Improving transparency of consumers' electricity charges

Consultation Paper

Submissions close: 5pm on Friday 26 September 2014

24 June 2014

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Executive summary

A lack of transparency, which becomes more evident when price changes are announced, is resulting in reduced consumer engagement and reduced confidence in the market. As a result the Authority is seeking feedback on options for improving transparency at these key times.

The proposal is to require retailers to provide information to consumers about any price changes in a standard form, so that the nature and reasons for these changes are clearly presented. The proposal is also to require retailers to consult with distributors, and distributors to consult with retailers, about any media releases each party proposes to issue relating to changes to consumers' charges in the distributor's area.

The primary objective of the proposal is to promote retail competition by:

(a) providing better information about the drivers of price changes – better information increases consumer engagement and will drive firms to deliver what consumers want

(b) promoting accountability across the supply chain by requiring better explanations of the drivers of price changes – this will increase consumers' confidence and engagement in the retail market, which will also drive firms to deliver what consumers want.

A secondary objective is to promote operational efficiency. The proposal would be expected to do this by reducing the transaction costs for consumers of making energy-related investment decisions. Better information about the drivers of energy and network price changes will assist consumers make decisions about when it is economically efficient to use demand-management technologies or to substitute alternative energy sources such as gas, wood or solar.

Other approaches discussed in this paper are:

1. leave it to market forces to incentivise the development of improved transparency in response to consumer wants
2. require retailers and distributors to issue separate bills to consumers
3. require retailers to separately itemise transmission and distribution costs on consumers' bills
4. for the Authority to publish an annual report on current and future price trends
5. require distributors to directly notify every customer on their networks of any price adjustments in distribution (including transmission pass through) charges
6. require retailers and distributors to agree on the reasons for price changes before letters are sent to consumers advising them of those reasons.

Glossary of abbreviations and terms

Act	Electricity Industry Act 2010
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
Authority	Electricity Authority
Code	Electricity Industry Participation Code 2010
ENA	Electricity Networks Association
GST	Goods and Services Tax
GXP	Grid exit point
ICP	Installation control point
PV	Photo voltaic
RAG	Retail Advisory Group
TLC	The Lines Company
UMR	UMR Research

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1. What you need to know to make a submission

1.1 What this consultation paper is about

Focus of this consultation is the proposal to improve transparency of consumers' electricity charges

1.1.1 The Electricity Authority (Authority) asked the Retail Advisory Group (RAG) to review whether there should be more transparency around consumers' electricity charges. The RAG was asked to identify and recommend alternatives that promote competition by ensuring consumers have timely access to sufficient information so they can understand their bills, see what is driving price changes and make choices about their retailer.

1.1.2 The RAG made its recommendations to the Authority on 28 March 2014.[1] This paper includes the Authority's response to the RAG's recommendations.

Purpose of this paper

1.1.3 The purpose of this paper is to consult with participants and persons that the Authority thinks are representative of the interests of persons likely to be affected by the Authority's proposal to improve transparency of consumers' electricity charges.

1.1.4 Section 39(1)(c) of the Electricity Industry Act 2010 (Act) requires the Authority to consult on any proposed amendment to the Electricity Industry Participation Code 2010 (Code) and the regulatory statement. Section 39(2) provides that the regulatory statement must include a statement of the objectives of the proposed amendment, an evaluation of the costs and benefits of the proposed amendment, and an evaluation of alternative means of achieving the objectives of the proposed amendment. The regulatory statement is set out in section 5.6 of this paper.

1.1.5 The proposed Code amendment is attached as Appendix C. The Authority invites submissions on the proposal for improving transparency and the associated regulatory statement and proposed Code amendment, including drafting comments.

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[1] The RAG's recommendations can be found at: https://www.ea.govt.nz/development/advisory-technical-groups/rag/final-report-recomendations/.

1.2 How to make a submission

1.2.1 Your submission is likely to be made available to the general public on the Authority's website. If necessary, please indicate any documents attached, in support of your submission and any information that is provided to the Authority on a confidential basis. However, you should be aware that all information provided to the Authority is subject to the Official Information Act 1982.

1.2.2 The Authority's preference is to receive submissions in electronic format (Microsoft Word) in the format shown in Appendix A. Submissions in electronic form should be emailed to submissions@ea.govt.nz with "Consultation Paper—Improving transparency of consumers' electricity charges" in the subject line.

1.2.3 Do not send hard copies of submissions to the Authority unless it is not possible to do so electronically. If you cannot or do not wish to send your submission electronically, you should post one hard copy of the submission to either of the addresses provided below or you can fax it to 04 460 8879. You can call 04 460 8860 if you have any questions.

Postal address	Physical address
Submissions Electricity Authority PO Box 10041 Wellington 6143	Submissions Electricity Authority Level 7, ASB Bank Tower 2 Hunter Street Wellington

1.3 Deadline for receiving a submission

1.3.1 Submissions should be received by **5pm** on **Friday 26 September 2014**. Please note that late submissions are unlikely to be considered.

1.3.2 The Authority will acknowledge receipt of all submissions electronically. Please contact the Submissions' Administrator if you do not receive electronic acknowledgement of your submission within two business days.

1.4 The Electricity Commission and the RAG have consulted previously on improving transparency of consumers' electricity charges

1.4.1 This is the latest in a series of consultations on improving transparency of consumers' electricity charges. Previous consultations include:[2]

(a) Electricity Commission consultation paper: Transparency of charge components – 12 November 2009

(b) RAG discussion paper: Improving transparency of consumers' electricity charges – 9 July 2013.

1.4.2 RAG meeting papers on improving transparency of consumers' electricity charges are also available on the Authority's website.[3]

1.4.3 For more detail on the background of the improving transparency project, see Appendix B.

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[2] Both consultations can be found on the Authority's website at: http://www.ea.govt.nz/development/work-programme/retail/improving-transparency-charges/consultations/.

[3] http://www.ea.govt.nz/development/work-programme/retail/improving-transparency-charges/advisory-group/.

2. The role of transparency

2.1 What is transparency?

2.1.1 In the context of this paper, 'transparency' is what is available for the consumer to see and understand about the service they are consuming or desiring, the prices available to them and their charges. For electricity, transparency primarily relates to whether consumers have timely access to sufficient information for them to understand their bills, see what is driving price changes, make choices about their retailers, and promote accountability across the electricity supply chain.

2.1.2 Hence, transparency is about a consumer having sufficient information about the performance of electricity suppliers to make better electricity-related decisions (ie, take actions). Better decision-making by consumers is expected to have on-going dynamic competitive benefits and improve accountability of industry participants, especially retailers and distributors. Enhanced competition and improved accountability can be expected to contribute to increased credibility and confidence in the market.

2.2 The role of transparency in promoting competition

2.2.1 Markets work better when consumers engage effectively with suppliers. Confident consumers enhance competition by making well-informed and well-reasoned decisions which reward those suppliers which best satisfy their needs. This creates competition between suppliers to deliver services and products efficiently and innovatively to meet consumers' needs.

2.2.2 When this process works well a virtuous cycle is created between consumers and competition. Active and confident consumers and vigorous competition work together in tandem to deliver long-term benefits to consumers.

2.2.3 Accurate information is a precondition for an efficient and competitive market because it enables consumers to choose the best retailer for their needs and to understand when it is economic to use demand-management technologies or to substitute alternative energy sources such as gas, wood or solar. If consumers do not have the information they need to engage effectively in the buying process, then firms may find it harder to win market share by providing what consumers most want. This will, in turn, reduce the incentive for firms to work towards that end, competition will be weakened, and the market will deliver less consumer benefit. Innovation may be dampened, as firms can only gain from innovation if they can get their products to market and consumers are active and willing to adopt these new, higher value products.

2.2.4 For consumers to engage effectively, they need to:

(a) have access to information about the various offers available in the market

(b) assess these offers

(c) act on this information and analysis by purchasing the good or service that offers the best value to them.

2.2.5 When any of these three elements of the consumer decision-making process breaks down, it will lead to reduced consumer engagement and impeded competition.

Q1. Do you agree with the Authority's view of the role of transparency in promoting competition? Please explain your answer.

2.3 Enabling consumers to make better choices about their retailers

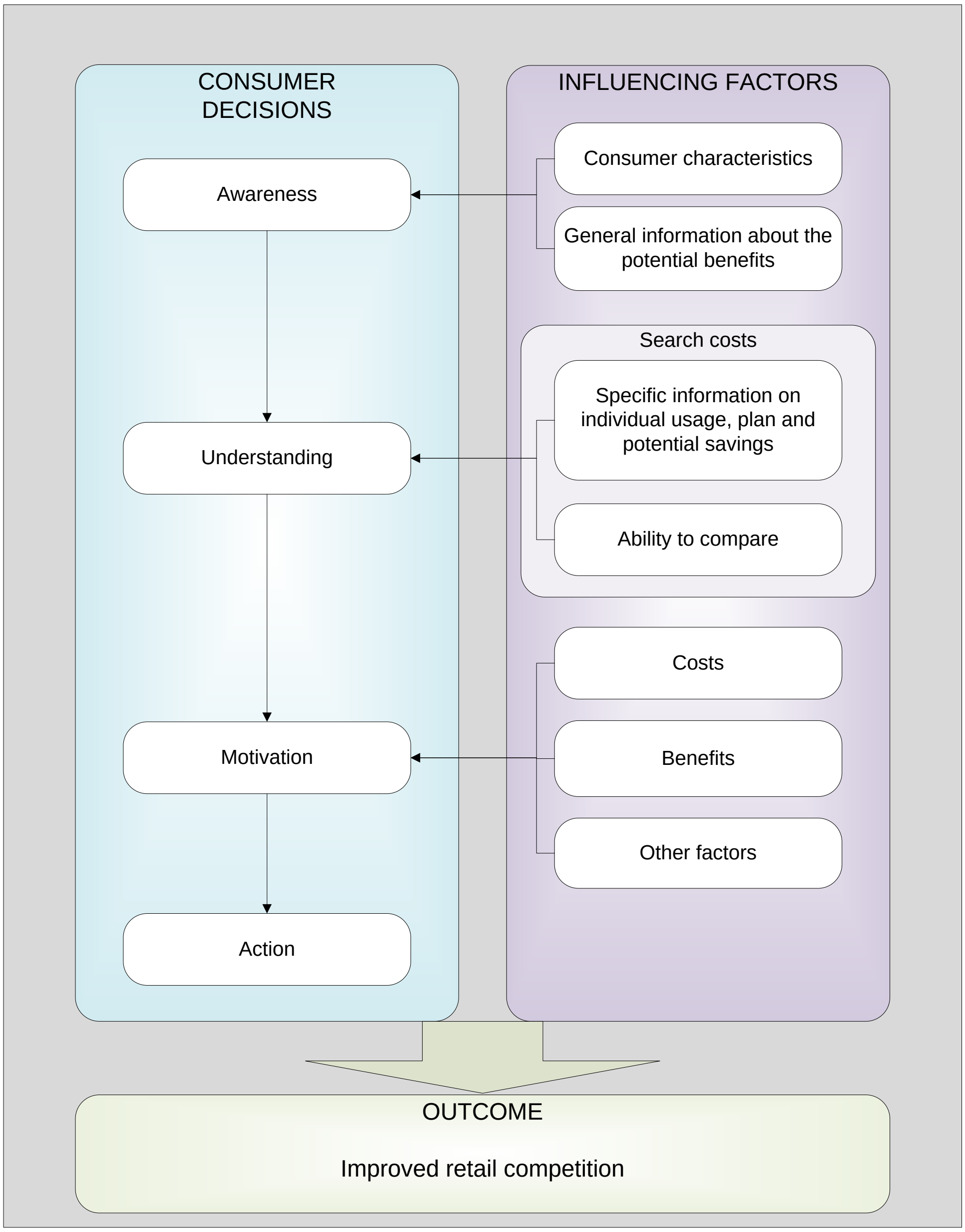
Drivers of consumer switching behaviour

2.3.1 Consumer choice is a key element of competition. However, to realise the gains from competition, consumers need to be engaged, that is, to exercise this choice and make active decisions when there are benefits available (whether savings from switching retailer or from obtaining more valued service levels).

2.3.2 As illustrated in Figure 1, below, a range of factors influence generic consumer decisions when engaging with retailers. These are not specific to electricity, but apply generally.

2.3.3 The figure shows the four stages of a consumer's decision-making process and links those stages with factors, including information, which may influence their thinking at that stage.

Figure 1: Factors influencing consumer decision-making



2.3.4 The factors in Figure 1 that influence consumer decisions about their electricity retailer can be further described as follows:

(a) **consumer characteristics** – these are consumer-specific factors such as household energy usage, income and education. These factors influence the consumer's awareness of the opportunity to pursue savings (by switching or making alternative energy-related investment and usage decisions)

(b) **general information about switching** – the availability and accessibility of information on the ability to switch and on the potential gains from doing so is likely to be an important factor in a switching decision. The focus of the Authority's What's My Number campaign in its first three years of operation was on increasing general awareness about the ease of switching and the savings available from switching

(c) **information search costs** – the availability of information that enables a consumer to understand whether they are on the right plan for them (taking into account price, service levels etc) is likely to be an important factor in a consumer's switching decision. The time and effort required to obtain and understand information about the potential savings specific to the consumer, and make comparisons across retailers, will influence the switching decision. In relation to transparency of consumers' electricity charges, a relevant factor is whether retailers provide price information (including changes) in a way that minimises search costs. For example:

   (i) is the information easy to understand, or does it contribute to potential confusion about prices?

   (ii) are the reasons for price changes explained clearly and consistently? For example, do changes in the regulated portion (transmission and distribution) of the electricity bill obscure competitive improvements in the energy portion of the bill?

   (iii) do retailers use rapidly developing technology to communicate with consumers about their electricity usage and costs?

   The costs of searching for information could be influenced by:

   (i) whether terminology about prices is consistent (presentation of GST, discounts and so on)

   (ii) a consumer's understanding of what tariff options are available to them (such as controlled, uncontrolled, night/day)

   (iii) a consumer's understanding of what tariff offer is best given their consumption profile

(d) **the cost of switching** – a consumer's motivation to obtain the savings that are available will be influenced by the cost of switching (actual or perceived). One consumer may consider that five minutes is too long (too costly) to make a switch. Another consumer may perceive the process as confusing or complex. The Authority's What's My Number campaign has focused on telling consumers that switching is easy, and has relied on the Consumer NZ Powerswitch comparison tool that reduces the effort required for comparing and choosing a retailer

(e) **the benefits from switching** – consumers need to consider that the quantum of savings will make switching worthwhile and any other benefits such as other product offerings and service quality. This factor is probably more affected by an individual consumer's assessment of the cost of switching versus the savings available, and is less influenced by the availability of information about charges

(f) **other factors** – such as consumers' attitudes towards their current retailer and alternate suppliers, and the degree of trust in the information provided. These factors are probably affected by consumers' perceptions of the providers of the information.

Firms may have incentives to increase search costs

2.3.5 There is economic literature that indicates firms may have an incentive to increase search or switching costs for consumers in the following ways:

(a) **accessing information**. Firms can make it more difficult for consumers to perform optimal searches.[4] For example, research suggests that consumers do not tend to look at pricing terms that are not provided upfront.[5] Firms may exploit this by putting more of the price into add-on services; restructuring their tariffs,[6] adding clauses within the terms and conditions; or making price searching harder (for example, by "drip pricing"—only revealing the true price after the customer has spent some time choosing)[7]

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4 For example, S. DellaVigna and U. Malmendier, (2006), 'Paying not to go to the gym', Amer. Econ. Rev, 96(3), 694-719, using data from three US health clubs find that consumers frequently choose contracts that appear sub-optimal given their attendance frequency. Members who choose a contract with a flat monthly fee pay a price per expected visit of more than $17, even though they could pay $10 per visit using a 10-visit pass. They suggest this could be driven by consumer overconfidence about gym attendance. S. Agarwal, J. C. Driscoll, X. Gabaix and D. Laibson, (2008), Learning in the Credit Card Market, Working paper series, investigate learning in the credit card market. They find that although consumers learn (through negative feedback), this hard-earned knowledge does not fully persist (that is, knowledge depreciates).

5 See for example M. Grubb, (2009), Selling to Overconfident Consumers, Amer. Econ. Rev., 99(5), 1770-1807, who analysed U.S. mobile phone data to investigate whether the three part tariffs seen within the U.S. mobile phone industry were developed as a means of capturing consumers' overconfidence. He found this was the most plausible of different explanations for the tariff structure. Grubb argued that the model could be reinterpreted more widely to explain the use of flat rates and late fees in rental markets, and teaser rates on loans.

6 See, for example, M. Eisenberg, (1995), The Limits of Cognition and the Limits of Contract, Stan. L. Rev., 47(2), 211-59.

7 Several commentators have argued that the low-cost airlines are particularly effective in using drip pricing to exploit the fact that consumers are more likely to buy the product after they have invested time in it, see, for example, D. Milmo, (30 September 2009), Ryanair Scraps Airport Check-in Desks, Guardian, (See also G. Ellison and S.F. Ellison, (March 2009), Search, Obfuscation, and Price Elasticities on the Internet, Econometrica, 427-452, who argue that economists should think about firms' active incentives to obfuscate as well as consumers' incentives to search.

(b) **assessing offers**. Firms can make it more difficult for consumers to assess the best deal.[8] Studies indicate that consumers have difficulties comparing across differently structured offers and firms may exploit this by obfuscating their prices or increasing choice or complexity.[9] They may also use price promotions and framing to distract and distort decision-making[10]

(c) **acting on information and analysis**. Firms can make it more difficult for consumers to act to get the best deals. Recent developments in behavioural economics indicate that consumers may display more inertia than traditionally suggested, perhaps due to overconfidence in their capacity to improve things at a later time.[11] Firms, knowing that consumers display this inertia, can increase switching costs. They can also use defaults and automatic enrolments, or use time limited offers to inhibit switching.

The availability of information affects consumer decisions about comparing and switching retailers

2.3.6 The Authority's 2013 survey of the impacts of the What's My Number campaign found that 82% of consumers were aware they could switch retailer, 73% believed it was worthwhile to do so, and 70% considered it was easy to switch. However, the Authority has also estimated that

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8 See for example, G. Wuebker and J. Baumgarten, Strategies against Price Wars in the Financial Service Industry, Simon-Kucher and Partners.

9 For example, V.G. Morwitz, E.A. Greenleaf and E.J. Johnson, (1998), Divide and prosper: Consumers' reactions to partitioned prices, J. Marketing Res., 35, 453-463, find that, when prices are presented in parts, consumers' ability to recall the entire price for the good is diminished and demand is increased. This might suggest that consumers may be anchoring to the first piece of information seen (generally the base price) and then attributing less importance to later pieces of information (that is, surcharges or add-ons). Similarly, T. Hossain and J. Morgan, (2005), Plus Shipping and Handling: Revenue (Non) Equivalence in Field Experiment on eBay, Advances in Econ. Analysis & Pol'y, suggest that consumers treat the base price separately from the handling fee in a natural field experiment they conducted using eBay auctions. The authors found that charging a low reserve price compared to the retail price of the good and high shipping and handling costs resulted in a higher total sales price than the reverse situation (low shipping and handling but high reserve price). This result may also be driven by consumers ignoring or missing the additional costs, although there are alternative behavioural explanations such as endowment bias.

10 For example, M. Baye, J. Morgan and P. Scholten, (2004), Price Dispersion in the Small and in the Large: Evidence from an Internet Price Comparison Site, J. Indus. Econ., 52(4), 463-496, using a UK data set of consumer click throughs from Kelkoo.co.uk for 2003 to 2004, found that even though Kelkoo does not order results by price by default, a firm listed first on a search results page still benefited from 17.5 per cent higher demand on average than when it was listed second. This is despite the ease with which the consumer can usually reorder the results by lowest price. More generally, A. Tversky and D. Kahneman, (1981), The Framing of Decisions and the Psychology of Choice, Sci., 211 (44810), 453- 458, show how psychological principles govern the perception of decision problems and the evaluation of options.

11 For example, as well as finding consumers are overconfident about gym use, DellaVigna and Malmendier (2006), suggest that consumers might overestimate their propensity to cancel automatically renewed contracts.

consumers could collectively have saved $267 million if they had all switched to the cheapest retailer in their region in 2013.

2.3.7 This raises the question of why consumers are not obtaining these savings by exercising their ability to compare and switch retailers. Despite awareness, it appears the motivation from the potential savings is insufficient to prompt many customers to act.

2.3.8 This could be due in part to consumers choosing not to move to the cheapest retailer in their region due to preference for contract terms and conditions available on their current plan. For example, payment by credit card, remaining on an open-term plan that can be terminated at any point without financial penalty, or having access to a call centre for enquiries – features that are often not available on the cheapest plan. Further, consumers may not switch to the cheapest retailer because of other factors such as the quality of a retailer's customer service.

