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Wellington Electricity's proposal to customise its prices to better prepare its network for an earthquake

Draft decision

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Executive summary

Purpose of this Paper

- X1 This paper sets out our draft decision on, and reasons for, setting a customised price-quality path (CPP) for Wellington Electricity Lines Limited (WELL).

WELL has submitted an application to increase prices

- X2 On 5 December 2017 WELL made an application to increase its prices to allow for \$31.2m of additional expenditure over a three year period to better prepare its network for an earthquake.

Increased risk of a major earthquake in Wellington since the Kaikoura earthquakes

- X3 The November 2016 Kaikoura earthquakes caused extensive damage to the surrounding regions. Wellington escaped major damage but widespread minor damage highlighted the region's vulnerability and that Wellington is not as prepared as it could be for a large earthquake.
- X4 Following the earthquake a Government Policy Statement (GPS) was issued noting the increased likelihood of a large earthquake occurring and highlighting the importance that key 'lifeline' utilities in Wellington, including WELL, take action to ensure they are well prepared for such an event.¹
- X5 In response WELL has identified \$31.2m of expenditure that it can immediately undertake in order to increase its network's resilience to a significant earthquake enable it to more quickly restore supply to customers faced with outages (resilience).²

Exceptional circumstances warranted the use of flexibility in our regime

- X6 WELL's exceptional circumstances, highlighted in the GPS, warranted the use of the flexibility in our regime to allow for a 'streamlined' CPP to ensure that WELL can recover the cost of undertaking this important expenditure as soon as possible.
- X7 This compares with normal circumstances where suppliers must follow the full set of processes in the input methodologies if they are to apply for a CPP.

¹ "Government Policy Statement — Resilience of Electricity Services in the Wellington Region" (21 September 2017) 97 *New Zealand Gazette* at 53.

² Throughout this paper we use the term 'resilience' to refer to both the resilience of WELL's network to earthquakes, as well its ability to restore electricity supply following an earthquake.

- X8 We considered that a streamlined CPP, in this instance, would promote the long-term benefit of consumers, as it was the best possible way to ensure that WELL could recover the cost of undertaking the urgent short-term resilience expenditure.

Our draft decision

WELL's proposal justifies an uplift in expenditure to address earthquake resilience needs

- X9 Our draft decision is to approve WELL's proposed \$31.2m of expenditure to prepare its network for a major earthquake.

WELL 'streamlined' CPP utilises DPP allowable revenue

- X10 For the first two years of the CPP, the additional revenue associated with the resilience expenditure will be added to the maximum allowable revenue allowed under the current DPP.
- X11 In the third year of the CPP, WELL will be able to recover a maximum allowable revenue determined consistent with a DPP revenue setting process, as well as revenue that is associated with the additional resilience expenditure.
- X12 We are comfortable that our draft decision is consistent with the evaluation criteria and it promotes the long-term benefit of consumers.
- X13 The maximum allowable revenue (MAR) of \$107.4m for the initial year of the CPP represents a 1.7% increase relative to the MAR that we forecast for WELL under the current DPP.³ This represents an increase of around \$0.47 in the typical residential customer's monthly bill.

Table X.1 shows the MAR that we propose for each year of the CPP.

Table X.1: Nominal maximum allowable revenue before tax

Maximum allowable revenue (\$m)	2018/19	2019/20	2020/21
CPP MAR draft decision	107.4	109.6	111.8

³ Maximum allowable revenue represents the allowable revenue WELL is allowed to recover prior to pass-through and recoverable costs.

- X14 WELL will also move to a revenue cap under the new rules, which will allow it to fully recover the MAR that we set. Under WELL's existing default price path it is unable to fully recover its MAR, due to lower demand than expected when we set it. WELL forecasts that under the default price path its actual allowable revenue would be 5.5% lower, in 2018/19, than the MAR we allowed for when we set it.

Quality standards for reliability and delivery of resilience improvements

- X15 Our draft decision is that WELL will be subject to a reliability quality standard and incentives consistent with the DPP set for WELL in 2014.
- X16 We also propose to include an additional quality standard and incentive that incentivises WELL to meet the objectives of the additional resilience expenditure.
- X17 WELL will be required to deliver a minimum level of the resilience improvements set out in its CPP proposal. In the case that WELL fails to meet this minimum resilience level WELL will breach its quality path and we may take enforcement action
- X18 Under the revenue linked quality incentive, if WELL does not deliver the resilience improvements, as outlined in its proposal, its revenue will be reduced in the next regulatory period.

Chapter 1 Introduction

Purpose of this paper

1. This paper sets out our draft decision on, and reasons for, setting a customised price-quality path (CPP) for Wellington Electricity Lines Limited (WELL) that promotes the long-term benefit of consumers.

WELL has submitted an application to increase its prices

2. On 5 December 2017 WELL made a CPP application to increase its prices to allow for \$31.2m of additional expenditure to better prepare its network for an earthquake.
3. This chapter explains why we have made changes to the normal process for setting CPPs, to allow WELL to make this application.
4. It also requests submissions on our draft decision on WELL's CPP and explains the structure of the rest of this paper.

Context for this application – a “streamlined” customised price-quality path

5. WELL explains that the purpose of its CPP proposal is to:⁴

...seek regulatory approval for the additional funding required to implement a number of readiness initiatives, which will improve response and restoration times following a major earthquake.

We are seeking approval to invest \$31.24 million (Opex and Capex) over the next three years to improve our readiness to respond to a major earthquake. Approval of this proposal will allow us to implement relatively low cost readiness measures, which in the event of a major earthquake will result in Wellington communities and businesses avoiding significant social and economic welfare losses.

Increased risk of a major earthquake in Wellington since the Kaikoura earthquakes

6. The November 2016 Kaikoura earthquakes caused extensive damage to the surrounding regions. Wellington escaped major damage but widespread minor damage highlighted the region's vulnerability and that Wellington is not as prepared as it could be for a large earthquake.

⁴ Wellington Electricity “Earthquake Readiness Customised Price-Quality Path Proposal” (5 December 2017), p 6.

7. Following the earthquake a Government Policy Statement (GPS) was issued noting the increased likelihood of a large earthquake occurring and highlighting the importance that key 'lifeline' utilities in Wellington, including WELL, take action to ensure they are well prepared for such an event.⁵

Identified investment to improve resilience of WELL's network

8. WELL has considered the resilience of its network to a major earthquake based on analysis it has undertaken over the past two years including through its ongoing participation in the 2017 Wellington Region resiliency modelling project. This project commenced in response to the Kaikoura earthquakes and required Wellington Lifelines Group members to consider the full interdependencies between lifeline utilities in the region.
9. As a result of this work WELL has identified \$31.2m of expenditure that it can immediately undertake in order to increase its network's resilience to a significant earthquake (ie, ability to maintain supply) and enable it to more quickly restore supply to customers faced with outages (resilience).⁶
10. WELL's position is that this significant increase in expenditure could not be funded under the existing default price-quality path (DPP) allowances.⁷ Reprioritising expenditure from maintenance to resilience was also considered but not deemed appropriate as it would likely affect the quality of supply of service provided to WELL consumers.
11. WELL was not in a position to submit a full CPP application (consistent with the relevant rules and requirements) in time to address the immediate concerns arising from the increased earthquake risk. This means that a different option was needed to provide for the additional expenditure.

Government policy statement – government supports additional resilience expenditure

12. On 18 September 2017, a GPS was issued supporting prudent, efficient and timely resilience-related expenditure by WELL.⁸

⁵ "Government Policy Statement — Resilience of Electricity Services in the Wellington Region" (21 September 2017) 97 *New Zealand Gazette* at 53.

⁶ Throughout this paper we use the term 'resilience' to refer to both the resilience of WELL's network to earthquakes, as well its ability to restore electricity supply following an earthquake.

⁷ Under Part 4 of the Commerce Act we set a DPP for WELL and 15 other electricity distribution businesses (EDBs). The current DPP runs from 1 April 2015 until 30 March 2020. DPPs take a one-size-fits-all approach to setting allowable revenues with limited tailoring for individual EDBs. Where the DPP does not suit a specific EDB's circumstances, it has the opportunity to apply for a CPP, which is tailored for that specific EDB.

⁸ The Commerce Act requires us to have regard to the economic policies of the Government as transmitted in writing from time to time to the Commission by the Minister (ie, via a GPS). The GPS is not a direction

Government policy statement – key points

- Lifeline utilities should be able to recover reasonable costs arising from their duties under the Civil Defence and Emergency Management Act (CDEM), to the extent allowed by law. The ability to recover those costs promotes the purposes of both the CDEM Act and Part 4 of the Commerce Act.
- The national significance of Wellington’s disaster resilience should be given due consideration by lifeline utilities and by the Commission when performing its functions under Part 4. In particular, the Commission should consider options consistent with the Part 4 purpose which, in respect of regulated suppliers of lifeline services in the Wellington region, will:
 - allow those suppliers to recover prudent, efficient and timely resilience-related expenditure that was not anticipated when existing s 52P price-quality path determinations were made;
 - provide certainty to those suppliers in relation to how any additional prudent, efficient and timely resilience-related expenditure may be recovered, where relevant amendments to a s 52P determination may not be made in advance of that expenditure being incurred; and
 - allow the Commission to consider amending requirements that might normally apply to those suppliers relating to information, verification, or consultation on proposed expenditure.

