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Dear Keston Ruxton

INPUT METHODOLOGIES REVIEW: RESPONSE TO DRAFT DECISIONS

Wellington Electricity Lines Limited (**WELL**) welcomes the opportunity to respond to the Commerce Commission's (**Commission**) draft decision on its review of input methodologies. Generally, WELL considers the Commission's draft decision represents a thorough consideration of the key issues. This submission outlines several matters where WELL considers the final decision should be further enhanced.

WELL's submission discusses several key issues outlined by the Commission, including the following:

- support for the introduction of a pure revenue cap, without restrictions around implementation, as the form of control;
- matters regarding both the cost of debt and cost of equity components of the weighted average cost of capital;
- step changes and re-openers for contingent or unforeseen projects are necessary for regulated businesses to recover their efficiently and prudently incurred costs;
- prudent expenditure associated with a catastrophic event should be able to be recovered, irrespective of whether the expenditure occurs before a CPP application to the Commission;
- expanding the provision for the Commission to reopen determinations will reduce regulatory certainty; and
- support for the Commission's approach to addressing uncertainty regarding emerging technologies.

WELL also supports the submissions provided to the Commission by the Electricity Networks Association (**ENA**).

1. Form of control

WELL supports the Commission's draft decision to introduce a pure revenue cap as the form of control. The complexity of the Commission's proposed constraints on the 'wash-up' account, however, is not required given the existing market pressures and incentives on electricity distribution businesses (**EDB**) to minimise price shocks to consumers.

Introduction of a pure revenue cap

WELL supports the Commission's draft decision to implement a pure revenue cap as the form of control for EDBs. As acknowledged by the Commission, the key reasons a revenue cap better promotes the long-term benefits of consumers relative to a weighted average price cap (**WAPC**) include the following:

- removing the potential for EDBs and consumers to incur windfall gains or losses as a result of quantity mis-forecasting;
- removing disincentives for EDBs to implement more cost reflective tariffs;

- removing disincentives for EDBs to participate in and encourage energy efficiency and demand-side management activities, which could assist to efficiently defer or reduce capital expenditure and therefore provide long term benefits to consumers; and
- providing positive incentives for EDBs to support energy efficiency and demand-side management initiatives that efficiently defer or reduce capital expenditure.

In reviewing the merits of a revenue cap, the Commission also published a separate letter submitted by the Electricity Authority (**the Authority**). This letter outlines the Authority's emerging view on the possible implications for efficient distribution pricing from adopting a revenue cap and poses a series of questions.

With the exception of matters under the Authority's jurisdiction, WELL considers the issues and uncertainties raised by the Authority were addressed by stakeholders in response to the Commission's emerging views paper (or through the Commission's consultation process, including its workshop). As requested by the Commission, WELL has provided responses to the Authority's questions as set out in appendix A of this submission. WELL concludes that the issues raised by the Authority do not impact on the draft decision to move to a revenue cap, and that the answers to the Authority's questions reinforce why a revenue cap is a better form of control than a price cap. This is consistent with changes made in other jurisdictions, such as Australia and the UK, where revenue caps have been introduced.

WELL is willing to meet with both the Commission and the Authority to discuss this topic further.

Implementation of a pure revenue cap

The Commission's draft decision proposed that annual revenue allowances be calculated with reference to a 'wash-up' account. This wash-up account includes constraints on annual average price increases, and a cap and collar mechanism applied to the balance and drawdown of this account. The input methodology, however, only introduces the provision for a cap and collar mechanism, and any decision regarding implementation would be made at the time of a default price-quality path (**DPP**) or customised price-quality path (**CPP**) determination.

WELL has previously outlined why the inclusion of a cap and collar on the drawdown amount introduces unnecessary complexity.¹ EDB's are facing significant uncertainty and substitution risk from emerging technologies. This is already impacting pricing decisions and market regulatory reviews of EDB pricing by the Authority. These impacts are expected to increase over time, and EDBs will need to develop service based and other pricing options to remain relevant to consumers.

Predictability and stability are also important for commercial and reputational reasons. For example, recent media coverage and the subsequent investigation by the Authority into Unison's solar PV tariff is a clear indication of the existing incentives to minimise price shocks to consumers. These factors provide strong incentives to ensure quantity forecasting is as accurate as possible when setting annual prices. A desire to minimise price shocks to consumers was an additional factor in WELL's decision to introduce better cost reflective pricing over several years.

Given the above, a cap and collar approach is an unnecessary regulatory step to mitigate the risk of significant price changes for consumers.

