Summary of submissions

Retail data project: access to consumption data

19 December 2014

Introduction

1 As part of its 'retail data' project the Electricity Authority (Authority) is looking at ways to improve consumers' access to their electricity consumption data, their tariff options, and data about their connection to the electricity network.[1] The Authority considers that giving consumers access to their electricity consumption data in a way they can easily use will provide long-term benefits to them by promoting retail competition.

2 The Authority published a consultation paper on 15 July 2014 seeking feedback from interested parties on a proposed amendment to the Electricity Industry Participation Code 2010 (Code). The consultation period ran from 15 July until 26 August. The proposed amendment required retailers to give up to 24 months of consumption data to consumers if the consumer, or the consumer's agent, requested it. The consultation paper contained a draft of the proposed Code amendment and an example of a possible standard format for providing electricity consumption data.

3 The consultation paper is available on the Authority's website: http://www.ea.govt.nz/development/work-programme/retail/retail-data/consultations/#c12844.

4 This paper provides a summary of the submissions on the consultation paper, received by the Authority. The paper does not contain an exhaustive list of points made in submissions, but rather the key themes that are observed in the submissions.

5 All public submissions are available on the Authority's website: http://www.ea.govt.nz/development/work-programme/retail/retail-data/consultations/#c12844.[2]

[1] Data about a consumer's connection to the electricity network includes, for example, the type and configuration of their electricity meter(s).

[2] Two submissions contain some confidential material, which has not been published.

Submissions received

6 The Authority has received 27 submissions on the consultation paper, from the parties listed in Table 1.[3]

Table 1 List of parties making submissions

Generator/Retailers	Consumers	Distributors	Energy services providers
Contact Energy	Major Electricity Users' Group (MEUG)	Orion	Arc Innovations
Electric Kiwi	Ian McChesney	Powerco	Cortexo
emhTrade	Glen McGeachen	The Lines Company (TLC)	Energy Link
Energy Direct NZ (EDNZ)	Molly Meluish	Unison	Energy Management Association of New Zealand (EMANZ)
Flick Energy	Electricity & Gas Complaints Commission (EGCC)	Vector	Energy and Technical Services Ltd (ETSL)
Genesis Energy			Rabid Technologies
Meridian Energy/ Powershop[4]			
Mighty River Power			
Nova Energy			
Pioneer Generation			
Trustpower			

[3] Meridian Energy and Powershop have made a joint submission.

[4] Meridian Energy and Powershop made a joint submission.

Summary of key areas covered in submissions

7 This section provides a summary of key points in submissions, for the following areas:

(a) the Authority's assessment of the problems arising from limited access to consumption data

(b) the proposed requirement on retailers to provide consumption data, and whether they should be required to store it themselves

(c) whether procedures should be developed requiring the supply of data using standardised formats

(d) ensuring the privacy of consumers' data

(e) the desirability of a central meter data store

(f) the Authority's assessment of the benefits and costs of the Code amendment proposal.

Submissions are reasonably evenly divided on the Authority's assessment of the problems arising from limited access to consumption data

8 The Authority's view, that limited access to consumption data by consumers and their agents is limiting retail competition and reducing the electricity industry's operation efficiency, has generated a good response rate from submitters. Only three of the 27 submissions do not comment on this matter. Seven submissions clearly agree with the Authority, while five submissions clearly do not.

9 Comments in the submissions agreeing with the Authority include:

(a) there could be wide-ranging innovation and pricing benefits in the retail market if authorised retailers or agents could retrieve and analyse consumption data on a consumer's behalf

(b) limited access to consumption data limits the potential for improvements in competition, as well as the ability of consumers to manage peak demand and understand the performance/efficiency of plant and appliances

(c) increased access to consumption data has led to improved efficiencies in the distribution network sector.

10 Comments in the submissions disagreeing with the Authority include:

(a) many customers already have access to downloadable granular consumption data, from retailers seeking to use it as a competitive advantage

(b) only a small number of customers are likely to utilise consumption data

(c) access to consumption data is unnecessary for consumers to make decisions about choice of retailer or about energy consumption.

The majority of submissions support retailers being required to provide consumption data, but not necessarily having to store it themselves

11 The proposed requirement for retailers to provide consumption data also generates a good response rate from submitters, with only four of the 27 submissions not commenting on

this matter. Eight submissions clearly agree with the Authority, while two submissions clearly do not agree, but on specific points. EDNZ does not believe retailers should be responsible for collecting and storing interval consumption data. TLC considers that MEPs should be responsible for providing consumption data, rather than retailers.

12 However, when it comes to the question of whether retailers should be required to hold consumption data, only a small number of submissions (three) clearly agree with retailers having to do this. In contrast six submissions clearly agree that retailers should be able to contract with another party to hold consumption data. Several submissions note that requiring retailers to hold consumption data would impose unnecessary costs on retailers, particularly new entrant retailers.[5]

There is substantial support for procedures requiring the supply of data using standardised formats and structures, but differing views about charging for data

13 Twenty two submissions comment either directly or indirectly on the need to develop procedures requiring the supply of data using standardised formats and structures. Of these, 17 submissions clearly agree with standardised data structures. There is a lot of support for leveraging the existing electricity information exchange protocols (EIEPs).

14 However, there are differences of view about charging for consumption data. Some submissions believe consumers should pay a reasonable charge for their consumption data if they do not obtain it using free online mechanisms. There is concern about the cost of providing half-hourly metered consumption data to consumers.

15 Other submissions are concerned that arguments of difficulty and cost may be used to create barriers to providing interval data, or that retailers will start charging for data that is currently provided free.

16 Of the submissions that comment on the five business day requirement for providing consumption data, most agree the timeframe is reasonable. Some submissions argue data transfer should be a lot quicker, while others believe more time may sometimes be needed.

The privacy of consumers' data is seen by many submissions as extremely important

17 Seventeen submissions comment either directly or indirectly on privacy, confidentiality and security of consumers' data. There is widespread agreement about the importance of maintaining the privacy of consumers' data, although one concern is that unwarranted privacy concerns should not be used as an excuse to withhold data. Some concerns are raised about ensuring the privacy of consumers' data is maintained when consumers use agents. A concern is also raised about ensuring the proposed Code amendment's provisions do not conflict with the Privacy Act's provisions. One submission suggests the Authority encourage development of a Privacy Code of Practice for electricity retailers, working with them and the Privacy Commissioner, as well as a technical working group, to consider a minimum standard for retailer disclosure of private consumption data.

The proposal is preferred to a central data repository, at least for now

18 Nineteen submissions comment either directly or indirectly on whether the Authority's proposal is preferable to other options. Eight submissions clearly agree that the Authority's proposal is preferable, while four clearly disagree. Some submissions propose

[5] New entrant retailers' submissions do not make this point.

simplifications to the Authority's proposal, such as providing monthly register level data rather than providing half-hourly metered data, or providing a maximum of 12 months of accumulation data. Another proposal is for consumers to access their consumption data via Powerswitch. It is believed this proposal would require a relatively cheap and uncomplicated modification to Powerswitch, and would achieve, at a minimum, the expected benefits of the Authority's proposal. Another option proposed is for consumers to be able to transfer their data between retailers when they switch.

19 Twenty one submissions comment on whether the proposal is preferable to a central meter data store. Ten of these clearly agree the proposal is preferable, while four do not. Several submissions believe that more consideration is required of the benefits and costs of a central data store before a decision can be made on whether to proceed with it. However, it should not be ruled out at this point in time.

More submissions disagree with the assessment of benefits and costs than agree with it

20 Twenty one submissions comment either directly or indirectly on the assessment of the benefits and costs of the proposal. While five submissions clearly agree with the assessment, eight submissions clearly disagree.

21 Comments in the submissions agreeing with the Authority include:

(a) the dynamic efficiency benefits are real, and that difficulty quantifying them should not hamper the project

(b) the potential benefits from efficiency gains in energy services technology and innovation have been underestimated

(c) more informed consumers would be able to react to peaks in their consumption and deploy energy efficiency measures, which could well reduce the quantity of additional investment in distributors' network infrastructure to meet peak loads

(d) the consultation paper has neglected potential network efficiencies from the proposal.

22 Comments in the submissions disagreeing with the Authority include:

(a) the costs of making the proposed change have been significantly underestimated

(b) the consultation paper overlooks the issue that retailers would not be incurring the same costs as each other

(c) the 5-10 percent uplift in switching is unrealistic

(d) the analysis addresses only the benefits of increased switching without considering the system benefits of consumer response to cost-reflective tariffs, enabled by a vigorous energy management industry

(e) any Code change proposal could pass a net benefits test under the Authority's approach, meaning the approach is not useful since it cannot discriminate between good and bad ideas

(f) it is 'quite a leap of faith' to assume consumers will be more actively engaged to seek a better price and/or switch, merely by amending the Code to require retailers to provide data upon request.

Summary of submissions

23 The main body of this report summarises the submissions received on the consultation paper, for each question. Submitters' comments are in alphabetical order.[6] Appendix A contains the questions from the consultation paper.

Question 1: Comments on the description of the current situation, the link between consumer engagement and retail competition, current levels of consumer engagement, and current limits on access to consumption data

24 Twenty five submissions comment either directly or indirectly on this question. Two submissions make no comment on this question – Ian McChesney, MEUG.

25 Seven submissions clearly agree with the Authority's identification of a link between consumer engagement and retail competition, and that improving access to timely consumption data will improve both – Cortexo, Electric Kiwi, EMANZ, ETSL, Flick Energy, Powerco, Unison.

26 One submission clearly disagrees with the Authority's identification of a link between consumer engagement and retail competition, and that improving access to timely consumption data will improve both – Nova.

27 Arc believes that all MEPs providing smart metering services in New Zealand make interval data available to all retailers, under rigorous service level agreements, as part of their default service offering. Arc notes that most retailers it provides interval data to have requested the daily provision of this data in order to make it available to their customers the morning after it is recorded. Customers of these retailers can view at least 12 months of their consumption history at no cost, via online access and/or daily email reports. Arc points out that these retailers are investing heavily in tools to enable their customers to access this data. These tools are a source of service differentiation and are being used in retailers' customer acquisition activities. Arc suggests this type of retailer will gain market share if access to this information is valued by consumers. Arc also notes that some retailers are providing tools that enable customers to extract their half-hourly read data so it can be analysed by third parties.

28 Contact considers that objective customer research should be undertaken to test whether changing consumers' ability to easily access consumption data in a useful form will increase customer engagement.

29 Cortexo believes that access to consumption data will help consumers greatly in managing their electricity costs better. There is significant information in the public domain clearly indicating that consumers are concerned about electricity costs but feel unable to act because of no information or feel it is too difficult to act because of perceived complexity and time requirements. Cortexo notes that a recent Consumer NZ survey of its members found that "*the whole energy supplier picture is too confusing*". Cortexo agrees the 'walled garden' reference in the consultation paper is a reality, which is stifling both competition and innovation.

30 EDNZ notes the consultation paper's description of the current situation is not correct for all retailers. EDNZ manually reads all of its customers' meters. It has no contracts in

[6] According to the abbreviated name of the submitter, where relevant.

place to receive interval data from MEPs and has therefore not gathered significantly more data about consumption as a result of the smart meter rollout. EDNZ also notes that retailers can choose non-half-hourly read settlement for a smart-metered site, and thereby have no smart meter data storage requirement.

31 The EGCC does not comment specifically on any of the 16 questions in the consultation paper. It notes that it has not seen evidence that access to consumption data is an issue of concern for most consumers. Since 1 January 2013 the EGCC has only received two complaints specifically relating to the quality and availability of consumption data provided by a retailer. Over the same period the EGCC has received 2,543 complaints about billing and 193 complaints about consumer switching.

32 Electric Kiwi agrees there is a strong link between consumer engagement and retail competition, and that improving access to timely consumption data will improve both.

33 EMANZ broadly supports the Authority's conclusions in describing the current situation. EMANZ believes the benefits are wider than improved decision making about switching. EMANZ agrees retailers could use the provision of information to increase barriers to switching, by providing customised information solutions that require bespoke investment by the customer. However, this should not necessarily be seen as a negative, but instead "a sign that competition is well in play". Instead, the real question is whether retailers would be able to establish barriers to competition from other market players (e.g. energy services companies and software system providers), when providing customised information solutions. EMANZ believes a key issue is the lack of guidelines, standards or consistency relating to the provision of consumption data, including that it is provided in a standard and useful manner. EMANZ believes the standards set in this area should reference the standards of access to banking information, where business and residential customers' information is available online at any time, is open source, and is able to be easily synchronised with software applications.

34 emhTrade submits that the 'walled gardens' identified in the consultation paper fail to help consumers compare tariffs, and they limit innovation and competition in 'value add' services facilitated by smart meter data.

35 Energy Link is unclear whether mass market consumers who do not switch are limited by access to data, or by complexity of tariffs, or by having higher priorities in life. Energy Link's perspective is that retailers are good at providing data on request, with any delays generally caused by upgrades to billing and related systems. Energy Link is more concerned about the complexity of line charges and retailers' handling of these (e.g. different retailers having different line charges for the same installation control point (ICP)). Given that consumer switching is already at a high level, Energy Link believes the main long-term benefits from improving access to data are:

(a) reducing the time and cost of accessing consumption data

(b) creating a standard protocol for transferring data

(c) ensuring that consumers have good data on which to base consumption and investment decisions (e.g. buying a heat pump, installing solar water heating, installing solar photovoltaic (PV)).

36 ETSL broadly supports the Authority's conclusions in describing the current situation. ETSL states it is currently extremely difficult to obtain interval meter data. The ability to access interval data also varies between retailers (e.g. some provide data in 30 minute

intervals; others send it in four-hourly blocks; some require the data to be downloaded from a website (which is time-consuming); others simply cannot provide it). ETSL notes that available interval data is almost always at least a month old, allowing no opportunity for the consumer to react to demand spikes. ETSL believes the market badly needs a set of rules for the transfer of consumption data, including a requirement that all parties co-operate.