13. Following receipt of the GPS we consulted on a proposed approach to “streamline” the CPP process using the flexibility afforded to us under the IMs and legislation.⁹

We decided to allow for a one-off ‘streamlined’ CPP for WELL

14. Taking into account submissions, we decided that WELL’s exceptional circumstances, highlighted in the GPS, warranted the use of the flexibility in our regime to allow for a ‘streamlined’ CPP to ensure that WELL can recover the cost of undertaking this important expenditure as soon as possible.¹⁰

by Government; however we must have regard to it, subject to our overall requirement to promote the long term benefit of consumers under s 52A of the Act.

⁹ As discussed further in the document: Commerce Commission “Our proposed approach to assessing Wellington Electricity’s proposal for additional expenditure to improve its resilience and response to a major earthquake Discussion Paper” (6 December 2017), paras 36-37.

¹⁰ Commerce Commission, “Wellington Electricity Customised Price-Quality Path – Process paper” (6 December 2017).

15. In making this decision, we considered whether this approach would promote the purpose of Part 4 of the Commerce Act, and we had regard to the Government Policy Statement.¹¹
16. We considered that a streamlined CPP, in this instance, would promote the long-term benefit of consumers, as it was the best possible way to ensure that WELL could recover the cost of undertaking the urgent short-term resilience expenditure.¹²
17. Further discussion of the changes we have made to the normal process is set out in Chapter 3.

WELL's customised price-quality path proposal

18. On 5 December 2017 WELL submitted its CPP application.

Key features of WELL's CPP proposal

- WELL propose to spend an additional \$31.2m of (primarily capital) expenditure over the next three years to better prepare its network for a major earthquake.
- In order to fund this expenditure, WELL requested that we allow it to recover this expenditure from its customers. WELL proposed this would be recovered via an initial increase in its maximum allowable revenue, after which its revenue would be indexed to inflation for the remainder of the CPP period.¹³ WELL estimates that the impact of this change on the typical residential bill will be an increase of approximately \$1.50 to \$1.90 a month.
- WELL proposes to keep its quality standards the same as under the current DPP.

19. We published WELL's CPP proposal for consultation on 6 December 2017, and we received submissions on the proposal in December 2017.¹⁴

We want to consider your views on our draft decision

20. In reaching our draft decision, we have considered submissions on WELL's CPP proposal. We have not specifically addressed all submissions in this paper though we have addressed some as necessary.

¹¹ Commerce Act 1986, s 52A.

¹² We consider that WELL's urgent and exceptional circumstances justify a streamlined CPP in this case (ie, the heightened earthquake risk following the Kaikoura earthquake and the government issuing the government policy statement). However we are unlikely to adopt this approach in the future, unless similar exceptional circumstances were to arise.

¹³ This increase does not factor in that WELL was not fully recovering its maximum allowable revenue under the DPP, under its weighted average price cap.

¹⁴ WELL's CPP Proposal and submissions in response are available at: <http://comcom.govt.nz/regulated-industries/electricity/cpp/cpp-proposals-and-decisions/wellington-electricitys-2018-2021-potential-cpp/>

21. Before we make our final decision, we want to consider the views of consumers and other stakeholders on our draft decision.
22. To give us time to consider submissions and ensure that we can determine the CPP prior to April 2017, we ask that we receive emailed submissions by 22 February 2018 and cross-submissions by 1 March 2018.
23. We will consider all submissions received by this date in reaching our final decision.
24. Please email your submission to regulation.branch@comcom.govt.nz with 'Wellington Electricity CPP draft decision' in the subject line of your email. All submissions will be published on our website.

Structure of this paper

25. The remainder of this paper is set out into three key parts:
 - 25.1 **Chapter 2: Our draft decision** sets out the maximum allowable revenues, expenditure forecasts and quality standards that our draft decision proposes. It also acts as a road map pointing to where more detailed reasons for each of the draft decisions can be found in the paper.
 - 25.2 **Chapter 3: Our process for setting WELL's price path** outlines the streamlined process we followed to make our draft decisions.
 - 25.3 **Chapter 4: Our evaluation** explains the high level framework we applied to evaluate WELL's CPP proposal.
 - 25.4 **Attachment A: WELL's resilience expenditure**
 - 25.5 **Attachment B: WELL's BAU expenditure**
 - 25.6 **Attachment C: Resilience quality standard assessment**
 - 25.7 **Attachment D: IM variations**

Chapter 2 Our draft decision

Purpose of this chapter

26. This chapter sets out our draft decision on WELL's CPP including:
- 26.1 the expenditure allowances that we have provided for;
 - 26.2 WELL's price path – the maximum revenues that WELL will be able to recover; and
 - 26.3 the quality standards that will apply to WELL.
27. It also explains where further discussion of these draft decisions can be found in this paper.

Summary of our draft decision

Key features of our draft decision

Our draft decision is to vary the way we determine WELL's CPP price path, as outlined in our previous process paper:¹⁵

- For the first two years of the CPP WELL will be able to recover the maximum allowable revenue allowed for under its DPP, as well as revenue associated with the additional resilience expenditure; and
- in the third year of the CPP WELL will be able to recover maximum allowable revenue determined consistent with a DPP revenue setting process (using forecast opex and capex), as well as revenue associated with the additional resilience expenditure.

Our draft decision, as presented in this paper, is to:

- approve WELL's proposed \$31.2m of expenditure to prepare its network for a major earthquake (resilience expenditure);
- approve WELL's proposed base expenditure for the third year of the CPP period, being \$33.4m of opex and \$35.8m of capex;
- approve WELL's proposed maximum allowable revenue of \$107.4m in the first year of the CPP, and CPI increases for subsequent years of the CPP period;
- retain the same quality standards and incentives for electricity outages as WELL had under its default price-quality path;
- introduce a new quality incentive for WELL to improve its network's ability to respond to a major earthquake.

¹⁵ Commerce Commission, "Wellington Electricity Customised Price-Quality Path – Process paper" (6 December 2017).

28. The maximum allowable revenue (MAR) of \$107.4m for the initial year of the CPP represents a 1.7% increase relative to the maximum allowable revenue we forecast for WELL under the current DPP.¹⁶ This represents around an increase of around \$0.47 for the typical residential customer's monthly bill.¹⁷
29. Table 2.1 shows the impact of our draft decisions on WELL's maximum allowable revenue (MAR).

Table 2.1: Nominal maximum allowable revenue before tax

Maximum allowable revenue (\$m)	2018/19	2019/20	2020/21
DPP forecast MAR	105.6	108.4	n/a
CPP MAR draft decision	107.4	109.6	111.8

30. We explain how we have constructed WELL's price path in 'Chapter 3 – Our process for setting WELL's price path'.

WELL transitions from a weighted average price cap to a revenue cap

31. In the 2016 IM review we decided electricity distribution business (EDBs) would move from a weighted average price cap (WAPC) to a 'pure' revenue cap. By applying for a CPP part way through the DPP period, WELL moves from a WAPC to a revenue cap earlier than if it remained subject to the current DPP.¹⁸
32. As outlined in our reasons paper to the IM review decision, one of the three key problems identified in relation to the WAPC for EDBs was that suppliers are exposed to quantity forecasting risk. It was noted that when actual demand is higher than our forecast there will be a revenue gain for suppliers and if the opposite occurs and actual demand is lower than our forecast then there would be a revenue loss for suppliers.¹⁹

¹⁶ The DPP forecast MAR represents the allowable revenue WELL was allowed to recover prior to pass-through and recoverable costs (including wash-ups) and the effect changes in WELL's actual demand has on the weighted average price cap.

¹⁷ Over the CPP period WELL anticipates consumers will pay lower line charges when expected reductions in pass through and recoverable costs (such as transmission costs) are taken into account, offsetting the effect of the contribution for resilience expenditure.

¹⁸ If WELL remained subject to a DPP it would transition to a revenue cap at the beginning of the next DPP period (2020/21).

¹⁹ As discussed further in the document: Commerce Commission "Input methodologies review decisions Topic paper 1: Form of control and RAB indexation of EDBs, GPBs and Transpower", paras 28-40.

33. During the current DPP period, WELL's actual demand has been lower than our forecast which has resulted in a forecasted 5.5% reduction in WELL's forecast DPP allowable revenue for the 2018/19 year.²⁰ By moving from a WAPC to a revenue cap this reduction is reversed.
34. We expect that as a result of the reversal, the average monthly residential bill will be around \$1.50 higher in the first year of the CPP.²¹

We consider that our draft decision promotes the purpose of Part 4 of the Commerce Act

35. The purpose of Part 4 of the Commerce Act is to promote the long-term benefit of consumers in regulated markets by promoting outcomes consistent with outcomes produced in competitive markets.²²
36. We consider that our draft decision meets the purpose of Part 4. In reaching this conclusion we have considered, in particular the outcome in s 52A(a) – that suppliers have incentives to innovate and invest. We consider it important that WELL is incentivised to undertake the investment that we consider is needed to better prepare the network to respond to a major earthquake. We are also satisfied that our decision limits WELL's ability to extract excessive profits in line with s 52A(d).

