Submission on the DPP3 Draft Decision

Unison Networks Limited

18 July, 2019

PUBLIC VERSION

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1. INTRODUCTION AND EXECUTIVE SUMMARY

1.1 Opening comment

1. Unison welcomes the opportunity to submit on the Commerce Commission's *Default price-quality paths for electricity distribution businesses from 1 April 2020 – Draft Decisions, Reasons Paper* which was released on 29 May 2019. In this submission we focus on key issues impacting Unison. We have contributed to the development of the ENA's submissions and support the recommendations in those submissions. Where we are silent on an issue in this submission we are in agreement with the ENA's submission.

1.2 Executive Summary

2. This submission is divided into two parts: submissions on the components of the financial models that drive the determination of the revenue allowance, and the quality and reliability standards and incentives. By dividing into two parts, we would not want to give the impression that they can be considered entirely separately – the expenditure allowances must be consistent with the quality and reliability standards.[1] It was notable in the agreed statement of facts between the Commission and Vector[2] in relation to its quality breach that there was a requirement on Vector to address the impact of foreseeable changes (such as increasing traffic congestion) on its operational performance. Accordingly it was agreed that it should have relocated parts of its depots and changed resourcing decisions. If this is an expectation of DPP regulation, then the DPP reset needs to include allowances for foreseeable changes that will impact on reliability, either through the quality targets and limits or opex allowances (or a mix of both). We encourage the Commission to consider the links between the quality aspects of the regime and expenditure allowances to ensure they are aligned.

3. Aside from the unclear linkage between price and quality, the Draft Decision appears out-of-step with the environment facing EDBs. The proposals (particularly, in respect of opex) implicitly assume a stable environment where the only growth in real opex is due to changes in business scale. However, in our view the environment confronting EDBs is more dynamic than ever before. We observe:

   a) There is increasing expectation on EDBs to facilitate new markets. No allowances have been made for any of the recommendations in the IPAG report to the Authority, nor for structural changes in EDBs' pricing approaches which are required to facilitate improvements in the efficient utilisation of the networks.

   b) There is no recognition that EDBs are managing a significant portfolio of assets that are maturing through end-of-life phases. Increased inspection and maintenance are required to manage those assets through to the end of their useful physical lives.

[1] For example, there is no logic to permitting increased capex allowances, if there is no corresponding adjustment to the planned SAIDI targets, otherwise the EDB would be penalised for undertaking the allowed expenditure.

[2] See pages 12 and 18: https://comcom.govt.nz/__data/assets/pdf_file/0025/155527/Commerce-Commission-v-Vector-Limited-Agreed-summary-of-facts-12-October-2018.pdf

However, opex allowances are anchored in the past, with increases only allowed for growth in customers served or network length.

c) Increasing health and safety obligations and expectations. Emerging case law on health and safety breaches highlights the very substantial expectations on businesses and identification of the kinds of steps businesses are expected to take to meet the "as low as reasonably practicable" test. Businesses are expected to design health and safety systems that address employee potential for incompetence, carelessness and disobedience,[3] for example. The bar is being set very high.

d) Expectations for the electricity industry to support decarbonisation of the economy. While we await the Government's responses to both the Electricity Price Review and Interim Climate Change Commission report, EDBs will likely need to facilitate actions to support decarbonisation. The problem for EDBs will be if there are multiple required actions, but they do not meet the thresholds for DPP reopeners or are very challenging to quantify.

e) Increasing costs of meeting community expectations and requirements for contributing to resilience. The Climate Change Response (Zero Carbon) Amendment Bill, suggests development of a national adaptation plan (Part 1C) with lifeline utilities, so EDBs would be expected to develop "proposals and policies for addressing the effects of climate change" (clause 5ZV) and be able to report on them to the Minister.

4. By contrast, we cannot recall a single piece of regulation or legislation that has been rescinded, nor any lesser expectation of our communities to maintain reliable networks and meet high expectations of resilience.

5. In this changing and dynamic environment, Unison notes that the proposed financial returns are very low, and risks associated with the determination are significant:

a) It is likely that the WACC will fall substantially from the draft decision to around 4.7%. Considering the reduction in cash returns arising from the deduction of revaluations of average 2.1% in the forecast period, the cash return available to equity during the regulatory period will be of the order 2.3% per annum.[4] At this level of WACC and CPI inflation, this means around half the returns to equity will be in revaluations of the assets. For Unison and many other EDBs, because of the low WACC and high proportion of returns in the form of revaluations, a significant amount of capital expenditure will need to be met from increased borrowings.

b) The global economy seems to be weakening quickly. If this continues to put a significant check on CPI inflation, such that it does not rise to the RBNZ's forecasts, EDBs' returns will not meet even this low WACC. While we recognise that WACC

3 Worksafe v Stevens and Stevens CRI-2017-070-001930 [2018] NZDC 19098, 24

4 Assuming 42% gearing and cost of debt of 3.1%.

issues are addressed as part of IM reviews, we consider that a likely real return of less than 2.6% for DPP3 is not adequate compensation for investors in EDBs.[5]

c) NZIER's labour cost inflation forecasts show weak real wage growth of 0.3% per annum over DPP3 (LCI inflation of 2.37% per annum and CPI of 2.06%). Given the significant uplifts in expenditure expected as a result of the Commission's approval of Powerco's CPP and the significant uplift in capex by Aurora, the labour supply is tight. **Unison Confidential Information** [

d) .]. We note the June NZIER consensus forecasts show expected private sector wage growth of 3.4%[6] per annum over 2018-22 and Treasury BEFU wage growth forecasts of 3.5%[7] per annum. Unison submits that in a tight labour market, with rising demand for skilled electrical workers, it is implausible that real wage growth would average only 0.3% per annum – effectively nothing! We submit that the Commission seek further advice and updates from NZIER on the appropriate wage growth forecasts that should apply to EDBs.

e) The Commission's opex adjustment model provides no allowances for opex growth except as it is correlated with forecast growth in customer numbers and line length. The Commission's draft productivity assumption is set at zero percent, up from -0.25% in DPP2. This would not be problematic, if the Commission's model allowed for a time-related variable that recognises other non-scale factors driving opex higher. However, the evidence is that after allowing for growth in line length and customer numbers as well as the impact of growth in other inputs and outputs (capacity measures) there is a trend increase driving opex. Setting aside the error in input price inflation allowance, the Commission's approach in DPP2 has under-forecast opex by $59 million in real terms (or 4.5% of opex) to date.

6. Considering all the factors above, Unison's expectation is that it would almost certainly fail to achieve the WACC over the course of DPP3 (operating efficiently). Apart from the modest scale-related adjustment to opex allowances, which for Unison amounts to an average real increase in opex of 0.45% per annum (in a best-case scenario where the Commission's labour cost forecasts turn out to be correct), there is nothing in the expenditure allowances that will allow Unison to meet any of the costs associated with addressing the factors listed in paragraph 6 above.

7. The NERA report provided as part of the ENA's submissions shows a clear and persistent trend in non-scale related factors that are driving EDBs operating costs higher.[8] Their preferred model, which is internally consistent with the Commission's opex-trend model, shows trend growth in opex due to the net of opex partial productivity improvements and other non-scale

5 We are particularly perturbed by the fall in yields on five-year Government bonds. Yields are now negative in real terms (based on the RBNZ's CPI projections).

6 NZIER (2019) https://nzier.org.nz/static/media/filer_public/7f/4b/7f4bf667-aecc-4a71-b1c9-5d62ea39d19a/consensus_forecasts_jun_2019.pdf

7 https://treasury.govt.nz/sites/default/files/2019-05/befu19-charts-data.xlsx

8 NERA (2019) *Opex Partial Factor Productivity for DPP3*

inputs and outputs is 1.7-3.1% per annum. Unison recommends that the Commission should adopt an allowance in the upper end of this range to account for growth in non-scale factors driving increases in opex, taking into account the operating environment confronting EDBs.

