

# **POWERNET LIMITED LINE PRICING METHODOLOGY FOR THE ELECTRICITY INVERCARGILL LIMITED NETWORK AS AT 1 APRIL 2008**

## **1. INTRODUCTION**

1.1 PowerNet Limited (PNL) has a responsibility for the management of the network assets owned by Electricity Invercargill Limited (EIL).

1.2 The total line charge is based on the following components:

- (a) Transmission Grid Asset Management costs (Transpower)
- (b) Subtransmission costs - 66,000 and 33,000V line and cables and 30 zone substations
- (c) Distribution costs - 11,000, 400V networks and distribution substations
- (d) PowerNet overheads, Board costs, and System Control costs
- (e) EIL Use Charge comprising depreciation, return of investment and other costs of ownership.

1.3 The derivation of the line charges is based on seven consumer profile parameters. They are:

- (a) The Contract Capacity kVA (kW) of the installation
- (b) The Winter Peak demand kVA (kW) (0700-1100 hours and 1700-2100 hours, each weekday between June and August inclusive)
- (c) The Winter Peak energy MWh (0700-1100 hours and 1700-2100 hours, each weekday between May and September inclusive)
- (d) The Winter Day energy MWh (0700-2300 hours, May to September inclusive)
- (e) The Summer Day energy MWh (0700-2300 hours, October to April inclusive)
- (f) The Total energy for the 12 month period MWh.
- (g) Coincident Peak demand with Transpowers 100 highest peaks for the lower South Island (kVA), half hour metered customers only

1.4 The basis of allocation of Transpower and subtransmission costs is on the after diversity maximum demand for each customer during the periods of network maximum demand. Similarly the allocation of the distribution costs is on an after diversity distribution capacity of the customer's installation.

The PowerNet methodology takes into account the duration that the customer impacts on the peak loading hours of the network. This is achieved by allocating some of the Transmission, subtransmission and distribution costs based on the Winter Peak energy and the Winter Day energy.

This in effect reduces the charges for a customer who incurs just one half hour peak for the whole winter or is only impacting on the peak hours for part of the winter and increases the charges for those customers who are impacting regularly on the peak periods during the whole winter.

It has the effect of integrating the peak demand over a longer period.

1.5 The Winter Peak demands for the various customers and customer groups have a diversity factor applied to them, which reflects to some extent their impact on the total after diversity maximum demand on the network. These diversity factors, based on their peak demands,



are as follows:

Up to 21kVA = 17%

Between 21kVA and 110kVA = ramp function from 17% - 37.5%

Between 110kVA and 2000kVA = ramp function from 37.5% - 75%

Above 2000kVA = 75%.

These diversity factors reflect the increased diversity of a large number of smaller customers compared to less diversity for the larger customers.

- 1.6 Similarly diversity factors are applied to the contract capacities of the various customers. These diversity factors are as follows:

For connections up to 16kVA = 25%

For connections between 16kVA and 100kVA = ramp function from 25% - 33%

For connections between 101kVA and 2000kVA = ramp function from 33% - 70%

For connections above 2000kVA = 70%.

These diversities reflect the differing impacts of the different sized customers on the local capacity of the reticulation system. There is an increased diversity between the smaller customers than with the large customers with respect to the capital investment in the local distribution network.

- 1.7 There are two defined types of consumers. They are as follows:

**(a) Individual Consumers**

These consumers have half-hour or time-of-use meters, including kVA maximum demand registers.

These consumers, through the half-hour or time-of-use metering, have individual profiles, which are used to calculate the line charges. Metering of these consumers includes kVA demand metering which provides the winter or seasonal peak demand and also the anytime peak demand. The latter figures are used in the calculation of line charges and to determine the contract capacity. For these consumers, the contract capacity is based on the next highest standard transformer size above their anytime demand or, alternatively, as per the original contract if growth is predicted and the network has been designed and built to supply the increased level.

**(b) Group Consumers**

For Group consumers, their individual meter readings or locations do not determine the initial line charges.

The bases for the different consumer groups are contract capacity and whether there is significant controllable load on the premises. The latter point qualifies the consumer for either an “all peak” or “with off peak” line charge. Different consumer groups are based on practical fuse sizes. The eligibility for a “with off peak” line charge is determined on the basis that at least 25% of the total energy consumption has to be separately metered and consumed between 23:00 and 07:00 hours or by an appropriate ripple controlled appliance, such as a water heater.



All domestic consumers are classed as single-phase irrespective of whether they are supplied two-phase or three-phase. This is due to the fact that for many of the consumers there was no choice in their method of supply and there are many older multi-phase domestic installations. All old domestic consumer installations are classed as “historic domestic”.

The 8kVA domestic consumer requires a 32-amp circuit breaker to be installed on the main switchboard to control the complete installation. This capacity is only allowed for single-phase installations.

1.8 The costs of the subtransmission and distribution components of the line charges are split into two categories:

1. Supply

The “supply” part is based on the depreciation of the network assets, other ownership costs and required return on the assets, the latter using the companies weighted average cost of capital.

The estimated carrying value of EIL’s network at 1 April 2008 is \$61.13 million. The overall Use Charge of \$7.94 million is made up of the depreciation of \$2.37 million, ownership costs of \$0.83 million and a gross return or net profit before tax of \$4.74 million. The latter equating to 7.8% of the carrying value of the assets.

2. Maintenance

The “maintenance” part is based on the Maintenance Works Programme for the current year.

Management costs for capital and maintenance work are allocated to Supply and Maintenance respectively.

1.9 The application of fixed and variable charges is not based on the derivation of the line charge but is an application of the line charge to the end-use consumer. The objectives behind the fixed and variable charges are as follows:

1. The 50:50 fixed: variable line charge is a compromise between a totally fixed charge which would benefit the large consumer within a load group and a totally variable charge which would benefit the small consumer within a load group.
2. As stated above, the fixed and variable charge allows the larger consumer in a load group to pay more which reflects to some extent their reduced diversity on the maximum demands seen at subtransmission and transmission level. Although the distribution network in the vicinity of the premises has to have enough capacity to supply the full capacity of the installation, the remainder of the network is designed to take into account the diversity between consumer demands. As a general rule, the less energy a consumer uses, the greater the diversity, hence the less capital investment required to supply. A totally fixed line charge does not take this into account so there would need to be more load sub-groups such as very small, small, medium, large and very large domestic consumers besides the existing All Peak and With Off Peak categories.



3. It is important to note that the variable charge is on daytime energy only, so domestic consumers with large night loads, such as storage or water heating, do not pay extra as this consumption is utilising network assets, the capacity of which is designed on the basis of and costs recovered by the peak load in daytime hours. This encourages better utilisation of the network and less capital investment.
4. Retailers may directly pass through a totally fixed charge to consumers.
5. It is a means whereby the line owner can share the risk of climatic variations and be responsive to changes in the local economy. It has been well received in the commercial market that when a consumer has a production downturn or invests in energy conservation measures, there is an immediate response through a reduction in the variable charges.
6. Consumers also have the opportunity to shift load to night time to receive immediate benefits.
7. If a consumer is expanding the business, the variable charges mean that the line owner can receive some immediate extra revenue and it can also cushion the increase in line charges for the following year.

The practical application of a variable component of the line charge for the group consumers resulted in a necessity for a uniform variable charge and individual fixed charges for each segment.

The variable charge component is based on daytime energy usage, i.e. between 07:00 and 23:00 hours. Hence, night time consumption does not contribute directly to the line charge account.

**The profile parameters for determining the line charges for the individual customers are:**

ICP Number Non Half Hour Metered	Contract Capacity kVA	Peak Demand Reading kVA	Total Energy Reading MWh	Winter Peak Reading MWh	Winter Day Reading MWh	Summer Day Reading MWh
7205085NV-6A2	100	75	213	46	108	105
722703NV-43B	200	180	112	21	47	60
724187NV-3BD	150	75	234	45	114	120
730158NV-F40	50	46	100	20	45	51
730262NV-92A	100	100	40	9	18	13
7302979NV-CAE	150	192	275	65	135	131
731881NV-4FA	200	190	216	40	95	110
734325NV-9C1	150	60	81	15	39	40
734326NV-501	200	88	202	40	107	38
734355NV-C9C	300	176	367	28	75	182
734360NV-62B	75	75	348	41	98	138
734470NV-384	300	180	118	25	50	39
734846NV-9FF	50	40	80	2	4	4
7350005NV-3D0	75	60	88	13	29	23
7350693NV-BBE	75	68	93	11	26	26
735249NV-D8B	200	100	176	19	42	76
740394NV-B0F	200	140	278	57	133	145
743312NV-D2A	150	150	205	41	97	108
7433294NV-FC6	150	120	208	32	75	120
743331NV-CBF	150	120	231	65	140	82
744502NV-5E1	200	160	57	12	25	25
744586NV-1A1	150	143	77	13	31	41
744592NV-A06	200	120	70	12	29	28
744610NV-CCA	150	150	136	43	90	82
7501257NV-2E9	150	60	98	17	39	29
750191NV-4A6	150	90	244	42	97	99
7501996NV-A4D	150	45	183	21	50	64



ICP Number Non Half Hour Metered	Contract Capacity kVA	Peak Demand Reading kVA	Total Energy Reading MWh	Winter Peak Reading MWh	Winter Day Reading MWh	Summer Day Reading MWh
754608NV-C92	50	50	22	4	9	13
754690NV-161	150	150	42	6	13	2
800449NV-3FB	75	70	107	20	48	58
8305374NV-169	200	190	150	25	72	73
836516NV-9C5	200	33	55	7	17	28
8541431NVDF3	150	120	84	16	39	45
8548111NV-903	75	76	189	29	70	82
8665382NV-F7A	150	230	576	67	153	190
8665408NV-7A3	150	150	84	17	41	43
8803044NV-797	75	75	85	9	21	30
880327NV-FB7	300	289	1207	158	417	498
880336NV-95F	300	358	1003	162	351	422
880344NV-C87	300	170	706	91	250	260
8803601NV-E7B	150	148	532	59	148	229
880360NV-0D8	150	100	567	89	190	207
880375NV-73A	300	200	155	18	52	94
8803767NV-900	150	154	510	67	167	202
9003193NV-3D3	200	190	65	13	28	30
900319NV-09D	200	200	450	101	234	215
9003243NV-D92	200	176	663	57	183	225
900356NV-DE6	300	240	442	74	170	240
9003573NV-568	200	235	293	60	139	135
900358NV-E7D	200	190	153	31	75	70
900390NV-B86	300	270	265	57	120	127
9003995NV-251	300	168	478	57	141	162
930505NV-E04	150	117	418	60	127	178
930921NV-E57	200	150	126	23	54	71
931326NV-837	150	115	79	12	27	29
931706NV-963	30	10	1	1	1	1
931760NV-71C	150	120	90	19	50	39
931775NV-0FE	150	130	39	8	16	23
931776NV-C3E	150	128	178	31	75	100
934525NV-5D1	150	63	99	13	32	27