We consider that our draft decision is consistent with the evaluation criteria

37. We consider that our draft decision on WELL's CPP is consistent with the CPP evaluation criteria. This includes an assessment of WELL's capex and opex forecasts against the expenditure objective.²³

We consider that a full CPP is necessary for any further resilience expenditure

38. We have undergone a streamlined process to reach our draft decision on WELL's CPP. This has involved using WELL's DPP revenues as a base, and allowing for additional resilience expenditure.²⁴

²⁰ Based on WELL's forecast of actual allowable revenue for 2018/19 of 100.1m, compared with the MAR we set for WELL under the DPP of 105.6m, for the same year.

²¹ This figure is based on the difference between WELL's forecast actual revenue under the DPP and its MAR under the DPP, applied to an estimate of a typical annual distribution bill of \$318.50, provided by WELL. There will also be an impact in the second year of the CPP, though WELL have not provided forecasts of the actual allowable revenue for this year.

²² Commerce Act 1986, s52A.

²³ We discuss our assessment of WELL's CPP against the evaluation criteria in 'Chapter 4 – Our evaluation approach'.

²⁴ This streamlined process is explained in more detail in 'Chapter 3 – Our approach to setting WELL's price path'.

39. We have allowed for this unique process, to address the urgent need for WELL to improve its ability to respond to an earthquake, highlighted by the increased risk following the Kaikoura earthquakes, and supported by a GPS encouraging the urgent consideration of measures to increase WELL's resilience.
40. WELL's customised price-quality path will last for three years, during which our draft decision allows for significant investment in improving its networks' ability to respond to an earthquake.
41. We consider that there is sufficient time for WELL to fully consider any further resilience investments required and, if needed, plan for and apply for a full CPP under the normal process.

Draft decision on WELL's resilience expenditure

42. Our draft decision is to approve WELL's proposed resilience expenditure of \$30.1m capex and \$1.2m opex.
43. While there are some areas where WELL could better articulate its quantitative analysis of the costs and benefits of the proposed expenditure, we consider that the substantial unquantified benefits along with the quantified benefits, justify the proposed expenditure as prudent to meet appropriate service standards (including resilience). We also consider that the proposal represents the efficient costs to achieve these service standards.
44. Our reasons are explained in more detail in Attachment A. We have also published, alongside this paper, a report from Strata Energy Consulting who we engaged to undertake an engineering review of WELL's proposed resilience expenditure.

Draft decision on WELL's base expenditure

45. Our draft decision is to use:
 - 45.1 for the first two years of the CPP, revenue allowed for WELL under the DPP as our base; and
 - 45.2 for the third year of the CPP, revenue determined consistent with a DPP approach as our base.
46. To determine a new base revenue for the third year of WELL's CPP, we have determined forecast capex and opex for the business-as-usual (BAU) operation of WELL's network.²⁵

²⁵ ie, the expenditure that we consider is appropriate, not including additional resilience expenditure.

BAU capital expenditure for year 3

47. Our draft decision is to allow for the \$35.8m of BAU capex for the third year of the CPP, consistent with what was proposed by WELL.
48. WELL has proposed BAU capex for the third year of the CPP consistent with the forecast outlined in its 2017 asset management plan.
49. WELL's proposed BAU capex for the third year of the CPP has been assessed by comparing disaggregated expenditure forecasts against historical expenditure and other metrics, and then investigating any anomalies.
50. WELL's proposed consumer connection capex forecast was identified as not being consistent with historical expenditure and justification for the increase was not sufficiently explained in its asset management plan. However, our draft decision is not to adjust the proposed base capex as the adjustment would be immaterial to total capex after taking into account the effects of capital contributions.²⁶

BAU operating expenditure for year 3

51. Our draft decision is to allow for \$33.4m BAU opex, consistent with what was proposed by WELL.
52. WELL has proposed base opex for the third year of the CPP consistent with its forecast opex as outlined in its 2017 asset management plan.
53. We modelled our own base and trend projections of WELL's opex forecast and used this forecast as a cross-check. WELLs forecasts are in line, with our expectations.

Draft decision on WELL's price path

54. Our draft decision is to allow WELL a maximum allowable revenue of \$107.4m in the first year of the CPP period. WELL will then be able to increase revenue by CPI for each subsequent year of the CPP period.
55. There is also likely to be a further price increase in subsequent regulatory periods, as the capex in the CPP period enters WELL's regulated asset base.
56. Given the uncertainty of inputs that affect the next period's prices,²⁷ and the streamlined process we are undertaking, we have decided not to forecast the impact of this expenditure on prices in future periods.

²⁶ Consumer connections are typically fully or partially funded by consumers through capital contributions. Capital contributions are required to be netted off against any capex when recognised in the RAB.

²⁷ Such as the approach to setting expenditure forecasts and the WACC used.

57. In making our draft decision we have assumed that an increase in prices of less than \$2 a month at the beginning of the CPP period is unlikely to be a price shock for consumers. This increase could also, potentially, be offset by other factors, such as reductions in Transmission charges, anticipated by WELL. As such, we have decided not to tilt WELL's price path.
58. Given the difficulties in accurately estimating the increase in prices at the end of CPP period, we do not think that there is a compelling case to tilt the path in anticipation of future price increases.
59. Accordingly we have not factored future prices into the profile of WELL's price path. We welcome feedback on this matter in submissions.

Pass-through and recoverable costs for the CPP period

60. The categories of pass-through costs and recoverable costs that WELL may recover in its prices (and that are not included in the BBARs, MARs or the setting of the price path) are defined in the IMs. Although these additional costs increase the amounts payable by consumers, they are not reflected in our estimated initial MAR increase.
61. We are, however, required to specifically determine certain pass through and recoverable costs amounts in the CPP determination.
62. We have specified in our draft determination that WELL may recover the costs of having its CPP proposal audited – \$71,396.05.
63. Other pass through and recoverable costs include costs (set out in the IMs) that are outside the control of WELL (such as electricity lines service charges payable to Transpower), financial incentives and wash-ups from prior periods.

WELL's pass-through balance moving off the DPP

64. WELL has forecast a negative 'pass-through balance' of approximately \$10m as at 31 March 2018. This is the amount that WELL owes consumers for the past over-recovery of pass-through and recoverable costs.
65. Our draft determination provides for this amount to be paid back to consumers in the first year of WELL's CPP. However, we note that this could create volatility in prices as there would be a reduction in the first year, followed by higher prices in subsequent years.
66. We invite submissions on this draft decision and whether it would be more appropriate to smooth the repayment of this balance (through lower prices) over the full CPP period, as opposed to just one year.

Draft decision on WELL's reliability quality requirements

67. Our draft decision is that WELL will be subject to a reliability quality standard and incentives for planned and unplanned interruptions over the CPP period, consistent with the standard and incentive set under WELL's DPP. We have also set the same standards and incentives for the third year of WELL's CPP, which was not set under the DPP.
68. We consider this appropriate as WELL's additional resilience investments are unlikely to have strong linkages with reliability.
69. WELL's reliability quality standard, measured through the System Average Interruptions Frequency Index (SAIFI) and System Average Interruptions Duration Index (SAIDI), restricts the frequency and duration of interruptions allowed on WELL's network. In the case that WELL fails to meet reliability quality standard, WELL will breach its quality path and we may take enforcement action.
70. The revenue linked quality incentive that was in operation under the DPP will also apply to WELL's CPP. Under this incentive WELL will stand to gain or lose up to 1% of its forecast net allowable revenue, depending on how it performs against its SAIFI and SAIDI targets.
71. This will provide WELL with incentives to improve network reliability beyond that required by the reliability quality standard where it is cost-effective to do so.
72. Consistent with the DPP, when measuring SAIDI and SAIFI, planned interruptions will be weighted at half that of unplanned interruptions. This recognises that planned interruptions are needed to maintain WELL's network and that they are less disruptive to end consumers than unplanned outages.
73. Key reliability metrics for WELL's reliability quality path are set out in the tables below.

Table 2.2: SAIDI Limit, SAIFI Limit, SAIDI unplanned boundary value, and SAIFI unplanned boundary value for the CPP regulatory period 1 April 2018 – 31 March 2021

Wellington Electricity	2018/19	2019/20	2020/21
SAIDI limit (minutes)	40.630	40.630	40.630
SAIDI unplanned boundary value (minutes)	2.103	2.103	2.103
SAIFI limit (outages)	0.625	0.625	0.625
SAIFI unplanned boundary value (minutes)	0.031	0.031	0.031

**Table 2.3: SAIDI quality incentive measures for the CPP regulatory period
1 April 2018 – 31 March 2021**

Wellington Electricity	2018/19	2019/20	2020/21
SAIDI target (minutes)	35.4358	35.4358	35.4358
SAIDI collar (minutes)	30.2414	30.2414	30.2414
SAIDI cap (minutes)	40.6302	40.6302	40.6302

**Table 2.4: SAIFI quality incentive measures for the CPP regulatory period
1 April 2018 – 31 March 2021**

Wellington Electricity	2018/19	2019/20	2020/21
SAIFI target (outages)	0.5465	0.5465	0.5465
SAIFI collar (outages)	0.4682	0.4682	0.4682
SAIFI cap (outages)	0.6248	0.6248	0.6248

74. Further details on WELL’s quality standard are set out in the draft determination which we have published alongside this paper.

