



**Submission on Input Methodologies Process  
and Issues Paper and Draft Framework Paper**

**Unison Networks Limited**

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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 *Input Methodologies: Process and Issues Paper* and *Draft Framework Paper*. We have contributed to the development of the ENA's submissions and support the recommendations in those submissions. In this submission we focus our brief comments on key areas of emphasis for Unison, rather than duplicate responses made in ENA's submission.

### 1.2 Executive Summary

2. Unison concurs with the ENA's submission that the Commission has "accurately and comprehensively captured the main issues that stakeholders identified in response to the Commission's open letter<sup>1</sup> and workshop." The Commission has identified a very wide range of issues that could potentially be explored in depth, but we think a focussed effort on a relatively narrow range of issues would be most likely to achieve better long-term outcomes for consumers.
3. Nearing twelve years since the IMs were first set, in general, Unison considers that much of the intents of the Part 4 regime are being realised through a stable set of IMs and their resulting implementation through DPPs. Nevertheless, there remain some key areas where we consider the review should focus to ensure that the IMs are fit-for-purpose for the next DPP reset, as well as address issues where we believe current settings are not effective in promoting outcomes consistent with the Part 4 Purpose:
  - a) We take it as a given that WACC parameters will be reviewed, but urge the Commission to carefully interpret results from periods of unusual market volatility or extreme settings (e.g., periods of significant negative real interest rates). We think the approach taken in previous resets using expert workshops should again be considered. We think three issues key should be examined in reviewing the approach to WACC:
    - i. Whether it remains appropriate to adopt narrow windows for calculating the risk free rate. Concentrating the measurement window on a narrow period creates risks for consumers of significant variability in the WACC, depending on the market/economic conditions prevailing during the three-month measurement window;
    - ii. Whether using the prior five year average to calculate the cost of debt before each regulatory period is appropriate. Under the current approach by the end of a regulatory period, an EDB is still being remunerated for debt costs based in part on a debt premium incurred ten years ago, but is incurring new debt premia at current market conditions, which are not recognised in contemporaneous revenue allowances;

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<sup>1</sup> [Commerce Commission, Open letter – Ensuring our energy and airports regulation is fit for purpose, April 2021](#)

- iii. How equity raising costs are addressed. Many EDBs and Transpower are likely to require new equity capital to efficiently fund decarbonisation-related capex as well as meet business as usual capex requirements, however, there is no explicit allowance for the costs of raising capital in the current WACC IM;
- b) Related to cost of capital, is how the inflation component of WACC is recovered over time. Unison submits an accelerated workstream should seek to resolve whether or not EDBs and Transpower should face full RAB indexation, or shift to a hybrid approach where the RAB is indexed for inflation by the equity proportion only and nominal interest costs are financed through the MAR. We recommend this is dealt with early in the review process, in order to enable Transpower to have as long lead time as possible for any new approach to take effect at its next IPP reset. We do not see how it is to the long term benefit of consumers for Transpower to be subject to a different approach than EDBs.
- c) It appears to be common ground that EDBs will need to incur additional capex to support their customers to decarbonise by increasing the capacity of their networks and investing in connection assets. In addition, EDBs will need to increase expenditure on climate response capabilities, such as disaster readiness, additional reporting etc. Capabilities relating to integration and use of flexibility services to support network services will need to be developed. It also appears to be common ground that the pace and scale of expenditure in these areas are uncertain. In this context, Unison submits that:
  - i. The base-step-trend approach to setting opex allowances within DPPs would not be fit-for-purpose in future DPP resets (at least as previously implemented). The Commission should review the reopener provisions to ensure that EDBs can adapt and invest in a timely manner to address requirements that were not anticipated in the reset. We think a significant workstream should be focussed on ensuring that re-openers, contingent allowances, and innovation allowances can work effectively to ensure EDBs are compensated for incurring costs that were reasonably not anticipated at each DPP reset in setting expenditure allowances;
  - ii. Re-opener provisions for unanticipated customer capex should be reviewed to ensure that they are sustainable in a context where the Commission may be required to make a higher volume of decisions and would need to make those decisions on a much more timely basis than it did with its first approval; and
  - iii. The IRIS incentive mechanisms should form an extensive part of the review. In particular, the inclusion of customer capex within the mechanism needs to be reconsidered, and the Commission and industry should have high confidence (through some form of mathematical proof) that the IRIS mechanisms do not deter substitutions between capex and opex, as this is likely to be an important factor in future as flexibility services become available to EDBs and will substitute for some capital expenditure.
- d) Unison submits that the Commission should ensure that the IMs also promote efficient risk-sharing between generations of consumers. Current approaches place the risk of

disaster cost-recovery on to the consumers that remain post-event. As insurance markets tighten or become unavailable and the likelihood of natural disasters associated with climate change increase, we question whether there should be greater ability for EDBs to establish better risk transfer mechanisms to more effectively spread the costs of disasters more equitably over consumers over time.<sup>2</sup> The current base-step-trend approach to setting opex allowances prevents EDBs from investigating alternative insurance or risk transfer arrangements.<sup>3</sup>

4. In the remainder of this submission we elaborate on the matters above and other elements of the Commission's two consultation papers.

