POWERNET
LINE PRICING METHODOLOGY
FOR THE POWER COMPANY LIMITED NETWORK
AS AT 1 APRIL 2004

1. INTRODUCTION

1.1 PowerNet Limited (PNL) has a responsibility for the management of the network assets owned by The Power Company Limited (TPCL).

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

(a) Transmission Grid Asset Management costs (Trans Power)
(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

1.3 The derivation of the line charges is based on six 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 week day between June and August inclusive)
(c) The Winter Peak energy MWh (0700-1100 hours and 1700-2100 hours, each week day 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

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 110kVA = 36%
Between 110kVA and 3000kVA = ramp function from 40% - 95%
Above 3000kVA = 95%.

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 50kVA = 30%
For connections between 51kVA and 100kVA = 30% - 75%
For connections between 101kVA and 2500kVA = ramp function from 75% - 95%
For connections above 2500kVA = 95%.

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.

In most cases these installations have contract capacities in excess of 100kVA. Due to their size, these consumers have a higher impact on the network design and operation and therefore their geographic location is taken into account when calculating their individual line charges. This also provides a signal for future investment and through the correct pricing, discourages network by-pass. In the case of these consumers, there are also individual calculated or estimated loss factors.

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.

The group consumer segments are divided into two areas taking into account the types of reticulation involved in their supply. These distinct groupings are classed as urban and rural.

The urban areas are defined areas within Southland including all the small townships and city areas.

The remaining areas are classified as rural and there is a price cap on the fixed charge component of the line charge.

Rate of Return

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

1) Supply
2) Maintenance

The "supply" part is based on the depreciation (based on the forecast for the financial year) of the network assets and the cost of capital required to fund the assets. The Power Company Limited requires a "Use Charge (lease charge) for its assets from PowerNet (the asset manager). This Use Charge includes the allowance for depreciation for its assets and its required gross return. This is not the net return on investment but the gross return before expenses and tax. As it is a consumer trust, the required gross return is presently comparatively low as most of the consumer shareholders receive an implicit benefit in the way of reduced line charges.

To avoid distortion, to allow a consistent cross subsidization benefiting rural consumers and to ensure the correct signals are sent to the larger industrial and commercial customers, the letters' line charges are based on a Use Charge which reflects the depreciation and a more commercial gross return on the assets used to supply those installations. The gross return in this case is 9.17% for the line charges. For all other smaller consumer groups the implicit benefit is higher and hence the gross return is significantly lower.

The ODV for The Power Company network is $217 million. The overall Use Charge which is made up of depreciation and gross return is $12.69 million. The $12.69 million is split $9.48million depreciation and a gross return of $3.21 million, the latter equating to an overall ROI for The Power Company of 1.48%.

The Power Company requires a commercial return from the individual customers therefore the Use Charge used to calculate their line charges is based on a gross return of 9.17% before expenses and tax. This is made up of depreciation of $6.92 million on the assets used by this group of customers ($156.42 million ODV) and an associated gross return of $12.98 million.

The Power Company requires a lesser gross return from the group customers, the use charge used to calculated their line charges is $12.69 million. This use charge is made up of $9.48 million depreciation and a gross return of $3.21 million.

The "maintenance" part is based on the 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 sub transmission 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, ie 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	Contract Capacity kVA	Peak Demand Reading kVA	Total Energy Reading MWh	Winter Peak Reading MWh	Winter Day Reading MWh	Summer Day Reading MWh
396516TP-CB8	300	164	168	38	76	90
396517TP-0FD	200	154	419	52	140	161
800105TP-315	10000	10,975	37,569	3,136	7,819	18,461
800116TP-578	6000	1,667	7,697	766	2,017	3,453
800134TP-8A8	5000	4,930	16,637	1,409	3,457	8,187
8001365TP-9E5	750	576	2,717	286	751	1,174
800127TP-EC5	500	234	742	104	288	215
800139TP-7F3	300	243	469	65	149	221
800107TP-390	200	146	590	24	67	343

800118TP-6E3	150	150	270	36	81	162
800128TP-11B	100	100	220	39	78	87
8001281TP-B51	100	90	79	14	27	32
8001275TP-A4C	75	75	446	85	192	174
118447TP-ECC	150	135	196	20	51	96
800146TP-D70	22000	16,000	58,416	4,306	9,330	28,598
502013TP-4D1	150	135	62	8	17	30
304798TP-4EA	300	152	110	20	45	42
800186TP-A9F	750	691	1,722	61	169	1,152
8001708TP-54F	500	256	397	36	93	267
1819183TP-528	150	63	134	25	55	48
482021TP-8E5	150	150	180	30	75	60
100109TP-F16	100	94	150	26	63	56
800158TP-446	3500	3,251	10,613	1,449	3,461	4,410
8001315TP-CB8	1500	992	4,638	427	1,054	2,218
437074TP-48B	1000	747	1,958	378	791	940
437078TP-795	1000	508	2,521	272	756	930
4370715TP-029	500	274	373	77	145	187
800155TP-B1D	300	311	2,380	238	670	909
8001875TP-046	200	9	1	1	0	0
5678995TP-502	200	105	276	24	84	66
800133TP-562	4500	170	430	43	115	195
141326TP-DAF	200	113	600	56	161	252
800163TP-D6A	300	161	493	53	123	227
444030TP-F7D	200	190	350	61	144	116
549615TP-72D	150	77	325	42	112	107
800124TP-205	1000	896	4,913	559	1,384	1,820
556470TP-E14	300	273	1,133	138	344	399
556472TP-E91	150	131	154	8	17	94
240526TP-6BD	150	123	301	43	101	135
8001505TP-013	300	87	296	30	81	121
5290993TP-D4F	150	107	128	26	55	47
221318TP-720	150	135	114	22	49	44
5791954TP-B19	150	27	115	13	36	48
8001815TP-FB6	1750	901	3,033	488	937	1,206
8001801TP-411	1000	896	5,088	528	1,440	1,947
800181TP-755	500	316	791	124	269	344
579155TP-BA6	150	135	123	31	95	16
314914TP-C54	200	200	254	48	109	99
4004001TP-401	150	54	86	10	27	29
5672985TP-1EF	100	85	46	7	18	17
313732TP-2E5	200	185	175	13	46	116
362484TP-9C2	200	208	545	78	205	231
404955TP-F5E	100	89	94	15	40	36

405545TP-85F	300	145	229	21	55	128
405508TP-5A1	200	111	374	35	97	164
405350TP-9BB	150	89	263	22	56	137
800153TP-A92	500	150	138	18	50	73
8001305TP-615	30	44	145	19	51	55
116195TP-ECE	150	150	284	35	87	125
5791985TP-A1E	150	135	105	14	36	44
110146TP-A8C	200	94	110	16	38	61
241126TP-B1C	150	150	287	53	132	83
166724TP-C86	300	375	1,600	165	441	636
690224TP-CD4	150	41	133	15	41	45
250351TP-0CD	300	153	525	74	184	193
177096TP-8F2	150	163	302	49	122	113
800151TP-A17	100	48	159	18	46	74
181105TP-28D	150	135	31	5	11	12
240375TP-473	150	135	277	38	96	113
8001245TP-DB4	500	584	380	46	146	229
517704TP-375	150	135	116	16	39	48
637250TP-A0B	500	200	853	11	30	650
1819179TP-7AE	150	112	290	40	113	152
625837TP-99A	150	160	163	32	85	77
800114TP-5FD	500	231	1,564	147	407	638
556467TP-973	500	300	1,339	144	403	534
800103TP-29A	300	88	407	43	106	172
569640TP-BA7	200	102	124	14	37	48
800130TP-9A2	300	389	1,550	194	502	656
568791TP-204	100	71	262	30	88	110
521003TP-551	75	60	256	31	86	114
564570TP-57C	50	31	92	10	29	38
5791016TP-030	50	34	128	14	41	56
181975TP-7DD	150	123	391	52	154	195
400440TP-B34	100	44	137	12	31	50
418284TP-E36	500	419	442	97	194	215
4182832TP-1BD	200	192	427	61	140	178
4182836TP-0B7	150	189	867	90	256	330
530906TP-856	300	191	420	61	155	120
800164TP-0A0	500	191	876	89	224	429
405190TP-453	150	90	194	16	40	106
319736TP-DAF	200	150	375	3	5	261
180710TP-2C9	150	150	160	30	68	84
8001695TP-CF7	500	371	1,916	226	556	827
800147TP-135	150	115	504	64	162	212
800150TP-652	100	90	118	16	41	48
142817TP-7FC	150	135	91	13	31	38

589190TP-49A	150	157	175	30	73	67
116167TP-E5C	150	135	123	20	48	44
118468TP-C47	100	90	238	33	82	93
1015827TP-5C5	150	98	144	22	54	55
190101TP-AC6	150	135	255	36	90	101
800169TP-FFB	150	116	533	54	136	236
249945TP-521	150	37	320	18	50	210
364828TP-B0F	150	37	100	12	35	60
110197TP-B8B	150	127	214	25	74	125
426599TP-D2E	500	187	779	87	240	345
192544TP-A6D	300	175	913	102	276	400
192519TP-D3E	150	120	194	5	10	12
1186119TP-9E7	200	308	329	57	155	150
118615TP-C46	200	208	593	72	204	213
1186118TP-5A2	200	120	697	62	193	283
543645TP-165	200	190	84	12	31	32
6204408TP-3FB	750	566	2,093	281	714	733
6204407TP-C25	500	420	1,541	161	434	610
6204405TP-CA0	300	182	188	34	75	84
6204404TP-0E5	1000	800	1,500	270	496	651
204735TP-7C2	50	118	130	19	51	48
525441TP-DF0	150	135	28	5	10	12
633604TP-988	200	65	211	33	66	92
3330513TP-914	150	150	375	3	5	261
615269TP-92F	300	258	307	56	149	142
800152TP-6D7	1000	911	3,355	223	548	1,880
800170TP-B07	750	657	1,553	167	386	589
642956TP-513	200	141	369	44	111	122
625880TP-6E2	200	81	232	27	72	93
800104TP-F50	500	429	1,549	176	436	715
8001045TP-7B3	500	325	1,366	174	398	610
5791226TP-DCF	300	84	402	34	93	133
549325TP-5D0	500	143	640	75	214	225
643847TP-B5F	500	336	654	126	310	222
6438485TP-221	200	70	73	14	31	28
6438465TP-89B	500	336	610	125	250	222
157641TP-7B1	150	135	62	12	26	24
800132TP-927	100	27	222	22	61	87
632751TP-46B	150	48	91	16	42	25
800113TP-837	100	92	406	44	119	155
579184TP-AA1	100	33	223	10	21	23
568266TP-ADC	500	517	1,472	121	319	387
5682737TP-04F	300	104	240	11	40	56
300360TP-C68	75	20	6	1	2	3

