
Scanpower Limited
Pricing Methodology Disclosure
For Pricing Effective 1 April 2011 to 31 March 2012

Introduction

1. The purpose of this document is to describe the methodology used by Scanpower Limited in setting its distribution and transmission charges, as required by Section 23 of the Electricity Information Disclosure Requirements 2004 issued 31 March 2004 and consolidating all amendments to 31 October 2008.
2. The objectives of Scanpower Limited's approach to network pricing are:
 - To meet regulatory requirements relating to fixed daily charges / low-user rates
 - To allocate costs fairly between user groups
 - To establish a fair range of charges
 - To appropriately recover pass through costs such as transmission charges
 - To achieve a rate of return acceptable to owners (Scanpower Customer Trust)
 - To provide appropriate demand based pricing signals where possible
3. The components of this disclosure, which in total describe the Scanpower pricing methodology, include:
 - Disclosure of revenue requirements
 - Determination of customer charging groups
 - Identification of costs and associated drivers
 - Allocation of costs to customer groups
 - Derivation of charges
 - Rationale for structure of fixed and variable charges

Calculation of Annual Revenue Requirement

4. The following table summarises the components included in the annual revenue requirement calculation:

Table One – Calculation of Annual Revenue Requirement

Description	Amount
Operations & Maintenance Costs	\$855,044
Administration & Corporate Costs	\$1,074,178
Depreciation Charges	\$933,206
Cost of Capital / Return to Owners	\$2,000,000
Transpower Charges (net of LRR)	\$1,018,709
Regulatory Costs / Levies (including EC)	\$36,000
Total Revenue Requirement	\$6,917,147

Identification / Explanation of Costs

6. Operations & Maintenance is a direct cost and relates to network asset maintenance, outage response, asset management, design, planning, and customer / public liaison. The cost is derived from the actual amount disclosed for 2009/10 and adjusted by the CPI for the period 1 January 2009 to 31 December 2010. These costs are recovered from Fixed Charges as they do not vary with load.
7. Administration & Corporate is an indirect cost and relates to overheads such as Board and Executive costs, audit fees, insurances, and similar items. The value is derived from the actual amount disclosed for 2009/10 and adjusted by the CPI for the period 1 January 2009 to 31 December 2010. These costs are recovered from Fixed Charges as they do not vary with load.
8. Depreciation Charges reflect the annual charge to the accounts for network and related fixed assets. They are calculated using the amount disclosed for 2009/10 plus the depreciation for network capital expenditure during 2010/11. These costs are recovered from Variable Charges as the fixed asset capacity is dependent on load.
9. Cost of capital / return to customer owners represents the anticipated annual distribution of returns to customers by way of the annual network discount mechanism. The amount is established through consultation with the Scanpower Customer Trust and is recorded in the annual Statement of Corporate Intent. These costs are recovered from Variable Charges as the fixed asset capacity is dependent on load.

10. Transpower charges are transmission costs applied by the national grid operator for the year 2011/12. They are stated here net of loss rental rebates which are offset as a credit against total budgeted transmission costs and have been calculated using the average amount of Loss Rental Rebates (LRR) received during the period 2005/10. These costs are recovered from Variable Charges as Transpowers charges are based on Scanpower's share of the national load.
11. Regulatory costs / levies include amounts Charged by the Electricity Commission, Commerce Commission, Ministry of Economic Development, and the Electricity & Gas Complaints Commission Scheme. These costs are recovered from Fixed Charges as they do not vary with load.

Consumer Grouping for Pricing Purposes

12. For pricing purposes, consumer groups have been split into domestic and commercial categories. Domestic consumers are deemed to be permanent places of residence as opposed to business premises. This enables identification of residential supplies for the purposes of complying with Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004.
13. In regard to residential low user tariffs, the decision was made to apply a low fixed daily charge component to all domestic supplies; i.e. not greater than 15 cents per day. Ease of understanding and reduced billing complexity were the underlying drivers behind this.
14. For commercial customers, consumer categories have been established on the basis of installed capacity and annual consumption. Both these measures correlate with the amount of asset used for each consumer group.
15. The table below summarises the consumer groupings for pricing purposes.

Table Two – Consumer Grouping for Network Pricing Purposes

Pricing Group	Quantity	Description
D1	4,705	Standard Domestic (0-15kVA)
C1	1,284	Standard Commercial (>8kVA)
C1.2	428	<2kVA Commercial (pumps, railway bells etc)
C1.5	392	2-8kVA Commercial (small sheds etc)
C3	14	Large Commercial (100,000 – 500,000 kwh pa)
C4	6	Large Commercial (500,000 – 2,000,000 kwh pa)
C5	3	Large Commercial (2,000,000 – 3,500,000 kwh pa)
C6	2	Large Commercial (3,500,000 + kwh pa)

16. The quantity of installations in each category is stated as at 1 January 2010 and is derived from the National Registry and cross referenced to Scanpower's billing system.
17. Therefore, the load / consumption characteristics shown in the table above prescribe the method / criteria for determining which pricing category a consumer is in.

Allocation of Costs to Customer Groups

18. Costs are allocated to customer groups on the basis of installed distribution transformer capacity. Given the relative simplicity of the Scanpower network design (no zone substations), this is used as a correspondingly straightforward, yet appropriate, allocation basis.
19. The table below summarises the allocation of costs, by type, to the consumer groupings identified in the pricing structure. Included are the installed capacity ratings for each group based on actual installed transformer size.