Further, WELL does not support a cap on the wash-up amount to ensure EDBs bear some risk if a major demand event occurs (e.g. a catastrophic event). For the following reasons, EDBs should be able to recover the expenditure required to prudently and efficiently operate and maintain the network:

- the purpose of Part 4 of the Commerce Act 1986 (**the Commerce Act**) is to promote the long-term benefit of consumers through outcomes that are consistent with those produced in competitive markets. This includes that suppliers of regulated goods or services have an incentive to invest—in particular, an ex-ante expectation of recovering the efficient costs of that investment. The Commission's proposed cap on the wash-up amount following a major demand event, however, limits the expectation that an EDB will recover

¹ See, for example: WELL, *Input Methodologies review – Commission emerging views*, 24 March 2016, p. 2.

their investment (i.e. previously allowed revenues that reflect projected efficient costs approved by the Commission);

- if the Commission does not allow the ex-post recovery of 'lost' revenue following a catastrophic event, it must provide an ex-ante allowance for catastrophic risk. This is consistent with the objectives of Part 4 of the Commerce Act, as in a competitive environment the costs of insurance are borne by consumers (as reflected through the price of goods). Similarly, providing an ex-ante allowance ensures an incentive to invest is maintained;
- allowing the ex-post recovery of lost revenue, however, is more efficient and better promotes the long-term interests of consumers. For example, WELL has previously demonstrated the corresponding insurance premiums for lost revenue risk are not economic. Further, the wash up mechanisms proposed in the Commission's draft decision (excluding the cap on the wash-up amount) would allow EDBs to smooth the recovery of lost revenue over time and thereby reduce price shocks to consumers. This is consistent with the existing incentives on EDBs to smooth price shocks, and mitigate the risk of short term abnormal pricing encouraging inefficient investment decisions on other technologies by consumers; and
- in a competitive environment, a firm faced with increased demand risk would likely respond by recovering its investment in long-lived assets over a shorter timeframe. As the asset lives of network infrastructure are beyond the control of EDBs (they are set under the regulatory framework), it is not clear why EDBs should bear the risk of a major demand event. This is particularly the case as any foregone revenue only represents that associated with the prudent and efficient recovery of its existing asset base, and the inability to recover the full cost of its existing assets will occur at the same time the EDB is funding additional expenditure for restoration and recovery of network services.

The Commission's draft decision also determined that a connections incentive scheme was not required under a revenue cap. WELL supports this decision, as the potential impact of emerging technologies in the energy sector already provides a strong incentive for EDBs to connect new customers.

Inflation

The advice provided to the Commission by Dr Lally stated that if the forecast inflation rate is an unbiased estimator of actual inflation then the business is able to recover the nominal regulatory cost of capital.² Dr Lally acknowledged that this methodology exposes businesses to some bankruptcy risk when inflation is lower than forecast (because the interest payments to debt holders are fixed in nominal terms). However, Dr Lally considered the Commission's inflation forecast errors are likely to be uncorrelated over time and therefore will tend to offset over time.

The Commission sets forecast inflation based on the forecast and target inflation rate from the underlying Monetary Policy Statement of the Reserve Bank of New Zealand (**RBNZ**). There is no analysis performed to confirm that this forecast has performed as an unbiased estimate of actual inflation historically. In fact, as outlined in the ENA's submission, the RBNZ forecast and target inflation rate is so diverged from the actual inflation that it could result in significant losses to EDBs.³ This is an unnecessary regulatory risk for both EDB's and consumers.

Further, WELL considers that an assumption that errors will offset over time is not a strong basis for not addressing this risk. The risk to consumers in the event the actual inflation is higher than forecast does not appear to have been considered either.

To mitigate these risks, WELL proposes the same inflation rate be used to determine both the building block allowance in the DPP model, and for rolling forward the regulatory asset base in the Information Disclosure reporting. Once the forecast and actual inflation rates used are the same, both EDB's and consumers will not be exposed to the regulatory inflation risk.

² Dr Martin Lally, *Review of further WACC issues*, 22 May 2016.

³ <http://www.nbr.co.nz/article/global-bond-markets-reserve-bank-there-no-inflation-jr-p-191656>

2. Cost of capital

WELL encourages the Commission to remain consistent with core principles when determining the approach to estimating the cost of capital. For the reasons set out below, the determination of the weighted average cost of capital (WACC) should be further amended.

Cost of debt

Methodology

WELL continues to advocate the benefits of adopting a trailing average approach to setting the cost of debt. A trailing average approach is consistent with the debt management practices of a business operating in a competitive market. In particular, it aligns with the staggered approach a prudent business is required to take for mitigating refinancing risks. The trailing average approach, therefore, better promotes an outcome that is consistent with the intent of the Commerce Act to enable workably competitive outcomes.

The trailing average approach also benefits consumers by significantly reducing the risk that prices may be higher or lower than the average interest rate over time, simply because the 'on the day' rate occurred at a high or low point in interest rate cycles. Debt capital markets over the next seven years, for example, could see significant fluctuations in interest rates with multiple global uncertainties. The current extended lower-than-average interest rate cycle is unlikely to be sustained, and by 2019 (i.e. the next DPP WACC pricing period) interest rates could be considerably higher. It is easy to foresee the advantages of a trailing average approach for both consumers and businesses in this scenario.

In contrast, the 'on the day' approach reflects the cost of debt of a business that raises all debt required to satisfy its financing needs once for every regulatory control period. This approach exposes both businesses and consumers to unexpected movements in interest rates and debt margins. This does not align with the prudent debt management practices of businesses investing in long-lived infrastructure. Refinancing risk is a key business risk that needs to be effectively managed and businesses must mitigate this risk to remain competitive.