405769TP-C13	200	100	222	15	36	130
617670TP-292	750	375	780	137	303	350
112267TP-BDF	150	135	101	15	20	68
800171TP-742	1500	1,138	1,648	215	594	721
632798TP-DD5	100	49	97	8	17	53
634528TP-0A0	30	6	37	3	9	18
176643TP-F59	150	150	20	3	7	8
800121TP-F4A	750	855	3,764	469	1,210	1,608
482074TP-DA2	200	150	110	21	52	57
800125TP-E40	2000	1,779	6,407	721	1,639	2,973
8001011TP-EB1	300	279	653	71	212	267
400495TP-B39	200	96	653	34	92	170
800120TP-30F	30	30	20	3	8	10
595728TP-15B	500	260	135	23	47	72
184621TP-6F0	50	45	77	15	33	30
5791154TP-B14	150	135	280	53	120	109
482070TP-CA8	300	300	101	14	56	43
656382TP-D30	100	10	0	0	0	0
800131TP-5E7	2500	1,134	3,978	566	1,227	1,574
520373TP-2AF	1500	696	364	91	152	176
184687TP-F60	150	135	153	25	60	56
150931TP-983	200	192	498	95	214	194
150925TP-224	150	150	441	69	170	160
389997TP-83A	200	67	208	19	44	109
389990TP-5F0	150	90	237	18	44	129
389999TP-BA1	300	70	150	16	40	70
800167TP-C60	150	99	407	48	133	199
800161TP-DEF	500	167	654	74	181	276
8001611TP-8B7	30	30	82	10	27	30
143131TP-38F	200	199	322	72	143	146
181911TP-927	75	59	657	35	95	141
235545TP-814	200	118	410	62	164	176
150910TP-893	500	375	2,096	211	737	807
150912TP-816	750	158	512	43	121	190
624649TP-8F7	500	21	322	5	14	181
800166TP-025	200	87	388	31	89	176
416731TP-C0E	150	88	100	23	44	38
624606TP-58C	150	150	158	19	46	73
1164012TP-00A	300	151	401	55	145	124
424510TP-575	500	300	731	81	206	380
800149TP-2AE	300	286	1,267	169	447	521
8001015TP-FBB	300	252	1,028	109	295	474

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
TPC Urban Domestic							
Small Domestic (8kVA 1 Phase) - All Peak	UD08P	36	26	146	20	47	59
Small Domestic (8kVA 1 Phase) - With Off Peak	UD08Q	376	230	1,527	157	446	605
Standard Domestic (20kVA 1 Phase) - All Peak	UD20P	125	225	1,269	174	412	513
Standard Domestic (20kVA 1 Phase) - With Off Peak	UD20Q	1,139	1,742	11,562	1,192	3,375	4,585
Historic Domestic - All Peak	UH20P	859	1,546	8,720	1,198	2,828	3,528
Historic Domestic - With Off Peak	UH20Q	11,500	17,589	116,738	12,031	34,080	46,292
Special Domestic (Multi Phase) - All Peak	UM20P	7	13	71	10	23	29
Special Domestic (Multi Phase) - With Off Peak	UM20Q	16	24	162	17	47	64
10% Fixed Charge Option - All Peak	UDL20P	76	137	429	59	139	173
10% Fixed Charge Option - With Off Peak	UDL20Q	317	485	1,788	184	522	709
Non-Domestic Single Phase							
Street Lights (1 Phase)	US001L	4,326	1,103	4,881	671	1,583	1,975
1 kVA 1 Phase - All Peak	US001P	26	26	345	47	112	140
8 kVA 1 Phase - All Peak	US008P	168	121	682	94	221	276
8 kVA 1 Phase - With Off Peak	US008Q	38	23	154	16	45	61
20 kVA 1 Phase - All Peak	US020P	373	671	3,786	520	1,228	1,532
20 kVA 1 Phase - With Off Peak	US020Q	156	239	1,584	163	462	628
Non-Domestic Three Phase							
15 kVA 3 Phase - All Peak	UT015P	43	58	327	45	106	132
15 kVA 3 Phase - With Off Peak	UT015Q	19	22	145	15	42	57
30 kVA 3 Phase - All Peak	UT030P	566	1,838	7,373	1,013	2,392	2,983
30 kVA 3 Phase - With Off Peak	UT030Q	121	334	1,576	162	460	625
50 kVA 3 Phase - All Peak	UT050P	263	1,904	9,547	1,312	3,097	3,863
50 kVA 3 Phase - With Off Peak	UT050Q	98	603	3,558	367	1,039	1,411
75 kVA 3 Phase - All Peak	UT075P	93	1,328	5,330	732	1,729	2,157
75 kVA 3 Phase - With Off Peak	UT075Q	25	304	1,433	148	418	568
100 kVA 3 Phase - All Peak	UT100P	7	165	663	91	215	268
100 kVA 3 Phase - With Off Peak	UT100Q	2	40	189	20	55	75

TPC Rural							
Domestic							
Small Domestic (8kVA 1 Phase) - All Peak	RD08P	45	32	183	25	59	74
Small Domestic (8kVA 1 Phase) - With Off Peak	RD08Q	299	183	1,214	125	354	481
Standard Domestic (20kVA 1 Phase) - All Peak	RD20P	182	327	1,848	254	599	748
Standard Domestic (20kVA 1 Phase) - With Off Peak	RD20Q	472	722	4,791	494	1,399	1,900
Historic Domestic - All Peak	RH20P	772	1,389	7,837	1,077	2,542	3,171
Historic Domestic - With Off Peak	RH20Q	6,126	9,369	62,186	6,409	18,154	24,659
Special Domestic (Multi Phase) - All Peak	RM20P	22	40	223	31	72	90
Special Domestic (Multi Phase) - With Off Peak	RM20Q	154	236	1,563	161	456	620
10% Fixed Charge Option - All Peak	RDL20P	69	124	389	53	126	157
10% Fixed Charge Option - With Off Peak	RDL20Q	108	165	609	63	178	242
Non-Domestic Single Phase							
Street Lights (1 Phase)	RS001L	588	150	663	91	215	268
1 kVA 1 Phase - All Peak	RS001P	127	127	1,686	232	547	682
8 kVA 1 Phase - All Peak	RS008P	671	483	2,725	374	884	1,102
8 kVA 1 Phase - With Off Peak	RS008Q	93	57	378	39	110	150
20 kVA 1 Phase - All Peak	RS020P	2,112	3,800	21,439	2,946	6,954	8,675
20 kVA 1 Phase - With Off Peak	RS020Q	266	407	2,700	278	788	1,071
Non-Domestic Three Phase							
15 kVA 3 Phase - All Peak	RT015P	158	213	1,203	165	390	487
15 kVA 3 Phase - With Off Peak	RT015Q	22	25	167	17	49	66
30 kVA 3 Phase - All Peak	RT030P	2,453	7,965	31,955	4,391	10,365	12,930
30 kVA 3 Phase - With Off Peak	RT030Q	366	1,010	4,768	491	1,392	1,891
50 kVA 3 Phase - All Peak	RT050P	327	2,367	11,871	1,631	3,851	4,803
50 kVA 3 Phase - With Off Peak	RT050Q	439	2,701	15,937	1,642	4,653	6,320
75 kVA 3 Phase - All Peak	RT075P	57	814	3,266	449	1,060	1,322
75 kVA 3 Phase - With Off Peak	RT075Q	13	158	745	77	217	295
100 kVA 3 Phase - All Peak	RT100P	18	425	1,705	234	553	690
100 kVA 3 Phase - With Off Peak	RT100Q	0	0	0	0	0	0

2. TRANSMISSION CHARGES

Transmission charges reflect the Trans Power grid asset management costs incurred by The Power Company Ltd based on the five points of supply and also include the equivalent costs of the Pioneer Generation point of supply at Monowai Power Station in Western Southland.

The five points of supply are:

(a) Gore
(b) Edendale
(c) Invercargill
(d) North Makarewa
(f) Monowai

Trans Power transmission charges have two components:

(a) Connection charge
(b) Interconnection charge

2.1 Connection Charge

The Trans Power connection charge is based on the Trans Power 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 charges for each point of supply are:

(a)	Gore	$228,897
(b)	Edendale	$483,733
(c)	Invercargill	$535,179
(d)	North Makarewa	$558,693
(f)	Monowai	$29,784

The total connection charge for Invercargill is $535,179. The Power Company's share is $222,367.

