21/12/2018

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Dear Dane,

UNISON SUBMISSION ON DEFAULT PRICE QUALITY PATHS FOR ELECTRICITY DISTRIBUTION BUSINESSES FRO 1 APRIL 2020: ISSUES PAPER

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, Issues paper* (Issues Paper). We have contributed to the development of the ENA's extensive submissions and support the recommendations in those submissions. In this submission we focus on key areas of emphasis for Unison, rather than duplicate responses made in ENA's submission.

2. We support the process outlined by the Commission on pages 53 and 54 of the Issues Paper, including the use of workshops. We also think it is important that the Commission provide good opportunity for comment on the Determination itself to ensure that the compliance requirements on EDBs are well drafted to avoid uncertainty or ambiguity on what is required.

Unison's views on the key issues

Overall framework

3. As was noted in the ENA submission, the electricity industry is becoming more dynamic, with increasing expectation on EDBs to play a key role in facilitating the integration of new technologies in an efficient manner into the industry. There are increasing calls on EDBs to facilitate non-wires alternatives (e.g., storage batteries) and to grow capabilities to enable more dynamic power-flows as consumers use networks in different ways. New pricing approaches will be required to effectively signal to consumers the benefits and costs of use of the network at different times. Regulators and consumers are expecting EDBs to engage more deeply on electricity supply issues and use digital communication channels to help manage or enhance the customer experience (e.g., outage communications to mobile devices).

4. While increasing customer expectations is no doubt a challenge being met in other sectors, with businesses needing to find efficiencies to effectively compete, it is important for the Commission to recognise that the major efficiency areas for EDBs to achieve are in capital efficiency: increasing utilisation and effective management of assets. This comes about through increased asset understanding through condition monitoring, sensors, improved systems for analysing asset performance information etc, ultimately leading to more optimal decisions about the timing of asset

investment and maintenance decisions. In consequence, EDBs are trading off higher operating expenditure on people and processes to improve asset knowledge, with longer-term benefits of more optimal asset investment. The trend towards software as a service is contributing towards higher operating expenditure in substitution for capex. It is essential that these factors are incorporated into the overall design and implementation of DPP3. This has implications for the capex and opex IRIS mechanisms, as well as accurate forecasting of opex and capex.

5. The Commission's proposals for DPP3 build on the framework applied in DPP2 and across the Commission's other regulatory resets. The Commission's approach appears to have been based around a performance evaluation of how well the components of forecasting have matched experience in the DPP2, and for the most part (particularly on the financial forecasts) the Commission's proposals are largely to roll-over the approaches used in DPP2, with some adjustments to the approach to opex and capex forecasts based on the IRIS schemes and the further development of capex forecasting approach in the Gas DPP reset. Substantial changes are mooted for the reliability aspect of the regime.

6. In general, we support the incremental approach being adopted – building on DPP2, and also note the constraints on the Commission looking at the detailed circumstances of each business under DPP Regulation. However, we do express concern that the mixed model of extrapolating from recent trends for opex and outage reference sets, with only a component of integrating forward-looking capital expenditure plans creates a risk for EDBs that the burden of higher operating expenditure is borne by the EDB, but the benefits of more optimised capital expenditure are captured by consumers because these benefits are realised over a longer timeframe than the regulatory period.

7. Overall, we think it is important that the reset is not just a mechanical application of models, but that where necessary adjustments are made to accommodate a reasonable forecast of the likely operating environment for EDBs in the 2020 to 2025 period and beyond. One of the factors not raised in the ENA submission is the need for EDBs with significant coastal exposures to start factoring into long term asset planning the impacts of sea level rise. Within the lifetime of most new assets being built, EDBs are likely to face exposure to damaging events with higher frequency and managed retreats by some coastal communities. This will start to impact on asset investment decisions within the 2020-25 period, and the risk allocations between consumers and EDBs. Central and local governments are beginning a process of long-term planning around coastal communities and we think EDBs and the Commission will need to consider the implications of sea level rise as part of DPP3, including the role that accelerated depreciation may play in parts of the networks.

8. In the following sections we make brief comments on the components of the DPP reset, following the order set out in the appendices in the Issues Paper.