The advice provided to the Commission by Dr Lally is highly academic. It does not reflect actual debt management practices. WELL considers it is necessary for the Commission to reflect actual practices to be consistent with the requirements of the Commerce Act to promote outcomes consistent with those in workably competitive markets.

The Commission also identified the following issues in its draft decision in respect of adopting a trailing average approach:

- Overcompensation to suppliers because of the proposed increase in term to 10 years from five years – The Commission has assumed the difference in yield of a 10 year bond sample over the five year bond sample will be higher than the hedging costs associated with the 'on the day' approach. This may not be correct, as the term spread between five and 10 year bonds will vary depending on a range of factors (and can even be negative). Hedging costs, however, can be significant and will always be greater than zero.
- Lengthy process and significant debate – The Commission raised concerns that the adoption of a trailing average approach in Australia, including the transition process, involved a lengthy consultation period and substantial debate. WELL notes, however, that all Australian businesses and consumer groups have supported the adoption of the trailing average approach. Further, the debate on the transition to a trailing average reflected ambiguity in the newly drafted National Electricity Rules (in relation to whether the AER was required to consider the actual financing practice of businesses, or the financing practice of a benchmark efficient entity).⁴ This ambiguity is not relevant in the New Zealand context, as the Commission itself is drafting the input methodology for measuring the cost of debt (i.e. the Commission can draft the input methodology to be unambiguous in how any transition should apply).
- Hybrid approach – The Commission also discussed the hybrid cost of debt approach where only the swap component is determined using 'on the day' approach and the debt risk premium (DRP) component is

⁴ See National Electricity Rules (<http://www.aemc.gov.au/getattachment/4b7d522a-622b-41f6-8392-0d4a9ad0514c/National-Electricity-Rules-Version-82.aspx>), clause 6.5.2(c) and 6.5.2 (k).

determined using a trailing average. WELL considers this to be a superior and practical approach compared to the 'on the day' approach, as it recognises that debt margins cannot be hedged by EDB's. A further alternative that is consistent with the reasons set out in support of a trailing average approach is for the Commission to apply the DRP trailing average immediately, but transition the risk free rate component to a trailing average approach over a 10 year period.

- High administrative costs – The Commission considers the introduction of a trailing average approach will result in large upfront administrative expenses, as it will result in substantial policy changes. Whilst there will be upfront costs, the Commission should be cognisant of future cost efficiencies that will arise. A simple trailing average approach is expected to significantly reduce time and effort required to consult on cost of debt matters in the future. There may be short term benefits from consistency of methodology approach, but the input methodologies review provides the appropriate opportunity to consider longer term benefits. WELL recommends the Commission give greater weight to the long term benefits of the industry and consumers in making its final decision. A trailing average approach is a practical cost of debt management strategy, that reduces volatility in the regulatory estimates (and consequently consumer tariffs) and the need for extensive consultation on the matter in future.

The Australian Electricity Regulator (AER) also considered these issues in moving from 'on the day' approach to a trailing average approach in its 2013 Rate of Return Guideline. Specifically, the AER concluded the following:

We propose to apply a trailing average portfolio approach to estimate the return on debt. This approach means that the allowed return on debt more closely aligns with the efficient debt financing practices of regulated businesses and means that prices are likely to be less volatile over time. The trailing average would be calculated over a ten year period. The annual updating of the trailing average should also reduce the potential for a mismatch between the allowed return on debt and the return on debt for a benchmark efficient entity.

...

In addition to the considerations above, the trailing average portfolio approach provides the following benefits:

- *It smooths movements in return on debt over a number of years. We consider this would result in lower price volatility (from one regulatory control period to the next) for energy consumers and more stable returns for investors than the 'on the day' approach. Consideration of consumer price volatility is an important factor, since the price volatility affects intertemporal decisions of energy consumers and hence affects the overall efficiency of economic outcome.*
- *It minimises the consequences of a single measurement error.*
- *It may be more reflective of the actual debt management approaches of non-regulated businesses. It might, therefore, be more likely to represent efficient financing practices.*

WELL considers the benefits of a trailing average approach—as outlined—are compelling. Together with international precedents, they demonstrate that a trailing average is a materially better approach to determining a benchmark cost of debt aimed at replicating workably competitive outcomes. The input methodology review provides a clear opportunity to revisit the Commission's current approach and ensure that businesses are adequately financed and resilient to adverse market conditions. It should encourage business to raise long term debt that is consistent with the life of assets as well as reducing the risk of refinancing. The Commission, therefore, should re-evaluate its draft decision taking all factors into consideration, and not be overly reliant on the requirement of NPV=0 (noting, however, that the trailing average is compliant with the NPV=0 rule, and minimises any mismatch between the actual efficient costs of the business and the benchmark efficient costs of business).

Measurement under 'on the day' approach

In his review of further WACC issues, Dr Lally advised the Commission to widen the averaging period from one month to three months. Although the intent of this proposed change is good, a three month period is no better than a one month period, as it is neither efficient nor practical for EDB's to hedge continuously over three months (i.e. to hedge against the regulatory benchmark). In particular, it will result in hedging very small amounts, which will incur higher hedging costs. To avoid this, EDB's will be forced to hedge over an interim

period within the three month window, making it impossible to achieve a cost of debt that aligns with the regulated cost of debt allowance.