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<sup>2</sup> For example, in the Hawke's Bay region, the local Authorities are agreed that targeted rates should be collected in advance to contribute to the future costs of coastal retreat and coastal defences, rather than only when costs are incurred in the future.

<sup>3</sup> For example, if an EDB wished to purchase cyber-insurance this would attract opex IRIS penalties for five years from the commencement of insurance.

## 2. COMMENTS ON THE DRAFT FRAMEWORK

5. In this section we make brief comments on the Draft Framework paper.

### *Support for the proposed framework and stated principles*

6. We note the Commission's proposed framework and the relatively little change from the previous IM Review. We are supportive of the approach to determine "Review elements" and then assess the merits of potential change, based on an assessment against statutory criteria and the three stated economic principles of:

- a) *Ex ante real financial capital maintenance* - suppliers should have an expectation of earning a risk-adjusted cost of capital over time and maintaining their financial capital in real terms over the long term;
- b) *Risks should be allocated to those best placed to manage those risks; and*
- c) *Recognition of the asymmetric consequences of over/under investment*

7. We support use of those principles and are pleased to see the Commission's ongoing commitment to them.

### *Task Force on Climate Related Financial Disclosure framework*

8. New to the draft framework is to consider climate-related uncertainties, risks and opportunities through the lens of the *Task Force on Climate Related Financial Disclosure framework*. We agree and support the use of that framework to assess the various dimensions of impact that climate change will have on EDBs.

9. As noted in the ENA's submission, we are concerned that the Commission seems to be giving high weight to the "permissive" consideration that must be given to climate risks under section 5ZN of the Climate Change Response Act 2002. Perhaps the Commission is simply reflecting the statutory language of the CCRA, but EDBs will face no choice but to support and enable their customers' drive to decarbonise, adapt their networks to be resilient in the face of climate change and make other strategic investments in their networks to enable efficient decarbonisation and use of electricity over time. In our view, the long-term interests of consumers are tied to New Zealand's success in efficiently decarbonising and preparing for and responding to the unavoidable consequences of climate change.

### *Consideration should be given to incorporating inter-temporal equity into risk allocation principle*

10. In Unison's view, the principle of allocating risks to those best placed to manage them should be further considered or qualified in terms of inter-temporal equity and spreading the cost of managing risk over time more effectively. Nationally there will be a difficult debate about how the costs of managed coastal retreat should be addressed, and this conversation will also

apply to the costs of infrastructure supplying affected communities. Current regulatory approaches would see any stranded infrastructure that serves communities that are forced into managed retreat recovered from all consumers over time. We think this is the only sustainable means of continuing to incentivise EDBs to continue to serve coastal communities that are at short to medium term threat of inundation and the current policy of stranded assets remaining in the RAB and depreciated over time remains the most effective policy. There may need to be consideration given to how reliability standards adapt to situations where it makes sense to maintain less reliable assets, rather than replace them in locations where retreat is expected.

11. While we continue to endorse the current approach to dealing with stranded assets, we think consideration needs to be given to how the expected costs of future disaster events might be better recovered over time. The regime currently places the net costs of disaster events on post-event consumers. These risks and costs are increasing with tightening or non-available insurance markets. It is not clear that this is an equitable outcome in the long term interest of consumers. So we think the concept of risk allocation also needs to be considered in an inter-temporal sense, not just a simple division between suppliers and consumers.
12. As insurance premiums increase or traditional insurance becomes unavailable or unaffordable, the role of insurance captives, self-insurance and other non-traditional forms of insurance may become important in efficiently transferring or managing risks of disaster events. But these are currently not well-supported within the DPP/IRIS schemes: for example, establishment of an insurance captive or an insurance mutual across EDBs would result in opex IRIS penalties.
13. In a similar vein, some expenses incurred by EDBs to develop long-term business capability to support decarbonisation and adapt to climate change are currently deemed “operating expenses”, but these might be better treated through capitalisation and recovered from beneficiaries over time. For example, it may be useful to consider whether a category of “knowledge assets” is created that might include such things as capitalising the costs of establishing information about the characteristics and performance of low voltage networks. We think an IM workstream should examine capitalisation rules to ensure expenses are able to be appropriately recovered from the beneficiaries of those activities, especially as these expenses become more material as EDBs prepare for more DER, decarbonisation and the effects of climate change.

