-001-B	High Pressure Sodium 250	SHARED OR NO POLE	110.34
HPS0110-TA-0960-003-B	High Pressure Sodium 250	SHARED OR NO POLE	211.80
HPS0110-TA-1070-002-B	High Pressure Sodium 250	WOOD POLE	53.59
HPS0110-TA-1120-001-B	High Pressure Sodium 250	STEEL POLE	202.90
HPS0110-TA-1120-002-B	High Pressure Sodium 250	STEEL POLE	52.63
HPS0110-TA-1120-004-B	High Pressure Sodium 250	STEEL POLE	52.82
HPS0110-TA-1450-001-B	High Pressure Sodium 250	R/BOUT COLUMN	377.90
HPS0120-ST-0860-002-B	High Pressure Sodium 2x250	R/BOUT COLUMN	72.66
HPS0120-ST-0860-004-B	High Pressure Sodium 2x250	R/BOUT COLUMN	72.92
HPS0120-ST-0870-002-B	High Pressure Sodium 2x250	R/BOUT COLUMN	72.66
HPS0120-ST-1490-002-B	High Pressure Sodium 2x250	R/BOUT COLUMN	72.66
HPS0140-ST-0070-001-B	High Pressure Sodium 310 (Retrofit)	SHARED OR NO POLE	106.17
HPS0140-ST-0070-002-B	High Pressure Sodium 310 (Retrofit)	SHARED OR NO POLE	50.96
HPS0140-ST-0240-001-B	High Pressure Sodium 310 (Retrofit)	WOOD POLE	170.95
HPS0140-ST-0240-002-B	High Pressure Sodium 310 (Retrofit)	WOOD POLE	63.44
HPS0140-ST-0330-001-B	High Pressure Sodium 310 (Retrofit)	STEEL POLE	210.54
HPS0140-ST-0330-002-B	High Pressure Sodium 310 (Retrofit)	STEEL POLE	62.47
HPS0140-ST-0400-001-B	High Pressure Sodium 310 (Retrofit)	STEEL POLE	235.81
HPS0140-ST-0400-002-B	High Pressure Sodium 310 (Retrofit)	STEEL POLE	62.47
HPS0140-ST-1030-001-B	High Pressure Sodium 310 (Retrofit)	SHARED OR NO POLE	131.44

HPS0160-ST-0070-001-B	High Pressure Sodium 360	SHARED OR NO POLE	111.38
HPS0160-ST-0070-002-B	High Pressure Sodium 360	SHARED OR NO POLE	56.17
HPS0160-ST-0240-001-B	High Pressure Sodium 360	WOOD POLE	176.16
HPS0160-ST-0240-002-B	High Pressure Sodium 360	WOOD POLE	68.65
HPS0160-ST-0330-001-B	High Pressure Sodium 360	STEEL POLE	215.74
HPS0160-ST-0330-002-B	High Pressure Sodium 360	STEEL POLE	67.68
HPS0160-ST-0400-002-B	High Pressure Sodium 360	STEEL POLE	67.68
HPS0160-ST-0620-001-B	High Pressure Sodium 360	SHARED OR NO POLE	109.33
HPS0160-ST-0620-002-B	High Pressure Sodium 360	SHARED OR NO POLE	56.17
HPS0160-ST-0770-001-B	High Pressure Sodium 360	WOOD POLE	201.43
HPS0160-ST-1020-001-B	High Pressure Sodium 360	SHARED OR NO POLE	145.04
HPS0160-ST-1030-001-B	High Pressure Sodium 360	SHARED OR NO POLE	136.65
HPS0160-ST-1130-002-B	High Pressure Sodium 360	STEEL POLE	67.68
HPS0160-ST-1170-002-B	High Pressure Sodium 360	STEEL POLE	67.68
HPS0170-ST-0070-001-B	High Pressure Sodium 400	SHARED OR NO POLE	102.97
HPS0170-ST-0070-002-B	High Pressure Sodium 400	SHARED OR NO POLE	47.77
HPS0170-ST-0070-003-B	High Pressure Sodium 400	SHARED OR NO POLE	184.47
HPS0170-ST-0070-004-B	High Pressure Sodium 400	SHARED OR NO POLE	47.94
HPS0170-ST-0240-001-B	High Pressure Sodium 400	WOOD POLE	167.75
HPS0170-ST-0240-002-B	High Pressure Sodium 400	WOOD POLE	60.24
HPS0170-ST-0240-003-B	High Pressure Sodium 400	WOOD POLE	335.18
HPS0170-ST-0240-004-B	High Pressure Sodium 400	WOOD POLE	60.46
HPS0170-ST-0270-002-B	High Pressure Sodium 400	R/BOUT COLUMN	59.28
HPS0170-ST-0270-004-B	High Pressure Sodium 400	R/BOUT COLUMN	59.49

HPS0170-ST-0330-001-B	High Pressure Sodium 400	STEEL POLE	207.34
HPS0170-ST-0330-002-B	High Pressure Sodium 400	STEEL POLE	59.28
HPS0170-ST-0330-003-B	High Pressure Sodium 400	STEEL POLE	418.18
HPS0170-ST-0330-004-B	High Pressure Sodium 400	STEEL POLE	59.49
HPS0170-ST-0400-001-B	High Pressure Sodium 400	STEEL POLE	232.61
HPS0170-ST-0400-002-B	High Pressure Sodium 400	STEEL POLE	59.28
HPS0170-ST-0400-003-B	High Pressure Sodium 400	STEEL POLE	479.77
HPS0170-ST-0400-004-B	High Pressure Sodium 400	STEEL POLE	59.49
HPS0170-ST-0440-001-B	High Pressure Sodium 400	STEEL POLE	257.88
HPS0170-ST-0440-002-B	High Pressure Sodium 400	STEEL POLE	59.28
HPS0170-ST-0440-003-B	High Pressure Sodium 400	STEEL POLE	541.36
HPS0170-ST-0440-004-B	High Pressure Sodium 400	STEEL POLE	59.49
HPS0170-ST-0480-001-B	High Pressure Sodium 400	STEEL POLE	283.15
HPS0170-ST-0480-002-B	High Pressure Sodium 400	STEEL POLE	59.28
HPS0170-ST-0480-004-B	High Pressure Sodium 400	STEEL POLE	59.49
HPS0170-ST-0560-001-B	High Pressure Sodium 400	R/BOUT COLUMN	350.45
HPS0170-ST-0560-002-B	High Pressure Sodium 400	R/BOUT COLUMN	59.28
HPS0170-ST-0560-004-B	High Pressure Sodium 400	R/BOUT COLUMN	59.49
HPS0170-ST-0600-001-B	High Pressure Sodium 400	R/BOUT COLUMN	375.72
HPS0170-ST-0600-002-B	High Pressure Sodium 400	R/BOUT COLUMN	59.28
HPS0170-ST-0600-004-B	High Pressure Sodium 400	R/BOUT COLUMN	59.49
HPS0170-ST-0620-001-B	High Pressure Sodium 400	SHARED OR NO POLE	100.92
HPS0170-ST-0620-002-B	High Pressure Sodium 400	SHARED OR NO POLE	47.77
HPS0170-ST-0620-003-B	High Pressure Sodium 400	SHARED OR NO POLE	179.44

HPS0170-ST-0620-004-B	High Pressure Sodium 400	SHARED OR NO POLE	47.94
HPS0170-ST-0660-001-B	High Pressure Sodium 400	SHARED OR NO POLE	124.14
HPS0170-ST-0660-002-B	High Pressure Sodium 400	SHARED OR NO POLE	47.77
HPS0170-ST-0660-004-B	High Pressure Sodium 400	SHARED OR NO POLE	47.94
HPS0170-ST-0770-001-B	High Pressure Sodium 400	WOOD POLE	193.02
HPS0170-ST-0770-002-B	High Pressure Sodium 400	WOOD POLE	60.24
HPS0170-ST-0770-004-B	High Pressure Sodium 400	WOOD POLE	60.46
HPS0170-ST-0900-001-B	High Pressure Sodium 400	WOOD POLE	204.88
HPS0170-ST-0900-002-B	High Pressure Sodium 400	WOOD POLE	60.24
HPS0170-ST-0900-004-B	High Pressure Sodium 400	WOOD POLE	60.46
HPS0170-ST-1030-001-B	High Pressure Sodium 400	SHARED OR NO POLE	128.24
HPS0170-ST-1030-002-B	High Pressure Sodium 400	SHARED OR NO POLE	47.77
HPS0170-ST-1030-003-B	High Pressure Sodium 400	SHARED OR NO POLE	246.06
HPS0170-ST-1030-004-B	High Pressure Sodium 400	SHARED OR NO POLE	47.94
HPS0170-ST-1060-002-B	High Pressure Sodium 400	WOOD POLE	60.24
HPS0170-ST-1080-001-B	High Pressure Sodium 400	SHARED OR NO POLE	161.20
HPS0170-ST-1080-002-B	High Pressure Sodium 400	SHARED OR NO POLE	47.77
HPS0170-ST-1100-001-B	High Pressure Sodium 400	WOOD POLE	173.68
HPS0170-ST-1100-002-B	High Pressure Sodium 400	WOOD POLE	60.24
HPS0170-ST-1100-003-B	High Pressure Sodium 400	WOOD POLE	349.71
HPS0170-ST-1100-004-B	High Pressure Sodium 400	WOOD POLE	60.46
HPS0170-ST-1130-001-B	High Pressure Sodium 400	STEEL POLE	244.47
HPS0170-ST-1130-002-B	High Pressure Sodium 400	STEEL POLE	59.28
HPS0170-ST-1130-003-B	High Pressure Sodium 400	STEEL POLE	508.84

HPS0170-ST-1130-004-B	High Pressure Sodium 400	STEEL POLE	59.49
HPS0170-ST-1170-001-B	High Pressure Sodium 400	STEEL POLE	213.27
HPS0170-ST-1170-002-B	High Pressure Sodium 400	STEEL POLE	59.28
HPS0170-ST-1170-003-B	High Pressure Sodium 400	STEEL POLE	432.72
HPS0170-ST-1170-004-B	High Pressure Sodium 400	STEEL POLE	59.49
HPS0170-ST-1250-001-B	High Pressure Sodium 400	WOOD POLE	236.08
HPS0170-ST-1250-003-B	High Pressure Sodium 400	WOOD POLE	501.95
HPS0170-TA-0070-001-B	High Pressure Sodium 400	SHARED OR NO POLE	105.06
HPS0170-TA-0070-003-B	High Pressure Sodium 400	SHARED OR NO POLE	186.56
HPS0170-TA-0240-001-B	High Pressure Sodium 400	WOOD POLE	169.84
HPS0170-TA-0330-001-B	High Pressure Sodium 400	STEEL POLE	209.43
HPS0170-TA-0400-001-B	High Pressure Sodium 400	STEEL POLE	234.70
HPS0170-TA-0600-001-B	High Pressure Sodium 400	R/BOUT COLUMN	377.81
HPS0170-TA-0600-002-B	High Pressure Sodium 400	R/BOUT COLUMN	61.36
HPS0170-TA-1080-001-B	High Pressure Sodium 400	SHARED OR NO POLE	163.29
HPS0180-ST-0860-001-B	High Pressure Sodium 2x400	R/BOUT COLUMN	390.42
HPS0180-ST-0870-001-B	High Pressure Sodium 2x400	R/BOUT COLUMN	421.62
HPS0180-ST-0870-002-B	High Pressure Sodium 2x400	R/BOUT COLUMN	81.47
HPS0180-ST-1490-001-B	High Pressure Sodium 2x400	R/BOUT COLUMN	359.22
HPS0190-ST-1470-001-B	High Pressure Sodium 3x400	R/BOUT COLUMN	433.52
HPS0190-ST-1470-002-B	High Pressure Sodium 3x400	R/BOUT COLUMN	103.66
HPS0210-ST-0190-001-B	High Pressure Sodium 600 (Internal Ignitor)	SHARED OR NO POLE	316.07
HPS0210-ST-0250-001-B	High Pressure Sodium 600 (Internal Ignitor)	WOOD POLE	380.85

HPS0210-ST-0340-004-B	High Pressure Sodium 600 (Internal Ignitor)	STEEL POLE	115.15
HPS0250-ST-0120-001-B	High Pressure Sodium 1000	SHARED OR NO POLE	281.72
HPS0250-ST-0120-002-B	High Pressure Sodium 1000	SHARED OR NO POLE	188.60
HPS0250-ST-0840-001-B	High Pressure Sodium 1000	R/BOUT COLUMN	509.07
HPS0250-ST-0850-001-B	High Pressure Sodium 1000	R/BOUT COLUMN	477.88
HPS0250-ST-1050-001-B	High Pressure Sodium 1000	R/BOUT COLUMN	540.27
HPS0250-ST-1050-002-B	High Pressure Sodium 1000	R/BOUT COLUMN	200.12
HPS0250-ST-1050-004-B	High Pressure Sodium 1000	R/BOUT COLUMN	200.84
INC0010-ST-0010-002-B	Incandescent 30	SHARED OR NO POLE	75.96
INC0010-ST-0810-001-B	Incandescent 30	WOOD POLE	167.36
INC0010-ST-0990-002-B	Incandescent 30	STEEL POLE	87.47
INC0020-ST-0010-001-B	Incandescent 40	SHARED OR NO POLE	102.58
INC0020-ST-0010-002-B	Incandescent 40	SHARED OR NO POLE	75.96
INC0020-ST-0810-001-B	Incandescent 40	WOOD POLE	167.36
INC0020-ST-0830-002-B	Incandescent 40	SHARED OR NO POLE	75.96
INC0030-ST-0010-001-B	Incandescent 60	SHARED OR NO POLE	102.58
INC0030-ST-0010-002-B	Incandescent 60	SHARED OR NO POLE	75.96
INC0030-ST-0810-002-B	Incandescent 60	WOOD POLE	88.44
INC0030-ST-0820-002-B	Incandescent 60	SHARED OR NO POLE	75.96
INC0030-ST-0990-002-B	Incandescent 60	STEEL POLE	87.47
INC0040-ST-0010-001-B	Incandescent 75	SHARED OR NO POLE	102.58
INC0040-ST-0010-002-B	Incandescent 75	SHARED OR NO POLE	75.96
INC0040-ST-0810-001-B	Incandescent 75	WOOD POLE	167.36