37 Flick Energy agrees with the Authority's general conclusions in describing the current situation.

38 Genesis does not comment specifically on Question 1, however it considers that a significant proportion of consumers already have access to granular private consumption data from their retailers.

39 Glen McGeachen believes that establishing a feedback mechanism of detailed consumption data is an important first step in providing a foundation for consumer-oriented demand control mechanisms. Analysis of energy demand can be used to change future behaviour.

40 Meridian and Powershop fully support retailers competing and innovating to satisfy customers. They emphasise that customer preferences vary dramatically and 'one size fits all' solutions are unlikely to lead to widespread consumer engagement. Consumer engagement is not just about switching and price. It ranges from checking whether to switch every three months, checking usage daily, actively managing usage, or purchasing smart appliances, to being happy with supply, level of service and costs, and choosing not to assess switching opportunities or manage usage. Meridian and Powershop submit that the needs or wants of consumers are not well understood from a regulatory perspective, with little attention paid to the sources of data showing what consumers want. Meridian and Powershop point to the 2014 UMR report as a rich source of such information and note it corresponds with their own customer research.[7] They note the strong theme throughout the UMR report is of less detail and more simplicity and ease, or what the Authority now refers to as 'actionable information'. Meridian and Powershop agree there are some issues with access to consumption data. They believe there is benefit in providing simple, easy-to-understand standardised electronic consumption data to consumers who want it, and to help these customers understand how this can be used to aid decision-making.

41 Molly Melhuish believes consumers are still waiting for innovative offers from retailers, although the launch of Flick could be a significant change to the standard model. Her view is that complexity in electricity supply options is being caused by the multiplicity of retailers. Ms Melhuish considers 'big data' is not the solution, but rather careful monitoring and analysis of data to help consumers understand retail price drivers. This should occur before a new initiative to further promote retail churn is designed.

42 MRP does not comment specifically on Question 1, but notes that Genesis, Meridian, MRP and Powershop have portals for consumption data, with Contact expected to offer one soon. The first four retailers currently serve 53 percent of residential customers, with this number rising to 75 percent if Contact is included. MRP states there is extremely limited customer demand for downloading online consumption data. It notes approximately 2,000

[7] The 2014 UMR report is available on the Authority's website, titled UMR-report-Feb14, available at: http://www.ea.govt.nz/development/advisory-technical-groups/rag/meeting-papers/2014/12-february/

of its residential customers have exported their consumption data using Mercury Energy's suite of free online tools since mid-March 2013. In contrast over 90,000 of Mercury Energy's residential customers have either logged into the web portal or interacted with one of the portal's outbound emails between mid-March 2013 and June 2014. MRP expects that customer uptake of an Authority-mandated data export function is likely to be miniscule and will not justify the expense and operational complexity incurred creating the database.

43 Nova comments that consumer engagement in virtually all markets is limited to a small minority with the expertise and incentive to pursue optimal solutions. In many markets the solutions found by those 'leaders' provides a guide to less well-informed consumers (e.g. reviews in publications and on websites). This is less useful in electricity where consumers' locations and demand patterns are quite varied, meaning consumer engagement is more complex. Nova considers that most switching activity is driven by retailer approaches to consumers rather than the reverse, which suggests consumers are not actively seeking engagement with electricity suppliers. Nova believes there is no proof that lack of access to consumption data is a factor limiting consumer engagement in electricity buying decisions.

44 Orion states it is probably true retail competition might be enhanced by more engaged consumers. However care needs to be taken in assuming any lack of engagement relates to the availability of information. Different levels of consumer engagement exist in markets. Orion makes the following observations about current limits on access to consumption data:

(a) not all retailers hold interval data, even if it is collected by the MEP

(b) whether parties acquire and store interval data (and the duration) depends on contracts and business models

(c) not all smart metering provides 'billing quality' interval data

(d) the range of approaches for accessing consumption data provided by retailers suggests the market is working.

45 Pioneer is concerned the Authority is focussed primarily on price and the level of switching as indicators of the level of retail competition. A competitive market is also demonstrated by providers offering new innovative products and services and creating customer loyalty. Pioneer has received very few requests for consumption data and its trial of more information on consumers' bills resulted in feedback that this is confusing and not helpful. Pioneer believes there are no limits on access to consumption data – a number of large retailers are providing easy-to-use platforms for monitoring smart meter data. Anyone can request the data under the Privacy Act.

46 Powerco considers there is clearly a link between consumer engagement and retail competition, which centres on consumers' perception of the level of competition and the market's complexity. Consumers are more likely to participate in the switching process if they believe it is easy and meaningful savings will result. This will, in turn, result in increased competition among retailers. Powerco believes consumer engagement has increased over the past three years, at least in part due to the Authority's various marketing campaigns. It notes there will always be a natural ceiling on the feasible level of consumer engagement, with some consumer segments consciously choosing not to engage.

47 Rabid Technologies believes the economic opportunity in the proposed framework is empowering consumers to engage with other prospective suppliers on equal information terms. There is an asymmetry of information between the consumer, the current retailer, and the prospective retailer. The current retailer can profile/segment their customers according to a number of valuable factors, including consumption history, consumption profile, the profitability of a customer relative to their tariff, and the relative impact of pricing innovations. A prospective new supplier does not currently have this information, while the consumer is also limited by their ability to interpret their data. Rabid Technologies believes consumers will always be challenged to engage with complex data, which lowers the likelihood of them taking actions like switching and negotiating. However, sophisticated potential retailers bidding for attractive customers potentially benefit consumers who do not price check. Those consumers that do negotiate with retailers may discipline/incentivise retailers to reward good clients more.

48 TLC considers increased customer engagement benefits the efficiency of electricity networks. Customer engagement is increased by energy literacy (e.g. many TLC customers monitor energy and power use via in-home displays). TLC provides consumption data to customers on request, and these requests are increasing, which suggests a greater desire to be engaged.

49 Trustpower does not support the proposal because it does not believe the changes will necessarily result in greater customer engagement. As evidence of this Trustpower notes that 81 percent of consumers are at least aware of the potential benefits in shopping around but only 32 percent do so, despite the ease of using a tool such as Powerswitch. Despite 69 percent of consumers being approached by a retailer in the last two years, only approximately 20 percent per year switch. This suggests consumers consider more than price when determining which offer presents the most value. Trustpower believes many factors contribute to a consumer's engagement in a market, and understanding what consumers want is a key component in retailing. Trustpower agrees that for consumers to engage in the buying process they need:

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

(b) an ability to assess these offers in an easy and well-reasoned way

(c) to act on the information and analysis by purchasing the good or service that offers them best overall value, accounting for non-price factors.

50 Unison agrees there is a link between consumer information and retail competition, however standardising the format for information may only slightly improve consumers' engagement. Many consumers do not perceive any real choice or benefit of competition because the experience of receiving and consuming electricity does not change (i.e. same network connection, same network performance, and in many cases the same company dealing with faults). Unison considers the current limits on access to data to be unacceptable, and supports this data being made available in standard formats and via standard protocols. Unison believes that genuine engagement requires dismantling of 'confusion marketing', by separating energy and lines (distribution) charges and standardising nomenclature of retailers' charges. Separation of lines and energy charges could be done via retailer websites rather than via consumer bills.

51 Vector agrees consumers will be better informed through improved access to information, provided the information is in a useful form and consumers can easily understand it. It therefore supports amending the Code to ensure consumers can access their

consumption data and retailers are not able to withhold it. Vector is not convinced the proposal will necessarily lead to more engaged and price sensitive consumers, or necessarily encourage consumers to negotiate better prices and switch retailers. Vector is not convinced the Authority has established a clear link between the availability of consumption data and increased levels of retail competition and switching. Vector considers that retailer innovation is more likely to result from increased uptake of smart meters than from a regulatory change.

Question 2: Comments on the Authority's assessment of the problems arising from limited access to consumption data

52 Twenty four submissions comment either directly or indirectly on this question. Three submissions make no comment on this question – EGCC, Ian McChesney, Glen McGeachen.

53 Seven submissions clearly agree with the Authority's assessment of the problems arising from limited access to consumption data – Cortexo, EMANZ, emhTrade, ETSL, MEUG, TLC, Unison.

54 Five submissions clearly disagree with the Authority's assessment of the problems arising from limited access to consumption data – Contact, EDNZ, Genesis, Pioneer, Powerco. Vector states it does not fully agree.

55 Arc notes that in a market economy it is not in a seller's best interest to facilitate the ready like-for-like comparison of products/services to those of their competitors. Arc believes the ability to make relevant and accurate comparisons between retailer tariff offerings currently involves a degree of guesswork. Arc considers that customer access to half-hourly read meter data in a standard format would improve the ease with which a third party service provider could provide accurate and relevant advice on retailer/tariff offers in the market.

56 Contact does not believe there is a convincing case for there being a material problem, or that the proposal's benefits would outweigh the costs. Contact's key concern is that there is no supporting evidence showing the proposal is what consumers want, or that they would find it useful.

57 Cortexo agrees with the Authority's assessment of the problems. It emphasises the problem would not be solved by retailers making some information available via a printed bill or online service. Information provided by retailers generally does not enable customers to understand whether they are getting the best deal for their personal energy use profile or to identify a competitor who might offer better value and test this offer. Neither does it enable consumers to significantly alter their behaviour and make energy savings in ways that reduce their profitability to the retailer.

58 EDNZ does not agree with the Authority's conclusion that limited access to consumption data is limiting retail competition. EDNZ believes that progressive retailers are already using their data to be market leaders without the Code requiring retailer access to consumption data. In an open and competitive market consumers should be able to choose between a retailer with less features and one that offers online web services, possibly at a higher price. EDNZ considers that access to consumption data is unnecessary for consumers to make decisions about appliance purchases and the use of timers and delay functions.

59 Electric Kiwi submits that data is currently available to consumers through some channels but is not widely used. There could be wide-ranging innovation and pricing benefits in the retail market if authorised retailers or agents could retrieve and analyse consumption data on a consumer's behalf. Electric Kiwi considers that consumer engagement is likely to be low if consumers perceive the process is too complicated.

60 EMANZ broadly agrees with the Authority's assessment of the problems arising from limited access to consumption data.

61 emhTrade agrees with the Authority's assessment of the problems arising from limited access to consumption data.

62 Energy Link notes that improving access to data would not eliminate uncertainty and risk around switching. Examples of other factors creating uncertainty include changing consumption patterns, changes in other retailers' price plans post-switch, costs associated with switching errors (e.g. the consumer is put on the wrong price plan), a reduction in retailer service levels post-switch, and changes in line charges post-switch. Energy Link believes the Authority needs to give attention to the way in which line charges are reflected in retail pricing plans and the data associated with calculating them.

63 ETSL agrees with the Authority's assessment of the problems arising from limited access to consumption data. It believes this limits the potential for improvements in competition, as well as the ability of consumers to manage peak demand and understand the performance/efficiency of plant and appliances.

64 Flick Energy has noted inconsistencies with customers being able to successfully request their historical interval consumption data from previous retailers. Some customers have been provided historical data but in varying formats, while others have been advised it cannot be provided. Flick Energy agrees that access to historical consumption data would increase the ease, accuracy and efficiency with which energy advisors/brokers or customer advocates could compare retail offers. If consumers could easily utilise consumption data, investment decisions could be made more efficiently and it would be easier to compare new, innovative product/price offers.

65 Genesis does not comment specifically on Question 2. However, it does not agree the current level of consumer access to consumption data is limiting retail competition, for four reasons:

(a) there is no problem with the competitiveness of the retail market

(b) many customers already have access to downloadable granular consumption data, from retailers seeking to use it as a competitive advantage

(c) only a small number of customers are likely to utilise consumption data

(d) there are technical limits to prescriptive requirements for consumption data, with half-hourly read data only available to consumers with a smart meter and some retailers not holding half-hourly read data.

66 Meridian and Powershop consider the issues in this section of the consultation paper are overstated and lacked perspective. They note the UMR report shows only a small portion of consumers are interested in information. Consequently, improvements in retail competition and efficiency under the proposal would be limited to what can be achieved through the small proportion of consumers that have an interest in additional data.

67 MEUG does not comment specifically on Question 2. However, it agrees that restricted access to historic consumption data, amongst other things, stymies competition and innovation.

68 Molly Melhuish believes the problem arising from limited access to consumption data is asymmetric information between retailers and their customers, which allows serious distortion of competitive markets. She queries why retailers are not offering innovative tariff plans despite analysing their customers' usage.

69 MRP does not comment specifically on Question 2, but states that retailers' portals for consumption data are a significant means of competitive differentiation between retailers. The rapid migration to smart metering by virtually all of the retail electricity industry likely

indicates that most retailers see this capability as "table-stakes." MRP does not agree that price-comparison websites such as Powerswitch are limited in their ability to inform customers of the potential benefits of switching without comprehensive consumption datasets. MRP's reasons for this view are:

(a) New Zealand's electricity consumer switching rate is amongst the highest in the world, and is driven partially by price comparison websites

(b) price comparison websites use detailed estimation techniques to provide accurate estimates of customers' potential individual savings from switching

(c) price comparison websites are already accurate for comparison and cost ranking purposes.

70 Nova expects positive changes to emerge from increased availability of consumption data, but believes it is less clear whether this will be enhanced by increased regulation. Competition and improvements in retailers' systems are already seeing new products and services being developed based on smart metering data.

71 Orion believes there is a risk of less access to data overall, from reduced incentives on retailers to innovate and procure the data in the first place. The proposal undermines the ability of innovators to maintain their intellectual property. It believes "no frills" retailers will incur additional cost to collect and provide access to data they do not need or use. It is not obvious to Orion why a consumer who is not engaged with limited data would become more engaged with more data. Orion is concerned differences between interval data and billed data will not build confidence in the market. Orion considers it very unclear what sorts of analyses are contemplated with more granular data. It also believes that understanding customers' attributes (e.g. how they heat their homes and their family structures) provides very good indicators of their load profiles without the need to analyse consumption data. Lastly, Orion notes there is an economic cost with providing data to consumers at no charge.

