

Submission of PowerNet Limited

To the Commerce Commission

On Default price-quality-paths for electricity distribution businesses from 1 April 2025 issues paper

15 December 2023

Introduction

1. PowerNet Limited (PowerNet) appreciates the opportunity to make a submission to the Commerce Commission (the Commission) on the issues paper default price-quality-paths for electricity distribution businesses from 1 April 2025.
2. PowerNet is an electricity management company with its head office based in Invercargill. It is a joint venture company, owned (50/50) by Electricity Invercargill Limited (EIL) and The Power Company Limited (TPCL). This submission is supported by EIL, TPCL, and OtagoNet Joint Venture (OJV).
3. EIL and TPCL established PowerNet in 1994 to achieve economies of scale through integrated network management across the Southern region's Electricity Distribution Businesses (EDBs). PowerNet manages the non-exempt EDBs of EIL and OJV, the exempt EDB of TPCL, and the non-grid connected Stewart Island Electric Supply Authority (SIESA).
4. PowerNet manages an asset base and investments in excess of NZ\$1 billion. The aggregated electricity distribution asset base managed by PowerNet is the fourth largest in New Zealand. It provides services to over 75,000 customers through more than 14,200 circuit kilometres. In addition to EIL operating in Invercargill and Bluff, TPCL operates in Southland and West Otago, OJV in the rural and coastal Otago region that surrounds Dunedin City, Lakeland Network (LNL) in the Frankton, Cromwell and Wānaka regions, and SIESA on Rakiura Stewart Island.
5. PowerNet has long-term management agreements in place with EIL, TPCL, OJV and LNL. With the benefit of integrated business management systems in place, PowerNet has a core purpose and expertise in asset management capability and delivering operating efficiencies and a sustainable network for the future of the EDBs it manages.
6. Alongside our own submission, PowerNet supports the Electricity Networks Aotearoa (ENA) submission in principle. Our submission reinforces some of the key points made in the ENA submission and addresses where the networks PowerNet manage wish to highlight or emphasise issues. This is not intended however to lessen the relevance or emphasis of any of the points in the ENA submission.

Customer service is important to us at PowerNet. If for any reason, we do not meet your expectations we would like the opportunity to work through a solution with you, please call our office on 03 2111899. If we are unable to resolve your concern, there is a free and independent resolution service available through Utilities Disputes Limited www.udl.co.nz

7. PowerNet also supports aspirations to reach net zero emissions that are not cost prohibitive. We acknowledge the important role distribution networks will play in supporting New Zealand's transition to a low emissions economy.

Key points

Regulatory Period

8. PowerNet views that the current five-year regulatory period is problematic. With increasing uncertainty, step changes, and the recognised rate of change, ensuring the regulatory regime is fit-for-purpose becomes increasingly important.
9. PowerNet acknowledges that reopeners are available, whereby allowing changes to be made to the five-year plan, however, they are costly, slow and resource hungry to engage in. Decarbonisation customers want to consider a variety of options and expect prompt decisions and turnarounds. The regulatory regime is not conducive to their needs. Allowing more flexible assessments and adjustments to regulated expenditure would allow for the adaptation and evolution of the energy industry that is required as we transition to a more renewable electricity system.
10. The five-year reset cycle and seven-year input methodologies review process is potentially leading to a set of rules that when applied could be 12 years old in some circumstances. This has effectively become too long in the planning cycle for EDB's. This goes together with ensuring that smart meter data is accessible to help determine consumer patterns of behaviour and therefore allow for future growth based on demand and need.
11. Any reduced timeframe for regulatory resets would also need to be balanced with the resources required to satisfactorily complete the planning process, and not place undue administrative burden on EDB's with a shorter timeframe. Alignment of the input methodology review period and price quality reset will provide a more current regime to deal with sector changes.