A three month averaging period is also unlikely to mitigate the New Zealand market issue of limited supply when multiple parties are required to transact in the same narrow pricing window. Instead, to the extent the Commission's preference is to have the same cost of debt estimate for all EDB's (requiring, therefore, the same market pricing period), this is best achieved through adopting a trailing average approach. If the Commission adopts a 10 year trailing average approach, EDB's would be required to raise only small amounts of debt each year, avoiding the market liquidity (and pricing distortion) problem noted above.

Measurement of debt risk premium

WELL considers the use of a trailing average approach will mitigate the need for estimating the DRP component separately to the risk free rate. This will reduce the level of analysis and approximation required when estimating the cost of debt.

Further, WELL has the following concerns with the advice provided to the Commission by Dr Lally, and the Commission's subsequent approach for measuring the DRP:

- Dr Lally noted that a mismatch on the DRP may lead to a higher MRP during the same period, and relies upon US data to prove this. Dr Lally, however, also stated this does not imply that a more variable estimate of MRP should be used, as short term variations in MRP cannot be reliably estimated. WELL considers there is circularity in this argument, and the Commission should not use this to form any conclusions. The reliance on US market data (and not NZ market data) should be interpreted with caution because it is not clear how the historical US market data is of direct relevance to the current NZ domestic capital market;
- WELL also disagrees with Dr Lally's view that the tenor used for estimating a trailing average DRP be seven years (which appears to be based on average tenor data from 2010). Using the data collected from EDBs, the weighted average tenor of bonds issued by firms is 10.4 years, while the average tenor is 9.3 years. Adopting a tenor of seven years, therefore, is not consistent with current practice and would likely undercompensate the larger EDB's and increase refinancing risks. WELL recommends the Commission determine its cost of debt assuming the efficient benchmark is a reasonably large size firm that issues long term bonds. Specifically, the Commission should adopt a 10 year tenor for measuring both the trailing average interest rate and DRP component. This is consistent with international practices and the Commission's view on estimating the debt premium—for example, the Commission considers yields to maturity for the pool of corporate bonds issued by companies that have similar characteristics to a notional benchmark supplier;⁵ and
- the Commission stated it will now use bonds issued by companies that are owned by the Crown or local authority in estimating the cost of debt. Approximately half of the companies the Commission currently considers when estimating the debt premium are majority owned by the Government. Bonds backed by Governments are lower risks assets for investors and therefore are likely to understate the debt premium faced by a private operator. As such, the resultant debt premiums will be conservative. The Commission could instead take a broader approach and use foreign bonds issued by New Zealand businesses. Notably, the AER relies on the Reserve Bank of Australia's BBB data curve (which includes foreign bonds issued by Australian businesses) for the measurement of benchmark efficient cost of debt. WELL recommends the Commission adopt a similar approach, and expands its bonds sample to include foreign bonds issued by NZ businesses. These bonds form over 50 per cent of the bonds issued by NZ businesses, of which 38 per cent are denominated in USD. The Commission can use this data to calculate more reliable estimates of the cost of debt.

In the event the Commission does not use foreign bonds, WELL also supports the position set out by the Competition Economists Group (CEG) in its report commissioned by the ENA.⁶ This report is further discussed in the ENA's submission in response to the Commission's draft decision. As stated by the ENA, it is unclear what, if

⁵ Commerce Commission, *Input methodologies review draft decisions, Topics Paper 4: Cost of capital issues*, June 2016.

⁶ CEG, *Review of the proposed TCSD calculations*, August 2016.

any, restrictions were placed on the quality of data used by the Commission in its term credit spread differential (TCS D) calculation. Excluding low quality data could have a significant impact on the results. In this regard, it is notable that Bloomberg assigns each bond yield observation a 'BVAL score' from one to 10 (with a higher number denoting a higher quality or reliability of the yield estimate), and in developing its BVAL curve, only uses bonds with minimum BVAL score of six.

Gearing

WELL is concerned that the Commission has lowered the gearing level to 41 per cent (from 44 per cent). WELL recommends the Commission leave the gearing level unchanged, as this is consistent with the approach the Commission applied in determining the values of asset beta and TAMRP.

For example, the Commission estimated the value for the asset beta based on the same market data set used to estimate the gearing level. This sample suggested a value of 0.35 (compared to the current value for the asset beta used by the Commission of 0.34). Unlike its approach to gearing, however, the Commission chose not to update the value for the asset beta, citing limited precision in its measurement approach. WELL supports this reason, but considers it should be applied consistently (i.e. the gearing level should also be left unchanged).

WELL also notes that although the updated market evidence supported a TAMRP value of 7.1 per cent, the Commission chose to adopt an MRP of 7.0 per cent.