72 Pioneer considers there are no limits on access to consumption data, consistent with its response to Question 1. In addition, Pioneer believes consumption data alone is of limited use to consumers trying to compare retailers, and therefore of little value as a way of promoting retail competition and switching.

73 Powerco finds it difficult to accept that limited access to consumption data is, of itself, limiting retail competition to any significant degree. A consumer or retailer does not need interval consumption data to make meaningful comparisons between multiple retailers. Estimated savings on the Powerswitch website potentially would be no more accurate if based on interval consumption data.

74 Rabid Technologies agrees about the potential for consumption data to assist consumption and investment decisions. There is an emerging opportunity in technology for home automation. Although the technology pathways remain uncertain, reducing energy consumption is a real prospect. Rabid Technologies believes if consumption data were to be readily available it would enable relatively low-cost, easy comparisons of various household strategies.

75 TLC agrees that limited access to consumption data limits competition in the retail sector. In addition, TLC has seen increased access to consumption data lead to improved efficiencies in the distribution network sector. TLC considers energy literacy to be a must. Increased knowledge allows wiser investment decisions and greater buyer understanding.

Knowledge drives innovation, provides greater buyer power and, depending on pricing signals, encourages the adoption of alternative supply. A number of TLC's customers benefit from reduced energy and power demands resulting from third party energy experts providing independent advice on demand patterns.

76 Trustpower agrees consumers may benefit through more informed decision making, and that new entrant retailers and brokers are likely to have less access to information than existing retailers. However, it is not sure of the materiality of the benefit that would be gained by a change to the status quo.

77 Unison agrees with the Authority's assessment of the problems arising from limited access to consumption data. It believes the bigger limitation is consumers' difficulty understanding retailers' tariff offers, let alone comparing them, even with access to data.

78 Vector supports the proposal but does not fully agree with the Authority's description of the problem or the benefits it expects will accrue as a result. This is because consumers can already access their consumption data via their energy bill or, in the case of smart meter consumption, via their in-home display or an online application.

Question 3: Comments on criteria used in developing the proposal are a suitable basis for the proposed Code amendment

79 Sixteen submissions comment either directly or indirectly on this question. Eleven submissions make no comment on this question – EGCC, EMANZ, emhTrade, Genesis, Ian McChesney, Glen McGeachen, MEUG, MRP, Pioneer, Powerco, Rabid Technologies.

80 Seven submissions clearly agree with the Authority's criteria used in developing the proposal for the proposed Code amendment – EDNZ, ETSL, Flick Energy, Molly Melhuish, Nova, Unison, Vector.

81 One submission clearly disagrees with the Authority's criteria used in developing the proposal for the proposed Code amendment – Meridian and Powershop.

82 Arc queries the references in the consultation paper to a maximum cost per data request and a requirement for the first four data requests per year to be free.

83 Contact notes the 'reasonable cost' recovery principle in the main body of the consultation paper has not been carried into the proposed Code amendment.

84 Cortexo believes that a barrier would be imposed if data custodians imposed costs on customers.

85 EDNZ considers the criteria used are reasonable but notes that ultimate responsibility under the proposal differs significantly depending on which party is deemed to be the 'data custodian'.

86 Electric Kiwi considers there needs to be a focus on the timeliness of data provision. Consumers will lose interest if the process takes days or weeks to generate results. Electric Kiwi believes the highest levels of consumer engagement would result from having near real time data access. A central consumption data repository is seen as probably the best way of achieving this.

87 Energy Link is concerned there may be a number of 'grey areas' as to who is entitled to consumption data (e.g. an unregistered society or club owning an asset and wanting consumption data; a landlord wanting to get data about one of their tenancies; an organisation wanting to set up a group purchase scheme). Energy Link queries whether the definition of consumer in Part 1 of the Code is adequate and whether the Authority needs to develop guidelines or protocols.

88 ETSL believes the criteria seem reasonable.

89 Flick Energy supports the suitability of the criteria.

90 Meridian and Powershop believe the criteria presuppose that provision of interval data is the solution. They believe a broader approach is required, with additional criteria focussing on what consumption data customers want, when and how they want it, and what they want it for. The cost-benefit analysis should also be considered in the criteria used to form any proposal.

91 Molly Melhuish believes the criteria seem appropriate. She believes consumers should be able to download half-hourly consumption and expenditure aligned with their billing cycle, in a format that enables summing over shorter or longer periods and which is widely available (e.g. a .xls file).

92 Nova considers the criteria to be appropriate.

93 Orion is not sure the criteria start from the correct identification of the actual or appropriate "primary custodian" of the data. Also the criteria talk about provision of data at reasonable cost, whereas the proposal implies data provision should be at no cost to the consumer.

94 TLC agrees with the proposal to have a data custodian but suggests the MEP would be the ideal candidate. Retailers have a disincentive to provide more competition, while the MEP has expertise, no such disincentive and fewer collection or access points. TLC thinks forcing this role onto retailers will increase barriers to entry in the retail market. TLC believes that, in the longer term, networks will be neutral facilitators of retail competition.

95 Trustpower agrees the data is consumer data and they have a right to access it, at a reasonable cost (including a maximum cost per request). Trustpower also agrees standardisation of formats leads to simplicity and efficiency.

96 Unison agrees the Authority's approach has benefits and is appropriate given consumer ownership of consumption data. However, this is a 'big data' solution that requires customers to exercise a degree of technical (information technology (IT)) and analytical (data manipulation, interpretation) knowledge. Not all customers will be able or willing to engage in this process. Unison notes many consumers make decisions on 'list price', and believes unbundling distribution and energy costs will enable consumers to readily compare retailers' offers, without engaging in data processing to make valid comparisons.

97 Vector agrees with the criteria, but suggests adding a requirement to ensure that the data is provided to consumers in a useful, simple and understandable form. It suggests the example .csv file format be simplified for consumers.

Question 4: Comments about the requirement for retailers to provide consumption data

98 Twenty three submissions comment either directly or indirectly on this question. Four submissions make no comment on this question – Arc, EGCC, MEUG, Unison.

99 Eight submissions clearly support consumers being able to seek and access historic consumption data from their retailer, or the previous retailer – Cortexo, EMANZ, emhTrade, Energy Link, ETSL, Flick Energy, Meridian and Powershop, Vector.

100 Two submissions clearly do not support consumers being able to seek and access historic consumption data from their retailer, or the previous retailer – EDNZ (in respect of half-hourly metered data), TLC (in respect of retailers providing the data).

101 Contact notes that not all customers have smart meters. Hence, the 24 months of data held may not be half-hourly read data. It also notes that system changes could make it difficult to provide 24 months of data.

102 Cortexo thinks that access to tariff information is also needed.

103 EDNZ is opposed to retailers having the responsibility for collecting and storing interval consumption data. EDNZ manually reads all meters. It has no contracts in place to receive data from a smart meter, which is held by the MEP.

104 Electric Kiwi believes that 24 months of data is sufficient. It prefers a central repository of data with quick delivery times. However if bilateral data exchange were to be used, all retailers with over 50,000 ICPs should have to deliver the data within 10 seconds of request via automated back office exchange. Smaller retailers could have 24 hours to supply data while they grew the capability to meet the tighter timeframe.

105 EMANZ believes there is no reason for businesses not to have access rights to their electricity consumption data. It suggests this be made explicit in the proposed Code amendment.

106 emhTrade has two concerns. The first is that retailers appear to have a right of refusal if consumption data had been requested four times in the previous year. This would drastically reduce the usefulness of the proposal. emhTrade believes that retailers' ability to charge fees would ensure the frequency of data requests reaches an efficient level. emhTrade's second concern is that only retailers would be required to provide consumers with their consumption data. emhTrade believes it might be more efficient for some consumers or their agents to obtain data from parties other than their retailer, consistent with their right under the Privacy Act. The proposal does not explicitly say consumers had this right.

107 Energy Link agrees that standardising protocols and data formats would provide benefits. It notes that data transfer protocols need to cater efficiently for thousands of ICPs at a time. Energy Link also suggests the design of the data transfer protocols should consider how to minimise the cost of retailers being asked to provide data for ICPs they do not supply.

108 ETSL believes responsibility for providing consumption data should be with the electricity retailer. ETSL considers it immaterial whether retailers store the interval data within their own IT systems or contract the storage to a meter provider, as long as the interval data is provided to the consumer in a timely and consistent manner. ETSL believes all consumers, individuals and businesses, should have access rights to their electricity consumption data, and this should be explicit in the Code amendment.

109 Flick Energy agrees consumers have a right to be provided with their consumption data.

110 Genesis does not comment specifically on Question 4, but it agrees consumers own their load and must have access to the record of that consumption. It notes that customers could request private consumption data from their retailer's billing system under the Privacy Act. Genesis states that it has always provided such data upon request and that it has provided smart-metered customers with self-access to private consumption data since 2011. It adds that this data is available graphically on its an application and on its Genesis' website, and is downloadable on a monthly, daily, or hourly basis. Genesis also states that authorised third parties can also request a complete record of meter data from the relevant MEP, including for non-smart-metered data.

111 Ian McChesney does not comment specifically on Question 4. However, he agrees that access by consumers to their consumption data is highly desirable to enable better management of their electricity use in the home, better consideration of retailer offers, better consideration of embedded generation opportunities, and to aid diagnosis of problems with electricity use (e.g. appliance malfunction).

112 Glen McGeachen notes there are other examples of applications and benefits from wider availability of consumption data. Providers of sustainable energy/energy efficiency services/products could use consumers' half-hourly read data to model the benefits and system sizing of a PV solution, and as part of a feedback loop for design optimisation and client reporting.

113 Meridian and Powershop support the provision of consumption data to customers who want it and to their agents, either by request and response or via a website or portal, for example.

114 Molly Melhuish believes cost per request is likely to be a barrier. She believes it is better for retailers to organise their back office so customers can access consumption data themselves after satisfying the usual security procedures. Ms Melhuish considers that interoperable data formats are critically important.

115 MRP does not comment specifically on Question 4, but argues that mandated access to consumption data would impose a barrier on smaller retailers and reduce competition. Some retailers have chosen not to incur the costs necessary to develop dedicated channels for providing consumption data to customers. MRP notes these retailers will still provide consumption data on request in accordance with the Privacy Act.

116 Nova considers it reasonable to expect that, in a non-regulated environment, retailers will present and analyse interval data in ways that are value enhancing for consumers. However, by regulating, the Authority is pre-empting such developments and ensuring all consumers pay for the availability of data rather than those who might actively value it.

117 Orion sees no justification for *requiring* retailers to provide data at no cost to the requesting consumer. The retailer may not currently have the data, the contractual right to acquire it, or the database to store it. At most the requirements should be permissive as to how consumers gain access to the data. Orion thinks it is more sensible to require retailers to provide consumption data but leave it to them how they manage this (e.g. via third parties). This will be lower cost.

118 Pioneer requests the Authority clarify if it anticipates a retailer being able to make a request for consumption data for multiple ICPs currently supplied by a different retailer. This seems well outside the scope of the proposal's objectives.

119 Powerco believes a centralised data repository such as the electricity registry would be a much better way of providing access to consumer data. The registry currently contains ICP and metering information for all ICPs in New Zealand. If it were also to contain consumption data, retailers (and potentially consumers) could access it for a given ICP even if the ICP had switched retailers within the relevant period.

120 Rabid Technologies believes the industry could avoid duplication of effort by using standardised application programming interfaces (APIs) and formats to expose, exchange, and authenticate data. This would also allow consumers to compare 'apples with apples', irrespective of retailer metrics and display formats.

121 TLC disagrees with retailers being custodians of consumption data, because this will increase barriers to entry for small retailers. The best short-term solution is for MEPs to act as data custodians. MEPs have large data marshalling facilities and leveraging these would minimise costs and maximise efficiencies for data transfer. TLC believes a by-product would be increased pressure for unbundling of retailer and network charges, thereby increasing the transparency of electricity bills.

122 Trustpower supports, in a general sense, the objective of giving consumers access to their consumption data to inform the switching process and to help consumers manage their electricity usage. However, it believes the costs of complying with the Code amendment proposal are likely to far exceed the costs modelled in the consultation paper's cost-benefit analysis. The process of collecting, storing, reconciling and providing strict security over access to large quantities of consumption data for all retail consumers should not be under-estimated. Trustpower believes online automated solutions are likely to be favoured to meet the data access requirements. To minimise retailers' implementation costs, agents should be encouraged to use retailers' preferred low-cost channels, or else pay reasonable costs for access (i.e. a retailer may choose to charge for a one-off bulk request for multiple ICPs). In its response to Question 5 Trustpower does not support any requirement for a retailer to provide consumption data to a consumer who ceases to be a consumer of the retailer because it would put unrecoverable costs on the retailer.

123 Vector agrees consumers should be able to seek and access historic consumption data from their retailer, or previous retailer, and that retailers must not be able to withhold it.

Question 5: Comments on the process for responding to requests to provide consumption data

124 Seventeen submissions comment either directly or indirectly on this question. Ten submissions make no comment on this question – Contact, Cortexo, EGCC, Flick Energy, Ian McChesney, MEUG, MRP, Pioneer, Rabid Technologies, Unison.

125 Arc states that historical half-hourly read data or register reads must only be provided for the contracted period over which the customer can be verified to have occupied the premise and been a customer of the retailer. Arc notes some retailers are already providing half-hourly read data in easy-to-read formats. It queries whether imposing such a requirement on all retailers would remove a competitive advantage for some retailers and reduce the incentive on these retailers to continue investing in value-add tools.

126 EDNZ believes the consultation paper incorrectly states that retailers must keep 48 months of raw meter data. It thinks this requirement is on MEPs.