Deliverability

12. PowerNet, like many others throughout New Zealand, both within the electricity sector and across the infrastructure industry as a whole, need to actively manage the challenges around deliverability. This relates to issues around the labour market, supply chain and economic challenges, and global factors. While we acknowledge that deliverability is not an individual EDB concern, but a concern over the aggregated deliverability of the electricity industry and wider infrastructure industry, PowerNet is actively managing any challenges around this and seeking opportunities for collaboration and greater efficiency throughout the challenges faced.
13. PowerNet acknowledges there are short, medium, and long-term challenges in both recruiting and retaining industry resource, especially with the current ageing workforce challenges. While people resources provide particular solutions, this can and will be complemented with seeking innovative solutions to fill the capacity and resourcing required for the transition to a decarbonised and electrified New Zealand. We do acknowledge however that the current skills shortage in the industry is mirrored overseas and results in competition for resources domestically and globally.

14. PowerNet has recently begun the process of recruiting line staff from the Philippines to meet the basic demands of growth within the networks we manage, and to meet the current demand reflected through our approved Asset Management Plan (AMP). Additionally, PowerNet has an active domestic recruitment approach, including qualified and trainee intakes, and have established a talent pool through our existing corporate and field-based resource base and future applicants. We are cognisant that the demand for skilled resource will only grow, and our aging work force will need to be replaced faster than we have had to historically and acknowledge there will be competing demand for the same skills across the country, and further afield. However we understand the challenges ahead and believe resourcing for decarbonisation and electrification can and will occur with the right strategies deployed.
15. The challenge for industry resources is not limited to field staff, whereby the foreseeable increase in smart and transformational technology will see an increased need in cyber security alone, alongside an overall expansion in the requirement for engineering and corporate functions to plan for and support the field-based operations. Supplementing with external resource is an option, but if the resource is required enduringly, PowerNet will consider bringing that resource into the business permanently.
16. The challenges facing the industry for capacity and skill base are not insignificant. The projected increase in AMP forecast expenditure, followed by demand for distribution (the accelerated scale and volume of new connections) will place increasing pressure on the sector to continue to drive efficiencies and ensure there are innovative solutions to how we deal with this issue. Ensuring there is sufficient flexibility in the regulatory regime to allow for this will be paramount to the success of New Zealand's strive for net zero emissions, decarbonisation goals and electrification. This regulatory regime is not limited to industry specific and extends to areas such as immigration settings.

Resilience

17. PowerNet is confident that as best as it can be, resilience planning has been, and will continue to be, reflected in our expenditure forecasts. We support the ENA submission in that resilience is not a stand-alone project or cost category, rather embedded in the design, build, and operations of our networks.
18. The continued operation of critical infrastructure against all hazards is an exciting opportunity for all in the infrastructure sector. PowerNet, as a servicer of critical infrastructure is acutely aware of the need for resilient networks in an environment where the rate and scale of change is unprecedented.

19. Forecasting expenditure to reflect resilience in the network will require future-focussed thinking to be embedded in the asset life cycles, consideration of asset locations, and increased scrutiny around the materials we use. However, resilience extends beyond physical resources and will also include our systems, supply chains, communication and IT networks, and infrastructure outside our control. PowerNet is aware that the need to anticipate, prepare for, respond to, and recover from hazards is an increasingly important element of the electricity sector. As we move towards an increasingly electrified nation, the step changes required in asset development, and resilience planning will be reflected in the next regulatory period AMPs.

Step-changes

20. PowerNet acknowledges that there will be step-changes in DPP4. We support the ENA submission in identifying smart meter data access, cyber security and insurance as quantifiable examples of step changes that will be faced.
21. PowerNet has significantly increased expenditure across cyber security and insurance in the last 12 months. In addition, the revaluations of assets, impacted by global pricing and flow-on insurance premiums has seen a significant increase in asset replacement and repair valuations. In short, it will cost more to maintain the network at its current level, and additional costs required for growth and responding to distributed energy resources (DER) consumer demands.
22. While PowerNet is confident in being able to meet these challenges, there is an inherent need for the regulatory environment to support the step-changes needed that will help move New Zealand towards electrification targets. At the current pace of electrification and decarbonisation changes PowerNet is managing, our view is capex and opex allowances for DPP4 and future DPP's should be based on EDB 2024 AMP's and not wedded to a previous period where decarbonisation was barely on the horizon.
23. PowerNet would encourage the Commission to ensure that barriers to advancing investment at the right time and in the right places are minimised. For example, the PowerNet managed EDB's would not invest early in a way that may be inefficient due to perceptions of pace of change risk. We are mindful of lines pricing creating incentives for efficient customer investments, particularly in DER, however we do not expect customers to respond immediately to price changes. Investment decisions in DER (solar, EVs, batteries etc), rely on the customers' ability to secure funding to invest in these non-network solutions. Therefore it is appropriate for PowerNet to signal the value of these energy resources early so customers can see stability and return from their DER investments.