Forecast operating expenditure

9. The Commission's proposals are to take as a baseline FY2019 opex expenditure (consistent with the logic of the opex IRIS) and extrapolate this using a trend and step approach, taking into account forecasts of opex partial productivity.

10. As set out in the ENA's submission, the econometric models used to underpin the trend forecasts have not proved accurate in forecasting real growth in opex. Unison provided quantitative evidence in the DPP2 reset that the opex trend model performs poorly because it uses a model that explains variations in opex *between* businesses, but does not accurately explain variances in opex *over time.*

Unison's key recommendation is that the Commission undertake steps to validate whatever statistical model is used for forecasting trends in real opex.

11. Unison also does not consider it appropriate for the Commission to adopt a working judgement that the opex partial productivity measure should be 0%. We support an update of the work done by Economic Insights in 2014 to measure opex partial productivity of New Zealand EDBs. Where judgement is exercised to depart from the empirical results, the Commission should have an evidential basis for making such judgement calls. Our impression is that the Commission's exercise of judgement in DPP2 was based on a conception of what the Commission wanted opex productivity to be, rather than an assessment of factors driving trends in EDB productivity.

12. We also strongly support the ENA's recommendation that trends in input price inflation should be the subject of expert analysis, taking into account industry context. While measures such as forecasts of the all-industry labour cost index are practical to apply, factors particularly impacting EDBs should be considered (for example, the type of analysis undertaken by NZIER in the Orion CPP application). There are significant resource pressures on the industry in light of Powerco's CPP and Aurora's significant ramp up in expenditure. In the context of broader skill-shortages in the economy, already high participation rates, heavy unionisation and, very low unemployment, there is substantial downside risks to EDBs of under-forecasting of wage inflation. We believe this is an area where significant focus should be placed on achieving high levels of forecast accuracy.

Capital expenditure forecasts

13. Unison supports the recommendations made in the ENA submission. In particular, we endorse the proposal that the Commission consider mechanisms to adjust revenues for major unanticipated customer-driven projects. Under revenue cap regulation, major unanticipated customer works do not generate additional revenues for the EDB until the next regulatory period, which automatically renders the NPV of the business case to connect negative, unless the customer is prepared to make a 100% capital contribution, which we do not consider is in the interests of consumers.

14. The ENA's submission notes that expenditure forecast accuracy is particularly important if capex IRIS incentive rates increase. We support the proposal for the Commission to examine the potential for different retention rates applying to different categories of capital expenditure. Setting the system growth retention factor at 33% would better promote trade-offs between opex solutions (e.g., demand response) and conventional capex solutions. Other areas could be considered for lower retention rates (e.g., replacement expenditure).

15. The Commission could also consider banded approaches to retention factors. For example, if the Commission limits capex allowances to less than AMP forecasts, but the EDB's expenditure meets its AMP plans, a lower retention factor could apply up to the value of its AMP forecast, and a higher retention factor for above-AMP forecasts.

Quality / reliability proposals

16. The Commission is proposing potentially significant changes to reliability incentives and measures that would apply in DPP3. The ENA's Quality of Supply Group has provided extensive submissions on these matters which are supported by Unison, but there are two key issues that we think are important in framing the overall approach:

a) Outage causes are heavily influenced by factors that are directly outside of EDB's control. In Unison's case, less than 10% of SAIDI is a result of equipment failure – the most direct aspect of quality under Unison's control. Since the beginning of DPP2, Unison's SAIDI from equipment failure has experienced a trend decline, but overall SAIDI and SAIFI have experienced increases, leading to Unison exceeding the SAIDI limits in the last two years. We believe significant adjustments need to be made to the scheme to ensure that rewards and penalties are better linked to asset performance and outage responsiveness, and less subject to random variations and factors that are largely outside of EDB's influence, such as the volumes of motor vehicle strikes, trees impacting from outside of regulated cut-zones, and third-party interference.

b) The use of historical data as the reference point for future targets, while practical, does need to be tempered by changes in the operating environment and forward asset investment plans. Most, if not all, EDBs are working through a significant replacement programme of assets reaching the end of their physical lifetimes, so planned outage targets need to be reflective of planned investment programmes, including the impacts of changes driven by health and safety requirements, both existing (e.g., HV live line practice changes) and future (e.g., LV work practices, currently being considered by the ENA/EEA).