*Framework issue: recommendation to further consider the relationship between this IM Review and Future DPP resets*

14. The Input Methodologies set out a number of key rules that underpin large elements of the financial models the Commission uses in DPPs, CPPs, IPPs and Information Disclosure. However, there are large parts of price-quality determinations that are discretionary for the Commission and are not included within IMs, especially in respect to the approach taken to forecasting over the relevant price-quality period. We think it is important for the Commission to consider the IMs in the context of approaches used in DPP resets to ensure they work effectively together to deliver on the Part 4 Purpose.

15. Unison submits that the Commission should consider the merits of scheduling IM reviews to take place every five years, with a view to setting IMs that best support the context of the next DPP reset, and indeed try to anticipate likely approaches to be used in that reset. For example, if the Commission considers it most likely that it would continue with the base-step-trend approach to forecasting opex in DPP resets, then more pressure is placed on the IM re-opener provisions for DPPs to effectively address unanticipated future expenditure allowances because this is a deficiency of the base-step-trend approach.
16. Put another way, if the Commission is minded to undertake IM reviews every seven years, then the current review would determine the rules that would apply to the 2030 DPP reset for EDBs. The Commission would need to consider the IM needs not just for DPP4 but those required to meet the circumstances of DPP5. Unison submits that trying to forecast circumstances prevailing in 2030 is not likely to be successful and it is better to conceive of this IM Review and the next DPP reset as part of a package that need to work effectively together.
17. Unison's key point is that a frame of reference for this IM Review should be to answer the question: "what IM changes are necessary to make the DPP4 reset a success, given the likely context for DPP4 and state of current knowledge of the effectiveness of the current IMs." We urge this focus on DPP resets as this is the primary tool for setting price-quality paths. From Unison's perspective, the long term benefits of consumers would be achieved in the DPP4 reset if EDBs:
  - a) Are adequately compensated for maintaining and investing in their networks, including compensation for the costs (incl WACC) and risks they face;
  - b) Have incentives to efficiently manage or transfer risks for the long term benefit of their consumers;
  - c) Have incentives to be efficient and rewarded/compensated for innovation activities;
  - d) Are compensated for delivering services that their consumers want at desired levels of reliability and customer experience;
  - e) Are compensated for ensuring their networks achieve levels of resilience and emergency response capability to meet CDEM obligations and consumer expectations;
  - f) Can support New Zealand's decarbonisation aspirations by providing network capacity, connectivity and platforms for enabling consumers to realise value from DER; and
  - g) Are compensated for impacts of unforeseen circumstances and can respond flexibly to a more dynamic economic and customer environment resulting from climate change and other factors.
18. In a number of respects, we think the current IMs and DPP approaches will not achieve the outcomes stated above. In the remainder of this submission, we respond to the issues set out in the Process and Issues Paper, with the "success outcomes" listed above as a frame of reference.



### 3. COMMENTS ON THE PROCESS AND ISSUES PAPER

#### 3.1 Context for the IM Review

19. Unison recognises that the primary purpose of the Process and Issues Paper (“PIP”) is to help identify “Review Elements” that the Commission will then go on to consider the merits of change within the framework identified in paragraph 3.9 of the PIP. The Commission seeks feedback on the potential IM elements that have been raised in the PIP and any new elements that submitters believe should be covered.
20. As stated in the ENA’s response, we think the Commission has done a very good job in reflecting the input provided to its December 2021 workshops. There is common recognition of the future challenges facing the energy sector from:
- “the physical impacts of climate change, the transition to a low carbon and climate resilient economy, and the ongoing impact of COVID-19”<sup>4</sup>
21. Since the December 2021 workshop we have also seen a very dramatic change in the economic outlook. Inflation has re-emerged bringing with it a dramatic shift in the interest rate outlook. Ongoing challenges with supply chains and labour market tightness are causing rising input prices. Fiscal and monetary support largely shielded the economy and New Zealanders from the disruptive economic consequences of COVID-19, but now the prospect of stagflation appears to be a distinct possibility. As the Commission has recognised, if these conditions prevail in 2024, this will lead to significant nominal increases in network charges, purely through the mechanical application of the building blocks model.
22. EDBs are not blind to the implications of increased electricity prices on their consumers, given all the other cost of living increases that are placing pressure on households. While consideration may need to be given to smoothing the effect of price increases on consumers, the Commission will need to look past the fact of cyclically driven factors driving the cost of capital and inflation that are outside the control of the Commission and EDBs.