Capital contributions

24. PowerNet's view is that capital contribution policies should remain our responsibility to develop and not have intervention from policy makers. If capital contributions are being utilised by other EDB's for system growth, and extending beyond consumer connections and asset relocations, this should be discussed at a bespoke level, and not a more generalised approach across the industry.

25. As in any workably competitive market customers and EDB's should be free to negotiate terms and conditions of new large connection agreements to suit each other's commercial situations. This should not be subject to intervention from regulatory policy. For example, we have seen payments under a capital contribution arrangement vary significantly when a customer's financial position changed from bring cash constrained to surplus cash following a change in shareholding. Furthermore, our EDB's have changed capital contributions policies to cater for the changing environment brought about by the GIDI fund.

Other general comments

26. PowerNet provides a unique perspective, in that we manage both exempt and non-exempt EDBs. We are able to compare the differences this creates and better understand the challenges and opportunities of the regulatory environment. We have relevant experience of operating within the exempt and non-exempt frameworks, especially with current decarbonisation occurring in our region. It is explicitly clear to us that the settings for exempt EDBs are more conducive to meeting the needs of customers and the goals of decarbonising and electrifying the New Zealand economy. We are of the view that the current regulatory settings for non-exempt EDBs are inhibiting this transition, which in our view has unfortunately not been efficiently and effectively addressed in the Input Methodology review. It would be disappointing to see this continue by comparing costs to a DPP period where activity was different. The step change in EDB spending required from electrification and decarbonisation needs to be recognised by accepting the proposed 2024 AMP spends.

27. PowerNet also has a number of larger commercial contracts. Each of these is bespoke and responds to the individual needs of the customer for their own electrification requirements. Maintaining this flexibility is important to the PowerNet managed EDB's to ensure we continue to meet the needs of our network consumers.

28. The PowerNet managed EDB's cover a vast area of Southern New Zealand. We maintain the second largest pole population in the country and operate under a network management business model managing multiple EDBs. We are committed to diversification and growth and have vision to invest in renewable energy for a sustainable future.

PowerNet Contact

PowerNet contact for this submission is: Michelle Fowler-Stevenson
Regulatory and Risk Manager

Summary of consultation questions

Number	Request for comment or responses on initial views	Page
Chapter 2 – Context and challenges		

Number	Request for comment or responses on initial views	Page
1	<p>We are interested in your views on whether we have properly understood the changing industry context as it relates to the DPP4 reset.</p> <p>Have we properly understood and represented the changing industry context and are there other implications for the DPP4 you believe we should consider?</p> <p>1 Response:</p> <p>The Power Company Limited (exempt) has been at the forefront of the decarbonisation / electrification landscape.</p> <p>Customers expect quick responses, change their views from process heat to electrode boilers, have processing season deadlines (milk and meat), distributed generation (43MW wind farm) connections have tight timelines and others have been changing commercial needs leading to delays in timelines.</p> <p>Using the latest AMPS's available in this landscape will be important.</p>	18
Chapter 3 – Forecasting capital expenditure		
2	<p>We are proposing to adapt our approach to capex for DPP4 based on feedback from EDBs, that past expenditure is not a good starting point for considering future spend.</p> <p>Do you have any particular concerns or issues with our proposed approach? If so, how could these concerns or issues be resolved?</p> <p>What alternative data and external sources should we use to support our consideration of capex forecasts, beyond the information in 2023 Asset Management Plans (AMPs), responses to section 53ZD notices and 2024 AMPs, and why should these be used?</p>	27
2 Response:		
The last information available to the Commission should be used in this fast-moving electrification landscape, i.e. 2024 AMP's.		
3	<p>We are proposing to apply the capital goods price index to forecast capex allocations.</p> <p>Is there a more appropriate index which could be applied; and, if so, why?</p>	27
3 Response:		

