09 October 2019

Dane Gunnell

Acting Manager, Price-Quality regulation

Commerce Commission

regulation.branch@comcom.govt.nz

wellington electricity

Wellington Electricity
Lines Limited

85 The Esplanade
Petone, PO Box 31049
Lower Hutt 5040
New Zealand

Tel: +64 4 915 6100
Fax: +64 4 915 6130

Dear Mr Gunnell

Default price-quality paths for electricity distribution businesses from 1 April 2020 – Draft Decision Update

1. Introduction

Wellington Electricity Lines Limited (**WELL**) welcomes the opportunity to make a submission in response to the Commerce Commission's (**Commission**) draft decision update on the "Default price-quality paths for electricity distribution businesses from 1 April 2020 – Update draft models" published on 25 September 2019. This submission refers to this paper as the "Draft Decision Update".

As per the Commissions instruction, WELL's submission is limited to the two new options presented.

2. Systems Growth Capex

WELL still has concerns around both of the gates in the new system growth capex tests. WELL is especially concerned that the ICP growth test has now been expanded to also apply to the system growth capex. The issues with this test now impact a more significant proportion of an EDB's capex allowance.

2.1. The ICP growth gate

As highlighted in WELL's previous submission on the Draft Decision and to the Issues Paper, population growth and historic ICP growth are poor predictors of future ICP growth. Expanding the test exacerbates the issues WELL has already highlighted and could lead to an underinvestment in system growth and network capacity not being able to meet customer demand.

Section 5.3.1 and 6.1.3 of WELL's submission to the DPP3 Draft Decision and section 5.2.1 of WELL's submission to the Issues Paper provide details about why the customer connections growth tests are poor indicators of future ICP growth. In summary, WELL does not believe population growth forecast provides a reliable estimate of ICP growth because:

- As illustrated in Figure A3 of the Draft Decision, there appears to be a low correlation between population growth and ICP growth.

- The Statistics New Zealand's forecast of population growth has under forecast population growth. The forecast used in the DPP2 model showed an average population growth of 0.86% from 2014 to 2018 and actual average population growth of 1.76% in Figure A3 of the Draft Decision for the same period. WELL noted similar issues in its DPP2 consultation submission on forecasting CPRG.

WELL can understand the advantages of using an independent, regional level data source like Statistics New Zealand's population forecast to use for forecasting purposes. However, the accuracy and effectiveness to forecast future ICP growth should be the primary decision factor, rather than the independence of the forecast method.

Aspects of ICP growth not captured by using population growth forecast and historic ICP growth Include:

- Housing shortages like that being experienced in many parts of New Zealand including Wellington. The proposed forecasts would not allow EDBs to forecast the acceleration in housing growth needed to close the current shortfall.
- In urban environments, multiple dwellings can be serviced by a single NCP. This includes apartment blocks and some housing developments.
- Economic factors like interest rates and immigration, influencing housing demand.

Applying this gate to the price path determination could also have the unintended consequence of forcing EDBs to align their own ICP forecasting methodologies with the determination method to maintain consistency with the Regulator. This would result in an EDB losing the ability to apply network specific forecast drivers like building consent forecasts and forward work programmes into their AMP and internal forecast processes. This could lead to the AMP ICP forecasts not being representative of growth on their networks.

2.1.1. Recommendation

As outlined in WELL's submission to the Draft Decision, WELL recommends that population growth is excluded from the gate (because it can be a poor predictor of ICP growth for some EDBs) and a cap above historic ICP growth is applied to the ICP forecast to capture situations where future ICP growth is expected to exceed past growth. This approach is also consistent with other capital forecast tests which included a cap to capture lumpy or non-liner growth. A 150% cap would be consistent with the other systems growth capex test.

This will allow differences between population growth and expected ICP growth to be captured. EDBs in areas experiencing housing shortages could reflect the expected acceleration in new dwellings resulting from government lead housing programmes. EDBs can incorporate local trends like consents awarded and forward work programmes into their forecasts, rather than using a prescriptive forecast that may not be representative.

2.2. Expenditure per ICP gate

WELL agrees that the historic dataset shows a strong correlation between customer connections and traditional systems growth expenditure, especially over the long term so that infrequent system

growth investments, like zone substation, are captured. WELL also agrees that by including a 150% cap allows the proposed new test to capture lumpy forecast systems growth expenditure.

However, WELL has concerns about the long term viability of the proposed gate. The 150% cap will allow the gate to function for the DPP3 regulatory period but WELL does not think it will remain viable for DPP4 and beyond.

The relationship between system growth investment and ICP growth will not be as strongly correlated as it has been historically. Network or systems growth in the future will also come from an increase in demand from existing connections as Electric Vehicles (**EV**) and other Distributed Energy Resources (**DERs**') demand more energy to be delivered across the existing network. Investment in systems growth will be needed without a corresponding increase in ICPs. This growth is also not captured by the revenue cap mechanism, as it would have been previously under a price cap mechanism[1].

WELL described how EDB services and customer demand is changing in its submission to the Draft Decision[2]. The submission also highlighted the government initiatives (electrification of the transport fleet and process heat) that are accelerating that change.

We have provided a simple[3] example to illustrate why the correlation between system growth expenditure and ICP growth will not be maintained in the future. The new gate assumes that over the long term, systems growth and ICP growth have a liner relationship – as the number of customers increase, the network to support the delivery of energy to those new connections will also increase at a similar rate. However, any increase in system growth investment to support an increase in demand from existing ICPs will mean the growth in system growth capex would be greater than ICP growth.

