

Commerce Commission  
P O Box 2351  
Wellington 6140

For the Attention of: Paul Mitchell

23 June 2017

Dear Paul

## Stage 1 Review of and opinion on the Powerco CPP Verifier's Report

1. I am pleased to provide this letter setting out Strata Energy Consulting Limited's (Strata) review of the key components of the Verifier's Report relating to Powerco's 2017 CPP Application.
2. As requested by the Commerce Commission (the Commission), Strata undertook a high-level review of the Verifier's Report to gain an understanding of the approach taken by the Verifier and its conclusions. Strata attended meetings between the Commission and the Verifier to test assumptions and conclusions included within the Verifier's Report.
3. This letter provides Strata's high-level informal opinion on the extent to which the Commission should rely on the conclusions and recommendations of the Verifier's Report. This is not intended to replicate the work already undertaken by the Verifier.

### Overview of the key findings of Strata's review

4. Strata's high level opinion is provided in the following section in this letter. For the Commission's information, I have also provided a table which records our high-level views on issues raised and discussed at the meetings.
5. The high-level views table is structured in the following four topic areas.
  - 1) Points related to the IM requirements for verification
  - 2) Points related to the broader regulatory framework
  - 3) Points directly related to verification of Powerco's CPP
  - 4) Other points
6. The content in the high-level views table provides context and supporting detail for the opinion provided below.

## Appropriateness of the Verifier's Report

7. Overall, Strata considers that the Verification Report provides a clear, well-constructed description of the verification approach, process and findings.
8. In 103 pages (excluding appendices) and six main sections, the report demonstrates that the Verifier had full knowledge of the Input Methodology (IM) requirements for CPP verification and had applied them appropriately for its assessment. The verification approach set out in the Verifier Report, and described at the meeting with the Verifier, was appropriate and well aligned with the IM requirements.
9. Despite a small number of identified issues, the Verification Report and comments from the Verifier demonstrate that the IM requirements, when applied appropriately, provide valuable and efficient assurance and information for the Commission's consideration of CPP applications. Given that the CPP application represents significant increase in expenditure above historical levels, the depth of the Verifier's investigations (as evidenced by the number of questions asked and information reviewed) was appropriate.
10. In its report and in the meeting discussions, the Verifier demonstrated that it had acquired a good depth of knowledge of Powerco including the state of the network, its assets and asset management practices. The Verifier was also able to bring and apply its knowledge of Australian EDBs, which provided some interesting comparative views on Powerco's level of asset management capability.
11. In its report, the Verifier has provided 11 key issues<sup>1</sup> that it believes the Commission should consider further. Strata thinks that the issues identified by the Verifier are appropriate and are supported by the more detailed information and analysis provided in the body of the Verifier report.
12. The Verifier provides suggestions on the additional information or lines of inquiry. Whilst the identified issues are appropriate and supported by information in the body of the report, several of the suggestions are not appropriate for the Commission to undertake. For example, for overhead line structures, the Verifier suggests that the Commission should *construct new survivor curves excluding green defects* and *revise the overhead structures forecast to reflect any changes to overhead conductor renewals capex*<sup>2</sup>. The suggestion highlights the absence of analysis and information that Powerco should have undertaken and provided to the Verifier, but did not. It would be more appropriate for the Verifier to suggest that the Commission requires Powerco to provide the analysis and information and that the Commission undertakes an assessment of Powerco's information and analysis.
13. The Verifier observed<sup>3</sup> that Powerco reduced its expenditure forecast capex by 5.6% and opex by 4.8% in response to the Verifier's draft report. This demonstrates the value that the verification process has added by improving the rigour of challenge of the CPP proposal prior to its submission.
14. However, discussions with the Verifier identified that Powerco has relied on the verification in place of internal challenge. Accordingly, it is not surprising that the over forecasting of expenditure was identified by the Verifier. Whilst a distributor may want to

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<sup>1</sup> Verifier Report 7 June 2017, table 2, page 19

<sup>2</sup> Verifier Report 7 June 2017, section 3.1.4, page 43

<sup>3</sup> Discussions with the Verifier identified that Powerco to some extent relied on the verification in place of an internal challenge process.

leave some surplus in the proposal for the Verifier to find, Strata considers that CPP applicants must ensure that the proposal has been subjected to rigorous internal challenge prior to submitting it to the Verifier. The lack of rigorous challenge on Powerco's CPP is likely to have had time and cost implications to the verification process.