ICP Number Half Hour Metered	Contract Capacity kVA	Coincident Peak Demand Reading kVA	Peak Demand Reading kVA	Total Energy Reading MWh	Winter Peak Reading MWh	Winter Day Reading MWh	Summer Day Reading MWh
721862NV-A61	50	21	37	152	17	43	70
721876NV-1C6	200	12	75	108	11	27	72
722709NV-6AA	500	6	84	119	9	29	69
7229001NV-0AF	200	28	89	151	24	52	73
724179NV-031	100	10	32	38	8	16	17
7301102NV-5CA	100	18	32	105	13	33	39
7301164NV-BB5	150	42	120	350	45	130	180
73015753NV-A0E	150	57	97	291	39	108	113
7301627NV-AD2	100	34	73	137	20	59	48
7301908NV-756	75	51	87	276	36	106	129
7302313NV-BC5	75	13	75	80	14	33	24
7302953NV-36A	300	59	82	294	37	98	123
7317032NV-617	200	86	157	401	63	174	171
734110NV-971	300	76	152	311	49	129	163
7341266NV-3A6	150	23	38	123	16	47	58
7341272NV-801	150	39	57	159	24	65	61
7341276NV-90B	200	43	75	213	27	77	105
734165NV-163	750	219	316	1000	163	418	528
7341792NV-7BE	200	55	77	271	33	100	126
7341793NV-BFB	100	38	60	158	25	64	74
734188NV-482	300	209	254	1002	141	333	410
734318NV-162	300	42	174	254	31	87	104
734460NV-929	200	109	109	457	56	136	178
734802NV-A50	150	79	145	402	52	171	140
7350104NV-691	75	14	33	48	9	23	20
7403085NV-205	200	79	115	340	51	113	142
740373NV-C7F	200	67	115	279	45	104	118
740385NV-DE7	200	81	145	400	50	146	206
740630NV-71F	150	70	142	252	58	105	101



ICP Number Half Hour Metered	Contract Capacity kVA	Coincident Peak Demand Reading kVA	Peak Demand Reading kVA	Total Energy Reading MWh	Winter Peak Reading MWh	Winter Day Reading MWh	Summer Day Reading MWh
740649NV-C13	75	34	69	129	25	48	59
7406951NV-064	50	43	50	136	23	50	60
744103NV-5A5	750	177	261	1046	131	344	491
744608NV-473	300	115	197	606	77	204	270
744655NV-320	200	58	76	382	46	124	144
7447181NV-71E	75	15	26	101	13	35	48
7447592NV-D72	150	32	58	134	18	51	60
754696NV-OEE	100	35	71	339	46	120	64
7551948NV-7E0	300	96	147	442	73	170	149
760735NV-A99	150	44	109	128	24	56	50
760737NV-A1C	500	172	393	542	108	242	198
7757907NV-783	300	148	301	546	94	234	195
7757994NV-4A4	200	56	116	180	33	79	68
784100NV-DD5	30	12	17	78	9	24	37
810201NV-DAD	150	25	66	104	21	43	43
8102959NV-5D5	300	112	260	579	92	215	197
8144266NV-0A8	200	26	75	281	17	82	90
825292NV-886	500	162	382	647	109	302	266
8305375NV-D2C	100	20	50	50	8	20	28
8305967NV-D0E	750	48	81	185	32	85	57
8305981NV-63B	500	196	337	608	116	277	224
831121NV-B96	300	16	78	123	16	44	49
832431NV-6DE	1000	74	573	709	45	104	82
8425758NV-FE5	150	84	169	396	58	149	136
8509006NV-D55	150	54	70	322	35	104	148
8509025NV-CC0	300	141	199	837	106	299	434
8509026NV-000	500	97	175	603	74	225	326
850908NV-B67	750	299	378	2170	244	669	893
850948NV-9C2	30	17	22	87	12	32	39
8509962NV-AA6	75	16	28	93	11	35	40
8665558NV-6AF	200	50	101	198	31	73	75
880302NV-FAD	150	52	72	341	40	114	169
8803032NV-345	150	55	99	218	32	89	79
8803034NV-2CA	200	39	74	191	30	79	95
880303NV-3E8	300	56	88	352	43	124	172
8803047NV-B57	150	43	107	224	33	91	74
880308NV-D3C	75	41	76	258	29	88	121
880309NV-179	300	79	114	462	61	156	193
880314NV-48F	300	60	88	333	41	117	125
8803164NV-3C6	75	54	75	226	38	93	97
8803165NV-F83	50	29	46	132	18	46	62
880316NV-40A	300	66	98	300	46	107	83
880317NV-84F	300	47	115	236	34	82	100
880321NV-E38	200	63	101	326	47	142	151
880323NV-EBD	150	35	35	120	18	44	40
8803283NV-7B5	150	77	175	562	63	162	258
8803298NV-3CC	500	170	450	845	127	254	422
880329NV-C2C	1000	401	641	2924	331	770	1256
880330NV-8D0	200	87	172	463	67	150	225
880361NV-C9D	500	251	319	1519	191	495	643
8803625NV-224	100	22	42	143	17	50	65
880363NV-C18	200	55	107	301	44	130	124
880397NV-D05	1000	56	93	439	36	96	234
880398NV-2DB	500	26	49	200	17	47	93
9003051NV-DBD	300	232	308	916	145	380	352
9003053NV-D38	300	129	375	862	101	237	287
900305NV-92E	750	88	143	1092	61	150	183
900306NV-5EE	750	87	215	376	56	152	136
9003071NV-0E8	300	199	361	1086	124	432	551
90030815NV-060	500	14	71	269	21	56	83
9003081NV-OFF	200	95	133	395	60	145	182
9003082NV-C3F	75	55	83	233	37	90	114
9003083NV-07A	500	297	401	1093	155	414	409
900308NV-675	1250	129	340	1000	98	292	323
9003114NV-B53	50	22	44	123	15	48	65
9003117NV-793	300	124	337	790	82	188	261
900313NV-20C	300	17	105	230	19	55	109



ICP Number Half Hour Metered	Contract Capacity kVA	Coincident Peak Demand Reading kVA	Peak Demand Reading kVA	Total Energy Reading MWh	Winter Peak Reading MWh	Winter Day Reading MWh	Summer Day Reading MWh
9003212NV-9DF	100	40	61	187	25	70	78
9003235NV-940	500	250	387	1294	173	434	438
9003244NV-058	300	122	155	778	101	254	359
900325NV-47B	500	354	418	2550	297	791	1076
900327NV-4FE	50	26	38	215	22	59	82
900330NV-399	500	273	330	2247	245	668	947
900337NV-E53	100	17	52	114	12	34	33
9003385NV-2F6	150	71	108	310	41	122	131
900342NV-641	100	87	141	366	57	137	166
9003503NV-035	200	57	103	236	39	88	63
900350NV-C69	100	61	97	230	37	89	91
900351NV-02C	200	88	99	824	68	204	280
9003603NV-336	300	168	291	848	123	312	330
900383NV-DEB	500	72	199	197	45	101	64
900384NV-021	500	215	345	1089	165	400	437
920755NV-4EA	150	48	131	513	47	124	231
930503NV-F8B	100	13	88	75	10	26	31
931777NV-07B	750	295	550	2931	271	747	1231
933534NV-759	200	3	163	393	30	75	268
9406011NV-187	500	154	332	1343	144	361	563
9406013NV-102	500	183	349	975	156	347	440
9408016NV-48D	1750	504	1193	4808	457	1221	2078

The profile parameters for determining the line charges for the Group customers are:

Consumer Capacity	Code	Number of Connections	After Diversity Peak Demand kW	Total Energy Group MWh	Winter Peak Group MWh	Winter Day Group MWh	Summer Day Group MWh
<b>Domestic</b>							
Small Domestic (8kVA 1 Phase) - All Peak	ND08P	13	19	74	14	30	28
Small Domestic (8kVA 1 Phase) - With Off Peak	ND08Q	185	231	1054	148	388	385
Standard Domestic (20kVA 1 Phase) - All Peak	ND20P	551	1621	6278	1179	2565	2342
Standard Domestic (20kVA 1 Phase) - With Off Peak	ND20Q	11579	28959	131939	18586	48520	48239
10% Fixed Charge Option - All Peak	NDL20P	102	300	517	97	211	193
10% Fixed Charge Option - With Off Peak	NDL20Q	1577	3944	7986	1125	2937	2920
10% Fixed Charge Option (8kVA 1 Phase) - All Peak	NDL08P	1	1	5	1	2	2
10% Fixed Charge Option (8kVA 1 Phase) - With Off Peak	NDL08Q	27	34	137	19	50	50
<b>Non-Domestic Single Phase</b>							
Street Lights (1 Phase)	NS001L	4221	317	962	181	393	359
1 kVA 1 Phase - All Peak	NS001P	34	34	310	58	127	116
8 kVA 1 Phase - All Peak	NS008P	124	182	706	133	289	264
8 kVA 1 Phase - With Off Peak	NS008Q	14	18	80	11	29	29
20 kVA 1 Phase - All Peak	NS020P	317	933	3612	678	1476	1348
20 kVA 1 Phase - With Off Peak	NS020Q	127	318	1447	204	532	529
<b>Non-Domestic Three Phase</b>							
15 kVA 3 Phase - All Peak	NT015P	49	135	523	98	214	195
15 kVA 3 Phase - With Off Peak	NT015Q	7	16	75	11	27	27
30 kVA 3 Phase - All Peak	NT030P	473	2963	8160	1533	3334	3044
30 kVA 3 Phase - With Off Peak	NT030Q	150	799	2588	365	952	946
50 kVA 3 Phase - All Peak	NT050P	260	3362	11575	2174	4729	4318



Consumer Capacity	Code	Number of Connections	After Diversity Peak Demand kW	Total Energy Group MWh	Winter Peak Group MWh	Winter Day Group MWh	Summer Day Group MWh
50 kVA 3 Phase - With Off Peak	NT050Q	81	890	3606	508	1326	1318
75 kVA 3 Phase - All Peak	NT075P	98	2359	6496	1220	2654	2424
75 kVA 3 Phase - With Off Peak	NT075Q	14	286	928	131	341	339
100 kVA 3 Phase - All Peak	NT100P	51	1954	5382	1011	2199	2008
100 kVA 3 Phase - With Off Peak	NT100Q	7	228	739	104	272	270
<b>EIL Bluff</b>							
<b>Domestic</b>							
Small Domestic (8kVA 1 Phase) - All Peak	BD08P	3	4	17	3	7	91
Small Domestic (8kVA 1 Phase) - With Off Peak	BD08Q	7	9	40	6	15	103
Standard Domestic (20kVA 1 Phase) - All Peak	BD20P	132	388	1504	283	615	98948
Standard Domestic (20kVA 1 Phase) - With Off Peak	BD20Q	599	1498	6825	961	2510	1511036
10% Fixed Charge Option - All Peak	BDL20P	44	129	223	42	91	4006
10% Fixed Charge Option - With Off Peak	BDL20Q	73	183	370	52	136	9925
10% Fixed Charge Option (8kVA 1 Phase) - All Peak	BDL08P	1	1	5	1	2	2
10% Fixed Charge Option (8kVA 1 Phase) - With Off Peak	BDL08Q	1	1	5	1	2	2
<b>Non-Domestic Single Phase</b>							
Street Lights (1 Phase)	BS001L	352	26	80	15	33	11533
1 kVA 1 Phase - All Peak	BS001P	1	1	9	2	4	4
8 kVA 1 Phase - All Peak	BS008P	10	15	57	11	23	303
8 kVA 1 Phase - With Off Peak	BS008Q	1	1	6	1	2	15
20 kVA 1 Phase - All Peak	BS020P	29	85	330	62	135	21739
20 kVA 1 Phase - With Off Peak	BS020Q	3	8	34	5	13	7568
<b>Non-Domestic Three Phase</b>							
15 kVA 3 Phase - All Peak	BT015P	3	8	32	6	13	39
15 kVA 3 Phase - With Off Peak	BT015Q	1	2	11	2	4	4
30 kVA 3 Phase - All Peak	BT030P	38	238	656	123	268	10179
30 kVA 3 Phase - With Off Peak	BT030Q	7	37	121	17	44	311
50 kVA 3 Phase - All Peak	BT050P	13	168	579	109	236	3074
50 kVA 3 Phase - With Off Peak	BT050Q	4	44	178	25	65	262
75 kVA 3 Phase - All Peak	BT075P	9	217	597	112	244	2194
75 kVA 3 Phase - With Off Peak	BT075Q	1	20	66	9	24	24
100 kVA 3 Phase - All Peak	BT100P	3	115	317	59	129	388
100 kVA 3 Phase - With Off Peak	BT100Q	1	33	106	15	39	39



## 2. TRANSMISSION CHARGES

Transmission charges reflect the Transpower grid asset management costs incurred by Electricity Invercargill Limited based on the Invercargill point of supply.

