Major Electricity Users' Group

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Dane Gunnell
Manager, Price-quality Regulation
Commerce Commission
By email to regulation.branch@comcom.govt.nz

Dear Dane

EDB DPP3 reset

1. This is a submission by the Major Electricity Users' Group (MEUG) on the Commerce Commission draft decision and reasons paper "Default price-quality paths for electricity distribution businesses from 1 April 2020" published 29th May 2019.[1] This process is abbreviated as the "EDB DPP3 reset."
2. MEUG members have been consulted in the preparation of this submission. This submission is not confidential. Some members may make separate submissions.
3. Five topics are covered in this submission in the sections that follow titled:
   a) Quality standards and incentives.
   b) IRIS retention factors.
   c) Early preparation needed to consider other measures of quality of service for DPP4.
   d) Postpone consideration of an innovation project incentive until DPP4.
   e) Accelerated depreciation option.

Quality standards and incentives

4. MEUG supports a cost benefit approach in assessing the setting of quality standards and incentives. As stated in the NZIER report included as part of the MEUG submission on the Issues Paper:

[1] Draft decision, https://comcom.govt.nz/regulated-industries/electricity-lines/electricity-lines-price-quality-paths/electricity-lines-default-price-quality-path/2020-2025-default-price-quality-path#projecttab.

> "Ideally a discussion of measures to improve service quality would begin with a comparison of consumer willingness to pay for improved service reliability and an estimate of the cost of delivering the reliability. …The cost of improving reliability could be assessed by a combination of operational and capital expenditure based on the relative efficiency and effectiveness of each of these measures in contributing to the improvement in reliability."

5. However, the NZIER report also noted the application of this approach to EDB quality standards and reliability incentives is difficult because none of the linkages are transparent and they vary widely across EDB. In particular:

   a) SAIDI and SAIFI measures do not include data on size of the load lost (but the dataset on outages now includes start and end times for the outage).

   b) The relationship between the increase in expenditure (operational or capital) and the improvement in service reliability experienced by customer is difficult to measure.

6. The Commerce Commission's draft decision on quality standards and reliability incentives is a complex mix of including customer willingness to pay to avoid outages[2] and updated data on outages within the existing quality standard and reliability incentive framework and ongoing acceptance of the wide variation in historical EDB performance.[3]

7. These factors make it difficult to provide an overall assessment of the changes proposed in the draft decision so instead this submission comments on each of the major items separately in the order that they are covered in the draft decision.

8. The key proposed decisions on quality standards that MEUG comments on in paragraphs 9 to 12 below are (draft decision paragraphs listed at the start of each in square brackets):

   - [7.7.2] separate standards for planned and unplanned interruptions;
   - [7.7.3] for planned interruptions, a regulatory period (five-year) standard set at three times distributors' 10-year historical average SAIDI and SAIFI;
   - [7.7.4] for unplanned interruptions, an annual standard set 1.5 standard deviations above the normalised 10-year historical average of SAIDI and SAIFI, with a ±5% limit on the change in the standards from DPP2; and
   - [7.7.5] an 'extreme event' standard to deal with extreme one-off events, set at three times the SAIDI major event boundary value, and applying to events caused by defective equipment, human error, or cause unknown.

[2] As proxied by surveys of the value of lost load (VoLL)

[3] The acceptance of the wide variation in EDB historical performance seems to be inconsistent with the implication from the Transpower IPP setting that both customer expectations of service and value of lost load do not vary widely across the country.