Cost of equity

Measurement of risk free rate

The Commission proposes to use a five year risk free rate for measuring cost of equity. This approach is not commensurate with international practices, and WELL provided a number of reports to the Commission in response to its update paper on this issue. These reports included those from SFG Consulting (SFG) that concluded the following:

- it is not necessary to set the term of the risk-free rate to the length of the regulatory period to preserve any NPV=0 principle (were this to be the accepted objective);⁷
- the almost universal practice of independent expert valuation professionals is to use a 10-year term to maturity when estimating the risk-free rate in asset-pricing models;⁸ and
- the only deviation from that dominant practice occurs where the expert notes that the life of the assets being valued is less than ten years.⁹

WELL considers there is a strong case for extending the risk free rate from five years to 10 years when determining the cost of equity as it better aligns with expert valuation practices and the long lived nature of EDB investments. It is unclear, however, how the relevant reports have been considered by the Commission in forming its draft decision. WELL encourages the Commission to consider this material as it was relied on by the AER to conclude that a 10 year tenor for measuring the risk free rate is more reflective of the long-lived nature of electricity infrastructure assets.

The Commission should also consider adopting a one year averaging period when determining the risk free rate for the cost of equity. This approach will reduce the volatility associated with short term movements in interest rates. This issue may be further discussed at the Commission's forthcoming WACC workshop.

Equity raising costs

Equity raising costs are paid by an entity when it raises equity from new or existing shareholders. These costs include legal and investment banking fees (e.g. brokerage, due diligence and underwriting fees). New equity is needed to maintain a given capital structure (in the case of benchmark operator, a 44 per cent gearing ratio) and credit rating (BBB+). Equity raisings are especially required when capital expenditure grows faster than revenues.

⁷ SFG, *Response to QCA approach to setting the risk free rate, Report for Aurizon Ltd*, March 2013.

⁸ SFG, *Evidence on the required return on equity from independent expert reports*, June 2013.

⁹ SFG, *Evidence on the required return on equity from independent expert reports*, June 2013.

The draft input methodologies do not compensate EDB's for equity raising costs incurred when financing capital expenditure. These are efficient costs, and like debt issuance costs that the businesses incur (should be compensated for).

The AER explicitly compensates EDB's for equity raising costs in their post-tax revenue model (**PTRM**).¹⁰ For example, in its October 2015 draft decision for Victorian businesses, the AER stated the following:

Equity raising costs are an unavoidable aspect of raising equity that would be incurred by a prudent service provider acting efficiently. Accordingly, we provide an allowance to recover an efficient amount of equity raising costs.

WELL recommends the Commission consider the AER's methodology for estimating equity raising costs, and provide an allowance for these efficiently incurred costs.¹¹

WELL appreciates the Commission arranging a workshop to discuss cost of capital matters and considers the above topics to be key matters for further discussion at the workshop. WELL considers it important that any additional material is provided well in advance of the workshop to enable an informed and efficient discussion on key matters.

3. Customised and default price-quality path requirements

The Commission's draft decision set out a number of changes to the DPP and CPP processes. WELL supports many of these changes, as they facilitate a simple and cost-effective assessment approach. This includes the following elements of the Commission's draft decision:

- broader application of the proportionate scrutiny principle;
- the alignment of CPP information requirements with the broader information disclosure requirements (**IDRs**);
- the alignment of the cost of capital for CPPs and DPPs;
- not introducing a constant price revenue growth (**CPRG**) reopener (subject to the implementation of a revenue cap);
- expanding the range of pass-through costs that can be included at the time of a DPP determination;
- the quality standard reopener only be initiated by EDBs; and
- DPPs can be reopened by the Commission to address 'workability' constraints.

The Commission's draft decision, however, did not accept several other proposals that would provide EDBs with sufficient flexibility to recover their prudent and efficient costs. For example, it is not clear how the Commission's draft decision promotes the long-term interests of consumers in regards to the following:

- rejection of DPP reopeners (or alternatively, mini-CPP) for single, discrete issues such as step changes, and contingent or unforeseen capital expenditure projects;
- restricting EDBs from recovering prudent expenditure incurred prior to the application of a CPP (particularly following catastrophic events); and
- expanded error provisions that allow the Commission to reopen its decision to correct errors based on the misuse of data.

These issues are discussed in detail below.

¹⁰ <http://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/post-tax-revenue-models-transmission-and-distribution-%E2%80%93-january-2015-amendment/final-decision>

¹¹ <http://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/post-tax-revenue-models-transmission-and-distribution-%E2%80%93-january-2015-amendment/final-decision>

Step changes and reopeners for contingent or unforeseen projects

As set out in response to the Commission's emerging views paper, a gap exists in the regulatory framework for circumstances where an EDB requires expenditure above historic levels (e.g. for a specific capital program), but that expenditure is not sufficiently material to justify undertaking a full CPP application. In effect, WELL proposes a 'mini-CPP' or DPP reopener option for these circumstances.

A relevant example is the efficiency of undertaking seismic strengthening works to improve the resilience of key assets and likely restoration times in the event of a catastrophic earthquake. Such an approach is arguably a more effective and cost efficient form of insurance compared to high upfront premiums which deliver no benefit to expected restoration times for consumers. It is also a specific program of work that is not required to meet current reliability thresholds and is discretionary in purpose. Thus it should be able to be dealt with through a DPP reopener and not require a full re-evaluation of all capital expenditure plans. Without an allowance above its historical expenditure, WELL would not be able to fund such a program notwithstanding it is in the long-term interests of consumers. Equally, without a DPP reopener option, WELL will be required to undertake an extensive CPP process, re-evaluating the entire capital programme, which is not affected by this discretionary specific purpose expenditure programme.