15. The timing issues identified by the Verifier were mainly due to the lateness of information that the Verifier had asked Powerco to provide. An example of this is the information to support linkages between the proposed expenditure and reliability outcomes. For this example, the lateness and lack of information provided by Powerco will have led to the Verifier's recommendation that the Commission undertake further review of reliability capex and quality standard variation.
16. The Verifier noted during the meeting that there are currently no hard dates given to the CPP applicant to provide information to the Verifier. Strata supports the issue and recommends that the Commission considers how the timelines for provision of information can be defined. This should improve the efficiency of future verifications.
17. The Verifier concludes<sup>4</sup> that it has verified 89% of capex and 94% of opex; this means that 9% (\$122m) of expenditure remains unverified. The Verifier has 11 key issues that it suggests the Commission should focus on when it assesses the CPP application. We have considered if this is an appropriate position for the Verifier to 'hand over' to the Commission and if the focus areas are sufficiently material for further consideration.
18. Strata considers that the Verifier Report and the approach taken by the verifier are well aligned with the IM requirements for verification and have highlighted appropriate areas for the Commission to investigate further.

### Opinion on the extent to which the Commission can rely on the Verifier's Report

19. Strata considers that the Verifier has demonstrated that it has applied an appropriate level of rigour to verification. This should provide an appropriate level of assurance to the Commission that the bulk of Powerco's CPP application that was subjected to verification can be relied upon. The Commission should have no reason to rework the verification.
20. Notwithstanding the above, Strata has identified three issues for the Commission to consider before accepting the Verifier's conclusion that it has verified 91% (\$1.205m) of expenditure.

#### 1) Key issues are not systemic

21. Strata considers that the verification can only be accepted if the 'key issues' identified by the Verifier are found to be specific to the 9% of unverified expenditure and are not systemic issues that also relate to the 91% of verified expenditure. It is important that, when considering the key issues, the Commission considers if each issue is systemic and therefore requires an adjustment to be made to the verified expenditure.
22. For example, the resolution of the quality standard variation issue may have implications for all replacement capex if it is found, as the Verifier expects, that the proposed expenditure will result in higher reliability. This result would be above the reliability level

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<sup>4</sup> Verifier Report 7 June 2017, page 13

that Powerco has found its customers are willing to pay for. Given that Powerco has not demonstrated the linkages between expenditure and quality outcomes to the Verifier's satisfaction, it is difficult to see that the Commission can rely on the Verifier's conclusion that 91% of the proposed expenditure is verified, without further review.

## 2) Perception of a wish-list

23. Powerco's CPP application has many drivers and therefore several expenditure components that are more than historical business and usual levels. This introduces a perception that the CPP application is potentially being used to secure a 'wish-list' rather than an efficient price path.
24. It is not clear the extent to which the verifier has specifically considered this effect, however, it is implicit in the rigor that it has applied to its assessment of each expenditure component and to the project/programme reviews. For example, the Verifier's questioning of the validity of the network evolution capex suggests that its evaluation of the individual components has been sufficient to remove unwarranted wish list items. To ensure that any potentially unwarranted expenditure is identified, Strata recommends that, as it works through the Verifier's key issues, the Commission considers the possibility of any remaining unwarranted expenditure.

## 3) Roll-outs not considered

25. During the meeting with the Verifier, Strata raised the issue of the expenditure 'roll-in/roll/out' effect that can produce an inappropriately high expenditure forecast. The roll-in effect occurs when expenditure that was forecast, but not spent, in a previous period is included in the following period's forecast. The Verifier noted at the meeting that this was observed during the verification. The roll-out effect occurs when the expenditure forecast in the current period is not actually spent and is rolled into the next period's forecast. The Verifier noted at the meeting that it had not specifically considered the roll-out effect but that it had considered the deliverability of the proposed expenditure.
26. An assessment of deliverability on its own does not fully cover the probability that roll-outs will occur. During the regulatory period, it is inevitable that changes to projects and programmes will occur. Some of these changes will be due to revised input data and information, reprioritisation, efficient deferrals etc. Strata recommends that the Commission makes further enquiries to ensure satisfaction that the expenditure forecast is not inflated due to the inclusion of potential roll-outs.
27. The significant ramp-up in forecast expenditure increases the possibility that, even though it is potentially deliverable, slippages and variations will result in some deferral of expenditure to the next regulatory period. Such a roll-over may produce issues for the IRIS incentive based regulation and for setting an appropriate price path for the next regulatory period.

## Concluding comments

28. Strata considers that the Verifier has met the requirements of the IMs for the Powerco CPP verification.
29. Strata considers that the key issues identified for the Commission to consider are appropriate and supported by the Verifier's assessment set out in its report. However, the Verifier's suggested 'additional information or a line of enquiry', for each identified key issue, needs to be reviewed.

30. Whilst Strata has concluded that the verification provides an appropriate level of assurance that the Commission can rely on, Strata has identified three additional areas of enquiry that it recommends to the Commission.

Regards

A handwritten signature in black ink, appearing to read 'Bill Heaps', with a stylized flourish at the end.