9. MEUG supports separate standards for planned and unplanned interruptions [7.7.2] as this allows recognition of the different drivers and level of control that the EDB has over these two types of interruption. The interruption dataset provided by the Commerce Commission suggests that unplanned outages account for the bulk of SAIDI minutes (70 to 85 percent for most EDB) and tend to have about double the SAIDI impact of planned outages.[4]

10. The Commission's proposal [7.7.3] to assess planned interruptions over a five-year period and setting the quality standard at 3 times the average over the reference period exposes customers to a significant reduction in reliability quality standards without a clear explanation of why such a large increase Is necessary. As the increase for each EDB is based on planned outages over the reference period it is not clear that the EDB with the greatest increase in quality standard tolerance will be those that are in most need of network upgrades.[5]

11. MEUG supports the Commission's proposal [7.7.4] to limit the movement in quality standards for unplanned interruptions from DPP2 to DPP3 as an intermediate measure. The cap is a simple way to avoid rewarding deteriorating performance with more relaxed standards and penalising improved performance with stricter standard standards simply because the reference period is updated. However, the long-term setting of quality standards needs to be based on consultation with customers about the trends in network reliability they expect and an assessment by EDB of what this change in resilience may cost.

12. The Commission's proposal [7.7.5] for an extreme event standard at three times the major event boundary conflates two relatively minor causes of unplanned interruptions ('human error' and 'unknown cause') with a much more common cause of interruptions 'defective equipment'. MEUG is sceptical that this proposed change is beneficial to customers.

13. MEUG also supports the following proposed changes to quality standards listed in attachment J:

    - [J2.5] (first part only) quality standards will be based on SAIDI and SAIFI, assessed annually for unplanned outages.
    - [J2.7] introduce automatic reporting requirements following a contravention of any quality standard.
    - [J2.8] revenue-linked quality incentives will be applied to SAIDI, with an additional incentive to meet minimum notification requirements for planned interruptions.

[4] The average of unplanned SAIDI as a percentage of total SAIDI calculated from the Commerce Commission interruptions data without normalising the data is between 70 and 85percnt for ten of the EDB including Vector, Powerco and Unison. Orion also fits into this band if the years affected by the earthquake rebuild are excluded. Two EDB including Wellington Electricity have proportions above this band.

[5] In response to the Commission's request for submitter comment at [J26], MEUG sees little value in using the 2004- 08 reference data in setting unplanned standards and incentives both because it does not include the start and end time of the outage and because of the age of the data.

14. The key proposed decisions for the quality incentive scheme that MEUG comments on in paragraphs 15 to 17 below are:

- [7.8.2] removing revenue-linked quality incentives for SAIFI;
- [7.8.6] determining the incentive rate for unplanned SAIDI with reference to a Value of Lost Load (VoLL) of $25,000/MWh, discounted by 74% to ensure benefits from improvements are shared with consumers, and a further 20% to account for the existing incentives created by quality standards (20.8% of VoLL);
- [7.8.7] determining the planned incentive rate at 50% of the unplanned rate (10.4% of VoLL), and a further 50% (5.2% of VoLL) if certain notification conditions are met; and
- [7.8.8] setting revenue at risk endogenously but capped at 2% of revenue.

15. MEUG supports the focus of revenue linked incentives on SAIDI rather than SAIFI [7.8.2] and [7.8.3] as the duration of the outage is a stronger driver of the cost to consumers than frequency (which was not reflected in the previous equal weighting of SAIDI and SAIFI). However, surveys of VoLL suggest that the occurrence of an outage has a value separate from the duration of the outage and VoLL rates decline with the length of the outage. Unfortunately, these studies are not precise enough to suggest an optimal balance between SAIDI and SAIFI incentives from a customer perspective. Also, it is difficult to assess independently how EDB respond to the balance between SAIDI and SAIFI incentive.

16. MEUG supports the recognition of VoLL in setting SAIDI incentives [7.8.6] and the rationale for discounting VoLL values to align the revenue at risk with a cap [7.8.8].

17. MEUG questions the rationale for the discounting of incentives for 'planned' and 'notified planned' outages relative to unplanned outages [7.8.7] particularly in view of the rise in planned outages over the past two years and the Commission's proposal to relax the quality standard for planned outages. The discounting of 50 percent for planned outages and 25 percent for notified planned outages is not supported by the two most recent VoLL surveys as they do not compare the VoLL of planned and unplanned outages despite asking questions about this topic. The earlier 2017 report[6] says "Planning outages did not appear to be valued. This result should be tested under other methods." The subsequent 2018 report[7] does not appear to include nay estimate of VoLL for planned outages.