Transpower transmission charges have two components:

- (a) Connection charge
- (b) Interconnection charge

### 2.1 Connection Charge

The Transpower connection charge is based on the Transpower local assets utilised to provide the supply.

In the case of the Invercargill point of supply the connection charge is split between The Power Company Limited and Electricity Invercargill Limited, each network connected to the transmission grid there.

The total connection charge for Invercargill is \$691,947. Electricity Invercargill's share is of the connection charge is \$458,639.

The connection charges which include the Transpower EVA credits are applied to customers on the basis of the following allocation:

Winter Peak Demand	70%
Winter Peak Energy	20%
Winter Day Energy	10%

For individual customers this equates to:

- (a) \$5.07 per kVA Peak Demand.
- (b) \$2.18 per Winter Peak MWh.
- (c) \$0.73 per Winter Day MWh

After the revenue from the individual customers has been subtracted from the total the remaining group customer charges are as follows:

- (a) \$4.89 per kVA Peak Demand
- (b) \$2.35 per Winter Peak MWh
- (c) \$0.79 per Winter Day MWh

The difference in the two sets of rates above reflects the difference in losses and diversity factors between the large individual customers and the smaller customer groups.

### 2.2 Interconnection Charge

This charge is based on the average of the coincident 100 highest peak demands recorded for Transpower's lower south island region during the assessment period 1 September to 31 August each year at the Invercargill grid exit point.

Electricity Invercargill's share of the Invercargill interconnection charge of \$4,814,870 is \$3,423,363.



The interconnection charges are applied to customers on the basis of the following allocation:

**Half Hour Metered:**

Coincident peak with lower south island region 100%

**Non Half Hour Metered:**

Winter Peak Demand	60%
Winter Peak Energy	30%
Winter Day Energy	10%

For individual non half hour metered customers this equates to the following charges:

- (a) \$32.42 per kVA Winter Peak Demand.
- (b) \$24.36 per Winter Peak MWh.
- (c) \$5.41 per Winter Day MWh.

For individual Half Hour Metered customers this equates to the following charges:

Point of Supply	Per kVA Coincident Peak Demand
Invercargill	\$63.74

After the revenue from the individual customers has been subtracted from the total the remaining group customer charges are as follows:

	Per kVA Peak Demand	Per Winter Peak MWh	Per Winter Day MWh
Electricity Invercargill	\$29.19	\$24.61	\$5.53

The differences in the above rates reflect the differences in losses and diversity factors between the large individual customers and the small customer groups.

### 2.3 Transpower Revenue for Individual Customers

The total Transpower revenue for individual customers grouped by capacity is shown in the following table:

Consumer Capacity kVA	Number of Connections	Line Charge Revenue per Consumer Group	Average Line Charge
30	3	\$2,041	\$680
50	8	\$11,485	\$1,436
75	15	\$28,360	\$1,891
100	14	\$31,238	\$2,231
150	42	\$133,519	\$3,179
200	36	\$134,831	\$3,745
300	31	\$213,556	\$6,889
500	17	\$202,271	\$11,898
750	7	\$84,894	\$12,128
1000	3	\$36,945	\$12,315
1250	1	\$9,320	\$9,320
1750	1	\$37,310	\$37,310



## 2.4 TransPower Revenue for Group Customers

The total Transpower revenue for group customers is shown in the following table.

Consumer Capacity	Code	Number of Connections	TransPower Charge	TransPower Revenue per Consumer Group
<b>Domestic</b>				
Small Domestic (8kVA 1 Phase) - All Peak	ND08P	13	\$87	\$1,130.26
Small Domestic (8kVA 1 Phase) - With Off Peak	ND08Q	185	\$72	\$13,399.32
Standard Domestic (20kVA 1 Phase) - All Peak	ND20P	551	\$174	\$95,811.28
Standard Domestic (20kVA 1 Phase) - With Off Peak	ND20Q	11579	\$145	\$1,677,305.29
10% Fixed Charge Option - All Peak	NDL20P	102	\$133	\$13,564.35
10% Fixed Charge Option - With Off Peak	NDL20Q	1577	\$112	\$176,193.60
10% Fixed Charge Option (8kVA 1 Phase) - All Peak	NDL08P	1	\$83	\$82.85
10% Fixed Charge Option (8kVA 1 Phase) - With Off Peak	NDL08Q	27	\$69	\$1,866.12
<b>Non-Domestic Single Phase</b>				
Street Lights (1 Phase)	NS001L	4221	\$4	\$17,000.33
1 kVA 1 Phase - All Peak	NS001P	34	\$93	\$3,160.35
8 kVA 1 Phase - All Peak	NS008P	124	\$87	\$10,780.94
8 kVA 1 Phase - With Off Peak	NS008Q	14	\$72	\$1,014.00
20 kVA 1 Phase - All Peak	NS020P	317	\$174	\$55,121.92
20 kVA 1 Phase - With Off Peak	NS020Q	127	\$145	\$18,396.91
<b>Non-Domestic Three Phase</b>				
15 kVA 3 Phase - All Peak	NT015P	49	\$163	\$7,987.90
15 kVA 3 Phase - With Off Peak	NT015Q	7	\$136	\$950.63
30 kVA 3 Phase - All Peak	NT030P	473	\$325	\$153,691.37
30 kVA 3 Phase - With Off Peak	NT030Q	150	\$272	\$40,759.47
50 kVA 3 Phase - All Peak	NT050P	260	\$728	\$189,362.31
50 kVA 3 Phase - With Off Peak	NT050Q	81	\$608	\$49,212.40
75 kVA 3 Phase - All Peak	NT075P	98	\$1,249	\$122,353.79
75 kVA 3 Phase - With Off Peak	NT075Q	14	\$1,044	\$14,617.34
100 kVA 3 Phase - All Peak	NT100P	51	\$1,988	\$101,376.68
100 kVA 3 Phase - With Off Peak	NT100Q	7	\$1,662	\$11,636.30
<b>EIL Bluff</b>				
<b>Domestic</b>				
Small Domestic (8kVA 1 Phase) - All Peak	BD08P	3	\$87	\$260.83
Small Domestic (8kVA 1 Phase) - With Off Peak	BD08Q	7	\$72	\$507.00
Standard Domestic (20kVA 1 Phase) - All Peak	BD20P	132	\$174	\$22,952.98
Standard Domestic (20kVA 1 Phase) - With Off Peak	BD20Q	599	\$145	\$86,769.66
10% Fixed Charge Option - All Peak	BDL20P	44	\$133	\$5,851.29
10% Fixed Charge Option - With Off Peak	BDL20Q	73	\$112	\$8,156.08
10% Fixed Charge Option (8kVA 1 Phase) - All Peak	BDL08P	1	\$83	\$82.85
10% Fixed Charge Option (8kVA 1 Phase) - With Off Peak	BDL08Q	1	\$69	\$69.12
<b>Non-Domestic Single Phase</b>				
Street Lights (1 Phase)	BS001L	352	\$4.03	\$1,417.70
1 kVA 1 Phase - All Peak	BS001P	1	\$92.95	\$92.95
8 kVA 1 Phase - All Peak	BS008P	10	\$86.94	\$869.43
8 kVA 1 Phase - With Off Peak	BS008Q	1	\$72.43	\$72.43
20 kVA 1 Phase - All Peak	BS020P	29	\$173.89	\$5,042.70
20 kVA 1 Phase - With Off Peak	BS020Q	3	\$144.86	\$434.57
<b>Non-Domestic Three Phase</b>				
15 kVA 3 Phase - All Peak	BT015P	3	\$163	\$489.05
15 kVA 3 Phase - With Off Peak	BT015Q	1	\$136	\$135.80
30 kVA 3 Phase - All Peak	BT030P	38	\$325	\$12,347.30
30 kVA 3 Phase - With Off Peak	BT030Q	7	\$272	\$1,902.11
50 kVA 3 Phase - All Peak	BT050P	13	\$728	\$9,468.12
50 kVA 3 Phase - With Off Peak	BT050Q	4	\$608	\$2,430.24
75 kVA 3 Phase - All Peak	BT075P	9	\$1,249	\$11,236.57
75 kVA 3 Phase - With Off Peak	BT075Q	1	\$1,044	\$1,044.10
100 kVA 3 Phase - All Peak	BT100P	3	\$1,988	\$5,963.33
100 kVA 3 Phase - With Off Peak	BT100Q	1	\$1,662	\$1,662.33



### 3. SUBTRANSMISSION CHARGES

Subtransmission charges are based on the subtransmission costs (66kV and 33kV network) and the zone substation costs.

There are two components making up the subtransmission charges:

- (a) Supply charge
- (b) Maintenance charge

#### 3.1 Supply Charge

The supply charge is based on the required return on the assets by the shareholder and depreciation.

All the costs of the subtransmission network and zone substations are averaged and the use charge allocated on the basis of the relative asset value compared to the total network asset value.

The supply charge for the EIL city area zone substations is \$862,950 and for the 33kV line and cables is \$392,250 giving a total supply charge for EIL City of \$1,255,200.

As EIL also wheels power for Bluff through The Power Company Limited 33kV line and Bluff zone substation there is a supply charge of \$455,446 for this zone substation and subtransmission lines.

The supply charge totalling \$1,255,200 for EIL City and \$455,466 for EIL Bluff is allocated across all customers on the following basis:

Winter Peak Demand	70%
Winter Peak energy	20%
Winter Day energy	10%

#### 3.2 Maintenance Charge

The maintenance charges for the EIL city zone substations and subtransmission system total \$264,387 and for EIL Bluff total \$66,589.