Bill Heaps  
Managing Director  
Strata Energy Consulting Limited

## Verifier Report Assessment Worksheet

### Points directly related to the CPP Process

Topic	Point	References in Verifier Report/discussion	Strata comments
<u>Constraints due to set timeframes</u>	The verification was constrained by the late delivery of information and data	SAIDI and SAIFI data and analysis arrived at the end of the verification process meaning that linkages between expenditure and quality outcomes could not be seen.	Given the time that Powerco has been developing its CPP approach and application, we would have expected that a comprehensive business case for major areas of expenditure would have been made available to the verifier at the commencement of the verification period. This clearly did not happen.  Consequently, the verifier has had to hand over a component of verification to the Commission.
<u>Document interchange protocols</u>	The use of a document exchange system is important to an efficient verification process	Raised in discussion	The establishment of a standard document exchange platform may be a valuable tool that will improve the efficiency of future CPP verifications.
<u>Project review sample size requirement</u>	Requiring specific project and programme sample size may not be appropriate for EDB verification	Raised in discussion	Verifier can determine the appropriate sample size. It isn't obvious that the IM needs to be changed. Additional guidance for future verifiers could be valuable in achieving consistency in sampling approaches.

## Points related to the regulatory framework

Topic	Point	References in Verifier Report/discussion	Strata comments
NZ EDB level of asset management maturity	Immature, compared with Australian regulated distributors	Discussion, morning session, day 1.	Economies of scale issues  Structural issues explain much of the differences. Australian distributors are generally much larger businesses and can extract significant economies of scale. Larger businesses are better resourced to participate within a heavier handed regulatory regime
Previous forecasting and expenditure limited by regulatory 'allowances'.	Expenditure on networks is not aligned with network need.	Raised in discussion	This is an issue being observed in other EDBs and it is not appropriate for EDBs to forecast and set internal allowances based on DPP settings alone. The state of the network including linkages between reliability and investment must be applied.  The Commission should consider how this issue can be resolved.
Regulation driving improvements in asset management	Regulation not alignment with good industry practice moderating EDB development	Raised in discussion	The Verifier noted that in Australia and New Zealand regulation has been driving improvement and change in asset management practices. Given the Verifier's observation that Australian EDBs generally have more mature asset management practices than NZ EDBs, it is worth considering what needs to change to raise the bar for NZ EDBs.
CPP and the second cycle	Verification only considers the CPP period and not what	Raised in discussion	Verification only considers the CPP period and not what happened in the following period. There are potential issues to consider if a return to DPP occurs.

## Points directly related to Verification of Powerco's CPP

Topic	Point	References in Verifier Report/discussion	Strata comments
<u>Accuracy of past disclosures</u>	Variation in data suggests that ID data may have been inaccurate	Raised in discussion	This issue is important as it means that the Commission as well as Powerco has been viewing potentially misleading information. There are indications that this issue is systemic across all EDBs. We are not sure of the potential implications arising from this for the CPP. A key question for the CPP assessment is what level of reliance that can be placed on current data and information?
<u>Linkage between criticality and proposed expenditure</u>	Potential loss of efficiency	Raised in discussion	It is not clear if Powerco attempted to provide a link or that no attempt was ever made. With so much (apparently) to do, if they get at least some of the money they are claiming, they will need to be very good at prioritising their scarce resources. Any lack of knowledge on criticality will lead to inefficiency and potential delays in delivering the programme.
<u>Limited data on failure rates</u>	Powerco has not proven that the current failure rate of OH structures is unacceptable and needs to be reduced.	Raised in report and in discussion	Has this been proven for all other asset categories or is it systemic? If not systemic why does it happen only in overhead structure assessment?
<u>Security policy</u>	Level risk of security not proven nor tested during consultation	Verifier undertook analysis on a sample which looked ok.	Security policy review should have been the first step including consultation on the price/quality trade off impact on customers. This should have been done on an East/West and regional basis focusing on the areas where expenditure would be targeted.  It's therefore very difficult to objectively view the magnitude of the forecast capex. The main capex growth-related driver is actually just catching up with Powerco's current security standard. But the Verifier thinks the standard is too rigid/deterministic. I haven't looked into it any further but, given the size of the growth/security capex bucket; this has to be a big area for the Commission's own review.