INC0040-ST-0990-001-B	Incandescent 75	STEEL POLE	220.55
INC0050-ST-0010-001-B	Incandescent 100	SHARED OR NO POLE	102.58
INC0050-ST-0010-002-B	Incandescent 100	SHARED OR NO POLE	75.96
INC0050-ST-0110-002-B	Incandescent 100	SHARED OR NO POLE	75.96
INC0050-ST-0810-001-B	Incandescent 100	WOOD POLE	167.36
INC0050-ST-0810-002-B	Incandescent 100	WOOD POLE	88.44
INC0050-ST-0990-001-B	Incandescent 100	STEEL POLE	220.55
INC0050-ST-0990-002-B	Incandescent 100	STEEL POLE	87.47
INC0070-ST-0740-002-B	Incandescent 130	SHARED OR NO POLE	75.96
INC0080-ST-0010-001-B	Incandescent 150	SHARED OR NO POLE	106.02
INC0080-ST-0010-002-B	Incandescent 150	SHARED OR NO POLE	79.40
INC0080-ST-0110-002-B	Incandescent 150	SHARED OR NO POLE	79.40
INC0080-ST-0810-001-B	Incandescent 150	WOOD POLE	170.80
INC0080-ST-0820-002-B	Incandescent 150	SHARED OR NO POLE	79.40
INC0080-ST-1000-002-B	Incandescent 150	STEEL POLE	90.91
INC0090-ST-0010-001-B	Incandescent 200	SHARED OR NO POLE	106.02
INC0090-ST-0010-002-B	Incandescent 200	SHARED OR NO POLE	79.40
INC0090-ST-0810-001-B	Incandescent 200	WOOD POLE	170.80
INC0100-ST-0010-001-B	Incandescent 300	SHARED OR NO POLE	106.02
INC0100-ST-0010-002-B	Incandescent 300	SHARED OR NO POLE	79.40
INC0100-ST-0610-001-B	Incandescent 300	SHARED OR NO POLE	136.81
INC0100-ST-0740-002-B	Incandescent 300	SHARED OR NO POLE	79.40
INC0100-ST-0810-001-B	Incandescent 300	WOOD POLE	170.80
INC0100-ST-0990-001-B	Incandescent 300	STEEL POLE	223.99

INC0110-ST-0010-001-B	Incandescent 500	SHARED OR NO POLE	106.02
INC0110-ST-0010-002-B	Incandescent 500	SHARED OR NO POLE	79.40
INC0110-ST-0110-001-B	Incandescent 500	SHARED OR NO POLE	92.03
INC0110-ST-0810-001-B	Incandescent 500	WOOD POLE	170.80
INC0110-ST-0990-001-B	Incandescent 500	STEEL POLE	223.99
INC0130-ST-0010-001-B	Incandescent 800	SHARED OR NO POLE	106.02
INC0140-ST-0680-002-B	Incandescent 1000	SHARED OR NO POLE	79.40
INC0140-ST-0900-002-B	Incandescent 1000	WOOD POLE	91.87
INC0140-ST-1130-002-B	Incandescent 1000	STEEL POLE	90.91
INC0160-ST-0620-001-B	Incandescent 1500	SHARED OR NO POLE	132.56
INC0160-ST-0620-002-B	Incandescent 1500	SHARED OR NO POLE	79.40
INC0160-ST-0640-001-B	Incandescent 1500	SHARED OR NO POLE	132.56
INC0160-ST-0640-002-B	Incandescent 1500	SHARED OR NO POLE	79.40
INC0160-ST-1170-002-B	Incandescent 1500	STEEL POLE	90.91
LPS0010-ST-0040-001-B	Low Pressure Sodium 18	SHARED OR NO POLE	84.69
LPS0010-ST-0350-001-B	Low Pressure Sodium 18	WOOD POLE	149.47
LPS0010-ST-0350-002-B	Low Pressure Sodium 18	WOOD POLE	68.65
LPS0010-ST-0360-001-B	Low Pressure Sodium 18	STEEL POLE	202.66
LPS0020-ST-0040-001-B	Low Pressure Sodium 35	SHARED OR NO POLE	84.69
LPS0020-ST-0040-002-B	Low Pressure Sodium 35	SHARED OR NO POLE	56.17
LPS0020-ST-0360-001-B	Low Pressure Sodium 35	STEEL POLE	202.66
LPS0030-ST-0040-001-B	Low Pressure Sodium 55	SHARED OR NO POLE	84.69
LPS0030-ST-0040-002-B	Low Pressure Sodium 55	SHARED OR NO POLE	56.17
LPS0030-ST-0040-003-B	Low Pressure Sodium 55	SHARED OR NO POLE	132.67

LPS0030-ST-0350-001-B	Low Pressure Sodium 55	WOOD POLE	149.47
LPS0030-ST-0350-002-B	Low Pressure Sodium 55	WOOD POLE	68.65
LPS0030-ST-0360-001-B	Low Pressure Sodium 55	STEEL POLE	202.66
LPS0030-ST-0360-002-B	Low Pressure Sodium 55	STEEL POLE	67.69
LPS0030-ST-0890-001-B	Low Pressure Sodium 55	SHARED OR NO POLE	96.87
LPS0030-ST-0890-002-B	Low Pressure Sodium 55	SHARED OR NO POLE	56.17
LPS0040-ST-0050-001-B	Low Pressure Sodium 90/100	SHARED OR NO POLE	108.21
LPS0040-ST-0050-002-B	Low Pressure Sodium 90/100	SHARED OR NO POLE	58.82
LPS0040-ST-0060-001-B	Low Pressure Sodium 90/100	SHARED OR NO POLE	108.41
LPS0040-ST-0220-001-B	Low Pressure Sodium 90/100	WOOD POLE	172.99
LPS0040-ST-0220-002-B	Low Pressure Sodium 90/100	WOOD POLE	71.30
LPS0040-ST-0310-001-B	Low Pressure Sodium 90/100	STEEL POLE	212.58
LPS0040-ST-0310-002-B	Low Pressure Sodium 90/100	STEEL POLE	70.34
LPS0050-ST-0060-001-B	Low Pressure Sodium 135	SHARED OR NO POLE	111.64
LPS0050-ST-0060-002-B	Low Pressure Sodium 135	SHARED OR NO POLE	62.06
LPS0050-ST-0230-001-B	Low Pressure Sodium 135	WOOD POLE	176.42
LPS0050-ST-0230-002-B	Low Pressure Sodium 135	WOOD POLE	74.53
LPS0050-ST-0320-001-B	Low Pressure Sodium 135	STEEL POLE	216.01
LPS0050-ST-0320-002-B	Low Pressure Sodium 135	STEEL POLE	73.57
LPS0060-ST-0060-001-B	Low Pressure Sodium 150	SHARED OR NO POLE	116.15
LPS0060-ST-0060-002-B	Low Pressure Sodium 150	SHARED OR NO POLE	66.56
LPS0060-ST-0060-004-B	Low Pressure Sodium 150	SHARED OR NO POLE	66.80
LPS0060-ST-0230-001-B	Low Pressure Sodium 150	WOOD POLE	180.93
LPS0060-ST-0230-002-B	Low Pressure Sodium 150	WOOD POLE	79.04

LPS0060-ST-0230-004-B	Low Pressure Sodium 150	WOOD POLE	79.33
LPS0060-ST-0320-001-B	Low Pressure Sodium 150	STEEL POLE	220.52
LPS0060-ST-0320-002-B	Low Pressure Sodium 150	STEEL POLE	78.08
LPS0060-ST-0320-004-B	Low Pressure Sodium 150	STEEL POLE	78.36
LPS0060-ST-0390-002-B	Low Pressure Sodium 150	STEEL POLE	78.08
LPS0060-ST-0470-002-B	Low Pressure Sodium 150	STEEL POLE	78.08
LPS0060-ST-0590-002-B	Low Pressure Sodium 150	R/BOUT COLUMN	78.08
LPS0060-ST-0960-002-B	Low Pressure Sodium 150	SHARED OR NO POLE	66.56
LPS0080-ST-0060-001-B	Low Pressure Sodium 180	SHARED OR NO POLE	116.15
LPS0080-ST-0060-002-B	Low Pressure Sodium 180	SHARED OR NO POLE	66.56
LPS0080-ST-0070-001-B	Low Pressure Sodium 180	SHARED OR NO POLE	121.77
LPS0080-ST-0230-001-B	Low Pressure Sodium 180	WOOD POLE	180.93
LPS0080-ST-0240-001-B	Low Pressure Sodium 180	WOOD POLE	186.55
LPS0090-ST-0070-002-B	Low Pressure Sodium 310	SHARED OR NO POLE	66.56
MHR0010-ST-0040-002-B	Metal Hallide (Reactor Control Gear) 70	SHARED OR NO POLE	67.17
MHR0010-ST-0040-004-B	Metal Hallide (Reactor Control Gear) 70	SHARED OR NO POLE	67.41
MHR0010-ST-0360-002-B	Metal Hallide (Reactor Control Gear) 70	STEEL POLE	78.69
MHR0010-ST-0360-004-B	Metal Hallide (Reactor Control Gear) 70	STEEL POLE	78.97
MHR0010-ST-0730-002-B	Metal Hallide (Reactor Control Gear) 70	STEEL POLE	78.69
MHR0020-ST-0730-001-B	Metal Hallide (Reactor Control Gear) 100	STEEL POLE	225.83
MHR0030-ST-0050-002-B	Metal Hallide (Reactor Control Gear) 150	SHARED OR NO POLE	71.68

MHR0030-ST-0220-002-B	Metal Hallide (Reactor Control Gear) 150	WOOD POLE	84.16
MHR0030-ST-0310-002-B	Metal Hallide (Reactor Control Gear) 150	STEEL POLE	83.20
MHR0030-ST-0690-002-B	Metal Hallide (Reactor Control Gear) 150	STEEL POLE	83.20
MHR0030-ST-0710-002-B	Metal Hallide (Reactor Control Gear) 150	STEEL POLE	83.20
MHR0060-ST-0060-001-B	Metal Hallide (Reactor Control Gear) 250	SHARED OR NO POLE	121.27
MHR0060-ST-0060-002-B	Metal Hallide (Reactor Control Gear) 250	SHARED OR NO POLE	71.68
MHR0060-ST-0060-004-B	Metal Hallide (Reactor Control Gear) 250	SHARED OR NO POLE	71.94
MHR0060-ST-0320-001-B	Metal Hallide (Reactor Control Gear) 250	STEEL POLE	225.63
MHR0060-ST-0320-002-B	Metal Hallide (Reactor Control Gear) 250	STEEL POLE	83.20
MHR0060-ST-0320-003-B	Metal Hallide (Reactor Control Gear) 250	STEEL POLE	428.40
MHR0060-ST-0320-004-B	Metal Hallide (Reactor Control Gear) 250	STEEL POLE	83.50
MHR0060-ST-0390-002-B	Metal Hallide (Reactor Control Gear) 250	STEEL POLE	83.20
MHR0060-ST-0390-004-B	Metal Hallide (Reactor Control Gear) 250	STEEL POLE	83.50
MHR0060-ST-0430-002-B	Metal Hallide (Reactor Control Gear) 250	STEEL POLE	83.20
MHR0060-ST-0430-004-B	Metal Hallide (Reactor Control Gear) 250	STEEL POLE	83.50
MHR0060-ST-0590-002-B	Metal Hallide (Reactor Control Gear) 250	R/BOUT COLUMN	83.20
MHR0060-ST-0610-001-B	Metal Hallide (Reactor Control Gear) 250	SHARED OR NO POLE	129.10

MHR0060-ST-0610-002-B	Metal Hallide (Reactor Control Gear) 250	SHARED OR NO POLE	71.68
MHR0060-ST-0610-003-B	Metal Hallide (Reactor Control Gear) 250	SHARED OR NO POLE	213.89
MHR0060-ST-0610-004-B	Metal Hallide (Reactor Control Gear) 250	SHARED OR NO POLE	71.94
MHR0060-ST-0650-002-B	Metal Hallide (Reactor Control Gear) 250	SHARED OR NO POLE	71.68
MHR0060-ST-0960-002-B	Metal Hallide (Reactor Control Gear) 250	SHARED OR NO POLE	71.68
MHR0060-ST-0960-004-B	Metal Hallide (Reactor Control Gear) 250	SHARED OR NO POLE	71.94
MHR0060-ST-1070-001-B	Metal Hallide (Reactor Control Gear) 250	WOOD POLE	193.88
MHR0060-ST-1070-002-B	Metal Hallide (Reactor Control Gear) 250	WOOD POLE	84.16
MHR0060-ST-1120-001-B	Metal Hallide (Reactor Control Gear) 250	STEEL POLE	233.47
MHR0060-ST-1120-002-B	Metal Hallide (Reactor Control Gear) 250	STEEL POLE	83.20
MHR0060-ST-1120-004-B	Metal Hallide (Reactor Control Gear) 250	STEEL POLE	83.50
MHR0060-ST-1160-002-B	Metal Hallide (Reactor Control Gear) 250	WOOD POLE	84.16
MHR0060-ST-1270-002-B	Metal Hallide (Reactor Control Gear) 250	STEEL POLE	83.20
MHR0060-ST-1270-004-B	Metal Hallide (Reactor Control Gear) 250	STEEL POLE	83.50
MHR0060-ST-1280-002-B	Metal Hallide (Reactor Control Gear) 250	STEEL POLE	83.20
MHR0060-ST-1280-004-B	Metal Hallide (Reactor Control Gear) 250	STEEL POLE	83.50
MHR0060-ST-1290-002-B	Metal Hallide (Reactor Control Gear) 250	STEEL POLE	83.20