#### 3.2 Comments on Chapter Five – Risk allocation and incentives under price-quality regulation

23. In the following paragraphs we respond to the Commission’s concerns about whether EDBs have responded to the intended efficiency and innovation incentives that apply under the current IMs and DPPs. At the conclusion of this section we set out in a table our recommendations about areas for focus for the IM Review in the areas of risk allocation and incentives.
24. In short, we think the Commission should apply a different lens to the evidence presented by the Commission of increased expenditure and stable levels of quality and reliability. At a time when it is known that large proportions of New Zealand EDBs’ assets are reaching end-of-life, the Commission should draw comfort that there is rising levels of expenditure: Aurora and the

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<sup>4</sup> Para 4.1 of the PIP

alarming state of New Zealand's "three waters" infrastructure demonstrate that inefficiency occurs when expenditure is not keeping pace with the need to maintain and replace assets.

25. The Commission observes (5.13) that expenditure by EDBs has nearly doubled in nominal terms since 2008, with this increase fortuitously occurring during a period of low inflation and interest rates, which has shielded consumers from more material price and revenue increases. In para 5.20 the Commission observes that a combination of factors will see revenues and prices increase substantially in DPP4. The Commission then expresses concern that the innovation and efficiency properties of current regulatory approaches may therefore not have been sufficient to have driven EDBs to improve their performance, but invites further submissions and evidence on this aspect, noting that assessing efficiency is not straightforward (para 5.30).
26. Unison agrees that on a very narrow measurement basis, the lines sector appears to be becoming less productive. The growth in narrowly measured outputs such as length of lines, customers served and kWh delivered has increased at a slower rate than inputs, such as operating expenditure. But what these simplistic models exclude (the point made in submissions in the DPP3 reset) is that the operating environment, laws, regulations and customer expectations have driven significant increases into the costs of conveying electricity. Examples include:
- a) Cyber-security: the reliance on digital technologies and digitisation of network management has increased significantly since 2008. In tandem, the rising cyber-threat landscape mean that EDBs have no choice but to invest in appropriate cyber defences and mature their information security systems. Investment in information security management systems does not deliver more kWh or serve more customers, but is clearly a necessary cost of doing business.
  - b) Traffic management requirements. These continue to grow, driven by NZTA and local requirements, and compliance with Health and Safety laws. A worksite in 2008 will look radically different to one in 2022. Even a simple stop to operate a network switch adjacent to the roadside now requires a degree of traffic management set-up, whereas in 2008 a vehicles' hazard warning lights would have been sufficient. Worker safety has been enhanced, but this does not deliver more kWh or serve more customers.
  - c) Consumers are investing in their own partial supplies, with solar and batteries. The full extent of the network is still required to serve such consumers, but fewer network-delivered kWh will show as a relative productivity drop. The use of the network to allow consumers to realise value from surplus solar is not recognised as a productivity or efficiency benefit (new service to that customer, using existing infrastructure).
  - d) Networks are making plans for addressing a much more complex operating environment in future, with an expectation that flexibility resources will need to play a role in balancing localised congestion and constraints. Again this did not exist in 2008, does not show up in the short term in delivering more kWh or serving more consumers and therefore manifests as contributing to a "productivity decline", but is agreed by all as being a critical focus for the industry.

- e) Responding to and managing Covid has resulted in higher rates of absenteeism due to isolation requirements, which can be expected for the foreseeable future. Again this will manifest as a productivity decline, but is unavoidable.
  - f) It is widely known that the industry is working through a period of asset renewal, as networks built in the 1960s and 70s come to the end of their useful physical/economic lives. New assets cost more than their depreciated, indexed historical costs. Old assets are more intensively inspected and maintained before they are most economically replaced. Again, relative to 2008, this issue is likely to be more pronounced leading to a measured decline in productivity and efficiency, yet is simply an operating reality.
  - g) There are higher community and indeed employee expectations on businesses to address Environmental, Social and Governance factors relating to sustainability than in 2008. Similarly, consumers expect higher levels of customer experience, for example, in receiving digital communications on outages. Such service enhancements or sustainability focus are not measured in traditional productivity analyses.
27. The preceding list could go on and on (and on). In theory, we could pick an historical point in time and undertake a forensic analysis of expenditure between then and now and seek to explain and justify the differences from an efficiency or productivity performance. But we would question the value of such historical assessment or whether it would be conclusive in answering an efficiency question.
28. Perhaps the most useful evidence on the Commission's question about the state of industry efficiency and productivity, may be from the experience with Aurora. The Commission has approved, through close independent scrutiny of Aurora's expenditure plans, a substantial expenditure programme that will see Aurora's revenues and prices move from well-below average position on a per ICP comparison with other EDBs to above average. Ironically, from a simplistic "productivity" assessment, Aurora will go from being highly productive prior to its CPP to show a substantial decline in productivity as considerably more will be expended on delivering similar levels of kWh and customers served. But from an efficiency perspective, Aurora's end-state will be a more resilient, safer and reliable network, with a well-informed community on how Aurora has planned and delivered its approved expenditure programme.
29. Unison also submits that the Commission needs to consider how improvements in efficiency manifest in infrastructure industries. The Commission appears to equate efficiency improvement and innovation with lower absolute levels of operating and capital expenditure or improvements in quality. In a period where EDBs are engaged in significant replacement and renewal of networks, as assets reach the end of their physical and economically useful lives, expenditure trends will inevitably be upwards. The key to unlocking efficiency improvements is to ensure that assets are replaced in a timely manner, with the right capacity to meet demand over the life of the asset.
30. Innovation is likely to manifest in things like improvements in condition assessment techniques; use of data analytics to identify failure modes and failure potential given asset condition and other asset health indicators; risk and asset management systems that deliver timely or efficient programmes of work to optimise replacement. Such innovation will not cause lower *absolute* levels of expenditure, but more efficient investment compared with more