The total subtransmission maintenance charges of \$330,976 are allocated across the customers on the following basis:

Total Energy	50%
Winter Peak Demand	50%

In this case the commercial customers incur a weighting compared to domestic customers of 1.5:1.0. This reflects the higher level of importance for commercial customers of the maintenance to the network. This weighted ratio only applies to the total energy components, i.e. 50% of the cost.

#### 3.3 Subtransmission Charges for Individual Customers above 100 kVA



*EIL City*

(a)	Subtransmission Supply charge	\$14.82 per kVA Winter Peak Demand
(b)	Subtransmission Supply charge	\$6.55 per Winter Peak MWh
(c)	Subtransmission Supply charge	\$2.19 per Winter Day MWh
(e)	Subtransmission Maintenance charge	\$0.51 per Commercial Total MWh
(f)	Subtransmission Maintenance charge	\$2.23 per kVA Winter Peak Demand

*EIL Bluff*

(a)	Subtransmission Supply charge	\$60.73 per kVA Winter Peak Demand
(b)	Subtransmission Supply charge	\$26.89 per Winter Peak MWh
(c)	Subtransmission Supply charge	\$8.27 per Winter Day MWh
(e)	Subtransmission Maintenance charge	\$1.96 per Commercial Total MWh
(f)	Subtransmission Maintenance charge	\$6.72 per kVA Winter Peak Demand

### 3.4 Subtransmission Charges for Group Customers

After the revenue from the individual customers has been subtracted from the total the remaining group customer charges are as follows:

*EIL City*

(a)	Subtransmission Supply charge	\$14.40 per kVA Winter Peak Demand
(b)	Subtransmission Supply charge	\$7.10 per Winter Peak MWh
(c)	Subtransmission Supply charge	\$2.40 per Winter Day MWh
(d)	Subtransmission Maintenance charge	\$0.52 per Domestic Total MWh
(e)	Subtransmission Maintenance charge	\$0.52 per Commercial Total MWh
(f)	Subtransmission Maintenance charge	\$2.10 per kVA Winter Peak Demand

*EIL Bluff*

(a)	Subtransmission Supply charge	\$70.41 per kVA Winter Peak Demand
(b)	Subtransmission Supply charge	\$32.51 per Winter Peak MWh
(c)	Subtransmission Supply charge	\$10.33 per Winter Day MWh
(d)	Subtransmission Maintenance charge	\$0.89 per Domestic Total MWh
(e)	Subtransmission Maintenance charge	\$0.89 per Commercial Total MWh
(f)	Subtransmission Maintenance charge	\$4.46 per kVA Winter Peak Demand



## 4. DISTRIBUTION CHARGES

Distribution charges are based on the distribution costs which include 11,000 and 400V line and cables and distribution substations and transformers.

There are three components making up the distribution charges

- (a) Supply charge
- (b) Maintenance charge
- (c) Transformer charge

In calculating the distribution charges an allowance is made for the fact that customers above 150kVA have normally less use of the 400V network than smaller customers, i.e. they often have their own local transformer or exclusive supply cables from a transformer. The distribution charges are multiplied by a factor of 60% for both EIL City and EIL Bluff.

### 4.1 Supply Charge

The supply charge is based on the use charge which is the required return on the assets by the shareholder and depreciation.

All the costs of the distribution network are averaged and the supply charge is allocated on the basis of the relative asset value compared to the total network asset value.

The supply charges are as follows:

- (a) *Overhead lines, Underground Cables & Distribution Substations*

EIL City	\$5,648,400
EIL Bluff	\$235,350

The supply charge is allocated across all customers on the following basis:

Contract Capacity	70%
Winter Peak Energy	20%
Winter Day Energy	10%

### 4.2 Maintenance Charge

The maintenance charges are as follows:

- (a) *Overhead lines, Underground Cables & Distribution Substations*

EIL City	\$793,161
EIL Bluff	\$125,236

The maintenance portion is allocated across all customers on the following basis:

Total Energy	50%
Contract Capacity	50%



With respect to the maintenance charges, the commercial customers incur a weighting compared to domestic customers of 1.5:1.0. This reflects a higher level of importance for commercial customers of the maintenance to the network. This weighted ratio only applies to the total energy components, i.e. 50% of the cost.

#### 4.3 Distribution Transformers

The transformer charges are as follows:

EIL Supply	\$706,050
EIL Maintenance	\$208,727

The transformer portion of the distribution charges is allocated across consumers on the following basis:

Number of transformers and transformer capacity	100%.
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#### 4.4 Distribution Charges for Individual Customers

##### *EIL City*

(a)	Distribution Supply charge	\$30.65 per kVA Contract Capacity
(b)	Distribution Supply charge	\$29.49 per Winter Peak MWh
(c)	Distribution Supply charge	\$5.91 per Winter Day MWh
(d)	Distribution Maintenance charge	\$1.54 per Commercial Total MWh
(e)	Distribution Maintenance charge	\$3.07 per kVA Contract Capacity

##### *EIL Bluff*

(a)	Distribution Supply charge	\$18.31 per kVA Contract Capacity
(b)	Distribution Supply charge	\$16.44 per Winter Peak MWh
(c)	Distribution Supply charge	\$3.20 per Winter Day MWh
(d)	Distribution Maintenance charge	\$2.68 per Commercial Total MWh
(e)	Distribution Maintenance charge	\$6.96 per kVA Contract Capacity

##### Transformer Charges

(a)	Distribution Transformer supply charge	\$289.88 per Transformer
(b)	Distribution Transformer maintenance charge	\$473.3 per Transformer



The Transformer charge of \$289.88 per transformer is multiplied by a price ratio depending on the size of the transformer. The ratios for the different sized transformers are shown below.

Transformer Size	Ratio applied
15kVA Transformer	1.00
30kVA Transformer	1.44
50kVA Transformer	1.88
75kVA Transformer	2.30
100kVA Transformer	2.80
150kVA Transformer	3.50
200kVA Transformer	4.40
300kVA Transformer	5.16
500kVA Transformer	7.20
750kVA Transformer	8.80
1000kVA Transformer	9.96
1250kVA Transformer	13.20
1500kVA Transformer	15.60

#### 4.5 Distribution Charges for Group Customers

After the revenue from the individual customers has been subtracted from the total the remaining group customer charges are as follows:

##### *EIL City*

(a)	Distribution Supply charge	\$32.40 per kVA Contract Capacity
(b)	Distribution Supply charge	\$34.34 per Winter Peak MWh
(c)	Distribution Supply charge	\$11.54 per Winter Day MWh
(d)	Distribution Maintenance charge	\$1.78 per Domestic Total MWh
(e)	Distribution Maintenance charge	\$1.78 per Commercial Total MWh
(f)	Distribution Maintenance charge	\$3.16 per kVA Contract Capacity
(g)	Distribution Transformer charge	\$5.19 per kVA Contract Capacity

##### *EIL Bluff*

(a)	Distribution Supply charge	\$18.57 per kVA Contract Capacity
(b)	Distribution Supply charge	\$19.59 per Winter Peak MWh
(c)	Distribution Supply charge	\$6.88 per Winter Day MWh
(d)	Distribution Maintenance charge	\$3.85 per Domestic Total MWh
(e)	Distribution Maintenance charge	\$3.85 per Commercial Total MWh
(f)	Distribution Maintenance charge	\$6.61 per kVA Contract Capacity
(g)	Distribution Transformer charge	\$5.19 per kVA Contract Capacity

The model applies a 2.5% discount for the single phase group customers compared to three phase customers of similar size. This is to reflect the reduced investment in network assets for single phase customers.



## 5. POWERNET OVERHEADS

The PowerNet overhead charges are based on those costs which cannot be allocated directly to either capital or maintenance.

These costs include the following:

- (a) Executive Management
- (b) Directors Fees
- (c) System Control
- (d) Miscellaneous overheads, e.g. buildings, rates, etc.

These charges are split equally over the total customer base.

The total overhead costs are \$750,097.

The charge per customer is \$38.07.

## 6. POWERNET CHARGES

### 6.1 PowerNet Revenue for Individual Customers

The total PowerNet revenue for individual customers grouped by capacity is shown in the following table.

Consumer Capacity kVA	Subtransmission Charge	Distribution Charge	PowerNet Overhead Charge	Total PowerNet Charge
30	\$590	\$2,666	\$114	\$3,370
50	\$3,171	\$13,735	\$305	\$17,211
75	\$9,340	\$38,478	\$571	\$48,389
100	\$11,813	\$31,784	\$533	\$44,131
150	\$70,326	\$145,282	\$1,599	\$217,207
200	\$54,400	\$161,692	\$1,370	\$217,463
300	\$72,533	\$212,573	\$1,180	\$286,286
500	\$91,574	\$193,366	\$647	\$285,588
750	\$55,011	\$113,643	\$266	\$168,920
1000	\$12,154	\$72,949	\$114	\$85,217
1250	\$4,096	\$29,818	\$38	\$33,951
1750	\$76,845	\$37,879	\$38	\$114,762



## 6.2 PowerNet Revenue for Group Customers

The total PowerNet revenue for group customers is shown in the following table.

Consumer Capacity	Code	Number of Connections	Sub transmission Charge	Distribution Charge	PowerNet Overheads	Total PowerNet Revenue
<b>Domestic</b>						
Small Domestic (8kVA 1 Phase) - All Peak	ND08P	13	\$492	\$3,131	\$495	\$4,119
Small Domestic (8kVA 1 Phase) - With Off Peak	ND08Q	185	\$5,997	\$35,789	\$7,042	\$48,829
Standard Domestic (20kVA 1 Phase) - All Peak	ND20P	551	\$41,742	\$271,763	\$20,975	\$334,479
Standard Domestic (20kVA 1 Phase) - With Off Peak	ND20Q	11579	\$750,738	\$4,701,038	\$440,777	\$5,892,553
10% Fixed Charge Option - All Peak	NDL20P	102	\$6,187	\$17,112	\$3,883	\$27,182
10% Fixed Charge Option - With Off Peak	NDL20Q	1577	\$81,615	\$192,183	\$60,032	\$333,830
10% Fixed Charge Option (8kVA 1 Phase) - All Peak	NDL08P	1	\$36	\$177	\$38	\$251
10% Fixed Charge Option (8kVA 1 Phase) - With Off Peak	NDL08Q	27	\$840	\$3,337	\$1,028	\$5,204
<b>Non-Domestic Single Phase</b>						
Street Lights (1 Phase)	NS001L	4221	\$7,520	\$122,795	\$3,772	\$134,087
1 kVA 1 Phase - All Peak	NS001P	34	\$1,300	\$10,956	\$1,294	\$13,550
8 kVA 1 Phase - All Peak	NS008P	124	\$4,697	\$29,869	\$4,720	\$39,286
8 kVA 1 Phase - With Off Peak	NS008Q	14	\$454	\$2,708	\$533	\$3,695
20 kVA 1 Phase - All Peak	NS020P	317	\$24,015	\$156,350	\$12,067	\$192,432
20 kVA 1 Phase - With Off Peak	NS020Q	127	\$8,234	\$51,562	\$4,835	\$64,630
<b>Non-Domestic Three Phase</b>						
15 kVA 3 Phase - All Peak	NT015P	49	\$3,480	\$20,923	\$1,865	\$26,268
15 kVA 3 Phase - With Off Peak	NT015Q	7	\$425	\$2,400	\$266	\$3,092
30 kVA 3 Phase - All Peak	NT030P	473	\$68,382	\$301,729	\$18,006	\$388,117
30 kVA 3 Phase - With Off Peak	NT030Q	150	\$18,533	\$78,712	\$5,710	\$102,956
50 kVA 3 Phase - All Peak	NT050P	260	\$83,120	\$422,788	\$9,897	\$515,806
50 kVA 3 Phase - With Off Peak	NT050Q	81	\$22,151	\$112,257	\$3,083	\$137,491
75 kVA 3 Phase - All Peak	NT075P	98	\$54,439	\$266,371	\$3,731	\$324,541
75 kVA 3 Phase - With Off Peak	NT075Q	14	\$6,647	\$32,500	\$533	\$39,679
100 kVA 3 Phase - All Peak	NT100P	51	\$45,106	\$185,488	\$1,941	\$232,535
100 kVA 3 Phase - With Off Peak	NT100Q	7	\$5,291	\$22,357	\$266	\$27,915
<b>EIL Bluff</b>						
<b>Domestic</b>						
Small Domestic (8kVA 1 Phase) - All Peak	BD08P	3	\$489	\$347	\$114	\$950