MHR0060-ST-1290-004-B Metal Hailide (Reactor Control Gear) STEEL POLE 83.50 MHR0070-ST-0060-001-B Metal Hailide (Reactor Control Gear) 400 SHARED OR NO POLE 125.66 MHR0070-ST-0060-002-B Metal Hailide (Reactor Control Gear) 400 SHARED OR NO POLE 76.08 MHR0070-ST-0070-001-B Metal Hailide (Reactor Control Gear) 400 SHARED OR NO POLE 131.28 MHR0070-ST-0070-002-B Metal Hailide (Reactor Control Gear) 400 SHARED OR NO POLE 76.08 MHR0070-ST-0070-003-B Metal Hailide (Reactor Control Gear) 400 SHARED OR NO POLE 76.35 MHR0070-ST-0070-004-B Metal Hailide (Reactor Control Gear) 400 SHARED OR NO POLE 76.35 MHR0070-ST-0270-001-B Metal Hailide (Reactor Control Gear) 400 R/BOUT COLUMN 396.55 MHR0070-ST-0320-001-B Metal Hailide (Reactor Control Gear) 400 STEEL POLE 230.03 MHR0070-ST-0300-002-B Metal Hailide (Reactor Control Gear) 400 STEEL POLE 87.59 MHR0070-ST-0300-002-B Metal Hailide (Reactor Control Gear) 400 STEEL POLE 87.59 MHR0070-ST-0620-001-B Metal Hailide (Reactor Control Gear) 400 SHARED OR NO POLE 87.59 <				
MHR0070-ST-0000-001-B 400 SHARED OR NO POLE 123.66 MHR0070-ST-0000-002-B Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 76.08 MHR0070-ST-0070-001-B Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 131.28 MHR0070-ST-0070-002-B Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 76.08 MHR0070-ST-0070-003-B Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 212.88 MHR0070-ST-0070-004-B Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 76.35 MHR0070-ST-0270-001-B Metal Hallide (Reactor Control Gear) 700 R/BOUT COLUMN 396.55 MHR0070-ST-0320-001-B Metal Hallide (Reactor Control Gear) 700 STEEL POLE 230.03 MHR0070-ST-0320-002-B Metal Hallide (Reactor Control Gear) 700 STEEL POLE 235.65 MHR0070-ST-0320-002-B Metal Hallide (Reactor Control Gear) 700 STEEL POLE 87.59 MHR0070-ST-0620-002-B Metal Hallide (Reactor Control Gear) 700 SHARED OR NO POLE 129.23 MHR0070-ST-0620-002-B Metal Hallide (Reactor Control Gear) 700 SHARED OR NO POLE 207.85	MHR0060-ST-1290-004-B	•	STEEL POLE	83.50
MHR0070-ST-0000-002-B 400 SHARED OR NO POLE 76.08 MHR0070-ST-0070-001-B Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 131.28 MHR0070-ST-0070-002-B Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 76.08 MHR0070-ST-0070-003-B Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 212.88 MHR0070-ST-0070-004-B Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 76.36 MHR0070-ST-0270-001-B Metal Hallide (Reactor Control Gear) 400 R/BOUT COLUMN 396.55 MHR0070-ST-0320-001-B Metal Hallide (Reactor Control Gear) 400 STEEL POLE 230.03 MHR0070-ST-0320-002-B Metal Hallide (Reactor Control Gear) 400 STEEL POLE 235.65 MHR0070-ST-0390-002-B Metal Hallide (Reactor Control Gear) 400 STEEL POLE 87.59 MHR0070-ST-0620-001-B Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 129.23 MHR0070-ST-0620-001-B Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 76.08 MHR0070-ST-0620-002-B Metal Hallide (Reactor Control Gear) 5HARED OR NO POLE 207.86 MHR0070-ST-	MHR0070-ST-0060-001-B		SHARED OR NO POLE	125.66
MHR0070-ST-0070-002-B Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 76.08 MHR0070-ST-0070-003-B Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 212.88 MHR0070-ST-0070-004-B Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 76.35 MHR0070-ST-0270-001-B Metal Hallide (Reactor Control Gear) 400 R/BOUT COLUMN 396.55 MHR0070-ST-0320-001-B Metal Hallide (Reactor Control Gear) 400 STEEL POLE 230.03 MHR0070-ST-0320-002-B Metal Hallide (Reactor Control Gear) 400 STEEL POLE 87.59 MHR0070-ST-0330-001-B Metal Hallide (Reactor Control Gear) 400 STEEL POLE 235.65 MHR0070-ST-0390-002-B Metal Hallide (Reactor Control Gear) 400 STEEL POLE 87.59 MHR0070-ST-0470-002-B Metal Hallide (Reactor Control Gear) 400 STEEL POLE 87.59 MHR0070-ST-0620-001-B Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 129.23 MHR0070-ST-0620-001-B Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 76.08 MHR0070-ST-0620-003-B Metal Hallide (Reactor Control Gear) 5HARED OR NO POLE 207.85	MHR0070-ST-0060-002-B	· ·	SHARED OR NO POLE	76.08
MHR0070-ST-0070-002-B Metal Hallide (Reactor Control Gear) A00 SHARED OR NO POLE 76.08 MHR0070-ST-0070-004-B Metal Hallide (Reactor Control Gear) A00 SHARED OR NO POLE 76.35 MHR0070-ST-0270-001-B Metal Hallide (Reactor Control Gear) A00 R/BOUT COLUMN 396.55 MHR0070-ST-0320-001-B Metal Hallide (Reactor Control Gear) A00 STEEL POLE 230.03 MHR0070-ST-0320-002-B Metal Hallide (Reactor Control Gear) A00 STEEL POLE 87.59 MHR0070-ST-0330-001-B Metal Hallide (Reactor Control Gear) A00 STEEL POLE 235.65 MHR0070-ST-0390-002-B Metal Hallide (Reactor Control Gear) A00 STEEL POLE 87.59 MHR0070-ST-0620-002-B Metal Hallide (Reactor Control Gear) A00 STEEL POLE 87.59 MHR0070-ST-0620-001-B Metal Hallide (Reactor Control Gear) A00 SHARED OR NO POLE 129.23 MHR0070-ST-0620-002-B Metal Hallide (Reactor Control Gear) A00 SHARED OR NO POLE 76.08 MHR0070-ST-0620-003-B Metal Hallide (Reactor Control Gear) A00 SHARED OR NO POLE 207.85 MHR0070-ST-0620-003-B Metal Hallide (Reactor Control Gear) A00 SHARED OR NO POLE 207.85	MHR0070-ST-0070-001-B		SHARED OR NO POLE	131.28
MHR0070-ST-0070-0003-B 400 SHARED OR NO POLE 212.88 MHR0070-ST-0070-004-B Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 76.35 MHR0070-ST-0270-001-B Metal Hallide (Reactor Control Gear) 400 R/BOUT COLUMN 396.55 MHR0070-ST-0320-001-B Metal Hallide (Reactor Control Gear) 400 STEEL POLE 230.03 MHR0070-ST-0320-002-B Metal Hallide (Reactor Control Gear) 400 STEEL POLE 87.59 MHR0070-ST-0330-001-B Metal Hallide (Reactor Control Gear) 400 STEEL POLE 87.59 MHR0070-ST-0390-002-B Metal Hallide (Reactor Control Gear) 400 STEEL POLE 87.59 MHR0070-ST-0620-001-B Metal Hallide (Reactor Control Gear) 400 STEEL POLE 87.59 MHR0070-ST-0620-001-B Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 129.23 MHR0070-ST-0620-002-B Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 207.85 MHR0070-ST-0620-003-B Metal Hallide (Reactor Control Gear) 5HARED OR NO POLE 207.85	MHR0070-ST-0070-002-B	· ·	SHARED OR NO POLE	76.08
MHR0070-ST-0070-004-B 400 SHARED OR NO POLE 76.35 MHR0070-ST-0270-001-B Metal Hallide (Reactor Control Gear) 400 R/BOUT COLUMN 396.55 MHR0070-ST-0320-001-B Metal Hallide (Reactor Control Gear) 400 STEEL POLE 230.03 MHR0070-ST-0320-002-B Metal Hallide (Reactor Control Gear) 400 STEEL POLE 87.59 MHR0070-ST-0330-001-B Metal Hallide (Reactor Control Gear) 400 STEEL POLE 87.59 MHR0070-ST-0390-002-B Metal Hallide (Reactor Control Gear) 400 STEEL POLE 87.59 MHR0070-ST-0620-001-B Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 129.23 MHR0070-ST-0620-002-B Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 76.08 MHR0070-ST-0620-003-B Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 207.85 MHR0070-ST-0620-004-B Metal Hallide (Reactor Control Gear) 5 SHARED OR NO POLE 76.35	MHR0070-ST-0070-003-B	·	SHARED OR NO POLE	212.88
MHR0070-ST-0320-001-B Metal Hallide (Reactor Control Gear) MHR0070-ST-0320-002-B Metal Hallide (Reactor Control Gear) MHR0070-ST-0320-002-B Metal Hallide (Reactor Control Gear) MHR0070-ST-0330-001-B Metal Hallide (Reactor Control Gear) MHR0070-ST-0390-002-B Metal Hallide (Reactor Control Gear) MHR0070-ST-0470-002-B Metal Hallide (Reactor Control Gear) MHR0070-ST-0470-002-B Metal Hallide (Reactor Control Gear) MHR0070-ST-0620-001-B Metal Hallide (Reactor Control Gear) MHR0070-ST-0620-002-B Metal Hallide (Reactor Control Gear) MHR0070-ST-0620-002-B Metal Hallide (Reactor Control Gear) MHR0070-ST-0620-003-B	MHR0070-ST-0070-004-B	` '	SHARED OR NO POLE	76.35
MHR0070-ST-0320-002-B Metal Hallide (Reactor Control Gear) A00 MHR0070-ST-0390-002-B Metal Hallide (Reactor Control Gear) A00 Metal Hallide (Reactor Control Gear)	MHR0070-ST-0270-001-B		R/BOUT COLUMN	396.55
MHR0070-ST-0320-002-B Metal Hallide (Reactor Control Gear) MHR0070-ST-0330-001-B Metal Hallide (Reactor Control Gear) MHR0070-ST-0390-002-B Metal Hallide (Reactor Control Gear) MHR0070-ST-0470-002-B Metal Hallide (Reactor Control Gear) MHR0070-ST-0620-001-B Metal Hallide (Reactor Control Gear) MHR0070-ST-0620-002-B Metal Hallide (Reactor Control Gear) MHR0070-ST-0620-003-B Metal Hallide (Reactor Control Gear) MHR0070-ST-0620-004-B Metal Hallide (Reactor Control Gear) MHR0070-ST-0620-004-B Metal Hallide (Reactor Control Gear) SHARED OR NO POLE 76.35	MHR0070-ST-0320-001-B	· ·	STEEL POLE	230.03
MHR0070-ST-0330-001-B 400 STEEL POLE 235.65 MHR0070-ST-0390-002-B Metal Hallide (Reactor Control Gear) 400 STEEL POLE 87.59 MHR0070-ST-0470-002-B Metal Hallide (Reactor Control Gear) 400 STEEL POLE 87.59 MHR0070-ST-0620-001-B Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 129.23 MHR0070-ST-0620-002-B Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 76.08 MHR0070-ST-0620-003-B Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 207.85 MHR0070-ST-0620-004-B Metal Hallide (Reactor Control Gear) 5HARED OR NO POLE 76.35	MHR0070-ST-0320-002-B	•	STEEL POLE	87.59
MHR0070-ST-0390-002-B Metal Hallide (Reactor Control Gear) MHR0070-ST-0620-001-B Metal Hallide (Reactor Control Gear) Metal Hallide (Reactor Control Gear) MHR0070-ST-0620-002-B Metal Hallide (Reactor Control Gear) Metal Hallide (Reactor Control Gear) MHR0070-ST-0620-002-B Metal Hallide (Reactor Control Gear) MHR0070-ST-0620-003-B Metal Hallide (Reactor Control Gear) MHR0070-ST-0620-003-B Metal Hallide (Reactor Control Gear) MHR0070-ST-0620-004-B	MHR0070-ST-0330-001-B	` '	STEEL POLE	235.65
MHR0070-ST-0620-001-B Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 207.85 Metal Hallide (Reactor Control Gear) 400 Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 207.85	MHR0070-ST-0390-002-B	•	STEEL POLE	87.59
MHR0070-ST-0620-001-B Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 76.08 MHR0070-ST-0620-003-B Metal Hallide (Reactor Control Gear) 400 Metal Hallide (Reactor Control Gear) 400 SHARED OR NO POLE 76.35	MHR0070-ST-0470-002-B	· ·	STEEL POLE	87.59
MHR0070-ST-0620-002-B Metal Hallide (Reactor Control Gear) 400 MHR0070-ST-0620-003-B Metal Hallide (Reactor Control Gear) 400 Metal Hallide (Reactor Control Gear) SHARED OR NO POLE 76.08 MHR0070-ST-0620-004-B Metal Hallide (Reactor Control Gear) SHARED OR NO POLE 76.35	MHR0070-ST-0620-001-B	,	SHARED OR NO POLE	129.23
MHR0070-ST-0620-003-B 400 Metal Hallide (Reactor Control Gear) SHARED OR NO POLE 76.35	MHR0070-ST-0620-002-B	`	SHARED OR NO POLE	76.08
MHRUU/U-ST-06/20-004-B	MHR0070-ST-0620-003-B	,	SHARED OR NO POLE	207.85
	MHR0070-ST-0620-004-B	•	SHARED OR NO POLE	76.35