2.3.9 There are a number of reasons why electricity is different from other residential consumer goods and services and, therefore, why consumers may benefit from more transparent pricing information:

(a) **the electricity sector is regarded as complex**. This may result in uncertainty for consumers about whether they are getting a fair deal

(b) **ex-post charging** weakens the connection between consumers' actions and their cost, meaning that consumers will often not have timely, actionable information on how their use of household items affects their consumption. In telecommunications a similar situation can occur when consumers receive their phone bill and discover they have incurred significant roaming charges. Telco providers seek to mitigate the surprise of such charges by sending text alerts to customers when they start roaming, which emphasises the connection between their actions and the charges. In electricity, smart metering, and the provision of smart metering data to consumers can assist the linkage between consumption and charging

(c) **a large proportion of a consumer's bill is a charge for the lines and transmission infrastructure**, which is largely regulated and varies in quantum and complexity between the 29 distributors across New Zealand. The majority of the balance of the bill is a charge for the energy they use, which is subject to a competitive market. The drivers of price movement in these two components are different and confusion exists among consumers about the sources of overall price movements.

2.3.10 On the other hand, developments in technology based on smart meter data, which provide consumers with greatly improved granularity and timeliness of usage information, now have the potential to provide consumers with greater understanding and control over their electricity usage. This trend is likely to increase as information about energy management technology, 'smart' whitegoods, and appliance-specific information, becomes more widely available.

2.3.11 But there are other aspects of electricity supply that probably contribute to consumer inertia:

(a) **electricity is homogenous**. The electricity 'good' does not differ by supplier. Retailers must therefore compete on price and service quality dimensions. This means potentially turning to additional product offerings such as dual fuel or telecommunications services, or additional offerings such as online consumption information, bill smoothing, choose your payment date, and so on

(b) **service generally continues when no decision is made**. Unlike other consumer goods (for example petrol), there are few regular transactions (only twelve per year, for most consumers) to prompt comparison of retailers and purchase decisions. Decisions are made in arrears, and are 'low involvement' on the part of the consumer.

In addition, retailer services and electricity supply continue when no decision is made, provided customers pay their bills and unexpected events (for example, storms) haven't interrupted supply. Decisions about supplier are generally made when a consumer moves house. Otherwise consumers (unless proactively approached with marketing) must actively investigate alternative suppliers, perhaps prompted by dissatisfaction with their current retailer (for example, large price increases or an unexpectedly large bill).[12] Price changes themselves also provide a reason to compare and contrast existing arrangements with alternatives.

2.3.12 These factors may serve to reinforce consumer inertia, and could point to a particular role for improved transparency of pricing information for consumers. There are not many times when a consumer thinks about their electricity charges alongside their consumption. However, these opportunities for a 'moment of truth' outside the normal billing cycle are key times when the consumer seeks to have clarity and transparency around consumption, pricing and value. Any confusion or lack of clarity at

12 Based on Anna Watson, Howard Viney and Patrick Schomaker (2002) 'Consumer attitudes to utility products: a consumer behaviour perspective', *Marketing Intelligence and Planning* 20/7(2002): 393-404.

these moments of truth may reduce confidence in the retail electricity market to the long-term dis-benefit of consumers.

2.4 Improving consumers' understanding of their bills

2.4.1 The issue of consumers being able to understand their bills refers to the availability of static information, such as the clarity of bill lay-out, the information on the bill and explanations of that information.

2.4.2 Research undertaken by UMR Research (UMR) for the Authority (on behalf of the RAG) found a moderate level of concern amongst consumers about the clarity of their power bills.[13] Forty five per cent of survey respondents expressed concern with how clearly information on electricity charges was outlined in power bills. However, a large majority of survey respondents were satisfied that bills from their power company were easy to understand (78%) and contained all the information they needed (76%), with 48% very satisfied that their bills were easy to understand and 44% very satisfied that all the information they needed was there. Only 7% of respondents were not satisfied with their power companies on these matters.

2.4.3 The findings from the focus groups (which were undertaken as part of the UMR research) helped explain this apparently mixed finding. While there was some concern about the clarity of power bills, there was little appetite for a more detailed bill as they were generally considered fit for purpose and a more comprehensive bill was viewed as unnecessary. Focus group participants only really wanted to know what the amount owing was, and there was a sense that if they really wanted more clarity on power bill charges they could find the information for themselves on the internet.

2.4.4 Focus group participants expressed views that even if power companies provided more detailed information on charges, they were unsure how it would benefit them. They viewed the charges that their retailer passed on to them as something they were powerless to do anything about and therefore saw no real value in being provided with more detailed information.

[13] UMR Research, February 2014, Report: Charge Transparency, available at, http://www.ea.govt.nz/dmsdocument/17313.

2.4.5 When asked how interested they would be in particular types of information being included on their power bills, survey respondents expressed stronger interest in information that had a more direct impact on them (that is, was specific to them). The strongest interest was expressed in the following options:

(a) the different rates offered by their retailer

(b) a graphic showing how their power usage compared to other similar households

(c) the retail margin charged by their retailer.

2.4.6 With respect to comparing charges across retailers, 45% of survey respondents thought it was easy to compare what power companies charged for their services, while 27% thought it was not easy. Of the 27% who thought it was not easy, reasons given were that they had different plans and rates, followed by difficulty in understanding what they were being charged, and a lack of transparent information.

2.4.7 The survey results contribute to the evidence base about the need for greater transparency and the nature of any information gaps or deficiencies. Submitters on the RAG's 2013 Issues and Options paper were divided on whether there was a gap in currently provided information, and therefore whether there was a problem to be addressed.

2.5 Improving consumers' understanding of the drivers of price changes – improved accountability between retailers and distributors

2.5.1 Approximately 29% of a consumer's bill is a charge for the lines and transmission infrastructure, which is largely regulated. The quantum and structure of lines company charges vary across the 29 distributors.[14] Furthermore, the differences between community owned and commercial distributors (who are subject to the Commerce Commission's default/customised price-quality regulatory regime) introduces a further layer of complexity. The potential for retailers to repackage lines charges when operating under an interposed arrangement is yet another area of potential complexity and ultimately confusion.[15] The majority of the

[14] "Quarterly Survey of Domestic Electricity Prices", Ministry of Business, Innovation & Employment, 15 February 2014.

[15] There are two models for use-of-system arrangements – interposed and conveyance. Interposed arrangements are where the retailer is interposed between the consumer and distributor. Conveyance arrangements are where both the retailer and the distributor have a direct relationship with the consumer.

balance of the bill is a charge for the energy the consumer uses, which is subject to a competitive market.

2.5.2 The drivers of price movements in these two components are significantly different and confusion exists among consumers about the makeup of the process and the sources of overall price movements. In most cases, it is the retailer who sends the bill to consumers and will, therefore, generally get ‘blamed’ for any price increase, regardless of which component was actually the cause and what the rationale is for the movement. Consumers do not have a good understanding of the other, rather invisible, links in the electricity supply chain.

2.5.3 The ‘blame game’ media coverage of recent price rises illustrates this point. In March 2014 electricity retailers and distributors announced price rises that coincided with the annual increase in regulated distribution and transmission charges. These parties’ associated media releases presented differing estimates of price increases, which in some cases led to confusion.

2.5.4 As a result, the Authority decided to check[16] the accuracy of retailers’ and distributors’ statements. The Authority found the price adjustment letters that retailers provided to consumers were accurate and transparent, but the media statements by the various parties (retailers and distributors) contained conflicting information about the sources and sizes of retail price increases. The sources of the conflicting information were found to be:

(a) different methodologies used to make calculations

(b) calculations made on different subsets of consumers.

[16] The price check review report can be found at: https://www.ea.govt.nz/monitoring/enquiries-reviews-and-investigations/2014/retail-price-check.

3. Problem with the existing arrangements

3.1.1 Providing consumers with sufficient transparency about electricity charges will facilitate the development of engaged consumers who will make better decisions. This in turn stimulates competition to deliver innovation and long-term benefits to consumers.

3.1.2 The UMR research provided some insight into the issues around transparency, yet cannot be said to have identified a 'smoking gun'. However, consistent with the RAG's analysis, a perceived, or real, lack of transparency in the communication of consumer pricing information is a significant problem for the New Zealand retail electricity market.[17] Consumer advocates,[18] generator-retailers[19] and distributors[20] have criticised this lack of transparency.

3.1.3 The apparent lack of transparency will have undoubtedly caused some parties to lose confidence in the competitive retail electricity market, as stakeholders' claims and counter-claims grab headlines (see references above). The $267m of savings that were available to consumers if they had switched to their cheapest regional retailer in 2013 provides some indication that:

(a) barriers to efficient operation of the retail market remain

(b) retail market information and price transparency issues are potential candidates to explain this inefficiency.

3.1.4 The RAG presented a number of reasons/explanations as to why issues of transparency and retail market information are problematic (refer paragraph 2.3.9 above). While these issues have some currency within electricity markets, there are clear parallels to other regulated markets, and especially regulated utilities. The 'special' and 'unique' elements of the electricity industry are becoming less evident. For example, retail electricity increasingly doesn't seem that different from capped fixed/mobile phone offerings which include:

(a) complexity: capped products (including to some international locations)

(b) regulated and unregulated fees: unbundled local loop

(c) costs: ex-post recovery of costs

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17 Where 'consumers' means mass market retail electricity consumers.

18 http://www.newstalkzb.co.nz/auckland/listen-on-demand/audio/cl-mollymelhuish10march14.

19 http://www.radionz.co.nz/news/political/238782/mps-told-power-bills-should-be-split.

20 See Appendix D.

(d) substitutes: few

(e) homogeneity and intangibility: data packets versus electrons

(f) necessity: consumers increasingly see continuous supply of mobile data as vital.

3.1.5 The evolution of telecommunication markets and associated customer interactions in New Zealand provides a useful counterpoint to the evolution of customer experiences in the retail electricity market. The 'blame game' illustrated in paragraph 2.5.3 is a symptom of a general lack of transparency and a potential culture of confusion as was purported to be the case in the telecommunications market up until the mid-2000s.

> *"What has every telco in the world done in the past? It's used confusion as its chief marketing tool. And that's fine ... But at some level, whether they consciously articulate or not, customers know that's what the game has been. They know we're not being straight up."* [21]

3.1.6 A recent Electricity Networks Association article (included as Appendix D) implies that a culture of confusion may also exist in the electricity market.

3.1.7 Changes in technologies that use electricity (for example, electric cars) and those that generate it (for example, solar photo voltaic (PV)) will invariably mean that both retail and distribution/transmission providers will need to consider and respond to changes in consumer preferences.

3.1.8 Concerns around transparency primarily present themselves at one of the 'moments of truth' described in paragraph 2.3.12, with the most obvious being when a price is changed. Confusion created either intentionally or unintentionally by participants at this time invariably leads to the start of a 'blame game' and has a corrosive effect on retail market confidence, potentially undermining the sustainability of current market arrangements for electricity. This in turn reduces incentives for new retailers and generators to enter the market.

3.1.9 A loss or deficit in confidence or trust in the retail market can have an effect that could overshadow many of the other benefits from market reform:

> *"For Angel Gurría, "Trust is the spinal cord of economics." Institutional economists, economic sociologists, political economists and others concerned with the social organisation of economic life have long maintained that trust and confidence are crucial to effective economic*

[21] Telecom New Zealand CEO, Theresa Gattung in speech delivered on 20 March 2006; http://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=10380894.

functioning, not only in underwriting specific exchanges between particular agents, but in terms of a generalised foundation of trust that underpins a wider socio-economic system."[22]

3.1.10 A key problem, therefore, is the lack of transparency at 'moments of truth', with the most obvious being the announcement of a change in prices or charges. Greater transparency should therefore lead to greater accountability for statements made on or with a consumer's bill (for example, price increase letters) and in media statements.

Q2. Do you agree with the problem definition? Please explain your answer.

[22] Fran Tonkiss, Trust, Confidence and Economic Crisis, p196, Intereconomics, July/August 2009.

4. The Authority's proposal for addressing the problem

4.1 Description of the proposal

4.1.1 The Authority proposes to require retailers to provide information to their consumers about any price changes in a standard form, so that the nature and reasons for these changes are clearly presented. The Authority also proposes to require retailers to consult with distributors, and distributors to consult with retailers, about any media releases each party proposes to issue relating to changes to consumers' charges in the distributor's area.

4.1.2 The proposal is expected to improve accountability and transparency by clearly setting out the causes of price changes across the competitive and non-competitive segments of the electricity industry.

4.1.3 The proposal is not expected to undermine innovation in the sector, particularly the competitive retail market. The proposal would not pose impediments on retailers developing new products and services. It places no restrictions on the form or content of retailers' bills or websites or any other communication to consumers (for example, when they're pitching for business). It simply requires retailers to use a certain form when announcing price changes.

4.1.4 The main aspects of the proposal, the reason for each aspect and the proposed draft Code amendment is shown in the table below.

Table 1: Description of proposal

Aspect of proposal	Reason	Supporting Code provision
If a distributor is changing its tariff rate, or a retailer is changing its tariff rate, the retailer must notify the consumer using a prescribed form	Setting out the tariff rate changes for each component would clearly demarcate price adjustments for the non-competitive (transmission and distribution) *vis-a-vis* competitive elements of the sector. Customers would be clearly able to see and understand the price adjustment. The form of the retailers' price change notice would be the same from year to year, and even if the customer changed retailers.	Clause 11.37(1) and (2)

Aspect of proposal	Reason	Supporting Code provision
Prescribed form to include the contact details for the party responsible for the retail and distribution components	Maximise accountability and ensure transparency which would reduce any customer confusion	Clause 11.37(2) and Schedule 11.6
If retailers choose not to pass on a distributor's price increase to consumers, the price change notification will show a decrease in retailer rates, corresponding with the distributor increase, and vice versa	Reduces the potential for customer confusion by making it clear to customers whether the distributor price adjustment has "flowed through" to them through their retailer	Schedule 11.6
Price change notification to be provided at least 30 days prior to the price change occurring	Improves transparency, reducing potential for customer confusion	Clause 11.38
If a distributor, which normally sends invoices to its consumers, choses to notify its consumers of a price change, the retailer doesn't have to send out the details of the distributor's tariff rate change	Reduces transaction costs and confusion by avoiding duplication of effort	Clause 11.37(3)
The requirement to send out the notice doesn't apply if the change is just the result of the consumer changing pricing plans	Improves transparency by ensuring notification is only sent as a result of distributors' or retailers' tariff changes Minimises retailers' and consumers' transaction costs	Clause 11.37(4)
If the retailer hasn't sent out the notice to the consumer, the retailer can't charge the consumer the new tariff rate until 30 days after the retailer sends out such a notice	Improves transparency, reducing potential for customer confusion	Clause 11.39

Aspect of proposal	Reason	Supporting Code provision
The information in the retailer's price change notification must be consistent with the information that the distributor publishes to satisfy the Commerce Commission Information Disclosure requirements	Improves transparency and accountability, and reduces potential for customer confusion	Clause 11.40
Retailers must consult with distributors, and distributors must consult with retailers, about any media releases each party proposes to issue relating to changes to consumers' charges in the distributor's area	Improves transparency and accountability, and reduces potential for customer confusion	Clause 11.41

4.2 Costs and benefits of the proposal

4.2.1 The Authority recognises that the preferred option will impose costs on distributors, retailers and consumers. The establishment costs would be the following:

(a) for the Authority – costs of designing the proposal, including analysis and legal costs. Some of these costs are sunk

(b) for retailers – costs of altering internal processes and systems to produce a price change notification.

4.2.2 The Authority does not expect distributors to incur any establishment costs due to the proposal.

4.2.3 The main expected ongoing costs would be:

(a) transaction costs for retailers from including the price change notification form with their existing notice advising price changes

(b) transaction costs for consumers from considering the price change notice. These costs are expected to be incremental as consumers already receive a price change notification from retailers. There would also be transaction costs associated with consumers contacting the retailer, distributor or other party to seek clarification of the price change

(c) transaction costs for retailers and distributors from consulting on price change media statements

(d) monitoring costs for the Authority.

4.3 Addressing the 'blame game' problem

4.3.1 The communication by retailers and distributors of the nature and reasons for the March 2014 retail price increases led to extensive negative commentary from media and consumers. The Authority's investigations found that retailers and distributors released conflicting information because they used different methodologies to make calculations and the calculations were for different subsets of consumers.

4.3.2 How retailers and distributors present price changes in the media is important. The confusion and diminishing of consumer confidence arising from retailers' and distributors' inconsistent presentation indicates that regulatory intervention is required to introduce greater accountability and improved transparency on parties responsible for the price changes.

4.3.3 This will become a larger problem over the coming years if, as anticipated, there is a significant increase in network investment which will flow through to consumers as a higher distribution component in electricity charges. There may also be a restructuring (or rebalancing) in network charges, with more revenue recovered from fixed tariffs, rather than variable. Efficiency benefits (both dynamic and allocative) will likely arise from consumers having more transparent information about the separate cost components and the drivers of price changes. This will be achieved as distributors will be more accountable for price changes and the underlying investment decisions.

4.3.4 The Authority is not proposing to place specific requirements on the format participants use for providing information in media statements because it may be unlawful for the Authority to place such an obligation on distributors.[23]

4.3.5 However, the proposal provides an authoritative source of information on price changes that are directly relevant to consumers. If distributors make media statements that are inconsistent with that information, for example, reporting price changes for different consumers, then it would be easier for

[23] Section 32(2)(b) of the Electricity Industry Act 2010 provides that the Code may not purport to do or regulate anything that the Commerce Commission is authorised or required to do or regulate under Parts 3 or 4 of the Commerce Act 1986. The Authority considers that placing obligations on distributors regarding the provision of information about price rises may fall into this category.

the Authority and/or the Commerce Commission (under the Fair Trading Act 1986) to hold them to account.

4.3.6 In addition, the Authority proposes to require retailers to consult with distributors, and distributors to consult with retailers, about any media releases each party proposes to issue relating to changes to consumers' charges in the distributor's area. This will reduce the potential for miscommunication by retailers and distributors.

4.3.7 The Authority considers this proposal would place sufficient incentives on participants to not provide confusing and potentially misleading statements to the media. It would also provide the Authority and the Commerce Commission with more transparent information so they can hold participants to account regarding their statements.

4.4 Design of the form

4.4.1 An example of a standardised form is attached as Appendix E.

4.4.2 The form consists of two pages:

(a) Page 1 sets out the estimated annual price change for that consumer, in dollars and as a percentage. The price change is then broken out into the retail and distribution components, showing which components caused the price change

(b) Page 2 sets out the detailed tariff changes for each component. This means that consumers can see how each tariff rate has changed, and how the estimated annual price change was calculated.

4.4.3 The Authority expects each retailer to be able to provide details on each tariff applicable to every consumer, regardless of whether the relevant distributor uses installation control point (ICP)[24] or grid exit point (GXP)[25] based pricing, because the retailer will need to do this anyway for billing purposes.

Q3. Do you agree with the Authority's proposal? Please provide reasons to support your answer.

[24] ICP-based pricing is where tariffs are based on volumes measured at the consumer's meter (or ICP).

[25] GXP-based pricing is where tariffs are based on volumes measured at the GXP.

5. The Authority has reviewed other approaches for improving transparency of consumers' electricity charges

5.1.1 The Authority identified six other approaches for improving transparency of consumers' electricity charges. However, only four of the approaches are considered viable options, and are discussed further in this section. The options are not necessarily mutually exclusive:

(a) Option 1: Market forces

(b) Option 2: Requiring retailers and distributors to issue separate bills to consumers

(c) Option 3: Requiring retailers to separately itemise transmission and distribution costs on consumers' bills

(d) Option 4: The Authority publishing an annual report on current and future price trends.

5.1.2 The following two approaches, discussed at section 5.6 below, were discounted because they are not legally possible:

(a) requiring distributors to directly notify every customer on their network of any price adjustments in distribution (including transmission pass through) charges

(b) requiring retailers and distributors to agree on the reasons for price changes before letters are sent to consumers.

5.2 Option 1: Market forces

5.2.1 Under this option, it would be left to market forces to incentivise the development of improved transparency in response to consumer wants. Incentives for innovation and the flexibility to allow for any existing arrangement would be preserved.

5.2.2 Ultimately, competition was the reason for the transformation of the telecommunications industry, (including improved transparency in billing practices) over the last decade. Similarly, competition as a result of market forces in the electricity industry will likely result in industry participants providing more transparent information to consumers in a form they find useful.

5.2.3 This option would impose no additional cost, but is unlikely to achieve the proposal's objectives.

5.3 Option 2: Issuing separate bills to consumers

5.3.1 This option involves requiring retailers and distributors to issue separate bills for the competitive and non-competitive components of the electricity tariff. Distributors would bill consumers on a regular basis – for example, each quarter.

5.3.2 Under this option distributors, like retailers, would likely also issue letters informing their customers of price changes and the reasons for those changes.

5.3.3 This would provide consumers with more information about the retail and distribution/transmission components of their electricity charges, and consumers would be able to hold each party to account over their price changes. In addition, the competitive energy component would be entirely separated from the other components and much more visible to consumers, thereby potentially enhancing retail competition.

5.3.4 The key benefit of separate bills would be improving consumers' confidence in the market by eliminating the possibility of disputes over the source of price changes.