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4	<p>We have concerns about the challenges in delivering increased programmes of work given current labour market, supply chain and economic challenges in New Zealand.</p> <p>How should our capex forecast take into account potential sector-wide deliverability constraints?</p>	27
4 Response:		
5	<p>We will be using the s 53ZD notice to collect information about how EDBs have reflected resilience in their expenditure forecasts.</p> <p>What engagement have EDBs had with consumers about resilience expectations, especially as it relates to significant step changes in forecast expenditure?</p> <p>What other considerations should we factor into our analysis of the resilience expenditure information collected from the s 53ZD notice and/or what is unlikely to be visible in the forecasts that we should consider?</p>	27
5 Response:		
6	<p>We would like to understand how potential changes in capital contributions policies could be accommodated in DPP4.</p> <p>How could changes to capital contributions policies, either in advance of or within the regulatory period, be accommodated within our capex forecasts for DPP4?</p>	27
6 Response:		
Large material contributions could be spread over the life of the asset in line with International Financial Reporting Requirements (IFRS).		

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7	<p>We are interested to understand if EDBs are assessing investments driven by expected pace of change which may not be consistent with choices otherwise made under a least cost lifecycle basis.</p> <p>Are there specific investment decisions being considered due to concerns on delivering increased scale of investment in limited time which are not consistent with a least cost lifecycle basis assessment; for example, areas where EDBs are intending to build well in advance of forecast need or for demand or generation that are only speculative?</p> <p>On what basis are these investments being assessed?</p>	27
<p>7 Response:</p> <p>We have pulled forward some capital projects to balance resources in areas and a recently signed electrode boiler conversion requiring in excess of \$30 million expenditure between Transpower and The Power Company Limited.</p>		
<p>Chapter 3 – Forecasting operating expenditure</p>		
8	<p>We are considering updating our approach to forecasting opex input price escalation to better reflect the mix of inputs EDBs face.</p> <p>Do you have a view on another index, or weighted mix of indices, which would improve the quality of opex forecasting compared to our current approach? (Using a 60/40 mix of percent changes in Labour Cost Index (LCI) all-industries and Producers Price Index (PPI) input indices.)</p> <p>If so, what evidence supports this view?</p>	34
<p>8 Response:</p> <p>An index could be used for changes through a regulatory.</p> <p>The latest AMP information should be used for changes between DPP periods..</p> <p>Continued incremental costs from matters such as Health and Safety (historic), traffic management (current increases), insurance (current increases), cyber security (current changes) tree regulations (and example of a potential unknown cost depending on MBIE / Government decisions).</p>		

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9	<p>We are considering revising our approach to scale growth trend factors, to better reflect EDBs increasing focus on investing to meet growth and renewal needs.</p> <p>Do you support our emerging view that including forecast capex as a driver of non-network opex could improve opex forecasts, and that this conclusion makes sense in terms of the way EDBs run their businesses?</p> <p>Are there alternative drivers that we should consider, and what evidence is there that they can meaningfully predict EDB scale growth?</p>	34
9 Response:		
10	<p>EDBs have identified that insurance costs have been increasing at a greater rate than other costs they face.</p> <p>What evidence do you have about how these costs are likely to evolve over time?</p> <p>Is the option of trending insurance opex forward using a separate cost escalator workable? How could incentives on EDBs to make risk management decisions be maintained?</p>	34
10 Response:		
<p>Other than costs increase in the current renewal we have no evidence of future cost increases.</p> <p>The EDB's managed by PowerNet are to establish insurance captives this year thereby increasing insurance costs to reflect the risk of today being met by the consumers of today.</p>		
11	<p>Given the possibility of a greater need for step-changes in opex in a context of industry transition, we have clarified further how we are thinking of applying the step-change criteria and the supporting evidence we expect.</p> <p>Do you consider the expanded descriptions of the step-change criteria provide sufficient clarity about the types of step-changes we consider meet the Part 4 purpose?</p>	34
11 Response:		

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Chapter 3 – Quality standards

12	Our initial view is to maintain the principle of no material deterioration and set quality standards on a basis consistent with that established in DPP3.	
	Do you agree with our proposed approach of maintaining the principle of no material deterioration and setting the quality standards on a basis consistent with DPP3? With regard to the quality standards, are the existing reporting obligations appropriate?	38

12 Response:

Ideally PowerNet would like to see improvement in quality metrics, however in the context of the current regulatory approach to what we see are low returns, incremental rolling incentive scheme penalties where increased customer work or cost increases outside an EDB's control occur we believe no material deterioration is appropriate.