MHR0070-ST-0640-001-B	Metal Hallide (Reactor Control Gear) 400	SHARED OR NO POLE	129.23
MHR0070-ST-0640-002-B	Metal Hallide (Reactor Control Gear) 400	SHARED OR NO POLE	76.08
MHR0070-ST-0640-003-B	Metal Hallide (Reactor Control Gear) 400	SHARED OR NO POLE	207.85
MHR0070-ST-0640-004-B	Metal Hallide (Reactor Control Gear) 400	SHARED OR NO POLE	76.35
MHR0070-ST-0660-001-B	Metal Hallide (Reactor Control Gear) 400	SHARED OR NO POLE	152.45
MHR0070-ST-0660-002-B	Metal Hallide (Reactor Control Gear) 400	SHARED OR NO POLE	76.08
MHR0070-ST-0680-002-B	Metal Hallide (Reactor Control Gear) 400	SHARED OR NO POLE	76.08
MHR0070-ST-0680-004-B	Metal Hallide (Reactor Control Gear) 400	SHARED OR NO POLE	76.35
MHR0070-ST-1080-001-B	Metal Hallide (Reactor Control Gear) 400	SHARED OR NO POLE	189.52
MHR0070-ST-1080-002-B	Metal Hallide (Reactor Control Gear) 400	SHARED OR NO POLE	76.08
MHR0070-ST-1100-001-B	Metal Hallide (Reactor Control Gear) 400	WOOD POLE	201.99
MHR0070-ST-1100-002-B	Metal Hallide (Reactor Control Gear) 400	WOOD POLE	88.55
MHR0070-ST-1100-003-B	Metal Hallide (Reactor Control Gear) 400	WOOD POLE	378.12
MHR0070-ST-1100-004-B	Metal Hallide (Reactor Control Gear) 400	WOOD POLE	88.87
MHR0070-ST-1130-001-B	Metal Hallide (Reactor Control Gear) 400	STEEL POLE	272.78
MHR0070-ST-1170-001-B	Metal Hallide (Reactor Control Gear) 400	STEEL POLE	241.58
MHR0070-ST-1170-002-B	Metal Hallide (Reactor Control Gear) 400	STEEL POLE	87.59

MHR0100-ST-0120-001-B	Metal Hallide (Reactor Control Gear) 1000	SHARED OR NO POLE	280.57
MHR0100-ST-0120-002-B	Metal Hallide (Reactor Control Gear) 1000	SHARED OR NO POLE	187.46
MHR0100-ST-0120-004-B	Metal Hallide (Reactor Control Gear) 1000	SHARED OR NO POLE	188.13
MHR0110-ST-0120-002-B	Metal Hallide (Reactor Control Gear) 1500	SHARED OR NO POLE	187.46
MVA0010-ST-0010-001-B	Mercury Vapour 50	SHARED OR NO POLE	62.11
MVA0010-ST-0010-002-B	Mercury Vapour 50	SHARED OR NO POLE	35.49
MVA0010-ST-0010-003-B	Mercury Vapour 50	SHARED OR NO POLE	107.27
MVA0010-ST-0010-004-B	Mercury Vapour 50	SHARED OR NO POLE	35.61
MVA0010-ST-0740-001-B	Mercury Vapour 50	SHARED OR NO POLE	72.39
MVA0010-ST-0740-002-B	Mercury Vapour 50	SHARED OR NO POLE	35.49
MVA0010-ST-0810-001-B	Mercury Vapour 50	WOOD POLE	126.89
MVA0010-ST-0810-002-B	Mercury Vapour 50	WOOD POLE	47.96
MVA0010-ST-0990-001-B	Mercury Vapour 50	STEEL POLE	180.08
MVA0010-ST-0990-002-B	Mercury Vapour 50	STEEL POLE	47.00
MVA0010-ST-0990-003-B	Mercury Vapour 50	STEEL POLE	369.12
MVA0010-ST-0990-004-B	Mercury Vapour 50	STEEL POLE	47.17
MVA0010-ST-1000-002-B	Mercury Vapour 50	STEEL POLE	47.00
MVA0010-ST-1260-002-B	Mercury Vapour 50	WOOD POLE	47.96
MVA0020-ST-0005-001-B	Mercury Vapour 80	NO CAPITAL	35.82
MVA0020-ST-0010-001-B	Mercury Vapour 80	SHARED OR NO POLE	62.44
MVA0020-ST-0010-002-B	Mercury Vapour 80	SHARED OR NO POLE	35.82
MVA0020-ST-0010-003-B	Mercury Vapour 80	SHARED OR NO POLE	107.60

MVA0020-ST-0010-004-B	Mercury Vapour 80	SHARED OR NO POLE	35.95
MVA0020-ST-0110-002-B	Mercury Vapour 80	SHARED OR NO POLE	35.82
MVA0020-ST-0110-004-B	Mercury Vapour 80	SHARED OR NO POLE	35.95
MVA0020-ST-0740-001-B	Mercury Vapour 80	SHARED OR NO POLE	72.72
MVA0020-ST-0740-002-B	Mercury Vapour 80	SHARED OR NO POLE	35.82
MVA0020-ST-0740-003-B	Mercury Vapour 80	SHARED OR NO POLE	132.44
MVA0020-ST-0740-004-B	Mercury Vapour 80	SHARED OR NO POLE	35.95
MVA0020-ST-0810-001-B	Mercury Vapour 80	WOOD POLE	127.22
MVA0020-ST-0810-002-B	Mercury Vapour 80	WOOD POLE	48.30
MVA0020-ST-0810-003-B	Mercury Vapour 80	WOOD POLE	258.31
MVA0020-ST-0810-004-B	Mercury Vapour 80	WOOD POLE	48.47
MVA0020-ST-0820-001-B	Mercury Vapour 80	SHARED OR NO POLE	83.01
MVA0020-ST-0820-002-B	Mercury Vapour 80	SHARED OR NO POLE	35.82
MVA0020-ST-0830-002-B	Mercury Vapour 80	SHARED OR NO POLE	35.82
MVA0020-ST-0990-001-B	Mercury Vapour 80	STEEL POLE	180.41
MVA0020-ST-0990-002-B	Mercury Vapour 80	STEEL POLE	47.33
MVA0020-ST-0990-003-B	Mercury Vapour 80	STEEL POLE	369.45
MVA0020-ST-0990-004-B	Mercury Vapour 80	STEEL POLE	47.50
MVA0020-ST-1000-001-B	Mercury Vapour 80	STEEL POLE	190.69
MVA0020-ST-1000-002-B	Mercury Vapour 80	STEEL POLE	47.33
MVA0020-ST-1000-004-B	Mercury Vapour 80	STEEL POLE	47.50
MVA0020-ST-1260-001-B	Mercury Vapour 80	WOOD POLE	137.50
MVA0020-ST-1260-002-B	Mercury Vapour 80	WOOD POLE	48.30
MVA0020-ST-1260-004-B	Mercury Vapour 80	WOOD POLE	48.47
			

MVA0020-ST-1460-002-B	Mercury Vapour 80	STEEL POLE	47.33
MVA0020-ST-1500-002-B	Mercury Vapour 80	STEEL POLE	47.33
MVA0080-ST-0005-001-B	Mercury Vapour 125	NO CAPITAL	36.29
MVA0080-ST-0010-001-B	Mercury Vapour 125	SHARED OR NO POLE	62.91
MVA0080-ST-0010-002-B	Mercury Vapour 125	SHARED OR NO POLE	36.29
MVA0080-ST-0010-004-B	Mercury Vapour 125	SHARED OR NO POLE	36.42
MVA0080-ST-0740-002-B	Mercury Vapour 125	SHARED OR NO POLE	36.29
MVA0080-ST-0810-001-B	Mercury Vapour 125	WOOD POLE	127.69
MVA0080-ST-0810-002-B	Mercury Vapour 125	WOOD POLE	48.77
MVA0080-ST-0820-001-B	Mercury Vapour 125	SHARED OR NO POLE	83.48
MVA0080-ST-0990-001-B	Mercury Vapour 125	STEEL POLE	180.88
MVA0080-ST-0990-002-B	Mercury Vapour 125	STEEL POLE	47.81
MVA0080-ST-1000-001-B	Mercury Vapour 125	STEEL POLE	191.16
MVA0080-ST-1000-002-B	Mercury Vapour 125	STEEL POLE	47.81
MVA0120-ST-0010-002-B	Mercury Vapour 160	SHARED OR NO POLE	41.16
MVA0120-ST-0740-002-B	Mercury Vapour 160	SHARED OR NO POLE	41.16
MVA0120-ST-1000-002-B	Mercury Vapour 160	STEEL POLE	52.67
MVA0170-ST-0020-001-B	Mercury Vapour 175	SHARED OR NO POLE	91.30
MVA0170-ST-0290-002-B	Mercury Vapour 175	STEEL POLE	52.67
MVA0190-ST-0020-001-B	Mercury Vapour 250	SHARED OR NO POLE	97.34
MVA0190-ST-0020-002-B	Mercury Vapour 250	SHARED OR NO POLE	47.20
MVA0190-ST-0020-003-B	Mercury Vapour 250	SHARED OR NO POLE	171.48
MVA0190-ST-0020-004-B	Mercury Vapour 250	SHARED OR NO POLE	47.37
MVA0190-ST-0200-001-B	Mercury Vapour 250	WOOD POLE	162.12

MVA0190-ST-0200-002-B	Mercury Vapour 250	WOOD POLE	59.68
MVA0190-ST-0200-003-B	Mercury Vapour 250	WOOD POLE	322.19
MVA0190-ST-0200-004-B	Mercury Vapour 250	WOOD POLE	59.89
MVA0190-ST-0290-001-B	Mercury Vapour 250	STEEL POLE	201.71
MVA0190-ST-0290-002-B	Mercury Vapour 250	STEEL POLE	58.72
MVA0190-ST-0290-003-B	Mercury Vapour 250	STEEL POLE	405.20
MVA0190-ST-0290-004-B	Mercury Vapour 250	STEEL POLE	58.93
MVA0190-ST-0370-001-B	Mercury Vapour 250	STEEL POLE	221.92
MVA0190-ST-0370-002-B	Mercury Vapour 250	STEEL POLE	58.72
MVA0190-ST-0370-003-B	Mercury Vapour 250	STEEL POLE	454.37
MVA0190-ST-0370-004-B	Mercury Vapour 250	STEEL POLE	58.93
MVA0190-ST-0450-001-B	Mercury Vapour 250	STEEL POLE	262.33
MVA0190-ST-0450-002-B	Mercury Vapour 250	STEEL POLE	58.72
MVA0190-ST-0570-002-B	Mercury Vapour 250	R/BOUT COLUMN	58.72
MVA0190-ST-0780-001-B	Mercury Vapour 250	WOOD POLE	182.33
MVA0190-ST-0780-002-B	Mercury Vapour 250	WOOD POLE	59.68
MVA0190-ST-0940-001-B	Mercury Vapour 250	SHARED OR NO POLE	117.55
MVA0190-ST-0940-002-B	Mercury Vapour 250	SHARED OR NO POLE	47.20
MVA0190-ST-0940-003-B	Mercury Vapour 250	SHARED OR NO POLE	220.65
MVA0220-ST-0030-001-B	Mercury Vapour 400	SHARED OR NO POLE	115.56
MVA0220-ST-0030-002-B	Mercury Vapour 400	SHARED OR NO POLE	65.19
MVA0220-ST-0030-004-B	Mercury Vapour 400	SHARED OR NO POLE	65.43
MVA0220-ST-0210-001-B	Mercury Vapour 400	WOOD POLE	180.34
MVA0220-ST-0210-002-B	Mercury Vapour 400	WOOD POLE	77.67
			

MVA0220-ST-0210-004-B	Mercury Vapour 400	WOOD POLE	77.95
MVA0220-ST-0300-001-B	Mercury Vapour 400	STEEL POLE	219.92
MVA0220-ST-0300-002-B	Mercury Vapour 400	STEEL POLE	76.71
MVA0220-ST-0300-004-B	Mercury Vapour 400	STEEL POLE	76.98
MVA0220-ST-0380-001-B	Mercury Vapour 400	STEEL POLE	240.35
MVA0220-ST-0380-002-B	Mercury Vapour 400	STEEL POLE	76.71
MVA0220-ST-0380-004-B	Mercury Vapour 400	STEEL POLE	76.98
MVA0220-ST-0420-002-B	Mercury Vapour 400	STEEL POLE	76.71
MVA0220-ST-0460-001-B	Mercury Vapour 400	STEEL POLE	281.19
MVA0220-ST-0460-002-B	Mercury Vapour 400	STEEL POLE	76.71
MVA0220-ST-0540-001-B	Mercury Vapour 400	R/BOUT COLUMN	353.34
MVA0220-ST-0540-002-B	Mercury Vapour 400	R/BOUT COLUMN	76.71
MVA0220-ST-0580-001-B	Mercury Vapour 400	R/BOUT COLUMN	373.76
MVA0220-ST-0580-002-B	Mercury Vapour 400	R/BOUT COLUMN	76.71
MVA0220-ST-0790-001-B	Mercury Vapour 400	WOOD POLE	200.76
MVA0220-ST-0790-002-B	Mercury Vapour 400	WOOD POLE	77.67
MVA0220-ST-0950-001-B	Mercury Vapour 400	SHARED OR NO POLE	135.98
MVA0220-ST-0950-002-B	Mercury Vapour 400	SHARED OR NO POLE	65.19
MVA0250-ST-0300-001-B	Mercury Vapour 500	STEEL POLE	203.36
MVA0260-ST-0190-001-B	Mercury Vapour 700	SHARED OR NO POLE	270.96
MVA0260-ST-0190-002-B	Mercury Vapour 700	SHARED OR NO POLE	58.12
MVA0260-ST-0250-002-B	Mercury Vapour 700	WOOD POLE	70.59
MVA0260-ST-0340-002-B	Mercury Vapour 700	STEEL POLE	69.63
MVA0290-ST-0120-002-B	Mercury Vapour 1000	SHARED OR NO POLE	106.16

MVA0290-ST-1040-002-B	Mercury Vapour 1000	SHARED OR NO POLE	106.16
MVA0290-ST-1050-004-B	Mercury Vapour 1000	R/BOUT COLUMN	118.09

Source: AER analysis.