On the Wellington network, historic ICP growth is 1%. As highlighted in WELL's Electric Vehicle (**EV**) trial, a single EV will increase household load by 34%[4] with no corresponding increase in ICP numbers. As provided on page 291 of WELL's AMP, the government is forecasting there to be approximately 6,000 EVs in Wellington by 2021 and 40,000 by 2028. Figure 1 below compares cumulative increase in demand from just ICP growth with the increase in demand if demand from EV's also included.

---

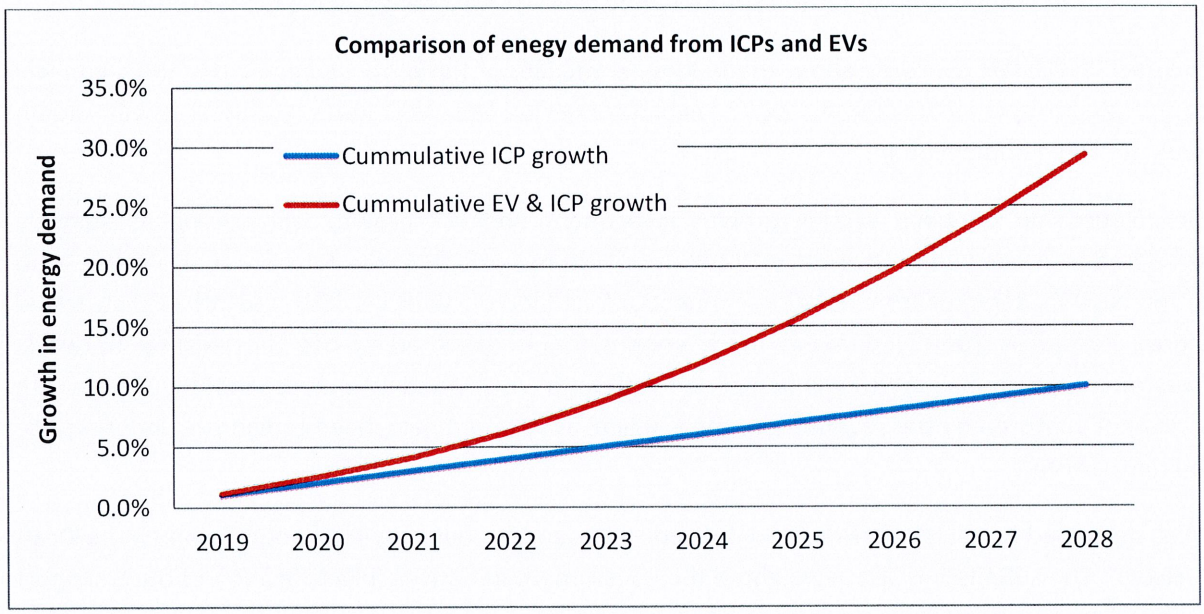
[1] Under a price cap mechanism, an increase in energy demand would have resulted in an increase in revenue for the EDB that could have been used to fund any additional cost the increase in demand required.

[2] WELL addressed how EDB services are changing and how government initiatives are accelerating change in sections 4 of its submission to the Draft Decision.

[3] For illustrative purposes, we have assumed demand increases are uniform and the investment required to meet that increase is also uniform. In reality, it is increases in demand during peak periods that will drive investment.

[4] https://www.welectricity.co.nz/disclosures/pricing/evtrial/

Figure 1: Comparison of energy growth from ICPs and EV's



The figure shows energy demand growth and ICP growth diverge and the growth in systems growth capex needed to meet energy demand will therefore also diverge from the ICP growth rate. The traditional correlation between ICP growth and system capex growth will weaken.

150% cap will provide some protection and, as demonstrated in the Draft Decision Update paper, provides enough of a buffer in the Draft DPP3 decision for it not to impact allowances for most EDBs. However, WELL is concerned that as DERs become more prevalent and become a larger influence on energy demands, the proposed gate will become inappropriate.

It will also reduce the effectiveness of 150% cap to buffer against variations in the different types of new connections and the lumpy nature of system growth expenditure.

2.2.1. Recommendation

The proposed new gate provides a workable solution for the DPP3 regulatory period because DERs have yet to be established in large numbers and due to the 150% cap providing some protection up to 2025.

However, the gate will not be appropriate in the longer term and a permeant solution is still needed. WELL recommends using the DPP3 period to explore alternative gates and using the Information Disclosures to collect data to support the implementation of a new method. The new method needs to be based on energy demand to capture system growth investment needed to support an increase in demand from existing ICPs. This is practically important under a revenue cap regulatory model that does not provide additional revenue to fund faster than expected energy growth, like a price cap regulatory model does.

3. Normalisation of major events

It is difficult to make an informed submission without an updated model to test the impacts of the new normalisation methodology. The following comments are based on a high level model developed by WELL and would need to be verified.

WELL supports changing to a 24 hour rolling Major Event window. The 24 hour period provides a better reflection of how the effects of a major storm propagates throughout the network. A 24 hour period is also better at capturing the impact a Major Event has on an EDBs ability to respond to subsequent outages. For example, it reflects that crews maybe stood down during a night time storm so that they are rested and effective for the next day repair window.

WELL also supports capping Major Event half hour intervals rather than replacing them. This reduces the impact caused by Major Events and the volatility in the reliability results. Reducing the volatility caused by Major Events highlights the underlying network performance and ultimately what the quality measures are designed to capture –deterioration of supply.

4. Closing

WELL appreciates the opportunity to provide a submission on the Commerce Commission's Draft Decision Update.

If you have any questions or there are aspects you would like to discuss, please don't hesitate to contact Scott Scrimgeour, Commercial and Regulatory Manger, at sscrimgeour@welectricity.co.nz .

Yours sincerely

Greg Skelton

Chief Executive Officer