Table Three – Allocation of Costs / Revenue Requirements to Consumer Pricing Groups

Group	Capacity	OM Costs	Admin	Deprec.	Cost of Capital	Transpower	EC Costs	Revenue Required
D1	31,650	\$436,203	\$547,998	\$476,072	\$961,480	\$817,554	\$17,307	\$3,528,758
C1	17,567	\$242,110	\$304,155	\$264,239	\$533,659	\$453,775	\$9,606	\$1,958,600
C1.2	1,440	\$19,846	\$24,932	\$21,660	\$43,745	\$37,197	\$787	\$160,550
C1.5	2,584	\$35,613	\$44,739	\$38,868	\$78,498	\$66,748	\$1,413	\$288,098
C3	1,500	\$20,673	\$25,971	\$22,563	\$45,568	\$38,747	\$820	\$167,240
C4	1,400	\$19,295	\$44,240	\$40,819	\$90,224	\$76,718	\$1,624	\$156,090
C5	3,400	\$46,859	\$58,868	\$18,554	\$41,011	\$34,872	\$738	\$379,077
C6	2,500	\$34,455	\$43,285	\$93,114	\$205,814	\$175,006	\$3,705	\$278,733
	62,041	\$855,054	\$1,074,178	\$904,830	\$2,000,000	\$1,700,616	\$36,000	\$6,917,147

Tariff Structure

20. In terms of the structure of fixed and variable pricing, as previously noted domestic (D1) pricing has been set such that all customers have a fixed daily charge of 15 cents, so as to comply with the Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004. With general increases in consumption since this policy was adopted, as shown in the table below the fixed / variable split for domestic consumers is 8.2% / 91.8%. In the case of commercial customers, the fixed / variable split has been to some extent based on historical precedent, which has been a 30 / 70 cost ratio. This ratio varies over time, with movements between consumer groups, but remains in use to promote price stability. Using the cost requirements in table 1 this ratio would be 28 / 72.
21. The ratio of night to day pricing has been based on system load factor. Historically this resulted in night charges being 67% of day charges. This ratio varies over time, with changes to consumption patterns, but remains in use to promote price stability. Using the 2010 disclosed information this ratio would be now be 62%.

Table Four – Split of Fixed and Variable Revenue by Consumer Pricing Group

Class	Fixed Revenue	Fixed %	Variable Revenue	Variable %	Total
D1	\$256,285	8.2%	\$2,871,398	91.8%	\$3,127,683
C1	\$395,953	23.3%	\$1,303,552	76.7%	\$1,699,504
C1.2	\$75,607	51.0%	\$72,597	49.0%	\$148,204
C1.5	\$85,292	33.2%	\$171,358	66.8%	\$256,650
C3	\$44,461	22.9%	\$149,919	77.1%	\$194,380
C4	\$40,800	22.5%	\$140,750	78.5%	\$181,550
C5	\$85,435	20.2%	\$337,232	79.8%	\$422,667
C6	\$138,028	40.6%	\$201,593	59.4%	\$339,622
TOTAL	\$1,108,500		\$5,248,400		\$6,356,900

22. The values shown in the above table are calculated using consumption from 1 January 2010 to 31 December 2010 and declared prices for 1 April 2011 to 31 March 2012. Excluding for the regulated Domestic fixed charge requirements the ratio of fixed / variable revenue for this period was 27 / 73.

Other Information

23. Scanpower calculates variable kWh on grid exit point volumes. Therefore, end use consumption data should be adjusted by the appropriate loss factor (disclosed in the schedule of prices) to arrive at billable volumes. This is to reduce complexity in monthly billing as individual ICP level data and consumption calculations are not necessary. Furthermore, GXP volumes are reconciled independently and therefore appropriate for billing purposes.
24. The difference in revenue and income indicates that an overall price increase of 9.2% is required for 2011/12. Scanpower's Directors and Owners agreed to limit this to 5.5% for 2011/12.
25. In February 2011 the Electricity Commission released its Distribution Pricing Principles and Information Disclosure Guidelines. While Scanpower believes its Pricing Principles are consistent with these guidelines, the Commission may require Scanpower to revise its Pricing Principles and Methodology in future years. In order to achieve pricing consistency Scanpower has continued to use its historical Principles and Methodology for 2011/12.

Compliance Matrix

EC Guideline	Description	Document Reference
9(a)	Prices should be based on a well-defined, clearly explained and published methodology, with any material revisions to the methodology notified and clearly marked.	Entire document, paragraphs 1 to 25.
9(b)(i)	Demonstrate how the methodology links to the pricing principles and any non-compliance.	Paragraphs 12 - 13 and 20 - 21
9(b)(ii)	Demonstrate the rationale for consumer groupings and the method for determining the allocation of consumers to the consumer groupings.	Paragraphs 12 – 16 and Table 2
9(b)(iii)	Demonstrate quantification of key components of costs and revenues.	Paragraphs 6 – 11 and 22
9(b)(iv)	Explanation of the cost allocation methodology and the rationale for the allocation to each consumer grouping.	Paragraphs 18 – 19 and Table 3
9(b)(v)	Explanation of the derivation of the tariffs to be charged to each consumer group and the rationale for the tariff design.	Paragraphs 20 – 21 and Table 4