A.2 Essential Energy—ancillary network services

Miscellaneous services

Table A.2 Essential Energy—miscellaneous services—2014–15 tariffs (\$, nominal, exc GST)

Product Code	Miscellaneous service	2014–15 Tariff
SRMBH	Special meter reading business hours	45.10
SRTFBH	Special meter reading for transfer business hours	45.10
SRMBH	Special meter reading wasted visit	45.10
МТВН	Meter test business hours	74.83
МІВН	Meter inspect business hours	74.83
SCID	Supply of conveyancing information desk inquiry	37.93
SCIF	Supply of conveyancing information field visit	74.83
ОРСВН	Off-peak conversion business hours	60.48
SVDNPBH	Disconnection site visit (only) business hours payment received	45.10
DMBH	Disconnection/de-energisation at meter box	90.20
DNPM	Disconnection/de-energisation at meter box no payment	90.20
DPPBM	Disconnection/de-energisation at pole top/pillar box	151.70
RICBH	Rectification of illegal connection business hours	226.53
RICAH	Rectification of illegal connection outside business hours	226.53
RMAH	Reconnection outside business hours	97.38
RPAH	Reconnection pole top/pillar box outside business hours	97.38

CWBH	Chargeable contestable works	Variable
RMBH	Reconnection business hours	No charge
RPBH	Reconnection pole/pillar box business hours	No charge
NOCHAR	Other no charge service	No charge

Source: AER analysis.

Monopoly services

Table A.3 Essential Energy—monopoly services (labour) —2014–15 tariffs (\$, nominal, exc GST)

Labour Class	Hourly rate	Overtime hourly rate*
Admin R1	65.60	114.80
Design R2a	82.00	143.50
Inspector R2b	82.00	143.50
Engineer R3	98.40	172.20

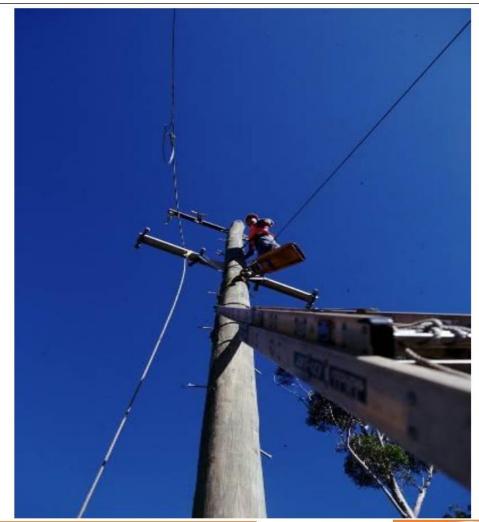
Source: AER analysis.

Table A.4 Essential Energy—monopoly services (other)—2014-15 tariffs (\$, nominal, exc GST)

Monopoly service	Undergroun subdivision			tial	Rural overl		odivisior	nsand	Undergroui industrial or (vacant lots	r rural su	bdivisio	ns	Commercial and industrial developments	Asset relation or streetlighting
Design information	Up to 5 lots 6 to 10 lots 11 to 40 lots			162.98 244.98 407.95	R2 per hour				R2 per hour				R2 per hour	R2 or R3 per hour
	Over 40 lots			489.95										
Design certification	Up to 5 lots 6 to 10 lots				Up to 5 poles 6 to 10 poles				Up to 10 lots 11 to 40 lots			62.98 244.98	R3 per hour	R2 or R3 per hour
	11 to 40 lots Over 40 lots				11 or more po	les		244.98	Over 40 lots		4	189.95		
Design rechecking	R2 per hour			020.00	R2 per hour				R2 per hour				R3 per hour	R2 or R3 per hour
Inspection of service work		A per lot	B per lot	C per lot	Grade	A per pole	B per pole		Grade	A per lot	B per lot	C per lot	R2 or R3 per hour	R2 or R3 per hour
(level 1 work)	First 10 lots	41.00	98.40	205.00	Up to 5 poles	49.20	98.40	180.40	First 10 lots	41.00	98.40	205.00		
	Next 40 lots	24.60	57.40		6 to 10 poles	41.00	82.00		Next 40 lots	41.00	98.40	205.00		
	Remainder	8.20	32.80	57.40	11 or more poles (see para 1.4.2)	32.80	57.40	123.00	Remainder	41.00	98.40	205.00		
Access permit	Residential sub combined fee	divisions:	27.67 per	lot	1210.52 maxi	mum per a	access per	mit	1210.52 maxir	mum per ac	cess perr	nit	1210.52 maximum per access permit	\$1210.52 maximum per access permit
Substation commissioning					908.15 per su	bstation			908.15 per sub	bstation			908.15 per substation	\$908.15 per substation
A d	Up to 5 lots 6 to 10 lots				Up to 5 poles 6 to 10 poles			197.83 264.45	R1 per hour (n	max 6 hours	s)		R1 per hour (max 6 hours)	R1 per hour
Administration	11 to 40 lots Over 40 lots			330.05 396.68	11 or more po	les		396.68						
Notice of arrangement	197.82			555.55										
Re-inspection (level 1 and 2 work)	R2 per hour (m	aximum 1	hour per l	evel 2 reir	spection)									
Re-inspection (service provider)	82.00													
Access	R1 per hour 162.98													
Authorisation Inspection of service work (level 2 work)	All service conr A Grade: 20.50 (NOSW= Notific	per NOS			33.82 Grade: 33.82	per NOS\	V		C Grade: 98.4	0 per NOS	W			
Site establishment	142.48													

B Connection policy to apply to Essential Energy

Essential Energy Connection Policy – Connection Charges for electricity retail customers



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1. Introduction

This document sets out the circumstances in which Essential Energy requires a Retail Customer, including a Real Estate Developer, to pay a connection charge and the basis for determining such charges, for the provision of a Connection Service under Chapter 5A (Electricity Connection for Retail Customers) of the National Electricity Rules (NER).

This document does not apply to the charging for connections to Essential Energy's Network by registered participants or intending registered participants in the wholesale market, which is covered by the provisions of Chapter 5 of the NER. (Generator connections under Chapter 5 are referred to Essential Energy document CEOP8079 Connection guidelines: High Voltage Customers and Embedded generators.)

Generation sites greater than 30kW that absorb system reactive power (measured in VARs) at a ratio greater than 4.84 kVAr absorbed to 10 kW exported must be referred to Essential Energy for further evaluation. Without written acceptance from Essential Energy, these installations will be subject to a Negotiated Offer or, under certain conditions, maybe subject to application of Essential Energy document CEOP8079 Connection guidelines: High Voltage Customers and Embedded generators.

To the extent applicable, this document is consistent with the connection charge principles set out in:

- · Part E (Connection Charges) of Chapter 5A of the NER;
- Part DA (Connection Policies) of Chapter 6 of the NER;
- The Australian Energy Regulator's (AER's) Connection charge guidelines for electricity retail customers, published by it under chapter 5A of the NER (Retail Connection Charge Guidelines); and
- Any determination of the AER in relation to the fees that Essential Energy can charge for Ancillary Services.

As a general rule, Retail Customers will pay the costs of providing and installing the connection assets dedicated to the Customer from the Customer's Premises (installation or development) up to a defined point of connection on Essential Energy's Network, known as the Linkage Point. Essential Energy will carry out and fund Network Augmentations on the shared assets beyond the Linkage Point; except for Rural Customers and Large Load Customers which will usually be required to fund these works.

This policy should be read in conjunction with the following documents:

- CEOP8020 Pioneer Scheme: Rural and Large Load Customers;
- CEOP2015 General Terms and Conditions: Supply of Electricity to New Subdivisions and Site Developments:
- NSW Service and Installation Rules;
- CEOP8079 Connection Guidelines: For High Voltage Customers and Embedded Generators; and
- CEOP8012 Generation Connection: Protection Guidelines.

Capitalised terms appearing in this document have the meaning given to them in the body of this Policy or in section 7 of this Policy.

1.1 Customer Costs

Customers should not assume that sufficient capacity, or the required number of phases, will be available at the proposed point of supply, particularly in rural locations, to accommodate their connection.

Essential Energy generally carries out and funds Network Augmentations on the shared Network beyond the Linkage Point. However, certain customers above a threshold set by Essential Energy will also be required to make a capital contribution towards the cost of the Network Augmentation of Essential Energy's shared Network, which is required to enable the connection to be made.

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Capital contributions for these works will be in accordance with the AER Connection charge guidelines for electricity retail customers under chapter 5A of the National Electricity Rules and are described in section 3 of this policy.

All customers will be required to pay Essential Energy connection charges which are the fees for ancillary services associated with their connection. These fees relate to the services, such as inspections, that Essential Energy must carry out to facilitate the design and construction on a contestable basis of premises connection assets, extensions and augmentations by ASPs. These services and fees are explained in detail in section 4.

Customers who propose to connect to a part of the network funded by another Customer in the previous 7 years (a pioneer scheme) may be required to make a payment to connect to the pioneer scheme as explained in detail in section 6.

1.2 Contestability of Connection Works

Under the Electricity Supply Act 1995 (NSW), where a Customer is required to procure and fund Connection Works or Network Augmentations, the Customer may do this by engaging an Accredited Service Provider to construct those contestable works. The ASP must be suitably accredited under the NSW Accreditation Scheme and authorised to work on or near Essential Energy's Network.

Essential Energy may determine at any time that certain Connection Works or portions thereof that would normally be provided in NSW in a competitive or contestable market will not be made contestable. Essential Energy will make this determination based on risk management principles, related to certain criteria such as safety, Network security and reliability of supply to Customers. These works will be carried out by Essential Energy and funded by the Customer.

2. Types of Connection

The charges a Customer might face associated with a new Connection or Connection Alteration will depend upon Essential Energy's classification of the Connection. These are explained below.

2.1 Basic Connection Service

A basic connection service means a Connection Service related to a Connection (or a proposed Connection) between Essential Energy and a Retail Customer's Premises (excluding a non registered embedded generator's Premises or a Real Estate Developer). A basic connection service does not require Network Augmentation to facilitate the Connection.

Essential Energy has developed two model standing offers to provide basic connection services. These are:

- 1. a basic connection service for Retail Customers who do not have Micro EG; and
- 2. a basic connection service for Retail Customers who have Micro EG.

These offers are usually applicable to single residential Premises, small commercial Premises and small Multi Occupant Developments.

A basic connection service does not require Network Augmentation to facilitate the Connection and as a result, the Customer will only be liable for the Connection Charges associated with Connection of their Premises Connection Assets to the Network as Contestable works.

The work required to install or alter the Customer's Premises Connection Assets (i.e. the service line and the type 5 meter) is Contestable and will be carried out by the Level 2 ASP engaged by the Customer. The Connection Cost for this work is payable to the ASP.

The relevant criteria for the basic connection services are identified in the table below.

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Essential Energy Connection Service	Connection Approval Process	Basic Offer Without Micro Embedded Generation	Basic Offer With Micro Embedded Generation
1. Urban and commercial loads of ≤100 amps 230 volt single phase connection or ≤63 amps 400 volt three phase connection with no augmentation required to the Network	Automatic approval of expedited application	x	
All other Low Voltage (LV) loads not requiring a Network Augmentation	Requires Essential Energy review before approval	х	
3. Embedded Generator with ≤3kW system for Rural Customers and <5kW system for Urban Customers with no Network Augmentation*	Automatic approval of expedited application		x
4. Embedded Generator with >3 KW system for Rural ≥5 KW system Urban and ≤30kW system with no Network Augmentation*	Requires Essential Energy review before approval		x

Table 1 - Basic Connection Services * Thresholds are based on total generation capacity.

2.2 Standard Connection Service

A standard connection service means a Connection Service (other than a basic connection service) for a particular class of Connection Applicant. This service requires Network Augmentation to facilitate the Connection.

Essential Energy has developed two model standing offers to provide standard connection services. These are:

- 1. A standard connection service for Retail Customers who do not have Micro EG; and
- 2. A standard connection service for Retail Customers who have Micro EG.

These offers are applicable to Rural Customers, large Multi Occupant Developments, and large commercial and industrial developments.

Customers who receive one of Essential Energy's standard connection offers will be liable for the Connection Charges associated with their Premises' connection assets. The work required to design and construct these works is Contestable and will be carried out by the Level 3 and Level 1 ASPs engaged by the Customer. The Connection Cost for the Contestable Connection Works is payable directly to the ASP.

The augmentation or extension of the Network will be determined in accordance with the specific charging principles outlined later in this Policy.