In its draft decision, however, the Commission cited three key reasons why it considered provisions for step changes and contingent or unforeseen expenditure projects were not required—a review of incremental expenditure was not sufficient as a DPP does not fully assess an EDB's historical expenditure; single-issue reopeners may be asymmetric; and any such reviews are unlikely to be low-cost.

For the following reasons, WELL does not support the Commission's draft decision:

- under the existing regulatory framework, an EDBs expenditure forecast is based on its historical actual expenditure. It is inconsistent for the Commission to assume historical expenditure represents an efficient basis for forecasting future allowances, yet at the same time, not allow forecast incremental expenditure as the underlying allowance has not been appropriately scrutinised. This is particularly the case with the introduction of the Commission's incremental rolling incentive scheme (**IRIS**);
- the cost of single-issue reviews can be limited by narrowing the scope of projects that can be assessed as a DPP reopener. In particular, WELL accepts that a materiality threshold may be justified, whereby discrete projects with forecast costs above this threshold would be assessed under a full CPP process. For example, a materiality threshold could require the specific program of works the subject of the DPP reopener to be no more than 30 per cent of the annual total capital expenditure requirement over the DPP period (above which an EDB would be required to apply for a CPP). Applying this approach to WELL's circumstances, a seismic strengthening program totalling \$40 million over the DPP period may be the subject of a DPP reopener, whereas a \$50 million program would require a CPP. WELL is open to further discussion with the Commission on any additional criteria, but maintains there is a gap in the regulatory framework for circumstances where historical expenditure is not sufficient, yet a full CPP application is not warranted; and
- single-issue DPP reopeners are not expected to be asymmetric, as EDBs would still be required to clearly demonstrate why the incremental expenditure is in the long-term interests of consumers.

Recovery of prudent expenditure

The existing regulatory framework facilitates the recovery of prudent expenditure incurred following a catastrophic event (beyond the allowance set out in the DPP), so long as the expenditure is incurred after the submission of a corresponding CPP. However, it appears there is no means to recover prudent expenditure incurred after a catastrophic event, but before a CPP application is submitted to the Commission.

Consistent with the view set out in response to the Commission's emerging views paper, it is not clear how such restrictions are in the long-term interests of consumers. In particular, WELL has the following concerns with the Commission's proposed approach:

- it creates an incentive for EDBs to delay expenditure in response to a catastrophic event until after a CPP application has been developed, or submit a less developed CPP application to the Commission. This has insufficient regard to the complexity and requisite effort likely required in developing a robust and fulsome

CPP application. This complexity would be exacerbated following a catastrophic event, where the state of network assets may be unclear and restoring reliable supply is necessarily a priority;

- EDBs will still face an incentive to submit a CPP application as soon as practicable under WELLS proposal (from a cash-flow perspective). For example, the sooner a CPP process is completed, the sooner prudent expenditure could be recovered through future revenues; and
- responding to a catastrophic event requires urgent high-quality decisions that are focused on restoring power to consumers as safely and efficiently as possible. There should be no perceived or real impediments to this occurring because of regulatory uncertainty regarding full recovery of prudent and efficient costs.

Expanded error provisions

The draft input methodology proposed by the Commission includes the provision for it to reopen a DPP or CPP to address the situation where a price-quality path was set on the basis of any type of error. This could include cases where incorrect data was used in setting the DPP, or where the data was correct but was applied incorrectly. WELL does not support the Commission's proposed expanded error provisions.

The ability for the Commission to initiate reopener provisions for errors should be limited. The Commission's determination process already includes multiple stages, including a draft decision and substantial stakeholder engagement. This provides ample time for the Commission to test any data and information provided by stakeholders, and to undertake a robust and fulsome quality assurance of its decision. Providing the Commission an additional safety-net, therefore, introduces a moral hazard that may incentivise lower quality decisions.

The expanded error-correction provisions will also erode the level of certainty that applies to the Commission's final decision. The Commission appears to recognise the importance of regulatory certainty in its decision to only allow the quality-path to be reopened on application from an EDB. For example, the Commission noted there is a natural tension between offering regulatory certainty over the period, and reducing asymmetry. Given the decision making process outlined previously, the correction of errors by the Commission does not represent an issue of asymmetry. WELL considers that the expanded error provisions as drafted are not consistent with section 52R of the Act, which states that the objective of the input methodology is to promote certainty.

4. The future impact of emerging technologies in the energy sector

WELL supports the Commission's draft decision to allow EDBs to apply for net present value (NPV) neutral shortening of their remaining asset lives. The principle of the Commission's proposed approach is a prudent response to uncertainty that exists regarding the timing and magnitude of the impact of emerging technologies in the energy sector.