The connection charges 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:

Point of Supply	Per kVA Peak	Per Winter Peak	Per Winter Day
	Demand	MWh	MWh
Gore	$4.61	$2.17	$0.71
Edendale	$18.11	$15.09	$4.97
Invercargill (TPCL)	$5.34	$2.30	$0.77
North Makarewa	$7.64	$4.13	$1.34
Monowai	$7.64	$4.13	$1.34

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

	Per kVA Peak	Per Winter Peak	Per Winter Day
	Demand	MWh	MWh
All Points of Supply	$3.39	$1.65	$0.52

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 12 highest peak demands at each point of supply on a rolling 12 month basis.

The total interconnection charges for each point of supply are:

(a)	Gore	$1,503,110
(b)	Edendale	$912,982
(c)	Invercargill	$3,875,568
(d)	North Makarewa	$1,873,193
(f)	Monowai	$290,160

The Power Company's share of the Invercargill interconnection charge of $3,875,568 is $1,278,938.

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

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

For individual customers this equates to the following charges:

Point of Supply	Per kVA Peak	Per Winter Peak	Per Winter Day
	Demand	MWh	MWh
Gore	$25.94	$21.36	$4.68
Edendale	$29.29	$42.71	$9.37
Invercargill (TPCL)	$26.31	$19.88	$4.43
North Makarewa	$21.96	$20.78	$4.51
Monowai	$21.96	$20.78	$4.51

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

	Per kVA Peak	Per Winter Peak	Per Winter Day
	Demand	MWh	MWh
All Points of Supply	$28.24	$24.06	$5.04

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

2.4 Trans Power Revenue for Individual Customers

The total Trans Power 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
15	0	$0	$0
30	4	$2,058	$515
50	4	$4,375	$1,094
75	4	$7,628	$1,907
100	15	$20,982	$1,399
150	52	$130,154	$2,503
200	30	$95,007	$3,167
300	24	$127,054	$5,294
500	25	$192,432	$7,697
750	7	$108,751	$15,536
1000	6	$155,155	$25,859
1500	3	$104,754	$34,918
1750	1	$30,943	$30,943
2000	1	$62,838	$62,838
2300	0	$0	$0
2500	1	$38,690	$38,690
3500	1	$142,202	$142,202
4500	1	$3,628	$3,628
5000	1	$212,036	$212,036
6000	1	$73,044	$73,044
10000	1	$474,050	$474,050
22000	1	$1,124,651	$1,124,651

2.5 Trans Power Revenue for Group Customers

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

Consumer Capacity	Code	Number of Connections	TransPower Charge	TransPower Revenue per Consumer Group
TPC Urban				
Domestic				
Small Domestic (8kVA 1 Phase) - All Peak	UD08P	36	$41	$1,488
Small Domestic (8kVA 1 Phase) - With Off Peak	UD08Q	376	$34	$12,927
Standard Domestic (20kVA 1 Phase) - All Peak	UD20P	125	$103	$12,918
Standard Domestic (20kVA 1 Phase) - With Off Peak	UD20Q	1,139	$86	$97,896
Historic Domestic - All Peak	UH20P	859	$103	$88,774
Historic Domestic - With Off Peak	UH20Q	11,500	$86	$988,414
Special Domestic (Multi Phase) - All Peak	UM20P	7	$103	$723
Special Domestic (Multi Phase) - With Off Peak	UM20Q	16	$86	$1,375
10% Fixed Charge Option - All Peak	UDL20P	76	$83	$6,286
10% Fixed Charge Option - With Off Peak	UDL20Q	317	$69	$21,953
Non-Domestic Single Phase				
Street Lights (1 Phase)	US001L	4,326	$13	$57,219
1 kVA 1 Phase - All Peak	US001P	26	$92	$2,401
8 kVA 1 Phase - All Peak	US008P	168	$41	$6,945
8 kVA 1 Phase - With Off Peak	US008Q	38	$34	$1,306
20 kVA 1 Phase - All Peak	US020P	373	$103	$38,548
20 kVA 1 Phase - With Off Peak	US020Q	156	$86	$13,408
Non-Domestic Three Phase				
15 kVA 3 Phase - All Peak	UT015P	43	$78	$3,333
15 kVA 3 Phase - With Off Peak	UT015Q	19	$64	$1,225
30 kVA 3 Phase - All Peak	UT030P	566	$162	$91,860
30 kVA 3 Phase - With Off Peak	UT030Q	121	$136	$16,398
50 kVA 3 Phase - All Peak	UT050P	263	$395	$103,892
50 kVA 3 Phase - With Off Peak	UT050Q	98	$329	$32,242
75 kVA 3 Phase - All Peak	UT075P	93	$714	$66,399
75 kVA 3 Phase - With Off Peak	UT075Q	25	$596	$14,904
100 kVA 3 Phase - All Peak	UT100P	7	$1,180	$8,262
100 kVA 3 Phase - With Off Peak	UT100Q	2	$986	$1,971

TPC Rural				
Domestic				
Small Domestic (8kVA 1 Phase) - All Peak	RD08P	45	$41	$1,860
Small Domestic (8kVA 1 Phase) - With Off Peak	RD08Q	299	$34	$10,280
Standard Domestic (20kVA 1 Phase) - All Peak	RD20P	182	$103	$18,809
Standard Domestic (20kVA 1 Phase) - With Off Peak	RD20Q	472	$86	$40,568
Historic Domestic - All Peak	RH20P	772	$103	$79,783
Historic Domestic - With Off Peak	RH20Q	6,126	$86	$526,524
Special Domestic (Multi Phase) - All Peak	RM20P	22	$103	$2,274
Special Domestic (Multi Phase) - With Off Peak	RM20Q	154	$86	$13,236
10% Fixed Charge Option - All Peak	RDL20P	69	$83	$5,707
10% Fixed Charge Option - With Off Peak	RDL20Q	108	$69	$7,479
Non-Domestic Single Phase				
Street Lights (1 Phase)	RS001L	588	$13	$7,777
1 kVA 1 Phase - All Peak	RS001P	127	$92	$11,728
8 kVA 1 Phase - All Peak	RS008P	671	$41	$27,738
8 kVA 1 Phase - With Off Peak	RS008Q	93	$34	$3,197
20 kVA 1 Phase - All Peak	RS020P	2,112	$103	$218,267
20 kVA 1 Phase - With Off Peak	RS020Q	266	$86	$22,862
Non-Domestic Three Phase				
15 kVA 3 Phase - All Peak	RT015P	158	$78	$12,247
15 kVA 3 Phase - With Off Peak	RT015Q	22	$64	$1,418
30 kVA 3 Phase - All Peak	RT030P	2,453	$162	$398,114
30 kVA 3 Phase - With Off Peak	RT030Q	366	$136	$49,600
50 kVA 3 Phase - All Peak	RT050P	327	$395	$129,174
50 kVA 3 Phase - With Off Peak	RT050Q	439	$329	$144,429
75 kVA 3 Phase - All Peak	RT075P	57	$714	$40,696
75 kVA 3 Phase - With Off Peak	RT075Q	13	$596	$7,750
100 kVA 3 Phase - All Peak	RT100P	18	$1,180	$21,245
100 kVA 3 Phase - With Off Peak	RT100Q	0	$986	$0

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 subtransmission network was broken up into its constituent components including every line and every zone substation. These components were categorised, i.e. 66,000 and 33,000V, indoor and outdoor, size, number of transformers, circuit breakers, length of line etc.

Values for these subtransmission network components were based on the replacement value costs. These values were then amended by the ratio of the overall replacement cost to the asset value of the network. The appropriate share of the supply charge was allocated to each zone substation on this basis.

The share of the subtransmission lines by each zone substation was determined using the superposition theorem and calculating load flows through the interconnected mesh network.

The total supply charge for all the TPCL zone substations is $6,147,528.

The supply charge for TPCL is allocated across all customers connected to each zone substation on the following basis:

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

3.2 Maintenance Charge

The subtransmission maintenance charges for TPC total $1,565,059.

These maintenance charges 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 2:1. 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 component, i.e. 50% of the cost.

3.3 Total Subtransmission Charges

The total subtransmission charges allocated to each zone substation are shown in the following table.

Zone Substation	Total Supply Charge	Total Maintenance Charge
Awarua	$63,018	$15,655
Bluff	$261,808	$65,040
Centre Bush	$148,024	$36,773
Conical Hills	$188,001	$49,163
Dipton	$84,610	$21,019
Edendale	$157,290	$39,075
Glenham	$83,613	$20,772
Gorge Road	$101,642	$25,251
Hillside	$191,322	$47,530
Kelso	$207,005	$51,426
Kennington	$95,338	$23,685
Lumsden	$304,373	$75,615
Makarewa	$164,748	$40,928
Manapouri	$159,746	$39,685
Mataura	$228,681	$56,811
Monowai	$60,855	$15,118
Mossburn	$201,260	$55,554
NZMP	$270,993	$39,515
North Gore	$113,807	$35,341
Ohai	$285,339	$83,395
Orawia	$327,641	$90,439
Otatara	$102,981	$25,583
Otautau	$310,393	$77,110
Pullar	$0	$0
Riversdale	$216,593	$53,808
Riverton	$296,599	$73,683
Seaward Bush	$199,072	$49,455
South Gore	$133,992	$33,287
Te Anau	$389,715	$138,308
Tokanui	$141,754	$35,216
Underwood	$312,896	$64,777
Waikiwi	$164,325	$40,823
Waikaka	$0	$0
Winton	$173,211	$43,030
ICC46	$6,882	$2,188

3.4 Subtransmission Charges for Individual Customers above 100 kVA

The subtransmission charges relating to each zone substation are shown in the following table.