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The relevant criteria for the standard connection services are identified in the table below.

Essential Energy Connection Service	Approval Process	Standard Offer Without Embedded Generation	Standard Offer With Micro Embedded Generation
5. LV Standard Connection service - Any service that does not meet the requirements of the LV Basic Connection service and requires Network Augmentation	Requires Essential Energy review before approval	x	
6. Embedded Generator with ≤30kW system with Network Augmentation*	Requires Essential Energy review before approval		x

Table 2 - Standard Connection service * Thresholds are based on total generation capacity.

2.3 High Voltage Connection Services and Large Embedded Generation

Essential Energy has connection contracts available for connection for non-basic or standard connection services. These are:

- a high voltage (HV) standard connection service for Large Load Customers (who may or may not have embedded generation); and
- an HV standard connection service for Customers who have large embedded generators (in that they will be Registered Participants or intending Registered Participants as defined in the National Electricity Rules) in which case the charging principles, including section 6 of this Policy will not apply.

HV standard contracts will also act as the Customer's ongoing Connection Contract once the Customer starts taking or delivering energy to or from the Network (refer CEOP 8079 Connection Guidelines: For High Voltage Customers and Embedded Generators).

2.4 Negotiated Connection

A Connection Applicant and a DNSP may negotiate a Connection Contract (a negotiated connection contract) where:

- the Connection Service sought by the Connection Applicant is neither a basic connection service nor a standard connection service, or
- the Connection Service sought by the Connection Applicant is a basic connection service or a standard connection service but the Connection Applicant elects to negotiate the terms and conditions on which the connection service is to be provided, or,
- 3. the Connection Service sought by the Connection Applicant contains Generation greater than 30kW that absorb system VARs at a ratio greater than 4.84 kVAr absorbed to 10 kW exported, that do not have Essential Energy written approval to be a basic connection service or a standard connection service.

The negotiations may, if the Connection Applicant elects, extend to ongoing Connection Services available from the DNSP. For more information on negotiated contracts, the process for negotiation and the fee applicable, the applicant can refer to Essential Energy's Negotiation Framework on essentialenergy.com.au.

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Applicable Connection charges and capital contribution thresholds

Connection charges

A Customer must pay to Essential Energy all fees and charges in relation to the connection services provided by Essential Energy in order for the Customer to connect. These services are known as Ancillary Services and are set out in section 4 of this Policy.

Capital contributions

A capital contribution is payable where a Customer is required to make a monetary contribution to the costs of connecting to Essential Energy's network. In NSW, Customers make capital contributions in relation to:

- Connection works which are required for the Customer and are dedicated to the Customer's supply of electricity (such as connection assets and extensions); and
- Connection works which are required for the Customer to connect but which are shared with other Essential Energy customers (i.e. network augmentations).

All Connections Works which are dedicated to the Customer are Contestable and are funded by the Customer who is responsible for paying the relevant ASP.

Whether a Customer is required to fund Connection works which relate to network augmentations is determined by whether the connection exceeds a Capital Contribution Threshold. Chapters 5A and 6 of the NER and the AER's Retail Connection Charge Guideline outline the circumstances when a Customer must make a capital contribution in relation to new Connection or a Connection Alteration that requires an augmentation of Essential Energy's Network.

Consistent with those regimes, the following Capital Contribution Thresholds and conditions apply to capital contributions for new Connections and Connection Alterations requiring augmentation of Essential Energy's Network. A Customer (other than a Real Estate Developer or a Non-registered Embedded Generator) is not required to fund Connection Works below any of the Capital Contribution Thresholds. If the Customer is a Real Estate Developer or Non-registered Embedded Generator, the Customer must fund all Connection Works regardless of whether a Capital Contribution Threshold applies to the Customer.

In circumstances where a Customer is required to make a capital contribution towards a network augmentation, Essential Energy may decide to fund the network augmentation in which case the service provided by the relevant network assets is known as a "standard control service". The revenue which Essential Energy can earn for standard control services is regulated by the AER and in these circumstances, Essential Energy does not require the Customer to make a capital contribution as the incremental cost of providing the standard connection service does not exceed the incremental revenue expected to be derived from the service.

3.1 Capital Contribution relating to Urban Network Substations

If the LV distribution Network is not capable of supplying the electrical load of the Customer's development, one or more new substations or additional substation capacity will need to be established on the Premises of the development or in the vicinity of the Premises (at Essential Energy's discretion)These are known as Customer Substations. They will be designed to be the minimum size or accommodate the minimum number of transformers necessary to supply the ultimate forecast load requirements of the development. For example, a new large Multi Occupant Development would typically require a new substation(s) to be established on the Customer's Premises.

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Instead of a Customer Substation, the Customer may be required to fund or partially fund::

- the installation of a new substation and/or the augmentation of substations and LV mains on the supply side of the Linkage Point in an Urban Network where the Customer requires 200 Amps or less; or
- the installation of a dedicated pole substation up to a max capacity of 500kVA installed in an Urban Network external to the property on a public roadway.

Dedicated Customer Substations: Where a Customer substation is required to be installed in an Urban Network to meet the requirements of the Customer's development and the ultimate load of the Customer's development is greater than 50% of the substation's nameplate capacity, the Customer will be required to fund a dedicated Customer Substation, (except for Essential Energy's funded equipment, see clause 3.7). The Customer must also fund:

- the dedicated HV mains from the Linkage Point to the substation. The standard reticulation is a loopin arrangement, i.e. 2 cables, or if an alternative arrangement consisting of a single (radial) HV cable connection and an LV interconnector is agreed to by Essential Energy, this LV interconnector will also be funded by the Customer; and
- the substation building, construction for chamber substations; and any site preparation works, including special foundations, footings, piers, retaining walls and railings for kiosks.

Shared Customer Substations: Where a Customer substation is required to be installed in an Urban Network, but the ultimate load of the Customer's development is 50% or less of the substation's nameplate capacity, Essential Energy will fund a shared Customer substation including the HV mains from the Linkage Point to the substation. The Customer must provide a suitable substation site on their Premises as near as possible to the street frontage and fund certain Connection Works, including necessary easements.

Should the development providing the substation accommodation require increased load in the future, and the total development load then exceeds 50% of the substation's nameplate capacity, the Customer will be liable for the cost of reconnecting some or all of the load external to the Premises.

A Pioneer Scheme may apply to Connection Works or Network Augmentation works funded by Customers where additional customers subsequently connect to the augmented network as outlined in section 6 of this Policy.

3.2 Rural Customers

Rural Customers are those connected, or to be connected, to the Rural Network. The Rural Network includes the parts of a Network:

- where the average demand on the HV feeders is less than 0.3 MVA/km;
- that is in an area zoned as rural under a local environment plan (made under the Environmental Planning and Assessment Act 1979 (NSW); and
- that is in an area mainly used for agricultural purposes.

Essential Energy will fund any increase necessary to the shared part of a Rural Network that is unable to adequately supply any new or existing Rural Residential Customer, provided that their load does not exceed 16kVA (63amps) single phase.

Rural Customers must otherwise fund any Connection Works and any Network Augmentation that is specific to the Customer as assessed by Essential Energy, including any dedicated Customer Substation equipment e.g. the transformer and HV switchgear.

A Pioneer Scheme may apply to Connection Works or Network Augmentation works funded by Rural Customers where additional customers subsequently connect to the augmented network as outlined in section 6 of this Policy.

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3.3 Large Load Customers

A Large Load Customer means a Customer connected, or to be connected, to the Urban Network whose expected load (as specified in its application for Customer Connection Services) is more than 50% of the nameplate/feeder capacity of any existing asset that is to be increased, as those assets exist immediately before Essential Energy makes its final decision on the Customer's application.

For the purposes of determining Large Load Customer status the expected load detailed above should comprise the sum of existing load and proposed additional load, including any definitive plans for expansion in the near future.

When determining the asset capacity the following should be considered:

- for a transformer the nameplate rating should be used; and
- for a feeder a notional capacity is calculated by stripping all existing loads from the feeder and
 applying a load at the proposed point of connection and increasing the load until the voltage or
 current constraint is reached. In urban areas the voltage constraints are 5% for HV and 4% for
 I V

When a Customer applies for supply where the total load is greater than 50% of the rating/capacity of an existing asset (Total Load = Existing Customer Load + Additional Requested Customer Load), then the augmentation of the existing asset is considered Connection Works and the customer must fund those Connection Works. The Connection Works are Contestable and the Customer engages and pays and ASP for the works. The amount payable to the ASP is not covered by this Policy.

A Pioneer Scheme may apply to Connection Works or Network Augmentation works funded by Large Load Customers where additional Customers subsequently connect to the augmented network as outlined in section 6 of this Policy.

3.4 HV Interconnectors

A HV interconnector is formed when two separate parts of the existing HV Network are connected with feeders installed through one or more substations on a Customer's Premises.

The construction of the HV interconnector is undertaken by an ASP as Contestable Connection Works and therefore the Cost of the Connection Works is determined by the ASP and payable to the ASP.

Essential Energy will contribute to the cost of the interconnector where there is some clear benefit to its general Network and/or to other Customers. In these circumstances, the Customer will fund the leg of the interconnector along the route of the connection that would have been formed had an interconnector not been installed, and Essential Energy will fund the remaining leg of the interconnector.

3.5 Shared HV Connection Works

Essential Energy will consider the potential for any new dedicated HV mains extension supplying a Multi Occupant Development or a customer substation in an Urban Network to be used to supply other Customers outside the development in the foreseeable future. This could occur via a direct connection to, or via a further mains extension of, the original mains extension. If at the time the original connection application is received by Essential Energy, there is a reasonable likelihood of such asset sharing taking place in the foreseeable future, then the original mains extension will be classed as Network Augmentation and will be funded by Essential Energy.

3.6 Gifting of customer-funded Works

Contestable Connection Works and/or Network Augmentation funded by the Customer may, upon acceptance, be transferred to Essential Energy who will then operate and maintain the asset.

3.7 Essential Energy Funded Works

Essential Energy will fund certain equipment in dedicated Customer Substations that satisfies all of the following criteria:

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- it is HV equipment:
- it supplies a Multi Occupant Development;
- it does not supply a Large Load Customer;
- it connects to an Urban Network: and
- it is capable of being physically moved and usefully employed in another location (whether or not this is likely to occur).

Typically, this will be the transformer and HV switchgear. Any LV reticulation supplying Customers external to a development will be funded by Essential Energy where the reticulation asset is shared. For example, a LV distributor (interconnector) to the Network from a Customer substation, with the exception outlined in clause 3.1.

The Customer will however, be required to fund these works for Connections that Essential Energy considers uneconomic

3.8 Guarantee of Revenue (GoR) (Security Fee)

In accordance with Chapters 5A and 6 of the NER and the Retail Connection Charge Guideline, Essential Energy will require a Customer to provide a financial guarantee or Guarantee of Revenue (GoR), where their Connection requires substantial Essential Energy funded Network Augmentation and:

- which is initially only for the Customer's benefit; and
- in relation to which Essential Energy is of the view that there is a high risk that Essential Energy will not earn the estimated incremental revenue.

The GoR is a financially binding legal agreement between Essential Energy and the Customer where the Customer guarantees the payment to Essential Energy of a minimum level of Network revenue each year for the duration of the GoR, to make up any shortfall in their actual 'Network use of system' charges over the period, usually between 5 and 10 years depending upon the circumstances.

The GoR will be established at the same time as the Connection Offer is accepted and/or the design information package is issued and prior to the Network Augmentation being initiated. This will allow the Network Augmentation to proceed in parallel with the associated Contestable works.

The GoR is secured by a bank guarantee provided by the Customer for no more than the value of the incremental costs Essential Energy will incur in undertaking the Network Augmentation, or other suitable financial instrument as agreed by Essential Energy. As a last resort, Essential Energy is entitled to withdraw from the bank guarantee any shortfall in actual Network use of system payment, in accordance with the terms of the GoR and the bank guarantee.

3.9 Customer Requested Alternative or Additional Connection Works

The Customer must fund any additional costs incurred by Essential Energy when requesting any alternative or additional Connection Works to the standard Essential Energy construction. This includes the additional cost of any alternative or additional HV equipment that would otherwise be funded by Essential Energy in accordance with clause 3.6.

3.10 Recoverable Works

Recoverable Works are those capital works completed by Essential Energy at the request of individuals or organisations, which are not for the purpose of establishing a new Connection to the system or expanding the existing Network. They include works such as:

- relocation of assets on a Customer's (or Real Estate Developer's) property, in a road reserve, etc, at the request of the Customer (or developer) e.g. shifting a power line, pole, substation or service pillar to suit site developments;
- reinstatement of electrical assets following works by other services, e.g. roadworks;

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- repairs to the Network following vehicle impacts or other damage accidentally by individuals or organisations; and
- removal of assets

Recoverable Works are generally Contestable, except where unsafe conditions or needless delay in the restoration of supply could result from such work, or where Essential Energy's commitment forms a significant component of the project cost.

In these instances Essential Energy is able to recover reasonable costs associated with the works. This ensures other Customers are not burdened by the costs which can be identified with specific parties, and which reflect requirements by those parties for variations in services.

There are some advantages to Essential Energy Networks in acquiring newly constructed system assets from the Customer to replace existing systems assets and benefit sharing with the Customer is therefore appropriate.

3.11 Site Inspection

If Essential Energy reasonably needs to make a site inspection in order to determine the nature of a Connection Service sought by a Connection Applicant, Essential Energy may charge its reasonable expenses for doing so.

The fee will be calculated in accordance with the AER approved monopoly services charge - labour rates R2.