- simple models of asset replacement based on asset age. Efficiency may manifest as faster replacement of some assets (because those assets are deemed more critical and enhanced monitoring has brought forward replacement before they fail) and in other cases efficiency may mean some assets can continue in service (because enhanced condition assessment techniques have identified the assets are in good condition for their age).
31. Unison's key point is that simple measures such as absolute movements in expenditure levels (especially at time where network assets are generally reaching late stage of life) are very unlikely to be indicators of efficiency performance. Indeed, if expenditure levels are not rising, this may be more likely to be an indicator of potential problems, as was the case of Aurora. The "3-waters" sector is also good example that maintaining low levels of opex and capex over extended periods, when assets are known to be aging, is more likely to be demonstration of inefficiency.
  32. Overall, as the Commission has recognised, assessing efficiency performance is not a simple exercise. The ENA's submission has indicated that it would like discussion with the Commission on the value in trying to comprehensively assess EDB's efficiency performance to address the Commission's concerns about whether EDBs are responding to the efficiency and innovation incentives provided under current regulatory approaches.
  33. From Unison's perspective, we do not see the value of such historical analysis of efficiency (which we think would likely be a very expensive exercise). Unison recommends that the IM Review should be focussed on ensuring that the IMs and approach to resetting DPPs create the incentives and capability for EDBs to meet their customers' needs in an environment where decarbonisation is expected to create significant new demands on EDB's networks and ensure resilience in the face of climate change. In addition, although the construction of revenue caps in New Zealand are different from overseas, especially DPP regulation, the fundamentals of 5-yearly caps and efficiency and quality incentive adjustments are similar to those applied internationally. It is unclear why New Zealand EDBs would not be similarly motivated to out-perform regulatory allowances through achievements of efficiencies.
  34. Unison cannot speak for other EDBs, but from our perspective, the regulatory allowances are never far from our performance assessments, we are very conscious of IRIS penalties for under-performance relative to the yearly allowances, and have the added pressure of Trust scrutiny and performance targets established through the Statement of Corporate Intent.
  35. Although we express dissatisfaction with the lack of forward-looking approach in setting DPP opex allowances and concur with others that the IRIS schemes should be prioritised highly for review, once set, we are highly motivated to perform efficiently for the long-term benefit of our consumers. Much of Unison's focus over the past decade has been on seeking to optimise expenditure on our networks, through adopting risk-based asset management approaches and maturing our asset management systems, which have achieved certification to ISO55001. Investments in Unison's smart grid, use of dynamic line ratings, investigation into new technologies to anticipate faults and use drones and AI to recognise assets at risk of failure, are all examples of Unison innovating to try to reduce investment costs and optimise expenditure. Despite all these efforts our costs have increased, reflecting the inevitability of needing to replace aging networks as well as meeting what seem to be ever-increasing regulatory requirements from all regulators.