Zone Substation	Supply Charge per kVA Winter Peak Demand	Supply Charge per Winter Peak MWh	Supply Charge per Winter Day MWh	Maintenance Charge per Domestic Total MWh	Maintenance Charge per Commercial Total MWh	Maintenance Charge per kVA Winter Peak Demand
Awarua	$35.91	$123.56	$60.02	$8.61	$17.22	$6.37
Bluff	$34.87	$12.01	$5.95	$0.89	$1.78	$6.19
Centre Bush	$42.90	$22.29	$12.69	$1.74	$3.48	$7.61
Conical Hills	$40.96	$21.68	$8.47	$1.09	$2.18	$7.65
Dipton	$69.64	$34.38	$10.86	$2.36	$4.71	$12.36
Edendale	$25.89	$6.17	$3.00	$0.57	$1.13	$4.59
Glenham	$48.09	$25.07	$14.29	$2.28	$4.57	$8.53
Gorge Road	$55.77	$24.10	$7.39	$1.67	$3.35	$9.90
Hillside	$283.44	$218.50	$66.98	$15.17	$30.35	$50.30
Kelso	$36.53	$12.74	$7.07	$1.05	$2.11	$6.48
Kennington	$20.18	$8.37	$2.94	$0.40	$0.80	$3.58
Lumsden	$84.41	$32.76	$18.07	$2.90	$5.79	$14.98
Makarewa	$25.68	$9.11	$4.88	$0.56	$1.13	$4.56
Manapouri	$131.48	$91.81	$28.14	$6.38	$12.75	$23.33
Mataura	$20.24	$8.76	$4.53	$0.48	$0.97	$3.59
Monowai	$225.39	$124.73	$38.23	$8.66	$17.32	$40.00
Mossburn	$125.17	$48.66	$26.87	$3.54	$7.07	$24.68
NZMP	$14.34	$12.34	$5.15	$0.17	$0.33	$1.49
North Gore	$9.37	$4.33	$1.45	$0.35	$0.69	$2.08
Ohai	$91.78	$45.13	$14.16	$3.37	$6.74	$19.16
Orawia	$90.29	$30.81	$16.43	$2.82	$5.64	$17.80
Otatara	$23.64	$8.90	$5.26	$0.93	$1.87	$4.19
Otautau	$57.48	$28.18	$10.21	$1.72	$3.45	$10.20
Pullar	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Riversdale	$59.98	$21.30	$6.52	$1.41	$2.81	$10.64
Riverton	$62.77	$20.50	$6.48	$1.37	$2.73	$11.14
Seaward Bush	$16.38	$7.81	$2.65	$0.42	$0.83	$2.91
South Gore	$11.22	$4.52	$2.39	$0.34	$0.68	$1.99
Te Anau	$56.60	$23.26	$7.16	$1.90	$3.80	$14.35
Tokanui	$114.51	$73.54	$22.54	$5.11	$10.21	$20.32
Underwood	$16.10	$11.10	$5.87	$0.37	$0.75	$2.38
Waikiwi	$13.11	$5.86	$1.82	$0.34	$0.67	$2.33
Waikaka	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Winton	$15.09	$7.42	$2.39	$0.39	$0.79	$2.68

3.5 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:

	Supply Charge per kVA Winter Peak Demand	Supply Charge per Winter Peak MWh	Supply Charge per Winter Day MWh	Maintenance Charge per Domestic Total MWh	Maintenance Charge per Commercial Total MWh	Maintenance Charge per kVA Winter Peak Demand
Group Consumers	$37.13	$15.26	$6.74	$1.06	$2.12	$6.39

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.

All individual customers have location based distribution charges. These customers pay their distribution charges based on four factors - the radial distance from the zone substation, the contract capacity of the installation and the number and size of transformers used to supply them.

The group customers have non locational distribution charges. For these customers the costs of the distribution network are averaged. These customers are identified as belonging to one of two groups, Urban and Rural.

The urban customers are located in the following areas:
(a) Invercargill
(b) Gore
(c) Te Anau
(d) Winton
(e) Mataura
(f) Riverton
(g) Otautau
(h) Tuatapere
(i) Ohai
(j) Nightcaps
(k) Mossburn
(l) Lumsden
(m) Riversdale
(n) Manapouri
(o) Tapanui
(p) Edendale
(q) Wyndham
(r) Wallacetown
(s) Otatara

The remaining customers are classified as rural.

There are three components making up the distribution charges

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

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.

The total supply charge for TPCL totals $10,761,195.

The non locational supply charges are allocated across customers on the following basis:

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

4.2 Maintenance Charge

The maintenance charges for TPCL total $2,685,754.

The maintenance portion of the non-locational distribution charges is allocated across customers on the following basis:

Total Energy	50%
Contract Capacity	50%

4.3 Transformer Charge

The transformer charges for TPCL total $3,564,740.

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

Number of transformers and transformer capacity 100%.

4.4 Locational Individual Distribution Charges

(a)	Distribution Supply charge	$2.27 per kVAkm Urban
(b)	Distribution Supply charge	$0.50 per kVAkm Rural
(c)	Distribution Transformer charge	$227 per Transformer
(d)	Distribution Maintenance charge	$1,068 per km Urban
(e)	Distribution Maintenance charge	$441 per km Rural
(f)	Distribution Transformer charge	$448 per Transformer for capacity >=75kVA
(g)	Distribution Transformer charge	$28 per Transformer for capacity <75kVA

The Transformer charge of $227 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

In calculating the distribution maintenance charges an allowance is made for the fact that customers above 150kVA have 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 line portion of the distribution maintenance charges is multiplied by a factor of 70%.

Individual commercial customers incur a weighting on the transformer portion of the maintenance charge of 5:1. This reflects the importance of the maintenance to the network for commercial customers.

4.4 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:

TPC Urban

(a)	Distribution Supply charge	$8.03 per kVA Contract Capacity
(b)	Distribution Supply charge	$18.70 per Winter Peak MWh
(c)	Distribution Supply charge	$5.52 per Winter Day MWh
(d)	Distribution Maintenance charge	$0.61 per Domestic Total MWh
(e)	Distribution Maintenance charge	$1.22 per Commercial Total MWh
(f)	Distribution Maintenance charge	$0.80 per kVA Contract Capacity
(g)	Distribution Transformer charge	$11.26 per kVA AD Transformer capacity

TPC Rural

(a)	Distribution Supply charge	$47.63 per kVA Contract Capacity
(b)	Distribution Supply charge	$80.17 per Winter Peak MWh
(c)	Distribution Supply charge	$25.48 per Winter Day MWh
(d)	Distribution Maintenance charge	$4.64 per Domestic Total MWh
(e)	Distribution Maintenance charge	$9.29 per Commercial Total MWh
(f)	Distribution Maintenance charge	$9.28 per kVA Contract Capacity
(g)	Distribution Transformer charge	$11.26 per kVA AD Transformer capacity

The model applies an 8% discount for rural single phase group customers and a 10% discount for urban 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.

With respect to the maintenance charges for group customers the commercial customers incur a weighting to domestic customers of 2:1. This represents a higher level of importance for commercial customers of the maintenance to the network. This weighted ratio only applies to the total energy component i.e. 50% of the charge.

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 $1,219,741

The charge per customer is $38.23

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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	Number of Connections	Sub transmission Charge	Distribution Charge	PowerNet Overhead	Total PowerNet Charge
30	4	$2,660	$3,602	$153	$6,415
50	4	$5,723	$2,603	$153	$8,479
75	4	$10,076	$3,278	$153	$13,507
100	15	$27,821	$21,400	$574	$49,794
150	52	$117,732	$97,422	$1,988	$217,143
200	30	$132,001	$62,524	$1,147	$195,672
300	24	$103,289	$57,405	$918	$161,612
500	25	$203,963	$77,875	$956	$282,794
750	7	$158,182	$22,883	$268	$181,333
1000	6	$158,615	$27,853	$229	$186,698
1500	3	$171,800	$12,058	$115	$183,973
1750	1	$16,910	$9,357	$38	$26,305
2000	1	$39,849	$20,455	$38	$60,342
2500	1	$27,244	$10	$38	$27,293
3500	1	$231,375	$683	$38	$232,095
4500	1	$2,914	$1,138	$38	$4,091
5000	1	$154,913	$1,896	$38	$156,847
6000	1	$59,015	$1,242	$38	$60,295
10000	1	$293,113	$3,134	$38	$296,285
22000	1	$320,151	$366	$38	$320,556