127 Electric Kiwi supports the Authority making timely delivery of data a priority.

128 EMANZ notes that metered consumption data is not always accurate for reasons beyond the control of the retailer (e.g. poor wiring in multi-tenant sites). EMANZ believes it would be worthwhile considering further how issues outside the control of the retailer should be treated in this process.

129 emhTrade suggests that a standard format could be developed for requests.

130 Energy Link thinks the wording of the proposed Code amendment needs clarification in respect of accumulation meter data. Energy Link also asks the Authority to confirm that references to monthly data mean data that is in end-use units, correctly scaled and allocated to each month, and that raw metering data in some form would not be acceptable.

131 ETSL believes the proposed process for responding to requests to provide consumption data appears reasonable.

132 Genesis does not respond specifically to Question 5. However, it notes that many retailers already provide access to private consumption data on websites or mobile applications, for reasons of cost-effectiveness and ensuring information is up to date. Genesis suggests the Authority should allow retailers to direct consumers to such facilities rather than responding to requests. Genesis also notes the proposed Code change could be interpreted as requiring retailers to provide real-time consumption data. This would not be practical for retailers, as information would be transmitted from MEPs to retailers in accordance with the retailers' needs and the respective service agreements. Lastly, Genesis considers that the proposed requirement on retailers to notify consumers annually of the availability of information would create additional cost for retailers with no clear associated benefit to consumers. Retailers already provide clear notice of a consumer's right to access private data, in their respective terms and conditions.

133 Glen McGeachen agrees that frequency of access to .csv data could be limited under the proposed process for providing and exchanging consumption data. However, this seems counter-productive if consumption data were to be provided via automated self-service mechanisms. He thinks access via API should have no limits.

134 Meridian and Powershop note that consumption data provision is aimed at giving customers better information to inform their choice of retailer and tariff and their usage decisions. Given that the market is in the mid stages of smart meter deployment and the

very early stages of time-of-use residential tariffs, it would be a large step moving to a minimum requirement of half-hourly read data at this stage. Meridian and Powershop support a simpler approach of setting the minimum requirement at providing monthly register level data to customers. They believe the bulk of the value of data provision will be realised by providing this level of data, and is consistent with stated customer preferences. It is important this monthly data:

(a) is based on billing periods rather than calendar months, to avoid customer confusion and to avoid unnecessary use of estimated data

(b) is based on longer than monthly periods if the customer is billed on a longer cycle or meter access is an issue

(c) is raw data that excludes estimates.

135 Molly Melhuish notes storage is cheap and that she has benefitted from observing more than two years of her consumption data, although she believes the large majority of consumers would not bother. She thinks the standard described in the consultation paper seems appropriate for New Zealand.

136 Nova believes it is important that retailers be given the scope to automate requests for consumption data while maintaining adequate security checks and privacy protection for consumers. Nova believes that requiring retailers to respond to emails or phone calls about access to ICP data might lead to significant additional costs and risks for retailers. Nova also believes retailers should only be expected to provide data to consumers with active and paid up accounts with the retailer.

137 Orion believes the Code requirement to retain data for 48 months does not apply to data that is not used in the reconciliation process. Orion is surprised the proposal is so prescriptive as to *how* the obligation to provide interval data is to be met. It requires retailers to develop systems and processes, and store interval data for extended periods. Orion is concerned that some recent entrant retailers' businesses cases may be undermined by the proposal.

138 Powerco suggests providing a standardised file format for non-half-hourly read and half-hourly read consumption data, if the intention is to provide data from both types of meter.

139 TLC supports the registry being a central data archive. It notes many of the installed smart meters cannot be remotely read. It should be possible to manually download annual data for these sites and upload this into the registry. The Authority could consider requiring MEPs to ensure this occurs, with customers, networks and retailers all benefiting from having this data available.

140 Trustpower believes very few customers will have the capability to process an EIEP3A file containing 24 months of consumption data. The usefulness of these datasets is much more likely to be realised when tools exist to handle them on behalf of consumers. Trustpower believes the cost of developing such tools should be included in the proposal's cost-benefit analysis, since they enable the proposal's benefits to be achieved. Trustpower does not support any requirement for a retailer to provide consumption data to a consumer who ceases to be a consumer of the retailer because it would put unrecoverable costs on the retailer. It thinks consumers who want their consumption data will find it acceptable to access this online, which has security benefits and facilitates timely and frequent access to data. Trustpower notes that many consumers still have legacy meters, and these are often read bi-monthly. Hence, it expectes the provision of an

EIEP1 file with normalised or “as read” consumption would be a pragmatic solution to providing 24 months of monthly accumulation data.

141 Vector recommends the Code amendment provide retailers with flexibility as to how they “hold” data, so that retailers who have MEPs store data on their behalf can retain these arrangements. This avoids inefficient duplication and storage of consumption data by retailers.

Question 6: Comments on the development of procedures requiring the supply of data using standardised formats and structures

142 Twenty two submissions comment either directly or indirectly on this question. Five submissions make no comment on this question – Arc, EGCC, Genesis, Ian McChesney, MEUG.

143 Seventeen submissions clearly agree with standardised data structures – Cortexo, EDNZ, Electric Kiwi, EMANZ, emhTrade, Energy Link, ETSL, Flick Energy, Glen McGeachen, Meridian and Powershop, Molly Melhuish, Nova, Powerco, Rabid Technologies, TLC, Unison, Vector.

144 One submission clearly disagrees with standardised data structures – MRP.

145 Contact notes some retailers are unlikely to collect interval data from an MEP (e.g. a retailer with a low service business model, who only uses consumption data for billing). It thinks the requirement to hold interval data would impose additional costs on these retailers, which would likely be passed on to customers. Contact considers that if the proposal were to proceed, transitional arrangements should be provided giving all retailers substantial time to build any new processes or systems needed to comply with the proposal.

146 Cortexo agrees that a common format should be selected that does not impose undue implementation costs on parties. It prefers use of protocols like EIEP3 (modified if required), although it has not investigated OpenADE/ESPI.

147 EDNZ supports a standardised format such as EIEP3A, but believes that it needs to be mandatory, otherwise consumers would receive data in varying formats. EDNZ is concerned at the sheer volume of data a customer could receive and thinks customers could have trouble making use of it.

148 Electric Kiwi supports standardised data structures.

149 EMANZ thinks it is worth examining international trends in standardising consumption data formats and structures to ensure New Zealand is consistent with them, to the extent possible. EMANZ also considers that information on the type of meter read is important (e.g. actual, customer read, special read, estimate), along with how itemised the consumption data is (e.g. does the consumption data relate to the various meters and registers at an ICP or the totals on the ICP?).

150 emhTrade considers that any standards developed should be applied uniformly for all participants and, where possible, be identical to those used in other industry processes. The new standards should not just be ‘based on’ these other standards.

151 Energy Link thinks the business requirements of the draft EIEP3A in the consultation paper appear to confuse agents of retailers (reconciliation participants) with agents of consumers. It is also unclear whether reactive metering data provision could incur extra costs. Energy Link believes the draft EIEP3A looks reasonable but wants to see sample data from a variety of situations, to allow it to make a more complete assessment of the proposed data format (e.g. how would EIEP3A cope with a request for thousands of ICPs with a mix of time-of-use and non-time-of-use metering?).

152 ETSL submits that an initial step in developing procedures for standardising formats and structures should be listing all data items that could possibly be transferred from the retailer to the consumer (e.g. kilowatthours, kilovolt-amperes reactive, voltage, date and

time stamp, losses, fees, reading type, whether consumption data related to the various meters and registers at an ICP or the totals on the ICP).

153 Flick Energy thinks it is logical and efficient to derive the proposed new EIEP format from EIEP3, as this should provide the basis of the required information, and minimise added development for retailers.

154 Glen McGeachen considers that data must be machine accessible and readable, with requests/responses via a standardised API. This is to enable the development of automated consumer-side mechanisms to retrieve such data.

155 Meridian and Powershop support standardising formats and processes for a simpler initial solution of providing monthly register level data, rather than half-hourly read data. They also support creating a standardised format for half-hourly read data for use by any retailers voluntarily choosing to provide it. This would enable third parties to develop their systems and processes and enter the market, as well as allowing for mandated half-hourly read data provision in the future if market forces did not deliver this outcome. Meridian and Powershop note there are multiple approved formats in the Australian market, which allow flexibility for different systems and included horizontal and vertical formats.

156 Molly Melhuish considers a standardised format is essential.

157 MRP does not comment specifically on Question 5, but considers mandating a data standard will stifle innovation and reduce customer choice. Retailers will be forced to either run with the Authority database in parallel with their commercial offerings, adding material cost and complexity, or realign their offerings to feed from the same data standard as the Authority database. This will likely reduce customer choice and stifle the ample innovation already present in the market for customer data services. MRP points to Mercury Energy's suite of online tools to help customers access, analyse and export their electricity consumption data. Adapting this to an alternative Authority-mandated standard is likely to be impossible and will require duplication of cost and effort.[8]

158 Nova considers that, if data provision were to be regulated, it needs to be in a prescribed format and structure to avoid confusion and the development of conflicting standards. However, the disadvantage of a prescribed format is that many retailers might choose to limit the presentation of data to the prescribed form and not bother to add extra analytical features.

159 Orion believes there may be other standards already in place that are more suitable.

160 Pioneer considers a standard format for the consumption data is only relevant if a person switches retailer after receiving consumption data from their previous retailer. Pioneer believe the proposed Excel file format would need considerably more explanation (of the headings and data) to make any sense to an average consumer.

161 Powerco suggests the standardised file format stipulate that consumption data for individual trading periods be provided in columns rather than rows, to make the data file significantly easier for a consumer (or their agent) to manipulate and analyse the data.

162 Rabid Technologies thinks the Authority's proposed approach appears to adopt good steps. It considers two years to be a reasonable timeframe and believes the benefits

[8] MRP relies on an international service provider, which provides its service platform to almost 100 retailer/utility clients globally, so there is no deviation or customisation of the data standard possible on an individual client basis.

include comparable data from any supplier, and a neutral data set. Rabid Technologies considers the provision of a neutral data set to be critical for ensuring fair usage of the data. Rabid Technologies notes there are separate technical issues about authentication/authorisation of data access, and the technical routes of the data.

163 TLC notes that meters lose data from time to time and formats/systems would have to handle this. In addition, if meters are changed due to customer need or faults, the archived data will need to be linked.

164 Trustpower notes the potential for ongoing costs if/when newer versions of the EIEP formats are released.

165 Unison believes the development of procedures requiring the supply of data using standardised formats and structures seems reasonable.

166 Vector agrees with the proposed standards and structures, subject to the comments in its submission. Vector recommends the Authority develop a standard process and format for consumption data requests for more than one ICP. In particular, the Authority should reconsider the five business days timeframe for requests involving a significant number of individual ICPs. Standards should be introduced for the processing of large ICP numbers per consumer (e.g. commercial businesses with hundreds or thousands of ICPs under their management).

Question 7: Comments on whether retailers should be required to hold consumption data

167 Seventeen submissions comment either directly or indirectly on this question. Ten submissions make no comment on this question – EGCC, Genesis, Ian McChesney, Glen McGeachen, MEUG, MRP, Pioneer, Powerco, Rabid Technologies, Unison.

168 Three submissions clearly agree that retailers should be required to hold consumption data – Electric Kiwi, EMANZ, emhTrade.

169 Six submissions clearly agree that retailers should be able to contract with another party to hold consumption data – Arc, Contact, Cortexo, EDNZ, ETSL, Vector.

170 Arc notes that retailers could contract out this responsibility to an agent (an MEP or an energy services company).

171 Contact does not believe it matters whether a retailer holds consumption data itself, provided it is able to obtain it as required (e.g. from an MEP or a smart meter service provider).

172 Cortexo believes that retailers need to either hold interval data or have arrangements in place where they can provide interval data for their customers. Cortexo believes that any optionality would defeat the Code amendment's objective.

173 EDNZ is opposed to the proposal for retailers to be required to hold half-hourly read consumption data. EDNZ states this would unfairly impose a significant cost on only those retailers who did not currently store the data themselves. It might also be an additional barrier to any potential new entrant retailers in the market.

174 Electric Kiwi believes retailers should be required to hold consumption data if there is no central data repository.

175 EMANZ supports a rule that requires retailers to hold consumption data for, say, two years, and provide it to customers for free, if no other parties are required to hold such consumption data. EMANZ agrees that any information sought beyond the agreed timeframe should be charged for (or not provided).

176 emhTrade submits that requiring retailers to hold consumption data seems low cost and sensible.

177 Energy Link queries whether the proposed Code amendment would force a retailer (in particular, a small new retailer) to incur additional costs even though its customers did not value having access to half-hourly read data.

178 ETSL believes the retailer has a responsibility to ensure it can provide its customer's interval data if so requested, but this does not mean the retailer must store the data itself.

179 Flick Energy supports a transitional approach, so retailers that do not currently have systems to hold interval data have time to develop them.

180 Meridian and Powershop note their recommended approach of starting with simpler monthly register level data, rather than mandating half-hourly read data provision, removes the need for transitional arrangements and allows all retailers to comply at reasonable cost without penalising customers. They state that all retailers must hold this level of raw meter data in order to invoice their customers.

181 Molly Melhuish agrees 'low service' retailers that treat half-hourly read meters as accumulation meters should have the option of whether or not to provide interval data to their customers.

182 Nova believes the disadvantage of making it compulsory for retailers to provide interval data, or even provide transitional arrangements, is that it creates an additional cost for new entrants, and reduces the potential for low cost 'no frills' offers. In effect consumers in low socio-economic groups would be forced to absorb additional costs for a service that many will not have the capacity to make any use of.

183 Orion believes it should not be assumed that retailers can access consumption data they do not hold at no cost. Also, if retailers do hold such data, providing it to third parties may not align with their contracts with metering/data providers. Orion also notes that validating the data (i.e. to make it error free or consistent with billing data) will add material cost to the process. This drives cost into retailers' businesses.