Quality and reliability of supply

8. The Commission is proposing significant changes to the quality standards and reliability incentive regimes.

9. We address the specific proposals in the main body of this submission, but in summary, we acknowledge that the Commission has invested significantly in designing changes to quality standards and reliability incentives. There are some aspects that we strongly support. In particular, the Commission has separated unplanned SAIDI and SAIFI from planned SAIDI and SAIFI, and designed reliability incentives and quality standards that address the different kinds of outages. However, we are concerned that the specific design and implementation approaches are likely to:

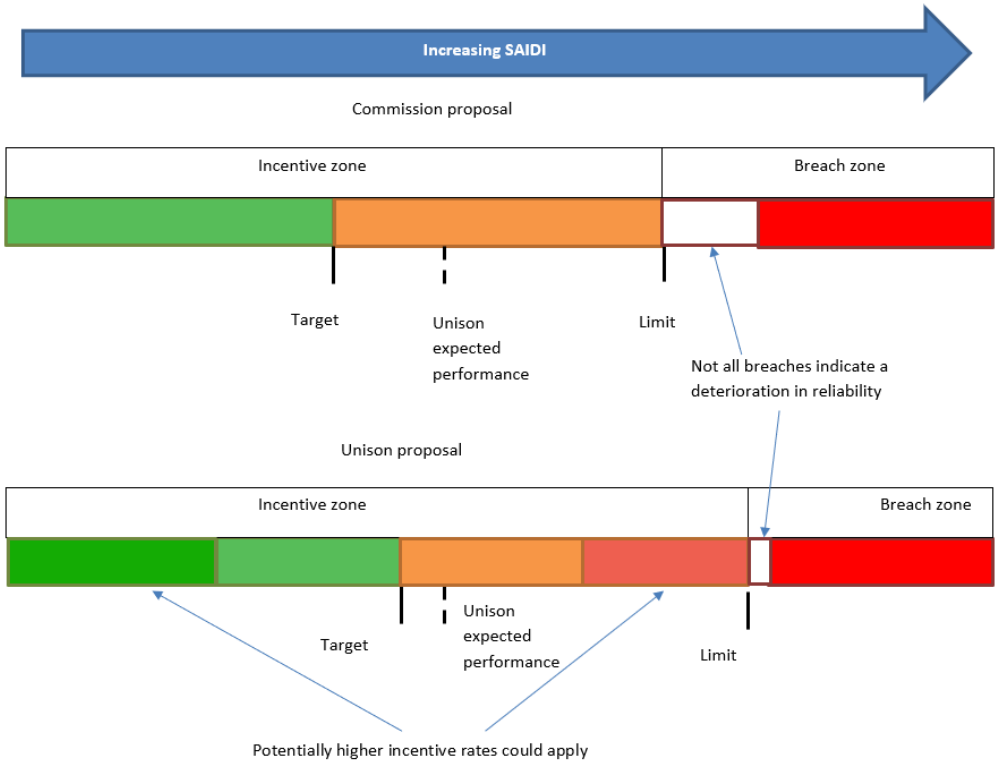
   a) Lead to a material number of false positives, which the Commission is not equipped to address in a timely manner and is very costly to both EDBs and the Commission;

   b) Create the risk of undue incentive penalties because too much reliance is placed on unadjusted historical performance, especially in respect of planned SAIDI;

   c) On average, increase risk aversion and therefore promote over-investment, by moving to annual unplanned SAIDI assessments; and

   d) Risk the creation of perverse incentives due to the change in MED normalisation methodology and introduction of a new category of notified planned SAIDI.

10. In this submission we propose an alternative that we think would improve the efficacy of the quality standards and reliability incentives, by putting more weight on incentive mechanisms. We illustrate this as follows with respect to Unison:



11. Under the Commission's current proposals the planned SAIDI standard is simply not reflective of current or expected future levels of capex (which the Commission proposes to allow in the BBAR model).[9] A key aspect of Unison's proposals is to better align planned SAIDI and SAIFI allowances to be more reflective of current conditions in order for EDBs not to be required to apply for quality variations.

12. We also think that the Commission should shift the balance so more reliance is placed on the incentive aspect of the regime and less on the breach assessment process, which is time consuming and costly. This could be achieved by setting wider zones where incentive rates apply, and potentially increasing the incentive rates at the outer points of the incentive zones. We simplistically represented this in the diagram above with a two-rate model, but alternatives could be considered. If incentive rates were increased, it would be essential that the normalisation approach works symmetrically and is effective in normalising extreme events. The proposed three-hour rolling average still suffers from the deficiency that in years where there is a higher frequency of major events, EDBs are punished. This is unfair, unreasonable and inconsistent with the expected NPV=0 test: it is impossible to have negative major events, but there is no effective cap on the number of extreme events above the expected 2.5 events per year allowed for in the targets and limits.

13. With more reliance placed on the incentive part of the scheme, the Commission could set the quality standard limits higher, at a point where the probability of false positives is reduced. Even

[9] Even if more recent planned SAIDI is more heavily weighted in setting the target, Unison would be unable to achieve at the mid-point, because generation was used extensively to avoid breaching the quality standards as the Commission had warned Unison that it was very concerned it would breach again. However, this is not cost-effective for consumers and is not a long-term sustainable asset management practice.

if the Commission errs in setting this point too high, consumers are still protected from the adverse consequence by the fact that incentive rates still apply. The Commission could retain the 2-out-of-3 year assessment rule, and shift the standard deviation to 1.5 from the target to the limit, for example, which we believe will still be more than sufficient to capture systemic deteriorations in quality. However, we strongly emphasize we would not support an extended incentive regime unless:

a) targets are set more closely to align with realistic expectations of planned SAIDI performance (aligned to recent performance and indexed to capex allowances); and

b) major events are properly normalised to eliminate the effects of higher frequency of major events than allowed for in the targets and limits.

Closing summary comment

14. Overall, we are concerned that if key features of the Draft Decision stand, especially in respect of opex allowances and reliability targets, EDBs will collectively be unlikely to make the cost of capital during this regulatory period. The growing expectations on EDBs to meet new regulatory requirements and expectations (both from the energy regulators and other agencies (Worksafe, Local Authorities etc)) need to be accounted for in the Final Decision. In addition, the increasingly challenging operational circumstances from expected rising incidence of adverse weather, as well as trend increases in motor vehicle damage, third party damage events etc. Furthermore, aspects of the Draft Decision in our view, do not pass the plausibility test: for example, the negligible real growth in labour costs suggested by NZIER.

15. We highlight the importance of a 'sense check' by the Commission at the final evaluation of the financial models in respect to the numerous impacting elements. There needs to be a strong and robust evidential basis to ensure there is stakeholder confidence that the revenue allowances for DPP3, will deliver an expected NPV=0 result to EDBs (operating efficiently), with an appropriate symmetry of upside and downside risks to forecasts.

16. We recognise that DPP regulation is limited in its ability to look forward and undertake detailed quantification of expenditure levels over the regulatory period. However, from our assessment of the available evidence, EDBs are very unlikely to achieve their cost of capital, and will also be exposed to the greater probability of downside risks, with limited upside potential. Accordingly, there will be high risk that EDBs cutback or defer efficient expenditure where it will not compromise SAIDI or SAIFI in the short-term, to the long-term detriment of consumers.

17. In the remainder of this submission we elaborate on the points made in this summary in more detail.

2. CALCULATION OF THE BUILDING BLOCKS ALLOWABLE REVENUES

2.1 Opening comment

18. The general approach to setting allowable revenues and the general calculations methods are largely unchanged from DPP2. Unison notes the following common features:

    a) The opex adjustment model is largely an update of DPP2, with the Commission again reliant on an econometric model to determine the impacts of changes in scale on EDBs' required opex.

    b) An allowance in the opex model for step changes that are expected to occur in the DPP3 period. None are proposed.

    c) An allowance for opex partial productivity growth. The Commission proposes to set this at 0%, up from -0.25% in DPP2.

    d) An evolution of the capex allowance model used in DPP2 and the gas DPP reset, which applies a series of tests and scale factors to EDBs' asset management plans.

    e) Reliance on forecasts from NZIER of all-industries input price inflation.