Draft decision on WELL’s resilience quality requirements

75. Our draft decision is to include a new quality standard and incentive for resilience improvements as part of WELL’s CPP.
76. Given that we are specifically providing for expenditure to improve the resilience of WELL’s network to an earthquake, we consider it appropriate to include a quality standard and incentive that incentivises WELL to meet the objectives of the additional expenditure (ie, ensuring that it is better placed to maintain and return supply following a major earthquake).
77. We explain how WELL’s resilience is measured in more detail in ‘Attachment C – Resilience quality standard assessment’.

Current quality requirements not sufficient to address resilience expenditure improvements

78. The current reliability quality requirements are not sufficient to ensure the delivery of resilience improvements, as improved earthquake resilience is not expected to be reflected in SAIDI and SAIFI.

Resilience quality requirements to incentivise WELL to deliver on CPP objectives

79. Under the resilience quality standard, WELL will be required to deliver a minimum level of the resilience improvements set out in its CPP proposal. This will be measured by a resilience index which will run from 0 to 100 and, at a high level will measure the extent to which:²⁸
- 79.1 WELL's key substations have been adequately seismically strengthened;
 - 79.2 WELL has capability to replace certain amounts of cable damaged in an earthquake;
 - 79.3 WELL has capability to replace a substation at short notice, in both the CBD and the Hutt regions; and
 - 79.4 WELL is suitably prepared to maintain data and communication links in the case of an earthquake.
80. In the case that WELL fails to meet the minimum resilience level (a resilience index value of 60 in the final year of the CPP), WELL will breach its quality path and we may take enforcement action.
81. WELL will also be subject to a revenue linked incentive, relating to its progress in meeting its resilience objectives. To the extent that WELL does not deliver the improved resilience improvements, as outlined in its proposal, its revenue will be proportionately reduced through the 'quality incentive adjustment' recoverable cost in the next period.
82. WELL could be penalised up to \$5.2m for non-delivery of resilience improvements in the CPP period. This amount represents what WELL would stand to gain, if it did not undertake any of the expenditure allowed for delivering resilience improvements.²⁹

²⁸ For the avoidance of doubt, a resilience value of 100 does not represent a fully resilient network – rather it represents the fully delivery of the resilience improvements that we expect over the CPP period.

²⁹ This amount takes into account the impact of the capex incentive applying to WELL. This is discussed in more detail in Attachment C.

WELL incentivised to deliver resilience improvements efficiently

83. WELL is still incentivised to deliver these improvements efficiently and will share with consumers any efficiencies achieved in delivering the resilience improvements, through the capex incentive.³⁰

Resilience quality standard and incentives

84. Key metrics for WELL's resilience quality path are set out in the tables below:

Table 2.5: Resilience minimum for the CPP regulatory period 1 April 2018 – 31 March 2021

Wellington Electricity	2018/19	2019/20	2020/21
Resilience Minimum	0	0	60

Table 2.6: Resilience quality incentive measures for the CPP regulatory period 1 April 2018 – 31 March 2021

Wellington Electricity	2018/19	2019/20	2020/21
Resilience target	100	100	100
Resilience collar	0	0	0
Resilience cap	100	100	100
Revenue at risk			\$5.185m

85. WELL's resilience target represents the full delivery of the resilience improvements expected from the resilience investment. If WELL fully delivers these improvements then there will be no incentive adjustment under this mechanism.
86. WELL's assessed resilience index value will be capped at the 100, and collared at 0, meaning that the incentive will apply to any value that WELL attains on the resilience index.

³⁰ See: *Electricity Distribution Services Input Methodologies Determination 2012* [2012] NZCC 26, Part 3, Section 3 of the EDB IMs.

Reporting on resilience improvements

87. WELL will be required to report its progress against the resilience index on an annual basis through its annual compliance statement.
88. Reporting is to include supporting evidence, demonstrating how WELL has determined its compliance.
89. The annual compliance statement is also required to be certified and audited, consistent with the compliance and audit requirements applicable to SAIDI and SAIFI reporting requirements.

Draft decision on IM variations

90. Our draft decision is to vary the IMs as proposed by WELL, except for the opex IRIS proposed variation. WELL proposed variations to the IMs to allow for its revenue path to be calculated consistent with the 'streamlined CPP' approach and to allow financial incentives and wash-ups to apply as intended under the varied approach.
91. Wellington Electricity has suggested an amendment to the opex IRIS in light of concerns about how it will operate in their particular circumstances. We have modelled how the IRIS mechanism would operate under Wellington Electricity's proposed transition from a DPP to CPP and believe the opex IRIS will work as intended without WELL's proposed amendment.
92. We have, however, included a variation to the IMs to correct a drafting error in the clauses relating to the opex IRIS.
93. Attachment D outlines each of the IM variations, WELL's reasons for proposing them, and our reasons for our draft decision.

Chapter 3 Our process for setting WELL's price path

Purpose of this chapter

94. This chapter outlines how we intend to set WELL's price path and how the CPP process has been tailored to align with the unique nature of WELL's CPP proposal. The chapter also outlines how we have modified and intend varying the IMs to allow for the streamlined CPP process.

The IMs set out how regulated suppliers price paths are set

95. The Commerce Act required us to set rules and processes for CPPs – these rules and processes are referred to as input methodologies (IMs).³¹
96. The IMs we have previously set relating to CPPs include the requirements that must be met by the applicant for information, verification, audit and consumer consultation, as well as the criteria that we must use to evaluate a CPP proposal.³²

What we are trying to achieve – key elements of the streamlined WELL CPP

97. We consider that the best way to enable WELL to undertake its necessary resilience expenditure is to enable the submission of a 'streamlined' CPP proposal, exempting WELL from many of the usual requirements for submitting and determining a CPP. This required us to alter, for the purpose of WELL's CPP, the CPP IMs.
98. The regime provides scope for us to modify and vary the IMs, to allow us to accept, evaluate and determine a streamlined CPP proposal. Given the particular circumstances of WELL's proposal we have made use of this flexibility.
99. The key features of the streamlined CPP include:
- 99.1 The CPP will start on 1 April 2018 and run for three years, under a revenue cap which will apply for the three year period;
 - 99.2 The allowable revenue in the 2018/19 and 2019/20 years will consist of existing maximum allowable revenues used to set the existing DPP plus allowable revenue for additional resilience expenditure;
 - 99.3 The allowable revenue for in the 2020/21 years will consist of maximum allowable revenue based on forecast 'business as usual' expenditure (determined using the existing DPP BBAR calculation) plus allowable revenue for the additional resilience expenditure;
 - 99.4 Scrutiny, in detail, of the additional resilience expenditure that WELL is proposing to undertake;

³¹ As required by the Commerce Act 1986, s 52T.

³² *Electricity Distribution Services Input Methodologies Determination 2012* [2012] NZCC 26, Part 5.

- 99.5 Scrutiny of the ‘business as usual’ expenditure allowances already provided for in the 2018/19 and 2019/20 years of the DPP and the 2020/21 year forecast, to the extent necessary to confirm that the additional resilience expenditure has not already been provided for under them (ie, confirming there is no “double-dipping”); and
- 99.6 Modified verification and audit requirements consistent with the streamlined CPP process.

Use of modifications and exemptions

100. In order to implement a streamlined CPP process, we have exempted WELL from the information requirements for CPPs apart from the limited information we would need to determine a streamlined CPP.
101. The information that we have required includes (among other things):
- 101.1 an overview of the proposal;
 - 101.2 the business cases for the resilience expenditure and any associated models;
 - 101.3 WELL’s latest AMP;
 - 101.4 a financial model for the CPP period;
 - 101.5 a summary of feedback from any consumer consultation undertaken;
 - 101.6 director’s certification of the proposal;
 - 101.7 a limited scope audit report; and
 - 101.8 any proposed variations to the input methodologies for determining the CPP.
102. We also have the ability to request further information after the CPP proposal is submitted using our information gathering powers.³³ We have requested further information from WELL, as needed, throughout the evaluation.
103. We modified the requirements for WELL to undertake verification, audit and consumer consultation, including:
- 103.1 removing the requirement for WELL to undertake verification. WELL has provided an independent engineer’s report supporting the resilience expenditure as part of its application. We have used our own experts to help us verify the CPP application after it has been submitted;

³³ Under s 53ZB and s 98 of the Commerce Act 1986.

- 103.2 modifying the audit requirements to ensure that the proposal can be audited in accordance with the streamlined process. This included limiting the scope of the audit to information required to set the streamlined CPP price path; and
- 103.3 requiring WELL to provide a summary of feedback from the engagement that it has undertaken with key stakeholders, but have not required specific consultation with consumers. We are instead consulting with consumers ourselves on the proposed expenditure.
104. Although we have modified WELL's consultation obligations, consumers have at least three opportunities to have their say on the streamlined CPP, including what the process would look like, the IM variations, and whether further information is needed to evaluate the CPP proposal. This includes:
- 104.1 consultation on our proposal to undertake a streamlined CPP process;
- 104.2 initial consultation on WELL's CPP proposal (as part of this consultation, consumers were able to see any modifications and exemptions that we have agreed with WELL, and ask us to request further information from WELL if needed); and
- 104.3 consultation on our draft CPP decision, including variations to the IMs, ie, this paper.³⁴
105. We do not think that modifying the IMs in this way will detract, in a way that is more than minor, from our ability to evaluate and determine the CPP or for interested persons to provide input.

