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Scanpower Limited

Pricing Methodology Disclosure

For Pricing Effective 1 April 2010 to 31 March 2011

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## 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 primary objectives of Scanpower Limited's approach to network pricing are:
  - To allocate costs fairly between user groups
  - To establish a fair range of charges
  - To provide appropriate demand based pricing signals where possible
  - To achieve a rate of return acceptable to owners (Scanpower Customer Trust)
  - To appropriately recover pass through costs such as transmission charges
  - To meet regulatory requirements relating to fixed daily charges / low-user rates
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*

<b>Description</b>	<b>Amount</b>
Operations & Maintenance Costs	\$777,091
Administration & Corporate Costs	\$1,012,802
Depreciation Charges	\$904,830
Cost of Capital / Return to Owners	\$2,000,000
Transpower Charges (net of LRR)	\$1,700,616
Regulatory Costs / Levies (including EC)	\$36,000
<b>Total Revenue Requirement</b>	<b>\$6,431,339</b>

5. Line item balances are derived from the operating budgets for the 2010 to 2011 financial year. In the case of cost of capital / return to owners, the amount is equal to that agreed with the Scanpower Customer Trust in the Statement of Corporate Intent for the year ending 31 March 2011.

### **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.
7. Administration & Corporate is an indirect cost and relates to overheads such as Board and Executive costs, audit fees, insurances, and similar items.
8. Depreciation Charges reflect the annual charge to the accounts for network and related fixed assets.
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.
10. Transpower charges are transmission costs applied by the national grid operator. They are stated here net of loss rental rebates which are offset as a credit against total budgeted transmission costs.

11. Regulatory costs / levies include amounts paid to the Electricity Commission, Commerce Commission, Ministry of Economic Development, and the Electricity & Gas Complaints Commission Scheme.

### Consumer Grouping for Pricing Purposes

12. For pricing purposes, consumer groups have been split into domestic and commercial categories. This enables identification of residential supplies for the purposes of complying with low user tariff requirements.
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	4,700	Standard Domestic (0-15kVA)
C1	1,272	Standard Commercial (>8kVA)
C1.2	414	<2kVA Commercial (pumps, railway bells etc)
C1.5	375	2-8kVA Commercial (small sheds etc)
C3	14	Large Commercial (100,000 – 500,000 kwh pa)
C4	7	Large Commercial (500,000 – 2,000,000 kwh pa)
C5	2	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 April 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.

In regard to the Domestic / Commercial split, domestic consumers are deemed to be permanent places of residence as opposed to business premises.

**Allocation of Costs to Customer Groups**

- 18. Costs are allocated to customer groups on the basis of installed 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 Cap.	Transpower	EC Costs	Rev. Req.
D1	31,650	\$373,579	\$486,894	\$434,988	\$961,480	\$817,554	\$17,307	\$3,091,802
C1	17,567	\$207,351	\$270,246	\$241,436	\$533,659	\$453,775	\$9,606	\$1,716,072
C1.2	1,440	\$16,997	\$22,153	\$19,791	\$43,745	\$37,197	\$787	\$140,670
C1.5	2,584	\$30,500	\$39,752	\$35,514	\$78,498	\$66,748	\$1,413	\$252,424
C3	1,500	\$17,705	\$23,076	\$20,616	\$45,568	\$38,747	\$820	\$146,531
C4	2,970	\$35,056	\$45,690	\$40,819	\$90,224	\$76,718	\$1,624	\$290,131
C5	1,350	\$15,935	\$20,768	\$18,554	\$41,011	\$34,872	\$738	\$131,878
C6	6,775	\$79,968	\$104,225	\$93,114	\$205,814	\$175,006	\$3,705	\$661,831
	<b>65,836</b>	<b>\$777,091</b>	<b>\$1,012,802</b>	<b>\$904,830</b>	<b>\$2,000,000</b>	<b>\$1,700,616</b>	<b>\$36,000</b>	<b>\$6,431,339</b>

**Fixed / Variable Cost 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 regulatory low user tariff requirements. With general increases in consumption since this policy was adopted, as shown in the table below the fixed / variable split for domestic consumers is 9.24% / 90.76%.
- 21. 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. Over time, with movements between consumer groups and changes to consumption patterns, this ratio has changed.

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

Class	Fixed Revenue	Fixed Percentage	Variable Revenue	Var. Percentage	Total
D1	\$277,595	9.24%	\$2,726,287	90.76%	\$3,003,882
C1	\$467,518	27.42%	\$1,237,674	72.58%	\$1,705,192
C1.2	\$69,965	50.37%	\$68,928	49.63%	\$138,893
C1.5	\$87,270	34.91%	\$162,698	65.09%	\$249,968
C3	\$35,607	22.40%	\$123,340	77.60%	\$158,947
C4	\$85,101	27.06%	\$229,366	72.94%	\$314,467
C5	\$20,758	14.49%	\$122,488	85.51%	\$143,246
C6	\$229,590	32.03%	\$487,149	67.97%	\$716,739
<b>TOTAL</b>	<b>\$1,273,405</b>	<b>19.80%</b>	<b>\$5,157,934</b>	<b>80.20%</b>	<b>\$6,431,339</b>

22. The rationale for a fixed charging component is to reduce the impact of seasonal fluctuations in electricity consumption, which can either favourably or adversely impact actual revenues. Given a relatively static annual revenue requirement this is considered to be a prudent pricing policy.

**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.
24. The rationale for 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.
25. In February 2010 the Electricity Commission released a document entitled “Distribution Pricing Principles and Information Disclosure Guidelines”. In this document the Commission prescribes a number of principles for distribution pricing. As a result, Scanpower will be reviewing its network pricing structure and pricing methodology in the coming year.

**Compliance Matrix**

EIDR 2004 Section	Description	Document Reference
23(a)	Describe the methodology used to calculate prices charged.	Entire document, paragraphs 1 to 24.
23(b)	Disclose the calculation of annual revenue requirement including numerical values.	Paragraphs 4 – 5 and Table 1
23(c)	State consumer groups used for pricing purposes.	Paragraph 15, Table 2
23(c)(i)	Rationale for customer grouping.	Paragraphs 12 – 17
23(c)(ii)	Method for determining customer price group	Paragraph 15
23(c)(iii)	Statistics relating to each group in methodology.	Table 2 (kva / kwh criteria / ICPs per group) Table 3 (installed capacity by group)
23(d)	Allocation and basis for allocation of costs / revenue requirement to groups including numerical values.	Paragraphs 18 – 19, Table 3
23(e)	Proportion of fixed to variable charges and associated rationale.	Paragraphs 20 – 22, Table 4