19. As noted in the Executive Summary, Unison's assessment is that the collective application of the Commission's proposals means that EDBs are unlikely to be able to make their cost of capital, operating efficiently. The problem is that the approaches anchor expenditure allowances too much to historical performance. The persistent trends affecting the industry that are driving expenditures levels higher, opex in particular, are not accounted for in the Draft Decision. The NERA report to the ENA, observes how businesses in jurisdictions such as Australia and the UK, can propose forward-looking operating expenditure allowances which take into account the changing environment. In contrast, under DPP regulation the Commission is constrained from undertaking such analysis. The regulators, in the jurisdictions noted, can select an opex partial productivity adjustment that represents an assessment of likely productivity improvement potential separate from other non-scale related drivers of opex. However, for the purposes of DPP Regulation, the "opex partial productivity allowance" needs to do the job of both a productivity adjustment and account for non-scale related trends due to the limitations placed on the Commission in undertaking a forward-looking assessment.

20. In this submission an alternative specification of the opex growth model is proposed. The proposal recognises these jurisdictional differences and appropriately allows for the multitude of factors that, while individually small and/or difficult to quantify as "step changes", are expected to persistently driven costs higher.

21. In the remainder of this Part we address the specific elements making up the BBAR calculations as well as the efficiency incentives.

2.2 Operating expenditure allowances

Real changes in opex

22. The Commission's opex proposals are based on the following model:

> $opex_t = opex_{t-1} \times (1 + \Delta$ due to network scale effects) ×
>
> (1 - Δ opex partial productivity growth) ×
>
> (1 + Δ input prices) ±
>
> Step changes

23. The change in opex due to scale effects is based on an updated econometric model which separately calculates the level of log(network opex) and log(non-network opex) based on levels of log(ICPs) and log(line length). These models explain around 90% of the variation in log(network opex) and log(non-network opex).[10] In turn, the measured elasticities are then applied to forecasts of the growth in ICPs and line length to provide forecasts of scale related-growth in opex. For Unison, the Commission forecasts real growth in opex relating to scale factors at an average of 0.46% per annum over the DPP3 forecast period.

24. Unison will not repeat its previous submissions on what we continue to see as limitations of the use of a "levels" model to forecast changes in opex over time. The key point is that the model continues to fail to account for any time dimension capturing the impact of non-scale variables on EDB's costs. The Commission notes that the time dimension affecting changes in opex is captured in the partial productivity factor (para A80).

25. We are pleased to see the Commission acknowledge that real changes in opex through non-scale factors need to be captured in the "partial productivity factor". However, the productivity factor then needs to become more than just a reflection of changes in opex partial productivity over time, but also include the wider impact of non-scale related variables. The Commission's subsequent proposal is to set this factor at 0% based on a proposition that the prior value of -0.25% would reflect a continuing decline in productivity. But this ignores the impact of non-scale related impacts on EDBs that are not captured by measurable step changes. It also ignores the fact that in other jurisdictions regulators can set a productivity factor that purely reflects changes in productivity. This is due to the fact that in these other jurisdictions the opex forecasting approach encompasses a forward-looking assessment of the opex requirements on EDBs including both scale and non-scale drivers.

26. The ENA commissioned NERA to provide an update of the study conducted by Economic Insights at the DPP2 reset. Importantly it makes the following conclusions:

> "In a framework like the DPP where opex is forecast in a mechanistic way, the productivity assumption is capturing *any* effect on opex not driven by changes in line length, ICPs or input prices. Given the simplicity of the model, it should not be surprising that there are other

[10] The Commission incorrectly states that the models explain 90% of the variations in network and non-network opex.

factors that drive opex which the model does not explain. Because of this, in our view, the productivity assumption should be re-labelled the "residual opex factor".

Reframing the opex partial factor productivity assumption in this way should make clear that a negative assumption is not necessarily an assumption of negative productivity. Rather it would be an assumption that the growth of unmeasured outputs exceeds the productivity achieved for opex driven by line length and ICPs. That is to say, setting a negative residual factor would be recognition that the Commission's model is necessarily an incomplete abstraction of reality, rather than a belief that the EBDs are becoming less efficient over time.[11]

…and

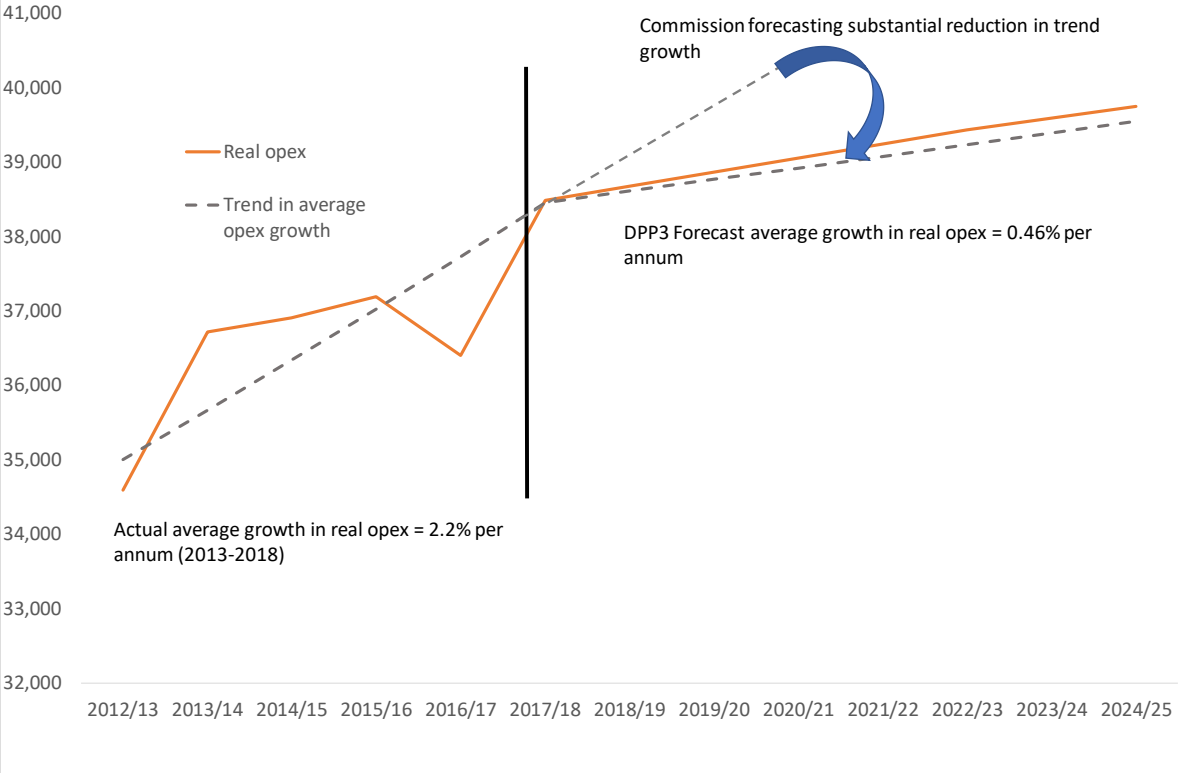
"If these pressures are likely to continue over DPP3, compensating EDBs solely on the basis of line length and ICP growth is likely to undercompensate EDBs for the costs they need to efficiently incur. Importantly the DPP2 residual opex figure of -0.25% would significantly undercompensate EDBs if the scale factor model continues to under forecast EDB opex requirements. Therefore, we recommend the Commission sets a residual opex factor significantly less (more negative) than -0.25%. The evidence considered in this report would support a factor between -1.74% and -3.08%."[12]

27. As further evidence in support of NERA's conclusions we have calculated the growth in real opex experienced by Unison in the DPP2 period to date, and compared this data series with the Commission's proposals for DPP3. It illustrates the significant step-down in the average level of real opex growth proposed for DPP3:

11 NERA (2019) p vi

12 NERA (2019) p vii

Figure: Real growth in Unison's opex: comparison of historical trend with draft DPP3 forecast