5.3.5 This option would also provide other ancillary benefits. These include:

(a) improved customer focus and better engagement between distributors and consumers – for example, distributors would have to engage directly with consumers on the reasons for their price changes. In an interview with EnergyNews on 7 April 2014 the Chief Executive of The Lines Company (TLC), Brent Norriss, had the following to say about its experience with directly billing consumers:

"Many of the country's lines companies will be in for a 'big wakeup' if separate billing for electricity distribution and retailing is mandated, says Brent Norriss… He says the transformation of The Lines Company since then from a typical network company with a 'poke the bill down the line to the retailer' operation, has been "extreme"…And part of that process is the structure of ownership of the distribution companies. Everything is exposed and the owners will have to be part of that change."

(b) more efficient decision making around the installation of PV distributed generation. Currently, consumers on most distribution networks who install PV effectively reduce or avoid paying distribution and transmission charges because distribution charges include a significant variable component based on the quantity of electricity used by the consumer (this is especially the case with net metering). This results in inefficiencies – the consumer with a PV installation is receiving a distribution service and not paying an amount that reflects the costs of that service, most of which is fixed, incurred regardless of the quantity of electricity consumed. Other consumers in effect subsidise distribution and transmission services to consumers with PV installations. This inefficiency will be exacerbated as more PV is installed.

To address the inefficiencies outlined above, distributors will need to move over time to a non-variable charging regime where consumers pay a fixed amount for distribution services regardless of use. Separate billing would improve the transparency of this change and make it clearer that consumers who install PV are only defraying the energy costs (plus potentially avoided distribution and transmission costs). This will encourage more efficient consumer decisions around the installation of PV.

5.3.6 The costs of new billing arrangements and the administration requirements to establish new retailer and distributor billing systems would be the highest of the options considered in this section. This is because distributors would need to either set up billing systems or pay someone to bill on their behalf. Distributors would also need access to metering data, to establish a call centre and employ additional staff to administer the billing system. Other costs potentially include renegotiating use-of-system agreements and developing terms and conditions for domestic contracts. Some distributors may consider changing to conveyance arrangements, if they are required to bill consumers directly. Retailers would need to review and reset their prices based on excluding distribution and transmission components.

5.3.7 Distributors' additional costs could potentially be passed through to customers via higher rates, depending on the approach taken by the Commerce Commission under its default/customised price-quality regulatory regime on whether to allow non-exempt distributors to recover these costs.

5.3.8 There are very few examples of jurisdictions where separate distribution and retail electricity bills are mandated. However, several jurisdictions exist in the United States where electricity distributors provide customers with the option to separate their payments (one payment to their registered electricity supplier, and another to their distribution and transmission provider).[26] Examples of this include the states of Delaware, Maryland,

[26] Delmarva Power (Delaware and Maryland) (http://www.delmarva.com/home/billing/understand/read/); PECO Energy Company (Pennsylvania, Philadelphia) https://www.peco.com/CustomerService/CustomerChoice/Pages/EnergyChoice.aspx); Champion Energy

Pennsylvania, Texas, Illinois, Ohio, New Jersey, and New York. In New Zealand, TLC[27] currently provides a separate bill.

5.3.9 Similar two-part payment schemes are also prevalent in the aviation industry. Several countries currently impose departure taxes (or other fees) that are not included in the flight ticket fare. This means that customers are required to pay this charge separately when they enter or exit the country.

5.3.10 However, most jurisdictions that previously adopted these arrangements have now included the taxes/fees within air fares (for example, New Zealand). Customers seem to favour the convenience of a single bill rather than separate charges and having to incur multiple transactions.[28] In practical terms for electricity in New Zealand this option would entail an additional transaction for consumers and would highlight starkly the differences between the competitive and non-competitive components of a customer's bill.

5.3.11 The time taken for consumers to undertake such an additional transaction would represent a cost on consumers. Given that there are approximately two million ICPs, the consumer costs, although modest on an individual basis, would be significant in total.

5.3.12 Implementing this option would not be a trivial task given the high costs imposed on both distributors (to introduce a new system and associated infrastructure) and retailers (to unbundle their existing arrangements), costs that may be passed on to consumers.

5.3.13 Separate billing is likely to be complex and high risk to implement. It would require phased implementation and potentially take several years to complete. It may increase consumers' dissatisfaction with the industry if there are any implementation problems or because of the inconvenience of receiving two separate bills.

5.3.14 The Authority considers that the preferred option (the proposal) achieves a similar improvement against the objectives at a fraction of the cost and risk.

5.3.15 In conclusion, of all the options considered, separate billing best addresses the retailer/distributor accountability and confusion issue,

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Services (Texas, Illinois, Pennsylvania, Ohio, New Jersey, Maryland and New York) http://www.championenergyservices.com/about-champion/.

27 http://www.energynews.co.nz/featured-content/16912/executive-interview-brent-norriss-chief-executive-lines-company.

28 http://www.scoop.co.nz/stories/BU1404/S00210/trustpower-urges-aucklanders-to-get-it-together.htm.

especially at “moments of truth” such as when prices change. It also would deliver ancillary benefits that would likely lead to improved competition between retailers and more efficient signalling of distribution and transmission charges which would improve the efficiency of decisions around PV installation. However, outweighing these benefits are:

(a) the extremely high costs of implementation and operation

(b) the transaction costs on consumers in having to deal with an additional stream of bills

(c) the unintended risks, particularly the reputational damage that could be done to the electricity industry.

5.4 Option 3: Separate itemisation on a single bill

5.4.1 Separate itemisation of the non-competitive charges on retailer bills would provide consumers with more information about the proportions of the different components that make up the final bill. For example, a consumer could conceivably be able to see the relative contribution to the total cost of the retail component, wholesale component, and the distribution and transmission components. Some retailers already itemise the components of the electricity charges on customer bills, including GreyPower Electricity, Just Energy, Pulse Energy, Mercury Energy in central Auckland and Meridian Energy.[29]

5.4.2 This option would yield some of the benefits of option 2, in terms of accountability and more efficient decision making about installing PV, but is likely to be more palatable to consumers, as survey data suggests that generally consumers would prefer a single bill. However, this option will not provide equivalent levels of accountability for price changes and the information on a bill is static. A consumer would need to refer to previous bills to estimate the source of a price change.

5.4.3 Consumers may also experience a decrease in their ability to compare retailers. In particular, for customers in areas where retailers allocate distribution prices based on GXP billing the complexity of these arrangements may affect their ability to select the best tariff option based on their bill.

5.4.4 This option is expected to be significantly lower cost overall than option 2, although the cost of this option falls on retailers rather than distributors. Nonetheless, the Authority expects this option would be higher cost than

29 Examples of some of these retailers’ bills (GreyPower, Pulse Energy and Just Energy) are included in Appendix F.

the proposal. Retailers who currently do not separately bill have indicated the costs of amending their billing engine to be in the region of $0.4 million to $1 million (per retailer).

5.4.5 Differences between the structures of distribution pricing in different network areas means that this may also introduce a barrier to expansion of new retailers. This would particularly affect smaller network areas due to the fixed cost nature of billing systems.

5.4.6 Changes to the structure of retailer prices would be required similar to the proposal to allow these to be disaggregated. Retailers' tariff structures may be limited in this option by the structure of distribution tariffs in an area. As noted in the assessment of the proposal this may undermine product innovation, thereby reducing competition.

5.4.7 In addition, the Authority notes that some retailers currently provide a disaggregated bill and to the extent that this is a competitive advantage, this would be eliminated by this proposal.

5.4.8 Option 3 is not preferred as it is likely to yield lower benefits than the proposal and is more costly.

5.5 Option 4: Annual report on price trends

5.5.1 The Authority could publish price trends, showing and explaining current and prospective movements in the different components of consumer charges, similar to those published by the Australian Energy Market Commission (AEMC). The aim would be to provide a single, authoritative source that explains pricing trends and their drivers. This would help to reduce consumers' confusion around the drivers and their mistrust of the explanations provided by retailers and distributors, thereby building confidence in the market.

5.5.2 The AEMC releases its report each December. The report focuses on factors driving residential electricity prices across the supply chain over the coming three years. The Chair of the AEMC recently spoke in Wellington at an Institute of the Study of Competition and Regulation forum and noted that the report has taken the heat out of the price movement blame game in Australia. It achieved this by providing commentators and media with a reliable and authoritative source of information on what has happened and what might happen in future with retail prices.[30]

[30] However, the same approach may not be as effective in New Zealand, as there are differences between the two regulatory environments. For example, retail prices in Australia have been regulated (although this is ending) and network regulation is also more heavy-handed in Australia.

5.5.3 The Authority is already moving in this direction by publishing on a quarterly basis changes in the key cost components for a hypothetical stand-alone retailer and a quarterly comparison of those costs against prices.

5.5.4 The gap in this current work is that it is not forward-looking. It focuses on historic price trends rather than anticipating likely future drivers of prices such as the potential for distributors to move towards greater fixed charges, and the implications if this is done suddenly. In order to address this, the Authority could further develop its reporting to look forward across the next few years, similar to the AEMC approach. There is also scope to improve the accessibility of the information provided. This could be done through the use of additional infographics to help convey messages to a wider audience.

5.5.5 The challenge here is for the Authority to not become the 'meat in the sandwich' between parties who have an incentive to keep blaming each other. The Authority could avoid this by establishing the credibility of the analysis by using clearly defined methodologies for establishing national and regional price movements to date and using broadly accepted assumptions about future price movements. The Authority could build support for the analysis by engaging with retailers and distributors in developing the approach.

5.5.6 The Authority has previously made statements about future wholesale price movements by referencing ASX forward price curves. Forecasting future distribution and transmission price movements would be more difficult, for example, due to potential uncertainty about how and when distributors might rebalance charges from mostly energy-related to more capacity-related. However, this information should be readily available from distributors assuming they are signalling the longer-term pricing strategy to consumers.

5.5.7 Providing consumers with an authoritative longer-term view of price movements would provide information and incentives for consumers to make longer-term investments. For example, knowing in advance that prices will be more influenced by network capacity requirements would inform household heating decisions.

5.5.8 This option assumes that the price trends report relies on data that participants already disclose. For example, by distributors through their existing Commerce Commission information disclosures and by retailers to the Ministry of Business, Innovation and Employment in their quarterly electricity price series (previously the Quarterly Survey of Domestic Electricity Prices). In this case, the additional costs lie predominantly with the Authority. The Authority estimates the set up costs of this option to be in the order of $100,000; ongoing costs would be in the order of $50,000-80,000 per year.

5.5.9 The benefits of this information lie largely in the potential improvement in confidence in the market as a result of commentators and media discussing the report. It is unlikely that the average consumer would read such a document. Although improved market confidence would likely improve consumer engagement and switching to some degree, the report would not be specific to consumers' individual circumstances so would only provide limited information.

Q4. Do you agree with the alternative options?

Q5. Are there any other options the Authority should consider?

5.6 Approaches considered but discounted

5.6.1 The Authority has also considered the following approaches:

(a) requiring distributors to directly notify every customer on their network of any price adjustments in distribution (including transmission pass through) charges

(b) requiring retailers and distributors to agree on the statements each would make to their customers and the media, which would include the reasons for price changes.

5.6.2 The Authority has discounted these two approaches because they cannot be implemented under the Act. Section 32(2)(b) of the Act requires that the Code may not purport to do or regulate anything that the Commerce Commission is authorised or required to do or regulate under Parts 3 or 4 of the Commerce Act 1986. This provision prevents the Authority from making Code to require pricing disclosures by distributors because this is something that the Commerce Commission is authorised or required to do.[31]

[31] Distributors are subject to information disclosure regulation under Part 4 of the Commerce Act (see section 54F). The Electricity Distribution Information Disclosure Determination 2012 imposes requirements on distributors to disclose information about price changes.

6. Regulatory Statement

6.1 Authority's proposal

6.1.1 The Authority proposes to amend Part 11 of the Code to:

(a) require retailers to use a template for notifying consumers of price changes

(b) require retailers to consult with distributors, and distributors to consult with retailers, about any media releases each party proposes to issue relating to changes to consumers' charges in the distributor's area.

6.1.2 The Authority's proposed Code amendment is set out in Appendix C, and the illustration of a potential template is provided in Appendix E.

Q6. Do you have any comments on the proposed Code amendment?

Q7. Do you have any comments on the draft template?

6.2 Statement of the objectives of the proposed amendment

6.2.1 The primary objective of the proposed amendment is to improve transparency of consumers' electricity charges, which will lead to **competition** benefits, by:

(a) better information about the drivers of price changes will increase consumer engagement. Increased consumer engagement will drive firms to deliver what consumers want

(b) promoting accountability will increase consumers' confidence and engagement in the retail market. Increased consumer engagement will drive firms to deliver what consumers want.

6.2.2 A secondary objective is to promote **operational efficiency**.

6.2.3 The proposal will do this by reducing the transaction costs for consumers of making energy-related investment decisions. Better information about the drivers of energy and network price changes will reduce consumers' costs in making decisions about when it is economically efficient to use demand-management technologies or to substitute alternative energy sources such as gas, wood or solar.

6.2.4 The proposed amendment is not expected to deliver reliability benefits.

6.2.5 The proposed amendment involves no significant trade-off between promoting efficiency, competition and reliable supply.

Q8. Do you agree with the statement of the objectives of the proposal? Please explain your answer.

6.3 Evaluation of the costs and benefits of the proposed amendment

6.3.1 The Authority has assessed the expected costs and benefits associated with the proposal.

Net assessment of costs and benefits

6.3.2 The midpoint estimates of the total value of the costs and benefits described in this section are summarised in Table 2. This demonstrates that the proposal is expected to deliver benefits that clearly exceed the expected costs. The net benefit is equivalent to $29.75 per residential consumer in present value terms.

Table 2: Assessment of costs and benefits (present value)

Source of benefit	*Estimated value*
Total expected benefits	$60.91 million
Total expected costs	$9.90 million
Net benefit	**$51.01 million**

Present value over 20 years at 8% real discount rate

Nature and size of expected benefits

6.3.3 Clear information about the source of price changes is a necessary factor for consumer engagement.

6.3.4 The proposal aims to address what is effectively a strong source of consumer disengagement. Unclear explanations for price increases result in a perception by consumers that the competitive component of the market is not effective, and only ever delivers price increases.

6.3.5 By ensuring that price changes by distributors and retailers are clearly and separately communicated, consumers will be able to better understand what is driving price changes.

6.3.6 This is expected to lead to competition benefits from more engaged customers. Customers will be better able to understand the charges the different retailers impose, and retailers will be rewarded for providing customers with competitive and innovative offerings.

Dynamic efficiency benefits – growing the pie

6.3.7 Dynamic efficiency is an economics term that describes overall increases in wealth generation, and is often referred to as ‘growing the pie’.

6.3.8 A primary source of increases in dynamic efficiency is the competitive process.

6.3.9 To the extent that this proposal increases competition, it can be expected to create dynamic efficiency benefits.

6.3.10 Another source of dynamic efficiency is investment. Private investors generally require a rate of return that reflects their risk, and a key component of risk is the stability of the regulatory regime and the durability of market arrangements.

6.3.11 Lack of transparency and loss of consumer confidence in market arrangements has a clear and well proven potential to reduce regulatory stability and market durability, with adverse consequential impacts on investment and in turn dynamic efficiency improvements.

6.3.12 The estimation of dynamic efficiency benefits is difficult, and the Authority does not feel able to provide a quantitative estimate of the proposal’s expected dynamic efficiency benefits.

6.3.13 Qualitatively, the Authority expects that there will be dynamic efficiency benefits arising from the proposal through increased competition and improved investment risk profiles. Specifically, the proposed requirement for retailers to issue a standard form providing clear explanations of the price changes coupled with the requirement for retailers and distributors to consult on price change media statements will address the ‘blame game’ issue, reduce consumer confusion and improve consumer engagement.

Allocative efficiency – good decisions about supply and demand

6.3.14 Economic theory revolves around the concept that efficient markets allow buyers and sellers to allocate resources by allowing buyers to communicate their willingness to pay and sellers to communicate their willingness to sell.

6.3.15 If the price that is established in the market is different from the efficient point, then the transfer of goods will not be allocatively efficient. Either some demand that could have been met will not be, or some goods are sold below cost. In practice, real markets never actually converge on the efficient point, but markets that are working well approach the efficient point more closely than those that are not.

Allocative efficiency of overall quantity consumed

6.3.16 Ensuring that consumers can understand the cost of consuming electricity will mean that they consume an amount of electricity that is closer to the exact amount that they are happy to pay for.

6.3.17 Ensuring that consumers feel confident to buy their electricity from the cheapest supplier, will result in a more efficient price being formed in the market, and a more efficient allocation of goods.

6.3.18 This represents an increase in consumer and supplier welfare from the electricity market because more goods are being traded at lower prices.

6.3.19 The sensitivity of consumer demand to price is termed the price elasticity of demand and is usually expressed as a ratio. The Authority has used a price elasticity of demand of -0.26 to assess the proposal's potential allocative efficiency effects. This means that for a 1% increase or decrease in price, there will be a 0.26% decrease or increase in the quantity demanded. This is a conservative estimate, with higher (more negative) price elasticity of demand more likely. For example, an elasticity of demand of -0.4 would provide higher allocative efficiency benefits.

6.3.20 The Authority expects that this proposal will have a relatively small impact on allocative efficiency, as it will have a limited effect on consumers' ability to make switching decisions. This is because switching depends on consumers comparing costs between suppliers, rather than costs across time with one supplier.

6.3.21 However, by ensuring that distribution and transmission charges are transparent, it is more likely that consumers will be able to identify differences in the retail component of the prices offered by competing retailers.

6.3.22 Consequently the Authority expects a modest increase in the switching rate to occur as a direct result of this proposal.

6.3.23 Based on related analysis of potential allocative efficiency gains completed as part of the retail data project, the Authority has assessed the likely allocative efficiency benefits of the proposal in Table 3.

Table 3: Present value of allocative efficiency gain

	$100 saving per consumer	*$150 saving per consumer*	*$200 saving per consumer*
0.5 % increase in switching rate	$49,545	$111,476	$198,179
1 % increase in switching rate	$99,090	$222,951	$396,358
1.5 % increase in switching rate	$148,634	$334,427	$594,537

Present value over 20 years at 8% real discount rate

Allocative efficiency of network usage

6.3.24 The purpose of distribution charges is to recover the costs of providing network services (distribution charges often include transmission charges). Distribution charges are efficient if the costs borne by each consumer accurately reflect the cost of supplying that consumer.

6.3.25 Due to the complexity and uncertainty inherent in supplying distribution services to a large number of different customers, distribution charges are unlikely to be perfectly efficient.

6.3.26 Adjusting distribution charges provides distributors with an opportunity to modify the signals they are sending to their customers about the cost of supply. Such signals include providing customers with information on:

(a) the mix of fixed and variable costs

(b) the value of controllable load

(c) the relative cost of supplying peak and off-peak demand.

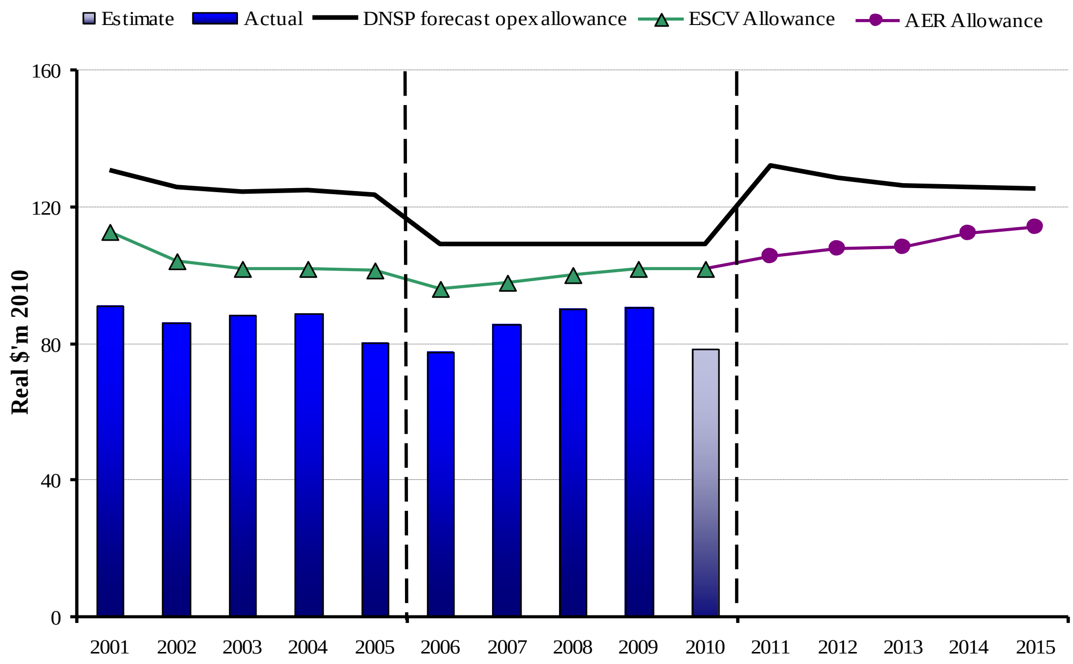
6.3.27 At present, these price signals can be lost or diluted when they are communicated to consumers, as the impact of them is combined with changes made by retailers.