**LINE PRICING METHODOLOGY FOR  
THE ELECTRICITY INVERCARGILL LIMITED NETWORK AS AT 1 APRIL 2008**

<b>Consumer Capacity</b>	<b>Code</b>	<b>Number of Connections</b>	<b>Sub transmission Charge</b>	<b>Distribution Charge</b>	<b>PowerNet Overheads</b>	<b>Total PowerNet Revenue</b>
Small Domestic (8kVA 1 Phase) - With Off Peak	BD08Q	7	\$967	\$614	\$266	\$1,848
Standard Domestic (20kVA 1 Phase) - All Peak	BD20P	132	\$43,049	\$32,056	\$5,025	\$80,129
Standard Domestic (20kVA 1 Phase) - With Off Peak	BD20Q	599	\$165,566	\$116,463	\$22,802	\$304,831
10% Fixed Charge Option - All Peak	BDL20P	44	\$11,763	-\$1,712	\$1,675	\$11,726
10% Fixed Charge Option - With Off Peak	BDL20Q	73	\$16,562	-\$3,888	\$2,779	\$15,453
10% Fixed Charge Option (8kVA 1 Phase) - All Peak	BDL08P	1	\$157	\$56	\$38	\$251
10% Fixed Charge Option (8kVA 1 Phase) - With Off Peak	BDL08Q	1	\$133	\$21	\$38	\$193
<b>Non-Domestic Single Phase</b>						
Street Lights (1 Phase)	BS001L	352	\$2,721.37	\$7,941.15	\$519.36	\$11,182
1 kVA 1 Phase - All Peak	BS001P	1	\$159.50	\$200.98	\$38.07	\$399
8 kVA 1 Phase - All Peak	BS008P	10	\$1,630.64	\$1,156.93	\$380.67	\$3,168
8 kVA 1 Phase - With Off Peak	BS008Q	1	\$138.20	\$87.67	\$38.07	\$264
20 kVA 1 Phase - All Peak	BS020P	29	\$9,457.72	\$7,042.51	\$1,103.94	\$17,604
20 kVA 1 Phase - With Off Peak	BS020Q	3	\$829.21	\$583.29	\$114.20	\$1,527
<b>Non-Domestic Three Phase</b>						
15 kVA 3 Phase - All Peak	BT015P	3	\$917	\$577	\$114	\$1,608
15 kVA 3 Phase - With Off Peak	BT015Q	1	\$259	\$144	\$38	\$442
30 kVA 3 Phase - All Peak	BT030P	38	\$23,912	\$5,822	\$1,447	\$31,181
30 kVA 3 Phase - With Off Peak	BT030Q	7	\$3,736	\$803	\$266	\$4,805
50 kVA 3 Phase - All Peak	BT050P	13	\$17,963	\$7,333	\$495	\$25,790
50 kVA 3 Phase - With Off Peak	BT050Q	4	\$4,685	\$1,952	\$152	\$6,790
75 kVA 3 Phase - All Peak	BT075P	9	\$21,761	\$7,701	\$343	\$29,805
75 kVA 3 Phase - With Off Peak	BT075Q	1	\$2,050	\$746	\$38	\$2,834
100 kVA 3 Phase - All Peak	BT100P	3	\$11,549	\$2,016	\$114	\$13,679
100 kVA 3 Phase - With Off Peak	BT100Q	1	\$3,265	\$685	\$38	\$3,988



## **7. TRANSMISSION GRID OPERATOR SERVICES COSTS**

These costs which relate to frequency, voltage support and black start on the National Grid are for security of energy supply and not to transmission. Accordingly they are excluded from the transmission charges and are allocated each month to the retailers on the basis of each Retailer's total energy consumption for that month.

## **8. LOSS CONSTRAINT EXCESS PAYMENT**

Loss Constraint Excess Payments are credits rebated by Transpower as a result of money received from the Clearing Manager for the Wholesale Electricity Market and are excluded from the Transmission Charges. The payments are allocated each month to the retailers on the basis of total energy consumption for the month in which the rebate applied.

## **9. TOTAL LINE CHARGE REVENUE**

### **9.1 Fixed, Variable and Metering Charges**

The total line charge is charged as a split fixed and variable charge. This allows PowerNet to share some of the risk with the Energy Trader. The fixed/variable split is approximately 50:50.

For the installations with ½ hour metering the total line charge is halved to establish the fixed charge per annum. The variable charge is calculated as the remaining charge divided by the number of Day MWh in the customer energy profile to give a variable charge in dollars per Day MWh.

In the case of all other installations the variable charge is a standard charge of \$51.64 per Day MWh. The fixed charge is then calculated as the difference between the total charge and the number of Day MWh for the installation times \$51.64. This method of calculating the fixed charge accounts for the fact that some installations have negative fixed charges.

The Variable Charge of \$51.64 per MWh of daytime sales equates to \$49.31 per MWh of daytime purchases at the grid exit point.



## 9.2 Line Charge Revenue for Individual Customers

The line charge revenue for individual customers grouped by capacity is shown in the following table.

Consumer Capacity kVA	Number of Connections	Line Charge Revenue per Consumer Group	Average Line Charge
30	3	\$5,411	\$1,804
50	8	\$28,696	\$3,587
75	15	\$76,749	\$5,117
100	14	\$75,369	\$5,383
150	42	\$350,727	\$8,351
200	36	\$352,294	\$9,786
300	31	\$499,842	\$16,124
500	17	\$487,859	\$28,698
750	7	\$253,814	\$36,259
1000	3	\$122,163	\$40,721
1250	1	\$43,272	\$43,272
1750	1	\$152,072	\$152,072

## 9.3 Line Charge Revenue for Group Customers

The line charge revenue for group customers is shown in the following table.

Consumer Capacity	Code	Number of Connections	Fixed Charge per Day	Variable Charge per Day MWh Sales	Line Charge Revenue per Consumer Group
<b>Domestic</b>					
Small Domestic (8kVA 1 Phase) - All Peak	ND08P	13	\$0.4793	\$51.38	\$5,248.98
Small Domestic (8kVA 1 Phase) - With Off Peak	ND08Q	185	\$0.3334	\$51.38	\$62,228.22
Standard Domestic (20kVA 1 Phase) - All Peak	ND20P	551	\$0.8857	\$51.38	\$430,290.67
Standard Domestic (20kVA 1 Phase) - With Off Peak	ND20Q	11579	\$0.6148	\$51.38	\$7,569,858.48
10% Fixed Charge Option - All Peak	NDL20P	102	\$0.1500	\$87.08	\$40,746.37
10% Fixed Charge Option - With Off Peak	NDL20Q	1577	\$0.00	\$87.08	\$510,023.94
10% Fixed Charge Option (8kVA 1 Phase) - All Peak	NDL08P	1	\$0.1500	\$70.51	\$333.88
10% Fixed Charge Option (8kVA 1 Phase) - With Off Peak	NDL08Q	27	\$0.00	\$70.51	\$7,070.58
<b>Non-Domestic Single Phase</b>					
Street Lights (1 Phase)	NS001L	4221	\$0.0730	\$51.38	\$151,087.67
1 kVA 1 Phase - All Peak	NS001P	34	\$0.3439	\$51.38	\$16,710.82
8 kVA 1 Phase - All Peak	NS008P	124	\$0.4793	\$51.38	\$50,067.19
8 kVA 1 Phase - With Off Peak	NS008Q	14	\$0.3334	\$51.38	\$4,709.16
20 kVA 1 Phase - All Peak	NS020P	317	\$0.8857	\$51.38	\$247,553.80
20 kVA 1 Phase - With Off Peak	NS020Q	127	\$0.6148	\$51.38	\$83,027.21
<b>Non-Domestic Three Phase</b>					
15 kVA 3 Phase - All Peak	NT015P	49	\$0.7399	\$51.38	\$34,256.24
15 kVA 3 Phase - With Off Peak	NT015Q	7	\$0.4793	\$51.38	\$4,042.26
30 kVA 3 Phase - All Peak	NT030P	473	\$1.2400	\$51.38	\$541,808.19
30 kVA 3 Phase - With Off Peak	NT030Q	150	\$0.8440	\$51.38	\$143,714.99
50 kVA 3 Phase - All Peak	NT050P	260	\$2.5321	\$51.38	\$705,168.41
50 kVA 3 Phase - With Off Peak	NT050Q	81	\$1.7193	\$51.38	\$186,703.83
75 kVA 3 Phase - All Peak	NT075P	98	\$5.1996	\$51.38	\$446,894.46
75 kVA 3 Phase - With Off Peak	NT075Q	14	\$3.7825	\$51.38	\$54,296.60
100 kVA 3 Phase - All Peak	NT100P	51	\$6.3249	\$51.38	\$333,911.62
100 kVA 3 Phase - With Off Peak	NT100Q	7	\$4.5848	\$51.38	\$39,550.86