Use of variations to the IMs

106. Our draft decision is to vary the IMs relating to the determination of the price path in accordance with the variations proposed by WELL as part of its CPP proposal.
107. The variations proposed by WELL include:
- 107.1 changing the IMs to allow for a three year price path;
- 107.2 allowing a different approach to building the price path; and

³⁴ The consultation documents and submissions in response are available at:
<http://comcom.govt.nz/regulated-industries/electricity/cpp/cpp-proposals-and-decisions/wellington-electricitys-2018-2021-potential-cpp/>

107.3 implementation matters (such as the application of the incremental rolling incentive scheme) to allow the IMs applicable to the streamlined CPP process to align with our policy intent.³⁵

108. The variations are discussed in more detail in the attachment to this paper. We seek your views on these variations.

We created a new submission window for WELL's CPP application

109. CPP applications are only able to be made in specific windows set out in the DPP determination. The CPP windows are intended to allow us to prioritise CPPs when more than three are received in a given year.

110. We amended the DPP determination in order to allow WELL to submit its CPP outside of the usual windows.³⁶ We do not consider that this is a material change, given that we did not expect any further CPPs, apart from Powerco's, that year.

How we have forecasted the third year of the CPP

111. We have decided that applying a similar approach to that taken in the recent gas DPP reset is an appropriate approach for determining the 2020/21 year base expenditure.

112. As part of the CPP we need to determine WELL's allowable revenue for the 2020/21 year, which is beyond the end of the current DPP allowances. This means we are not able to use the DPP allowances as the base for setting WELL's revenue allowance for this year.

113. We started by analysing WELL's AMP and then applied further scrutiny to expenditure that was not consistent with what we expect to be 'business-as-usual'. We then used these expenditure forecasts to build the allowable revenue for the third year of the CPP using a simple building blocks approach.³⁷

WELL will move to a revenue cap for the CPP

114. WELL will move from a weighted average price cap (WAPC) to a revenue cap for the 2018/19 and 2019/20 years in line with the recently amended IMs.³⁸

115. WELL, under the DPP, is subject to a WAPC as its price control. Under a WAPC supplier revenue is exposed to differences between forecast and actual demand.

³⁵ Attachment D outlines each of the variations in detail.

³⁶ *Electricity Distribution Services Default Price-Quality Path (CPP Window) Amendment Determination November 2017 [2017] NZCC27*

³⁷ Building blocks approach uses the forecasts of various costs to a business, in order to determine the appropriate revenue for that business.

³⁸ Consistent with the recently amended IMs, a revenue cap will apply to WELL in 2020/21 irrespective of whether they are on a DPP or CPP.

116. As part of our IM review last year, we decided that a revenue cap was a more appropriate form of control for EDBs as it would remove this forecasting risk for suppliers.
117. WELL estimates that it would under-recover approximately \$5.5m less than the maximum allowable revenue set for the 2018/19 year on the DPP under a weighted average price cap.

Chapter 4 Our evaluation approach

Purpose of this chapter

118. This chapter explains the approach we have taken to evaluate WELL's CPP proposal and make our draft decision. It explains, at a high level, the framework that we have applied in order to make a decision that aligns with the unique nature of WELL's proposal while delivering long-term benefits to consumers.

The Commerce Act guides our determination of WELL's CPP

119. Our starting point for determining WELL's CPP is the purpose of Part 4 of the Commerce Act – to promote the long-term benefit of consumers.³⁹

The purpose of Part 4 of the Commerce Act

52A purpose of Part 4

- (1) The purpose of Part 4 is to promote the long-term benefit of consumers in markets referred to in section 52 by promoting outcomes that are consistent with outcomes produced in competitive markets such that suppliers of regulated goods or services—
- (a) have incentives to innovate and to invest, including in replacement, upgraded, and new assets; and
 - (b) have incentives to improve efficiency and provide services at a quality that reflects consumer demands; and
 - (c) share with consumers the benefits of efficiency gains in the supply of the regulated goods or services, including through lower prices; and
 - (d) are limited in their ability to extract excessive profits.

The CPP evaluation criteria

120. The criteria that we must use to evaluate a CPP are set out in EDB input methodologies.⁴⁰ These criteria are intended to ensure that our determination of a CPP promotes the long-term benefit of consumers.

³⁹ Commerce Act 1986, s52A.

⁴⁰ *Electricity Distribution Services Input Methodologies Determination 2012* [2012] NZCC 26, clause 5.2

Evaluation criteria for customised price-quality path proposals

The Commission will use the following evaluation criteria to assess each CPP proposal:

- a) whether the proposal is consistent with the input methodologies;
- b) the extent to which the proposal promotes the purpose of Part 4 of the Act;
- c) whether data, analysis, and assumptions underpinning the proposal are fit for the purpose of determining a CPP;
- d) whether the proposed capital and operating expenditure meet the expenditure objective;
- e) the extent to which any proposed variation to the existing quality standards better reflects what the applicant can realistically achieve, taking into account either or both: statistical analysis of past SAIDI and SAIFI performance; and the level of investment provided for in the proposal; and
- f) the extent to which the CPP applicant has consulted with consumers on its CPP proposal; and the proposal is supported by consumers, where relevant.

121. We briefly explain below each of the evaluation criteria and how they have been applied to the WELL streamlined CPP.

Assessment of WELL's CPP against evaluation criteria

Whether the proposal is consistent with the relevant input methodologies

122. WELL's proposal must apply or adopt all relevant IMs.⁴¹ The IMs establish the key rules, requirements and processes of regulation. As outlined in chapter three we have provided modifications and amendments to the IMs to allow for a streamlined CPP process.
123. Our evaluation of WELL's proposal included assessing whether the proposal was consistent with the IMs, following the WELL modifications and exemptions. This included an assessment, prior to accepting the proposal, of whether the proposal met the CPP process and content IM requirements; as well as an assessment of whether the proposal met the substantive IMs for determining a CPP.
124. On 15 December 2017 we determined that the CPP proposal was consistent with the IMs.

⁴¹ Commerce Act 1986, s53Q(2)(d).

The extent to which the proposal will promote the purpose of Part 4

125. To satisfy the evaluation criteria the proposal must promote the purpose of Part 4 of the Act, outlined above. The Act sets out objectives in s52A(1)(a)-(d) which are integral to promoting the long-term benefit of consumers, and reflect key areas of supplier performance that we would expect in markets with workable competition.

Whether the information in the proposal is fit for purpose

126. The information in a proposal must be sufficient in detail and quality to allow us to undertake our assessment.⁴² The assumptions used must also be robust.
127. To enable a streamlined process we modified the information we required from WELL. For the most part WELL provided the required information in a way that was fit for purpose for evaluating its streamlined CPP proposal.
128. Where we considered further information was necessary to establish if it was fit for purpose, we requested this from WELL. Where we had doubts about the appropriateness or robustness of an assumption, we sought further explanation for the assumption or used a more appropriate assumption.

Whether the proposed expenditure reflects the expenditure objective

129. The expenditure objective was included in the IMs as a specific evaluation criterion for the assessment of capital expenditure and operating expenditure.⁴³
130. The expenditure objective requires us to assess WELL's proposed capital expenditure and operating expenditure on the basis that it reflects the efficient costs that a prudent supplier subject to price-quality regulation would require to:
- 130.1 meet or manage the expected demand for electricity distribution services, at appropriate service standards, during the customised price-quality path regulatory period and over the longer term; and
- 130.2 comply with applicable regulatory obligations associated with those services.⁴⁴
131. The assessment of forecast expenditure is not a mechanistic process – it necessarily involves the exercise of judgement supported by expert advice.

⁴² Commerce Commission "Input Methodologies (Electricity Distribution and Gas Pipeline Services) Reasons Paper" (22 December 2010), para 9.4.8.

⁴³ Commerce Commission "Input Methodologies (Electricity Distribution and Gas Pipeline Services) Reasons Paper" (22 December 2010), para 9.4.10.

⁴⁴ *Electricity Distribution Services Input Methodologies Determination 2012* [2012] NZCC 26, clause 1.1.4.

132. For the purposes of WELL's CPP the focus of our assessment against the expenditure objective has been on whether the resilience expenditure proposed by WELL reflects efficient costs a prudent supplier would incur to meet appropriate resilience service standards.
133. We also considered whether WELL's forecasts for the third year of its CPP met the expenditure objective.

Whether any proposed quality standard variation is realistically achievable

134. There is no proposed variation to the existing quality standards so we have not considered this evaluation criterion.⁴⁵
135. We have, however, proposed an additional quality standard which is discussed in Chapter 2 and Attachment C.