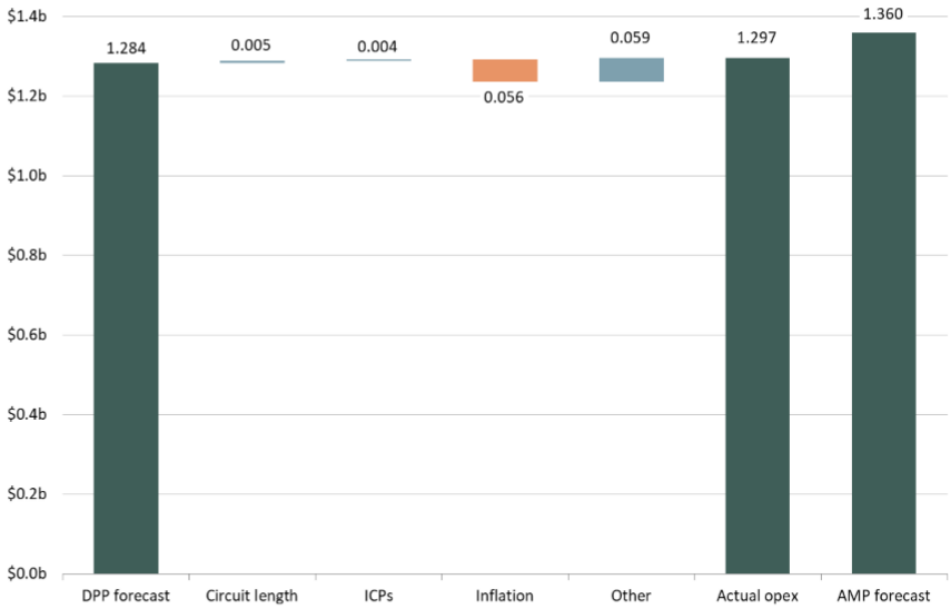
Base = 2017/18. Real opex determined by actual opex adjusted for Commerce Commission input price inflation sourced from Input-cost-inflators-model-EDB-DPP3-draft.xls

28. The chart starkly demonstrates the significant fall predicted by the Commission's model: down from an average of 2.21% per annum between 2012/13 and 2017/18, to only 0.46% per annum predicted for DPP3. Given the concerns that we have with the downside risks forecasts of the Commission's labour cost inflation forecasts (i.e., under-prediction) discussed below, we think that there is very real prospect that there is, in effect, no allowance for real opex growth in the Commission's model.

29. The difference between allowing 0.46% real growth in opex and 2.2% real growth over the DPP period would amount to a significant shortfall in opex allowances by the end of the regulatory period to the value of 11.2% of operating expenditure, with this extended by the operation of the opex IRIS incentive. This highlights that accuracy is crucial in setting trends for opex allowances.

30. While we recognise that Unison is only a single data-point, a similar issue exists at the industry level. The Commission's analysis demonstrates a failure to accurately forecast real opex growth during DPP2 in the period to date, to an aggregate value of $59 million, amounting to a 4.5% under-forecast. While the Commission over-forecast inflation over the period to date, this is not relevant to the consideration of under-estimation of real opex in the Commission's model.

Figure A1 Deviations between DPP allowance and actuals, 2016–2018 ($b)



Source: Commerce Commission Draft Decision Figure A1

31. Overall, if opex growth is not accounted for by either scale effects or step change allowances, the Commission needs to address or explain this gap in its model. Currently the Commission is proposing zero, which does not provide any allowance for other factors that drive opex.

32. EDBs continue to face opex pressures on their businesses from the changing regulatory environment (including new compliance costs associated with the DPP Reset and new disclosure requirements), rising expectations on EDBs to facilitate changes in the electricity market, as well as rising operating costs to manage networks through requirements to address community resilience, cyber-security, rising insurance costs, rising health and safety compliance costs etc. In our experience, the demands on EDBs that continue to rise are unrelated to our business scale, and it is a rare (in fact unknown) event for regulatory impositions or compliance costs to be reduced.

33. Unison submits that the NERA study provides a strong evidence base to determine an allowance for the average effects of non-scale opex drivers on EDBs. They recommend that a trend allowance of between 1.7 to 3.1% per annum be included in the opex adjustment term as the net allowance for opex productivity improvement and non-scale opex drivers. Our recommendation is to select from the upper end of the range based on the factors discussed elsewhere in this submission that are driving costs higher. We recommend that this is included as follows within the opex adjustment model:

$opex_t = opex_{t-1} \times (1 + \Delta \text{ due to network scale effects}) \times$

$(1 + \Delta \text{ opex partial productivity and non-scale opex drivers}) \times$

$(1 + \Delta \text{ input prices}) \pm$

Step changes

Step change allowances

34. The Commission proposes that there be no step change allowances during DPP3. A number of potential candidates nominated by EDBs are evaluated, but then rejected by the Commission as failing the criteria to accept as step change allowances. To a degree we are sympathetic to the challenges associated with verifying and quantifying step changes, particularly in a DPP environment. However, we do not accept that there is zero risk of step increases being required during DPP3 that will not become subject to a potential reopener, and result cumulatively in a material impact on EDBs. It is more likely that EDBs will continue to experience opex increases that are driven by non-scale factors, and we would see no reason for the trends in those factors to be any less than the trends quantified in the NERA study. Indeed, our expectation is that during DPP3, if anything, the relative increase in demands and requirements on EDBs will be greater than prior regulatory periods.[13]

35. Provided that the Commission makes appropriate allowance for non-scale related factors driving opex higher based on the trends identified in the NERA study, Unison submits that making zero allowance for step changes would be an acceptable approach.

Input price inflation allowances

36. The Commission's proposed approach to input price inflation forecasts is to adopt NZIER forecasts of labour cost inflation and producer price indices at the all-industries level. We acknowledge that forecasting input price inflation is challenging as there are no suitable industry-specific cost benchmarks that provide a stable and independent basis for forecasting changes in EDBs' input costs.

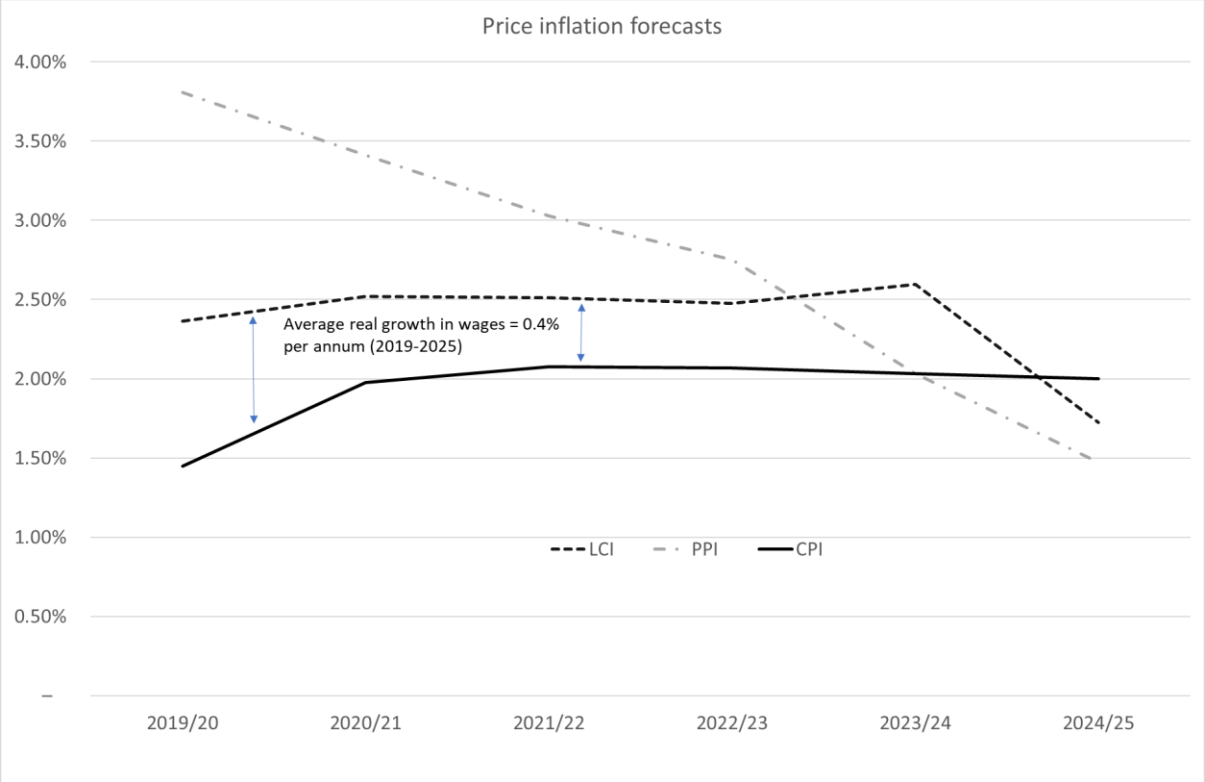
37. The Commission relies on NZIER to provide it with forecasts, which appear to be applied without any overlay of judgment, to turn real opex forecasts into nominal allowances.