	<p>the nature of the risks associated with merger or acquisition and the up-front investment required to realise medium to longer-term synergies is not supported by the revenue cap and IRIS mechanisms.</p>	
Innovation incentives	<p>The current innovation allowance mechanism has not yielded any successful applications and only one unsuccessful application. Unison considered applying for an innovation project allowance, but was ultimately deterred by the time and cost involved in making an application.</p> <p>Where the current regime lacks an adequate incentive framework is where there are upfront costs associated with an innovation that delivers long term paybacks in the form of avoided investments. Upfront costs are treated as an inefficiency under IRIS, and the regime rewards investments that <i>are</i> made, not those that <i>aren't</i> made. It is essential to ensure that EDBs receive expenditure allowances to cover the costs of investments made to help support avoiding or deferring investment.</p>	Medium
RAB indexation	<p>Unison submits that the Commission has for the most part accurately summarised the issues associated with RAB indexation and related issues associated with CPI forecasting. As the Commission has observed, the inflation environment has now shifted into a phase where CPI forecasts are being exceeded by out-turn inflation. This now provides a benefit to EDB's equity-holders because interest payments that are paid in fixed terms are more than compensated for by the inflation adjustment to the RAB. Despite this turn-around, Unison's view is that the Commission should still give active consideration to a mixed approach to RAB indexation. Realistically, EDBs are unable to hedge the inflation portion of the cost of debt by issuing inflation-indexed bonds, so equity-holders bear 100% of the inflation forecast risk.</p> <p>In addition, EDBs must finance additional borrowings in the short-term to cover the mis-match in revenue allowances for interest costs (only the real proportion is provided in the BBAR calculation) and the actual nominal costs of debt that EDBs must pay out of their cashflows. At a time when decarbonisation is likely to drive substantial capital investment requirements, we do not consider this is likely to be in the long-term interest of consumers.</p> <p>Unison advocates for the RAB indexation issue to be accorded an accelerated priority in the IM review, especially in regard to its application to Transpower. A shift to an indexed or hybrid-indexed approach for Transpower may require it to adjust its financing activities, including the Crown as equity-holder, so the earlier it has a decision on this, the earlier a change or transition can begin. It is difficult to conceive that there is a long-term consumer benefit from a variance between EDBs and Transpower in the approach to inflation compensation.</p>	Accelerated priority
Form of	<p>Unison supports revenue cap regulation. It is successfully supporting tariff reform by removing the risks and challenges associated with forecasting</p>	

control	<p>or determining volumes when introducing new approaches. In 2022 we commenced introduction of mandatory TOU pricing for retailers for residential price plans. Revenue cap regulation has also removed the risk associated with volume forecasting that was an issue under the previous weighted average price cap approach.</p> <p>Unison submits that a review should be undertaken of practical implementation issues, associated with wash-ups and how any adjustments due to major customer capex reopeners are reflected in revised revenue caps.</p>	Low priority
Long-term demand risk	<p>With the decarbonisation imperative now clearly established in the New Zealand's policy environment, the longer-term demand risk is less material to EDBs, so asset stranding for economic factors is somewhat less. However, human-induced climate change is forecast to bring higher incidence of storms, flooding etc and coastal communities will be at more frequent risk of coastal inundation, leading to eventual managed retreat or defences in coastal communities. Insurance availability, which is already non-existent for poles, wires and underground cables, will potentially retrench further or become prohibitively costly for currently insurable assets.</p> <p>Current regulatory approaches effectively place disaster recovery costs (net of any insurance proceeds) on post-event consumers and these costs are likely to be increasing on an expected cost basis.</p> <p>Unison submits that these issues need to be considered from an inter-temporal equity perspective. It may be preferable for EDBs to form insurance captives, mutuals or investigate other risk transfer arrangements to spread the costs of network repair and reinstatement more equitably over time.</p>	Medium priority



### 3.3 Comments on Chapter Six – Cost of capital issues

38. Unison endorses a cost of capital workstream undertaken as part of the IM Review, using dedicated workshops involving finance experts as a key means of surfacing areas of agreement and disagreement.
39. In this section, we make brief comments on some aspects of the cost of capital, with a table at the conclusion setting out our recommendations. Our views are aligned with those set out in the ENA's submission. We strongly agree with the ENA that it will be important to carefully consider the results of updated parameter calculations to ensure that they are not subject to anomalous outcomes caused by extreme periods occurring at key timeframes during the Covid pandemic.
40. As the Commission has identified, financial and economic environments have changed rapidly, with Covid-19 causing extreme monetary and fiscal settings to mitigate the economic effects of Covid. The unwinding of those effects, the economic shocks associated with the war in Ukraine, and ongoing supply chain disruptions has caused periods of quite extreme outcomes, such as significant periods of negative real interest rates. Government five-year bond rates reached as low as -0.06% on 25 and 28 September, 2020. Had the DPP reset been scheduled for 2021, a WACC in the low 3% range would have resulted, yet two years later, a WACC struck on current market data would be approaching 7%.
41. These extremes have highlighted that the approach to setting the risk-free rate on a three month window potentially can cause quite volatile outcomes that then become locked in for a five year period. It is not evident that this concentration risk is to the long-term benefit of consumers and we think the Commission should reconsider the appropriate measurement window for the risk-free rate.
42. Unison also submits that using the five-year historical average to establish the debt risk premium risks becoming severely disjointed from the actual financing costs that an EDB must incur during the regulatory period. During this regulatory period EDBs are receiving a real cost of debt allowance in cash flows of around 0.9% (2.92% less expected inflation of around 2%), but marginal nominal funding costs are now considerably higher, making it increasingly difficult to justify investment. Unison submits that the Commission should revisit the basis for establishing the cost of debt, including better alignment to running an efficient, real world Treasury policy.
43. Unison also submits that the Commission should also consider how the WACC is used in the financial model, particularly as it relates to RAB indexation. Given the risk of inflation becoming persistent, there is potential for situations to arise where the WACC may be exceeded in some years by a forecast of inflation during the regulatory period<sup>5</sup>. This could give rise to a situation where the calculation of the BBAR results in a negative allowance for cost of capital in those years where inflation forecasts are extremely high in relation to the WACC. While this is an unlikely scenario, and the conversion of BBAR to MAR would temper the impact of this scenario, we think the Commission should consider whether the IMs should prevent such anomalous outcomes.

