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Dear Andy

2023 Incentivising efficient expenditure for EDBs

1. This is Vector's follow up submission on the workshop entitled Forecasting and incentivising efficient expenditure for electricity distribution businesses (EDBs) held on 7 November 2022 part of the input methodologies (IM) review and future Default Price-Quality Path (DPP) reset.
2. Vector, along with Aurora, Orion, Powerco, Unison, and Wellington Electricity (the 'big six' EDBs), has obtained expert reports from Frontier Economics on 'Investing to enable decarbonisation and realise the benefits of electrification' and from NERA on 'Innovation under the DPP potential barriers and solutions' in relation to electricity distribution businesses (EDBs). These reports were submitted to the Commerce Commission (Commission) in December 2022.
3. This submission provides further context for those reports and expands on our response to the workshop submitted on 6 December. We had anticipated further consultation on the topics of the workshop in early 2023 but we were subsequently made aware that the Commission would not be publishing any further issues papers on the matters covered in the workshop.
4. This submission contains Vector's views on some of the stakeholder submissions now published on the Commission's website, and some new ideas we believe will benefit the IM process stemming from the expert reports we commissioned with the big six EDBs.

Executive summary

Topic	Vector recommendation
Incentives	
Incremental Rolling Incentive Scheme (IRIS)	IRIS mechanism should carry forward into future DPP regulatory periods IRIS should exclude new connections expenditure or at least apply a lower incentive rate
Other incentives	Vector advocates for a mechanism to either fast-track or reward companies that demonstrate efficiency and ambition in their Asset Management Plans (AMPs).
Totex	
Totex approach	The DPP and IM framework is a low-cost regulatory framework, we believe moving to a totex approach could be costly and resource

		intensive. We would need to understand in detail what would change before forming our view.
Totex regime		We need to look at totex from its various components and review the benefits and drawbacks of each.
Questions from the Commission on Innovation		
Innovation Allowance (IPA)	Project	The IPA's conservative criteria – it's low budget, ex-ante nature, and high contribution rate – will skew the applications towards safer (i.e., not particularly innovative) projects. The scope, funding, contribution and budget levels need to be reviewed.
Other innovation		To remove the barriers to innovation for EDBs in New Zealand we need to look at new solutions to target funding and release innovative opportunities.
Form of control		
Revenue cap for gas distribution businesses (GDBs)		The Commission should move GDBs from a weighted average price cap (WAPC) to a revenue cap

Incentives

5. We welcomed the discussion in the workshop on how to incentivise efficient expenditure. At present our regulatory framework for EDBs is limited to three incentive mechanisms: IRIS, our quality standards and the IPA.
6. We address the IPA under the Innovation section below and quality standards are out of scope of this submission.

IRIS

7. The IRIS mechanism however raised some debate in the workshop and subsequent submissions.
8. On one hand, Aurora called for IRIS “to be overhauled so that it is simpler to understand, and is able to inform network decision-making”. Whilst we agree that it is a complex tool, there is a trade off to be made between complexity and suitability. To achieve the desired incentives it may be necessary to have some complexity. There is some risk that more simplicity may result in sub-optimal incentive mechanisms.
9. On the other hand, we agree that IRIS can be improved. Both Horizon Networks (Horizon) and Wellington Electricity (WELL) explained the importance that IRIS is carried forward beyond a single DPP regulatory period. We agree that the way it currently works does not allow a network to be rewarded for capex savings that may incur in future regulatory periods, and as such should be amended to ensure it does.

Other incentives

10. We believe there is scope for the Commission to look at ways to incentivise EDBs that consider the long-term interests of consumers (within the scope of Part 4) but perhaps are not captured in a DPP regime.

11. NERA has reviewed a number of unmeasured outputs that EDBs undertake beyond cost and reliability measures and present in Table 2 of their report broadly four categories:
 1. Consents, regulation, and compliance
 2. New product/service
 3. Digitisation & IT
 4. Network resilience
12. EDBs are not rewarded for these outputs (unlike in other jurisdictions where performance incentives cover a range of activities). In many instances allowances were not provided for in the DPP to cover new services, and they do not meet any re-opener threshold.
13. Vector advocates for a mechanism to either fast-track or reward companies that demonstrate efficiency and ambition in their Asset Management Plans (AMPs).
14. In the UK there is a 'Business plan incentive' (BPI): Ofgem rewards business plans that provide value to customers; penalises firms for poorly justified costs; and rewards ambitious proposals for high-confidence costs. In theory, this set up can mitigate concerns about a capex bias because efficient costs are assessed at a totex level.
15. In the next reset there could be an assessment of AMPs which enables either the fast-tracking of EDBs' expenditure forecasts which meet the Commission's confidence levels; and/ or a financial reward for EDBs whose AMPs present levels of ambition for the benefit of consumers.