The extent of WELL's consultation with consumers and support from WELL's consumers

136. A CPP path must promote the long-term benefit of consumers. While consumers are best placed to understand what they value in terms of price and quality trade-offs, we acknowledge that a supplier should have a better understanding of the required network investment to meet those preferences than its consumers. Accordingly, while consumer support for the network investment is taken into account, agreement to the proposed customised price-quality path is not required.⁴⁶
137. We evaluating WELL's CPP proposal we have considered:
- 137.1 the need for WELL's network resilience as outlined in the government policy statement;⁴⁷
- 137.2 the extent of support by consumers for the resilience expenditure that was outlined by WELL in its proposal;⁴⁸ and
- 137.3 submissions we received on our Process Paper and WELL's CPP proposal.⁴⁹

⁴⁵ *Electricity Distribution Services Input Methodologies Determination 2012* [2012] NZCC 26, clause 5.4.5.

⁴⁶ Commerce Commission "Input Methodologies (Electricity Distribution and Gas Pipeline Services) Reasons Paper" (22 December 2010), para 9.4.16.

⁴⁷ "Government Policy Statement — Resilience of Electricity Services in the Wellington Region" (21 September 2017) 97 *New Zealand Gazette* at 53.

⁴⁸ WELL "Earthquake Readiness: Customised Price –Quality Path Proposal" (5 December 2017) section 5.1.

⁴⁹ The consultation documents and submissions in response are available at:
<http://comcom.govt.nz/regulated-industries/electricity/cpp/cpp-proposals-and-decisions/wellington-electricitys-2018-2021-potential-cpp/>

138. We have taken into account the nature of the resilience expenditure and the streamlined process, compared with usual CPPs, in determining the extent of WELL's consultation with consumers.
139. We will also take into account feedback received through consultation on this paper.

Our evaluation of WELL's proposal against the evaluation criteria

140. The starting point for our assessment was the review of WELL's proposal by Strata. We have also considered the findings and recommendations outlined from the independent engineer's review provided by WELL.

WELL provided us an independent engineering report from Jacobs

141. WELL sought an exemption to the requirement to obtain 'verification' under clause 5.1.3 of the IMs in favour of providing evidence of an independent engineering review of its earthquake readiness business case.
142. Jacobs were engaged to undertake the independent review. Jacobs is a global provider of technical, professional, and scientific services, including engineering, architecture, construction, operations and maintenance.
143. WELL used the feedback from Jacobs review to revise its proposal. Revisions to the proposal changed the total proposed resilience expenditure from \$32.0m to \$31.2m.
144. Jacobs also provided a letter summarising the review and outlining key findings and recommendations. WELL responded to the findings and recommendations outlined by Jacobs in its submission.
145. We have taken account of the Jacob's report in reaching our final decision, while recognising that Jacob's review process did not have the full independence safeguards in place as would an independent verifier.

We have used Strata as our own independent expert to assist our evaluation of WELL's CPP proposal

146. As explained in more detail in attachments A and B, we have engaged Strata to assist us in the evaluation of WELL's CPP proposal.
147. Strata have produced two reports – with recommendations on appropriate levels of resilience expenditure and BAU expenditure – which we have published alongside this paper.
148. We have critically reviewed Strata's recommendations, with the assistance of Commission engineering experts, and concluded that Strata's recommendations are appropriate for the purposes of WELL's streamlined CPP.

Attachment A WELL's resilience expenditure

Purpose of this attachment

149. This attachment explains our draft decision on the level of resilience expenditure that we have allowed for under WELL's CPP.

Summary of our draft decision

150. WELL proposed \$31.2m of expenditure to prepare its network for a major earthquake (resilience expenditure) – \$30.1m of capex and \$1.2m of opex.
151. We consider that WELL's proposed expenditure is needed, and meets the expenditure objective. Our draft decision is to allow WELL's proposed resilience expenditure.

Our approach to assessing WELL's proposed BAU opex for 2020/21

152. In order to determine an appropriate level of BAU capex, against the evaluation criteria, we engaged Strata to assist with the task from an engineering perspective.
153. Strata were generally satisfied with WELL's approach to the business case for its resilience expenditure, but identified a number of potential issues with some of its assumptions
154. Commission staff and Strata subsequently met with WELL to discuss the potential issues and WELL provided further justification on a number of points.

Strata's report and view on WELL resilience expenditure

155. After meeting with WELL and reviewing further information provided by WELL, Strata concluded that there was no reason for the Commission to decline or adjust the CPP application based on this issues identified. This was on the basis that:
- 155.1 WELL provided satisfactory explanations for the issues identified, or
- 155.2 while quantification of resilience benefits could be refined and improved, the unquantifiable benefits were likely to be sufficiently significant to justify the expenditure.
156. Strata identified the risk that the full 91 building reinforcement projects proposed by WELL would not be completed in the proposed timeframes. Strata recommended that WELL's CPP should specify that the expenditure allowed for this work cannot be used for other projects.
157. We have published Strata's report alongside this paper.

Commission review of Strata's report

158. We have critically reviewed Strata's approach and findings and consider that WELL's proposed resilience expenditure forecast is appropriate and meets the expenditure objective.
159. We have considered the concerns raised by the Major Energy Users Group (MEUG) that WELL's estimate of the benefits are overstated, because the counterfactual is not the status quo over the 20-year time frame used by WELL for its cost-benefit analysis. MEUG submitted that subsequent resilience work could shorten the recovery time used significantly.
160. We have considered MEUG's concerns and discussed the matter further with WELL. We are satisfied that the expenditure will deliver the proposed benefits, even once further resilience work is undertaken in the future.
161. While there are some areas where WELL could better articulate its quantitative analysis of the costs and benefits of the proposed expenditure, we agree with Strata that the substantial unquantified benefits along with the quantified benefits, justify the proposed expenditure and represents prudent steps to meet appropriate service standards (including resilience). We also consider that the proposal represents the efficient costs to achieve these service standards.
162. As such, our draft decision is to accept WELL's proposed resilience expenditure of \$31.2m (\$30.1m of capex and \$1.2m of opex).
163. As discussed in our draft decision is to introduce a resilience specific quality standard that addresses Strata's concerns regarding the deliverability of WELL's seismic strengthening programme.

Attachment B WELL's BAU expenditure

Purpose of this attachment

164. This attachment explains our draft decision on the BAU level of expenditure for the third year of WELL's CPP.

Summary of our draft decision

165. In order to determine WELL's streamline CPP, we need to set new business-as-usual (BAU) opex and capex forecasts for the final year of the CPP as we do not have DPP forecasts in this year to use as a base.⁵⁰

Year 3 BAU capex

166. WELL proposed \$35.8m of BAU capex for the third year of its CPP. Our draft decision is to allow for \$35.8m BAU capex for the third year of WELL's CPP.

167. We identified issues with WELL's proposed consumer connection capex. However, taking into account the capital contributions that are netted off this forecast before entering the regulated asset base, the overstatement of this forecast was not material.

Year 3 BAU opex

168. WELL proposed \$33.4m of BAU opex for the third year of its CPP. Our draft decision is to allow for \$33.4m BAU opex as proposed by WELL.

Our approach to assessing WELL's proposed BAU capex for 2020/21

High level approach

169. In order to determine an appropriate level of BAU capex, against the evaluation criteria, we engaged Strata to assist with the task from an engineering perspective. We developed an approach to assessing WELL's year three capex that took into account the urgent nature of the CPP. At a high level, we asked Strata to:

169.1 develop a dashboard to identify business-as-usual (BAU) expenditure based on a comparison against historical expenditure and other metrics (such as ICP numbers, line length, etc);

169.2 identify expenditure that falls outside what was deemed to be BAU;

169.3 assess WELL's asset management plan to see if justification is provided for any non-BAU expenditure; and

⁵⁰ By business-as-usual, we mean expenditure required, but not linked to the additional specific resilience expenditure proposed by WELL.

- 169.4 make a recommendation on an appropriate level of capital expenditure for WELL in the 2020/21 year.

Strata identified two outlying expenditure categories in dashboard assessment

170. Strata assessed WELL capex using the dashboard tool they created. They found two expenditure categories did not fit with what they would expect to be required as business-as-usual:

170.1 consumers connection capex; and

170.2 system growth capex.

171. All other categories were consistent with what would be expected as BAU.

Further justification from WELL's AMP

172. Strata went on to consider if the non-BAU expenditure was justified in WELL's asset management plan:

172.1 System growth – Strata found that the process that WE undertook to determine system growth expenditure forecasts was sound and that the options assessment process was robust. They had no concerns with the planning criteria applied and thought that demand forecasts were appropriate. As such, Strata recommended that we accept WELL's forecasts for system growth expenditure.

172.2 Consumer connections – Strata did not consider that consumer connections expenditure was supported, as the forecast was for a substantial increase above historical actual costs with no explanation in the AMP.

173. Strata initially recommended that we approve an amount of consumer connection capex in line with historical average over the last 4 years of \$5.7m compared with \$7.1m, reducing the forecast total capex by \$1.44m.

174. However, capital contributions for consumer connections are netted off the consumer connection forecast before entering the price path. Taking this, and WELL's capital contribution forecasts, into account, we consider that any overstatement in consumer connection expenditure is immaterial.