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 Revenue per Consumer Group	Distribution Revenue per Consumer Group	PowerNet Overheads Revenue per Consumer Group	Total PowerNet Revenue
TPC Urban						
Domestic						
Small Domestic (8kVA 1 Phase) - All Peak	UD08P	36	$1,773	$3,264	$1,376	$6,414
Small Domestic (8kVA 1 Phase) - With Off Peak	UD08Q	376	$15,974	$28,976	$14,376	$59,326
Standard Domestic (20kVA 1 Phase) - All Peak	UD20P	125	$15,394	$28,333	$4,779	$48,506
Standard Domestic (20kVA 1 Phase) - With Off Peak	UD20Q	1,139	$120,974	$219,441	$43,548	$383,963
Historic Domestic - All Peak	UH20P	859	$105,785	$194,705	$32,843	$333,333
Historic Domestic - With Off Peak	UH20Q	11,500	$1,221,425	$2,215,601	$439,687	$3,876,713
Special Domestic (Multi Phase) - All Peak	UM20P	7	$862	$1,587	$268	$2,716
Special Domestic (Multi Phase) - With Off Peak	UM20Q	16	$1,699	$3,083	$612	$5,394
10% Fixed Charge Option - All Peak	UDL20P	76	$7,845	$15,783	$2,906	$26,534
10% Fixed Charge Option - With Off Peak	UDL20Q	317	$28,082	$55,957	$12,120	$96,160
Non-Domestic Single Phase						
Street Lights (1 Phase)	US001L	4,326	$74,746	$67,117	$3,308	$145,171
1 kVA 1 Phase - All Peak	US001P	26	$3,022	$2,536	$994	$6,552
8 kVA 1 Phase - All Peak	US008P	168	$8,276	$15,232	$6,423	$29,931
8 kVA 1 Phase - With Off Peak	US008Q	38	$1,614	$2,928	$1,453	$5,996
20 kVA 1 Phase - All Peak	US020P	373	$45,935	$84,546	$14,261	$144,742
20 kVA 1 Phase - With Off Peak	US020Q	156	$16,569	$30,055	$5,964	$52,588
Non-Domestic Three Phase						
15 kVA 3 Phase - All Peak	UT015P	43	$4,319	$7,509	$1,644	$13,472
15 kVA 3 Phase - With Off Peak	UT015Q	19	$1,667	$2,833	$726	$5,227
30 kVA 3 Phase - All Peak	UT030P	566	$120,375	$220,963	$21,640	$362,978
30 kVA 3 Phase - With Off Peak	UT030Q	121	$22,363	$40,295	$4,626	$67,284
50 kVA 3 Phase - All Peak	UT050P	263	$135,158	$234,960	$10,055	$380,173
50 kVA 3 Phase - With Off Peak	UT050Q	98	$43,912	$74,742	$3,747	$122,401
75 kVA 3 Phase - All Peak	UT075P	93	$87,010	$155,975	$3,556	$246,541
75 kVA 3 Phase - With Off Peak	UT075Q	25	$20,326	$35,770	$956	$57,051
100 kVA 3 Phase - All Peak	UT100P	7	$10,826	$19,289	$268	$30,383
100 kVA 3 Phase - With Off Peak	UT100Q	2	$2,688	$4,702	$76	$7,466
TPC Rural						
Domestic						
Small Domestic (8kVA 1 Phase) - All Peak	RD08P	45	$2,217	$12,642	$1,721	$16,579
Small Domestic (8kVA 1 Phase) - With Off Peak	RD08Q	299	$12,703	$71,835	$11,432	$95,970

Standard Domestic (20kVA 1 Phase) - All Peak	RD20P	182	$22,413	$127,827	$6,959	$157,199
Standard Domestic (20kVA 1 Phase) - With Off Peak	RD20Q	472	$50,132	$283,498	$18,046	$351,676
Historic Domestic - All Peak	RH20P	772	$95,071	$542,212	$29,516	$666,799
Historic Domestic - With Off Peak	RH20Q	6,126	$650,648	$3,679,464	$234,219	$4,564,331
Special Domestic (Multi Phase) - All Peak	RM20P	22	$2,709	$15,452	$841	$19,002
Special Domestic (Multi Phase) - With Off Peak	RM20Q	154	$16,356	$92,497	$5,888	$114,742
10% Fixed Charge Option - All Peak	RDL20P	69	$7,122	$42,105	$2,638	$51,865
10% Fixed Charge Option - With Off Peak	RDL20Q	108	$9,568	$56,235	$4,129	$69,932
Non-Domestic Single Phase						
Street Lights (1 Phase)	RS001L	588	$10,160	$36,739	$450	$47,348
1 kVA 1 Phase - All Peak	RS001P	127	$14,762	$56,734	$4,856	$76,351
8 kVA 1 Phase - All Peak	RS008P	671	$33,053	$188,510	$25,655	$247,218
8 kVA 1 Phase - With Off Peak	RS008Q	93	$3,951	$22,343	$3,556	$29,850
20 kVA 1 Phase - All Peak	RS020P	2,112	$260,090	$1,483,357	$80,749	$1,824,196
20 kVA 1 Phase - With Off Peak	RS020Q	266	$28,252	$159,768	$10,170	$198,190
Non-Domestic Three Phase						
15 kVA 3 Phase - All Peak	RT015P	158	$15,869	$88,813	$6,041	$110,723
15 kVA 3 Phase - With Off Peak	RT015Q	22	$1,930	$10,688	$841	$13,459
30 kVA 3 Phase - All Peak	RT030P	2,453	$521,695	$2,963,985	$93,787	$3,579,467
30 kVA 3 Phase - With Off Peak	RT030Q	366	$67,643	$380,934	$13,994	$462,570
50 kVA 3 Phase - All Peak	RT050P	327	$168,048	$929,879	$12,502	$1,110,429
50 kVA 3 Phase - With Off Peak	RT050Q	439	$196,708	$1,077,921	$16,785	$1,291,414
75 kVA 3 Phase - All Peak	RT075P	57	$53,328	$296,811	$2,179	$352,319
75 kVA 3 Phase - With Off Peak	RT075Q	13	$10,569	$58,325	$497	$69,392
100 kVA 3 Phase - All Peak	RT100P	18	$27,839	$154,126	$688	$182,653
100 kVA 3 Phase - With Off Peak	RT100Q	0	$0	$0	$0	$0

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 $45.97 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 $45.97. This method of calculating the fixed charge accounts for the fact that some installations have negative fixed charges.

The Variable Charge of $46.14 per MWh of daytime sales equates to $40.16per MWh of daytime purchases at the grid exit point.

For rural group customers with capacities less than 75kVA the fixed line charge is capped at 15% higher than the equivalent urban charge, for capacities greater than or equal to 75kVA the cap is set at 20%.

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	4	$8,473	$2,118
50	4	$12,854	$3,214
75	4	$21,134	$5,284
100	15	$70,776	$4,718
150	52	$347,297	$6,679
200	30	$290,680	$9,689
300	24	$288,665	$12,028
500	25	$475,226	$19,009
750	7	$290,084	$41,441
1000	6	$341,853	$56,976
1500	3	$288,728	$96,243
1750	1	$57,248	$57,248
2000	1	$123,180	$123,180
2500	1	$65,982	$65,982
3500	1	$374,297	$374,297
4500	1	$7,719	$7,719
5000	1	$368,884	$368,884

6000	1	$133,339	$133,339
10000	1	$770,335	$770,335
22000	1	$1,445,207	$1,445,207

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
TPC Urban Domestic					
Small Domestic (8kVA 1 Phase) - All Peak	UD08P	36	$0.43	$46.14	$7,902
Small Domestic (8kVA 1 Phase) - With Off Peak	UD08Q	376	$0.29	$46.14	$72,253
Standard Domestic (20kVA 1 Phase) - All Peak	UD20P	125	$0.79	$46.14	$61,424
Standard Domestic (20kVA 1 Phase) - With Off Peak	UD20Q	1,139	$0.54	$46.14	$481,859
Historic Domestic - All Peak	UH20P	859	$0.79	$46.14	$422,107
Historic Domestic - With Off Peak	UH20Q	11,500	$0.54	$46.14	$4,865,127
Special Domestic (Multi Phase) - All Peak	UM20P	7	$0.79	$46.14	$3,440
Special Domestic (Multi Phase) - With Off Peak	UM20Q	16	$0.54	$46.14	$6,769
10% Fixed Charge Option - All Peak	UDL20P	76	$0.15	$79.28	$32,820
10% Fixed Charge Option - With Off Peak	UDL20Q	317	$0.00	$79.28	$118,112
Non-Domestic Single Phase					
Street Lights (1 Phase)	US001L	4,326	$0.06	$46.14	$202,390
1 kVA 1 Phase - All Peak	US001P	26	$0.31	$46.14	$8,953
8 kVA 1 Phase - All Peak	US008P	168	$0.43	$46.14	$36,876
8 kVA 1 Phase - With Off Peak	US008Q	38	$0.29	$46.14	$7,302
20 kVA 1 Phase - All Peak	US020P	373	$0.79	$46.14	$183,290
20 kVA 1 Phase - With Off Peak	US020Q	156	$0.54	$46.14	$65,997
Non-Domestic Three Phase					
15 kVA 3 Phase - All Peak	UT015P	43	$0.65	$46.14	$16,804.75
15 kVA 3 Phase - With Off Peak	UT015Q	19	$0.43	$46.14	$6,451.52
30 kVA 3 Phase - All Peak	UT030P	566	$1.11	$46.14	$454,838.00
30 kVA 3 Phase - With Off Peak	UT030Q	121	$0.74	$46.14	$83,682.16
50 kVA 3 Phase - All Peak	UT050P	263	$2.24	$46.14	$484,065.85
50 kVA 3 Phase - With Off Peak	UT050Q	98	$1.53	$46.14	$154,642.84
75 kVA 3 Phase - All Peak	UT075P	93	$5.44	$46.14	$312,939.20
75 kVA 3 Phase - With Off Peak	UT075Q	25	$3.67	$46.14	$71,955.41
100 kVA 3 Phase - All Peak	UT100P	7	$10.09	$46.14	$38,645.02