17. At a specific level:

a) Unison does not support the Commission's proposals to increase the financial exposure to 5% of line revenue at risk, given the low direct control that EDBs have over the causes of unplanned outages. In our view, the current regime is highly reflective of the impacts of weather, and the degree of penalties and rewards experienced is materially a measure of whether the operating environment has been benign or adverse relative to that experienced in the reference period. We do not think it is appropriate to extend the exposure to penalties to such a significant extent in a context where EDBs are exposed to significant variability in reliability outcomes driven by events largely outside of our controls.

   Additionally, we question whether a 5% revenue at risk incentive would result in actions that are in consumers' long term interests. 5% of revenue at risk would equate, in Unison's case to around $5 million in revenue per annum. This would justify investment of $90-100 million to shift performance, say, from middle of band to the collar, representing around 15% of RAB value. We do not think that this would be in our consumers' interests to create such a strong incentive to improve quality performance.

b) We do not support the Commission's proposal to continue to substitute the boundary value on Maximum Event Days (MEDs). This would be of even more concern if revenue-at-risk increased to 5%. The current methodology means that in years with 3 or more MEDs, EDBs essentially must compensate their customers for storm-related extended outages, at a time when the business is already incurring additional costs of network repairs.

   As we understand it, the Commission is concerned EDBs would not be incentivised to restore supplies as quickly as possible if the actual SAIDI impact was replaced with the average value. This concern does not match the reality of EDB knowledge during major outages. Moreover, EDBs take clear pride in restoring power as quickly as possible following outages – the concept of network controllers being directed to delay restorations to obtain regulatory benefits would run against the strong public service ethic in EDBs and their recognised role as essential service providers.

Incentives to improve efficiency

18. We remain supportive of the objectives of the capex and opex IRIS incentive schemes, and note the Commission's consideration of equalising incentives between capex and opex. This is particularly important in helping to eliminate biases towards capex solutions in preference to opex (including procurement of non-wires alternatives from third parties). We think it is important that this is modelled from a cash-flow perspective, rather than as a simple comparison of NPV calculations of the sharing of efficiency benefits to ensure that effects such as changing WACCs between regulatory periods are well understood.

19. More generally, we think that the Commission needs to take a wider view on incentives to promote efficiency. In particular, EDBs are increasingly being called upon to consider alternatives to conventional network solutions and to support the development of new markets where third parties can integrate network benefits with other benefits in the electricity supply chain as part of an overall business case. We encourage the Commission to consider the paper submitted by the ENA from Brattle Group on the objectives and designs of incentive schemes used in other jurisdictions. We also think the Commission should consult non-EDB stakeholders on the kinds of services or platforms that they would like EDBs to provide.

20. Under the DPP2 framework, there are no incentives or compensation for EDBs to undertake research and development unless benefits can be realised within the regulatory period. Again we encourage the Commission to consider the Brattle Group report and how other jurisdictions promote innovation, research and development. Such capability-building investments are likely to be particularly important to consumers over the longer term as EDBs play a pivotal role in enabling the development of a more dynamic electricity market.

Concluding comments

21. The Commission identifies in its economic principles that an objective of DPP regulation is to provide "regulated suppliers with an ex-ante expectation of earning their risk-adjusted cost of capital". Unison supports this objective. We submit that to achieve this objective it is necessary for the Commission to examine up-side and downside risks to forecasts, so that the expected outcome achieves the stated objective. If risks are asymmetric, then this needs to be factored into the chosen forecast. As noted above, we are particularly concerned that input price inflation, particularly labour costs, may increase significantly beyond current forecasts by Treasury and Reserve Bank, given a very tight labour market and an extended period of surprisingly low wage growth in a strong economy.

22. For any questions on the content of this submission please feel free to contact me.

Yours sincerely

Nathan Strong
GENERAL MANAGER BUSINESS ASSURANCE