175. We have published Strata's report alongside this paper.

Commission review of Strata's report

176. We have critically reviewed Strata's approach and findings and consider the approach and findings appropriate given urgent nature of WELL's CPP.

Our approach to assessing WELL's proposed BAU opex for 2020/21

177. We used a slightly different approach to determine whether WELL's forecast opex for year three of its CPP was appropriate.
178. In line with our streamlined approach we modelled our own base and trend projections of WELL's opex forecasts. These projections were relatively simple, in line with our streamlined approach to WELL's CPP. At a high level:
 - 178.1 we used opex models from the 2015 DPP reset as our base;
 - 178.2 we updated pricing inflators to include more recent information provided by NZIER, and to extend into the 2020/21 year; and
 - 178.3 we updated actual opex values for 2015/16 and 2016/17 years.
179. Using this forecast as a cross-check we compared our own forecast of WELL's opex, with WELL's forecast in its 2017 AMP. WELL's forecast was in line with our expectations. As such, we are satisfied that the amount of opex proposed by WELL is appropriate in these circumstances.
180. Our draft decision is that the WELL's opex forecast of \$33.4m is appropriate for the purposes of this CPP.

Attachment C Resilience quality standard assessment

Purpose of this attachment

181. This attachment explains, in greater detail, how we have implemented the resilience quality standard and how resilience will be assessed.

We have developed an index to measure WELL's performance in delivering resilience improvements

182. In order to measure WELL's performance in delivering resilience improvements (ie, its ability to maintain and restore supply in the event of a major earthquake) we have developed a resilience index.
183. The resilience index runs from 0 to 100 and measures WELL's delivery of some of the improvements WELL has proposed as part of its CPP, to ensure that its network is adequately prepared for a major earthquake.
184. A resilience index value of 100 represents the full delivery of resilience improvements that we expect from WELL during the CPP period, whereas an index value of 0 represents a case where WELL delivers none of these improvements.
185. Throughout the period WELL's resilience will be assessed on the resilience index, by summing the values we have attached to specific resilience improvements that we expect WELL to make in the CPP period. These values are weighted consistent with the level of capital expenditure that we have allowed for to deliver the resilience improvement.
186. For example, if WELL can demonstrate, on the assessment date that its Wainuiomata zone substation building is strengthened to 67% of the national building code, then WELL will attain the resilience value of 0.7 associated with that resilience improvement.
187. At a high level, the key resilience improvements we will measure are whether:
- 187.1 WELL's key substations have been adequately seismically strengthened;
 - 187.2 WELL has capability to replace certain amounts of cable damaged in an earthquake;
 - 187.3 WELL has capability to replace a substation at short notice, in both the CBD and the Hutt regions; and
 - 187.4 WELL is suitably prepared to maintain data and communication links in the case of an earthquake.
188. The full list of resilience improvements and their associated values are set out in Schedule 9 of the draft CPP determination, which we have published alongside this paper.

WELL will be subject to a binding resilience quality standard

189. Under the resilience quality standard, WELL will be required to deliver a minimum level of the resilience improvements set out in its CPP proposal. In the case that WELL fails to meet this minimum resilience level (a resilience index rating of 60 in the final year if the CPP), WELL will breach its quality path and we may take enforcement action.

WELL's resilience quality standard will have a revenue linked incentive

190. WELL will also be subject to a revenue linked incentive, relating its assessed value on the resilience index. To the extent that WELL does not deliver the improved resilience improvements (represented on the resilience index) as outlined in its proposal, its revenue will be reduced through the 'quality incentive adjustment' recoverable cost in the next period.
191. WELL's resilience target represents the full delivery of the resilience improvements expected from the resilience investment. If WELL fully delivers these improvements then there will be no incentive adjustment under this mechanism.
192. WELL's assessed resilience index value will be capped at the 100, and collared at 0, meaning that the incentive will apply to any value that WELL attains on the resilience index.

Revenue at risk under the quality linked incentive

193. The total revenue at risk will be the equivalent of 15% of the present value of the forecast commissioned asset values for the resilience assets. This is the present value of the "retention adjustment" per the capex incentive wash-up⁵¹ that WELL would stand to gain, in the case that it did not undertake any of the expenditure allowed for delivering resilience improvements.
194. The forecast commissioned asset values in each of the three years of the CPP are \$8.3m, \$11.1m, \$11.8m respectively. The present value is to be calculated as at 31 March 2021, as the recoverable cost is to apply to the year ending 2021.
195. The three values of forecast commissioned asset values are each deemed to occur at mid-year. The periods from mid-year to the end of 2020/21 will be 2.5, 1.5 and 0.5 years respectively for each of the 3 forecast amounts. The present value so discounted over these periods totals \$34.6m.⁵²
196. The revenue at risk with respect to completing the resilience works is therefore $\$34.6\text{m} \times 15\%$, or specifically \$5,185,000.

⁵¹ Clause 3.3.12(1) of the Electricity Distribution Services Input Methodologies Determination 2012 (Consolidated version published 28 February 2017)

⁵² Discount rate used is the 2015 DPP WACC of 7.19%.

Attachment D IM variations

Purpose of this attachment

197. This attachment outlines our draft decisions on proposed IM variations.⁵³

Summary of our draft decision

198. Our draft decision is to accept the IM variations proposed by WELL, except for the proposed Opex IRIS variation.

199. The IM variations proposed by WELL provide for the price path to be determined consistent with the streamlined CPP process. The variation proposed include variations to:

199.1 Definitions of “CPP regulatory period” and “next period”;

199.2 Definition of “building blocks allowable revenue before tax”;

199.3 Capex wash-up;

199.4 Opex IRIS;

199.5 Works under construction; and

199.6 Capex IRIS and the definition of ‘forecast value of commissioned assets’.

200. We have also proposed an additional variation to correct a drafting error in the Opex IRIS.

201. The remainder of this attachment outlines the purpose of the variations and our reasons for our draft decision. The proposed determination drafting to give effect to our draft decisions is outlined in the draft determination released alongside this paper.

Definitions of “CPP regulatory period” and “next period”

202. Under the streamlined CPP, the analysis of allowable revenue and its components is limited to 2018/19 to 2020/21. However, the IMs require a number of items to be calculated for the duration of the “next period” or the “CPP regulatory period”.

203. The ‘next period’ is defined as from the regulatory year in which the CPP application is made until the regulatory year five years after the start of the CPP regulatory period.

⁵³ Section 53V(2)(c) of the Commerce Act allows us in determining a CPP to vary the IMs with agreement of the supplier.

204. The ‘CPP regulatory period’ is defined as five years long for the purposes of a CPP proposal, and can only be shorter once a CPP determination has been made.

WELL’s proposal

205. WELL proposes that to enable the streamlined CPP approach, a variation is required to the definitions of both “CPP regulatory period” and “next period”, such that these terms are limited to the three years in the proposed CPP regulatory period.
206. WELL proposes that, in clause 1.1.4(2), the definitions of “CPP regulatory period” and “Next period” are varied, to affect the change.

Our draft decision

207. Varying the definitions of “CPP regulatory period” and “next period”, to the proposed 3 year period, rationalises the information required to be prepared by WELL and assessed by us when considering the CPP proposal. This variation, therefore, aligns with us streamlining the CPP process for WELL.
208. We consider, in this instance, that limiting the calculations to the three year period of the streamlined CPP is appropriate given the urgency of this proposal.

Definition of “building blocks allowable revenue before tax”

209. Under the streamlined CPP for WELL, allowable revenue is calculated by extending the current DPP by one year and then adding an increment each year related to earthquake readiness expenditure. This is a change to how the IMs currently provide for the determination of a CPP revenue path.

WELL’s proposal

210. In order to implement the streamlined CPP for WELL, WELL has proposed a variation to Part 5, Subpart 3, Section 1 of the IMs, which sets out how the revenue path is to be determined.
211. The variation proposed involves a variation to how BBAR before tax and the regulatory tax allowance is calculated.

Our draft decision

212. The variation to the definition of “building blocks allowable revenue” is consistent with the streamlined CPP approach proposed for WELL. The variation provides for allowable revenue to be calculated by extending the current DPP by one year and then adding an increment each year related to earthquake readiness expenditure.

Capex wash-up

213. The capex wash-up corrects for differences in the revenues that EDBs could expect to recover during the regulatory period as a result of changes between the forecast and actual value of commissioned assets in the year prior to the start of the regulatory period.

214. WELL is currently in the process of recovering a capex wash-up amount, based on the RAB reset in 2015, when the current DPP was determined.⁵⁴ The recovery of the wash-up amount is spread over 2016/17 to 2019/20 years (year's two to five of that DPP period).⁵⁵
215. Also, the value of the capex wash-up is calculated assuming that the RAB used to determine allowable revenue would apply for five years before being reset.
216. Under the proposed 'streamlined' CPP approach to setting allowable revenue, WELL's RAB will be reset one year later than assumed when specifying the capex wash up.