6.3.28 The proposal is expected to address this by increasing the clarity of communication of retailer and distributor price changes.

6.3.29 The potential benefits from better communication of retailer and distributor price signals can be observed by looking at other jurisdictions. In Australia, for example, there has been a period of very heavy distribution network investment in a regulatory environment that largely prevented price signals from reaching consumers. The Australian Energy Regulator (AER) found that appropriate investment signals (in this case from the regulator) resulted in substantial reductions in the cost of network investment.

6.3.30 Figure 2 shows the impact of incentive based regulation on the network costs in Victoria compared to non-incentive based regulation. The average reduction in network spend set by incentive based regulation was 13%.

Figure 2: Victorian DNSP historical and forecast operating expenditure comparison ($m 2010)[32]

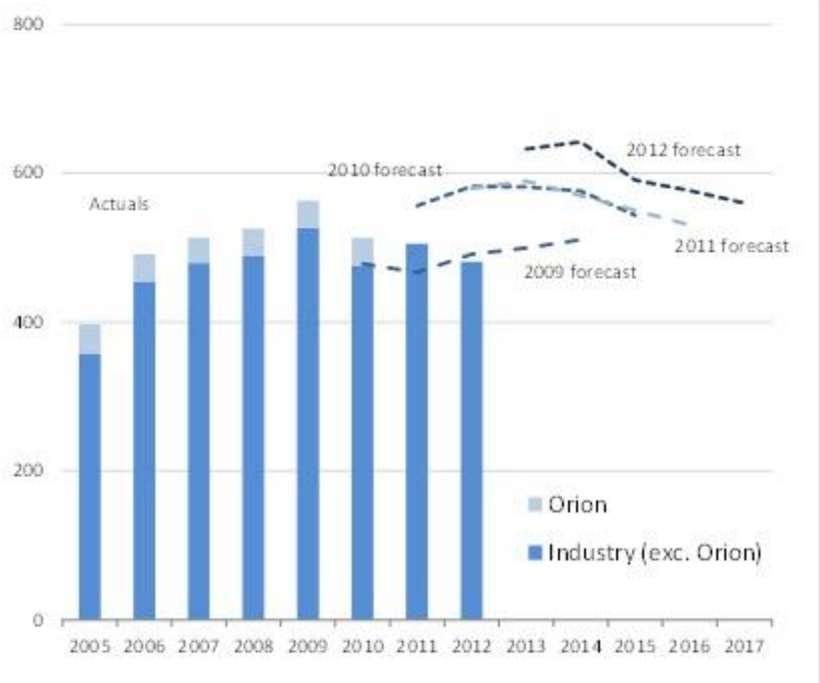


Source: AER Final Decision - Victorian electricity distribution network service providers distribution determination 2011-15, October 2010. page 374.
Note: ESCV refers to the previous regulator - Essential Services Commission of Victoria

6.3.31 Under the regulated price path, New Zealand distributors are expected to spend around $500 million per year for the foreseeable future, as shown in Figure 3. Any improvement in distributors' ability to communicate the cost of this supply, and for consumers to respond to the costs and subsequently avoid them by adjusting their demand, will represent an allocative efficiency benefit.

[32] http://www.pc.gov.au/__data/assets/word_doc/0003/116769/sub013-electricity.doc

Figure 3: Actual and forecast network capital expenditure by electricity distributors ($m)[33]



Source: Commerce Commission analysis based on data from electricity distributors' information disclosures. Note: All figures are expressed in 2012 dollars

6.3.32 Based on the Victorian example given, the Authority considers that a reduction in network expenditure of 13% is readily achievable.

6.3.33 The proposed Code amendment is expected to achieve a proportion of these 13% reductions. A conservative estimate of 10% of this value is used, ie 1.3% of the total, which translates to $7.15 million per annum.

6.3.34 While this number does not automatically translate directly to allocative efficiency, the Authority considers it to be a reasonable proxy.

6.3.35 Table 4 shows the present value estimates of a range of network expenditure reductions and efficiency ratios.

33 http://www.comcom.govt.nz/the-commission/media-centre/features/electricity-distributors-current-future-investment/

Table 4: Present value estimates of allocative efficiency gains from improved network price signalling

	0.65% cost reduction	*1.3% cost reduction*	*1.95% cost reduction*
50% efficiency ratio	$17,549,938	$35,099,877	$52,649,815
75% efficiency ratio	$26,324,908	$52,649,815	$78,974,723
100% efficiency ratio	$35,099,877	$70,199,754	$105,299,631

Present value over 20 years at 8% real discount rate.

Efficiency ratio is the proportion of the cost savings that are considered to be allocative efficiency gains.

Productive efficiency – reducing costs

6.3.36 Economists use the term productive efficiency to describe the costs of doing business, and how these compare to the minimum possible costs.

6.3.37 The proposal is expected to improve productive efficiency in the electricity industry by reducing the net transaction costs incurred by consumers making decisions about their energy usage.

Transaction costs for switching

6.3.38 The Authority considers that the proposal will make it easier for consumers to compare offerings from different retailers by improving the transparency of the different components of energy costs.

6.3.39 Increasing customer propensity to switch, and reducing the costs of searching and switching are common goals of many Authority projects in the retail space aimed to improve retail efficiency, and this proposal is one of these.

6.3.40 The Authority conservatively estimates the transaction costs of a customer to search for a new supplier and initiate a switch at $40 per customer. This is on the basis that many customers do not switch, despite apparent savings of $150-200 per year, and that customers who do switch tend to do so less than once per year regardless of savings on offer.

6.3.41 The Authority estimates that the proposal would reduce the transaction costs of switching by $1 per customer on average. This is calculated on the basis that customers would be more readily able to differentiate between retailer price changes and distributor price changes. Consumers would therefore have a clearer understanding of the make-up of their electricity costs, and therefore the impact of different pricing plans and other choices.

6.3.42 In the 12 months to May 2014 there were 404,000 switches.[34] The present value of a $1 reduction in transaction cost under a range of sensitivities is given in Table 5 below.

Table 5: Present value of reduced transaction costs

	Low (10% discount rate)	*Medium (8% discount rate)*	*High (6% discount rate)*
Switching rates decline by 2% per year	$3,002,548	$3,427,064	$3,959,183
Switching rates constant	$3,405,425	$3,927,259	$4,587,968
Switching rates increase by 2% per year	$3,895,617	$4,541,284	$5,366,746

Transparency increases competitive pressure on retail costs

6.3.43 At present retailers make price changes to coincide with distributor price changes. This provides an opportunity to pass through cost increases without direct scrutiny.

6.3.44 The Authority expects that the proposal would result in greater scrutiny on retailer price changes, as they would occur separately from distributor price changes.

6.3.45 This would be expected to increase the competitive pressure on retailers because raising prices is more likely to result in them losing customers.

6.3.46 This increased discipline can be expected to encourage retailers to drive costs out of their retail operations in order to maximise profit margins.

6.3.47 The Authority estimates that current retail cost to serve is $200 per customer per year, or $420 million per year for the whole country.

34 http://www.emi.ea.govt.nz/Reports/VisualChart?reportName=R_SwT_C&categoryName=Retail&reportGroupIndex=2&reportDisplayContext=Gallery#reportName=R_SwT_C.

6.3.48 The Authority notes that it would take an average reduction of just 0.36% of this overall cost over the 20 year assessment period to cover the costs of the proposal.

6.3.49 A conservative estimate of 0.1% is used for this analysis, which gives a present value benefit of $4.12 million over 20 years at a discount rate of 8%.

Summary of expected benefits

6.3.50 The midpoint estimates of the present value of each of the benefits described in this section are summarised in Table 6.

Table 6: Summary of estimates (present value)

Source of benefit	*Estimated value*
Dynamic efficiency	>$0 (many $m)
Allocative efficiency (switching)	$0.22 M
Allocative efficiency (network investment)	$52.65 M
Productive efficiency (switching)	$3.92 M
Productive efficiency (pressure on retailer costs)	$4.12 M
Total expected benefits	**$60.91 M**

Nature and size of expected costs

6.3.51 The proposal would involve establishment and ongoing costs. These costs would be incurred by the Authority, distributors, retailers and consumers. Table 7 provides the total estimated costs of the proposal:

Table 7: Summary of total estimated costs of the proposal (present value)

Cost	*Low*	*Medium*	*High*
Establishment costs	$266,250	$355,000	$443,750
Ongoing costs	$8,312,898	$9,547,509	$11,105,126
Total	**$8,579,148**	**$9,902,509**	**$11,548,876**

Estimated establishment costs

6.3.52 The main expected establishment costs are:

(a) for the Authority – costs of designing the proposal, including analysis and legal costs. Some of these costs are sunk

(b) for retailers – costs of altering internal processes and systems to produce a price change notification .

6.3.53 The Authority estimates that the present value establishment costs would be about $355,000.

6.3.54 The majority of the establishment costs are expected to be incurred by retailers in altering internal processes and augmenting/developing systems to provide a price change notification to all customers on their network. The establishment costs for retailers would be expected to include:

(a) redesigning internal processes to account for the annual price change notification

(b) augmenting/establishing systems to produce customer specific price change data.

6.3.55 The Authority does not expect distributors to incur any establishment costs due to the proposal.

6.3.56 The estimated present value establishment costs are described in Table 8.

Table 8: Estimated establishment costs

Party	*Item*	*Low (-25%)*	*Medium*	*High (+25%)*
Authority	Design of proposal	$22,500	$30,000	$37,500
Distributor	Altering internal processes and augmenting systems	$0	$0	$0
Retailers	Altering internal processes and augmenting systems	$243,750	$325,000	$406,250
	Total	**$266,250**	**$355,000**	**$443,750**

Estimated ongoing costs

6.3.57 The main expected ongoing costs are:

(a) Mail-out costs. The annual costs to retailers of notifying consumers of the price adjustment. This is an incremental cost associated with adding extra processes to established postal or electronic communication.

(b) Consumers considering the price adjustment notice. Consumers would face transaction costs in considering the price adjustment notice. This cost is expected to be incremental as consumers already receive a price change notification from retailers. There would also be transaction costs associated with consumers contacting the retailer/distributor to seek clarification of the price change.

(c) Retailers and distributors consulting on price change media statements.

(d) The Authority would have some ongoing monitoring and compliance costs. The Authority would expect this to be in the order of $10,000 per year.

Table 9: Twenty year present value of ongoing costs

Party	*Item*	*Low (10% discount rate)*	*Medium (8% discount rate)*	*High (6% discount rate)*
Authority	Monitoring and compliance	$102,163	$117,818	$137,639
Distributors/ Retailers	Managing customer contact	$0	$0	$0
Distributors/ Retailers	Distributors consult retailers on price change media statements	$1,357,913	$1,565,995	$1,829,452
Distributors/ Retailers	Retailers consult distributors on price change media statements	$2,383,798	$2,749,081	$3,211,578
Retailers	Inserting copy of notice into customer invoice	$1,391,669	$1,565,698	$1,780,482
Consumers	Transaction costs of reviewing notice	$3,077,355	$3,548,917	$4,145,975
	Total	**$8,312,898**	**$9,547,509**	**$11,105,126**

6.3.58 More information on the assumptions underpinning the costs is provided in Appendix G.

6.3.59 The Authority considers that there would be no additional costs associated with participants managing customer contact. Distributors would need to respond to some consumer queries about the price change notifications. The majority of calls are expected in the three months following the mail-out, but there would be calls throughout the year. However, the calls to distributors are expected to be offset by a reduced number of calls to retailers. The Authority understands that call centres are scalable and has assessed this cost as neutral.

Q9.	**Do you agree with the assessment of the costs and benefits of the proposal?**
Q10.	**Are there any other costs or benefits that should be included in the assessment?**

6.4 Evaluation of alternative means of achieving the objectives of the proposed amendment

6.4.1 Discussion of the costs and benefits of each option is provided in section 5 above, and a summary of the evaluation is set out in Table 10 below.

Table 10: Summary evaluation of proposal and alternative options

Option	Benefits	Establishment costs	On-going costs	Ease of implementation	Risks
Proposed amendment Information disclosure requirements	High May prompt consumers to seek comparisons Improved accountability between distributors and retailers through standard format Improved consumer confidence	Low-Moderate (less than $1 million) $000s for participants Development of template ($50-100k) Code change ($30-50k)	Low-Moderate Minimal admin costs for retailers (completed as part of normal price setting process) Transaction costs for retailers and distributors from consulting on price change media statements ($400-$500k per year) Compliance monitoring ($30k/year)	Moderate Would require Code changes to ensure regime is consistently applied and confusion minimised May require price restructuring	Potential barrier to entry Potential to limit structure of prices, which could stifle innovation

Option	Benefits	Establishment costs	On-going costs	Ease of implementation	Risks
Option 1: Status quo (market forces)	**Low** Little incentive for retailers and distributors to agree consistent messaging to consumers Incremental improvement in transparency over time, through innovation and competition	**N/A**	**Low** Costs are foregone efficiency benefits from competition, due to lack of consumer confidence and engagement	**N/A**	A lack of material self-propelled activity from the market to achieve transparency would suggest that risks are high
Option 2: Separate bills	**Medium** May prompt consumers to seek comparisons Improved **accountability** between distributors and retailers from more consistent communications May improve consumer **confidence**	**High (hundreds of millions)** $100m+ across distributors for new billing systems (even if costs shared by virtue of third party provider) based upon publicly reported experiences of major retailer billing system upgrades in recent years. Code change ($30-50k)	**Moderate (tens of millions)** ~10% of set-up costs per year for participants Price regulation monitoring costs small. Additional transaction costs for consumers which will be significant in total.	**Low – extremely complex** Requires long implementation timeframe. Considerable commentary globally about the risks in the delivery of large scale information technology projects. Publicly disclosed cases of electricity billing system implementations over the past decade give support for a low rating.	Increased consumer confusion and dissatisfaction. Highly complex multi-year implementation undertaking – considerable risks around multiple large IT projects.

Option	Benefits	Establishment costs	On-going costs	Ease of implementation	Risks
Option 3: Separate itemisation on a single bill	**Medium** Does not target problem; potentially reduces competition. Has many of the same issues as the Separate Bills option but without the extreme costs or risks. Improved **accountability and transparency**	**Moderate** $0.4-$1m per retailer that does not already separate out bills. Some additional costs for retailers that already separate out in terms of standardisation Code change ($30-50k)	**Low** Marginal administration cost for participants who do not currently itemise their bills	**Low – complex** Will require some retailers to make significant changes to the billing engines.	Increased consumer confusion and dissatisfaction Stifling innovation Potential barrier to entry Loss of existing competitive advantage for retailers who currently itemise. IT implementation risks
Option 4: Annual report on price trends	**Low+** Unlikely to be read by consumers, info not consumer-specific and has an unavoidable time lag which may reduce consumers' ability to act on this data set at point of price changes May improve **confidence** in the market through regulated independent assessment of prices and associated trends.	**Low** Set-up/development of methodologies ($100k)	**Low** Analysis and reporting ($50-80k/year)	**High** Challenge to present data in a way that is timely and meaningful to consumers	**Low** Due to largely static nature of information being presented.

Q11. Do you agree with the evaluation of the alternative options? If not, why not?

6.5 Assessment under section 32(1)

6.5.1 Section 32(1) of the Act provides that Code provisions must be consistent with the Authority's objective and be necessary or desirable to promote any or all of the following:

(a) competition in the electricity industry

(b) the reliable supply of electricity to consumers

(c) the efficient operation of the electricity industry

(d) the performance by the Authority of its functions

(e) any other matters specifically referred to in the Act as a matter for inclusion in the Code.

6.5.2 Table 11 sets out an assessment of the proposed amendment against the requirements of section 32(1) of the Act.

Table 11: Assessment of the proposed amendment against the requirements of section 32(1) of the Act

Section 32(1) requirements:	Response
The proposed amendment is consistent with the Authority's objective under section 15 of the Act, which is as follows:	
(a) to promote competition in, reliable supply by, and the efficient operation of, the electricity industry for the long-term benefit of consumers	The proposal supports the Authority's objectives as outlined below. Where a response or comment has been previously introduced in this table it has not been repeated even if it could be applied to another of the section 32(1) requirements.
The proposed amendment is necessary or desirable to promote any or all of the following:	
(a) competition in the electricity industry	The proposal promotes competition in the retail electricity market by enabling consumers to better understand the magnitude of, and responsible parties for, price changes for each of the components of their electricity bill. This accountability is expected to result in improved consumer confidence in the retail market and increased consumer engagement. Increased consumer engagement will promote retail competition.

(b) the reliable supply of electricity to consumers	The proposal is neutral in terms of reliable supply.
(c) the efficient operation of the electricity industry	The proposal promotes the efficient operation of the retail market by reducing the transaction costs for consumers of making energy-related investment decisions.
(d) the performance by the Authority of its functions	The proposal will not materially affect the Authority's performance of its functions.
(e) any other matter specifically referred to in this Act as a matter for inclusion in the Code.	The proposal will not materially affect any other matter specifically referred to in the Act for inclusion in the Code.

Q12. Do you agree with the assessment of the proposed amendment against the requirements of section 32(1) of the Act? If not, why not?

6.6 Assessment against the Code amendment principles

6.6.1 When considering amendments to the Code, the Authority is required by its Consultation Charter to have regard to the following Code amendment principles, to the extent the Authority considers they are applicable.

6.6.2 *Principle 1 – Lawfulness:* The Authority and its advisory groups will only consider amendments to the Code that are lawful and that are consistent with the Act (and therefore consistent with the Authority's statutory objective and its obligations under the Act).

6.6.3 The Authority considers the proposal is lawful and consistent with the Act.

6.6.4 *Principle 2 – Clearly Identified Efficiency Gain or Market or Regulatory Failure:* Within the legal framework specified in Principle 1, the Authority and its advisory groups will only consider using the Code to regulate market activity when:

(a) it can be demonstrated that amendments to the Code will improve the efficiency of the electricity[35] industry for the long-term benefit of consumers;

(b) market failure is clearly identified, such as may arise from market power, externalities, asymmetric information and prohibitive transaction costs; or

(c) a problem is created by the existing Code, which either requires an amendment to the Code, or an amendment to the way in which the Code is applied.

6.6.5 The Authority considers the proposal will clearly lead to improvements in the efficiency of the electricity industry for the long-term benefit of consumers. Such benefits will be achieved through dynamic efficiency benefits from improved competition and operational efficiency benefits from reduced transaction costs.

6.6.6 *Principle 3 – Quantitative Assessment:* When considering possible amendments to the Code, the Authority and its advisory groups will ensure disclosure of key assumptions and sensitivities, and use quantitative cost-benefit analysis to assess long-term net benefits for consumers, although the Authority recognises that quantitative analysis will not always be possible. This approach means that competition and reliability are assessed solely in regard to their economic efficiency effects. Particular care will be taken to include dynamic efficiency effects in the assessment, and the assessment will include sensitivity analysis when there is uncertainty about key parameters.

6.6.7 The Authority has undertaken a quantitative costs benefit assessment where possible. The benefits are expected to outweigh the costs. The assessment is presented in section 6.3.

Q13. Do you agree with the assessment against the Code amendment principles? If not, why not?

35 Where efficiency refers to allocative, productive and dynamic efficiency, and improvements to efficiency include, for example, a reduction in transaction costs or a reduction in the scope for disputes between industry participants.

Appendix A Format for submissions

Question No.	Question	Submitter's response
Q1	Do you agree with the Authority's view of the role of transparency in promoting competition? Please explain your answer.	
Q2	Do you agree with the problem definition? Please explain your answer.	
Q3	Do you agree with the Authority's proposal? Please provide reasons to support your answer.	
Q4	Do you agree with the alternative options?	
Q5	Are there any other options the Authority should consider?	
Q6	Do you have any comments on the proposed Code amendment?	
Q7	Do you have any comments on the draft template?	
Q8	Do you agree with the statement of the objectives of the proposal? Please explain your answer.	
Q9	Do you agree with the assessment of the costs and benefits of the proposal?	
Q10	Are there any other costs or benefits that should be included in the assessment?	
Q11	Do you agree with the evaluation of the alternative options? If not, why not?	

Q12	Do you agree with the assessment of the proposed amendment against the requirements of section 32(1) of the Act? If not, why not?	
Q13	Do you agree with the assessment against the Code amendment principles? If not, why not?	

Appendix B Background

B.1 History

B.1.1 For many years trust-owned distributors and customer advocates have sought to require the separation of line charges on customer bills.[36] They stated that customers should know the reason for electricity bill increases, and noted that there had been several cases of misleading explanations by retailers as to the reason for bill increases.[37]

B.1.2 Transparency of charge components was raised in 1994, when the Electricity (Information Disclosure) Regulations 1994 included a requirement for retailers (and distributors who directly invoiced consumers) to publicly disclose, annually and within two months of a change in line charges, the amount of the line charge and the basis on which that line charge was calculated. However, the issue was so problematic and confusing to customers that this part of the legislation was removed in 1999.

