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**Scanpower Limited**

**Plan for Transition to Service-Based and Cost-Reflective Distribution Pricing Structures**

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## Introduction

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1. The purpose of this document is to describe Scanpower's project plan for reviewing the structure of its network pricing structures, and over time, transitioning to a more service-based and cost-reflective set of charges.
2. This work is being undertaken as part of an industry-led initiative being facilitated by the Electricity Authority (EA) and Electricity Networks Association (ENA).
3. The EA has requested that all electricity lines companies publish their plan for introducing efficient pricing by 1 April 2017. This plan has been uploaded to the Information Disclosures<sup>1</sup> section of Scanpower's website prior to the date.
4. Key elements of the plan described herein include:
  - An overview of current network pricing and the perceived issues that have prompted this review.
  - A high-level summary of the project plan, including a description of the phases of the project lifecycle and itemisation of work streams / key tasks.
  - Corresponding time frames and milestone dates.
  - A discussion of project resourcing requirements and how these will be met.
5. Scanpower intends to report its progress against this plan on a six-monthly basis.

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<sup>1</sup> <http://www.scanpower.co.nz/corporate-information-disclosures>

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## Overview of Current Pricing and Associated Issues

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6. Scanpower's network charges make up approximately one third of our connected customers' retail electricity bills. Our charges comprise a transmission component (being costs passed through from national grid operator Transpower) and a distribution component (Scanpower's charges for delivering electricity over our network). We invoice our charges to electricity retailers on an aggregated basis, and these are passed on to customers via their power individual accounts.
7. Our network pricing is made up of a fixed daily charge (based on customer categories) and a variable charge based on the amount of electricity customers use. The electricity used is recorded using meters and is measured in kilowatt hours (kWh).
8. For residential customers / house holds, the fixed daily network charge component is limited by regulation to 15 cents per day. Correspondingly, in the residential sector, only 6% of Scanpower's revenue comes from these fixed charges, and the remaining 94% from variable, volume based charges<sup>2</sup>.
9. The structure of Scanpower's network charges is based on legacy market conditions, and were designed at a time when the company operated as an integrated distributor / retailer (pre-1998). Since that time, the structure has not changed and it is now becoming evident that a review of it would be desirable.
10. Key issues with the current pricing structure are as follows:
  - Network charges do not reflect the services that Scanpower provides to customers.
  - Revenue is largely recovered on a variable basis, whereas the costs incurred by Scanpower are predominantly fixed.

These shortcomings have the potential to distort consumer investment and consumption decisions. Over time this is likely to result in outcomes that are contrary to the interests of New Zealand consumers, and the economy as a whole.

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<sup>2</sup> Across all customer sectors (i.e. including commercial and industrial customers) 16% of revenue is derived from fixed charges, and 84% from variable, volume based charges.