Major increases in EDB reset revenues in the region of 40%-50% is expected to occur due to increases in WACC through the Risk-Free Rate increases, CPI increases in Regulatory Asset Bases and capex increases in DPP3.

We are very concerned that the Commission will put too much pressure on DPP4 capex and opex allowances that will have a relatively small impact on reset revenue and a material impact on EDB's ability to manage DPP4 quality.

13	Our initial view is to maintain the DPP3 settings of a 10-year reference period updated for the most relevant information and normalisation approach for major events.	
	Do you think that we should maintain a 10-year reference period updated for the most relevant information and normalise major events on the same basis as DPP3?	38

13 Response:

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14	<p>Our initial view is step changes in reliability, if appropriate, may be accommodated through setting of values or revisions to definitions.</p> <p>Are there identifiable step changes to reliability parameters for quality standards to manage operational or situational changes outside the control of the distributor compared to historical periods?</p> <p>What value and challenges do you see with different approaches to addressing inconsistencies in the recording of interruptions, the 'multi-count' issue, using either a proxy allocation basis or requiring a recast dataset? Are there alternative approaches which may appropriately address the issue?</p>	38
<p>14 Response:</p> <p>Normalisation seems to deal with extreme events outside and EDB's control. The EDB's we manage report interruptions as single count and record both single and multi-count.</p>		
15	<p>Our initial view is to not introduce new additional quality of service measures.</p> <p>Are there any other quality of service measures beyond those currently required within DPP3 that we should consider introducing, and why?</p>	38
<p>15 Response:</p>		
<p>Chapter 3 – Other issues</p>		
16	<p>Aurora Energy is scheduled to rejoin the DPP from 1 April 2026.</p> <p>Do you agree with how we propose to transition Aurora Energy to the DPP in 2026?</p>	40
<p>16 Response:</p>		

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17	<p>Section 53M(5) allows us to reduce the regulatory period if this would better meet the purposes of Part 4 of the Act. We are considering whether we should reduce the regulatory period from five to four years.</p> <p>What particular challenges do you perceive may arise from shortening the regulatory period?</p> <p>What are the potential benefits to consumers from maintaining or shortening the length of the regulatory period?</p>	40
17 Response:		
<p>A shortening in the regulatory period would address issues more quickly with the pace of change occurring in the sector. It would utilise more current information but add increased costs from a Commission and EDB perspective given it would occur five times in 20 years rather than four times.</p> <p>The reasons for reducing the regulatory period in our view are analogous with using 2024 AMP information as both will utilise more up to date information.</p>		
18	<p>The DPP sets annual deadlines by which suppliers must make Customised Price-Quality Path (CPP) applications to enter into effect the following year.</p> <p>Do you support retaining a similar approach to setting CPP application windows as was undertaken for DPP3?</p>	41
18 Response:		
19	<p>The current IMs provide for a discretionary shortening of asset lives.</p> <p>Do you have views on the framework for assessing accelerated depreciation applications?</p>	41
19 Response:		
Chapter 4 – Quality incentives		

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20	<p>Our initial view for DPP4 is to retain revenue-linked quality incentives for both planned and unplanned SAIDI, with targets, caps, collars, incentive rate and revenue at risk set on a consistent basis with DPP3.</p> <p>Are EDBs considering the quality incentive scheme (QIS) in their investment decisions?</p> <p>Do you consider the proposed settings are appropriate for the QIS, including whether the incentive rate is driving appropriate outcomes with regards to consumer quality expectations?</p>	45
<p>20 Response:</p> <p>Yes, we use the QIS changes that can achieved in prioritising investment decisions.</p>		
21	<p>Caution around treatment of non-performance of less proven solutions may create a reticence by EDBs to implement these types of solutions and result in a focus on more proven established technologies, typically, capex investments. Our intention is that the compliance with the quality standards and penalties under the QIS do not act as a potential impediment to innovation.</p> <p>How should we account for non-performance of non-network solutions (regulatory sandboxing)?</p>	46
<p>21 Response:</p>		
<p>Chapter 4 Innovation</p>		
22	<p>The regime's baseline incentives may be insufficient to support innovation, such that we consider it is appropriate to have an innovation (and/or non-traditional solutions) incentive scheme.</p> <p>Do you agree with our understanding of the regime's baseline incentives to support innovation, and the need for an innovation and/or non-traditional solutions scheme?</p> <p>Would you be interested in participating in a targeted workshop, and if so, are there any topics you consider should be covered?</p>	47