100 kVA 3 Phase - With Off Peak	UT100Q	2	$7.00	$46.14	$9,437.30
TPC Rural					
Domestic					
Small Domestic (8kVA 1 Phase) - All Peak	RD08P	45	$0.49	$46.14	$18,439.67
Small Domestic (8kVA 1 Phase) - With Off Peak	RD08Q	299	$0.33	$46.14	$106,249.63
Standard Domestic (20kVA 1 Phase) - All Peak	RD20P	182	$0.91	$46.14	$176,007.76
Standard Domestic (20kVA 1 Phase) - With Off Peak	RD20Q	472	$0.62	$46.14	$392,243.47
Historic Domestic - All Peak	RH20P	772	$0.91	$46.14	$746,582.36
Historic Domestic - With Off Peak	RH20Q	6,126	$0.62	$46.14	$5,090,854.92
Special Domestic (Multi Phase) - All Peak	RM20P	22	$0.91	$46.14	$21,275.66
Special Domestic (Multi Phase) - With Off Peak	RM20Q	154	$0.62	$46.14	$127,977.74
10% Fixed Charge Option - All Peak	RDL20P	69	$0.15	$79.28	$57,571.74
10% Fixed Charge Option - With Off Peak	RDL20Q	108	$0.05	$79.28	$77,411.33
Non-Domestic Single Phase					
Street Lights (1 Phase)	RS001L	588	$0.07	$46.14	$55,125.85
1 kVA 1 Phase - All Peak	RS001P	127	$0.31	$46.14	$88,079.36
8 kVA 1 Phase - All Peak	RS008P	671	$0.49	$46.14	$274,955.96
8 kVA 1 Phase - With Off Peak	RS008Q	93	$0.33	$46.14	$33,047.54
20 kVA 1 Phase - All Peak	RS020P	2,112	$0.91	$46.14	$2,042,463.67
20 kVA 1 Phase - With Off Peak	RS020Q	266	$0.62	$46.14	$221,052.47
Non-Domestic Three Phase					
15 kVA 3 Phase - All Peak	RT015P	158	$0.74	$46.14	$122,969.41
15 kVA 3 Phase - With Off Peak	RT015Q	22	$0.50	$46.14	$14,877.48
30 kVA 3 Phase - All Peak	RT030P	2,453	$1.27	$46.14	$3,977,581.01
30 kVA 3 Phase - With Off Peak	RT030Q	366	$0.86	$46.14	$512,170.16
50 kVA 3 Phase - All Peak	RT050P	327	$2.57	$46.14	$1,239,603.35
50 kVA 3 Phase - With Off Peak	RT050Q	439	$1.76	$46.14	$1,435,843.82
75 kVA 3 Phase - All Peak	RT075P	57	$6.53	$46.14	$393,014.79
75 kVA 3 Phase - With Off Peak	RT075Q	13	$4.40	$46.14	$77,141.97
100 kVA 3 Phase - All Peak	RT100P	18	$12.11	$46.14	$203,897.90
100 kVA 3 Phase - With Off Peak	RT100Q	0	$8.41	$46.14	$0.00

10. LINE CHARGE TABLES

10.1 Line Charge Breakdown for Individual Customers

ICP Number	Contract Capacity kVA	Trans Power Charge	Sub transmission Charge	Distribution Charge	PowerNet Overhead	Total Line Charge	Fixed Charge per annum	Variable Charge per Day MWh
396516TP-CB8	300	$3,391	$10,747	$2,703	$38	$16,879	$9,206	$46.14
396517TP-0FD	200	$4,042	$13,416	$2,178	$38	$19,674	$5,750	$46.14
800105TP-315	10000	$474,050	$293,113	$3,134	$38	$770,335	$385,167	$14.66
800116TP-578	6000	$73,044	$59,015	$1,242	$38	$133,339	$66,669	$12.19
800134TP-8A8	5000	$212,036	$154,913	$1,896	$38	$368,884	$184,442	$15.84
8001365TP-9E5	750	$18,425	$14,677	$243	$38	$33,383	$16,692	$8.67
800127TP-EC5	500	$6,664	$8,177	$2,533	$38	$17,413	$8,706	$17.30
800139TP-7F3	300	$5,258	$4,036	$1,744	$38	$11,077	$5,538	$14.96
800107TP-390	200	$2,671	$2,165	$2,007	$38	$6,881	$3,440	$8.38
800118TP-6E3	150	$3,202	$2,916	$1,575	$38	$7,731	($3,436)	$46.14
800128TP-11B	100	$2,602	$3,197	$1,555	$38	$7,393	($240)	$46.14
8001281TP-B51	100	$1,465	$1,898	$1,528	$38	$4,929	$2,202	$46.14
8001275TP-A4C	75	$4,020	$4,536	$1,092	$38	$9,686	($7,255)	$46.14
118447TP-ECC	150	$2,446	$1,940	$1,606	$38	$6,030	($729)	$46.14
800146TP-D70	22000	$1,124,651	$320,151	$366	$38	$1,445,207	$1,445,207	$0.00
502013TP-4D1	150	$1,998	$1,015	$1,560	$38	$4,611	$2,448	$46.14
304798TP-4EA	300	$2,552	$1,461	$3,106	$38	$7,158	$3,579	$41.14
800186TP-A9F	750	$12,830	$8,699	$5,873	$38	$27,441	$13,721	$10.38
8001708TP-54F	500	$4,596	$10,402	$4,487	$38	$19,523	$9,761	$27.05
1819183TP-528	150	$1,306	$459	$3,272	$38	$5,076	$2,538	$24.50
482021TP-8E5	150	$3,018	$2,748	$1,761	$38	$7,565	$1,296	$46.14
100109TP-F16	100	$1,991	$2,526	$2,316	$38	$6,872	$3,436	$28.83
800158TP-446	3500	$142,202	$231,375	$683	$38	$374,297	$187,149	$23.78
8001315TP-CB8	1500	$62,858	$28,247	$11,549	$38	$102,692	$51,346	$15.69

437074TP-48B	1000	$24,227	$50,646	$6,519	$38	$81,431	$40,716	$23.52
437078TP-795	1000	$17,487	$40,003	$7,866	$38	$65,395	$32,697	$19.39
4370715TP-029	500	$5,993	$12,742	$4,213	$38	$22,986	$11,493	$34.61
800155TP-B1D	300	$12,994	$6,010	$3,667	$38	$22,709	$11,354	$7.19
8001875TP-046	200	$51	$27	$2,174	$38	$2,290	$2,272	$46.14
5678995TP-502	200	$2,084	$1,052	$1,549	$38	$4,724	($2,244)	$46.14
800133TP-562	4500	$3,628	$2,914	$1,138	$38	$7,719	$3,859	$12.43
141326TP-DAF	200	$3,658	$5,233	$2,137	$38	$11,066	$5,533	$13.40
800163TP-D6A	300	$3,845	$8,757	$2,654	$38	$15,294	$7,647	$21.82
444030TP-F7D	200	$4,745	$2,556	$1,924	$38	$9,263	($2,810)	$46.14
549615TP-72D	150	$2,177	$1,021	$1,391	$38	$4,626	($5,523)	$46.14
800124TP-205	1000	$34,036	$21,567	$3,656	$38	$59,297	$29,648	$9.25
556470TP-E14	300	$8,297	$5,185	$1,768	$38	$15,288	$7,644	$10.29
556472TP-E91	150	$1,913	$1,279	$1,604	$38	$4,834	$2,417	$21.80
240526TP-6BD	150	$3,104	$1,154	$3,244	$38	$7,540	($3,354)	$46.14
8001505TP-013	300	$1,916	$769	$4,621	$38	$7,344	($1,946)	$46.14
5290993TP-D4F	150	$2,161	$996	$1,473	$38	$4,668	($65)	$46.14
221318TP-720	150	$2,459	$896	$2,279	$38	$5,672	$1,337	$46.14
5791954TP-B19	150	$602	$291	$1,526	$38	$2,458	($1,419)	$46.14
8001815TP-FB6	1750	$30,943	$16,910	$9,357	$38	$57,248	$28,624	$13.35
8001801TP-411	1000	$35,045	$20,212	$5,786	$38	$61,082	$30,541	$9.02
800181TP-755	500	$8,453	$4,634	$3,638	$38	$16,762	$8,381	$13.66
579155TP-BA6	150	$2,964	$1,330	$1,677	$38	$6,009	$781	$46.14
314914TP-C54	200	$4,341	$11,251	$2,471	$38	$18,102	$8,443	$46.14
4004001TP-401	150	$738	$1,591	$1,661	$38	$4,029	$1,437	$46.14
5672985TP-1EF	100	$1,148	$1,543	$1,005	$38	$3,735	$2,113	$46.14
313732TP-2E5	200	$2,893	$5,530	$1,978	$38	$10,439	$3,030	$46.14
362484TP-9C2	200	$5,820	$3,171	$2,676	$38	$11,705	$5,852	$13.44
404955TP-F5E	100	$1,570	$2,030	$1,376	$38	$5,014	$1,503	$46.14
405545TP-85F	300	$2,615	$6,192	$2,609	$38	$11,455	$3,058	$46.14

405508TP-5A1	200	$2,804	$6,419	$1,929	$38	$11,191	($826)	$46.14
405350TP-9BB	150	$1,641	$3,896	$1,607	$38	$7,182	($1,632)	$46.14
800153TP-A92	500	$2,516	$959	$5,320	$38	$8,833	$4,417	$35.97
8001305TP-615	30	$1,089	$1,377	$1,159	$38	$3,664	($1,255)	$46.14
116195TP-ECE	150	$3,197	$1,223	$2,543	$38	$7,001	($2,777)	$46.14
5791985TP-A1E	150	$2,241	$1,096	$1,629	$38	$5,005	$1,308	$46.14
110146TP-A8C	200	$1,573	$1,204	$2,418	$38	$5,233	$672	$46.14
241126TP-B1C	150	$3,881	$1,577	$2,547	$38	$8,044	($1,968)	$46.14
166724TP-C86	300	$11,030	$5,026	$1,887	$38	$17,982	$8,991	$8.35
690224TP-CD4	150	$784	$309	$1,475	$38	$2,606	$1,303	$15.12
250351TP-0CD	300	$4,709	$1,742	$3,287	$38	$9,776	($7,667)	$46.14
177096TP-8F2	150	$3,741	$1,569	$1,833	$38	$7,181	$3,590	$15.27
800151TP-A17	100	$1,073	$1,419	$1,588	$38	$4,119	($1,409)	$46.14
181105TP-28D	150	$1,850	$702	$2,465	$38	$5,055	$3,991	$46.14
240375TP-473	150	$3,122	$1,337	$1,967	$38	$6,464	($3,198)	$46.14
8001245TP-DB4	500	$10,735	$14,036	$3,326	$38	$28,135	$14,068	$37.54
517704TP-375	150	$2,300	$1,121	$1,672	$38	$5,131	$1,111	$46.14
637250TP-A0B	500	$4,920	$3,767	$3,230	$38	$11,954	$5,977	$8.79
1819179TP-7AE	150	$2,833	$1,056	$3,254	$38	$7,181	$3,590	$13.57
625837TP-99A	150	$3,275	$2,195	$1,548	$38	$7,057	($437)	$46.14
800114TP-5FD	500	$8,613	$7,871	$609	$38	$17,131	$8,566	$8.20
556467TP-973	500	$9,176	$5,846	$2,350	$38	$17,410	$8,705	$9.29
800103TP-29A	300	$2,179	$1,095	$194	$38	$3,506	$1,753	$6.30
569640TP-BA7	200	$1,651	$819	$371	$38	$2,880	$1,440	$16.91
800130TP-9A2	300	$11,737	$5,803	$1,824	$38	$19,402	$9,701	$8.37
568791TP-204	100	$1,729	$2,298	$894	$38	$4,958	$2,479	$12.57
521003TP-551	75	$1,666	$2,179	$768	$38	$4,650	$2,325	$11.62
564570TP-57C	50	$543	$721	$452	$38	$1,754	$877	$12.97
5791016TP-030	50	$746	$1,002	$425	$38	$2,211	$1,106	$11.32
181975TP-7DD	150	$3,451	$1,491	$2,106	$38	$7,086	$3,543	$10.16