184 TLC agrees a data holding period will be necessary if MEPs are data custodians. TLC suggests there should be no significant implications since most MEPs already had systems and processes to hold data.

185 Trustpower considers half-hourly read data handling is significantly more complicated and costly that simple register read processing. A retailer not using half-hourly read data in billing or settlement will face additional costs storing and providing interval data to its customers. Trustpower thinks the business case for the proposal should model realistic operational costs for retailers to collect and provide these data sets, as the costs are likely to become a factor in consumer pricing. Trustpower believes all retailers should be required to meet any standard imposed, but with a transitional period allowed. Also, retailers should be obliged to provide the most up-to-date information held in their databases, instead of reading a meter for the sole purpose of providing free consumption data to a consumer.

186 Vector reiterates that the Code should not prescribe how retailers are to 'hold' data, so that existing arrangements for holding consumption data can continue. Vector notes that duplicating databases with supposedly identical information may cause data integrity issues, caused by the information in the databases diverging over time.

Question 8: Comments on the requirements of the process for providing interval data

187 Twenty one submissions comment either directly or indirectly on this question. Six submissions make no comment on this question – EGCC, EMANZ, Genesis, Ian McChesney, MEUG, Pioneer.

188 Arc suggests customers should pay a reasonable charge for requesting their consumption data other than via existing (free) systems. If retailers choose not to store this data, MEPs should reasonably be able to charge retailers for provision of the data.

189 Contact notes the process for providing interval data could drive significant costs for retailers, depending on the number and frequency of customers using such a service. Consumers would ultimately bear these costs.

190 Cortexo believes that arguments of difficulty and cost could be used to create barriers to implementation. It believes the processes to facilitate consumers accessing interval data would be automated in most if not all cases, because this would be cheaper than manual or ad-hoc arrangements. Cortexo considers data transfer should be within hours, not days (e.g. within five days, but with 50 percent in 1 day), especially to the consumer's nominated service provider. It believes that requests for new data should not be restricted to three months as contemplated in the consultation paper. If the retailer and consumer have an automated system (i.e. via a third party provider), the data should be made available daily. This would be similar to the systems that MEPs have for providing data now. Cortexo considers data provided using an automated system should be provided at no cost regardless of frequency, but data supplied manually should have a handling cost. Cortexo believes consumers will form the perception that retailers are withholding information for their own benefit if consumers become aware their interval data is available from retailers but not in the same manner.

191 EDNZ agrees five business days is not unreasonable to produce a response file, but it will increase the workloads of retailers that are already busy. EDNZ agrees the marginal cost of repetitive standard requests is likely to be negligible, but notes the cost and time of initial development have not been addressed in the consultation paper.

192 Electric Kiwi believes consumers would not be engaged effectively if they faced wait times of up to 5 days for their consumption data. Hence, data exchange should be near real time. Modern technology makes this very feasible for large retailers. Electric Kiwi believes that obstructing and slowing data sharing would be in an incumbent retailer's financial interests if it weakened competition.

193 emhTrade considers industry standards for transferring customer data should always be at the lowest granular interval (i.e. half hour / trading period where available).

194 Energy Link is puzzled by the requirement for only four free data requests every 12 months. It notes that currently retailers provide accumulation data free of charge on invoices, and most are likely to provide interval data free of charge each month along with invoices (providing the retailer's systems are capable of this). Energy Link does not want to see retailers start charging for data sent with invoices in eight of 12 months. It suggests the proposed Code amendment explicitly state that a retailer can only charge for data requests where these exceed four requests in any given year and:

(a) the customer is on a non-time-of-use pricing plan, and receives cumulative consumption data on their invoices, and does not normally request data each month;

(b) the customer has access to interval data each month with their invoice through a retailer's website but submits a data request anyway.

195 Energy Link thinks that in all other cases, particularly where the consumer is on a time-of-use pricing plan, consumption data should be supplied monthly for free.

196 ETSL believes consumers with interval metering should be offered interval consumption data as part of the supply of information at the time of invoicing. In this scenario, if a consumer requests interval data for the period of the invoice, this should not be regarded as one of the four free requests. ETSL does not believe this should place an undue burden on the retailer because the process should be automated. ETSL suggests interval data be standardised at 30 minute intervals, but with an option of receiving it in four-hourly blocks. ETSL believes this should form part of the rules requiring retailers to hold this data for, say, two years and provide it to customers for free, with any information sought beyond that timeframe able to be charged for (or not provided).

197 Flick Energy thinks the process requirements seem reasonable.

198 Per his response to Question 6, Glen McGeachen considers that data must be machine accessible and readable, with requests/responses via a standardised API. This is to enable the development of automated consumer-side mechanisms to retrieve such data.

199 Meridian and Powershop consider the five day timeframe for providing data should be on a best endeavours basis. They also believe the proposal not to provide data if data has been provided in the last three months is unnecessary and may be frustrating for consumers (e.g. if a consumer authorises two separate third parties (retailers) to access their data so they can give the customer a tariff quote, the first party would get the data while the second might be declined). They believe a minimum number of free requests is the only requirement needed. Meridian and Powershop consider that two free requests in a 12 month period is reasonable, after which the retailer should be free to choose whether to charge a reasonable fee or not.

200 Molly Melhuish believes automated processes are highly desirable and should eventually become a requirement. She thinks four free requests a year sounds acceptable, but notes that queries should barely incur a cost at all if automated systems were to be used.

201 MRP does not comment specifically on Question 8. However, it considers the proposal that charges may be permissible if a customer makes more than four requests in a year does not address the possibility of agents acting as aggregators and making large bulk data requests for thousands of customers at a time. The proposal may lead to a scenario where a single customer's request could be subject to a charge, but a bulk data request for 25,000 customers' data would be free to the aggregator, who derives commercial benefit from it, without having to invest in its provision. MRP is concerned that providing customer data to non-retailer agents in this way undermines the entire commercial premise of New Zealand's market-led model for deploying smart meters. It risks forcibly creating a gap in the market for aggregators who would effectively receive a regulated subsidy, receiving their inputs (customer data) for free while charging the customer, directly or indirectly, for the outputs. MRP believes all commercial entities providing services to customers should face whole-of-system data costs. Hence, aggregators should have to pay for access to data.

202 Nova considers the proposed measures seem reasonable.

203 Orion believes it would be sensible to permit retailers to contract out their obligations (e.g. to MEPs), but this is unclear in the consultation paper. Orion considers MEPs are fewer in number than retailers and generally better resourced and more expert at data management than smaller retailers.

204 Powerco thinks four free data requests every 12 months for each ICP seems to impose an excessive cost burden on retailers if they do not hold the data. It suggests retailers should have the ability to pass on any reasonable costs incurred for more than one data request over a six or 12 month period.

205 Rabid Technologies notes the value of ongoing/recent data is significant, as is the cost of procedures to initiate new requests. Having an automated service that could poll retailers for automated data feeds would reduce barriers to consumer access. Rabid Technologies believes it is arguable retailers should compete to develop the service to do this rather than the regulator stipulating these requirements.

206 TLC considers the rules for data supply need to be simplified so that all groups can access the data, subject to customer sign off. TLC believes the commercial terms for data supply need to be kept out of the Code, and the supply of data to customers needs to be allowed to develop in an innovative way.

207 Trustpower thinks retailers are likely to give unrestricted free access to consumption data via online channels, addressing any timeliness or frequency concerns. If an online download meets the data access requirements, retailers should have the discretion to charge for consumer data requests outside the online solution. It believes five days is reasonable for retailers using manual data access solutions. Trustpower considers that data requests by 'brokers' that are not using the online channel should be chargeable if the broker is able to use the online channel.

208 Unison suggests the data should be made available in hardcopy to those who request it (e.g. those without access to computers). It notes this may be expensive because of the nature of the data, which may be grounds for retailers to charge consumers for this type of request.

209 Vector notes Advanced Metering Services provides services where data is provided in an easy-to-understand form online, with consumers able to easily analyse and download it if they wish. Vector suggests any requirements about form or presentation of data be flexible and be able to cater to new and evolving technological advances (i.e. not be limited to .csv spreadsheet format).

Question 9: Comments on privacy, confidentiality and security of consumer data

210 Seventeen submissions comment either directly or indirectly on this question. Ten submissions make no comment on this question – EGCC, Electric Kiwi, Flick Energy, Genesis, Ian McChesney, Glen McGeachen, MEUG, Orion, Powerco, Unison.

211 Arc agrees a retailer must confirm that it is providing data to a customer who is entitled to receive it. If MEPs were to supply data to a customer directly, the retailer would need to supply the MEP with all necessary authorisations, since the retailer is the only entity with a direct contractual relationship with the consumer.

212 Contact believes that special consideration must be given to the privacy, confidentiality and security of consumer data.

213 Cortexo agrees privacy and data security are critical to consumer confidence in services offered. It believes that parties should comply not only with the Privacy Act, but also industry codes of conduct (e.g. the Cloud Computing Code of Practice).

214 EDNZ queries whether the suggested five business days timeframe starts once the identity of the consumer and/or authority of the consumer's agent is confirmed.

215 EMANZ agrees it is imperative that individuals' private information be respected, but this should not prevent consumers being able to share their data with others if they see benefit in doing so. A central repository of consumption data appears to offer the advantage of innovation and, ultimately, productivity benefits.

216 emhTrade agrees privacy is paramount. It agrees the market should develop appropriate authorisation protocols, but with the Authority closely monitoring the development of these protocols and being prepared to issue guidelines or take further action if, for instance, unwarranted privacy concerns are being used as an excuse to withhold data.

217 Energy Link raises concerns about access by agents. It agrees consumption data should only be given to agents if the customer has provided a valid authorisation. However, there is room for innovation in this area, rather than requiring an agent to have customers sign a letter of authority. An agent would want to streamline the authorisation process, but each retailer may have its own prescribed process for authorisation, which appears permissible under the general requirements of the draft EIEP3A. Energy Link suggests the proposed Code amendments or related guidelines and procedures include:

(a) requiring retailers to recognise alternative approaches to authorisation subject to vetting and approving them, with such approval not to be unreasonably withheld

(b) having the Authority vet the alternative approval process put up by an agent, which all retailers would then be required to accept as authorisation by customers of the agent (perhaps with an annual review).

218 ETSL agrees that issues surrounding privacy, confidentiality and security of consumer data need to be upheld. So too does the consumer's right to have free access, at no additional cost, to their consumption data.

219 Meridian and Powershop note that retailers routinely handle customer data under the Privacy Act including authorisation and checking. However, increased transfer of customer data electronically, particularly through manual channels such as email, increased risks to privacy. Enabling customers to access their consumption data online with login facilities is a good way to minimise privacy risks. Meridian and Powershop submit that the interaction between any legal obligations imposed under the Code and

existing legal obligations under the Privacy Act need more careful consideration. Meridian notes the potential for conflict in the following areas:

(a) the Privacy Act generally allows for charging when assisting with data requests, while the proposal would limit charging

(b) the Privacy Act generally has longer time limits for making decisions on requests than does the proposal

(c) the Privacy Act requires agents to have written authority to request personal information, while this is unclear in the proposal

(d) the Privacy Act has broader grounds for refusing requests than does the proposal, but does not have the proposed excuses or exemptions for not providing information under the Code (e.g. if already provided in the last three months)

(e) purporting to extend the applicability of the Privacy Act to consumers who are not individuals by means of the Code

(f) the Privacy Act requires information be made available in the manner or format preferred by the person requesting it, whereas the proposal would involve information provision in a standard format.

220 Molly Melhuish agrees consumption data is personal information and should be very strictly limited. Non-participant service providers must also be given access only at the consumer's direct request. She anticipates privacy problems arising.

221 MRP does not comment specifically on Question 9, but considers the role of non-retailer agents has not been well considered. It believes the use of agents would be likely to cause privacy and security concerns and costs for retailers, who would be required to assess whether the agent was properly authorised. MRP considers it is unclear how this assessment should be made, particularly since the consultation paper envisages that authorisation may be given by means other than in writing. MRP is concerned that where an authorisation is not clear, retailers would face a legal dilemma: refuse to disclose the data and risk breaching their obligation to disclose data on request, or disclose the data and risk disclosing the data to an unauthorised person.

222 Nova considers it likely that meeting the privacy/confidentiality/security requirements surrounding consumer data will cost as much as storing and providing the specified data, particularly if retailers must respond to requests from agents. Nova believes the requirement to respond to agents should be the retailer's prerogative, because it presents extra difficulties in protecting individuals' privacy.

223 Pioneer hopes ensuring an agent is properly authorised to access someone's data is not too onerous (e.g. does the retailer have to see the signed document giving the agent authorisation?).

224 Rabid Technologies notes usage data could reveal patterns of habitation (e.g. households are vacant / on holiday), so privacy considerations are very valid. Retailers could use their existing authentication procedures to identify the account holder, and then allow the account holder to further authorise other household members, or staff.

225 TLC believes the rules around privacy and vexatious requests/acts will become important. In its experience a very small number of customers will want to use this data for lobbying.

226 Trustpower considers absolute vigilance is required to protect consumers' personal data and consumers' interests, and to comply with privacy laws. It therefore thinks consumers should authenticate themselves using secure logins before then downloading their data. In the same way, consumers could authorise agents to access consumption data on their behalf by sharing secure logins with trusted agents.

Question 10: Other comments or suggestions on the proposal

227 Fifteen submissions comment either directly or indirectly on this question. Twelve submissions make no comment on this question – Cortexo, EGCC, emhTrade, Flick Energy, Ian McChesney, Glen McGeachen, MEUG, Molly Melhuish, Nova, Powerco, Rabid Technologies, Vector.