WELL's proposal

217. As WELL's RAB is not being reset when it moves onto the streamlined CPP, it is appropriate that WELL continues to recover the unrecovered portion of the capex wash-up as specified in the DPP determination (ie, during the 2018/19 and 2019/20 years).
218. WELL proposes that the capex forecasting variance which is reflected in the DPP BBAR will continue for another year, and a capex wash-up can be included for 2020/21 to offset this variance.
219. The variation proposed involves a variation to IM clause 3.1.3(1)(p). Since the value of the wash-up can be calculated today, the CPP determination can specify the specific values, rather than just a formula.
220. As WELL's RAB will not be reset when it moves onto the CPP, WELL proposes there is no need for a capex wash-up related to a 2018 CPP determination.

Our draft decision

221. WELL will have recovered, during 2016/17 and 2017/18, a portion of the wash-up amount from the 2015 RAB reset but not the full amount. Our draft decision is it is appropriate for WELL continue to recover the remaining amount during 2018/19 and 2019/20.

⁵⁴ The capex wash-up is the variance between 2014/15 actual capex and the 2014/15 capex used to set prices for the 2015-2020 default price-quality path.

⁵⁵ The total wash-up amount and the annual recoverable cost values have been specified by the Commission, Commerce Commission "EDB capex wash-up adjustment recoverable cost calculation sheet – 11 December 2015" (10 December 2015)

222. The capex wash-up amount determined in the 2015-2020 DPP assumed a regulatory period ending 2019/20. The proposed streamlined CPP extends the period the forecast variance impacts to 2020/21. Accordingly it is our draft decision to include a capex wash-up amount in 2020/21 that reflects the effect of the 2014/15 capex variance on the rolled forward allowable revenue.
223. Our draft decision is also to not provide for a capex wash-up for the 2018 CPP determination, as proposed by WELL. In the streamlined CPP approach applied to WELL, the RAB is not being reset at the beginning of the regulatory period. Capex wash-ups are only required when the RAB is reset which is most likely to be at the end of the proposed CPP period (FY21).
224. The draft capex wash-up amounts for the streamlined CPP period are outlined in the below table.

Table D.1: Nominal capex wash-up amounts for recovery through CPP period

\$m	2018/19	2019/20	2020/21
Capex wash-up amount	0.489	0.518	0.350 ⁵⁶

Implementation of the IRIS

225. The Incremental Rolling Incentive Scheme (IRIS) is intended to ensure that suppliers subject to price-quality regulation have an incentive to achieve operating efficiencies that is relatively constant throughout the regulatory period.
226. WELL has suggested an amendment to the IRIS in light of concerns about how it will operate in its particular circumstances as it transitions to the streamlined CPP. We have modelled how the IRIS mechanism would operate under WELL's proposed transition from DPP to CPP and back to a DPP and we do not share these concerns.
227. Our draft decision is therefore that the proposed variation to the IRIS for opex is not required. Instead we propose to apply the existing IRIS mechanism.
228. Table D.2 outlines the retention factors that occur when the existing IRIS mechanism is applied in the situation faced by WELL in making its CPP application, ie, when the IMs are applied without variation. The retention factor represents the percentage of the Net Present Value of any efficiency gain or loss that WELL can expect to retain.

⁵⁶ 2020/21 Capex wash-up amount has been determined using the methodology adopted in determining the previous year's capex wash-up amounts and applying the rolled forward assumptions applied in the WELL CPP financial model.

Table D.2 Achieved retention factors under IRIS⁵⁷

	Year 1 (DPP)	Year 2 (DPP)	Year 3 (DPP)	Year 4 (CPP)	Year 5 (CPP)	Year 6 (CPP)	Year 7 (DPP)
Permanent saving retention factor	33	34	34	34	34	34	34
Temporary saving retention factor	34	34	34	34	34	34	34

229. A key policy intent of the IRIS is to produce a retention factor that is broadly constant in each year of the regulatory period. As can be seen in the table, WELL will retain between 32.5% and 34.1% of the Net Present Value of any efficiency gain or loss. This is broadly equivalent to retaining the benefit of a gain or loss for five years before it is shared with consumers.

Explanation of why a variation is not required

230. The retention factors that are produced by applying the existing IRIS to the situation faced by WELL are, in fact, more constant than the retention factors that would be observed for a CPP applicant under a normal situations. Table D.3 below shows the retention factors that are observed for a CPP applicant where the price path is rest at the beginning of the CPP period.

Table D.3 Incentive rates observed under a 'normal' CPP

	Year 1 (DPP)	Year 2 (DPP)	Year 3 (DPP)	Year 4 (CPP)	Year 5 (CPP)	Year 6 (CPP)	Year 7 (DPP)
Permanent saving retention factor	6	4	34	34	34	34	34
Temporary saving retention factor	34	34	34	34	34	34	34

231. The marginal incentive (as represented by the retention factor) depends on the type and timing of the forecast used for setting the operating allowance. This is because the forecast determines the amount of efficiency gains that are taken into account when setting the allowance for opex in the next period.

⁵⁷ Permanent savings are those that carry forward into subsequent years vs one off temporary savings. i.e one off bonuses vs. permanent increases in salary obligation

232. The retention factors are different for WELL to those shown in Table D.3 because of differences in the way the forecasts are developed for the purposes of setting the opex allowance for a CPP. As noted in Chapter 2 the opex allowance (for the purposes of calculating the IRIS adjustment) for WELL will be set by:
- 232.1 For the first two years of the CPP, using the forecast that was developed for the DPP, and which incorporates permanent efficiency gains up to the base year for that forecast (2013);
 - 232.2 For the last year of the CPP, relying on the suppliers forecast from the 2017 Asset Management Plan, which incorporates permanent efficiency gains up to the date of the forecast (2016);
 - 232.3 Adding an annual allowance for additional resilience expenditure.
233. By contrast, the assumption when the IRIS mechanism was developed was that a CPP would usually be set based on the supplier's forecast which we had scrutinised. This type of forecast would mean that the opex allowance for all years of the CPP would reflect permanent efficiency gains achieved during the three years of the preceding DPP.
234. In addition, following a submission from Powerco Ltd, we set the IRIS IMs for CPPs in a way that provided more certainty about the calculation of penalties and rewards under IRIS, but this came at the cost of more constant sharing factors for permanent savings/losses.⁵⁸ The outcome as shown in Table D.3 was that permanent savings/losses prior to the CPP (which are shared with consumers through the use of an engineering forecast to set the opex allowance) are effectively shared more by the IRIS than they would need to be to produce a constant sharing factor of 34%.
235. A fortunate consequence of using the DPP forecasts for the purposes of calculating IRIS in years 1 and 2 of the WELL CPP is that it prevents the sharing of permanent savings and losses that would otherwise occur through the use of a normal CPP forecast. This results in a sharing factor closer to the desired 34%.
236. We welcome submissions on our modelling of the opex IRIS retention factors and on WELL's proposed approach. Submissions on alternative approaches to that provided for under the current IMs, including associated retention factors and an explanation for why these associated retention factors may be more appropriate would also be welcomed.

⁵⁸ Commerce Commission, Electricity Distribution services (IRIS) Input Methodologies Amendments Determination 2015 (25 November 2015).

Works under construction

237. The ‘streamlined’ CPP approach combines an existing DPP allowance with an increment for the earthquake readiness expenditure. While the CPP IMs define a “works under construction” roll-forward, the DPP IMs do not.

WELL’s proposal

238. WELL proposes to limit the works under construction roll-forward to the earthquake readiness expenditure – incorporating the CPP IMs but maintaining the current DPP treatment.
239. WELL proposes a variation to clause 5.3.12 to implement the proposed change.

Our draft decision

240. Our draft decision is to vary how works under construction is calculated as proposed by WELL.
241. The proposed amendment provides for the readiness expenditure to be recognised in the CPP BBAR calculation and excludes other expenditure already accounted for through the DPP BBAR calculation.

Capex incentive definition of forecast value of commissioned assets

242. As with the Opex IRIS the method specified in the IMs for the Capex incentive involves a calculation using actual and forecast values. For the purpose of the ‘streamlined’ CPP these values include both DPP and earthquake readiness components.
243. The definition of ‘actual’ value of commissioned assets refers to Part 2 which implies that it includes both components. But the definition of forecast commissioned asset values for a CPP does not explicitly include the DPP component.

WELL’s proposal

244. WELL proposes a variation to the definition of “forecast value of commissioned assets” for the purpose of the Capex incentive to incorporate both the DPP and readiness components.

Our draft decision

245. Our draft decision is to vary the definition of “forecast value of commissioned assets” as proposed by WELL.
246. Amending the definition provides for the Capex incentive to be appropriately applied to forecast capex for each of the streamlined CPP years.

Correction to Opex IRIS drafting

247. In 2016, as part of the IM review, we made a change to the Opex IRIS. The policy change was to introduce a smoothing adjustment to spread the previously second year adjustment over the whole regulatory period.
248. The IM amendment implementing the policy change incorrectly referred to the DPP regulatory period rather than the regulatory period. A variation to the IMs is required to allow the Opex IRIS policy intent to appropriately apply under a CPP.

Proposed Amendment

249. Clause 3.3.2 of the IMs is varied so that it refers to the regulatory period rather than DPP period. The same variation has been proposed for the Powerco CPP.

Our draft decision

250. Our draft decision is to correct the drafting through a variation to allow the Opex IRIS policy intent to apply.