Consumer Capacity	Code	Number of Connections	Fixed Charge per Day	Variable Charge per Day MWh Sales	Line Charge Revenue per Consumer Group
Peak					
<b>EIL Bluff</b>					
<b>Domestic</b>					
Small Domestic (8kVA 1 Phase) - All Peak	BD08P	3	\$0.4793	\$51.38	\$1,211.30
Small Domestic (8kVA 1 Phase) - With Off Peak	BD08Q	7	\$0.3334	\$51.38	\$2,354.58
Standard Domestic (20kVA 1 Phase) - All Peak	BD20P	132	\$0.8857	\$51.38	\$103,082.34
Standard Domestic (20kVA 1 Phase) - With Off Peak	BD20Q	599	\$0.6148	\$51.38	\$391,600.76
10% Fixed Charge Option - All Peak	BDL20P	44	\$0.1500	\$87.08	\$17,576.86
10% Fixed Charge Option - With Off Peak	BDL20Q	73	\$0.00	\$87.08	\$23,609.22
10% Fixed Charge Option (8kVA 1 Phase) - All Peak	BDL08P	1	\$0.1500	\$70.51	\$333.88
10% Fixed Charge Option (8kVA 1 Phase) - With Off Peak	BDL08Q	1	\$0.00	\$70.51	\$261.87
<b>Non-Domestic Single Phase</b>					
Street Lights (1 Phase)	BS001L	352	\$0.0730	\$51.38	\$12,599.59
1 kVA 1 Phase - All Peak	BS001P	1	\$0.3439	\$51.38	\$491.49
8 kVA 1 Phase - All Peak	BS008P	10	\$0.4793	\$51.38	\$4,037.68
8 kVA 1 Phase - With Off Peak	BS008Q	1	\$0.3334	\$51.38	\$336.37
20 kVA 1 Phase - All Peak	BS020P	29	\$0.8857	\$51.38	\$22,646.88
20 kVA 1 Phase - With Off Peak	BS020Q	3	\$0.6148	\$51.38	\$1,961.27
<b>Non-Domestic Three Phase</b>					
15 kVA 3 Phase - All Peak	BT015P	3	\$0.7399	\$51.38	\$2,097.32
15 kVA 3 Phase - With Off Peak	BT015Q	1	\$0.4793	\$51.38	\$577.47
30 kVA 3 Phase - All Peak	BT030P	38	\$1.2400	\$51.38	\$43,527.93
30 kVA 3 Phase - With Off Peak	BT030Q	7	\$0.8440	\$51.38	\$6,706.70
50 kVA 3 Phase - All Peak	BT050P	13	\$2.5321	\$51.38	\$35,258.42
50 kVA 3 Phase - With Off Peak	BT050Q	4	\$1.7193	\$51.38	\$9,219.94
75 kVA 3 Phase - All Peak	BT075P	9	\$5.1996	\$51.38	\$41,041.33
75 kVA 3 Phase - With Off Peak	BT075Q	1	\$3.7825	\$51.38	\$3,878.33
100 kVA 3 Phase - All Peak	BT100P	3	\$6.3249	\$51.38	\$19,641.86
100 kVA 3 Phase - With Off Peak	BT100Q	1	\$4.5848	\$51.38	\$5,650.12



## 10. LINE CHARGE TABLES

### 10.1 Line Charge Breakdown for Individual Customers

ICP Number	Contract Capacity kVA	Trans Power Charge	Subtransmission Charge	Distribution Charge	PowerNet Charge	Total Line Charge	Fixed Charge per annum	Variable Charge per Day MWh
880323NV-EBD	150	\$2,323	\$352	\$2,966	\$38	\$5,679	\$2,839	\$33.80
9003081NV-OFF	200	\$6,512	\$1,684	\$5,128	\$38	\$13,362	\$6,681	\$20.44
8803298NV-3CC	500	\$12,233	\$5,014	\$11,271	\$38	\$28,556	\$14,278	\$21.12
740649NV-C13	75	\$2,343	\$634	\$2,561	\$38	\$5,575	\$2,787	\$26.14
900390NV-B86	300	\$5,895	\$2,451	\$6,068	\$38	\$14,452	\$1,223	\$51.38
880327NV-FB7	300	\$10,538	\$4,354	\$9,586	\$38	\$24,517	(\$24,463)	\$51.38
8102959NV-5D5	300	\$7,691	\$2,068	\$7,249	\$38	\$17,046	\$8,523	\$20.67
900350NV-C69	100	\$4,188	\$1,089	\$2,675	\$38	\$7,990	\$3,995	\$22.23
810201NV-DAD	150	\$1,760	\$563	\$2,994	\$38	\$5,354	\$2,677	\$31.01
7341266NV-3A6	150	\$1,536	\$383	\$2,946	\$38	\$4,904	\$2,452	\$23.37
734802NV-A50	150	\$5,526	\$1,791	\$4,213	\$38	\$11,568	\$5,784	\$18.60
734355NV-C9C	300	\$2,693	\$1,227	\$5,565	\$38	\$9,522	(\$4,190)	\$51.38
784100NV-DD5	30	\$814	\$194	\$1,029	\$38	\$2,074	\$1,037	\$17.16
850948NV-9C2	30	\$1,149	\$253	\$1,178	\$38	\$2,619	\$1,309	\$18.39
900327NV-4FE	50	\$1,782	\$506	\$2,180	\$38	\$4,506	\$2,253	\$16.07
8803283NV-7B5	150	\$5,460	\$2,119	\$4,500	\$38	\$12,118	\$6,059	\$14.42
740385NV-DE7	200	\$5,543	\$1,478	\$4,987	\$38	\$12,047	\$6,023	\$17.12
9003503NV-035	200	\$3,924	\$1,144	\$4,449	\$38	\$9,556	\$4,778	\$31.48
8509006NV-D55	150	\$3,677	\$915	\$3,644	\$38	\$8,274	\$4,137	\$16.37
880344NV-C87	300	\$6,037	\$2,493	\$7,483	\$38	\$16,051	(\$11,267)	\$51.38
8305374NV-169	200	\$3,643	\$1,562	\$4,093	\$38	\$9,336	\$1,568	\$51.38
8803044NV-797	75	\$980	\$456	\$1,823	\$38	\$3,297	\$569	\$51.38
7433294NV-FC6	150	\$2,779	\$1,162	\$3,375	\$38	\$7,353	(\$3,071)	\$51.38
743331NV-CBF	150	\$3,908	\$1,476	\$4,132	\$38	\$9,554	(\$2,371)	\$51.38
900330NV-399	500	\$18,985	\$6,218	\$15,914	\$38	\$41,156	\$20,578	\$12.74
740373NV-C7F	200	\$4,622	\$1,335	\$4,638	\$38	\$10,633	\$5,316	\$23.87
721862NV-A61	50	\$1,413	\$400	\$1,844	\$38	\$3,695	\$1,848	\$16.47
8803601NV-E7B	150	\$4,347	\$1,861	\$4,360	\$38	\$10,606	(\$9,549)	\$51.38
8548111NV-903	75	\$1,871	\$798	\$2,908	\$38	\$5,615	(\$2,523)	\$51.38
734326NV-501	200	\$2,467	\$955	\$4,497	\$38	\$7,958	\$153	\$51.38
734325NV-9C1	150	\$792	\$301	\$2,865	\$38	\$3,996	(\$236)	\$51.38
9003114NV-B53	50	\$1,501	\$425	\$1,788	\$38	\$3,752	\$1,876	\$16.69
734165NV-163	750	\$15,204	\$4,490	\$17,043	\$38	\$36,775	\$18,388	\$19.43
8541431NVDF3	150	\$2,292	\$980	\$2,883	\$38	\$6,192	\$1,695	\$51.38
722703NV-43B	200	\$2,893	\$1,237	\$3,903	\$38	\$8,071	\$2,346	\$51.38
90030815NV-060	500	\$1,080	\$665	\$8,398	\$38	\$10,181	\$5,090	\$36.51
734846NV-9FF	50	\$320	\$184	\$1,054	\$38	\$1,597	\$1,169	\$51.38
900356NV-DE6	300	\$6,295	\$2,608	\$6,678	\$38	\$15,620	(\$6,309)	\$51.38
8665558NV-6AF	200	\$3,443	\$1,031	\$4,236	\$38	\$8,749	\$4,374	\$29.50



ICP Number	Contract Capacity kVA	Trans Power Charge	Subtransmission Charge	Distribution Charge	PowerNet Charge	Total Line Charge	Fixed Charge per annum	Variable Charge per Day MWh
8803767NV-900	150	\$4,155	\$1,709	\$4,529	\$38	\$10,432	(\$9,319)	\$51.38
880360NV-0D8	150	\$4,269	\$1,663	\$4,998	\$38	\$10,968	(\$10,292)	\$51.38
740394NV-B0F	200	\$3,222	\$1,235	\$4,921	\$38	\$9,416	(\$5,471)	\$51.38
9003071NV-0E8	300	\$13,984	\$4,760	\$9,018	\$38	\$27,800	\$13,900	\$14.15
8509026NV-000	500	\$6,812	\$2,339	\$10,142	\$38	\$19,332	\$9,666	\$17.53
7551948NV-7E0	300	\$6,645	\$1,921	\$6,661	\$38	\$15,265	\$7,632	\$23.91
7301627NV-AD2	100	\$2,353	\$673	\$2,215	\$38	\$5,279	\$2,639	\$24.53
9003385NV-2F6	150	\$4,896	\$1,322	\$3,781	\$38	\$10,037	\$5,018	\$19.77
9003117NV-793	300	\$8,890	\$3,642	\$7,192	\$38	\$19,762	\$9,881	\$21.99
7403085NV-205	200	\$5,418	\$1,412	\$4,810	\$38	\$11,679	\$5,839	\$22.88
900305NV-92E	750	\$6,094	\$2,136	\$14,601	\$38	\$22,868	\$11,434	\$34.33
900306NV-5EE	750	\$6,179	\$2,261	\$13,852	\$38	\$22,329	\$11,165	\$38.73
744103NV-5A5	750	\$12,280	\$3,755	\$16,325	\$38	\$32,398	\$16,199	\$19.40
734318NV-162	300	\$2,832	\$618	\$5,549	\$38	\$9,037	\$4,519	\$23.63
734470NV-384	300	\$1,187	\$442	\$5,189	\$38	\$6,855	\$2,081	\$51.38
754696NV-0EE	100	\$2,491	\$1,001	\$2,928	\$38	\$6,459	\$3,229	\$17.57
831121NV-B96	300	\$1,199	\$647	\$5,044	\$38	\$6,927	\$3,464	\$37.21
754690NV-161	150	\$2,136	\$954	\$2,596	\$38	\$5,724	\$4,915	\$51.38
9003083NV-07A	500	\$20,338	\$5,208	\$12,520	\$38	\$38,103	\$19,052	\$23.14
900313NV-20C	300	\$1,321	\$895	\$5,231	\$38	\$7,485	\$3,742	\$22.88
880314NV-48F	300	\$4,148	\$1,129	\$5,891	\$38	\$11,206	\$5,603	\$23.10
880363NV-C18	200	\$3,879	\$1,339	\$4,740	\$38	\$9,997	\$4,998	\$19.68
880302NV-FAD	150	\$3,575	\$985	\$3,766	\$38	\$8,364	\$4,182	\$14.76
8803047NV-B57	150	\$3,076	\$1,156	\$3,463	\$38	\$7,734	\$3,867	\$23.48
73015753NV-A0E	150	\$3,935	\$1,161	\$3,690	\$38	\$8,823	\$4,411	\$19.95
900337NV-E53	100	\$1,223	\$415	\$1,984	\$38	\$3,659	\$1,830	\$27.46
7301164NV-BB5	150	\$3,068	\$1,465	\$3,911	\$38	\$8,482	\$4,241	\$13.68
8803625NV-224	100	\$1,522	\$440	\$2,146	\$38	\$4,146	\$2,073	\$18.03
9003212NV-9DF	100	\$2,706	\$669	\$2,386	\$38	\$5,799	\$2,899	\$19.57
7301102NV-5CA	100	\$1,217	\$308	\$1,986	\$38	\$3,548	\$1,774	\$24.52
7301908NV-756	75	\$3,543	\$1,060	\$3,435	\$38	\$8,077	\$4,038	\$17.18
880308NV-D3C	75	\$2,815	\$883	\$3,138	\$38	\$6,874	\$3,437	\$16.41
8803164NV-3C6	75	\$3,709	\$910	\$3,320	\$38	\$7,978	\$3,989	\$20.98
8803165NV-F83	50	\$1,941	\$451	\$1,869	\$38	\$4,299	\$2,149	\$20.06
9003603NV-336	300	\$11,741	\$3,777	\$8,330	\$38	\$23,885	\$11,943	\$18.59
9003051NV-DBD	300	\$15,956	\$4,209	\$8,980	\$38	\$29,182	\$14,591	\$19.93
7757907NV-783	300	\$10,380	\$3,381	\$7,312	\$38	\$21,111	\$10,556	\$24.57
7757994NV-4A4	200	\$3,874	\$1,171	\$4,259	\$38	\$9,342	\$4,671	\$31.82
744610NV-CCA	150	\$3,202	\$1,250	\$3,526	\$38	\$8,016	(\$1,204)	\$51.38
880336NV-95F	300	\$11,443	\$4,678	\$9,204	\$38	\$25,364	(\$16,013)	\$51.38
880303NV-3E8	300	\$3,875	\$1,161	\$5,953	\$38	\$11,027	\$5,514	\$18.62
880321NV-E38	200	\$4,378	\$1,330	\$4,846	\$38	\$10,591	\$5,296	\$18.07
8665382NV-F7A	150	\$5,867	\$2,531	\$4,539	\$38	\$12,976	(\$5,381)	\$51.38
721876NV-1C6	200	\$916	\$551	\$3,681	\$38	\$5,185	\$2,593	\$26.25