B.1.3 The issue was next included in the December 2000 Government Policy Statement (GPS) as a component of domestic consumer contracts. In 2005, the Electricity Commission (Commission) included separation of line and energy charges in the proposed Model Domestic Contract. However, retailers stated that feedback they received from their customers was that simplicity and clarity were important features on bills, rather than a very detailed breakdown of charge components. Retailers stated that bill unbundling would not provide customers with additional information on which customers could act, as consumers are not able to select retailer A's line charge offering and retailer's B energy offering.

B.1.4 Retailers also stated that bill unbundling would increase their costs (which would result in higher prices to consumers) without a corresponding increase in benefit to the consumer, and restrict their ability to offer innovative products and services.

B.1.5 In 2007, the Commission undertook a cost benefit analysis to determine if it would be possible to recommend that the Model Domestic Contract Guidelines on separation of charges become a regulated requirement. It found insufficient supporting evidence for regulation, due to the lack of indication that customers would find the additional disclosure helpful. Also, retailers would pass implementation costs on to customers and there were other lower cost ways of providing this information to interested customers.

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[36] Specifically, WEL Energy Trust, Waitaki Power Trust, Network Tasman Trust, Counties Power Consumer Trust, Energy Trusts of New Zealand, and Grey Power.

[37] There have been successful Fair Trading Act cases in 2003 and 2004 brought against Meridian Energy, TrustPower and Contact Energy relating to this issue.

B.1.6 As a result, the Proposed Changes to Interposed Model Contracts (April 2008) consultation document proposed an option that would reduce the disclosure requirement. The consultation document proposed that retailers:

(a) publish on their website details of the line and energy split for each active “standard” tariff that they have available

(b) place notification on their invoices of exactly where consumers could access the information on transparency of invoices

(c) at the time of a tariff change, include within their correspondence to customers the line and energy split of all of their rates.

B.1.7 In their submissions on the April 2008 consultation document, several electricity distributor trusts stated that they were not supportive of the draft proposals; they continued to support full separation of line charges on the customer’s bill. Retailers also did not support the April 2008 proposals, stating that:

(a) they would not provide useful information to customers

(b) would increase retailers costs, which would be passed through to customers

(c) the additional complexity required would act as a barrier to expansion/entry.

B.1.8 The Ministry of Consumer Affairs and Grey Power supported the April 2008 proposals, although Grey Power added that it would like the information to be on the Commission’s website, in a format that was easy to understand.

B.1.9 The 2009 GPS required the Commission to ensure that concerns around transparency of charge components were addressed in domestic consumer contracts. On 12 November 2009, the Commission sought submissions on options to address concerns about transparency of charge components on consumer bills.

B.1.10 In April 2010 the Commission published a summary of submissions on the consultation paper and the Commission’s responses to those submissions. The Commission concluded that the scope of the project should be broadened to identify and address unmet consumer information needs, rather than just focussing on disclosure of bill components. However, as a result of existing work commitments, the Commission considered it was unlikely to make significant progress on this project before the proposed transition of functions from the Commission to the Electricity Authority took place on 1 October 2010. The Commission therefore recommended that the Authority should undertake a project to identify and address consumer information needs as part of its proposed function of market facilitation through education and provision of information to consumers.

B.2 Work undertaken by the Retail Advisory Group

B.2.1 The Authority added the ‘Disclosure of bill components’ project to its work programme in 2012. This was in response to further requests from consumer groups (for example Grey Power) and electricity network trusts (for example, Top Energy Consumer Trust) to consider whether there should be mandatory disclosure of the component parts of consumers’ bills. In June 2012, the Authority asked the RAG to undertake this project.

B.2.2 The RAG considered the issues and problems relating to the disclosure of bill components between April and May 2013. This led the RAG to request a change to the project scope and title on the basis that the problem should be more clearly defined before it identified potential solutions.

B.2.3 The RAG released an issues and options paper in August 2013 to seek feedback about problems with the availability (or transparency) of consumers’ electricity charge information. The RAG considered that submissions received well represented participants’ views. However, due to the limited number of submissions from consumers, the responses did not provide a sufficient cross-section of consumer views to allow an informed decision about the views of consumers about transparency. Consequently, the RAG decided to undertake further research to obtain evidence of consumers’ understanding and expectations for information about their electricity charges.

B.2.4 On behalf of the RAG, the Authority engaged UMR to survey consumer views. UMR completed the survey between October and November 2013 and comprised:

(a) qualitative research with six focus groups among consumers and six in-depth interviews among small business owners

(b) quantitative research based on a nationally representative sample of 1000 people. The design of the survey was heavily influenced by the qualitative research.

B.2.5 Following consideration of the survey results, on 28 March 2014 the RAG made the following recommendations to the Authority:

(a) the Authority should conduct a forum with retailers, distributors and consumer representatives. The forum should discuss how the industry could achieve wider consumer understanding of the regulated (lines and transmission) versus competitive (energy) components of bills , without the additional costs or consumer irritation from bill separation or unbundling

(b) the Authority should ensure that the scope of the retail data project includes consideration of what actionable information is, and should be, available to consumers. This information would be to assist consumers to understand their bills, to see what is driving price changes and to make choices about their retailer

(c) the Authority should consider how to promote wider consumer understanding of the regulated (lines and transmission) versus competitive (energy) components of bills and the drivers of these. Within this the Authority should consider how best to use its independent position to focus media commentary and public debate

(d) the Authority should consider requiring standardised disclosure of headline price movements across all retailers and lines companies, to assist in removing consumer confusion and industry contradiction. In particular, any such disclosure should make clear both the average and the range of price movements, and affected number of customers, within prescribed consumption bands. The RAG noted the Authority's recent announcement of an investigation into the clarity and accuracy of industry communications to consumers regarding price movements.

B.3 Authority's response to RAG's recommendation

B.3.1 The Board considered the RAG's recommendations on 9 April 2014. This paper sets out the Authority's response to the RAG's recommendation, which is to undertake a further round of consultation on a full range of options.

B.3.2 In developing its response to the RAG's recommendations, the Authority has been cognisant of the fact that transparency of consumers' electricity charges has become particularly topical since early 2014. Media and commentators have suggested different options to provide greater 'transparency' and to address confusion about the drivers of price changes.

B.4 Related Authority initiatives

Retail data project

B.4.1 The Authority's work programme for 2013/14 includes a project to consider issues with retail data (the retail data project).[38] The primary purpose of the retail data project is to promote competition in the electricity industry to pursue the Authority's aspiration of 'widespread confidence in competitiveness of markets'. Monitoring is also a statutory function of the Authority and parts of the project will improve the Authority's ability to perform this function.

B.4.2 The retail data project will assess whether the following matters impede competition and/or reduce confidence in the electricity sector, and will

[38] Electricity Authority, 2013/14 work programme, Table C, project C8. The work programme is available at, http://www.ea.govt.nz/dmsdocument/15241.

consider options for addressing any barriers to competition, including whether:

(a) incomplete data available to the Authority and other stakeholders about retail prices and the resulting costs to consumers is inhibiting effective monitoring and analysis of the retail market

(b) incomplete data available to consumers on retail tariff options and consumption data is inhibiting consumers' ability to make informed decisions about electricity

(c) the complexity and uncertainty that arises from a lack of good quality information is adversely affecting consumers' propensity to make decisions about electricity (imposing a high cost of attention)

(d) a lack of clarity around prices paid by consumers is leading to poor consumer decisions and a lack of innovation by retailers and service providers

(e) a perception by consumers and observers that the existing market arrangements, especially as they relate to retail matters, are not delivering outcomes that are for the long-term benefit of consumers.

B.4.3 The focus of the improving transparency project is on retailer interactions with customers, such as through their bills, letters, website etc. In contrast, the retail data project is focused on providing consumers and others with better access to retail data through a central portal to make it easier for consumers to compare offerings across retailers.

B.4.4 As a result there is considerable alignment between the retail data project and the objectives of greater transparency, including the following:

(a) the proposed approach to price monitoring via the retail data project will enable reporting on actual costs to consumers, including separation of energy and distribution costs. This enhanced monitoring should complement the initiatives discussed in this paper

(b) the proposed development of a tariff database and energy service provider trial should provide consumers with access to better, more independent, information (and by inference greater clarity) about the different retail offerings

(c) energy service providers will be encouraged to compete to provide the most useful service to consumers, which is likely to include transparent, easy to understand pricing

(d) similarly, competition between energy service providers should drive changes to retailer offerings in order to attract customers via the energy service providers

(e) providing consumers with easier access to their consumption data should allow consumers (or service providers on their behalf) to ‘test’ changes in retail and distribution tariffs in order to get specific information about how price changes will affect them.

B.4.5 Separately and in combination, these features of the retail data project are expected to improve transparency of prices and price changes, and thereby contribute to improved consumer understanding and perception of market arrangements.

B.4.6 A key purpose of the retail data project is to provide actionable information to consumers about their electricity costs and consumption. A key aspect of actionable information is the ability to reduce the complexity of a set of information to a form that enables a decision.

B.4.7 Consumers are far more likely to make decisions about a service when faced with changes in the service being provided. An obvious case of this is when price changes are implemented. Therefore, in order to be successful, the retail data project will need to be able to assist consumers to understand the impact of price changes. As such the retail data project shares some of its objectives with the improving transparency project.

Price check work

B.4.8 During March 2014 when retail companies announced the annual increases in network charges, there was a high level of media coverage which included conflicting claims from retailers and distribution companies.

B.4.9 A precondition for efficient and competitive markets is accurate information that reflects the underlying economic reality. The situation that developed during March 2014 meant that retail consumers faced conflicting information about the source and likely size of price increases. This experience has the obvious potential to inhibit efficiency and competition in the retail market.

B.4.10 As a result, the Authority undertook an enquiry to check the accuracy of the claims made by the retailers and distribution companies.

B.4.11 In summary, the enquiry found:[39]

(a) in all cases, communication between retailers and consumers was very transparent

(b) the media statements by the various parties contained conflicting information about the sources and sizes of retail price increases. The sources of such conflicting information were:

(i) different methodologies used to make calculations

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[39] The price check review report can be found at: https://www.ea.govt.nz/monitoring/enquiries-reviews-and-investigations/2014/retail-price-check.

(ii) calculations made on different subsets of consumers.

B.4.12 The Authority decided that concerns about conflicting information in media statements would be addressed as part of this project on improving transparency.

Appendix C Proposed amendment

The proposed Code amendments are as follows:

Part 11

Registry and consumer information management

11.1 Contents of this Part

This Part—

(a) provides for the management of information held by the **registry**; and

(b) prescribes a process for switching **customers** and **embedded generators** between **traders**; and

(c) prescribes a process for a **distributor** to change the record in the **registry** of an **ICP** so that the **ICP** is recorded as being usually connected to an **NSP** in the **distributor's network**; and

(d) prescribes a process for switching responsibility for **metering installations** for **ICPs** between **metering equipment providers**; and

(e) prescribes a process for dealing with **retailer events of default**~~.~~; and

(f) prescribes information that a **retailer** must provide to **consumers** if the **retailer** or a **distributor** changes a tariff rate for the **consumer**.

……

Information about tariff rate changes

11.37 Consumers to be advised of tariff rate changes

(1) Subject to clause 11.38, this clause applies when—

(a) a **retailer** changes the tariff rate it charges to 1 or more of its **consumers**; or

(b) a **distributor** changes the tariff rate it charges to 1 or more of the **consumers** connected to its **network**.

(2) When this clause applies, the **retailer** of a **consumer** that is affected by the tariff rate change must clearly explain the nature of the tariff rate change to the **consumer**, using the form set out in Schedule 11.6.

(3) Despite subclause (2), a **retailer** must not explain the nature of a **distributor's** tariff rate change to a **consumer** if—

(a) the **distributor** has 1 or more **consumers** connected to its **network** to whom the **distributor** sends accounts for **line function services** directly; and

(b) the **distributor** has already explained to the **consumers** affected by the tariff change the nature of the tariff rate change, using the form set out in Schedule 11.6.

(4) To avoid doubt, a **retailer** is not required to give an explanation under this clause if the tariff rate change results from the **consumer** changing pricing plans.

11.38 When explanation must be sent

(1) A **retailer** must send the explanation required under clause 11.37 at least 30 days before the tariff rate change takes effect.

(2) If a **distributor** sends an explanation to its **consumers** under clause 11.37(3)(b), it must send the explanation at least 30 days before the tariff rate change takes effect.

11.39 Retailer not to change tariff rate without providing explanation

A **retailer** must not invoice a **consumer** at a tariff rate that has changed from the tariff rate that was used in the **consumer's** previous invoice, unless the **consumer** has received an explanation of the tariff rate change in accordance with clauses 11.37(2) and 11.38(1).

11.40 Distributor tariff rate change explanation to align with information provided under Commerce Act

(1) This clause applies when a **retailer** provides an explanation of a **distributor's** tariff rate change under clause 11.37(2).

(2) When this clause applies, the **retailer** must ensure that the explanation of the tariff rate change provided to a **consumer** is consistent with the information the **distributor** is required to publicly disclose for the purposes of a determination made under Part 4 of the Commerce Act 1986.

11.41 Requirement to consult on media releases

(1) A **retailer** must consult with a **distributor** if—

(a) the **retailer** intends to make a media release in relation to a tariff rate change; and

(b) the tariff rate change will affect a **consumer** on the **distributor's network**.

(2) A **distributor** must consult with a **retailer** if—

(a) the **distributor** intends to make a media release in relation to a tariff rate change; and

(b) the tariff rate change will affect one of the **retailer's consumers**.

……

Schedule 11.6 cl 11.37
Explanation of tariff rate change

[To be added – refer Appendix E]

Appendix D Electricity Network Association Article

Source: Electricity Network Association Issue 327, February – March 2014 Newsletter, p.5.

Orion's chief executive among many frustrated by price increase spin

Many ENA members are annoyed at the apparent campaign by some gentailers to shift the debate around market reform to one on reforming the distribution industry. Most recently this has also generated a number of claims implying that retail price increases are just the result of changes in distribution and Transpower charges. The following note from Orion Chief Executive Rob Jamieson encapsulates this:

"As a customer, I received an email offer from Genesis that commenced;

> *'With network costs changing in your region, now's the perfect time to lock in certainty around your electricity prices for two years.'*

There followed a set of prices that equated to a 9.5% retail price increase. This is despite publicity that outlined our network increase impact as 3% plus 1 % for Transpower. A spokesperson for that retailer then was quoted in a local newspaper:

> *He said much of the increase was due to lines company Orion being allowed by the Commerce Commission to substantially increase its prices. Genesis was passing that on in its prices. But he could not say how much of Genesis' increase was passing on Orion's increase and how much was its own. Orion's higher prices start being charged on April 1. "There may be a small amount in there for our own costs that are also increasing" [Genesis' spokesperson Richard] Gordon admitted.*

A subsequent report in the same paper highlighted the difference in the figures;

> *So it appears the remaining 5.5 percentage points of the 9.5 percent increase is the increase in Genesis' prices. Spokesman Richard Gordon said last week Genesis' increase was a small part of the overall increase but it appears to be more than half of the 9.5 per cent rise. Gordon said yesterday that Genesis had to cover its rising costs but he could not detail those. "I'm not going to go through them one by one. There are cost increases we are facing and they have to be recovered".*

In March, as a customer I received notification of a price increase from Genesis (about 7.5% on variable prices and 1% fixed price), two paragraphs of which state;

> *Your bill reflects a variety of costs, including generation and transmission costs, metering charges and our own business cost.*
>
> *Some of these costs are set charges that we pass on to you, such as those from your local network company Orion, those related to distribution and other charges. Unfortunately we are unable to influence how much these costs change.*

The only reference to "changes" in costs is in a paragraph dedicated to Orion. I'm sure that readers can reach their own conclusions"

Appendix E Illustration of potential price change notification

Price change notification - page 1

The following price change notification is provided in accordance with sections 11.37 to 11.40 of the Electricity Industry Participation Code.
All prices stated are GST inclusive.

Connection address: 60 AB Sample Road
Sample Suburb
AKL

Price change notification provided by: Retailer A

ICP number: 1234567890AB12

A change to one or more tariff rates for the above address and ICP number will become effective on: 1 July 2015

Based on your last 12 months' electicity consumption, en estimation of the annual price change is provided below.
Further detail is provided on Page 2 of this price change notification.

Total estimated $ change per annum: $ 36.19

Total estimated % change per annum: 1.47%

The price change consists of the following estimated annual changes to each component:

		Organisation	Website	Phone number
Retail:	$ 14.63 1.99%	Retailer A	http://www.retailera.co.nz/	0800 123 456
Distribution:	$ 21.56 1.25%	Distributor B	http://www.distributorb.com/	0800 987 654

Price change notification - page 2

The following price change notification is provided in accordance with sections 11.37 to 11.40 of the Electricity Industry Participation Code.
All prices stated are GST inclusive.

Connection address: 60 AB Sample Road
Sample Suburb
AKL
ICP number: 1234567890AB12

Price change effective on: 1 July 2015

Price change disclosure statement provided by: Retailer A

	Provider	Tariff rate	Units	Previous price	New price	Price increase	Estimated units	Previous annual charge	New annual charge
Retail	Retailer A	All Day Electricity Rate - Uncontrolled	c/kWh	8.06	8.2	1.7%	4188	$ 337.55	$ 343.42
		All Day Electricity Rate - Controlled	c/kWh	8.06	8.2	1.7%	1464	$ 118.00	$ 120.05
		All Day Electricity Rate - Night	c/kWh	8.06	8.2	1.7%	2712	$ 218.59	$ 222.38
	Electricity Authority	Residential consumer	c/day	17	17.8	4.7%	365	$ 62.05	$ 64.97
								Estimated retail $ change per annum	**$ 14.63**
								Estimated retail % change per annum	**1.99%**

	Provider	Tariff rate	Units	Previous price	New price	Price increase	Estimated units	Previous annual charge	New annual charge
Distribution	Distributor B	Variable charge - Uncontrolled	c/kWh	8.87	8.93	0.7%	4188	$ 371.48	$ 373.99
		Variable charge - Controlled	c/kWh	4.44	4.6	3.6%	1464	$ 65.00	$ 67.34
		Variable charge - Night	c/kWh	2.22	2.3	3.6%	2712	$ 60.21	$ 62.38
		Invoice delivery rate	c/kWh	0.2	0.2	0.0%	8364	$ 16.73	$ 16.73
		Daily charge	c/day	57.51	58.2	1.2%	365	$ 209.91	$ 212.43
		Billing and Admin rate	c/day	60	60.5	0.8%	365	$ 219.00	$ 220.83
		Metering Rate	c/day	30	30.5	1.7%	365	$ 109.50	$ 111.33
	Transpower	Transmission	c/kWh	8	8.1	1.3%	8364	$ 669.12	$ 677.48
								Estimated distribution $ change per annum	**$ 21.56**
								Estimated distribution % change per annum	**1.25%**

Appendix F Sample bills

Contact Energy

Account Details Page 2 of 3 **Account No. 1234567810**

YOUR ACCOUNT NUMBER

ELECTRICITY CHARGES FOR 2 THOMPSON ROAD NEW LYNN AUCKLAND

From 04 Jan 01 to 09 Feb 01 (37 Days) ICP 0000213013UN-A52

YOUR ICP NUMBER

Meter Number	Previous Estimate	Present Reading	Units Used	Meter Multiplier	Average Daily Consumption
930367:1	29084	28905	-179	1	-4.8

ECONOMY VARIABLE	-53	kWh	@	8.21	cents per kWh	$-4.35
ECONOMY VARIABLE	-126	kWh	@	8.21	cents per kWh	$-10.34
DAILY FIXED CHARGE	37	Days	@	$1.1228	per day	$41.54
Rounding						$-0.04
GST						$3.36
TOTAL ELECTRICITY CHARGES						**$30.17**

GAS CHARGES FOR 2 THOMPSON ROAD NEW LYNN AUCKLAND

From 04 Jan 01 to 09 Feb 01 (37 Days) ICP 0000281211QT-4A1

Meter Number	Previous Estimate	Present Reading	Units Used	Meter Multiplier	Conversion Factor*	Total Consumption	Consump/day This Period
8221075941:1	1901	1917	16	1	10.9926	176	4.7568

* Energy Conversion Factor (10.5926) = kWh Factor (11.0421) x Altitude Factor (1.0000) x Temp Factor (0.9810) x Pressure Factor (1.0140) x Deviation Factor (1.0000) x Meter Multiplier (1)

* Energy Conversion Factor as per NZS 5259:1997

Start Smart Tariff	176	kWh	@	8.14	cents per kWh	$14.33
Start Smart Dly Chg	37	Days	@	21.00	cents per day	$7.77
GST						$2.76
TOTAL GAS CHARGES						**$24.86**

Account Details Page 2 of 2 **Account No. 123456789**

ICP Number

ACTUAL ELECTRICITY CHARGES FOR Electricity Usage **WITCHVILLE**

From 03 Feb 11 to 01 Mar 11 (27 days) ICP **000123466UN-025**

Meter types

	Previous Estimate	Present Reading	Units Used	Meter Multiplier	Average Daily Consumption
2600762:1	004783	004846	2520	40	93.3

Anytime	2427	kWh @	21.306	cents per kWh	$517.10
Anytime	93	kWh @	22.943	cents per kWh	$21.34
One Meter Continuous	26	Days @	$1.171	per Day	$30.45

GST $105.57

TOTAL ELECTRICITY CHARGES **$809.34**

OTHER CHARGES FOR 1 SWITCHME ST, SWITCHVILLE

Electricity Commission Levy 2520 kWh @ 0.186c per kWh $4.69

GST $0.70

TOTAL OTHER CHARGES **$5.39**

Choose the best payment option for you...