400440TP-B34	100	$741	$1,056	$1,184	$38	$3,019	($712)	$46.14
418284TP-E36	500	$9,263	$29,781	$3,874	$38	$42,955	$21,478	$52.51
4182832TP-1BD	200	$4,742	$15,501	$2,178	$38	$22,459	$7,771	$46.14
4182836TP-0B7	150	$6,201	$21,055	$2,003	$38	$29,298	$2,235	$46.14
530906TP-856	300	$4,840	$9,622	$1,739	$38	$16,239	$3,463	$46.14
800164TP-0A0	500	$5,634	$12,756	$3,781	$38	$22,209	$11,104	$17.01
405190TP-453	150	$1,403	$3,370	$1,787	$38	$6,597	($93)	$46.14
319736TP-DAF	200	$1,895	$8,723	$2,916	$38	$13,573	$6,787	$25.51
180710TP-2C9	150	$2,962	$1,231	$1,562	$38	$5,792	($1,231)	$46.14
8001695TP-CF7	500	$12,618	$8,906	$2,133	$38	$23,695	$11,848	$8.57
800147TP-135	150	$3,633	$1,387	$1,418	$38	$6,476	$3,238	$8.66
800150TP-652	100	$1,611	$2,131	$1,562	$38	$5,342	$1,228	$46.14
142817TP-7FC	150	$2,154	$1,674	$1,737	$38	$5,604	$2,415	$46.14
589190TP-49A	150	$5,575	$2,565	$1,668	$38	$9,846	$4,923	$35.28
116167TP-E5C	150	$2,349	$875	$1,523	$38	$4,785	$2,392	$26.00
118468TP-C47	100	$2,156	$2,741	$1,302	$38	$6,237	($1,857)	$46.14
1015827TP-5C5	150	$1,894	$2,505	$2,100	$38	$6,537	$1,490	$46.14
190101TP-AC6	150	$3,039	$1,133	$2,258	$38	$6,469	($2,366)	$46.14
800169TP-FFB	150	$3,234	$2,360	$1,481	$38	$7,113	$3,557	$9.57
249945TP-521	150	$928	$2,264	$1,753	$38	$4,983	$2,492	$9.58
364828TP-B0F	150	$653	$355	$2,015	$38	$3,060	$1,530	$16.11
110197TP-B8B	150	$2,601	$2,032	$2,230	$38	$6,902	($2,260)	$46.14
426599TP-D2E	500	$5,687	$3,223	$3,649	$38	$12,597	$6,299	$10.76
192544TP-A6D	300	$6,230	$2,432	$3,173	$38	$11,874	($19,303)	$46.14
192519TP-D3E	150	$1,647	$843	$2,216	$38	$4,744	$3,727	$46.14
1186119TP-9E7	200	$6,374	$4,816	$1,565	$38	$12,793	($1,340)	$46.14
118615TP-C46	200	$5,565	$4,293	$1,565	$38	$11,461	($7,845)	$46.14
1186118TP-5A2	200	$3,770	$3,132	$1,565	$38	$8,505	$4,252	$8.93
543645TP-165	200	$2,937	$3,804	$1,642	$38	$8,420	$5,503	$46.14
6204408TP-3FB	750	$18,108	$12,616	$2,676	$38	$33,439	$16,720	$11.55

6204407TP-C25	500	$11,630	$8,457	$2,247	$38	$22,372	$11,186	$10.71
6204405TP-CA0	300	$3,440	$2,449	$1,727	$38	$7,654	$3,827	$24.06
6204404TP-0E5	1000	$21,332	$14,933	$3,004	$38	$39,308	$19,654	$17.14
204735TP-7C2	50	$2,215	$2,969	$1,290	$38	$6,512	$3,256	$32.73
525441TP-DF0	150	$1,892	$1,169	$1,529	$38	$4,628	$3,635	$46.14
633604TP-988	200	$3,310	$1,115	$1,688	$38	$6,152	$3,076	$19.43
3330513TP-914	150	$1,895	$8,723	$2,165	$38	$12,821	$6,411	$24.10
615269TP-92F	300	$5,607	$11,501	$2,625	$38	$19,771	$6,284	$46.14
800152TP-6D7	1000	$23,027	$11,253	$1,022	$38	$35,341	$17,670	$7.28
800170TP-B07	750	$15,870	$78,702	$2,804	$38	$97,414	$48,707	$49.94
642956TP-513	200	$3,265	$3,007	$1,712	$38	$8,022	$4,011	$17.22
625880TP-6E2	200	$1,641	$1,213	$1,521	$38	$4,413	$2,207	$13.39
800104TP-F50	500	$12,056	$5,957	$2,494	$38	$20,545	$10,273	$8.93
8001045TP-7B3	500	$10,085	$4,878	$2,505	$38	$17,507	$8,753	$8.68
5791226TP-DCF	300	$1,995	$1,046	$1,979	$38	$5,057	($5,367)	$46.14
549325TP-5D0	500	$4,721	$2,272	$2,672	$38	$9,702	($10,620)	$46.14
643847TP-B5F	500	$8,853	$7,601	$2,662	$38	$19,154	$9,577	$18.02
6438485TP-221	200	$1,110	$954	$1,693	$38	$3,796	$1,029	$46.14
6438465TP-89B	500	$8,457	$7,228	$2,662	$38	$18,385	$9,193	$19.48
157641TP-7B1	150	$2,096	$896	$1,866	$38	$4,896	$2,555	$46.14
800132TP-927	100	$1,059	$1,438	$2,028	$38	$4,564	$2,282	$15.40
632751TP-46B	150	$1,999	$612	$1,689	$38	$4,338	$1,216	$46.14
800113TP-837	100	$2,697	$3,613	$1,148	$38	$7,496	($5,156)	$46.14
579184TP-AA1	100	$493	$977	$844	$38	$2,352	$1,176	$26.66
568266TP-ADC	500	$11,873	$6,168	$2,494	$38	$20,573	$10,287	$14.58
5682737TP-04F	300	$1,480	$827	$1,875	$38	$4,220	$2,110	$21.98
300360TP-C68	75	$121	$160	$493	$38	$812	$592	$46.14
405769TP-C13	200	$1,665	$4,207	$5,513	$38	$11,423	$3,837	$46.14
617670TP-292	750	$9,811	$19,489	$5,245	$38	$34,583	$17,292	$26.47
112267TP-BDF	150	$2,120	$1,634	$1,604	$38	$5,396	$1,372	$46.14

800171TP-742	1500	$28,196	$105,594	$433	$38	$134,261	$67,131	$51.05
632798TP-DD5	100	$602	$892	$1,548	$38	$3,080	$1,540	$21.77
634528TP-0A0	30	$140	$210	$1,091	$38	$1,478	$739	$28.21
176643TP-F59	150	$1,979	$871	$1,594	$38	$4,483	$3,776	$46.14
800121TP-F4A	750	$30,151	$18,747	$2,016	$38	$50,952	$25,476	$9.04
482074TP-DA2	200	$2,621	$2,358	$2,138	$38	$7,156	$3,578	$32.94
800125TP-E40	2000	$62,838	$39,849	$20,455	$38	$123,180	$61,590	$13.35
8001011TP-EB1	300	$6,381	$3,148	$1,921	$38	$11,488	$5,744	$12.01
400495TP-B39	200	$2,275	$6,383	$2,462	$38	$11,158	($892)	$46.14
800120TP-30F	30	$272	$356	$1,058	$38	$1,724	$862	$47.89
595728TP-15B	500	$4,153	$4,026	$3,479	$38	$11,695	$6,211	$46.14
184621TP-6F0	50	$870	$1,032	$436	$38	$2,376	($552)	$46.14
5791154TP-B14	150	$3,566	$1,617	$1,371	$38	$6,592	($4,055)	$46.14
482070TP-CA8	300	$4,785	$4,374	$2,643	$38	$11,841	$7,241	$46.14
656382TP-D30	100	$44	$62	$1,522	$38	$1,666	$1,663	$46.14
800131TP-5E7	2500	$38,690	$27,244	$10	$38	$65,982	$32,991	$11.78
520373TP-2AF	1500	$13,700	$37,959	$76	$38	$51,775	$25,887	$78.82
184687TP-F60	150	$2,604	$1,100	$1,571	$38	$5,313	($65)	$46.14
150931TP-983	200	$5,885	$7,240	$1,850	$38	$15,013	($3,923)	$46.14
150925TP-224	150	$4,477	$5,717	$1,758	$38	$11,990	($3,306)	$46.14
389997TP-83A	200	$1,197	$2,786	$1,928	$38	$5,949	($1,067)	$46.14
389990TP-5F0	150	$1,473	$3,626	$1,824	$38	$6,962	($935)	$46.14
389999TP-BA1	300	$1,077	$2,422	$2,657	$38	$6,194	$3,097	$28.16
800167TP-C60	150	$3,092	$6,498	$1,836	$38	$11,463	($3,842)	$46.14
800161TP-DEF	500	$4,729	$10,454	$3,560	$38	$18,781	$9,391	$20.55
8001611TP-8B7	30	$558	$717	$294	$38	$1,606	($1,031)	$46.14
143131TP-38F	200	$4,734	$3,389	$2,286	$38	$10,447	$5,223	$18.08
181911TP-927	75	$1,821	$3,202	$925	$38	$5,985	$2,993	$12.69
235545TP-814	200	$3,645	$1,329	$2,500	$38	$7,512	$3,756	$11.05
150910TP-893	500	$13,828	$19,467	$3,146	$38	$36,480	$18,240	$11.81