18. The Commission does not quantify its assertion that planned outages are 'less' inconvenient to customers. Aside from general statements about not wanting to discourage network upgrades, the Commission does not seem to explain what EDB network upgrade work will be encouraged by this change in the incentives.

[6] 'Full results from consumer survey, Survey results for Powerco, April 2017, completed by PricewaterhouseCooper included in 'Powerco Customised price-quality path (CPP) Consultation report, June 2017' Appendix 4 -Reflections and recommendations page 10 (of Appendix 4 which starts at page 48 of the report.

[7] Estimating the Value of Lost Load in New Zealand, Transpower New Zealand Limited, March 2018, completed by PricewaterhouseCooper.

IRIS retention factors

19. MEUG supports the proposed equalisation of retention rates for capital and operating expenditure and agrees with arguments made by the Commission.

Early preparation needed to consider other measures of quality of service for DPP4

20. The draft decision adds no new measures of quality of service for DPP3.[8] Some of the options considered for DPP3 will not be introduced because insufficient historic data is available. We want to avoid missing the opportunity at the DPP4 reset to consider new measures of quality of service because of a lack of historic data.

21. We suggest work on the options for DPP4 discussed in the draft decision commence:

    a) as soon as practicable building on the knowledge and level of engagement by interested parties in the DPP3 reset process; and

    b) align with the Electricity Authority work such as quality of service obligations in the proposed Default Distribution Agreement.

Postpone consideration of an innovation project incentive until DPP4

22. The draft decision proposes a new recoverable cost of up to 0.1% of allowable revenue as an additional incentive for innovation. The draft Input Methodology (IM) proposed to give effect to this proposal has a new defined term "innovation project" for this new recoverable cost mechanism.

23. MEUG does not support this proposal and instead recommends the Commission postpone consideration of an innovation project incentive mechanism until DPP4 because:

    a) MEUG is unaware of evidence that New Zealand EDB are underinvesting in innovation or under-prepared for the uncertainty of future sector changes compared to what would be optimal.

       We suggest an appropriate evidence base would include benchmarking by the Commerce Commission of the productivity and performance of New Zealand EDB's relative to international best practice. An evidence base comparing New Zealand EDB's with international peers would be of value for both future consideration of an "innovation project" incentive and testing the effectiveness of other aspects of the DPP and Information Disclosure (ID) regimes.

       The value of international peer comparisons was demonstrated by the Verifier's report on the Transpower Individual Price-Quality Path (IPP) proposal. Benchmarking of individual EDB is out of scope of the DPP regime. However, it may be worthwhile considering if generic international benchmarking metrics could be assembled consistent with the low-cost approach of the DPP regime.

[8] Draft decision [N2] to [N4]

MEUG is wary of parties using selected input (rather than output) metrics such as financial incentives given to overseas EDB for innovation as evidence of New Zealand not being at best practice. We suggest the Commission would consult on possible generic international benchmarking metrics at the start of implementing collection of information.

Some might argue waiting five years to implement an "innovation project" or some other incentive mechanism is too long. An alternative to making a guess as to what the incentive should be for DPP3 would be to shorten DPP3 to four-year term, gather historic and other evidence, and then decide whether and if so what new incentive mechanism to start 1st April 2024. This is a benefit of transitioning to a four-year regulatory period not considered in the draft decision discussion weighing the pros and cons of changing the length of the regulatory period for DPP3.[9]

b) There is no analysis of the expected incremental benefits of the "innovation project" incentive relative to the current DPP2 suite of incentives and penalties or the DPP3 regime based on the DPP2 regime modified for the equalisation of the capex IRIS retention factor. For example, it may be the latter will achieve most of the marginal change in incentives required. Or it may not.