Internet & telephone banking
You can set us up as a bill payee with the following details: Our bank account: Contact Energy Limited, our account number: 03-0502-0223829-03. Please use your 10 digit energy account number as a reference number.

Direct Debit and Smoothpay
Direct Debit is the easiest way to pay your bill and ensures you get your prompt payment discount every time, and with Smoothpay you pay a regular set amount throughout the year, smoothing out the highs and lows of your energy bill.

Other ways to pay
You can also pay your bill by credit card, posting us a cheque, or in person at any PostShop outlet or Westpac branch.

Find out more about our payment options, visit contactenergy.co.nz/waystopay or call 0800 80 9000.

If you have a complaint...

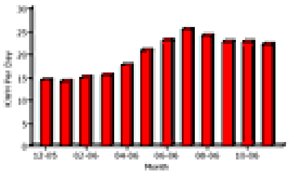
We welcome customer feedback. If you have a complaint, please contact us on 0800 80 9000 or email help@contactenergy.co.nz to use our free complaint service. If we cannot resolve your complaint, you can contact the Electricity and Gas Complaints Commission's free and independent service on 0800 22 3340 or go to www.egcomplaints.co.nz

Energy Online

Customer No. 500500
Account Enquiries 0800 086 400
Fax 09 361 2159
Faults Number 0800 xxxxxx
Email help@energyonline.co.nz
Invoice Date 15 December 2006
Statement/Invoice No 2768698

Mr A B Cee
123 High Street
Hillcrest
1000

Paying your account by Direct Debit always ensures your payments are made on time, and is easy to set up. To arrange payments by Direct Debit, call our Customer Services Team on 0800 086400 or send an email to help@energyonline.co.nz



Historical Usage Information
Previous 12 months Usage 6972 kWhs
Avge Daily Usage 19 kWhs
Avge Monthly Bill $104.73 excl GST

15 Nov 2006	Opening Balance	$107.20
23 Nov 2006	Payments Received (thank you)	-$96.48
23 Nov 2006	Prompt Payment Discount	-$10.72
Balance Before Current Charges		**$ 0.00**
Electricity Charges (see usage details)		$ 92.70
GST		$ 11.59
Current Charges Due 03-Jan-2007		**$ 104.29**
Total Amount Due		**$ 104.29**
Less prompt payment discount if paid by 03-Jan-2007		$ 10.43
Total Amount Due if paid by 03-Jan-2007		**$ 93.86**

This invoice contains partially or wholly estimated consumption - for more information please call 0800 086 400

Electricity Usage Details
123 High Street, ICP 0123456789AB123, Billing period 15/11/06 to 14/12/06

Item	Meter	Last Actual Read		Last Bill	This Bill	Units Read	Multiplier	Units Used	$ Rate	$ Total
Daily Charge						30		30	$0.6400	$19.20
Uncontrolled	12345678/1	17 Oct 06	9227	9648	9888	240	1	240	$0.1725	$41.40
Controlled	12345679/1	17 Oct 06	5281	5465	5726	261	1	261	$0.1230	$32.10

Sub-total for site	$ 92.70
GST	$ 11.59
Total for site including GST	**$ 104.29**
Less 10% prompt payment discount if paid by 03-Jan-2007	$ 10.43
Total for site if paid by due date	**$ 93.86**

Remittance Advice

Please return this portion with your payment to: Energy Online Ltd. PO Box 11793, Ellerslie, Auckland
Please do not fold or staple the cheque to this slip. Please do not send cash.

Total Amount Due if paid by 03-Jan-2007 **$ 104.29**

Total Amount Due if paid after 03-Jan-2007 $ 93.86

Mr A B Cee
Customer No. 500500

EG1AC 551580 013515

$ ______________
(Please Write Amount Paid)

C005••••• C0002768698 C060243A C005••••• C243 B00000••••• B

Genesis Energy

PAGE 1

genesis ENERGY

Genesis Energy Limited
Private Bag 3131
Waikato Mail Centre
Hamilton 3240
0800 300 400
Freefax 0800 110 999
genesisenergy.co.nz
info@genesisenergy.co.nz

Our Contact Centre hours are
Monday to Friday 8am to 8pm

MR A B SAMPLE
SAMPLE ADDRESS1
SAMPLE ADDRESS2
SAMPLE ADDRESS3
SAMPLE ADDRESS4 0624

Your Consumer Number
300 000 0000

Customer Service
0800 300 400

Account Date
9 Apr 2012

Due Date
28 Apr 2012

GST Tax Invoice/Statement
Statement Number
300000000

GST Number
71-067-769

COPY OF ORIGINAL INVOICE

Your Dual Fuel Account - Actual Reading

Summary of Payments Since Your Last Account		
Closing Balance of Your Last Account	$	714.60
Payments Received - Thank You!	$	714.60 cr
Opening Balance	$	0.00

Current Account Summary (refer over for details)

Current Electricity Charges	$	134.30
Current Natural Gas Charges	$	33.33
Prompt Payment Discount	$	16.76 cr
Total Amount Due (If paid after due date 28 Apr 2012)		$ 167.63
Discounted Amount Due (If paid by due date 28 Apr 2012)		$ 150.87

Total Current GST Content $21.87 (refer over for details)
Total Current GST Content After Prompt Payment Discount $19.68
GST is calculated on each separate charge. Discounts only apply when total dual fuel account payment is received by the due date.

Brownie Points

Balance as at
9 April 2012
1640

To redeem Brownie Points visit genesisenergy.co.nz and log in to My Account to select your reward.

SMART SAVERS

Save all around the house.

See our current offers at genesisenergy.co.nz/smartsavers.

genesis ENERGY

Your Consumer Number
300 000 0000

MR A B SAMPLE
SAMPLE ADDRESS1
SAMPLE ADDRESS2
SAMPLE ADDRESS3
SAMPLE ADDRESS4 0624

Statement Number
300000000

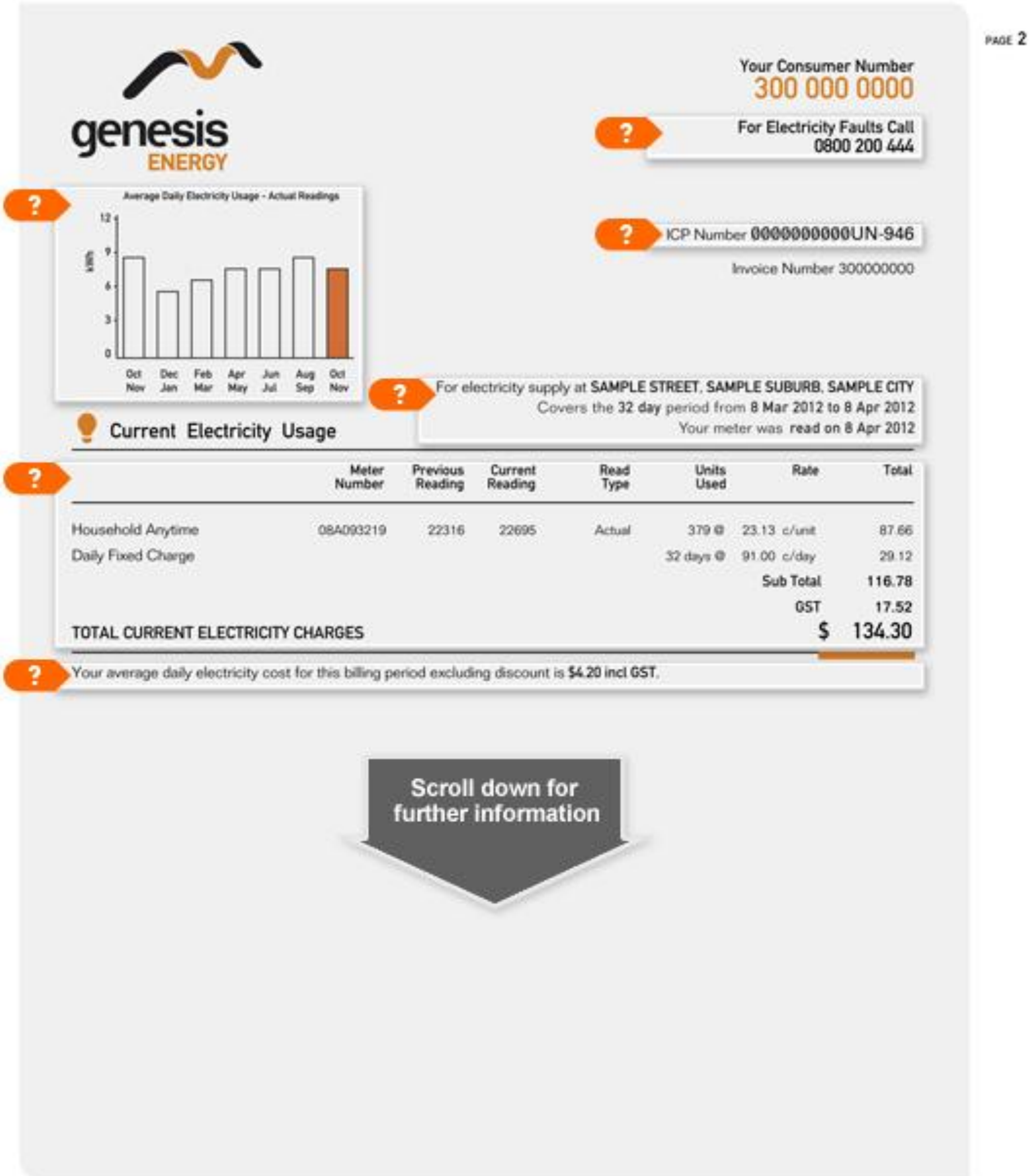
If it's easier, you can pay us via internet banking. Please use the following details:

Bank: Westpac, Lambton Quay
Bank Account Number: 03-0502-0244320-000
Account Name: Genesis Energy
Reference Code: 3000000000

This is a copy of the original remittance slip. Please detach when making payment.

Total Amount Due	$	167.63
Discounted Amount Due (If paid by due date 28 Apr 2012)	$	150.87
Amount Paid	$	

⑈3880⑆ ⑈003000000000⑆ ⑈0000000000⑆ ⑈000014585⑈



	Meter Number	Previous Reading	Current Reading	Read Type	Units Used	Rate	Total
Household Anytime	08A093219	22316	22695	Actual	379 @	23.13 c/unit	87.66
Daily Fixed Charge					32 days @	91.00 c/day	29.12
						Sub Total	116.78
						GST	17.52
TOTAL CURRENT ELECTRICITY CHARGES						$	134.30

Your average daily electricity cost for this billing period excluding discount is $4.20 incl GST.

Thank you for your payment.

Please make cheque payable to Genesis Energy. Please return this portion with your payment in the reply paid envelope or post to **Private Bag 39999, Wellington Mail Centre, Lower Hutt 5045.**

If you have any concerns about our service or wish to lodge a complaint, please call us on 0800 300 400 to access our free complaints process. Or you can email us at customercomplaints@genesisenergy.co.nz.

If we are unable to resolve your complaint, you can also call the free independent dispute resolution service provided by the Electricity and Gas Complaints Commission on 0800 22 33 40 or visit www.egcomplaints.co.nz.

PAGE 3

genesis ENERGY

Your Consumer Number
300 000 0000

For Gas Emergencies Call
0800 300 400

ICP Number 0000000000QT-C48

Invoice Number 300000000

For natural gas supply at SAMPLE STREET, SAMPLE SUBURB, SAMPLE CITY
Covers the 29 day period from 11 Mar 2012 to 8 Apr 2012
Your meter was read on 8 Apr 2012

Current Natural Gas Usage

Meter Number	Previous Reading	Current Reading	Read Type	Volume Used (M^3)	X Meter Factor	X Calorific Value (kWh/ M^3)	= Energy (kWh)
284061	0	7	Actual	7	1.0146	11.3439	81

	Energy	Rate	Total
Convenience Variable	81 kWh	7.1400 c/unit	5.78
Daily Fixed Charge	29 days	80.0000 c/day	23.20
		Sub Total	28.98
		GST	4.35
TOTAL CURRENT NATURAL GAS CHARGES		$	33.33

Your average daily natural gas cost for this billing period excluding discount is $0.96 incl GST.

Other Transactions

1 Apr 2012 Genesis Oncology Donation	2.00	
	Sub Total	2.00
	GST	0.00
	$	2.00

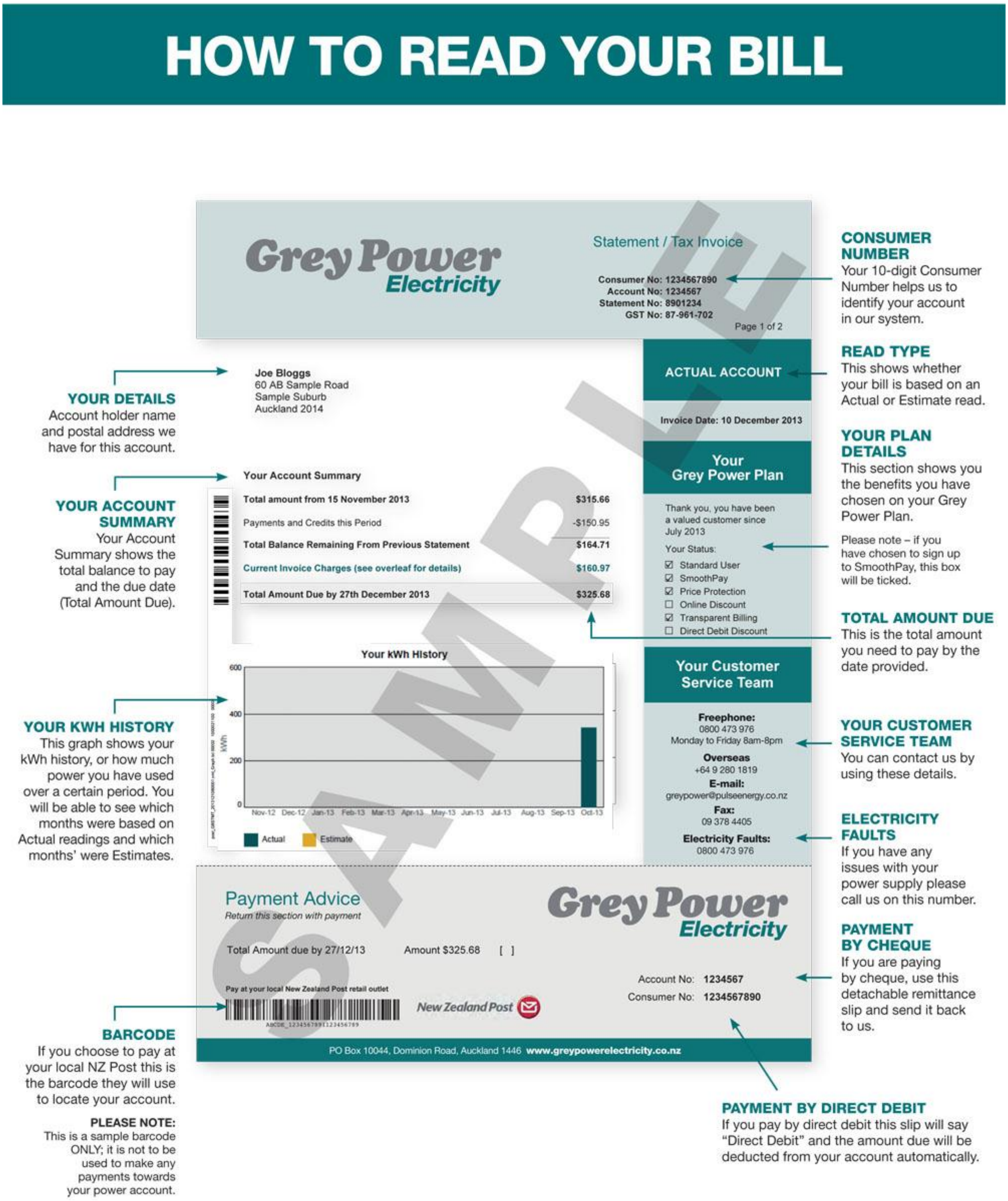
Payments Since Your Last Account

7 Mar 2012 DIRECT CREDIT	357.40 cr	
10 Mar 2012 DIRECT CREDIT	357.20 cr	
TOTAL PAYMENTS RECEIVED (INCL GST)	$	714.60 cr

Brownie Points

Opening Brownie Points Balance	1300 pts
4 Mar 2012 Thanks! You paid your bill on time. Statement #100837696	10 pts
4 Mar 2012 Your everyday usage earned points. Statement #100837696	30 pts
4 Mar 2012 You're combining electricity & natural gas on Dual Fuel.	80 pts
4 Mar 2012 You saved trees by getting your bill electronically.	50 pts
31 Mar 2012 You saved trees by getting your bill electronically.	50 pts
31 Mar 2012 You're combining electricity & natural gas on Dual Fuel.	80 pts
Brownie Points due to expire on 31 August 2012	310 pts
CLOSING BROWNIE POINTS BALANCE AS AT 31 MARCH 2012	1600 pts

Grey Power


HOW TO READ YOUR BILL
Grey Power Electricity
Statement / Tax Invoice
Consumer No: 1234567890
Account No: 1234567
Statement No: 8901234
GST No: 87-961-702
Page 1 of 2
SAMPLE
CONSUMER NUMBER
Your 10-digit Consumer Number helps us to identify your account in our system.
ACTUAL ACCOUNT
READ TYPE
This shows whether your bill is based on an Actual or Estimate read.
Joe Bloggs
60 AB Sample Road
Sample Suburb
Auckland 2014
YOUR DETAILS
Account holder name and postal address we have for this account.
Invoice Date: 10 December 2013
Your Grey Power Plan
YOUR PLAN DETAILS
This section shows you the benefits you have chosen on your Grey Power Plan.
Thank you, you have been a valued customer since July 2013
Your Status:
Standard User
SmoothPay
Price Protection
Online Discount
Transparent Billing
Direct Debit Discount
Please note – if you have chosen to sign up to SmoothPay, this box will be ticked.
Your Account Summary
Total amount from 15 November 2013 $315.66
Payments and Credits this Period -$150.95
Total Balance Remaining From Previous Statement $164.71
Current Invoice Charges (see overleaf for details) $160.97
Total Amount Due by 27th December 2013 $325.68
YOUR ACCOUNT SUMMARY
Your Account Summary shows the total balance to pay and the due date (Total Amount Due).
TOTAL AMOUNT DUE
This is the total amount you need to pay by the date provided.
Your kWh History
600
400
200
0
kWh
Nov-12 Dec-12 Jan-13 Feb-13 Mar-13 Apr-13 May-13 Jun-13 Jul-13 Aug-13 Sep-13 Oct-13
Actual
Estimate
YOUR KWH HISTORY
This graph shows your kWh history, or how much power you have used over a certain period. You will be able to see which months were based on Actual readings and which months' were Estimates.
Your Customer Service Team
Freephone:
0800 473 976
Monday to Friday 8am-8pm
Overseas
+64 9 280 1819
E-mail:
greypower@pulseenergy.co.nz
Fax:
09 378 4405
Electricity Faults:
0800 473 976
YOUR CUSTOMER SERVICE TEAM
You can contact us by using these details.
ELECTRICITY FAULTS
If you have any issues with your power supply please call us on this number.
Payment Advice
Return this section with payment
Total Amount due by 27/12/13
Amount $325.68 [ ]
Pay at your local New Zealand Post retail outlet
New Zealand Post
Account No: 1234567
Consumer No: 1234567890
PAYMENT BY CHEQUE
If you are paying by cheque, use this detachable remittance slip and send it back to us.
PO Box 10044, Dominion Road, Auckland 1446 www.greypowerelectricity.co.nz
BARCODE
If you choose to pay at your local NZ Post this is the barcode they will use to locate your account.
PLEASE NOTE:
This is a sample barcode ONLY; it is not to be used to make any payments towards your power account.
PAYMENT BY DIRECT DEBIT
If you pay by direct debit this slip will say "Direct Debit" and the amount due will be deducted from your account automatically.