38. To escalate real opex forecasts, the Commission applies a 60:40 weight of LCI and PPI (all industries) forecasts, resulting in the following weighted average input price inflation allowance, which we then compare to forecast CPI inflation to gain a sense of the real movements in the contributing variables:

[13] A good example comes in the cyber-security area. Our assessment is that it is only a matter of time before EDBs are expected to meet the requirements of what are currently the Voluntary Cyber Security Standards for Industrial Control Systems Operators (VCSS-CSO) https://www.ncsc.govt.nz/resources/vcss-cso/. This will have significant cost repercussions for EDBs, that would emerge over time.

Figure: Price inflation forecasts DPP3

Source: Commerce Commission Input Price Inflation Model and CPI Model



39. We find it very difficult to comment on the pattern of PPI inflation forecasts as no explanation is provided for the declining trend, though we expect to a degree the decline in New Zealand dollar is driving the short-term increase in input price inflation, as many of the components used to build networks are imported.

40. We do, however, consider that the proposed labour cost inflation forecasts are implausible. We also question the basis for using LCI inflation, rather than forecasts of wage inflation, as it is unreasonable to assume that the quality of EDBs' workforces can remain the same, in an environment where asset management capability is expected to lift on an ongoing basis.

41. Unison notes the following:

    a) The field workforce is highly unionised. **Unison Confidential Information** [

    ];

    b) The economy is effectively at full employment;

    c) NZIER's Quarterly Survey of Business Opinion shows the net position of firms experiencing greater difficulty securing both skilled and unskilled labour than in the previous quarter is at its highest level since the global financial crisis;

d) The minimum wage is increasing strongly, with spill-over effects as this flows upwards to those previously earning just above the minimum wage to maintain parity;

e) There is strong demand for line workers as a result of CPP approvals and the ramp up of work in the Otago region; and

f) The observed successes in the public sector of substantial above-inflation wage rises potentially creates an environment of rising salary expectations.

42. In this context, Unison reiterates that it is implausible that real wage inflation would equate to an average of 0.4% over the DPP3 forecast period. We note that NZIER's consensus forecasts, Treasury and Reserve Bank, have increases in private sector wage growth in excess of 3% per annum over their forecast horizons.

43. Unison recommends that the Commission ask NZIER to update its forecasts and consider adjustments to the base all-industries forecasts to provide a more realistic forecast of labour cost price inflation. We think this is critical, especially in the context that the real opex allowances are (at least as proposed) negligible and would easily be swamped by input price inflation forecast error.

2.3 Capital expenditure allowances

Real changes in capex

44. The Commission's capex proposals build on capex forecasting approaches used in the DPP2 reset and applied to GPBs in their DPP resets.

45. The Commission has developed a multi-step model that seeks to assess EDBs' capex forecasts against historical performance and internal consistency. A cap of 120% applies to total forecast expenditure on the basis that above this level an EDB should be seeking a CPP. In addition, the Commission proposes a reopener on significant customer capex connections that meet certain criteria.

46. Unison supports the general approach, but recognises that the approach may require refinement over time as improved tests are developed to assess the reasonableness of expenditure projections. Although less affected than other smaller EDBs we are cautious about the 120% cap on total capex and the sliding scale cap on more minor expenditure categories. There are some investments that are lumpy in profile and can create significant percentage movements. This is likely to disproportionately impact on smaller EDBs, but may also affect EDBs at Unison's scale.

47. In the initial test of the approach based on 2018 Asset Management Plans, Unison would face no limits on its proposed capex, but in Unison's 2019 Plan, expenditure levels have lifted materially for two main reasons:

    a) In conjunction with University of Canterbury, Unison undertook research into testing the correlation of visual assessment ratings of conductor condition with tests of tensile strength. This project has identified that Unison has a particular type of copper conductor (7/0.064) which is at increased risk of failure. Accordingly, a planned replacement programme has been developed which will replace some 450km of conductor over a ten year programme, at an expected annual cost of $6.7 million per annum.

    b) Unison has entered into a contract with a software provider to replace a significant number of Unison's software platforms with an integrated "Enterprise Resource Planning" (ERP) system. This system is expected to lift Unison's asset management capability further, allowing for improved asset lifecycle management. These systems are expensive, but are expected to pay-off significantly over the long term through improved asset management, as a key component of the system is Enterprise Asset Management. This project is budgeted at $6.8 million across 2020 and 2021.

48. Additionally, in 2022, Unison expects to incur an additional $3 million as part of a necessary upgrade of its Advanced Distribution Management System.

49. We have not yet assessed whether these expenditure requirements will tip Unison over the 120% total cap, or the sliding scale cap on non-network capex, but we consider it would be detrimental to the long-term interests of consumers if the operation of a relatively arbitrary cap limits Unison's ability to undertake these additional projects. This is particularly a concern with the lift in capex IRIS incentive factor to 26%.

50. Unison submits that EDBs should have some opportunity to justify their expenditure programmes where these exceed the 120% cap, particularly where there are one-off or major programme elements that are causing an uplift over historical levels. Unison recommends that EDBs which have material levels of their expenditure plans cut after the five-stage gating process, have opportunity to provide evidence to the Commission that would underpin a higher allowance. We recognise that it is not the intent of DPP regulation for the Commission to undertake detailed scrutiny of every AMP, but it would seem inappropriate to limit allowances to a relatively arbitrary 120% cap, particularly when the model penalises small EDBs that periodically face lumpy expenditure requirements.

51. One element of the assessment approach that the Commission has expressed some doubt on is the tests associated with system growth expenditure. Although this does not affect Unison in DPP3, Unison's engineers were consulted to provide guidance on whether any high-level tests could be designed that would provide a suitable litmus test of the reasonableness of the proposed expenditure. We were unable to identify a test that would address the different kinds of investments to address system growth issues due to the lumpy nature of these kinds of expenditures and the different types of expenditure requirements (e.g., new sub-station or upgrade of existing sub-station has very different cost characteristics). At this point we can only suggest that the Commission review the expenditure plans, or potentially allow the proposed expenditures with a wash-up to apply in the event the expenditure does not materialise.

52. With respect to the proposed re-opener for customer capex, we are pleased that the Commission has recognised that it is necessary to address this to ensure consumers are not disadvantaged when an EDB's capex allowance has "run out". The Commission proposes that where a major customer capex project materialises that has not been provided for in the expenditure allowances, a reopener can be applied for subject to certain criteria.

53. For Unison, this will mean that unforeseen customer projects exceeding ~$5 million can be catered for under the reopener allowances, whereas for projects not quite meeting the allowance, Unison would either have to absorb the foregone returns (including adjustments that come through the capex IRIS mechanism) or find some alternative means of meeting the customers' needs that do not involve Unison funding the investment. The reality for Unison is that once the customer capex allowance has been spent, there is not any financial incentive to undertake customer works because the NPV>0 test cannot be met. The major customer capex reopener addresses large works, but anything less would mean a loss to Unison, and would fail board approval processes.