Without an understanding of how the "innovation project" incentive will work with the other components of the DPP incentive package we cannot support what would be a hunch it might have a net benefit.

There needs to be a robust estimates of expected net benefits for perceived underinvestment in innovation or preparedness for future changes. That analysis needs to be on a with and without base to uncover the marginal net benefit attributable to the case with the proposed "innovation project" incentive. This information is necessary as a basis of:

- Determining the optimal level of intervention. For example, if the optimal level truly were 0.1% then the marginal net benefit analysis would demonstrate that was a better solution than selecting half or double that rate, i.e. 0.05% or 0.2%.
- Estimating a conservative or minimal level of intervention with certainty that consumers will be no worse off.

We would be interested in any quantitative analysis undertaken by the Commission to support the proposed 0.1% maximum of allowable revenue.

[9] Ibid [4.44] to [4.51] discussed the length of regulatory period for DPP3 and invited submitters to confirm a preference for either a four-year or five-year regulatory period.

c) There is confusion and uncertainty on what might constitute costs that could be part of an innovation project. MEUG's submission on EDB and Transpower Input IM changes noted:[10]

> "EDB have already been innovating and we expect that will continue. There will be some EDB that decide in some situations to be a fast follower of successful innovations by others. MEUG does not believe the intention of the proposed innovation project allowance is to fund existing innovation investment practices or early adopters of proven technologies, processes and approaches. The definition needs tightening up to give certainty to consumers that will end up paying for approved innovation project allowances and EDB considering whether to make an application for approval. MEUG suggests the last part of the definition make it clear the innovation is new to New Zealand EDB and not the imprecise phrase 'an EDB in that type of situation'."

The above recommended tightening up of the IM was proposed if the Commission decided to proceed with the "innovation project" incentive contrary to MEUG's objection to it.

d) EDB bear little if any downside if an innovation project proves worthless.[11] It is unclear what share of the potential upside net benefits would accrue to consumers over the long-term.

24. The above arguments support our recommendation that consideration of an innovation project incentive mechanism be postponed until DPP4 when an evidence base and analysis of net benefits can be undertaken. Postponing a decision on the innovation project incentive mechanism does not preclude considering if over DPP3 there might be other continuous or incremental improvements to the existing incentives on EDB to optimally plan to allocate resources for innovation and possible sector changes in their Asset Management Plan (AMP).

25. For example, a possible barrier to uptake of innovative projects are transaction costs to EDB socialising and testing ideas with other EDB, customers and retailers. MEUG suggests the Commission consider sponsoring a series of voluntary informal workshops where EDB presented innovations and work in anticipation of changes to the sector.

[10] MEUG submission on EDB and Transpower IM amendments, https://comcom.govt.nz/regulated-industries/input-methodologies/projects/amendments-necessary-to-implement-the-2020-electricity-distribution-default-price-quality-path#projecttab

[11] Draft decision [4.76.5]

Accelerated depreciation option

26. The decision paper explains that:

    a) EDB applications for approval of accelerated depreciation are for instances where there is a risk of economic stranding, not physical stranding.[12]

    b) intergenerational equity and fairness are not relevant matters.[13]

    c) Improving pricing structures "… may be as or more effective at mitigating these risks than acceleration recovery of assets."[14]

27. MEUG notes and agrees with the above points. We support the Commission's decision to decline Vector's current application.

28. MEUG does not agree with the Commerce Commission's agreement with ENA's framing of the use of adjustment factors "wherever it is needed to mitigate stranding risk and to maintain investor confidence."[15] Using "wherever" is too absolute given future stranding risk and investor confidence is uncertain and should be considered in a probabilistic range of possible outcomes. There are other factors with probabilistic ranges of uncertainty to consider also including the rate of technology changes and uptake by EDB and consumers, changes in EDB tariff structures and the effectiveness of other Part 4 incentives.

Yours sincerely

Ralph Matthes
Executive Director

[12] Ibid [D34]
[13] Ibid [D54]
[14] Ibid [D55]
[15] Ibid [D35]