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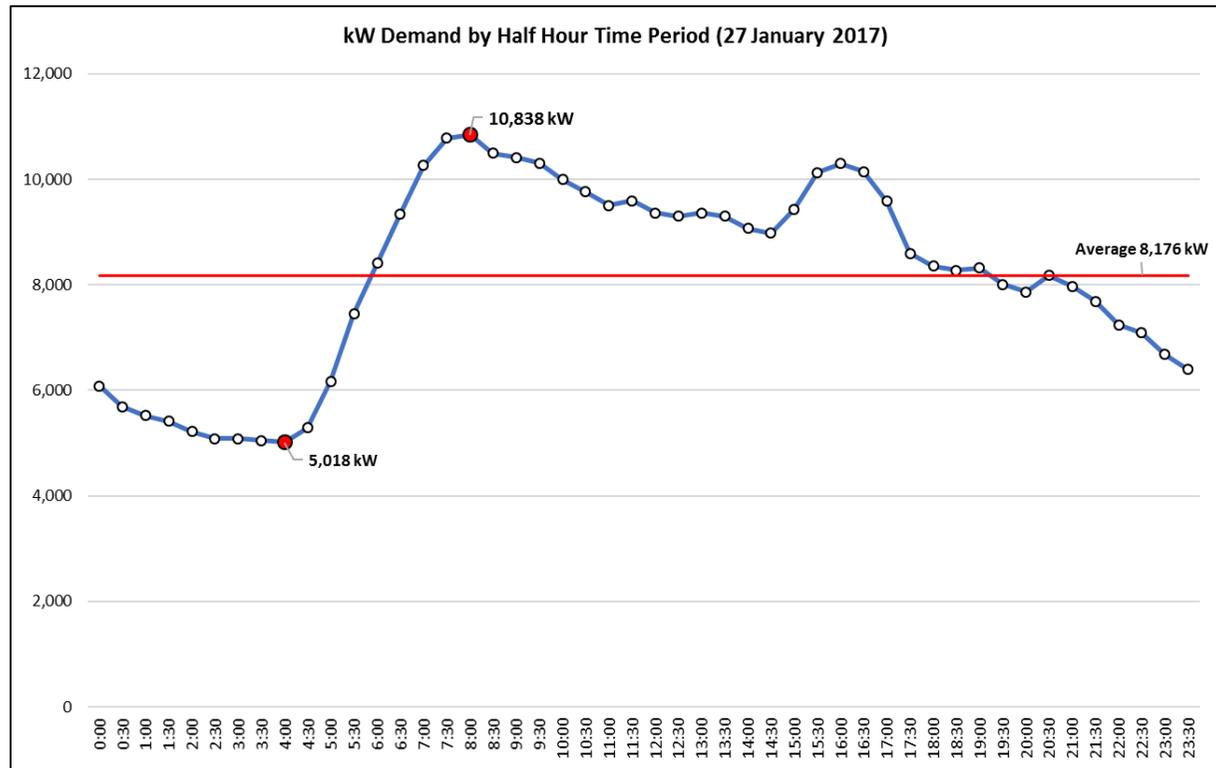
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11. In regard to the services provided by Scanpower, the Electricity Authority has identified the following three services that distributors provide<sup>3</sup>:
- Transporting electricity to a customer's premises at a certain level of quality (e.g. voltage) and reliability.
  - Keeping a certain amount of network capacity available for the customer to use at the "flick of a switch" whenever they want.
  - Acting on customers' behalf to manage their use of the distribution network (e.g. remote control of water heating load).

These are in contrast to the delivery of a metered quantity of electricity over, say, a one month period which is the "service" that current network pricing largely reflects.

12. As to the costs of providing the actual services, they are not accurately reflected by the existing volumetric / "per kWh" pricing structure. What drives Scanpower's costs is how much electricity is used at once ("peak demand") rather than how many units of electricity are delivered in total over a given period. The network must be designed and built to ensure that consumers' demand for electricity can be met at peak times. The graph below shows network demand in Dannevirke, by half hour time period for a given day (27<sup>th</sup> January 2017).
13. As is evident, over the course of the day, the network peak of 10,838 kW occurs between 8:00am and 8:30am. This contrasts with the low point over the day of 5,018 kW between 4:00am and 4:30am. The low / high point range is more than 100%.
14. It is this peak demand that drives Scanpower's costs and more closely reflects the service that the company provides. Existing pricing structures do not signal either of these points.

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<sup>3</sup> Electricity Authority (3 November 2015) *Implications of evolving technologies for pricing of distribution services – Consultation Paper*, page D.



15. Taking these factors into account, Scanpower, as part of an industry lead process (affecting all lines companies), now intends to establish a project with the objective of transitioning to a network pricing structure that:
- Is service-based (i.e. reflects the services provided).
  - Is cost-reflective (i.e. aligned with the drivers of Scanpower's cost structure).
  - Does not distort customer investment and consumption decision making.

- Is complementary to evolving energy technologies (to the extent that we can foresee).