Grey Power Electricity

Statement / Tax Invoice

Consumer No: 1234567890
Account No: 1234567
Statement No: 8901234
GST No: 87-961-702

Page 2 of 2

SAMPLE

Detailed invoice for: 60 AB Sample Road, Sample Suburb, AKL
For the period from 14/11/2013 to 10/12/2013
Grey Power Electricity - Standard User - Counties Power

Energy

Item	Quantity	Rate (cents)	Total
All Day Electricity Rate - Uncontrolled	203 kWh	8.060	$16.36
All Day Electricity Rate - Uncontrolled	146 kWh	8.060	$11.77
All Day Electricity Rate - Controlled	122 kWh	8.060	$9.83
All Day Electricity Rate - Night	226 kWh	8.060	$18.22
Total Energy			**$56.18**

Delivery

Your lines network is Counties Power Ltd

Item	Quantity	Rate (cents)	Total
Counties Daily Charge	27 Days	57.510	$15.53
Counties Variable Charge - Uncontrolled	349 kWh	8.870	$30.96
Counties Variable Charge - Controlled	122 kWh	4.440	$5.42
Counties Variable Charge - Night	226 kWh	2.220	$5.02
Billing and Administration Rate	27 Days	60.000	$16.20
Invoice Delivery Rate	697 kWh	0.200	$1.39
Metering Rate	27 Days	30.000	$8.10
Online Bill Discount	0 kWh	-0.100	$0.00
Direct Debit Discount	0 Days	-6.580	$0.00
Electricity Authority Levy	697 kWh	0.170	$1.18
Total Delivery			**$83.80**

Special Fees and Promotions (Tax Inclusive)

Total Special Fees	**$0.00**

GST at 15%	**$20.99**
Current Invoice Charges (including GST)	**$160.97**

Payments and Credits this period

Item	Date	Total
Payment –THANK YOU	27/11/2013	-$150.95
Total		**-$150.95**

Metering Details

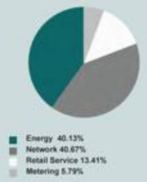
ICP Number:
1234567890AB12

Meter Number: 0812816/1
Previous Reading: 55600
Previous Read Type: Actual read
Current Read: 55803
Current Read Type: Estimate read
kWh this period: 203

Meter Number: 0020746/1
Previous Reading: 32870
Previous Read Type: Actual read
Current Read: 33016
Current Read Type: Estimate read
kWh this period: 146

Meter Number: 0020748/1
Previous Reading: 23599
Previous Read Type: Actual read
Current Read: 23721
Current Read Type: Estimate read
kWh this period: 122

Meter Number: 0812817/1
Previous Reading: 30102
Previous Read Type: Actual read
Current Read: 30328
Current Read Type: Estimate read
kWh this period: 226



How to Pay Your Account

1. **Direct Debit** is the most convenient and secure way to pay your bill each month. You will also receive a discount every month by choosing direct debit as your payment option.
2. **Westpac Branch.** Westpac bank account number is 03-0252-0842407-000. Please use your consumer number as a reference with any payments you make. Pulse Energy is set up as a pre-loaded payee within all major bank internet and telebanking systems.
3. **Credit Card.** To pay by credit card, call our customer service team on **0800 473 976**.
4. **Cheque.** Attach your cheque to the payment slip and post to Pulse Energy, PO Box 10044, Auckland 1446.

How to register an official complaint about our service

In the unlikely event that you are not happy with how we have handled your enquiry, you may contact the free independent dispute resolution service provided by the Electricity and Gas Complaints Commission on **0800 22 33 40** or visit **www.egcomplaints.co.nz**.

Grey Power Electricity is the trading name of Pulse Energy Ltd.

SUPPLY ADDRESS
The address we supply and the billing period for this invoice.

METERING DETAILS
A detailed description of your meter(s).
ICP Number.
An ICP number is assigned by your Lines Network to help identify each metering point on your property.

This graph shows you a breakdown of the charges which make up your bill

PAYMENT OPTIONS
We offer a variety of payment options to suit your needs. For more information visit our website at www.greypowerelectricity.co.nz

COMPLAINTS
If you have a complaint we have not been able to address, you can use these contact details.

YOUR BILL
An outline of your electricity usage (rates are exclusive of GST) from a certain billing period. This is divided up into three sections so you know what you are paying for:

- **Energy**
  What Grey Power Electricity charges you for your electricity.
- **Delivery**
  This is all charges related to the delivery of your electricity and includes:
  Network Charges, Metering, Billing and Administration, and the Electricity Authority Levy.
- **Special Fees & Promotions**
  Any promotional credits or fees on your account will appear in this section.

Grey Power Electricity

PO Box 10044, Dominion Road, Auckland 1446
Freephone 0800 473 976 **Fax** +64 9 378 4405
www.greypowerelectricity.co.nz

Just Energy


HOW TO READ YOUR BILL
Statement / Tax Invoice
just energy
YOUR DETAILS
The account holders' name, and the postal address
The postal address is not necessarily the same as the property being billed
OUR DETAILS
Our contact details, in case you need to get in touch with us.
Page 1 of 2
For account enquiries phone 0508 JUST ENERGY (0508 587 836)
Since your last statement
Balance
Current transactions
GST at 15%
Discount for prompt payment of 10%
Consumer Number
Statement Number
Statement Date
YOUR CONSUMER NUMBER
Each of your properties will have a unique consumer number.
YOUR STATEMENT NUMBER
The unique identifier for this statement.
STATEMENT DATE
The date the invoice was printed.
YOUR BALANCE
The balance on your account at the time the invoice was generated, and may include items such as previous charges or credits.
BALANCE TO PAY
The amount to pay, if payment is received after the due date.
BALANCE TO PAY
The amount to pay, if payment is received by the due date.
ELECTRICITY FAULTS
ELECTRICITY FAULTS
Should you suspect that you have a fault, or if you have no power, please call this number first.
Payment advice
YOUR PAYMENT ADVICE SLIP
Use this if you are making payment by cheque
PROMPT PAYMENT OPTION
NON-DISCOUNT PAYMENT OPTION
OTHER PAYMENT AMOUNT
just energy
PO Box 10044, Dominion Road, Auckland 1446
Freephone 0508 587 836 Fax +64 9 378 4405

YOUR ACCOUNT NUMBER
This number is your identifer and will generally be same on all the properties you have with us

SUPPLY ADDRESS
The physical address of the property this invoice covers.

INVOICE PERIOD
The period this invoice covers (last reading to latest reading).

YOUR ICP IDENTIFIER
This is your universal connection identifier assigned to your property by the Electricity Authority.

YOUR METER NUMBER(S)
This number identifies the meter(s) which you are being invoiced for.

Current Transactions

Statement Number 1234567
Account Number 2191234

just energy

Page 2 of 2

ELECTRICITY

Supply to 1 - 28 Key Street, Red Town, Tauranga
Invoice 110383153 from 21/06/2011 to 20/07/2011 for Consumer 1072699710
ICP Number: 0000009999PU121, Contract Plan Residential Low User

Meter Number	Previous Reading	Previous Read Type	Current Reading	Current Read Type
RZ12131415/3	12803	Actual read	13303	Actual read

Our Charges	Qty	Rate	Amount
Vector Variable - Inclusive	500	9.7100 cents / kWh	$48.55
Vector Daily Fixed Charge	30	18.5200 cents / day	$5.56
Everyday Saver Variable - Inclusive	500	11.8800 cents / kWh	$59.40
Everyday Saver Daily Fixed Charge	30	14.8100 cents / day	$4.44
Electricity Authority Levy	500	0.1800 cents / kWh	$0.90
Sub-total			$118.85

Total Net Current Charges	**$118.85**

CURRENT USAGE
This is the current reading and read type for this invoice

PREVIOUS USAGE
This is the previous reading and read type (from your last invoice)

THIS MONTH'S CHARGES
This is the total current charges, before GST

Payment options:
Our Westpac bank account number is 03-0252-0842407-300. Please use your 10 digit consumer number as a reference number with any payments you make. Just Energy is setup as a pre-loaded payee within all major bank internet and telebank systems. For over the counter payments in towns that do not have a Westpac, use our Kiwibank account 38-9013-0012605-008. Please fill in a deposit slip.

If you prefer the convenience of paying by direct debit, please contact us for a form, or download one from our website www.justenergy.co.nz

Feedback and complaints:
We welcome your feedback. If you have any concerns about our service or wish to lodge a complaint, please contact us on 0800 587 800 or send us an e-mail to customer.service@justenergy.co.nz

In the unlikely event that we are unable to resolve your complaint, you may contact the free independent dispute resolution service provided by the Electricity and Gas Complaints Commission on 0800 22 33 40 or visit www.egcomplaints.co.nz

YOUR PAYMENT OPTIONS
This tells you how to pay your bill.

CHARGES
The charges on your account, which will normally include:

a) Daily Fixed Charges – You will see one set of daily fixed charges. The daily fixed charge is normally split into two parts, so you can see exactly where your money is going. The first part is how much the local lines company[1] charge you per day (shown on the example as "Vector Daily Fixed Charge"). The second is how much we (your retailer[2]) charge you per day (shown on the example as "Everyday Saver Daily Fixed Charge).

b) Your Variable Charges – You will have one set of variable charges per meter being billed. Like the daily fixed charge, each of the variable charges on your account is split in two. The first part is how much the local lines company[1] charges you per unit (kWh) (shown on the example as "Vector Variable - Inclusive"). The second part is how much we (your retailer[2]) charge you per unit (shown on the example as "Everyday Saver Variable – Inclusive".

c) Electricity Authority Levy – The Electricity Authority charges the electricity industry a levy to pay for its operations. We pass this cost on to customers and show it on your bill as a separate line item called "Electricity Authority Levy". This amount of the charge varies depending on how many kWh of electricity you use.

1 The Local Lines Company owns and maintains the physical wires in your region.
2 Your retailer is responsible for billing you, being your point of contact, and purchases your electricity from generators on the electricity market for you.
3 The Electricity Authority is the government body, who regulates the electricity industry.

Mercury Energy

000001 / 3121969 00001 01 / 000000

Statement/Tax Invoice
GST Number 71 048 870

Your account manager
Account Manger B Phone: (09) 580-3500
Email: AccountManagerB@mercury.co.nz

Mercury Energy

Mighty River Power Limited trading as Mercury Energy

Sample Company
PO Box 12345
Auckland 1234

Contract invoice

For account enquiries phone **0800 20 18 20** (8am - 6pm Mon to Fri)

Your account number
123-456-789

Recent transactions

02 Sep 10	Opening balance	$6,049.08
27 Sep 10	Direct debit payment 27 Sep 10 - Thank you	$6,049.08cr
Balance		**$0.00**

Current account summary

Net current charges	$6,986.23
GST	$1,047.94
Total current charges (please see **Current account details**)	$8,034.17
Amount due	**$8,034.17**

Please refer to the following explanation sheet/s for details
Reference no(s): 1234567 1234568

Be forewarned about potential spikes in the market price of electricity. Set up email or text alerts so you know when market prices have been forecasted to go higher than a threshold you are comfortable with. Simply **call 0800 20 18 20 to get email or text price alerts** set up for your business.

Invoice date
03 October 2010

Billing period
01 September 2010 to
30 September 2010

Power supplied to
1 Sample Rd
Auckland 1234

ICP identifier
1234567890LC0F8

GXP
PEN1101

FAULTS - **For all faults phone VECTOR Limited on 0508 VECTOR (0508 832 867)**

VECTOR Limited GST No. 10 008 239

Direct debit transaction - no action required Account number 123-456-789

The schedule below sets out the payment(s) that will be direct debited from your bank account on the due date(s) specified, UNLESS YOU INSTRUCT US OTHERWISE BY THE CANCELLATION DATE(S) also specified below.

DIRECT DEBIT ARRANGEMENT(S)

Due date	Type of payment	Payment amount	Cancellation date
27 Oct 10	Current charges	$8,034.17	25 Oct 10

Mercury Energy

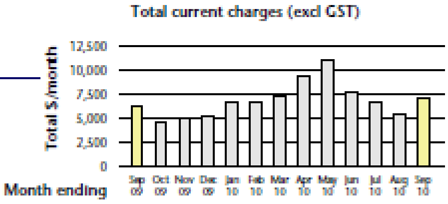
Private Bag 92008
Auckland

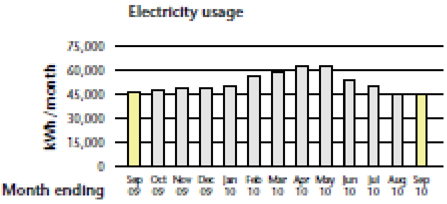
Current account details (since last reading) - For the period 01 Sep 10 to 30 Sep 10

Charge type	*Mercury Energy*	*Vector Limited*
Energy Charge	$2,102.98	
EA Levy	$43.51	
Metering Fee	$71.10	
Management Fee	$290.40	
Energy Charge	$1,618.65	
EA Levy	$34.01	
Management Fee	$226.99	
Line Charge		$2,887.32
Line Charge Discount		$288.73cr
Subtotals	$4,387.64	$2,598.59
GST	$658.15	$389.79
Totals	$5,045.79	$2,988.38

Total current charges (Mercury Energy plus Vector Limited) $8,034.17

Usage information





Continued on the following sheet/s

000002 / 3121569 00001 02 / 000000

Explanation Sheet

Sample Company
From 01.09.10 00:00 to 30.09.10 24:00

Installation ID 1234567890
Ref Invoice No. 1234567

Account number
123-456-789

Invoice date
03 October 2010

Billing period
01 September 2010 to
30 September 2010

Power supplied to
1 Sample Rd
Auckland 1234

ICP identifier
1234567890LC0F8

GXP
PEN1101

Energy Charges

Final Market Price

	Metered kWh	Average Spot Price (c/kWh)	Spot Charge
Sep Weekdays 0000-0800	4,584	6.453	$295.77
Sep Weekdays 0800-2400	14,332	7.998	$1,146.21
Sep Weekends 0000-0800	1,811	6.259	$113.36
Sep Weekends 0800-2400	4,237	11.293	$478.48
	24,964	8.147	$2,033.83

Sub-Total $2,033.83

Loss Charges
Final Market Price

	Metered kWh	Average Spot Price (c/kWh)	Spot Charge
Sep Weekdays 0000-0800	156	6.453	$10.06
Sep Weekdays 0800-2400	487	7.998	$38.97
Sep Weekends 0000-0800	62	6.259	$3.85
Sep Weekends 0800-2400	144	11.293	$16.27
	849	8.147	$69.15

Sub-Total $69.15

Total Energy Charges $2,102.98

Line Charges Current

Capacity

Days	Quantity	Price ($/DAY)	Charge
30	750	0.0291	$654.75

Sub-Total $654.75

Variable

	Metered kWh	Average Rate ($/kWh)	Charge
Winter Day	32,682.19	0.03360	$1,098.12
Winter Night	11,795.50	0.00200	$23.59
	44,477.69	0.02522	$1,121.71

Sub-Total $1,121.71

Demand

	Days	Metered kVA	Average Rate ($/kVA)	Charge
Weekdays (0800-2000)	30	157.434510	0.23520	$1,110.86

Sub-Total $1,110.86

Total Current Line Charges $2,887.32

Meter Fees

Data logger

Days	Quantity	Price ($/DAY)	Charge
30	1	2.3700	$71.10

Sub-Total $71.10

Total Meter Fees $71.10

Continued overleaf

Page 3

Management Fees

Market and Management fee

	Metered kWh	Average Rate (c/kWh)	Charge
Anytime	25,813	1.12500	$290.40

Sub-Total	$290.40
Total Management Fees	$290.40

Electricity Authority Levy

Electricity Authority Levy

	Metered kWh	Average Rate (c/kWh)	Charge
Anytime	25,813	0.16856	$43.51

Sub-Total	$43.51
Total EA Levy Charge	$43.51

Account number
123-456-789

Invoice date
03 October 2010

Billing period
01 September 2010 to
30 September 2010

Power supplied to
1 Sample Rd
Auckland 1234

ICP identifier
1234567890LC0F8

GXP
PEN1101

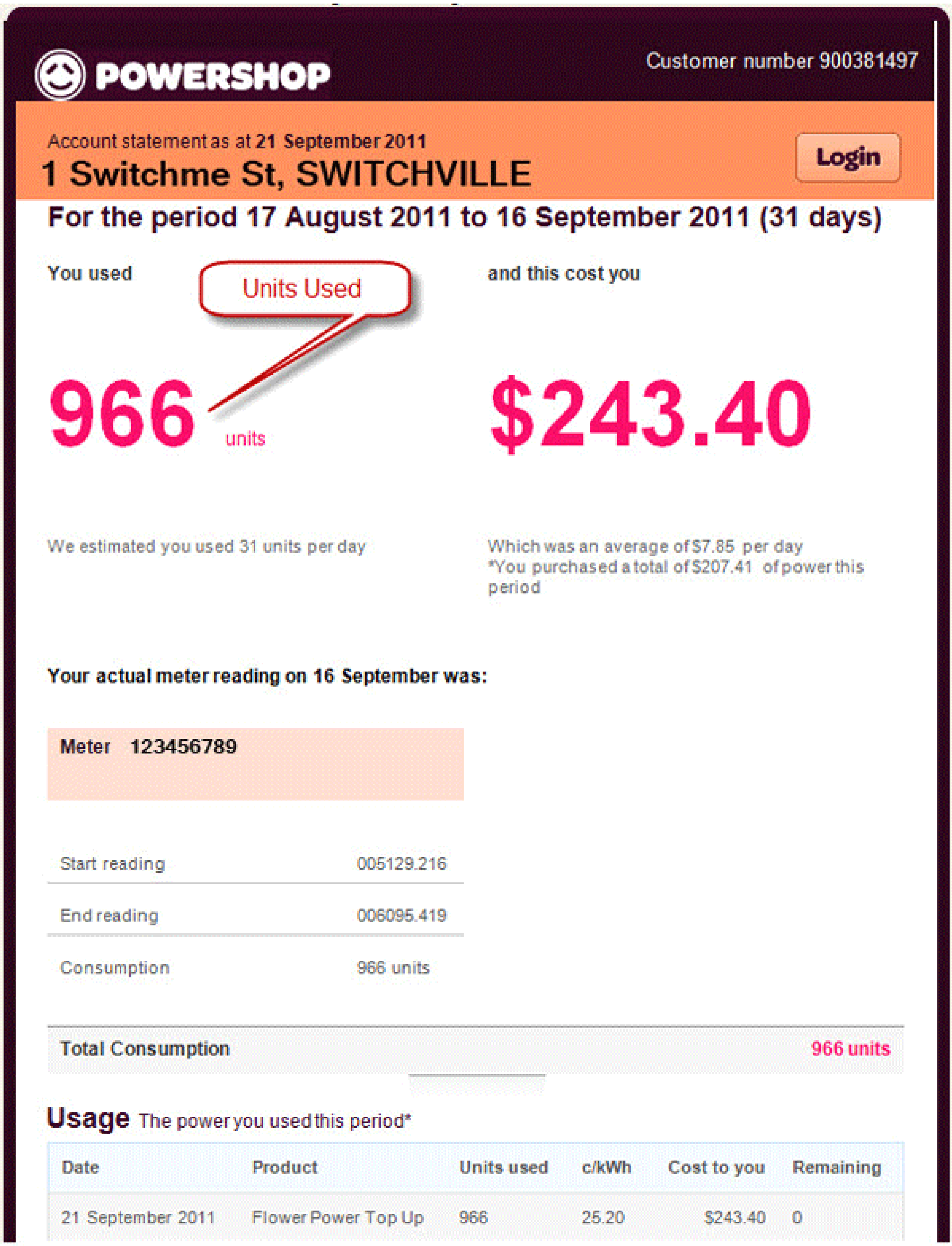
Summary Information

Load Factor	62.23%	The difference between the maximum energy usage per period for a month and the average energy usage per period for a month. The higher the number the more efficient your company is.
Power Factor	0.88	How much of the delivered Apparent Power (kVA) is converted to Real Power for useful work. It measures how efficiently your company uses energy.
Total kWh this month	24,964	Metered kWh used this month.
Total kWh for last month	23,411	Metered kWh used last month.
Total kWh same period last year	24,677	Metered kWh used this month last year.
c/kWh (exc. line charges)	9.44	The gross energy charges per kWh expressed as cents per unit.
kVA Maximum Demand (anytime)	61	Delivered power at maximum demand.
kW Maximum Demand (anytime)	54	Useful power at maximum demand.

Continued on the following sheet/s

Page 4

Powershop



POWERSHOP

Customer number 900381497

Account statement as at 21 September 2011

1 Switchme St, SWITCHVILLE

Login

For the period 17 August 2011 to 16 September 2011 (31 days)

You used

Units Used

966 units

We estimated you used 31 units per day

and this cost you

$243.40

Which was an average of $7.85 per day

*You purchased a total of $207.41 of power this period

Your actual meter reading on 16 September was:

Meter 123456789

Start reading	005129.216
End reading	006095.419
Consumption	966 units

Total Consumption	966 units

Usage The power you used this period*

Date	Product	Units used	c/kWh	Cost to you	Remaining
21 September 2011	Flower Power Top Up	966	25.20	$243.40	0

Tax Invoice (#)

POWERSHOP.CO.NZ
Your online energy store

07 April 2011

GST # 97-988-340

Powershop New Zealand Limited
PO Box 392
Masterton 5840

Account number: **123456789**

A SAMPLE LIMITED

1 SWITCHME WAY

SWITCHVILLE

ICP Number

Electricity Usage

ICP: **0000123456UN-125**

Supplier	Product	Units	c/Unit	Cost
Power Kiwi	Flower Power Top Up	4500	22.64	$1018.96

Plan Type

Current charges	**$1018.96**
Includes GST	$132.91

Powershop Account Statement

Previous balance on account	$0.00
Current charges	$1018.96
Balance on account	$1018.96 OD

Powershop has a free complaints process. Our complaints process is set out on our website. Follow the link 'Complaints' at the bottom of our website. You can contact us to complain through any of the following: call one of our friendly crew at freephone IN CONTROL (0800 462 668) between 9am and 9pm, Monday to Friday, Skype us at powershopnz, Email us at complaints@powershop.co.nz or write to us at Powershop, PO Box 392, Masterton. C/- Contact Centre Manager.