54. In Unison's view the balance of benefits and costs would suggest that customer capex should be treated more like a pass-through cost. There is strong public interest in EDBs connecting customers, so there should be no incentive for EDBs not to do so. Although we assume that the Commission would be concerned about the efficiency of customer capex expenditure under a pass-through or *ex post* washup scenario, the much greater interest is that consumers are connected without undue barriers. The current proposal leaves a gap. Unison submits that the Commission needs to give further consideration to mechanisms that compensate EDBs for the full costs of their customer connection capex (including mechanisms to recover un-spent allowances if customer demand does not materialise).

2.4 Retention factor under Capex IRIS Adjustment

55. The Commission proposes that the capex retention factor be increased to 26% (based on a WACC of 5.13%). This will strengthen incentives for capital efficiency and may better equate the incentives between opex and capex.

56. Unison is a strong supporter of neutralising trade-offs between opex and capex, as increasingly non-wires alternatives will become available to EDBs which can effectively substitute opex for capex. We suspect that it is necessary to move to a totex regime to achieve this, and note that the current approach to setting DPP expenditure allowances continues to promote capex over opex. Opex allowances are constrained and anchored in historical performance, whereas there is a degree of forward-looking allowance for capital expenditure. While we do not think that the approach to setting expenditure allowances is a barrier to equating the capex retention factor to 26%, but we observe that it may be until the introduction of a totex regime where it will make financial logic for EDBs to procure non-wire alternatives.

57. Unison also submits that the Commission should give consideration to the appropriate capex IRIS adjustment to apply to customer capex. As variations in customer capex are likely to be driven more by the volume and size of customers seeking connections, than variations in efficiency in connecting customers, we question the validity of the 26% capex IRIS adjustment. It is unclear what policy reason exists that either EDBs or existing customers should bear the volume/size risks on customer capex, compared with an approach of simply providing a wash-up that makes EDBs and existing customers neutral to the volume/size of customer connections.

3. QUALITY STANDARDS AND RELIABILITY INCENTIVES

3.1 Opening comment

58. It is clear that the Commission has invested significant effort in the design of the proposed quality standards and reliability incentives. We acknowledge that many of the issues identified by the ENA's Quality of Supply Working Group have been addressed and improvements made over DPP2.

59. The Commission has retained an under-pinning principle that there should be "no material deterioration" in quality or reliability of supply, which we support. The challenge is in how this is measured, particularly when only simple measures are available to assess whether the standard has been achieved. SAIDI and SAIFI are outcome measures reflecting an average consumers' experience of network reliability and operational performance. Both these measures are subject to significant statistical variation and heavily impacted by external factors. Many of these external factors are only weakly influenced by EDBs in the short term.

60. By way of example, Unison's normalised SAIDI performance is expected to be around 100-110 minutes per annum under current normalisation approaches. Outages due to network equipment failures have trended down over time, such that they make up only around 10% of SAIDI minutes. The reliability element most directly influenced by asset lifecycle management now only makes up a small proportion of the outages that we must manage. Conversely, we are seeing growing pressures from motor vehicle accidents, third-party damage (e.g., contractors striking our assets), and vegetation strikes from trees outside the regulated cut-zones etc. The reality for Unison is that to achieve the standard of "no material deterioration" in reliability, as measured by SAIDI and SAIFI, we are having to increase operational performance to counteract these external factors.

61. Because both opex and SAIDI and SAIFI are based on backwards-looking measures there is real disconnect between the requirements of "no-material deterioration in reliability" and the operational requirements on the business. This especially manifests in the proposed allowances for planned SAIDI and SAIFI. Planned SAIDI and SAIFI are a function of the amount of work being carried out on the network, as indicated by capex allowances. In DPP3, Unison will be carrying out more work on the network, yet the Commission proposes that planned SAIDI and SAIFI allowances be anchored to the historical reference datasets. Accordingly, to carry out the permitted capex programme, Unison would automatically incur penalties. At this point we see that we will have little choice but to apply for a quality variation because of this disconnect, unless the methodology for determining planned SAIDI and SAIFI targets changes.

62. More generally, we strongly submit that the Commission consult on and issue an enforcement guideline and criteria for assessing breaches. We remain puzzled by the approaches to the enforcement actions to date. The enforcement actions appear to be more focussed on achievement of "good industry practice" as defined by the Commission's consultant engineers, rather than an assessment of whether the network or operational performance has deteriorated. In addition, there seems to have been no recognition of the price-quality trade-offs inherent within the DPP allowances. We were particularly struck by the conclusions in Vector's breach assessment that, with the foreseeable growth in congestion in Auckland and the impact that would have on outage responses, Vector should have established new depots to enable more timely fault responses. This appears inconsistent with the DPP philosophy, where expenditure

allowances are not forward-looking. Unison submits that there would be a strong benefit from publishing enforcement guidelines and criteria for assessing whether there has been material deterioration. These criteria would help to establish the real service expectations that the Commission has on EDBs – which is a critical element of understanding the regime and moderating the current level of regulatory uncertainty.

63. In the remainder of this Part, we comment on the Commission's specific quality and reliability proposals for DPP3.

3.2 Quality standards

64. The Commission proposes:

a) to separate planned SAIDI and SAIFI from unplanned SAIDI and SAIFI and treat these separately;

b) a new quality standard to be introduced to address extreme events caused by human error, equipment failure or "unknown" causes;

c) limit the movement in unplanned SAIDI and SAIFI by plus/minus 5%;

d) change the normalisation approach for major event days;

e) Reference periods set at ten years;

f) change the standards for unplanned SAIDI and SAIFI to an annual assessment with the limit set at 1.5 standard deviations above the target; and

g) change the standards for planned SAIDI and SAIFI to assessment at five years with the limit set at three times the cumulative target.

65. Unison makes the following comments in response:

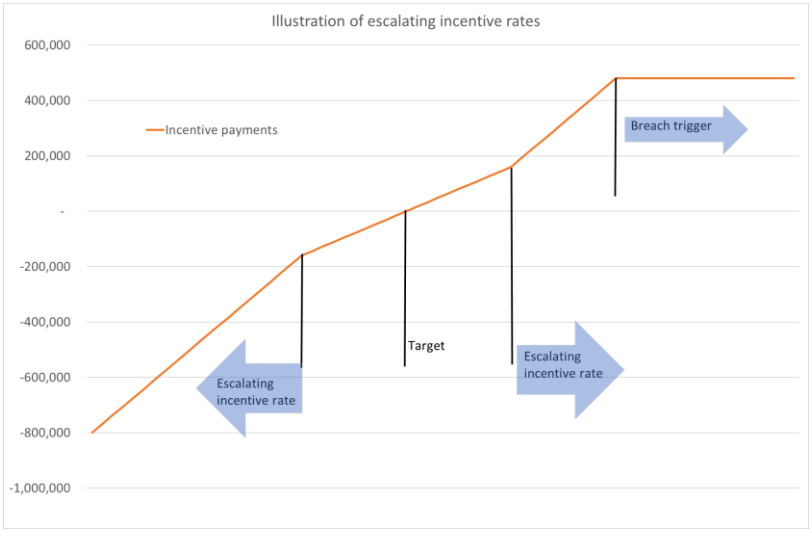
Proposal	Unison submissions
Separate planned SAIDI and SAIFI from unplanned SAIDI and SAIFI and treat these separately.	We support this approach.
A new quality standard to be introduced to address extreme	We do not support this approach for DPP3. We recommend that this become a disclosure obligation.