3.12 Negotiation Fee

Where a Customer's application relates to a negotiated connection contract, Essential Energy may charge a customer a negotiated connection fee to cover its reasonably incurred expenses in assessing the application and making the negotiated connection offer.

Essential Energy requires an upfront payment of \$250 to assess an application prior to the commencement of negotiations, for HV and embedded generator connections please refer to CEOP8079.

Following initial assessment of the connection application Essential Energy will provide the Connection Application with an estimate of the charges for making a Connection Offer for a negotiated connection contract. Any charges to be imposed by Essential Energy will be based on the costs reasonably incurred in negotiating the contract with the Connection Applicant and will include the costs of facilitating and contributing to the negotiation process, liaising with subject matter experts, preparation of related information and documents, direct legal costs of finalising the ocntracts and independent review.

Once negotiating have been completed, Essential Energy will bill the Connection Applicant for outstanding amounts in a final invoice with the Connection Offer. The Connection Applicant will be liable to pay all invoiced costs whether or not the final Connection Contract is agreed or accepted.

Following initial assessment of the connection application Essential Energy will provide the Connection Applicant with an estimate of the charges for making a Connection Offer for a negotiated connection contract. Any charges to be imposed by Essential Energy will be based on the costs reasonably incurred in negotiating the contract with the Connection Applicant and will include the costs of facilitating and contributing to the negotiation process, liaising with subject matter experts, preparation of related information and documents, direct legal costs of finalising the contracts and independent review.

Once negotiations have been completed, Essential Energy will bill the Connection Applicant for outstanding amounts in a final invoice with the Connection Offer. The Connection Applicant will be liable to pay all invoiced costs whether or not the final Connection Contract is agreed or accepted.

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3.13 Other Costs

To the extent permitted by law, the Customer will be responsible for any unforseen costs related to Connection Works. This could include Connection Works unable to be performed by the ASP, eg. Live Line connections

3.14 Estimating Customers' Consumption and Demand

Essential Energy is required under the AER Guideline to specify how it intends to estimate a Connection Applicant's consumption and demand. Generally, these estimates will be based primarly upon the content of the application for connection submitted by the customer. However, Essential Energy reserves the right to use other methodologies where the information is not consistent with similar customer types, or, where the existence of Network constraints, emerging or otherwise, require engineering intervention to manage the impacts on its Network.

4. Ancillary services

Ancillary Services are services that only Essential Energy can perform, which facilitate contestable Connection Works carried out by ASPs. These services are necessary to ensure that an appropriate level of reliability, quality of supply and safety is maintained in the operation of Essential Energy's Network. The AER reviews and approves these services and sets the rates and conditions.

The charges for Ancillary Services are identified in our document "Price schedule for Ancillary Services" which can be found on our website at: essentialenergy.com.au. Essential Energy may seek upfront payment of Ancillary Services fees that apply to the preapproval phase of a connection if the total of those fees is greater than \$5,000.

In Appendix B is a summary of the Ancillary Services.

5. Dispute Resolution

The Customer is entitled to seek to have the AER determine a dispute it has with Essential Energy. Details of how the AER will determine the dispute or terminate proceedings are set out in Part G of Chapter 5A of the NER.

Essential Energy suggests that Customers first attempt to resolve the dispute with Essential Energy in accordance with our internal dispute resolution policy. Details of how a Customer may apply for review of our decision-making and how Essential Energy will conduct the review are available on Essential Energy's website: essentialenergy.com.au.

If Customers are not satisfied with the internal review by Essential Energy, then Essential Energy suggests that small Customers approach the Electricity & Water Ombudsmen NSW (EWON) for NSW Customers and the Energy and Water Ombudsman Queensland (EWOQ) for Queensland Customers to resolve the matter, before taking the matter to the AER.

Energy and Water Ombudsman of New South Wales:

Freecall: 1800 246 545 Freefax: 1800 812 291

Mail Reply Paid Box K1343, Haymarket NSW 1239

E-mail: omb@ewon.com.au

Or.

Queensland Energy Ombudsman on:

Freecall: 1800 662 837, Freefax: 1800 812 291,

Mail: PO Box 3640 South Brisbane Qld 4101,

E-mail: complaints@ewoq.com.au or info@ewoq.com.au;

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Pioneer Schemes

A pioneer scheme applies under Part E of Chapter 5A of the NER and the AER's Connection Charge Guidelines for Electricity Retail Customers. The pioneer scheme requires Customers to make reimbursements for Connection Works that provide a Connection to their Premises and which have been previously funded by another Customer (within a 7 year period). This section should be read in conjunction with CEOP 8020 – Shared Asset pioneer scheme; Rural and Large Load Customers.

6.1 Applicability

This section 6 applies to all Connection Works and Network Augmentations which were funded by a Customer and which will be used by another Customer to connect to Essential Energy's network within 7 years from the original connection.

6.2 Establishment and Administration of Schemes

A pioneer scheme will be established and administered in accordance with this section 6 in relation to each original Customer's works (as defined in clause 6.3) of the same category. For example, if the original Customer's works included a distribution line and a substation, then one pioneer scheme will be established for the distribution line and a separate pioneer scheme will be established for the substation.

Essential Energy will bear the cost of establishing and administering the pioneer schemes.

6.3 Contributions by Subsequent New Customers Towards Connection Works or Network Augmentations

Where

- (a) a Customer (the original Customer) procures and funds, or becomes liable to procure and fund Connection Works or Network Augmentations (original Customer's works);
- (b) within 7 years of the date of the construction or installation of the original Customer's works (pioneer period), a new Customer requests Customer Connection Services from Essential Energy; and
- (c) in order to provide those Customer Connection Services to the new Customer, Essential Energy will use all or any part of the original Customer's works, then the new Customer is liable, in addition to paying for any Connection Works or Network Augmentations for which that Customer is liable, to pay Essential Energy a proportion of the costs of the original Customer's works, calculated in accordance with clause 6.4.

6.4 Calculation of Cost Share Reimbursement under the Pioneer Scheme

All calculations for reimbursement are in accordance with Appendix A.

Despite any other provision of this section 6, Essential Energy is not liable to pay any cost share reimbursement if the total refund to all customers already connected to an extension is calculated to be less than \$1000 (indexed by CPI with a base year of 2012).

6.5 Reimbursements

- (1) Where a new Customer pays to Essential Energy an amount under this section 6, Essential Energy will, as soon as practicable after receiving that amount, repay that amount to the then current owner of the Premises to which the original Customer's works were connected.
- (2) Where there are two or more Customers constituting the original Customer, as a result of Essential Energy requiring those Customers to procure and fund their common works together, the repayment by Essential Energy must be divided between those Customers in accordance with the proportions in which they funded the works.

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6.6 Obligation to Notify

- (1) Essential Energy will notify all new Customers who apply to Essential Energy for Customer Connection Services and who may be obliged to make reimbursements under an existing pioneer scheme, and all ASPs known to Essential Energy who are likely to have Customers who will so apply, of the existence of the pioneer scheme and that connecting Customers may be obliged to contribute towards reimbursement.
- (2) Essential Energy will also notify original Customers, to which a pioneer scheme applies, of the existence of the pioneer scheme and that they may be entitled to receive a reimbursement.

7. Key Terms and Definitions

The terms shown in italics throughout this document have the following meanings:

WORD/TERM:	DEFINITION:
ASP	means an accredited service provider, being a person accredited under Part 10 of the Electricity Supply (General) Regulation 2001 (NSW).
Basic Micro EG Connection Service	means a basic connection service for a Retail Customer who has a Micro EG up to and including 30kW.
Connection	means a physical link between a distribution system and a Retail Customer's Premises to allow the flow of electricity.
Connection Alteration	means an alteration to an existing Connection including an addition, upgrade, extension, expansion, augmentation or any other kind of alteration.
Connection Applicant	means an applicant for a Connection Service of 1 of the following categories: (a) Retail Customer; (b) retailer or other person acting on behalf of a Retail Customer; (c) Real Estate Developer.
Connection Charge	means a charge imposed by a DNSP for a Connection Service.
Connection Contract	means a contract formed by the making and acceptance of a Connection Offer.
Connection Cost	is the cost of providing Connection Works.
Connection Offer	means an offer by a DNSP to enter into a Connection Contract with: (a) a Retail Customer; or (b) a Real Estate Developer.
Connection Point	the agreed point of supply established between Essential Energy and a Customer

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WORD/TERM:	DEFINITION:
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.
Connection Works	In relation to a new Connection, means those works yet to be constructed which will, upon construction: (a) enable the DNSP to provide Customer Connection Services requested by that new Customer; and (b) form part of the Network on the side of the Linkage Point where all the Network assets on that side are dedicated to one or more Customers. In some cases this may include Network Augmentation of the shared Network from the proposed Connection Point back to the point of Network capable of supporting the load. These include (without limitation): (c) in the case of services to new connection points (as defined in the National Electricity Rules) requested by a new customer, works to connect the Customer's Premises at that Connection Point to the existing Network; and (d) in the case of services to existing Connection Points: (i) replacements of existing assets servicing that Connection Point, where those existing assets, at the time of their replacement, satisfy (a) and (b) above; or (ii) additional new works that satisfy (a) and (b) above in relation to that Connection Point, in order to provide additional service at that Connection Point requested by the new Customer.
Contestable	means a service permitted by the laws of New South Wales to be provided by more than one supplier as a contestable service or on a competitive basis.
Customer	means a Retail Customer or Real Estate Developer
Customer Connection Contract	means a Deemed Standard Connection Contract.

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WORD/TERM:	DEFINITION:	
Customer Connection Services	 means any of the following services: the connection of any Premises to a DNSP's distribution system; an increase in the maximum capacity of any Premises' existing connection to a DNSP's distribution system; the capability for electricity to be supplied to any Premises from a DNSP's distribution system; and includes services of a kind prescribed by the regulations as being within this definition. 	
DNSP	means a Distribution Network Service Provider.	
Essential Energy	means Essential Energy (ABN 37 428 185 226 - a statutory state-owned corporation incorporated under the Energy Services Corporation Act 1995 (NSW)) having the contact details as follows Address: PO Box 5730, Port Macquarie NSW 2444 Phone: 13 23 91, who provides the Customer with Customer Connection Services.	
Large Load Customer	means a new Customer or existing Customer whose expected load (as specified in its application for Customer Connection Services that will require Network Augmentation) is more than 50 per cent of the capacity of any existing asset that is to be augmented, as those assets exist immediately before the DNSP makes its final decision on the Customer's application. Refer to CEOP8019 for further details.	
Linkage Point	means a point on a Network at which the use of assets changes from being dedicated to being shared among Customers generally. Assets are considered to be dedicated if they are: Used by one Customer exclusively, or Shared by more than one Customer in circumstances where a DNSP has required that those Customers together procure and fund the same Connection Works.	
Micro EG	means a connection between an embedded generating unit and a distribution Network of the kind contemplated by Australian Standard AS 4777 (Grid connection of energy systems via inverters) up to and including 30kW.	

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WORD/TERM:	DEFINITION:		
Multi Occupant Development	a building or proposed building that is under strata title, or a building or proposed building, or set of such buildings, in relation to which distinct parts are occupied or designed to be occupied, by 2 or more separate businesses or residences or for other separate purposes, or a subdivision of one or more lots for the purposes of sale or disposal whether residential, commercial or industrial and in respect of which the application for Customer Connection Services is made by one Customer only.		
Network	means an electricity distribution system owned or controlled by a DNSP.		
Network Augmentation	means works to enlarge or increase the capability of the distribution network.		
Original Customer	for the purposes of Pioneer Schemes, includes 1 or more Customers where a DNSP has required that those Customers together procure and fund the same common works in accordance with Clause 6 of this policy. All references to the original Customer for the purpose of counting the number of Customers are to be read as references to the actual number of Customers comprising the original Customer.		
Premises	means the Customer's premises and includes any building or part of a building, any structure or part of a structure, any land (whether built on or not) and any river, lake or other waters.		
Premises Connection Assets	means the components of a distribution system used to provide Customer Connection Services.		
Real Estate Developer	means a person who carries out a real estate development.		
Retail Customer	includes a non-registered embedded generator and a micro embedded generator.		
Rural Customer	means a Customer whose Premises are connected or will connect (once any relevant Connection Works are constructed) to a Network at a point at which the Network is a Rural Network.		
Rural Residential Customer	for the purpose of this document means a Rural Customer whose Premises is used wholly or principally as a private dwelling.		
Rural Network	for the purpose of this document means that part of a Network: • where the average demand on the HV feeders within it is less than 0.3 MVA/km, or • that is in an area zoned as rural under a local environment plan		

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WORD/TERM:	DEFINITION:	
	(made under the Environmental Planning and Assessment Act 1979 (NSW), or	
	 that is in an area that is predominantly used for agricultural purposes. 	
Urban Customer	means a Customer whose Premises are connected or will connect (once any relevant Connection Works are constructed) to a Network at a point at which the Network is not a Rural Network.	
Urban Network	means that part of a Network that is not a Rural Network.	

8. References

CEOM7097 - Overhead: Design Manual

CEOM7098 - Underground: Design Manual

CEOP8003 - Subtransmission and Distribution Network Planning Criteria and Guidelines

CEOP8012 - Generation Connection: Protection Guidelines

CEOP8026 - Supply Standards: Electricity Supply Standard

CEOP8046 - Easement Requirements

CEOP8079 - HV Connection Guidelines

AER's Connection Charge Guidelines for Electricity Retail Customer June 2012

Community Land Development Act, 1989

Electricity Association of NSW, Code of Practice - Contestable Works

Electricity Supply Act 1995, Section 25(2)

Electricity Supply (Customer Contract) Regulations

Electricity Supply (Customer Contracts) Regulation 1996 - Dispute Resolution

Electricity Supply (General) Regulation, 2001

National Electricity Market Code

NSW Service and Installation Rules

Standards Australia - Wiring Rules (AS/NZS 3000:2000)

The Electricity Supply (Customer Contracts) Regulation

9. Revisions

Iss	ue Number	Section	Details of Changes in this Revision
	1	All	New document
	2	All	To incorporate Chapter 6 NER Connection policy requirements

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Appendix A: Pioneer Scheme reimbursement

This Appendix A sets out the method for calculating reimbursements provided for under section 6 (Pioneer Scheme) of this Policy.