ICP Number	Contract Capacity kVA	Trans Power Charge	Subtransmission Charge	Distribution Charge	PowerNet Charge	Total Line Charge	Fixed Charge per annum	Variable Charge per Day MWh
750191NV-4A6	150	\$2,647	\$1,055	\$3,641	\$38	\$7,381	(\$3,119)	\$51.38
880317NV-84F	300	\$3,342	\$1,209	\$5,559	\$38	\$10,148	\$5,074	\$27.87
9003244NV-058	300	\$8,426	\$2,480	\$7,718	\$38	\$18,663	\$9,332	\$15.23
7447592NV-D72	150	\$2,182	\$526	\$3,001	\$38	\$5,746	\$2,873	\$25.68
7350104NV-691	75	\$980	\$241	\$1,906	\$38	\$3,165	\$1,583	\$36.78
743312NV-D2A	150	\$3,661	\$1,501	\$3,589	\$38	\$8,789	(\$2,188)	\$51.38
8665408NV-7A3	150	\$2,784	\$1,197	\$2,905	\$38	\$6,924	\$2,425	\$51.38
9003243NV-D92	200	\$4,969	\$2,202	\$5,475	\$38	\$12,683	(\$9,154)	\$51.38
880361NV-C9D	500	\$17,342	\$5,095	\$13,774	\$38	\$36,249	\$18,125	\$15.93
7302979NV-CAE	150	\$5,086	\$2,038	\$4,156	\$38	\$11,317	(\$2,936)	\$51.38
744655NV-320	200	\$3,978	\$1,090	\$4,827	\$38	\$9,933	\$4,966	\$18.54
7341276NV-90B	200	\$2,932	\$796	\$4,203	\$38	\$7,968	\$3,984	\$21.82
7341272NV-801	150	\$2,646	\$592	\$3,166	\$38	\$6,442	\$3,221	\$25.54
880316NV-40A	300	\$4,533	\$1,204	\$5,894	\$38	\$11,669	\$5,835	\$30.68
900325NV-47B	500	\$24,545	\$7,657	\$17,443	\$38	\$49,683	\$24,842	\$13.30
8803034NV-2CA	200	\$2,703	\$796	\$4,241	\$38	\$7,779	\$3,890	\$22.36
8509962NV-AA6	75	\$1,093	\$281	\$2,094	\$38	\$3,506	\$1,753	\$23.55
7317032NV-617	200	\$5,997	\$1,935	\$5,284	\$38	\$13,254	\$6,627	\$19.22
9003573NV-568	200	\$5,710	\$2,355	\$5,003	\$38	\$13,106	(\$1,577)	\$51.38
880375NV-73A	300	\$3,669	\$1,625	\$5,127	\$38	\$10,459	\$2,659	\$51.38
880309NV-179	300	\$5,467	\$1,617	\$6,452	\$38	\$13,574	\$6,787	\$19.44
8144266NV-0A8	200	\$1,878	\$772	\$4,135	\$38	\$6,823	\$3,411	\$19.82
880329NV-C2C	1000	\$28,218	\$10,102	\$31,493	\$38	\$69,851	\$34,925	\$17.24
7406951NV-064	50	\$2,879	\$511	\$2,024	\$38	\$5,452	\$2,726	\$24.78
7205085NV-6A2	100	\$2,364	\$929	\$2,765	\$38	\$6,096	(\$5,318)	\$51.38
8305967NV-D0E	750	\$3,300	\$868	\$13,051	\$38	\$17,257	\$8,629	\$60.71
730158NV-F40	50	\$1,095	\$442	\$1,861	\$38	\$3,436	(\$1,704)	\$51.38
7501996NV-A4D	150	\$1,158	\$484	\$3,093	\$38	\$4,773	(\$1,327)	\$51.38
7341792NV-7BE	200	\$3,720	\$925	\$4,439	\$38	\$9,122	\$4,561	\$20.15
9003235NV-940	500	\$17,374	\$5,324	\$13,062	\$38	\$35,799	\$17,899	\$20.54
7229001NV-0AF	200	\$2,014	\$808	\$4,000	\$38	\$6,861	\$3,430	\$27.60
880397NV-D05	1000	\$3,836	\$1,076	\$22,197	\$38	\$27,147	\$13,574	\$41.14
880398NV-2DB	500	\$1,810	\$491	\$8,240	\$38	\$10,579	\$5,290	\$37.71
722709NV-6AA	500	\$554	\$627	\$7,979	\$38	\$9,198	\$4,599	\$47.17
724187NV-3BD	150	\$2,538	\$974	\$3,740	\$38	\$7,290	(\$5,244)	\$51.38
754608NV-C92	50	\$554	\$252	\$1,114	\$38	\$1,959	\$782	\$51.38
760737NV-A1C	500	\$12,148	\$4,233	\$10,653	\$38	\$27,072	\$13,536	\$30.76
9003082NV-C3F	75	\$3,786	\$969	\$3,305	\$38	\$8,098	\$4,049	\$19.89
836516NV-9C5	200	\$471	\$196	\$3,528	\$38	\$4,233	\$1,828	\$51.38
9003995NV-251	300	\$4,571	\$1,949	\$6,350	\$38	\$12,908	(\$3,315)	\$51.38
825292NV-886	500	\$11,582	\$4,335	\$10,988	\$38	\$26,943	\$13,471	\$23.75
900384NV-021	500	\$14,999	\$4,742	\$12,617	\$38	\$32,396	\$16,198	\$19.35
7302313NV-BC5	75	\$988	\$563	\$2,130	\$38	\$3,720	\$1,860	\$32.63
900383NV-DEB	500	\$5,131	\$1,877	\$8,854	\$38	\$15,900	\$7,950	\$48.29



ICP Number	Contract Capacity kVA	Trans Power Charge	Subtransmission Charge	Distribution Charge	PowerNet Charge	Total Line Charge	Fixed Charge per annum	Variable Charge per Day MWh
730262NV-92A	100	\$1,523	\$697	\$1,811	\$38	\$4,068	\$2,405	\$51.38
7350005NV-3D0	75	\$931	\$406	\$1,977	\$38	\$3,353	\$563	\$51.38
734360NV-62B	75	\$2,188	\$951	\$3,518	\$38	\$6,695	(\$5,927)	\$51.38
735249NV-D8B	200	\$2,008	\$882	\$3,916	\$38	\$6,844	\$540	\$51.38
9003053NV-D38	300	\$9,370	\$4,201	\$7,725	\$38	\$21,334	\$10,667	\$20.35
850908NV-B67	750	\$20,761	\$6,579	\$20,296	\$38	\$47,674	\$23,837	\$15.26
734110NV-971	300	\$5,312	\$1,682	\$6,026	\$38	\$13,059	\$6,529	\$22.32
7501257NV-2E9	150	\$1,207	\$489	\$2,911	\$38	\$4,645	\$996	\$51.38
7350693NV-BBE	75	\$769	\$343	\$1,917	\$38	\$3,067	\$281	\$51.38
7447181NV-71E	75	\$1,030	\$286	\$2,146	\$38	\$3,500	\$1,750	\$20.92
900358NV-E7D	200	\$3,795	\$1,599	\$4,199	\$38	\$9,630	\$1,859	\$51.38
734460NV-929	200	\$7,313	\$1,407	\$5,088	\$38	\$13,846	\$6,923	\$22.05
724179NV-031	100	\$671	\$205	\$1,783	\$38	\$2,697	\$1,349	\$39.95
8425758NV-FE5	150	\$5,858	\$1,936	\$4,219	\$38	\$12,051	\$6,025	\$21.12
7302953NV-36A	300	\$4,028	\$990	\$5,716	\$38	\$10,772	\$5,386	\$24.41
880330NV-8D0	200	\$6,084	\$2,036	\$5,311	\$38	\$13,470	\$6,735	\$18.00
900351NV-02C	200	\$6,045	\$1,816	\$5,873	\$38	\$13,772	\$6,886	\$14.23
7341793NV-BFB	100	\$2,594	\$632	\$2,339	\$38	\$5,603	\$2,802	\$20.35
734188NV-482	300	\$14,310	\$3,695	\$8,814	\$38	\$26,856	\$13,428	\$18.08
800449NV-3FB	75	\$1,333	\$559	\$2,301	\$38	\$4,230	(\$1,444)	\$51.38
900308NV-675	1250	\$9,320	\$4,096	\$29,818	\$38	\$43,272	\$21,636	\$35.16
8305981NV-63B	500	\$13,576	\$3,912	\$10,972	\$38	\$28,497	\$14,249	\$28.42
832431NV-6DE	1000	\$4,892	\$976	\$19,259	\$38	\$25,165	\$12,583	\$67.44
8305375NV-D2C	100	\$1,363	\$315	\$1,813	\$38	\$3,529	\$1,764	\$36.76
760735NV-A99	150	\$3,062	\$1,004	\$3,105	\$38	\$7,209	\$3,605	\$34.21
900319NV-09D	200	\$5,992	\$2,295	\$6,120	\$38	\$14,445	(\$9,621)	\$51.38
740630NV-71F	150	\$4,905	\$1,566	\$3,912	\$38	\$10,420	\$5,210	\$25.29
9003193NV-3D3	200	\$3,101	\$1,360	\$3,668	\$38	\$8,166	\$5,060	\$51.38
744586NV-1A1	150	\$2,418	\$1,054	\$2,801	\$38	\$6,311	\$2,459	\$51.38
744502NV-5E1	200	\$2,236	\$969	\$3,634	\$38	\$6,878	\$4,199	\$51.38
744592NV-A06	200	\$2,141	\$931	\$3,662	\$38	\$6,772	\$3,717	\$51.38
731881NV-4FA	200	\$4,114	\$1,719	\$4,466	\$38	\$10,337	(\$638)	\$51.38
8509025NV-CC0	300	\$9,785	\$2,955	\$8,012	\$38	\$20,789	\$10,395	\$14.17
8803032NV-345	150	\$3,724	\$810	\$3,440	\$38	\$8,013	\$4,006	\$23.92
900342NV-641	100	\$6,017	\$1,717	\$3,292	\$38	\$11,064	\$5,532	\$18.24
744608NV-473	300	\$7,994	\$2,463	\$7,000	\$38	\$17,495	\$8,747	\$18.47
933534NV-759	200	\$613	\$6,278	\$3,988	\$38	\$10,917	\$5,459	\$15.93
931777NV-07B	750	\$21,076	\$34,922	\$18,477	\$38	\$74,513	\$37,256	\$18.84
931775NV-0FE	150	\$2,122	\$3,699	\$2,316	\$38	\$8,175	\$6,089	\$51.38
930503NV-F8B	100	\$1,006	\$2,725	\$1,661	\$38	\$5,430	\$2,715	\$47.51
930505NV-E04	150	\$3,761	\$6,104	\$3,608	\$38	\$13,511	(\$2,803)	\$51.38
920755NV-4EA	150	\$3,478	\$6,394	\$3,650	\$38	\$13,560	\$6,780	\$19.09
931776NV-C3E	150	\$2,968	\$4,893	\$2,861	\$38	\$10,759	\$1,397	\$51.38
930921NV-E57	200	\$2,283	\$3,769	\$3,443	\$38	\$9,534	\$2,846	\$51.38