150912TP-816	750	$3,556	$5,252	$4,025	$38	$12,871	$6,435	$20.70
624649TP-8F7	500	$260	$330	$2,930	$38	$3,559	$1,779	$9.14
800166TP-025	200	$2,043	$4,909	$1,989	$38	$8,979	$4,489	$16.93
416731TP-C0E	150	$1,676	$5,124	$2,003	$38	$8,841	$5,037	$46.14
624606TP-58C	150	$2,611	$1,287	$1,589	$38	$5,526	$43	$46.14
1164012TP-00A	300	$3,818	$1,433	$1,769	$38	$7,059	$3,529	$13.16
424510TP-575	500	$6,920	$4,027	$3,881	$38	$14,867	$7,434	$12.67
800149TP-2AE	300	$9,770	$3,672	$3,285	$38	$16,765	$8,382	$8.66
8001015TP-FBB	300	$7,106	$3,543	$1,947	$38	$12,635	$6,317	$8.22

10.2 Line Charge Breakdown for Group Customers

Consumer Capacity	Code	Number of Connections	TransPower Revenue per Consumer Group	Sub Transmission Revenue per Consumer Group	Distribution Revenue per Consumer Group	PowerNet Overheads per Consumer Group	Fixed Charge per Day	Variable Charge per Day MWh Sales
TPC Urban Domestic								
Small Domestic (8kVA 1 Phase) - All Peak	UD08P	36	$1,488	$1,773	$3,264	$1,376	$0.43	$46.14
Small Domestic (8kVA 1 Phase) - With Off Peak	UD08Q	376	$12,927	$15,974	$28,976	$14,376	$0.29	$46.14
Standard Domestic (20kVA 1 Phase) - All Peak	UD20P	125	$12,918	$15,394	$28,333	$4,779	$0.79	$46.14
Standard Domestic (20kVA 1 Phase) - With Off Peak	UD20Q	1,139	$97,896	$120,974	$219,441	$43,548	$0.54	$46.14
Historic Domestic - All Peak	UH20P	859	$88,774	$105,785	$194,705	$32,843	$0.79	$46.14
Historic Domestic - With Off Peak	UH20Q	11,500	$988,414	$1,221,425	$2,215,601	$439,687	$0.54	$46.14
Special Domestic (Multi Phase) - All Peak	UM20P	7	$723	$862	$1,587	$268	$0.79	$46.14
Special Domestic (Multi Phase) - With Off Peak	UM20Q	16	$1,375	$1,699	$3,083	$612	$0.54	$46.14
10% Fixed Charge Option - All Peak	UDL20P	76	$6,286	$7,845	$15,783	$2,906	$0.15	$79.28
10% Fixed Charge Option - With Off Peak	UDL20Q	317	$21,953	$28,082	$55,957	$12,120	$0.00	$79.28
Non-Domestic Single Phase								
Street Lights (1 Phase)	US001L	4,326	$57,219	$74,746	$67,117	$3,308	$0.06	$46.14
1 kVA 1 Phase - All Peak	US001P	26	$2,401	$3,022	$2,536	$994	$0.31	$46.14
8 kVA 1 Phase - All Peak	US008P	168	$6,945	$8,276	$15,232	$6,423	$0.43	$46.14
8 kVA 1 Phase - With Off Peak	US008Q	38	$1,306	$1,614	$2,928	$1,453	$0.29	$46.14
20 kVA 1 Phase - All Peak	US020P	373	$38,548	$45,935	$84,546	$14,261	$0.79	$46.14
20 kVA 1 Phase - With Off Peak	US020Q	156	$13,408	$16,569	$30,055	$5,964	$0.54	$46.14
Non-Domestic Three Phase								
15 kVA 3 Phase - All Peak	UT015P	43	$3,333	$4,319	$7,509	$1,644	$0.65	$46.14
15 kVA 3 Phase - With Off Peak	UT015Q	19	$1,225	$1,667	$2,833	$726	$0.43	$46.14
30 kVA 3 Phase - All Peak	UT030P	566	$91,860	$120,375	$220,963	$21,640	$1.11	$46.14

30 kVA 3 Phase - With Off Peak	UT030Q	121	$16,398	$22,363	$40,295	$4,626	$0.74	$46.14
50 kVA 3 Phase - All Peak	UT050P	263	$103,892	$135,158	$234,960	$10,055	$2.24	$46.14
50 kVA 3 Phase - With Off Peak	UT050Q	98	$32,242	$43,912	$74,742	$3,747	$1.53	$46.14
75 kVA 3 Phase - All Peak	UT075P	93	$66,399	$87,010	$155,975	$3,556	$5.44	$46.14
75 kVA 3 Phase - With Off Peak	UT075Q	25	$14,904	$20,326	$35,770	$956	$3.67	$46.14
100 kVA 3 Phase - All Peak	UT100P	7	$8,262	$10,826	$19,289	$268	$10.09	$46.14
100 kVA 3 Phase - With Off Peak	UT100Q	2	$1,971	$2,688	$4,702	$76	$7.00	$46.14
TPC Rural								
Domestic								
Small Domestic (8kVA 1 Phase) - All Peak	RD08P	45	$1,860	$2,217	$12,642	$1,721	$0.49	$46.14
Small Domestic (8kVA 1 Phase) - With Off Peak	RD08Q	299	$10,280	$12,703	$71,835	$11,432	$0.33	$46.14
Standard Domestic (20kVA 1 Phase) - All Peak	RD20P	182	$18,809	$22,413	$127,827	$6,959	$0.91	$46.14
Standard Domestic (20kVA 1 Phase) - With Off Peak	RD20Q	472	$40,568	$50,132	$283,498	$18,046	$0.62	$46.14
Historic Domestic - All Peak	RH20P	772	$79,783	$95,071	$542,212	$29,516	$0.91	$46.14
Historic Domestic - With Off Peak	RH20Q	6,126	$526,524	$650,648	$3,679,464	$234,219	$0.62	$46.14
Special Domestic (Multi Phase) - All Peak	RM20P	22	$2,274	$2,709	$15,452	$841	$0.91	$46.14
Special Domestic (Multi Phase) - With Off Peak	RM20Q	154	$13,236	$16,356	$92,497	$5,888	$0.62	$46.14
10% Fixed Charge Option - All Peak	RDL20P	69	$5,707	$7,122	$42,105	$2,638	$0.15	$79.28
10% Fixed Charge Option - With Off Peak	RDL20Q	108	$7,479	$9,568	$56,235	$4,129	$0.05	$79.28
Non-Domestic Single Phase								
Street Lights (1 Phase)	RS001L	588	$7,777	$10,160	$36,739	$450	$0.07	$46.14
1 kVA 1 Phase - All Peak	RS001P	127	$11,728	$14,762	$56,734	$4,856	$0.31	$46.14
8 kVA 1 Phase - All Peak	RS008P	671	$27,738	$33,053	$188,510	$25,655	$0.49	$46.14
8 kVA 1 Phase - With Off Peak	RS008Q	93	$3,197	$3,951	$22,343	$3,556	$0.33	$46.14
20 kVA 1 Phase - All Peak	RS020P	2,112	$218,267	$260,090	$1,483,357	$80,749	$0.91	$46.14
20 kVA 1 Phase - With Off Peak	RS020Q	266	$22,862	$28,252	$159,768	$10,170	$0.62	$46.14

Non-Domestic Three Phase								
15 kVA 3 Phase - All Peak	RT015P	158	$12,247	$15,869	$88,813	$6,041	$0.74	$46.14
15 kVA 3 Phase - With Off Peak	RT015Q	22	$1,418	$1,930	$10,688	$841	$0.50	$46.14
30 kVA 3 Phase - All Peak	RT030P	2,453	$398,114	$521,695	$2,963,985	$93,787	$1.27	$46.14
30 kVA 3 Phase - With Off Peak	RT030Q	366	$49,600	$67,643	$380,934	$13,994	$0.86	$46.14
50 kVA 3 Phase - All Peak	RT050P	327	$129,174	$168,048	$929,879	$12,502	$2.57	$46.14
50 kVA 3 Phase - With Off Peak	RT050Q	439	$144,429	$196,708	$1,077,921	$16,785	$1.76	$46.14
75 kVA 3 Phase - All Peak	RT075P	57	$40,696	$53,328	$296,811	$2,179	$6.53	$46.14
75 kVA 3 Phase - With Off Peak	RT075Q	13	$7,750	$10,569	$58,325	$497	$4.40	$46.14
100 kVA 3 Phase - All Peak	RT100P	18	$21,245	$27,839	$154,126	$688	$12.11	$46.14
100 kVA 3 Phase - With Off Peak	RT100Q	0	$0	$0	$0	$0	$8.41	$46.14