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22 Response:		
The narrow criteria for the DPP3 innovation allowance and small expenditure allowance have not caught our attention from costs benefit perspective.		
23	<p>We are interested in feedback on our initial thinking about how to design an incentive scheme to encourage innovation and/or non-traditional solutions in DPP4.</p> <p>What are your views on the key principles (see Attachment I)? Are they effective as the basis of an innovation and/or non-traditional solutions scheme? Are there others you think may be suitable?</p> <p>What are your views on the potential scheme design characteristics? Are they effective as the basis of an innovation and/or non-traditional solutions scheme? Are there others you think may be suitable?</p> <p>How could these principles and characteristics be best applied in designing a potential scheme? We would also welcome submissions with examples of overseas schemes/characteristics that you consider appropriate for a DPP.</p>	47
23 Response:		
Energy efficiency, demand-side management and reduction of energy losses		
24	<p>Our initial view is that a specific demand-side management and energy efficiency scheme is not required for DPP4.</p> <p>Is there a basis for strengthening the incentives for energy efficiency and demand-side management initiatives?</p>	49
24 Response:		
Consider an incentive for EDB's to invest in areas where we can reduce technical energy losses.		

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25	<p>We are not proposing to implement a QIS for line losses. We believe EDBs improved visibility of low voltage performance and improvements to the energy efficiency of distribution transformers should drive improvements in DPP4 without additional explicit incentives.</p> <p>Do you agree with our approach to not introduce a specific QIS related to reducing energy losses?</p>	49
25 Response:		
Yes.		
Chapter 5 – Setting revenue allowances		
26	<p>We are proposing to retain our approach of setting a ‘default’ X-factor of 0% (before considering price shocks or supplier financial hardship).</p> <p>We are interested in your views on whether this approach (where long-run changes in sector productivity are accounted for in our building blocks analysis) remains appropriate.</p>	54
26 Response:		
Should the X be negative given continued increases in imposed costs outside and EDB’s control such as recent examples of insurance, cyber prevention, and traffic management.		
27	<p>Our emerging view is to assess price shocks for consumers using the real change in aggregate distribution revenue from year-to-year, with a particular focus on the change between regulatory periods.</p> <p>Do you agree with this approach? If not, are there other alternatives we should consider?</p> <p>When applying this (or any other) analysis, what factors should we consider in determining whether a price change amounts to a price shock?</p>	54
27 Response:		
Our concern is that should a low cap remain in place that timing subsidies will begin to occur across EDB customers. i.e customers benefitting from low pricing received at the beginning of a regulatory period and catch-up high pricing at the end and even into the next DPP.		

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28	<p>Our emerging view is that financial hardship will be ‘undue’ only where it is to such an extent that it is inconsistent with the long-term benefit of consumers.</p> <p>Do you agree with this approach? If not, are there other alternatives we should consider?</p> <p>When applying this (or any other) analysis, what factors should we consider in determining whether a supplier faces undue financial hardship?</p>	54
28 Response:		
<p>EDB’s are incurring financial hardship at present with the balance between debt, investment and shareholder returns not being maintained.</p> <p>Shareholders are receiving little if any dividend returns and in some cases may drive owners to sell to get a return elsewhere in the medium term.</p>		
Chapter 5 – Consumer bill impacts		
29	<p>Previously we have forecasted indicative consumer bill impacts from information disclosed by EDBs. We are interested in understanding what other information may help refine our approach.</p> <p>What models or data inputs could be provided by EDBs which would improve our approach to modelling consumer bill impact?</p>	58
29 Response:		