228 Arc suggests that MEPs might be better providers of consumption data because they hold all such data for their metering installations, possibly dating back many years.[9] The current retailer would only be able to provide data relating to the period during which the consumer was their customer. This would force a consumer to possibly make multiple requests across retailers in order to obtain the full consumption history for their premise.

229 Contact believes the costs are significantly understated.

230 EDNZ notes that its comments on this question are covered elsewhere in its submission.

231 Electric Kiwi urges the Authority to pursue near real time data access.

232 EMANZ thinks this project has the potential to rekindle the potential benefits promised by the smart metering initiative when it started in the mid 2000's, but which have not been delivered. EMANZ also believes an old retailer should have to provide consumption data to the new retailer post a customer switch, thereby enabling the new retailer to provide historical data to the consumer on request.

233 Energy Link raises its concern about the way line charges are reflected in retail pricing plans and the data associated with calculating them. It puts forward reasons for retailers calculating the same line charges for each and every ICP, even if these are then bundled into an overall retail pricing plan. It also proposes that line charges be separated out on all invoices.

234 ETSL considers the proposal a very welcome initiative, which should have no losers once implemented.

235 Genesis supports the Authority's intention to improve consumer access to private consumption data but does not believe the proposed Code change will have a material impact on retail competition. Genesis believes the proposal risks unnecessary costs for retailers, particularly those who have already invested in providing customers with access to consumption data. Genesis also considers the proposed Code change duplicates existing statutory requirements on retailers (and MEPs) in regard to the provision of consumer data. Examples of such duplication include:

(a) the Code requiring retailers to hold consumption data for reconciliation purposes

(b) the Privacy Act 1993 requiring disclosure of private consumption data within a reasonable timeframe.

236 Genesis suggests what it considers a better approach than the Code amendment proposal is for the Authority to facilitate the development of a Privacy Code of Practice for electricity retailers, working with retailers and the Privacy Commissioner. This would set out industry-specific guidance on how private information was disclosed. However, if the Authority were to proceed with a Code change, it should focus any changes on the following three key areas where the industry can improve the accessibility of consumers' private consumption data:

[9] Arc notes that smart meters have been actively deployed in New Zealand since 2006.

(a) establishing an industry minimum timeframe for responding to consumer requests for private consumption data

(b) giving guidance to retailers and consumers on when it will be reasonable to charge for information disclosure

(c) providing minimum standards on how retailers provide private consumption data to customers.

237 Genesis also suggests that any Code change would be better located within Part 10 or Part 15 rather than Part 11, because the provision of data to consumers is not a registry issue and is better related to retailers' functions. Part 10 is Genesis' preference because it relates to metering and metering data. Genesis also requests that the Authority establish a technical working group to consider a minimum standard for retailer disclosure of private consumption data.

238 Meridian and Powershop note that data provision (whether half-hourly or monthly) has complications that need to be thought through, including:

(a) not all smart meters are half hourly certified

(b) is there a data quality threshold for providing half-hourly read data?

(c) is it acceptable to provide estimated data or raw data only and what if this data differs from billing data?

(d) if a meter read is provided, would the retailer estimate usage for the remainder of the day on which the meter read is taken or is the time of the meter read provided?

(e) for monthly data provision, is billing month or calendar month more appropriate, and what if a billing period is longer than a month?

239 MRP does not comment directly on Question 10, but does not believe the proposal will enhance customer switching outcomes. MRP maintains the primary reason customers struggle to compare the competitive elements of their bill is because of the complexity of distribution tariffs and the extra complexity and distortion created by the Electricity (Low Fixed Charge Tariff option for Domestic Consumers) Regulations 2004. MRP also believes customer switching outcomes will be enhanced by removing the 'WhatsMyNumber' website and shifting funds into direct promotion of the 'Powerswitch' website.

240 Orion thinks the case for regulation is weak. It thinks the question is not whether interval data could be useful, but whether the Authority should regulate to require retailers to buy and store it and provide it free to consumers. Orion thinks retailers' current approaches to providing consumers with interval data indicate a competitive market. Consumers wanting data will tend to favour retailers that provide it, while consumers who do not will make different choices. Likewise, retailers that get value from interval data will buy and process it, while others will not. Orion believes that having interval data does not help consumers make decisions about electricity supply in the following three areas:

(a) which retailer is best for me?

(b) what pricing plan is best for me?

(c) should I invest in this, or that, technology?

241 Pioneer submits that, under the proposal, the data consumers get may be overly complex. It proposes an alternative approach, using Powerswitch. This alternative is summarised under Question 12.

242 Pioneer also suggests that a low cost approach to improving consumers' trust of the electricity industry is for the Authority to inform consumers that their consumption data is already available, and promote the advantages of consumers understanding their consumption. If there is increased interest in this data, it might be appropriate to introduce a standard format and process. Pioneer suggests the Authority could run a regular report, based on the AV120 report from retailers' billing systems to the reconciliation manager. The Authority could use this to show the average charge per unit by each retailer in a network supply point area each month (i.e. the bill value after all discounts divided by volume invoiced). Pioneer believes the advantages of this approach would be:

(a) minimal set-up costs

(b) no ongoing costs, since there is already a process for producing and transporting this information to the reconciliation manager

(c) the collection of price/tariff information by the Ministry of Business, Innovation and Employment and the Authority (and others) could be discontinued

(d) the data would not require any cleansing or interpretation.

243 TLC believes the proposal is a significant step forward. The main benefits nationally will be the long term saving of significant investment in assets through the energy supply chain, which will help New Zealand's international competitiveness. The proposal will also benefit customers who are challenged to pay for electricity. TLC reiterates that retailers should not be wholly responsible for consumption data and that MEPs are probably the most practical and lowest cost solution. It also reiterates the registry needs to be extended to be the central holder of data.

244 Trustpower considers retailers are already innovating, allowing consumers to make supplier choices. It believes it is optimistic to expect consumers' proactive engagement with the electricity market to lift substantially because of consumption data being available. Trustpower thinks it is clear the Authority expects a market model to emerge where agents/brokers provide services to consumers. It advises the true costs for market participants to service agents/brokers should be recoverable.

245 Unison refers to its earlier responses.

Question 11: Views on whether the purpose and objectives of the proposal are appropriate and consistent with the Authority's statutory objective

246 Eighteen submissions comment either directly or indirectly on this question. Nine submissions make no comment on this question – EGCC, Ian McChesney, Glen McGeachen, MEUG, MRP, Orion, Pioneer, Rabid Technologies, Vector.

247 Eleven submissions clearly agree that the purpose and objectives of the proposal are appropriate and consistent with the Authority's statutory objective – Cortexo, Electric Kiwi, EMANZ, emhTrade, Energy Link, ETSL, Flick Energy, Nova, TLC, Trustpower, Unison.

248 Two submissions clearly disagree that the purpose and objectives of the proposal are appropriate and consistent with the Authority's statutory objective – EDNZ, Powerco.

249 Arc states the proposal may remove competition. It reiterates that some retailers are already providing consumption data to gain a competitive advantage for acquiring and retaining customers. The proposal may remove retailers' incentive to invest in value-add tools, resulting in generic, undifferentiated service offerings. Arc notes that any proposal that increased compliance costs may also reduce competition in the retail market. It considers efficiency may be improved by mandating certain minimum retailer service requirements such as the ability to extract half-hourly read data using online tools and in a standards-compliant format.

250 Contact supports the purpose of the proposal (i.e. to improve consumers' ability to participate in the retail market and increase consumer engagement). However, it does not believe the proposal in the consultation paper will achieve this.

251 Cortexo believes a genuine and visible problem exists and that it falls within the Authority's statutory objective to identify and implement a solution.

252 EDNZ disagrees that the proposal is appropriate and consistent with the Authority's statutory objective. It notes that imposing significant cost on only some (potentially smaller or new entrant) retailers, which would ultimately be passed to consumers, does not promote competition or the efficient operation of the industry.

253 Electric Kiwi agrees the purpose and objectives of the proposal are appropriate and consistent with the Authority's statutory objective.

254 EMANZ agrees the purpose and objectives of the proposal are appropriate and consistent with the Authority's statutory objective.

255 emhTrade agrees the purpose and objectives of the proposal are appropriate and consistent with the Authority's statutory objective.

256 Energy Link agrees the purpose and objectives of the proposal are appropriate and consistent with the Authority's statutory objective.

257 ETSL agrees the purpose and objectives of the proposal are appropriate and consistent with the Authority's statutory objective.

258 Flick Energy agrees the purpose and objectives of the proposal are appropriate and consistent with the Authority's statutory objective.

259 Genesis does not respond specifically to Question 11. However, it suggests the Authority first needs to consider whether it is the correct regulator to address these issues, and whether the Code is the correct regulatory instrument. Genesis considers a fundamental issue with the proposed Code change is whether it is appropriate or cost effective for the

Authority to duplicate the role and expertise of the Privacy Commissioner, particularly expertise in information security, agency verification, or the reasonableness of charges (where applicable).

260 Meridian and Powershop believe that giving customers access to their consumption data may improve the ability of customers to participate in the retail market, in terms of both switching and usage decisions, if it is done in a way that meets customers' needs. Meridian and Powershop consider the majority of the proposal's benefit can be achieved at this time by providing consumption data based on billed meter reads. The mandating of half-hourly read data provision may be appropriate in future once smart meters are universally installed and if residential tariffs become largely time-of-use-based.

261 Molly Melhuish is unsure whether incomplete access to retail data is the main cause of retailers not innovating and seeking efficiency gains. She considers consumer decisions on the timing of demand, and investments in energy efficiency and automated appliances, will increase efficiency the most, with the benefit from lower transaction costs less important. Ms Melhuish believes tariff offers should promote increased reliability through real-time offers to reduce demand during system constraints.

262 Nova agrees with the objectives, but believes the benefits of a regulated approach versus a market-led approach are over-stated. In particular, Nova does not see it materially benefiting competition.

263 Powerco considers it difficult to agree that increased access to consumption data will increase consumer engagement. Consumers who request and analyse their consumption data are already likely to be strongly engaged with the market. Therefore, it would appear that minimal improvement in competition and market efficiency is likely to result from increased access to consumer data. In Powerco's view the proposal is unlikely, in practice, to promote the Authority's statutory objective.

264 TLC agrees the purpose and objectives of the proposal are appropriate, subject to the custodians of the data being more neutral than retailers. The proposal will improve energy literacy and therefore customer engagement, which will be an opportunity to increase efficiencies in other sectors of the electricity industry. Improved knowledge and engagement will encourage innovation. If MEPs are data custodians, the proposal will in TLC's view decrease barriers to entry in the retail market, thereby increasing competitive forces.

265 Trustpower agrees the purpose and objectives of the proposal are appropriate and consistent with the Authority's statutory objective. However, it considers the likelihood of achieving the results modelled in the cost-benefit analysis is very low.

266 Unison agrees the purpose and objectives of the proposal are appropriate and consistent with the Authority's statutory objective.

Question 12: View on proposal being preferable compared to other options

267 Nineteen submissions comment either directly or indirectly on this question. Eight submissions make no comment on this question – Contact, EGCC, Genesis, Glen McGeachen, MEUG, Pioneer, Rabid Technologies, Vector.

268 Eight submissions clearly agree that the Authority's proposal is preferable – Cortexo, EMANZ, emhTrade, ETSL, Flick Energy, Ian McChesney, TLC, Unison.

269 Four submissions clearly disagree that the Authority's proposal is preferable – EDNZ, Electric Kiwi, Nova, Orion.

270 Arc prefers Option 1, but only to the extent that it would support the market fulfilling consumer needs without recourse to regulation.

271 Cortexo agrees the proposal is preferable to other options.

272 EDNZ believes Option 4 would be most preferable to retailers who did not currently store interval data, as the cost associated with implementing this would be significant.

273 Electric Kiwi thinks a central repository is preferable. Bilateral data exchange with near real-time requirements on large retailers should be a secondary option.

274 EMANZ believes Option 1 is an appropriate first step. Ensuring consistency in the provision of consumption data is a useful, relatively low cost first step to improving access to consumption data.

275 emhTrade agrees the proposal is preferable to other options, but with minor modification to ensure innovation in smart metering data use, for the long term benefit of consumers.

276 Energy Link considers 12 months of accumulation data for each meter register would suffice at present in the vast majority of cases (mass market). The main exceptions would be where a pricing plan had a component charged in dollars per peak unit. However, in future there may be a significant number of real-time pricing plans, which would require more data, but this is some time off yet. Energy Link reiterates a point in its response to Question 1; that the long term benefits of ensuring access to interval data are more likely to be gained from improved decision making around energy efficiency and investments.

277 ETSL believes Option 1 is the best option, followed by Option 4.

278 Flick Energy agrees the proposal is preferable to other options.

279 Ian McChesney agrees in principle with the recommendations. He notes the timeframe for the smart meter roll-out set out in the consultation paper implies that a large percentage of consumers will not benefit from the proposal initially, thereby compromising the assumed benefits of the initiative. Mr McChesney recommends that the Authority gives further attention to the smart meter roll-out timeframe, in relation to information access.

280 Meridian and Powershop agree that a modified proposal, which focuses on providing raw monthly register level data in a standardised format to consumers and authorised agents, is preferable to the other options. It is preferable to the status quo because it ensures consumers are aware they can access their consumption data and it standardises formats. It is preferable to providing consumption data on bills because the UMR report shows consumers do not want more detail on their bills and having electronic data available is preferable. Lastly, the modified proposal is preferable to a central meter data store at this time. A central data store would involve significant costs and have privacy implications. They note a service like this could develop via market forces, without regulation.