events caused by human error, equipment failure or "unknown" causes	The inclusion of this standard would cause EDBs to examine their networks for critical points of failure and to invest in network assets to avoid the potential for those assets to fail (e.g., increase network security to N-1 or N-2). Given the potential for a fine of $5 million, this may cause an excessive degree of risk aversion and over-investment. While we understand the Commission's concern about major outages caused by human error and equipment failures, the potential for significant financial penalties as a result of equipment failure may cause EDBs to over-invest in redundancy to avoid this risk or otherwise adopt costly operational practices to avoid risks. For example, Unison has experienced situations where due to Transpower requirements when maintaining their assets, our network has been required to operate in less secure state (N-1 security reduced to N for a period). If we were subject to an asset failure while operating in this state, we would face the (uncompensated) costs and risks of an engineering investigation, even if we were found to be operating prudently. We think it would be better for the Commission to introduce a new disclosure requirement associated with such outages to assess the need for such a standard in DPP4. If the Commission decides to proceed with the new standard then: 1. Because the costs of engineering investigations have not been experienced in the 2018/19 opex baseline, an EDB must be able to pass through the costs of responding to an engineering investigation where it is found to be operating at "good industry practice"; 2. The Commission would need to publish an enforcement guideline and assessment criteria so that EDBs can understand the Commission's service-level expectations. EDBs need to know when such breaches are culpable or not.
Limit the movement in unplanned SAIDI and SAIFI by plus/minus 5%	We strongly support the proposal. Through-out DPP2 Unison has been concerned that if performance improves, this will lead to a ratcheting down of SAIDI and SAIFI targets, making the prospect of penalties and breaches more likely in DPP3. As it turns out, deterioration of the operating environment (e.g., vegetation issues caused by trees outside regulated cut-zones, motor vehicle accident increases, third-party damage) has limited the effect of our performance improvements, but nevertheless we have had to spend more to seek to comply with the current limits, for which we will incur opex IRIS penalties in DPP3 that will reduce Unison's effective opex allowance. It would not be appropriate to make Unison's targets more stringent, when at the same time Unison's effective opex allowance is not adjusting to reflect the efforts required to meet that more stringent standard.

	EDBs that have experienced a performance deterioration have the option to apply for a quality variation to achieve better alignment of their quality standards to their DPP allowances and what is realistically achievable.
Change the normalisation approach for major event days	Unison is unsure whether the change in normalisation approach is appropriate. While we understand that it results in normalisation of more SAIDI and fits the observed data "better", we are concerned that it departs even further from the IEEE standard that the DPP2 approach is loosely based on. In adopting the three-hour rolling period to identify major events the Commission creates risks of unintended consequences. It is important to recognise that the Commission has applied its analysis to data on high voltage outages only. An EDB will initially prioritise restoration of the HV network before turning to LV repairs. Generally, important and sensitive loads will be restored first and then repair priorities are generally based on the number of customers affected. The problem with identifying major events within a three-hour window is that a business is likely to be operating in an impaired mode for some period after the initial damage-causing event, so that subsequent HV outages outside of the normalisation window may take longer to address. The commercial incentive created by unplanned SAIDI incentives would be to potentially divert resources to address outages that arise outside the originating three-hour window because they will not be normalised. These incentives would not exist under a longer period of normalisation such as under the current 24-hour approach. At this point we neither support nor oppose the change in normalisation approach. We think it should be subject to more testing from an operational and engineering perspective to ensure it does not cause unintended consequences. We continue to oppose the approach to normalisation of major events where the replacement values are not the average or zero. It means that EDBs facing more than the assumed frequency of major events face financial penalties and greater risk of breach. In Unison's view it is not appropriate that an EDB that experiences high frequency of severe weather events should have these consequences. We continue to advocate that the Commission should not depart from the IEEE's standard where MEDs are separated from normal days and addressed separately. We cannot understand the policy rationale for penalising EDBs for higher frequency of severe weather events, than assumed in setting the targets, and therefore effectively penalising consumers for benign weather years. In addition, the outcomes are not symmetric, EDBs face the jeopardy of both penalties and costly engineering investigations, whereas consumer exposure to good weather is limited to zero MEDs. The new methodology is complex to implement and is likely to cause additional audit costs. Should the new methodology be implemented, we recommend a revenue allowance be included for each EDB of $40,000 per annum to cover these increased compliance and reporting costs.

Reference periods set at ten years	Unison agrees that a ten-year reference period for unplanned SAIDI is appropriate as it more likely represents the range of conditions a network is likely to experience. Ideally, it would also represent a forward-looking view of reliability taking into account things such as rising traffic congestion and an efficient trade-off between reliability and performance. However, this does not seem possible with DPP regulation at this point and should be recognised as a limitation. Unison recommends that planned SAIDI targets be based on the most recent four years of planned SAIDI performance (2015-2019) The 2015-2019 period coincides with the changes to the Health and Safety at Work Act, and is better likely to reflect the level of planned outages in DPP3. We submit that the Commission should consider a further adjustment to align planned SAIDI targets with the capex allowances, by indexing the allowance to the increase in capex on replacement expenditure. There seems little point in providing EDBs with increased capex allowances, but at the same time penalising them for undertaking the approved additional replacement work with no additional minutes to undertake the work. The Commission's proposed DPP3 allowance for Unison is 40 minutes per annum, whereas Unison's planned SAIDI has exceeded 60 minutes per year over the last three years. Additionally, Unison's planned SAIDI in 2018/19 has been ameliorated with the use of mobile generators, which enabled Unison to avoid breach in the past year, but at significant additional cost, which is not efficient in the long-term. We expect the efficient level of planned SAIDI to rise further. On this basis there is high likelihood that Unison would need to apply for a quality variation because historical performance is a very poor indicator of future requirements. We suspect that this will be the case for many EDBs, and as a result the Commission needs to ensure it has resources to manage multiple applications. We recommend that the Commission provide as early a signal as possible on its final decision on how the SAIDI standards are to be set, so that EDBs can have their applications processed prior to the start of DPP3. The Commission's draft decision is that it will make no adjustment for changes in live line practices, resulting from reconsideration following passage of the HSAW Act (2015). In 2016, under the auspices of the EEA and with involvement of Worksafe, a new guideline was released to EDBs on the determination of circumstances where live-line work may be undertaken. Unison was legally obliged to consider this guideline as representing accepted industry practice. The Commission has calculated based on Unison's data that it incurred an additional 18 minutes SAIDI since the commencement of changes in practice. If the Commission adopts Unison's recommended reference period, then no specific allowance is needed to the reference dataset, but if the longer period is used to calculate the targets and limits for planned SAIDI, then Unison will face no choice but to apply for a quality variation. This would place the Commission in a position where it would have to assess Unison's live-line practices, which we do not believe is an

	appropriate role for the Commission. Accordingly, depending on the approach taken to defining the reference dataset, we submit the Commission should reconsider its draft decision not to allow for increases in planned SAIDI as a result of changes in live line practices.
Annual breach assessment for unplanned SAIDI and SAIFI	Commission staff noted at their attendance at the ENA's workshop that the Commission believed there was broad statistical equivalence of a 2-out-of-3 assessment approach with one standard deviation between the target and limit, and annual assessment with 1.5 standard deviations between target and limit. Operationally we do not believe that to be the case, and the change may drive significant operational conservatism and additional expenditure, as well as much greater chance of false positives. Our experience is that the Commission lacks the capacity to manage breaches on a timely basis, so we would be concerned that this risk is exacerbated under the proposed approach. In addition, we understand that an engineering investigation causes substantial business disruption and costs to produce information for the Commission's engineer; which creates an opportunity cost in terms of network management and operations. At a principle level, we struggle to understand that a single year excursion above the SAIDI and SAIFI limits is a good indicator of likely deterioration in performance. Notably Vector and Aurora who are, or probably will be, subject to pecuniary penalties have exceeded the limits by substantial margins over multiple years. It is unclear what the Commission is trying to achieve with tight trigger points for investigations, it seems to us that it creates a strong risk of over-investment given the severe consequence of breach. It is not evident that this is in the long-term interest of consumers. Our recommendation is that the Commission revisit the specification of limits and assessment timeframes in conjunction with the reliability incentives. All EDBs are subject to the quality incentive payments which creates incentives to avoid outages. If the Commission is concerned that these are inadequate, then it could consider increasing the incentive rates the higher the distance from target. The quality standard could then be based on 2-out-of-3 years compliance tests and 1.5 standard deviations so that only genuine and persistent deteriorations in quality are addressed through breach investigations and potential for pecuniary penalties:

	 We think this approach could support a better balance between the financial incentives on quality and identification of the point where the Commission needs to take a closer look. Unison's support for such a scheme (especially with varying incentive rates) is that the normalisation methodology appropriately adjusts for the frequency of major events. EDBs should not be subject to penalties just because of a higher frequency of severe weather events. We discuss this further in the section on reliability incentives.
Standards for planned SAIDI and SAIFI to assessment at five years with the limit set at three times the cumulative target	We believe it is appropriate for the Commission to set a cap that allows EDBs to undertake planned works without unduly triggering a breach.