ICP Number	Contract Capacity kVA	Trans Power Charge	Subtransmission Charge	Distribution Charge	PowerNet Charge	Total Line Charge	Fixed Charge per annum	Variable Charge per Day MWh
931326NV-837	150	\$1,375	\$2,328	\$2,438	\$38	\$6,179	\$3,180	\$51.38
9406013NV-102	500	\$12,757	\$15,753	\$10,000	\$38	\$38,548	\$19,274	\$24.49
9406011NV-187	500	\$11,006	\$18,084	\$10,540	\$38	\$39,668	\$19,834	\$21.46
9408016NV-48D	1750	\$37,310	\$76,845	\$37,879	\$38	\$152,072	\$76,036	\$23.05
931706NV-963	30	\$78	\$143	\$459	\$38	\$718	\$611	\$51.38
931760NV-71C	150	\$2,241	\$3,707	\$2,563	\$38	\$8,548	\$3,774	\$51.38
934525NV-5D1	150	\$1,122	\$1,878	\$2,490	\$38	\$5,528	\$2,364	\$51.38



## 10.2 Line Charge Breakdown for Group Customers

Consumer Capacity	Code	Number of Connections	TransPower Charge	Sub transmission Charge	Distribution Charge	PowerNet Overheads	Fixed Charge per Day	Variable Charge per Day MWh Sales
<b>Domestic</b>								
Small Domestic (8kVA 1 Phase) - All Peak	ND08P	13	\$1,130	\$492	\$3,131	\$495	\$0.4793	\$51.38
Small Domestic (8kVA 1 Phase) - With Off Peak	ND08Q	185	\$13,399	\$5,997	\$35,789	\$7,042	\$0.3334	\$51.38
Standard Domestic (20kVA 1 Phase) - All Peak	ND20P	551	\$95,811	\$41,742	\$271,763	\$20,975	\$0.8857	\$51.38
Standard Domestic (20kVA 1 Phase) - With Off Peak	ND20Q	11579	\$1,677,305	\$750,738	\$4,701,038	\$440,777	\$0.6148	\$51.38
10% Fixed Charge Option - All Peak	NDL20P	102	\$13,564	\$6,187	\$17,112	\$3,883	\$0.1500	\$87.08
10% Fixed Charge Option - With Off Peak	NDL20Q	1577	\$176,194	\$81,615	\$192,183	\$60,032	\$0.00	\$87.08
10% Fixed Charge Option (8kVA 1 Phase) - All Peak	NDL08P	1	\$83	\$36	\$177	\$38	\$0.1500	\$70.51
10% Fixed Charge Option (8kVA 1 Phase) - With Off Peak	NDL08Q	27	\$1,866	\$840	\$3,337	\$1,028	\$0.00	\$70.51
<b>Non-Domestic Single Phase</b>								
Street Lights (1 Phase)	NS001L	4221	\$17,000	\$7,520	\$122,795	\$3,772	\$0.0730	\$51.38
1 kVA 1 Phase - All Peak	NS001P	34	\$3,160	\$1,300	\$10,956	\$1,294	\$0.3439	\$51.38
8 kVA 1 Phase - All Peak	NS008P	124	\$10,781	\$4,697	\$29,869	\$4,720	\$0.4793	\$51.38
8 kVA 1 Phase - With Off Peak	NS008Q	14	\$1,014	\$454	\$2,708	\$533	\$0.3334	\$51.38
20 kVA 1 Phase - All Peak	NS020P	317	\$55,122	\$24,015	\$156,350	\$12,067	\$0.8857	\$51.38
20 kVA 1 Phase - With Off Peak	NS020Q	127	\$18,397	\$8,234	\$51,562	\$4,835	\$0.6148	\$51.38
<b>Non-Domestic Three Phase</b>								
15 kVA 3 Phase - All Peak	NT015P	49	\$7,988	\$3,480	\$20,923	\$1,865	\$0.7399	\$51.38
15 kVA 3 Phase - With Off Peak	NT015Q	7	\$951	\$425	\$2,400	\$266	\$0.4793	\$51.38
30 kVA 3 Phase - All Peak	NT030P	473	\$153,691	\$68,382	\$301,729	\$18,006	\$1.2400	\$51.38
30 kVA 3 Phase - With Off Peak	NT030Q	150	\$40,759	\$18,533	\$78,712	\$5,710	\$0.8440	\$51.38
50 kVA 3 Phase - All Peak	NT050P	260	\$189,362	\$83,120	\$422,788	\$9,897	\$2.5321	\$51.38
50 kVA 3 Phase - With Off Peak	NT050Q	81	\$49,212	\$22,151	\$112,257	\$3,083	\$1.7193	\$51.38
75 kVA 3 Phase - All Peak	NT075P	98	\$122,354	\$54,439	\$266,371	\$3,731	\$5.1996	\$51.38
75 kVA 3 Phase - With Off Peak	NT075Q	14	\$14,617	\$6,647	\$32,500	\$533	\$3.7825	\$51.38
100 kVA 3 Phase - All Peak	NT100P	51	\$101,377	\$45,106	\$185,488	\$1,941	\$6.3249	\$51.38
100 kVA 3 Phase - With Off Peak	NT100Q	7	\$11,636	\$5,291	\$22,357	\$266	\$4.5848	\$51.38
<b>EIL Bluff</b>								
<b>Domestic</b>								
Small Domestic (8kVA 1 Phase) - All Peak	BD08P	3	\$261	\$489	\$347	\$114	\$0.4793	\$51.38
Small Domestic (8kVA 1 Phase) - With Off Peak	BD08Q	7	\$507	\$967	\$614	\$266	\$0.3334	\$51.38
Standard Domestic (20kVA 1 Phase) -	BD20P	132	\$22,953	\$43,049	\$32,056	\$5,025	\$0.8857	\$51.38



Consumer Capacity	Code	Number of Connections	TransPower Charge	Sub transmission Charge	Distribution Charge	PowerNet Overheads	Fixed Charge per Day	Variable Charge per Day MWh Sales
All Peak								
Standard Domestic (20kVA 1 Phase) - With Off Peak	BD20Q	599	\$86,770	\$165,566	\$116,463	\$22,802	\$0.6148	\$51.38
10% Fixed Charge Option - All Peak	BDL20P	44	\$5,851	\$11,763	-\$1,712	\$1,675	\$0.1500	\$87.08
10% Fixed Charge Option - With Off Peak	BDL20Q	73	\$8,156	\$16,562	-\$3,888	\$2,779	\$0.00	\$87.08
10% Fixed Charge Option (8kVA 1 Phase) - All Peak	BDL08P	1	\$83	\$157	\$56	\$38	\$0.1500	\$70.51
10% Fixed Charge Option (8kVA 1 Phase) - With Off Peak	BDL08Q	1	\$69	\$133	\$21	\$38	\$0.00	\$70.51
<b>Non-Domestic Single Phase</b>								
Street Lights (1 Phase)	BS001L	352	\$1,417.70	\$2,721.37	\$7,941.15	\$519.36	\$0.0730	\$51.38
1 kVA 1 Phase - All Peak	BS001P	1	\$92.95	\$159.50	\$200.98	\$38.07	\$0.3439	\$51.38
8 kVA 1 Phase - All Peak	BS008P	10	\$869.43	\$1,630.64	\$1,156.93	\$380.67	\$0.4793	\$51.38
8 kVA 1 Phase - With Off Peak	BS008Q	1	\$72.43	\$138.20	\$87.67	\$38.07	\$0.3334	\$51.38
20 kVA 1 Phase - All Peak	BS020P	29	\$5,042.70	\$9,457.72	\$7,042.51	\$1,103.94	\$0.8857	\$51.38
20 kVA 1 Phase - With Off Peak	BS020Q	3	\$434.57	\$829.21	\$583.29	\$114.20	\$0.6148	\$51.38
<b>Non-Domestic Three Phase</b>								
15 kVA 3 Phase - All Peak	BT015P	3	\$489	\$917	\$577	\$114	\$0.7399	\$51.38
15 kVA 3 Phase - With Off Peak	BT015Q	1	\$136	\$259	\$144	\$38	\$0.4793	\$51.38
30 kVA 3 Phase - All Peak	BT030P	38	\$12,347	\$23,912	\$5,822	\$1,447	\$1.2400	\$51.38
30 kVA 3 Phase - With Off Peak	BT030Q	7	\$1,902	\$3,736	\$803	\$266	\$0.8440	\$51.38
50 kVA 3 Phase - All Peak	BT050P	13	\$9,468	\$17,963	\$7,333	\$495	\$2.5321	\$51.38
50 kVA 3 Phase - With Off Peak	BT050Q	4	\$2,430	\$4,685	\$1,952	\$152	\$1.7193	\$51.38
75 kVA 3 Phase - All Peak	BT075P	9	\$11,237	\$21,761	\$7,701	\$343	\$5.1996	\$51.38
75 kVA 3 Phase - With Off Peak	BT075Q	1	\$1,044	\$2,050	\$746	\$38	\$3.7825	\$51.38
100 kVA 3 Phase - All Peak	BT100P	3	\$5,963	\$11,549	\$2,016	\$114	\$6.3249	\$51.38
100 kVA 3 Phase - With Off Peak	BT100Q	1	\$1,662	\$3,265	\$685	\$38	\$4.5848	\$51.38