<sup>5</sup> This could occur for example, if there was a short-term expectation of an inflation spike, but longer-term expectation is reversion to 2% within a regulatory period.



44. The following table summarises Unison’s recommendations on review of the cost of capital IM:

Issue	Comment	Priority
Updated parameter estimates	The Commission should exercise caution in interpreting the results of updating parameter estimates, particularly those estimated during periods of high market volatility or unusual market settings (e.g., where real interest rates were significantly negative)	n/a
Measurement period for risk free rate	Unison recommends that Commission revisit the use of a three month window for establishing the risk free rate. A longer measurement window could reduce the risk of extreme outcomes for EDBs and consumers.	
Calculation of debt premium	Use of the five-year prior period for calculating the debt premium leads to a significant disjoint between EDBs cost of debt incurred during a regulatory period and historical debt premiums used to establish the cost of debt for the period. At the end of a regulatory period, compensation for debt premium relies, in part, on debt premiums calculated ten years prior. If debt premia rise significantly, this may deter incentives to invest. Unison recommends that the Commission consider alternative methods to obtain better alignment between allowance for debt premiums with the premiums being incurred during the regulatory period.	
Allowance for capital raising costs	EDBs and Transpower may need to seek additional equity funding to keep pace with the extent of investment required to enable customers to decarbonise. There is currently no explicit allowance for capital raising costs within the WACC IM, which may be inconsistent with the principle of achieving an expectation of real FCM.	

### 3.4 Comments on Chapter Seven – CPPs and in-period adjustments to price quality paths

45. The Commission is interested in hearing about whether existing reopeners and other in-period flexibility mechanisms in the IMs are effective.
46. The current reopener provisions respond to only a limited range of circumstances where EDBs require additional revenues to cover unanticipated expenditure requirements. In conjunction with the approaches to setting DPP allowances for opex (base-step-trend) and capex (120% cap relative to historical expenditure), Unison submits that current approaches are inconsistent with the principle of EDBs expecting real FCM. We hold this view because:
- a) The base-step-trend approach has only provided opex allowances for trends in growth in network length and numbers of customers. There are no forward-looking allowances to enable EDBs to incur opex in support of decarbonisation or climate change resilience activities, for example. Where there is a degree of certainty about future requirements these can be accommodated within “step” allowances, but a new approach needs to be developed to better identify and quantify such step allowances within the DPP reset process. However, within regulatory periods, there also needs to be better means to address new expenditure requirements that were either unknown or uncertain at the point of resets. For example, it appears to be commonly accepted that EDBs would benefit from access to meter data to more accurately understand the performance and characteristics of their low voltage networks. It was unknown at the point of the DPP3 reset what the costs of meter data would be from MEPs or retailers, but as these costs are revealed during DPP3, EDBs will be forced to choose between incurring data costs (with five year long IRIS penalties attached) or waiting until the next reset to seek a “step” allowance in operating expenditure. Neither outcome is reasonable.
  - b) New regulatory requirements tend to be individually small in their impact, but are cumulatively significant in increasing EDBs’ opex. For examples:
    - NEMA is proposing that EDBs prepare reports on their emergency preparedness for particular disaster scenarios called “Planned Emergency Levels of Service” (“PELOS”).
    - There seems little doubt that the Electricity Authority will impose new requirements on EDBs under their project to review Regulatory Settings for Distributors, but these are currently unknown and costs uncertain.