Reimbursement calculations for Distribution Line

a. The unadjusted amount for each prospective new Customer is to be calculated using the following formula:

Cost of original Customer's works x Depreciation factor ÷ Number of prospective new Customers + original Customer

b. The percentage of the distribution line which will be utilised by each new Customer is to be calculated using the following formula:

Length of distribution line the new Customer will be using

:

Whole length of the distribution line original Customer paid for

x
100

c. The final reimbursement payment that each new Customer is required to make is to be calculated using the following formula:

Unadjusted amount worked out in (a) x Depreciation factor

†
100
x
the percentage worked out in (b)
=
\$ total reimbursement payable for distribution line for that Customer
+
CPI (refer to section 5)

1. Reimbursement calculation for distribution substation

The reimbursement amount for each prospective new customer is to be calculated using the following formula:

Cost of original Customer's works x Depreciation factor

:
Number of prospective new Customers + original Customer
+
CPI (refer to section 5)

2. The pro-Rata reimbursement (Applicable to Large Load in non-rural areas)

The pro rata reimbursement for each prospective new customer is to be calculated using the following formula:

Cost of original Customer's works x Depreciation factor X

New customer's utilisation of original Customer's works

Total utilisation of original Customer's works

+

CPI (refer to section 5)

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3. Minimum Reimbursement

Despite any other provision in section 1 of this appendix, a new customer is not liable to pay any cost share reimbursement if the amount calculated is less than \$1000.

\$1000	CPI(2)		
+ CPI	in this case the CPI = ÷	(refer to section 4)	
CPI(3)			

4. CPI Adjustments

CPI (1) means the average of the consumer price indices (all groups, all capital cities) published by the Australian Bureau of Statistics for the previous 4 quarters immediately prior to the date that the original Customer's work is completed.

CPI (2) means the average of the consumer price indices (all groups, all capital cities) published by the Australian Bureau of Statistics for the previous 4 quarters immediately prior to the date of the new Customer's application for Customer Connection Services.

CPI (3) means the average of the consumer price indices (all groups, all capital cities) published by the Australian Bureau of Statistics for the previous 4 quarters immediately prior to the date of commencement of this determination.

5. Depreciation Factor

A straight line depreciation, over a twenty year asset life, is to be applied to unadjusted values to determine the current day depreciated value of the asset.

The depreciation factor is determined as follows: (Deemed asset life (20 years)– asset age) / Deemed asset life (20 Years)

For example:

Cost of line is \$12,000 and actual asset age is 2 years

Depreciation factor is (20-2) / 20 = 0

Depreciated asset value is \$12,000 x 0.9 = \$10,800

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Appendix B: Ancillary Services

1. Design Information

The provision of information by Essential Energy to enable an ASP accredited for level 3 work to prepare a design drawing and to submit it for certification.

This may include without limitation:

- deriving the estimated loading on the system, technically known as the ADMD (after diversity maximum demand). This estimate depends on such factors as the number of Customers served and specific features of the Customer's demand
- copying drawings that show existing low and HV circuitry (geographically and schematically) and adjacent project drawings
- specifying the preferred sizes for overhead wires (conductors) or underground wires (cables)
- 4. specifying switchgear configuration type, number of pillars, streetlights etc
- determining the special requirements of Essential Energy's planning departments necessary to make electrical supply available to a development and cater for future projects
- any necessary liaison with designers associated with assistance in sourcing design information and developing designs, and
- nominating Network connection points.

2. Design Certification

A certification by Essential Energy that a design (if implemented) will not compromise the safety or operation of Essential Energy's distribution system.

This may include, without limitation:

- 1. certifying that the design information/project definition have been incorporated in the design
- certifying that easement requirements and earthing details are shown
- considering design issues, including checking for over-design and mechanisms to permit work on HV systems without disruption to supply to Customers' (adequate LV parallels)
- 4. certifying that funding details for components in the scope of works are correct
- certifying that there are no obvious errors that depart from Essential Energy's design standards and specifications
- certifying that shared assets are not over-utilised to minimise developer's connection costs and that all appropriate assets have been included in the design
- auditing design calculations such as voltage drop calculations, conductor clearance (stringing) calculations etc
- 8. certifying that a bill of materials has been submitted, and
- certifying that an environmental assessment has been submitted by an accredited person and appropriately checked

3. Design Rechecking

The rechecking of a design submitted under section 2, except where the modifications to a design are of a trivial or minor nature.

4. Inspection of Service Work (Level 1 Work)

The inspection by Essential Energy of work undertaken by an ASP accredited to perform level 1 work, for the purpose of ensuring the quality of assets to be handed over to Essential Energy.

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5. Inspection of Service Work (Level 2 Work)

The inspection by Essential Energy of work performed by an ASP accredited to perform level 2 work, complying with the condition below.

Condition

The number of inspections required must correspond to the grade in the table below:

Table 1: Inspection Rate

Grade	Number of Inspections	
Α	1 inspection per 20 jobs	
В	1 inspection per 5 jobs	
С	Each job to be inspected	

6. Re-Inspection (Level 1 or Level 2 Work)

The re–inspection by Essential Energy of work (other than Customer installation work) undertaken by an ASP accredited to perform level 1 or level 2 work, for the reason that on first inspection the work was found not to be satisfactory.

7. Re-Inspection of Work of a Service Provider

The re-inspection by Essential Energy of Customer installation work undertaken by a service provider for the reason that on first inspection the work was found not to be satisfactory.

8. Access Permit

The provision of a permit by Essential Energy to a person authorised by law to work on, or near, a distribution system.

This may include without limitation:

- researching and documenting the request for access
- 2. documenting the actual switching process
- 3. programming the work
- control room activities
- fitting and removing of operational earths
- 6. the actual switching together with any operator's transport costs
- 7. identification of any Customers who will be interrupted, and
- LV switching and paralleling of substations that permits HV work without disrupting supply to other Customers

Access

The provision of access to switchrooms, substations and the like to an ASP who is accompanied by a member of staff of Essential Energy, but does not include the circumstance where an ASP is provided with keys for the purpose of securing access and is not accompanied by a member of staff of Essential Energy.

10. Substation Commissioning

The commissioning by Essential Energy of a new substation, (whether it is a single pole, padmount/kiosk or indoor/chamber) and includes:

- all necessary pre-commissioning checks and tests prior to energising the substation via the HV switchgear and closing the LV circuit breaker, links or fuses, and
- 2. the setting or resetting of protection equipment.

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11. Administration

Work of an administrative nature (not including work of an administrative nature described in section 12), involving the processing of level 1 and/or level 3 work where the Customer is lawfully required to pay for the level 1 and /or level 3 work.

This may include without limitation:

- checking supply availability
- 2. processing applications
- 3. correspondence from application to completion
- record–keeping
- 5. requesting and receiving fees (initially, then prior to design and after certification)
- 6. receiving design drawings (registering and copying)
- raising an order for HV work
- 8. calculating value of any reimbursements under any applicable pioneer schemes
- 9. calculating the cost of a project and warranty/maintenance bond
- 10. organising refunds to developers for HV work
- 11. liaising with developers via phone and facsimile, and
- updating geographic information systems (GIS) and mapping.

12. Notice of Arrangement

Work of an administrative nature performed by Essential Energy where a local council requires evidence in writing from Essential Energy that all necessary arrangements have been made to supply electricity to a development.

This may include without limitation:

- receiving and checking linen plans and 88B Instruments
- copying linen plans
- 3. checking and recording easement details
- 4. preparing files for conveyancing officers
- 5. liaising with developers if errors or changes are required
- checking and receiving duct declarations and any amended linen plans and 88B Instruments approved by a conveyancing officer, and
- 7. preparing notifications of arrangement.

13. Authorisation

The annual authorisation by Essential Energy of individual employees or sub–contractors of an ASP to carry out work on or near Essential Energy's distribution system.

This may include without limitation:

- 1. familiarisation and training in Essential Energy's safety rules and access permit requirements
- induction in the unique aspects of the Network
- verification that the applicant has undertaken the necessary safety training (resuscitation etc) within the last 12 months
- 4. conducting interviews/examinations for access permit recipients, and
- issuing authorisation cards.

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14. Site Establishment Fee

Site establishment includes the issue of a meter by Essential Energy and its coordination with Australian Energy Market Operator (AEMO) for the purpose of establishing a NMI (National Metering Identifier) in MSATS (Market Settlement and Transfer System), operated by AEMO, for new Premises or for any existing Premises for which AEMO requires a new NMI and for checking and updating Network load data.

Note: This fee will usually be charged to the ASP when the NOSW form is submitted detailing metering of a new installation or the transfer or separation of an existing installation where a new NMI has to be created. If an ASP is not involved with the work, the Site Establishment Fee will be charged to the installing electrical contractor, upon submission of the CCEW.

The Site Establishment Fee does not apply in the following circumstances involving Temporary Builder's Services (TBSs), where an existing service line is 'relocated' on the same site and no new NMI is created:

- for a new TBS, where an existing single domestic residence is being demolished and the site
 redeveloped for a new single domestic residence only. The associated NOSWs for the
 recovered and the new metering / service lines must be submitted to Essential Energy at the
 same time. The NOSW for the new metering / TBS should be marked 'Service Line Relocation',
 and
- for a new single domestic residence, where the TBS used for its construction is being removed.
 The associated NOSWs for the recovered and the new metering / service lines must be
 submitted to Essential Energy at the same time. Note: The Site Establishment Fee will be
 charged (and a new NMI created) for the initial 'greenfields' TBS. The NOSW for the new
 metering / service line should be marked 'Service Line Relocation'.

15. Supply of Conveyancing Information Desk Inquiry

The provision of information regarding the availability of supply, presence of the Essential Energy's equipment, power lines and like information for property conveyancing purposes undertaken without any physical inspection of a site, other than the provision of information or the answering of inquiries relating to any matter under freedom of information legislation.

16. Supply of Conveyancing Information Field Visit

The provision of information regarding the availability of supply, presence of the Essential Energy's equipment, power lines and like information for property conveyancing purposes undertaken by a physical inspection of a site, other than the provision of information or the answering of inquiries relating to any matter under freedom of information legislation.

17. Meter Test

The testing of a meter in accordance with AER's Final Determination.

18. Special Meter Reading

This service:

- has the same meaning as the meaning given to the expression 'special meter read' the AER's Final Determination (but excludes any special meter reading of metering installation types 1 to 4, which is an unregulated distribution service); and applies in each of the following circumstances:
- where a Customer or a retail supplier requests that the DNSP undertake a special Meter read, (but does not apply where the special meter read was requested solely to verify the accuracy of a scheduled meter read and the special meter read reveals that the scheduled meter read was inaccurate or in error), or
- 3. where the DNSP attends at a Customer's Premises for the sole purpose of discharging the DNSP's obligation to read the Customer's meter within the period specified by law (but not where the DNSP merely chooses to read the Customer's meter without being under a legal obligation to do so) and on attending the Customer's Premises the DNSP is unable (through no act or omission of the DNSP), to gain access to the meter, or
- 4. where Essential Energy and the Customer agree on an appointed time at which the DNSP may attend the Customer's Premises to enable the DNSP to discharge the DNSP's legal obligation referred to in clause 3 above and when the DNSP attended at the Customer's Premises at the

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appointed time the DNSP (through no act or omission of the DNSP), was unable to gain access to the Customer's meter.

19. Disconnection Visit (Acceptable Payment Received)

A site visit to a Customer's Premises on an occasion for the purpose of disconnecting the Customer's supply for breach by the Customer of a Customer supply contract or a Customer connection contract, where the disconnection does not occur on that occasion.

20. Disconnection at Meter Box

A site visit to a Customer's Premises to:

- disconnect the supply of electricity to a Customer via either the main switch or service fuse removal for breach by the Customer of a Customer supply contract or a Customer connection contract, or where a retail supplier has requested that the supply to the Customer be disconnected, and
- reconnect the supply following the disconnection above.

21. Disconnection at Pole Top/Pillar Box

A site visit to a Customer's Premises:

- to disconnect the supply of electricity to a Customer at the pole top or pillar box for breach by
 the Customer of a Customer supply contract or a Customer connection contract, or where a
 retailer supplier has requested that the supply to a Customer be disconnected, where the
 Customer has denied access to the meter or had prior to the visit, reconnected supply without
 authorisation by the DNSP following a previous disconnection, and
- to reconnect the supply, following the disconnection above.

22. Rectification of Illegal Connection

Work undertaken by a DNSP to the property of the DNSP or to the property of another person in order to:

- rectify damage, or
- prevent injury to persons or property, resulting from conduct that constitutes an offence under Part 6, Division 1 of the Electricity Supply Act 1995 (NSW).

23. Off-Peak Conversion

The alteration of the off–peak meter at a Customer's Premises for the purpose of changing the hours of the meter's operation.

24. Reconnection Outside Normal Business Hours

- The provision of the reconnection component of the service described in sections 21(2) and 22(2) outside the hours of 7.30 am and 4.00 pm on a working day, at the request of a Customer, or
- The connection of electricity to a new Customer outside the hours of 7.30 am and 4.00 pm on a working day at the request of the Customer.

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