281 Molly Melhuish thinks Option 4 could, and likely will, evolve out of Option 1.

282 MRP does not comment specifically on this question but does suggest an alternative. It proposes that individual customers be able to transfer their data between retailers when they switch. It believes the most efficient way of enabling this data portability between retailers would be for a customer's new retailer to purchase the customer's historic data upon a switch occurring. The new retailer would be authorised by, and be acting as, an agent of the customer. MRP believes this model of data portability supports a market reliant on smart metering, requires little additional cost to establish, and has no legal/commercial impediments to an authorised retailer going to MEPs for consumption data. MRP believes the advantages of this alternative approach are:

(a) it is consistent with a market based heavily (in time entirely) on smart metering

(b) retailers currently purchase data off MEPs via secure data exchange processes, so there would be little extra cost

(c) there would be no legal/commercial impediments to a retailer, authorised by a customer, seeking this data from MEPs.

283 MRP believes that customer authorisation could occur via the new retailer's terms and conditions. This would enable the data exchange to occur behind the scenes, which would be seamless for the customer. It also believes customer switching would be enhanced by closing WhatsMyNumber and shifting the resources to Powerswitch, and requiring retailers to establish functionality to generate customer-initiated automated switches from Powerswitch.

284 Nova does not agree the proposal is preferable to other options. It considers the criticism of the status quo merely reflects that some retailers' systems are not yet fully developed to take advantage of interval data from mass market meters, and it is unhelpful for regulation to force developments in a particular direction. Nova believes that Powerswitch could be enhanced and used to identify value-add services being offered by retailers. Nova believes most consumers would not have the resources or ability to use interval data in the standard format, and the potential financial gains from analysing data are rarely going to justify the use of a professional advisor. The proposal is therefore only going to be of any relevance to a small subset of consumers. Nova also notes that providing 12 months consumption data on a bill is an easy and effective way of providing consumers with the most important piece of information, without them taking any action. This could be enhanced by adding more details (e.g. network tariff code, day/night breakdown, monthly totals, peak demand).

285 Orion does not agree the proposal is preferable to other options. It believes a regime that leaves it to retailers to decide whether they procure and/or provide consumption data, and at what (if any) cost, would lead to superior economic outcomes. The consultation paper does not:

(a) establish there is a material unmet need

(b) adequately consider the risk of unintended consequences or potential contractual constraints on data acquisition and dissemination

(c) identify a market failure.

286 Orion agrees Option 4 should not be progressed at this time, as it is likely to be much more expensive and intrusive. Orion suggests a lower cost alternative to the proposal,

which would achieve most of the proposal's benefits, is requiring retailers to notify customers of the last 12 months' billed consumption for each meter/register. It believes a comparison using Powerswitch based on just one bill produces a reliable result in most cases. Orion believes the Authority has serious concerns about the quality of Powerswitch's comparisons. Orion also considers the consultation paper understates contractual barriers to data acquisition and provision, between retailers and MEPs, and between retailers and their customers. Orion thinks these contractual barriers are an important consideration.

287 Pioneer submits that, under the proposal, the data consumers get may be overly complex. It proposes an alternative approach whereby consumers access their consumption data via Powerswitch. Pioneer believes a relatively cheap and uncomplicated modification could be made to Powerswitch that would achieve, at a minimum, the expected benefits of the Authority's proposal. Pioneer considers the advantages of this approach are:

(a) the Authority and industry have already committed a lot of resources to promoting Powerswitch

(b) Powerswitch is an independent, and potentially more trusted, information source

(c) it avoids confusion created by the proposal (whereby consumers compare retailers by requesting their own consumption data, rather than just using Powerswitch)

(d) it eliminates the need for consumers to request their data then input it into Powerswitch

(e) consumers can undertake the same analysis after downloading consumption data from Powerswitch as they could under the Authority's proposal

(f) the cost of modifying Powerswitch would be spread across the industry in a manner that has already been identified as efficient for other costs covered by the levy

(g) it enables consumers to have direct access to their data without relying on a request process

(h) there would be no need to limit the number of data requests.

288 Powerco prefers that the Authority utilises the registry as the centralised data store since it holds ICP and metering information, and a number of retailers are understood to use it as a portal to submit consumption data to distributors. Powerco notes the proposal appears to be a stop-gap solution, since the Authority states Option 4 could potentially deliver greater benefits over time.

289 TLC agrees the proposal is preferable to other options. TLC does not think it would raise costs because the registry already collects a significant amount of data and has efficiencies in place for data storage. Furthermore, data efficiencies would be achieved if MEPs were to be data custodians, because of current data channels.

290 Trustpower believes introducing a simpler file of monthly data may lower a number of retailers' participation costs while still enabling consumers to be better informed when using existing buying tools. Trustpower notes the majority of consumers supplied via a smart meter are likely to have access to a relatively standard set of interval data, and a simpler option may be to let the smart metering market develop.

291 Unison agrees the proposal is preferable to other options.

Question 13: Value of option 1 compared to option 4

292 Twenty one submissions comment either directly or indirectly on this question. Six submissions make no comment on this question – Contact, EGCC, Genesis, Ian McChesney, MRP, Vector.

293 Ten submissions clearly agree that Option 1 is better than Option 4 – Cortexo, emhTrade, Energy Link, ETSL, Flick Energy, Glen McGeachen, Nova, Orion, Trustpower, Unison.

294 Four submissions clearly disagree that Option 1 is better than Option 4 – EDNZ, Electric Kiwi, Powerco, TLC.

295 Arc recommends Option 4 not be considered until a detailed cost-benefit study is undertaken.

296 Cortexo notes the United Kingdom adopted Option 4, and believes it is logical when first introducing interval data use. Although a centralised meter data service may provide standardisation benefits, it may inhibit innovation by third party service providers offering customised solutions. Cortexo considers Option 1 facilitates such innovation, is much less costly and complex, and could be implemented in months, not years.

297 EDNZ does not agree that Option 1 is better than Option 4.

298 Electric Kiwi prefers Option 4, believing this option will deliver the best outcome for consumers.

299 EMANZ believes the response of retailers and other market players to Option 1 will ultimately determine whether Option 1 or Option 4 provides improved services to consumers. Option 4 should not be ruled out.

300 emhTrade agrees Option 1 is preferable to Option 4.

301 Energy Link agrees Option 1 is preferable to Option 4.

302 ETSL agrees Option 1 is preferable to Option 4. It believes the response of retailers and other market players to Option 1 will ultimately determine whether Option 1 or Option 4 provides improved services to consumers. Option 4 should not be ruled out.

303 Flick Energy agrees Option 1 is better than Option 4.

304 Glen McGeachen agrees Option 1 should be pursued because of its timeliness. However, Option 1's API mechanisms could become the basis for data feeds under Option 4, which therefore should minimise retailer costs to implement Option 4 at a later date. He points out that selecting a 48 month half-hourly read data retention period would enable back-fill of a central repository, if the implementation timeframes in the consultation paper are met. Mr McGeachen thinks once a central repository is in place, retailers should be required to provide half-hourly read data to it at least weekly. At their discretion they could also continue providing consumption data directly to the consumer.

305 Meridian and Powershop consider their modified Option 1, based on providing raw monthly register level data, is preferable to a regulated centralised meter data store at this time.

306 MEUG does not comment specifically on Question 13 but agrees that Option 4, while possibly having greater gross benefits than the proposal, would also have higher set-up costs and would take between 2 to 3 years to implement. MEUG notes the proposal leaves Option 4 as a possibility to be revisited longer term.

307 Molly Melhuish believes Option 4 evolves out of Option 1, if and when it delivers benefits.

308 Nova agrees Option 1 is better than Option 4. There is a risk that Option 4 could be costly to develop.

309 Orion agrees Option 1 is better than Option 4, but without agreeing that Option 1 is superior to the status quo.

310 Pioneer prefers its alternative to both Option 1 and Option 4.

311 Powerco does not agree that Option 1 is better than Option 4. Should the Authority decide to proceed with Option 4, it seems sensible to implement the single best solution rather than an interim measure, given the time and effort associated with Code amendments.

312 Rabid Technologies believes there are significant economic advantages of Option 4. Some steps when implementing Option 1 are worth considering, to enable some of these benefits to be captured sooner, or to lessen the cost of a future Option 4. It has submitted a diagram showing the design of Option 1 could anticipate the requirements of Option 4 and make overall cost savings.

313 TLC does not agree that Option 1 is better than Option 4. Option 4 will cost more but will give the best savings to New Zealand. Retailers will soon find ways to add value to the core data.

314 Trustpower believes Option 1 preserves the relationship between retailers and consumers and is therefore most likely to meet consumers' needs for access to and security of their consumption data. Option 1 is better than Option 4 because it gives consumers access to consistent and reliable information.

315 Unison agrees Option 1 is preferable to Option 4, at the present time.

Question 14: Views on the establishment of a centralised meter data store

316 Twenty one submissions comment either directly or indirectly on this question. Six submissions make no comment on this question – EGCC, Genesis, Ian McChesney, MEUG, MRP, Vector.

317 Five submissions clearly support a centralised meter data store – Electric Kiwi, Glen McGeachen, Powerco, Rabid Technologies, TLC.

318 One submission clearly does not support a centralised meter data store – Trustpower.

319 Arc recommends this option not be considered until a detailed cost-benefit study is undertaken.

320 Contact considers a centralised meter data store, while technically feasible, would drive extra costs. Hence, Contact believes it should only be considered if a decentralised model of data provision to customers does not work.

321 Cortexo thinks a centralised data store might add to the efficiency of the market in the future.

322 EDNZ believes the extra complexities of developing, populating and maintaining a central meter data store with date ranged ICP vs meter vs customer relationships would be prohibitive. It notes there are still unresolved data integrity issues with the registry post the implementation of the new Part 10. EDNZ queries whether retailers who currently do not receive or store interval data would have 2-3 years to become compliant, which is the timeframe indicated for implementing a central data store.

323 Electric Kiwi believes a centralised meter data store should be implemented as soon as possible.

324 EMANZ believes consistent data standards for consumption information will improve the status quo, but the extent to which it does so is in the hands of the sector. It remains to be seen how the standards would be enforced, and the degree of difficulty consumers would experience retrieving consumption data. EMANZ believes Option 4 may be needed in the future to improve competition for consumer services.

325 emhTrade does not agree the Authority, or any party, should collect and store personal information such as consumption data on anything other than an 'opt-in' basis, unless it is necessary for providing contracted services (e.g. electricity supply).

326 Energy Link thinks the additional set-up and maintenance costs of a central data store are not justified. It is also concerned that dealing with a third party could add transaction costs, including delays and mistakes.

327 ETSL believes Option 1 should be deployed first. ETSL is not against Option 4, and wonders whether moving to a centralised meter data store could be managed in conjunction with Option 1 (i.e. deploying Option 1 and then steadily migrating to Option 4).

328 Flick Energy queries why Option 4 would be implemented if Option 1 were implemented, and this resulted in a duplicated service with little or no added benefit. Either Option 1 or Option 4 should be implemented, but not both.

329 Glen McGeachen believes that a centralised meter data store will have the following additional benefits:

(a) consumers (or their agents) will be able to access historical consumption data after a change of retailer

(b) providing half-hourly read meter data to distributors will enable them to perform network modelling and capacity planning at a more granular level than now

(c) comparisons of retailer pricing will be more accurate

(d) existing authentication services (such as RealMe) could be used

(e) by having access to its customers' historical consumption data, a consumer's current retailer could perform better demand-side forecasting and be in a better position to recommend the best plan(s) to a new consumer

(f) it would facilitate other uses, such as PV design, and community energy action groups establishing collective statistics/targets.

330 Meridian and Powershop believe a centralised meter data store is an appealing concept, but there is a significant question around the costs to set up and maintain this, and there are significant privacy concerns to be managed (e.g. ensuring consumers access only their own data and not the previous property owners' data).

331 Molly Melhuish believes Option 4 evolves out of Option 1, if and when it delivers benefits.

332 Nova thinks that Option 4 would most likely reduce the ability and incentive for retailers to create services based on using the data. Option 4 may be useful if it improves the market's overall efficiency by eliminating some reconciliation processes and simplifying billing between retailers and lines companies.

333 Orion believes Option 4 would need to be considered on its merits at some future point, noting that a common data store might arise as a commercial solution to the perceived problem.

334 Pioneer notes that its proposal removes the need for a centralised meter data store.

335 Powerco supports the concept of a centralised data store for all consumption data because it has the potential to deliver significant efficiencies across the industry, by negating the need for each retailer to submit separate consumption data to both the reconciliation manager and each distributor.

336 Rabid Technologies believes a centralised data store has significant merit, for reasons including:

(a) assisting with consumer/supplier negotiations

(b) improving the ability of the market to innovate on quality

(c) reducing duplication of effort

(d) standardising consumption data for analysis against other data sources in future

(e) retailers could re-use APIs and associated intellectual property within their own systems to innovate more cheaply in their services to customers

(f) consumers could access data to model consumption strategies for environmental considerations

(g) as a research resource (for policy development/reporting purposes and for commercial purposes).

337 TLC believes a centralised meter data store should be implemented sooner rather than later. Implementing Option 1 and then Option 4 will add costs and delay the industry progressing to 'low hanging fruit' (e.g. controlling reactive power flows through the use of

data and demand-side innovation). TLC suggests the focus shifts from customer data to meter data that is available to the customer.

338 Trustpower thinks it is difficult to comment on Option 4 without a clear understanding of how a centralised data store could benefit the industry, participants and consumers. Trustpower opposes a centralised dataset because it is not confident that the appropriate security controls could be easily put in place to protect the privacy of the data. It is also likely to be a costly and complex project to establish.

339 Unison believes metering data would be very useful information to hold, but the costs and benefits would need to be fully explored.

Question 15: Views of the assessment of benefits, costs and net benefits

340 Twenty one submissions comment either directly or indirectly on this question. Six submissions make no comment on this question – Arc, EGCC, Genesis, Ian McChesney, Glen McGeachen, Rabid Technologies.

341 Five submissions clearly agree with the Authority's assessment – Cortexo, EMANZ, Energy Link, ETSL, Flick Energy.

342 Eight submissions clearly disagree with the Authority's assessment – Contact, EDNZ, Meridian and Powershop, Molly Melhuish, Orion, Pioneer, Trustpower, Vector.