Our experience is that individually, each new regulatory requirement is unlikely to trigger the 1% threshold for a DPP reopener due to regulatory change, but cumulatively we experience material increases in cost due to regulation. Because there is an asymmetry in regulatory change (we cannot think of any reduced regulatory imposition in recent times, only increased regulatory and compliance requirements) we therefore expect to incur material uncompensated costs to meet new requirements during each regulatory period. This problem is compounded by the opex IRIS arrangements. Accordingly, we consider that there are two key problems that need to be addressed:

- i. Opex allowances to date have not been forward-looking, so even if examples like the NEMA one above can be anticipated and quantified, we do not have an effective process to allow “steps” to be realised;
    - ii. There are likely to be uncertain future changes (regulatory and non-regulatory) that require effective in-period mechanisms to enable adjustment to revenues;
  - c) There is likely to be significant uncertainty about the pace and scale of customer capex driven by decarbonisation. Under current DPP capex forecasting approaches, EDBs must estimate their customers’ requirements for network connections and upgrades for the purpose of determining DPP capex allowances. If EDBs forecast an outlook for customer decarbonisation capex which does not materialise at the predicted scale or pace, this would be treated as a capital efficiency and rewarded under the capex IRIS scheme. Conversely, if EDBs do not adequately forecast customer requirements this can end up either deemed an inefficiency under the capex IRIS, or EDBs can apply for major capex re-openers. If the Commission constrains customer capex allowances for decarbonisation related customer capex, then it may need to be prepared for a material volume of major customer capex re-openers. In our view, these arrangements and potential outcomes are inconsistent with achieving the Part 4 Purpose. Unison recommends that the Commission make it a high priority to review arrangements for effectively aligning revenue allowances to customer and system growth capex requirements during regulatory periods.
47. Overall, Unison submits that in an operating environment that is likely to be less predictable and more dynamic, the Commission needs to ensure there is an effective framework which allows revenues to adjust to emerging circumstances during a regulatory period. Unison submits that a significant focus for the IM Review should be on how DPP opex and capex allowances are to be struck in the next DPP reset, including a better process for “step adjustments”, with a mix of arrangements included within the IMs to adjust revenues during a regulatory period, including the potential for:
- a) Contingencies that automatically adjust revenues if certain events occur. These may be effective where expenditure requirements are uncertain in scale or timing at the point of a reset, but it is acknowledged that it would be efficient to incur such expenditure;
  - b) Administratively efficient reopener arrangements, including mass reopener events to address issues common across EDBs, such as regulatory change;
  - c) More effectively addressing the costs of regulatory change where these are less than 1% of revenues.
48. Although the approach to setting DPP opex and capex forecasts is not an IM issue, we submit that it will be important to consider the forecasting approaches to ensure that the reopener provisions are compatible with the intended forecasting approach. For example, if the Commission is not minded to change the approach to allowing for forward-looking opex step adjustments, then the reopener provisions would need to be effective in accommodating the lack of step allowances.

#### 4. CLOSING COMMENTS

49. Unison's key concern is that the current approach to forecasting within the DPP framework is not effective in providing reasonable allowances for EDBs to meet consumers' current and future needs. The approach to setting opex allowances is particularly problematic, because it is anchored in the past and the processes for establishing "step" changes are inadequate. In combination with limited re-openers and IRIS adjustment mechanisms that treat all expenditure above opex allowances as inefficiency, this has the effect of constraining EDBs incentives to proactively plan for the future.
50. Although these settings are problematic for DPP3, as decarbonisation-related and climate change response expenditure needs to lift in DPP4, we think if there are not significant changes to DPP forecasting approaches, reopener provisions and IRIS mechanisms there is likely to be significant compromise to EDB's ability to support New Zealand's low carbon future.
51. Unison submits that the principle areas for focus through this IM review should be on ensuring that at the DPP4 reset there are effective mechanisms in place to support efficient expenditure requirements. We think that the Commission should use the following two scenarios to test whether an effective, coherent approach exists across the approaches to DPP forecasting, in-period adjustments and IRIS:
- a) Assume it is universally accepted that EDBs should have access to meter data to support network management, but at the time of the reset, the costs of meter data are unknown and have not been incurred previously so do not form part of base opex. How do the IM's enable an EDB to incur and recover costs of the meter data without incurring an IRIS penalty in an administratively efficient manner? and
  - b) Assume it is universally accepted that EDBs will need to incur significant customer capex to support their customers to decarbonise. The pace and scale of investment is unknown at the reset. What approach to capex forecasting, reopeners and capex IRIS would allow an EDB to incur capex to connect and upgrade their customers connections in an administratively efficient manner?
52. We look forward to engaging with the Commission through the remainder of the IM Review process and hope these comments are useful in helping the Commission to identify and prioritise issues for detailed review.