<u>Future Network</u>	Why is this not business as usual?	Raised in report and in discussion	This appears to be one of the escaping sheep added to the CPP 'wish list'. All other EDBs seem to be managing this within the DPP, so why is Powerco different? Not appropriate for inclusion. They're still getting to grips with managing their <i>current network</i>
<u>Rollins and rollouts not considered</u>	The Verifier did not directly consider the impact of potential roll outs	Raised in discussion	The Verifier did consider deliverability, however projects and programmes are substituted during the period and it is normal that some expenditure gets carried over to the next period. Accordingly, an allowance for this is appropriate, if roll ins are included in the forecast.  How the CPP handles roll ins and outs needs to be considered as a multi period issue, this is quite complex.
<u>Vegetation management records</u>	Third parties not charged for second cut	Raised in report and in discussion	Due to poor records, third parties are not being charged for second cuts. This means that Powerco customers are meeting these costs through distribution charges. There is no incentive for Powerco to change this and effectively manage any fall out and bad debts. If the extent of this can be identified the expenditure could be disallowed. This would provide an incentive to recover costs appropriately.
<u>Future Network</u>	Massive potential for inefficient replication of analysis and planning costs	Raised in discussion	Need to capture economies of scale. All other EDBs will be doing this within the DPP, why should Powerco be any different – competition issues? Opportunity exists for EDBs to cross-subsidise their participation in adjacent emerging markets (eg demand response) from their regulated business. Need to be vigilant in this space. Recommend zero allowance.
<u>Conductor replacements</u>	Review suggested additional line of enquiry	Raised in report and in discussion	Need to reconsider the Verifier's suggested additional line of enquiry. The Commission should require Powerco to undertake and provide the results of the suggested investigation/analysis.
<u>OH structure replacements</u>	Review suggested additional line of enquiry	Raised in report	Need to reconsider the Verifier's suggested additional line of enquiry. The Commission should require Powerco to make the suggested changes.
<u>Substation replacements</u>	Powerco to adjust forecast for prudent deferral	Raised in report	Commission needs to ensure that the Verifier's issue has been resolved by Powerco.
<u>ISO 550000 accreditation costs</u>	No business case presented	Raised in report	The lack of business case analysis appears to be systemic which suggests that inclusion of several 'wish-list' items.

<u>Insufficient information on Corporate FTE opex needed for CPP work</u>		Raised in report	Again, the lack of business case and top down challenge suggests that the FTE forecast is excessive. It is possible that the FTE forecast is based on a summing of individual division requests, with no portfolio level assessment. A review of this will be needed.
<u>Planned SAIDI/SAIFI</u>	'0' weighting on planned SAIDI/SAIFI opens a big door	Raised in report and in discussion	There is a need to consider another performance measure/incentive to ensure that planned outages are appropriate
<u>Quality performance modelling</u>	Modelling is not robust	8yr historical average used but forecast ICPs over period should be used.	SAIDI and SAIFI forecasting is difficult and will be quite new to Powerco. Some additional work will be needed to ensure that the forecasts are credible.
<u>Maintaining reliability at current levels</u>	Does not account for full impact of reliability improvement investments	Raised in report and in discussion	The Verifier has a clear expectation that quality performance will improve as new assets replace the failing old ones. Yet Powerco is forecasting that SAIDI and SAIFI will be maintained at current levels. If the Verifier is correct, Powerco's proposed expenditure will be more than that required to meet the identified customer requirement that the current reliability level is maintained. This is likely to be a key issue for the Commission to consider.
<u>Demand forecasting</u>	Is flat forecast reasonable?	Raised in discussion	It would be good to get a better understanding of the underlying assumptions for this forecast and the sensitivity of the expenditure to changes in them.
<u>Contingent projects</u>	None identified but should there be some?	Raised in report and in discussion	The Network evolution project maybe?
<u>Deliverability</u>	Forecast for the regulatory period shows a steep increase in capex and opex in the first two years	Raised in report and in discussion	Verifier notes that Powerco has engaged with its contractors, who are confident they can deliver the increased level of work. We consider contractors are highly incentivised to say they can do the work, yet history shows that step change increases in network capex/opex face significant practical challenges. We have seen the same phenomenon with both the Orion CPP and with Transpower's RCP2. Going into RCP2, Transpower had a workflow pipeline from RCP1 and it still struggled to spend its allowance. Some of the issues they face:  Getting enough internal staff (engineers and project managers) to plan, design, and

			<p>drive out the work.</p> <p>The availability of skilled external contractors to do the work, in spite of the contractors' expressed optimism in this regard. Skilled field staff are in short supply, eg technicians. There are many other distributors competing for limited contractor bandwidth.</p> <p>Projects are frequently complex engineering endeavours – there are many things to consider and design and planning takes much longer than applicants provide for in their forecasts.</p> <p>The most realistic discussion we've had on this issue with an applicant was with Transpower – the tower painter case (worst job in the world and you simply can't get people to do it, no matter how much you offer). Would be a revealing exercise to look at how Transpower has progressed through RPC2, compared to their RCP2 application forecast!</p> <p>Current national election-year politics around immigration of skilled workers also casts doubt.</p> <p>We see that step-change forecast capex/opex spend by year graph in every application. I think we need much more solid proof and recommend we accept a more gradual step up.</p>
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