343 Contact believes the costs of making the proposed change have been significantly underestimated.

344 Cortexo agrees with the assessment of benefits, costs and net benefits, noting its staff members are not economists.

345 EDNZ disagrees with the assessment of benefits, costs and net benefits. It believes the cost (and time) of system modifications would differ substantially depending on the system being used and its current functionality. EDNZ feels the cost estimates are extremely light. The consultation paper overlooks the issue that retailers would not be incurring the same costs as each other.

346 Electric Kiwi does not believe the benefits analysis places sufficient weight on the timely provision of data.

347 EMANZ believes the assessment of costs and benefits appears reasonable. It agrees the dynamic efficiency benefits are real, and that difficulty quantifying them should not hamper the project.

348 emhTrade thinks the Authority has underestimated the potential benefits from efficiency gains in energy services technology and innovation.

349 Energy Link again notes its view that the greatest benefits over the long term could arise from consumers' use of their information to make informed decisions about how and when to consume energy.

350 ETSL believes the assessment of costs and benefits appears reasonable. It agrees that significant benefits from the project proceeding are almost certain to outweigh the costs. ETSL reiterates its view that more informed consumers would be able to react to peaks in their consumption and deploy energy efficiency measures. This could well reduce the quantity of additional investment in distributors' network infrastructure to meet peak loads.

351 Flick Energy agrees with the Authority's general conclusions, noting the wide variance of potential benefits. It agrees that potential annual customer savings could be greatly improved if more consumers were to switch based on improved efficiencies and more educated comparison analysis.

352 Meridian and Powershop do not agree with the assessment of costs and benefits. On the benefits side they believe the assumption of a 5-10 percent increase in switching is unrealistic, and point to the UMR report as supporting their view. The UMR report showed only 47 percent of the sample was interested in power-related information, meaning a 5-10 percent uplift in switching equates to at least a 10-20 percent uplift from the 47 percent of consumers with an interest in power information. If this sub-group is over-represented in current switching rates, then the uplift from the non-switching portion would be even higher. Meridian and Powershop consider these levels to be unrealistic. On the cost side

they believe a maximum cost of $50,000 per retailer is extraordinarily low. Their estimate of the cost of system changes is in the range of $200,000 for mandatory provision of half-hourly read data. However, the costs are significantly lower for their preferred monthly register level data provision. They also note that all customer-facing staff will need training to ensure customer data requests are responded to appropriately and within the specified guidelines and timeframes.

353 MEUG considers there are no other options that need to be considered and agrees that Option 4, while possibly having greater gross benefits than the proposal, will have higher implementation costs and take 2-3 years to implement. MEUG agrees Option 2, the status quo, is the appropriate counterfactual against which to compare incremental benefits and costs of the proposal. MEUG has no information on retailers' incremental costs from implementing the proposal. The Authority's assessment that there is a small risk that the proposal will discourage retailers from further investments in smart metering technology is reasonable. However, in MEUG's view, even if both of these cost elements were to significantly increase, it is difficult to conceive of scenarios where the benefits of the proposal would be less than the costs. MEUG agrees dynamic efficiency benefits are expected to be large, but suggests the Authority's comparison of incremental costs and incremental static efficiency benefits alone is sufficient to support the proposal's implementation.

354 Molly Melhuish disagrees with the assessment and thinks it is not very useful. It addresses only the benefits of increased switching without considering the system benefits of consumer response to cost-reflective tariffs, enabled by a vigorous energy management industry. She notes the assumed elasticity (price sensitivity) of -0.26 has been around for a while, with little or no new evidence to support it. She agrees the proposal could encourage retailers to reduce their costs of supply. Ms Melhuish notes the consultation paper calculates net benefits to several significant figures whereas the assumptions, such as the price elasticity of demand, are little more than pulled out of a hat. This is unscientific.

355 MRP does not comment specifically on this question but states that it does not believe the proposed Code amendment will be any benefit to customers over any time period.

356 Nova does not believe the proposal would encourage more consumers to proactively move to a lower price. It estimates that the additional information would help a modest percentage of those consumers who are already proactively looking for better electricity deals. The additional data would help an even smaller number of consumers who might use the data to better manage their load, many of whom would already be receiving consumption details from their retailer. Nova concludes that the number of consumers using the increased information to any effect would have a negligible impact on the market.

357 Orion disagrees with the assessment and believes the cost-benefit analysis is a major weakness of the consultation paper. It cannot see how any Code change proposal could fail a net benefits test under the Authority's approach, meaning the approach is not useful since it cannot discriminate between good and bad ideas. Orion states that if benefits are real and material then third parties should already be offering services to consumers, so questions where the market failure is. Orion believes the Authority is consistently failing to apply higher level qualitative benefits assessments before moving to quantify them. In this case the allocative and productive efficiency benefits rest on an assumption that switching rates would increase as a result of the proposed change, yet there is no explanation as to

how or why this would happen. Orion queries whether the estimated price elasticity of demand and marginal productive efficiency gains are appropriate.

358 Orion believes there is a risk the proposal will inappropriately socialise the development cost of third party providers' intellectual property. In effect the proposal free-rides on existing retailers' arrangements, where they exist. Orion is puzzled by the assumption that the modification cost is highest for medium sized retailers. It thinks the cost per retailer would be fairly similar irrespective of size. It also believes the cost could easily be much higher than the highest estimates. The consultation paper understates the financial barriers to data acquisition and provision. Orion considers the risk that certain smart metering functionality will not be enabled or supported is more important than the risk of reduced investment in smart metering technology.

359 Pioneer believes the proposal's benefits are overstated, as the Authority could test consumers' interest in having usage data by informing people this is already available. It notes that if this created more interest or engagement then it might be worth proceeding to set standard information formats and processes.

360 Powerco suggests that the Authority considers mandating monthly aggregated consumption data rather than interval data, if the Authority wishes to mandate the provision of consumption data. This would potentially deliver the same benefits at a fraction of the cost, since it appears the benefits would result from the provision of monthly consumption data as readily as from interval data.

361 TLC considers the consultation paper neglects potential network efficiencies from increased buyer power. TLC thinks dynamic efficiency will be encouraged if barriers to retailer entry are kept low, with MEPs the short term data custodians and networks the longer term co-ordinators of data. TLC believes the costs would be largely avoided if MEPs acted as custodians. TLC does not believe this would deter smart metering investment because of the resulting efficiency benefits across the industry. It also believes the cost of the proposal is insignificant compared to the cost of the recent Transpower upgrade and that maybe some of this could have been deferred if smart meter rollouts had received regulatory support. TLC observes that a 1% reduction in power demand growth from better informed consumers would equate to a $17 million saving in ongoing costs in the electricity distribution sector.

362 Trustpower disagrees with the assessment of benefits, costs and net benefits. The cost estimates assumed are significantly understated. Trustpower considers retailers operating multiple retail brands are likely to need to develop distinct data provision solutions for each brand, since customers' engagement is with the retail brand. Costs will arise in respect of:

(a) strict data security principles

(b) regulated delivery timeframes

(c) regulated charging regimes for data access

(d) regulated requirements for promoting the service to customers

(e) additional validation and verification steps to reconcile datasets provided to consumers with billing and settlement data.

363 Trustpower believes retailers may also face additional costs from MEPs seeking to charge for half-hourly read data sets to be made available to consumers. Trustpower considers the additional costs from a 25 percent increase in switching volumes will significantly offset

any efficiency benefits received. On the benefits side, Trustpower reiterates its view that customers choose retailers for more reasons than just price. It is ambitious to assume that access to consumption data alone will result in a switching rate uplift of 5 percent. Trustpower assumes consumers will receive little benefit from the availability of consumption data without extra analysis tools, for which no costs have been modelled.

364 Unison submits that the Authority should undertake a more detailed assessment of the proposal relative to what is currently available in the competitive retail market. It notes that retailers such as Genesis have consumption data available and have an online application that consumers can use to analyse their data. Other retailers do not provide this data but the cost of their service might be cheaper. Unison notes that asking all retailers to provide this level of service may have the unintended consequence of driving prices up and reducing competition.

365 Vector does not respond specifically to Question 15. However, it disagrees with the Authority's assessment of benefits. Vector considers it 'quite a leap of faith' to assume consumers will be more actively engaged to seek a better price and/or switch, merely by amending the Code to require retailers to provide data upon request. Vector notes the data is already available for many consumers. Non-interval consumption data is readily available to consumers via their energy bill and/or online and, as far as Vector is aware, there is no evidence to suggest the less engaged consumers are the 51 percent of consumers with smart meters.

Question 16: Views on the Authority's assessment that the proposed Code amendment meets the requirements of Section 32 of the Act

366 Fifteen submissions comment either directly or indirectly on this question. Twelve submissions make no comment on this question – Arc, Contact, EGCC, Genesis, Ian McChesney, Glen McGeachen, MRP, Nova, Pioneer, Rabid Technologies, Trustpower, Vector.

367 Eight submissions clearly agree with the Authority's assessment – Cortexo, EMANZ, emhTrade, Energy Link, ETSL, Flick Energy, MEUG, Molly Melhuish.

368 Two submissions clearly disagree with the Authority's assessment – Meridian and Powershop, Orion.

369 Cortexo agrees with the Authority's assessment that the proposed Code amendment meets the requirements of section 32 of the Act, noting its staff members are not lawyers.

370 EDNZ submits that:

(a) consumption data would need to be at the meter channel level for a consumer to effectively compare price offerings (e.g. usage through the 'Night' portion of a meter, rather than total combined usage at the ICP)

(b) the draft proposed Code amendment implies that if half-hourly read data has not been collected by the retailer it will not be provided to the consumer

(c) the proposed requirement to notify consumers annually of their ability to request their consumption data is excessive.

371 EDNZ believes it would be sufficient to include this in a retailer's terms and conditions, together with information on their website. It also notes that an annual notification process would be an additional cost to all retailers and ultimately to consumers.

372 Electric Kiwi believes the timeliness requirements on delivery of data are too slow to cause a step change in consumer engagement.

373 EMANZ agrees with the Authority's assessment that the proposed Code amendment meets the requirements of section 32 of the Act.

374 emhTrade agrees with the Authority's assessment that the proposed Code amendment meets the requirements of section 32 of the Act.

375 Energy Link agrees with the Authority's assessment that the proposed Code amendment meets the requirements of section 32 of the Act.

376 ETSL agrees with the Authority's assessment that the proposed Code amendment meets the requirements of section 32 of the Act.

377 Flick Energy agrees with the Authority's assessment that the proposed Code amendment meets the requirements of section 32 of the Act.

378 Meridian and Powershop's view is that the Authority's assessment of the proposal overstates the expected outcomes and benefits. A realistic assessment of the proposal is that it would allow the few consumers interested in detailed data to access it, although some of these customers would be already accessing this data from their retailer. The impact on competition, reliability and efficiency would therefore likely be very small. They argue that achieving the expected benefits in the Authority's assessment would require significant additional steps, such as: full smart meter roll-out, extensive deployment of

time-of-use residential tariffs, consumers being able to pull their half-hourly read data directly into a price comparison tool that enabled accurate comparison between tariffs, active sending of price signals, and smart appliances. They believe that while the industry is headed in this direction, the benefits of these extra steps are not available now, and the assessment against the Act should be formed on the basis of the current proposal. Meridian and Powershop consider that these additional steps should be market-led, as regulation of the customer experience will only stifle positive innovation.

379 MEUG agrees with the Authority's assessment that the proposed Code amendment meets the requirements of section 32.

380 Molly Melhuish generally agrees with the Authority's assessment that the proposed Code amendment meets the requirements of section 32 of the Act.

381 Orion does not agree with the Authority's assessment that the proposed Code amendment meets the requirements of section 32, because it does not believe there is clearly identified market failure or that the proposal would produce net benefits.

382 Powerco considers the proposed amendment does not appear to be contrary to section 32, but may not promote the achievement of section 32(1).

383 TLC agrees with the Authority's assessment that the proposed Code change meets the requirements of Section 32 of the Act. TLC believes it would do so more if MEPs were to be data custodians.

384 Unison mostly agrees with the Authority's assessment that the proposed Code change meets the requirements of Section 32 of the Act, but thinks a more detailed analysis of the existing market is needed.

Appendix A Consultation paper questions

	Question
Q1	Do you have any comments on the description of the current situation, including: a) The link between consumer engagement and retail competition? b) Current levels of consumer engagement? c) Current limits on access to consumption data?
Q2	What are your comments on the Authority's assessment of the problems arising from limited access to consumption data?
Q3	Do you have any comments or suggestions about whether the criteria used in developing the proposal are a suitable basis for the proposed Code amendment?
Q4	Do you have any comments or suggestions about the requirement for retailers to provide consumption data?
Q5	Do you have any comments or suggestions about the process for responding to requests to provide consumption data?
Q6	Do you have any comments or suggestions about the development of procedures requiring the supply of data using standardised formats and structures?
Q7	Do you have any comments or suggestions about whether retailers should be required to hold consumption data?
Q8	Do you have any comments or suggestions about the requirements of the process for providing interval data?
Q9	Do you have any comments or suggestions on privacy, confidentiality and security of consumer data?
Q10	Do you have any other comments or suggestions on the proposal?
Q11	Do you agree that the purpose and objectives of the proposal as set out in section 5.2 are appropriate and consistent with the Authority's statutory objective? If not, why not?
Q12	Do you agree that the proposal is preferable to other options? If not, please explain your preferred option in terms consistent with the Authority's statutory objective.
Q13	In particular, do you agree that option 1 is better than option 4?
Q14	What are your views on the establishment of a centralised meter data store at some point in the future?
Q15	Do you agree with the assessment of benefits, costs and net benefits? If not,

	Question
	please explain your reasoning.
Q16	Do you agree that with the Authority's assessment that the proposed Code amendment meets the requirements of Section 32 of the Act?