The proposed cap (i.e. 15 per cent) and restriction on applying for shortening of asset lives more than once, however, are unnecessarily restrictive. Consistent with the view expressed by the ENA, WELL considers the approach should be uncapped and open to multiple applications. This better reflects the dynamic nature of emerging technology (i.e. it can change quickly and multiple times), and that the Commission retains the ability to assess EDBs applications.

It is also important for the Commission to engage with EDBs to ensure the application process is workable. Any such consultation should be undertaken as soon as possible to enable EDBs sufficient time to prepare applications before the next DPP determination.

The ENA submission expands further on the additional issues raised by the Commission regarding the future impact of emerging technologies. WELL supports the ENA's position and reasons, including the following:

- EDB investments in emerging technologies should not be ring-fenced;
- the avoidable cost allocation methodology (ACAM) threshold should not be reduced; and
- the Commission should not develop a revenue allocation input methodology at this time.

5. Conclusion

WELL appreciates the continuing opportunity to contribute to the Commission's review of the input methodologies. If the Commission has any queries regarding WELL's submission, please do not hesitate to contact Jeff Anderson, Regulatory Projects Manager, at janderson@welectricity.co.nz.

Yours sincerely



Greg Skelton

CHIEF EXECUTIVE OFFICER

APPENDIX A: Form of control—response to the Authority's questions

This appendix sets out WELL's response to each of the specific questions set out in the Authority's submission to the Commission.

1. To what extent would a revenue cap affect the incentives on distributors to change to more efficient pricing structures, compared to a WAPC?

The introduction of a revenue cap will not affect the incentives on EDBs to adopt efficient pricing structures. In particular, cost reflective pricing is better incentivised under a revenue cap because of the opportunity to efficiently defer network investment and benefit under the IRIS (e.g. under the IRIS, EDBs retain 15 per cent of the value of the financing costs and depreciation associated with the efficiently deferred capital expenditure). Efficient deferral could arise where peak demand pricing shifts consumption to lower demand periods and therefore augmentation can be efficiently deferred or mitigated.

Under a WAPC, EDBs have a theoretical incentive to price based on the price sensitivity of demand and expectations regarding relative growth rates across customer groups and tariff types. This is considered efficient to the extent that pricing reflects customer willingness to pay. Importantly, it does not necessarily reflect cost reflective pricing.

Cost reflective pricing sends appropriate signals to customers regarding the costs of using the network at different times, and compared with alternative energy sources. Cost reflective pricing, therefore, will mitigate the risk of inefficient investment in both the network and non-network alternative energy sources. As noted above cost reflective pricing is better incentivised under a revenue cap.

The Authority also noted that the AER's reasons for replacing the WAPC with a revenue cap for NSW distribution networks may not apply in NZ because some of the larger NZ EDBs are privately owned, well-resourced and obliged to preserve shareholder value. The AER, however, also applied a revenue cap to EDBs in other states under its jurisdiction, including Victoria and South Australia, where all the EDBs are privately-owned. The AER cited the same reasons for its decision to move from a WAPC to a revenue cap in all jurisdictions. Privately owned EDBs in the UK are also regulated under a revenue cap.

2. What is the likelihood that distributors under a revenue cap would set inefficiently high prices for certain services or customers?

For the following reasons, setting inefficiently high prices for certain services or customers is unlikely to be in the interests of EDBs:

- it would result in increased competition from alternative energy sources, and as such, erode the value of the network and increase stranding risk. As noted in section 1, EDBs are now facing unprecedented competitive threats from emerging technologies. These impacts are expected to increase over time, and contrary to the Authority's concerns, EDBs will need to develop service based and other pricing options to remain relevant to consumers;
- predictability and stability are also important for commercial and reputational reasons, and provide strong incentives to ensure quantity forecasting is as accurate as possible when setting annual prices (i.e. to minimise price shocks to customers). This is also discussed further in section 1; and
- asset specific or location specific pricing is very uncommon, and retailers would be unlikely to pass on such pricing as they typically bundle prices across consumers.

The Authority also questioned whether EDBs would set inefficiently high prices to reduce the need for future capital expenditure. However, if actual capital expenditure is inefficiently low during a regulatory period the Commission's method of forecasting capital expenditure—which is based on historical expenditure—would lead to lower future allowances and therefore lower revenues in the next regulatory period.

3. Have any distributors operating under a revenue cap been observed engaging in this pricing behaviour?

We are not aware of any jurisdiction where such pricing behaviours have been observed in practice. In contrast, a desire to minimise price shocks to consumers was a factor in WELL's decision to introduce better cost reflective pricing over several years. This is consistent with the response to question two above

(i.e. revenue predictability and stability are important for commercial and reputational reasons, and efficient prices will ensure EDBs remain relevant to consumers as new technology emerges).

WELL also notes that other jurisdictions have found a WAPC is not likely to lead to efficient pricing behaviour. For example, the AER found that any theoretical benefits of a WAPC have not eventuated in practice because they rely on assumptions that do not apply to electricity EDBs, including the following:¹²

We [AER] consider the WAPC's theoretical advantages have not eventuated in practice because they rely on assumptions that do not apply to electricity distributors. These assumptions include:

- distributors have the expertise, incentive, infrastructure and independence to set prices to maximise profit ...*
- pass through of distribution costs to consumers ...*
- fully informed consumers ...*

The AER considers that where these assumptions do not hold the WAPC does not provide an incentive to set efficient prices.