3.3 Reliability incentives

66. The Commission proposes the following key changes to the reliability incentive regime:

a) A new approach to setting incentive rates based on an estimate of VOLL;

b) Separate categories of planned work: notified and non-notified;

c) A new penalty to apply to planned outages that do not proceed;

d) Incentives apply to SAIDI only;

e) Separate treatment of planned and unplanned SAIDI;

f) A maximum 2% revenue at risk; and

g) As per the quality standards a new approach to normalising major events.

67. Unison makes the following comments in response:

Proposal	Unison submissions
A new approach to setting incentive rates based on an estimate of VOLL	Unison agrees that standardisation of incentive rates is appropriate and logically they should be based on an estimate of VOLL. Although VOLL estimates are highly averaged across multiple dimensions, including time of day, customer type, length of outage, we agree it is reasonable to use it in the context proposed.
Separate categories of planned work: notified and non-notified	The Commission does not explain how it identified the proposed four hour rule, but Unison submits that this is extremely inappropriate: 1. It creates a financially based time-pressure / incentive on EDBs which goes against the requirements of the HSAW Act; 2. It would cause planning inefficiencies. Unison has undertaken extensive internal works to improve outage planning to group more works into a single outage, rather than have customers experience the inconvenience of multiple outages. There are significant time costs of establishing earths as part of any shutdown, so incentivising multiple shutdowns to achieve a four hour maximum is likely to lead to increased outage lengths for customers. If an outage length involving multiple tasks is efficiently five hours, we would have to consider a cost benefit trade-off of: a. a four hour outage, plus another one hour outage, plus additional set-up costs at an incentive rate of $7,888 per SAIDI minute incurred; or b. a five hour outage cost of $15,777 per SAIDI minute; or

	c. the relative costs of bringing in additional work crews to reduce the outage length to four hours. In addition, for outages scheduled during work hours (especially in the 9am-3pm period), many people would be at school or work, so are largely indifferent to the length of outage and certainly between a four hour outage and six hour outage. Unison recommends that the Commission does not place a four hour restriction on eligibility for a notified planned outage.
A new penalty to apply to planned outages that do not proceed	Data on historic outages that have not proceeded is not included in reference datasets, so automatically EDBs are to be penalised for outages that do not go ahead. There are many good reasons an outage will not go-ahead, including: • late customer demands/requests, • unsafe weather conditions, • stand-down periods resulting from a prior storm event where workers are required to rest before recommencing work. Unison recommends that this measure is not included in the quality incentives.
Incentives apply to SAIDI only	On balance we support the proposal.
Separate treatment of planned and unplanned SAIDI	We agree with the approach.
A maximum 2% revenue at risk	We express concern about the increase in revenue at risk from 1%. The proposals result in an unbalanced set of performance targets and limits and because of their failure to take into account any forward-looking assessment of the environment confronting EDBs or rising work requirements. Accordingly, our assessment is that we would likely always be on the wrong side of the incentive scheme. For example, we note that as a result of the Higgins' roadside fatalities, there are new requirements on EDBs to increase traffic management controls. What used to be a simple road-side switching job, now requires traffic management, whereas previously far more limited controls were required based on a relatively swift risk assessment. This change in requirements is not included in the reference data. As noted earlier, the planned SAIDI allowances are disconnected from capex allowances. It is internally inconsistent to provide for growth in planned works via increased capex allowances, but then penalise businesses for undertaking

	that work. If these issues are not resolved, then we recommend the Commission limit the exposure to the status quo of 1% revenue at risk.
A new approach to normalising major events	See previous comments above.

3.4 Closing comments on the proposed quality standards and reliability incentives

68. It is essential that the quality and reliability regime is struck at a level where EDBs have reasonable expectation of achieving the quality targets and avoiding breach. If the Commission does not set sufficiently forward-looking targets, especially for planned SAIDI, then EDBs will face little choice but to apply for quality reopeners. Applications for quality reopeners would seem to defeat the purpose of DPP regulation and the efficacy of the reset process.

69. In finalising the approach for the Determination, Unison recommends that the Commission further engage with the ENA's Quality of Supply Working Group to ensure that the approaches are workable and create desirable incentives.

70. Finally, taking account the approach used in assessing Vector's quality breaches, Unison notes the following foreseeable impacts on costs and reliability over DPP3, which would need to be accommodated with either adjustments to opex or adjustments to quality targets and limits or a mix of both:

a) Strengthened traffic management requirements arising from the lessons from the fatalities of Higgins' workers. This is likely to slow fault restoration and lead to longer shut-downs as switching operations take longer;

b) Increased controls for work on low voltage assets. Increasing prevalence of customer generation enhances the risks of back-feeds into de-energised worksites. Additional control measures will be required to protect workers from consumer generation;

c) Increasing volumes of plantation forestry coming up for harvest. This will increase the risks of damage to the network as well as requirements for safety shutdowns;

d) An expected, but uncertain impact from climate change which will likely increase the frequency and severity of damage-causing weather events; and

e) Population growth through positive net migration is forecast to continue leading to increased congestion, as well as damage to networks caused by high levels of construction activity.

4. OTHER MATTERS

4.1 Compliance costs

71. The proposed changes the compliance and reporting obligations on EDBs for DPP3 are significant, especially in respect of the proposed changes to quality standards and reliability incentives. While they will cause us to incur additional internal costs to record and report the requirements, they will also cause significant new audit costs because they are outside of the existing normal audit areas. Nominally, we think the Commission should allow an additional $40k per annum to cover this additional cost. Unison's preference would be to allow a pass-through cost for new audit fees covering new reporting obligations, as costs could significantly exceed this level, depending on the final decisions.

4.2 Innovation allowance

72. Unison strongly supports the ENA's proposals that the Commission allows for pooling of innovation allowances, so that small EDBs can leverage the allowance to fund meaningful innovation projects. At 0.1% of revenue, the allowance would provide Unison with only $100k per annum in innovation funding, which is inadequate to establish any meaningful innovation project.

5. CONCLUDING COMMENTS

73. When looked at in totality, Unison is concerned that the Commission's proposals will under-forecast EDBs' reasonable operating expenditure requirements, as well as set unrealistic quality limits and reliability incentives. Additionally, when we assess the symmetry of forecast risks (upside versus downside risks), there appears much greater downside potential than upside.

74. In Centralines' submission, it sets out a table providing an assessment of forecast risk associated with each major component of the BBAR calculations. We think that is a useful approach to adopt in evaluating the proposals and encourage the Commission to document a similar approach in the final decision. To meet the standard of expected NPV=0, there must be symmetry in forecast risks. With the significant decline in WACC and the heavy reliance that EDBs will have on revaluations, which will represent around 50% of return on equity during DPP3, it is more critical than ever that forecasts are as accurate and unbiased as possible.

75. A significant missing aspect of the proposals and allowances in DPP2 is the lack of any allowance for non-scale trend factors, which are more than offsetting productivity improvements over time. The NERA study provides a strong evidential basis to address this missing element and we strongly urge the Commission to include its recommendations in the BBAR calculations.

76. Unison hopes these submissions are useful to the Commission in progressing the DPP reset. Please feel free to contact us if there is any further information we can provide or to clarify any aspect of this submission. Unison's contact is Nathan Strong, General Manager Business Assurance.