16. In undertaking this project, Scanpower is mindful of seeking a pricing outcome that:

- Can be readily understood and acted on by customers (assuming it is passed through).
  - Results in a transition that minimises price shocks.
  - Is cost effective in terms of data gathering and billing.
  - Minimises any duplication of hardware (e.g. meters) installed at customer premises.
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### **Scanpower Project Plan**

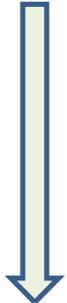
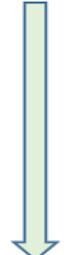
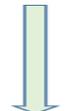
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17. Scanpower's current project plan is summarised below. It is necessarily high level at this stage, pending completion of the initiation and detailed planning phases of the project life cycle. Key milestones include:

- Project initiation, definition and scoping completed by 31 March 2018.
- Detailed project planning completed and socialised by 31 March 2019.
- Project implementation completed by 31 March 2021.

18. Scanpower will review progress to plan, and update timeframes accordingly, on an ongoing basis and report any changes six-monthly.

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<b>Project Initiation</b>	<b>Key Tasks</b>	<b>Timing</b>
Problem identification & scoping	<i>Project justification and scope setting</i>	
Define project objectives	<i>Set overall goals including target dates or date ranges</i>	
Project strategy & options	<i>Develop ideas and options for project direction (e.g. possible pricing options)</i>	
Initial stakeholder communications	<i>Publish future pricing roadmap, include reasoning and why it's important</i>	
Identify challenges / dependencies	<i>AMI penetration, resources, data availability etc.</i>	
Establish high level plan	<i>Gain commitment to reform, agree plan, allocate resources</i>	
Data gathering	<i>Where are the gaps in existing knowledge?</i>	
Define pathway	<i>Prepare final strategic pricing plan (including target dates)</i>	
Alignment across EDBs	<i>Compare plan with other EDB's, form coalitions</i>	
<b>Deliverable / milestone</b>	<b><i>Project is defined, understood and communicated.</i></b>	
<b>Project Planning</b>	<b>Key Tasks</b>	<b>Timing</b>
Develop project plans, including:		
- customer interactions	<i>Establish research program and focus groups (retailer + end-user)</i>	
- pricing trials to test ideas	<i>Conduct in-market testing, examine impact on customer groups</i>	
- data analysis to assess customer impacts	<i>Narrow down preferred options and test market impacts</i>	
- implementation / transition arrangements	<i>Identify what will drive success</i>	
- feedback loops and issues resolution	<i>Develop processes to account for stakeholder views</i>	
- communication	<i>Educate customers and retailers about change</i>	
- regulatory compliance	<i>Check plan meets regulatory expectations</i>	
<b>Deliverable / milestone</b>	<b><i>Project plan is in place, socialised and meets expectations / objectives.</i></b>	<b>31 March 2019</b>
<b>Project Implementation</b>	<b>Key Tasks</b>	<b>Timing</b>
Proceed with implementation plan.	<i>Commence full market roll-out</i>	
Adopt risk management approach	<i>Identify and manage risks to markets, customers, EDBs</i>	
Review progress and make adjustments	<i>Actively consider progress towards outcomes over time</i>	
Ongoing customer interactions	<i>Monitor customer responses and manage as required</i>	
<b>Deliverable / milestone</b>	<b><i>Project implementation is completed.</i></b>	

## Project Resourcing

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19. Through the Project Initiation phase, Scanpower believes it has adequate, existing internal resources to meet requirements. Resourcing demands will be ameliorated by the ability to participate in, and leverage off, work undertaken by the ENA Pricing Working Group and through collaborative work undertaken by sub-groups of companies.
  
20. Beyond this stage, exact resourcing requirements will become more apparent nearer the time. However, it is anticipated that additional resources will be required in particular in the areas of customer consultation and education. If the implementation phase necessitates the deployment of new hardware (or changes to existing hardware) at customer premises, this is another area that will require additional project specific resource.