4. To what extent has the limited penetration of smart meters in the past acted as a barrier to the introduction of efficient distribution pricing?

The limited penetration of smart meters contributes to the difficulty of implementing efficient pricing under both a WAPC and a revenue cap. For example, access to smart meter data remains a barrier to efficient pricing because of the following:

- WELL currently has around 70 per cent penetration of smart meters for residential consumers. If WELL adopted pricing structures that required smart meter data, therefore, these pricing structures would be unavailable for 30 per cent of our customers;
- not all smart meters are identical, and the differing functionality may require considerable costs to re-configure meters to facilitate pricing structures that are available to all customers; and
- the data necessary to implement more efficient pricing (or to assess more efficient pricing options) is not necessarily available (e.g. due to meter specification issues, or difficulties accessing the data from the data owner).

5. To what extent have the low fixed charge (LFC) regulations acted as a barrier to the introduction of efficient distribution pricing in the past (given the prevailing interpretation of the regulations)?

LFC regulations have acted as a barrier to efficient pricing by limiting the value of fixed charges. It is informative, however, that LFC regulations do not exist in other jurisdictions where WAPCs have not incentivised efficient pricing behaviour.

6. To what extent does the prospect of emerging technologies influence distributors' pricing decisions? How is this influence developing over time?

EDBs are now facing unprecedented competitive threats from emerging technologies. These impacts are expected to increase over time, and in response, EDBs will need to develop service based and other pricing options to remain relevant to consumers.

Cost reflective pricing sends appropriate signals to customers regarding the costs of using the network at different times, and compared with alternative energy sources. Cost reflective pricing, therefore, will help EDBs and consumers mitigate the risk of inefficient investment in both the network and non-network alternative energy sources (e.g. emerging technologies). As noted previously, cost reflective pricing is better incentivised under a revenue cap.

WELL also notes that the Authority listed several factors it considered may better promote efficient pricing under a WAPC in future—smart meters, emerging technologies and clarification that peak demand and

¹² See, for example: AER, *Stage 1 Framework and approach paper*, Ausgrid, Endeavour Energy and Essential Energy, March 2013, pp. 48–49.

capacity charging is permitted under LFC regulations. Other factors remain, however, that would continue to contribute to inefficient pricing structures under a WAPC:

- the incentive under the WAPC to seek windfall revenue gains by continuing to rely on consumption based pricing when aggregate consumption is growing;
- the incentive under the WAPC to protect against unrecoverable losses occurring when consumption is declining;
- political pressure to minimise price shocks to customers; and
- compliance risks (e.g. risk of breaching the price path).

7. Could the WAPC be administered in such a way as to reduce barriers to changing price structures resulting from compliance requirements (e.g. considering rules around use of lagged volumes and allowing distributors to take customer response into account)?

As outlined in response to question six, several factors remain that would continue to contribute inefficient pricing structures under a WAPC.

8. Are there any other impediments to the introduction of more efficient pricing under a WAPC? How could these impediments be addressed?

As outlined previously, where there is potential for growth to exceed the Commission’s forecast, a WAPC will continue to incentivise EDBs to rely on consumption based pricing. No such incentive exists under a revenue cap, as revenue is independent of volumes. WELL considers the optimal regulatory solution to current pricing impediments is a change in the form of control to a pure revenue cap and the removal of the pricing constraints imposed by the LFC regulations.

9. To what extent could distributors reduce the quantity forecasting risk they are exposed to through their choice of pricing structure?

The Authority stated that other businesses are subject to forecasting risk and thrive. There are key differences, however, between unregulated businesses and regulated EDBs. For example:

- unregulated businesses undertake their own forecasting, whereas under a DPP the Commission determines the forecast, which does not take account of network-specific demand characteristics;
- unregulated businesses may adjust quantity and quality of goods and services to mitigate forecasting risk. EDBs are limited in this due to regulation of quality of supply and the essential service nature of electricity; and
- the consumption of electricity relates to a range of factors, including weather variability and not just tariff prices. EDBs, therefore, have less control over demand for services than unregulated goods and services (where demand is more directly linked to price).

10. What is the likelihood that bearing quantity forecasting risk could provide distributors with incentives to price more efficiently?

Bearing quantity forecasting risk provides EDBs an incentive to set prices based on consumption patterns and consumer type. Although this may be considered efficient to the extent that pricing reflects customer willingness to pay, it does not necessarily reflect cost reflective pricing. As outlined previously, cost reflective pricing sends appropriate signals to customers regarding the costs of using the network at different times, and compared with alternative energy sources. Cost reflective pricing, therefore, will better mitigate the risk of inefficient investment in both the network and non-network alternative energy sources.

Further, EDBs should not be subject to revenue risk resulting from the Commission’s quantity forecasting methodology. The revenue allowance determined by the Commission through the building blocks methodology is intended to reflect the efficient costs of operating the distribution network. Efficient costs are not driven by aggregate energy consumption and, therefore, revenue should not be dependent on aggregate energy consumption.