Powershop is also a member of the Electricity and Gas Complaints Commissioner Scheme. So if for some reason we can't resolve your complaint or problem within 20 working days you can take your complaint to the Electricity and Gas Complaints Commissioner Scheme, which is a free independent complaints resolution scheme. Write to them at Electricity and Gas Complaints Commission, Freepost 192682, PO Box 5875, Lambton Quay, Wellington 6145. Email them at www.egcomplaints.co.nz or info@egcomplaints.co.nz. Phone them at 64 4 914 4630 or Free Phone: 0800 22 33 40. Fax them at +64 4 472 5854 or Free Fax: 0800 22 33 47.

Pulse Energy

HOW TO READ YOUR BILL

CONSUMER NUMBER
Your 10-digit Consumer Number helps us to identify your account in our system.

READ TYPE
This shows whether your bill is based on an Actual or Estimate read.

YOUR PLAN DETAILS
This section shows you the benefits you have chosen on your Pulse Energy Plan.

Please note – if you have chosen to sign up to SmoothPay, this box will be ticked.

TOTAL AMOUNT DUE
This is the total amount you need to pay by the date provided.

YOUR CUSTOMER SERVICE TEAM
You can contact us by using these details.

ELECTRICITY FAULTS
If you have any issues with your power supply please call us on this number.

PAYMENT BY CHEQUE
If you are paying by cheque, use this detachable remittance slip and send it back to us.

YOUR DETAILS
Account holder name and postal address we have for this account.

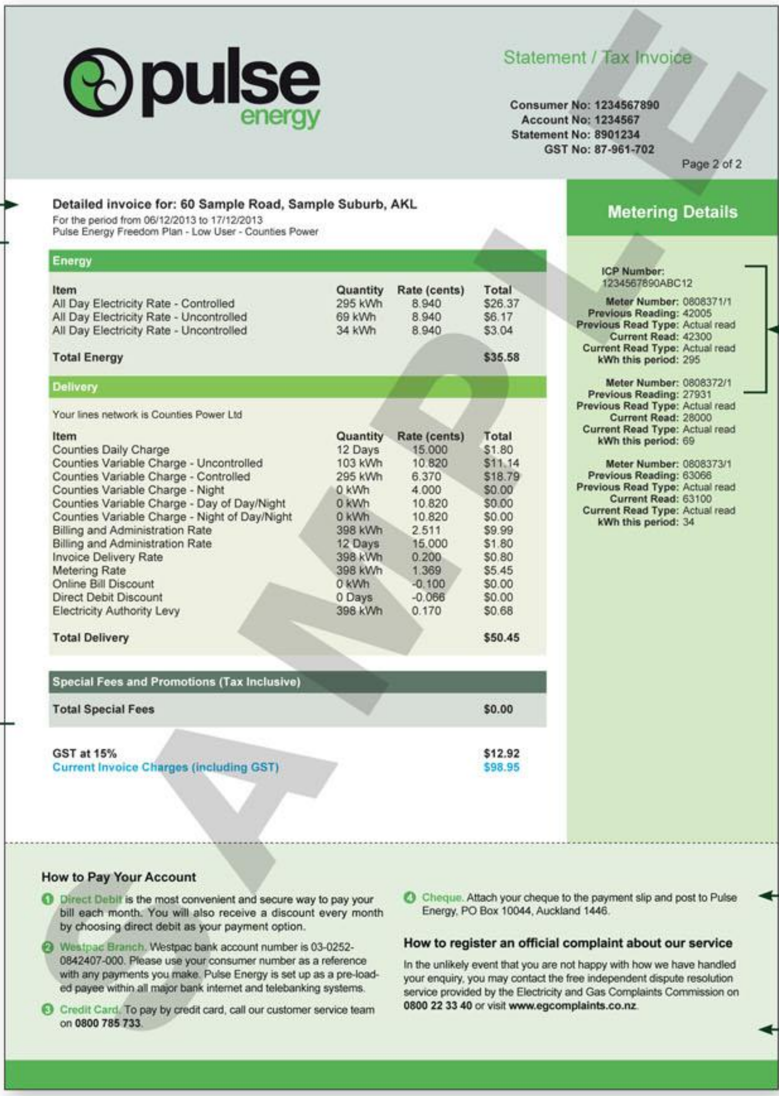
YOUR ACCOUNT SUMMARY
Your Account Summary shows the total balance to pay and the due date (Total Amount Due).

YOUR KWH HISTORY
This graph shows your kWh history, or how much power you have used over a certain period. You will be able to see which months were based on Actual readings and which months' were Estimates.

BARCODE
If you choose to pay at your local NZ Post this is the barcode they will use to locate your account.

PLEASE NOTE:
This is a sample barcode ONLY; it is not to be used to make any payments towards your power account.

PAYMENT BY DIRECT DEBIT
If you pay by direct debit this slip will say "Direct Debit" and the amount due will be deducted from your bank account automatically.



Statement / Tax Invoice

Consumer No: 1234567890
Account No: 1234567
Statement No: 8901234
GST No: 87-961-702

Page 2 of 2

Detailed invoice for: 60 Sample Road, Sample Suburb, AKL
For the period from 06/12/2013 to 17/12/2013
Pulse Energy Freedom Plan - Low User - Counties Power

Energy

Item	Quantity	Rate (cents)	Total
All Day Electricity Rate - Controlled	295 kWh	8.940	$26.37
All Day Electricity Rate - Uncontrolled	69 kWh	8.940	$6.17
All Day Electricity Rate - Uncontrolled	34 kWh	8.940	$3.04
Total Energy			**$35.58**

Delivery

Your lines network is Counties Power Ltd

Item	Quantity	Rate (cents)	Total
Counties Daily Charge	12 Days	15.000	$1.80
Counties Variable Charge - Uncontrolled	103 kWh	10.820	$11.14
Counties Variable Charge - Controlled	295 kWh	6.370	$18.79
Counties Variable Charge - Night	0 kWh	4.000	$0.00
Counties Variable Charge - Day of Day/Night	0 kWh	10.820	$0.00
Counties Variable Charge - Night of Day/Night	0 kWh	10.820	$0.00
Billing and Administration Rate	398 kWh	2.511	$9.99
Billing and Administration Rate	12 Days	15.000	$1.80
Invoice Delivery Rate	398 kWh	0.200	$0.80
Metering Rate	398 kWh	1.369	$5.45
Online Bill Discount	0 kWh	-0.100	$0.00
Direct Debit Discount	0 Days	-0.066	$0.00
Electricity Authority Levy	398 kWh	0.170	$0.68
Total Delivery			**$50.45**

Special Fees and Promotions (Tax Inclusive)

Total Special Fees	**$0.00**
GST at 15%	**$12.92**
Current Invoice Charges (including GST)	**$98.95**

Metering Details

ICP Number: 1234567890ABC12

Meter Number: 0808371/1
Previous Reading: 42005
Previous Read Type: Actual read
Current Read: 42300
Current Read Type: Actual read
kWh this period: 295

Meter Number: 0808372/1
Previous Reading: 27931
Previous Read Type: Actual read
Current Read: 28000
Current Read Type: Actual read
kWh this period: 69

Meter Number: 0808373/1
Previous Reading: 63066
Previous Read Type: Actual read
Current Read: 63100
Current Read Type: Actual read
kWh this period: 34

How to Pay Your Account

1. Direct Debit is the most convenient and secure way to pay your bill each month. You will also receive a discount every month by choosing direct debit as your payment option.
2. Westpac Branch. Westpac bank account number is 03-0252-0842407-000. Please use your consumer number as a reference with any payments you make. Pulse Energy is set up as a pre-loaded payee within all major bank internet and telebanking systems.
3. Credit Card. To pay by credit card, call our customer service team on **0800 785 733**.
4. Cheque. Attach your cheque to the payment slip and post to Pulse Energy, PO Box 10044, Auckland 1446.

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A detailed description of your meter(s).
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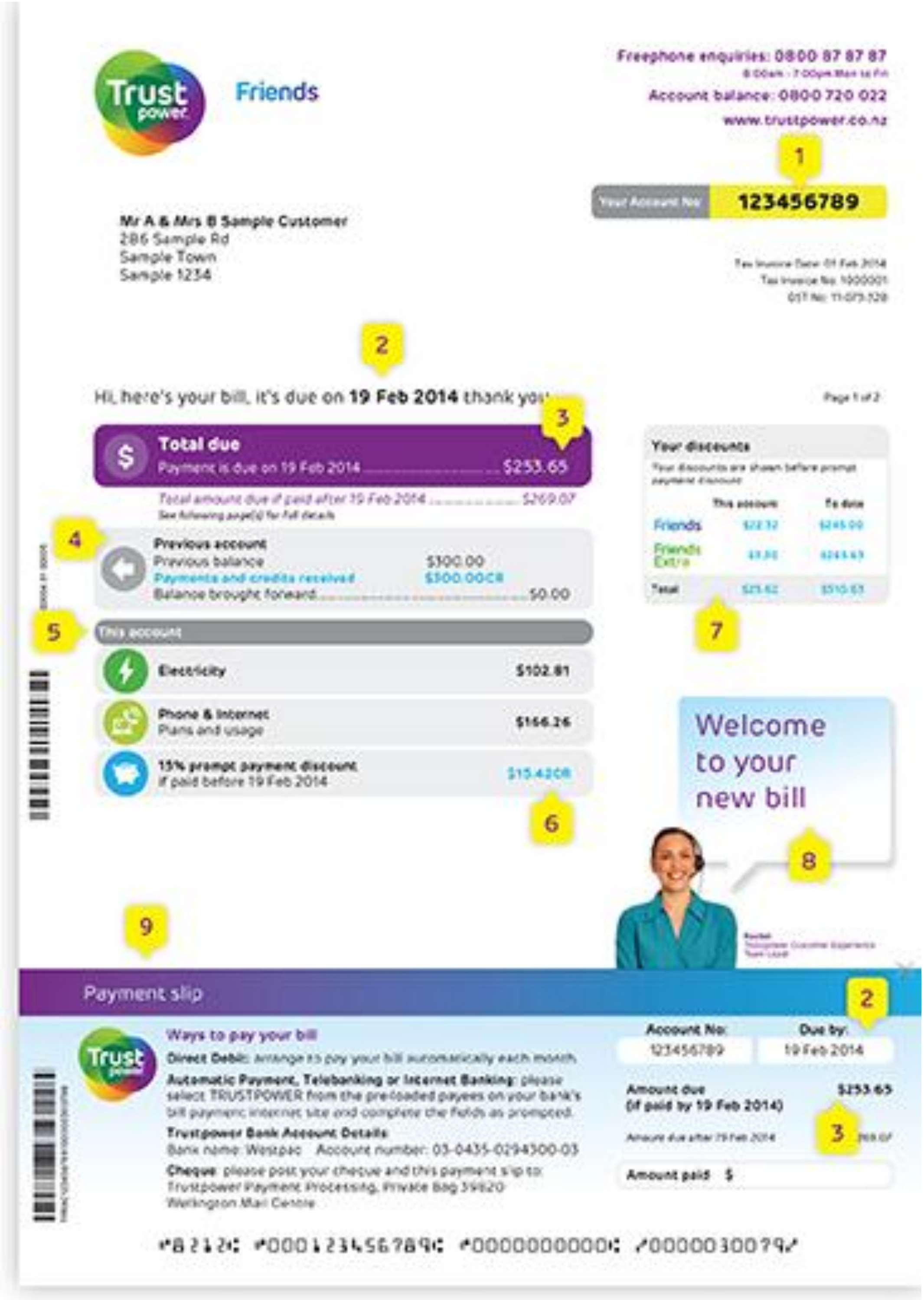
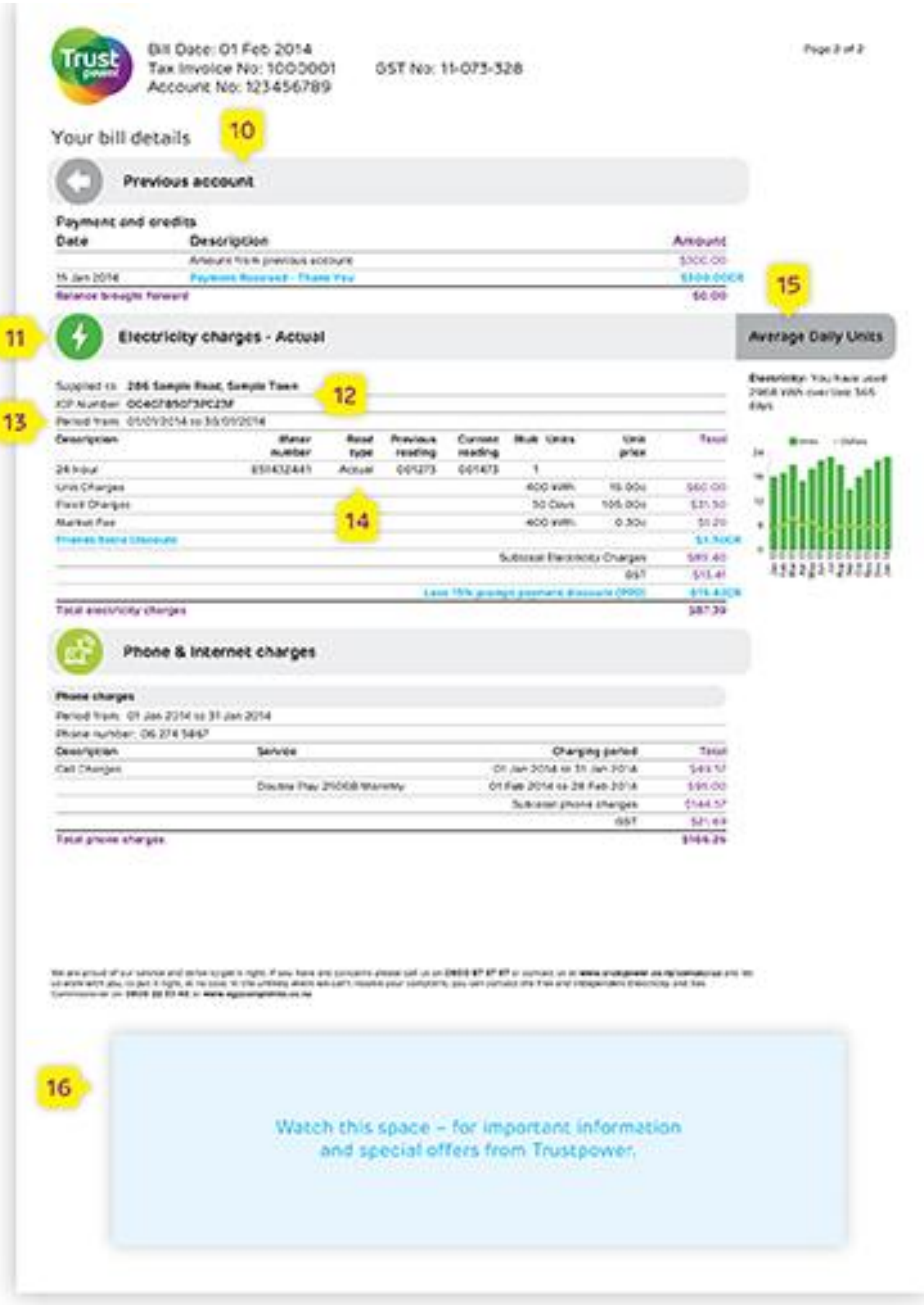
- **Special Fees & Promotions**
  Any applicable promotional credits or fees on your account will appear in this section.

PO Box 10044, Dominion Road, Auckland 1446
Freephone 0800 785 733 **Fax** +64 9 378 4405
www.pulseenergy.co.nz

Trustpower


Friends
Freephone enquiries: 0800 87 87 87
Account balance: 0800 720 022
www.trustpower.co.nz
1
123456789
Mr A & Mrs B Sample Customer
286 Sample Rd
Sample Town
Sample 1234
2
Hi, here's your bill, it's due on 19 Feb 2014 thank you
3
Total due
Payment is due on 19 Feb 2014 $253.65
Total amount due if paid after 19 Feb 2014 $269.07
4
Previous account
Previous balance $300.00
Payments and credits received $300.00CR
Balance brought forward $0.00
5
This account
Electricity $102.81
Phone & Internet
Plans and usage $166.26
15% prompt payment discount
if paid before 19 Feb 2014 $15.42CR
6
Your discounts
Friends
Total
7
Welcome to your new bill
8
9
Payment slip
2
Ways to pay your bill
Direct Debit: arrange to pay your bill automatically each month.
Automatic Payment, Telebanking or Internet Banking: please select TRUSTPOWER from the pre-loaded payees on your bank's bill payment internet site and complete the fields as prompted.
Trustpower Bank Account Details
Bank name: Westpac Account number: 03-0435-0294300-03
Cheque: please post your cheque and this payment slip to: Trustpower Payment Processing, Private Bag 39920 Wellington Mail Centre
Account No: 123456789
Due by: 19 Feb 2014
Amount due (if paid by 19 Feb 2014) $253.65
3
Amount paid $


Bill Date: 01 Feb 2014
Account No: 123456789
GST No: 11-073-328
Your bill details
10
Previous account
Payment and credits
Date
Description
Amount
11
Electricity charges - Actual
15
Average Daily Units
12
13
14
Phone & Internet charges
Phone charges
16
Watch this space – for important information
and special offers from Trustpower.

Appendix G Estimate of costs

Table 12: Assessment of establishment costs of proposal

Who	Cost	Estimate	Assumptions and calculation
Authority	Design of proposal	$30,000	Analysis costs of developing proposal. 0.15 FTE = $18,000 Legal costs of Code drafting. 40 hours at $300/hour = $12,000
Distributor	Altering internal processes and augmenting systems	$0	Assumes that distributors are not required to take any action in addition to their Commerce Commission information disclosures.
Retailers	Altering internal processes and augmenting systems	$325,000	13 ‘parent’ retailers $25,000 per retailer to augment/establish systems to send distributor price notifications to consumers in the required format.

Table 13: Assessment of ongoing costs of proposal

Who	Cost	Estimate (present value over 20 years at 8%)	Assumptions and calculation
Authority	Monitoring and compliance	$117,818	Monitoring of distributor/retailer alignment with requirements and resulting compliance activity. 0.1 FTE = $12,000

Who	Cost	Estimate (present value over 20 years at 8%)	Assumptions and calculation
Distributors/retailers	Managing customer contact	$0	Distributors will need to respond to some customer queries about the price change notifications. The majority of calls are expected in the 3 months following the mail-out, but there would be calls throughout the year. However, these are expected to be offset by reduction in calls to retailers. Because the workforces for call centres are highly scaleable, the Authority has assessed this cost as a net zero.
Distributors/retailers	Distributors consult retailers on price change media statements	$1,565,995	29 distributors consult with 11 retailers each on average (conservative estimate) Consultation takes 4 hours of staff time for each party =$480 per party per consultation (based on $120,000 pa staff cost) One price change per year Cost per year = $159,500
Retailers/distributors	Retailers consult distributors on price change media statements	$2,749,081	14 retailers consult with 20 distributors on average (conservative estimate) Consultation takes 4 hours of staff time for each party =$480 per party per consultation (based on $120,000 pa staff cost) Two price changes per year (conservative estimate, likely to be less than this on average) Cost per year = $280,000

Who	Cost	Estimate (present value over 20 years at 8%)	Assumptions and calculation
Retailers	Inserting distributor price change explanation in retailer price change notice.	$1,565,698	Retailers are to attach a copy of the distributor price adjustment notification in their first customer invoice which incorporates the distributor price adjustment. $0.15/customer by mail and $0.00/customer electronically. First year = $0.22 million. 1.47 million (mailed) and 630,000 (electronic) based on a 70/30 split. Subsequent years: A 5% reduction in mailed notifications each year.
Consumers	Transaction costs of reviewing notice	$3,548,917	Consumers will incur additional transaction costs of receiving and reviewing the notification over and above existing notifications. Suggest 25% of customers already review newspaper notifications at 7 minutes each due to complexity and generality. Suggest 75% of customers will review new notifications at 3 minutes each. 0.5 million customers save 4 minutes per year as reviewing time drops from 7 minutes to 3 minutes. 1.005 million customer spend an additional 3 minutes per year. In total a net increase of 1.005 million minutes per year. The value of their time based on median hourly earnings of $21.58.[40] is : $361,000 a year:

[40] http://www.stats.govt.nz/browse_for_stats/income-and-work/Income/NZIncomeSurvey_HOTPJun13qtr.aspx