Totex

Totex approach

16. We look forward to engaging further on totex but we are currently reluctant to support the transition and want to further understand the impacts.
17. To that end we appreciate that Transpower have already provided a succinct summary of repercussions for themselves:
 - *We would have reduced costs/ uncertainty if IRIS is replaced with a totex incentive mechanism.*
 - *We would have greater flexibility with changes in capitalisation policies (i.e., currently change in capitalisation rates post-IPP determination are not equal).*
 - *A new price control revenue model would need to be constructed and tested.*
 - *We also note the Commission staff's identification of elements that would need to be determined e.g. depreciation rates, tax pools, capitalisation rates, etc."*
18. We agree with the summary provided by Transpower and would like to add the difficulty posed by the potential move away from GAAP for regulatory reporting (as described by Horizon). We also believe that Transpower's IPP regime would more easily transition to a totex framework than our DPP regime.
19. We agree with WELL that because of the difficulties that totex could bring, our preference would be for the Commission to ensure that there are adequate allowances (capex and opex) for new costs in next reset as it may be difficult to "stand up" a totex approach before then.
20. We understand the totex incentive mechanism (TIM) to be a simplified IRIS where under or overspend of pre-determined allowances are rewarded or penalised via an incentive rate. Although we understand the views around the complexity of IRIS, we do not currently

recommend moving away from it without having much more detail about the mechanism that would replace it.

21. NERA explains that it is important to note that there are different conceptual components of a totex regime:
 1. *Totex assessment/forecasting*: the regulator does not distinguish between capex and opex when assessing efficient levels. Instead, the regulator reviews total costs (or expenditure). This would address the more procedural aspect of any potential bias whereby it is easier to ask for capex – if a joint allowance is being asked for and assessed, the issue should fall away.
 2. *Totex incentives*: requires companies to have equal incentives to reduce costs, irrespective if the savings are in capex or opex. This would address any potential within period bias towards capex as there is no issue around equivalent retention rates if there is a single allowance for the purpose of calculating incentives payments.
 3. *Totex revenue recovery*: revenue allowances comprise two sources: fast money (does not enter RAB) and slow money (enters RAB). A totex approach to the split between fast and slow money divorces the capitalisation rate from the actual shares of capex and opex. A totex revenue profile therefore removes companies' incentives to over-capitalise to take advantage of a cost of capital allowance that may exceed the true cost of capital.
22. For Vector the first two components are attractive but the third is the one we need to be very cautious in considering if the Commission does wish to continue the totex debate. And instead of focussing on the all-encompassing UK totex regime, we should instead refer to Germany and the Netherlands where only the first one (Germany) or two (Netherlands) components are adopted.

Innovation

Innovation Project Allowance (IPA)

23. NERA's report 'Innovation under the DPP potential barriers and solutions' scopes out the possible mechanisms to incentivise innovation given the potential barriers in the New Zealand context. This included a review of the IPA.
24. NERA compares the IPA to two other innovation schemes: Ofgem's Network Innovation Allowance and the AER's Demand Management Innovation Allowance (DMIA).
25. NERA finds that:

"...the IPA has been much less successful in funding innovative projects compared to both the AER's DMIA and Ofgem's NIA."
26. Frontier Economics, in their report 'Investing to enable decarbonisation and realise the benefits of electrification' explains that:

"...the innovation allowance mechanism hasn't encouraged EDBs to apply for innovation funding because of its time and resource intensive application process, relatively small allowance (0.1% of allowable revenue or \$150,000 over the DPP3 period), and its ex-post approval structure combined with a requirement that EDBs must have already incurred an amount of costs on the innovation project that is at least equivalent to 200% of the proposed application amount."
27. Vector would like to see the Commission review the mechanism in relation to:

- Scope: to include projects beyond the delivery of electricity lines services (ELS). Innovation schemes should be facilitating the efficient transition to decarbonise networks, but that innovation should not be limited to increased reliability. The NIA considers decarbonisation projects and projects which facilitate the energy transition. The DMIA allows for a broad array of projects which may fall outside the scope of ELS. As way of example, in 2018-2019, Endeavour Energy successfully applied for a project to control households' air conditioning. Under the IPA, it is not clear, whether controlling people's appliances would come under the scope of ELS.
- Budget: the total recoverable cost (i.e., the amount drawn down from the IPA) is limited to the greater of the 0.1% of each EDB's MAR or \$150k. The NIA varies between 0.5% and 0.7% of allowable revenues. We recommend increasing the percentage to encourage larger projects. Given IPA is intentionally small scale in nature, it may only be useful for pilots.
- Funding: the funding mechanism is ex-post meaning that the EDB must already have incurred the costs. This is clearly a barrier so in order to encourage applications we recommend making the funding ex-ante.
- Contribution: Requires a contribution from the EDB of greater or equal to the recoverable cost. Because of the ex-post nature of the IPA, the already incurred costs will be at least 200% of the proposed drawdown amount. We recommend lowering the percentage to at least 100%.
- Suitable expert report: it is not practical for a suitable expert to assess that a project is innovative ahead of the project going ahead. This requirement needs to change to allow the suitable expert time to understand the project, while not impeding or holding back the start of the project. We recommend the expert does a review once the project has started but ahead of the EDB applying. This will also provide the Commission much more detail on how successful the project was.

Other innovation

28. NERA describes the barriers to innovation for EDBs in New Zealand:

“EDBs still face the other barriers to innovation: meaning that there is no clear pathway to advance an innovation in New Zealand. To be specific, while in the first instance, the allowance reduces the initial cost to innovating, the next step of developing any project further would face the other three barriers. Overcoming these barriers would require:

- *Combining the innovation allowance with another mechanism. For example, the AER combines an allowance with a cost multiplier for implementing projects; and/or*
- *Removing these barriers. For instance, Ofgem applies outcome incentives (and other mechanisms) so that the payoff from innovating is greater than in New Zealand”.*

29. We would like to call out three of the solutions identified by NERA to overcome the barriers to innovation here in New Zealand.

1. Targeted allowance or fund: which is an allowance that can only be spent on a specific category that is difficult to measure in the allowance setting process. The purpose is to incentivise innovation in the direction of generating the uncompensated outputs/outcomes. For precedent, Ofgem has several use-it-or-lose-it allowances for specific purposes. Regarding examples, there is a visual amenities allowance (to address environmental impacts e.g., pollution) and the worst served customer

allowance (to mitigate the number of interruptions experienced by customers who experience unusually poor service).

2. Business plan incentives: please see section on 'Other incentives' above.
 3. Address deficiencies in opex allowance: by carving out or bespoke forecasting of specific categories. This could be addressed through the solution proposed under point 1 above.
30. Frontier provides an example in Box 1 of their report which explains why point 3 above is important to address. In its DPP3 decision, the Commission rejected Vector's request for a 'step' to their expenditure allowances relating to LV monitoring (opex).
31. Their report outlines that:

"The DPP framework provides limited alternatives to funding activity. LV monitoring will become increasingly important as it is likely to be the first part of the network impacted by emerging technologies, such as electric vehicles or battery storage."

32. Arguably this point relates more specifically to opex expenditure. Vector has previously called out (more recently in its submission on 'EDB expenditure forecasting') that in the next DPP reset the Commission can no longer rely on historic expenditure to validate opex forecasts and that the 120% cap on capex forecasts is arbitrary unless backed up by flexible and implementable uncertainty mechanisms. An example of opex expenditure which has risen well above its historic average is cyber security related expenditure.

Form of control

Revenue cap for GPBs

33. In February 2023, Vector commissioned Frontier Economics to produce an expert report (attached with this submission) that considers whether the continued application of a WAPC as the form of control for GDBs would best promote the purpose of Part 4 of the Commerce Act 1986 (the Part 4 purpose), and whether there is now a strong case for the Commission to switch to a revenue cap form of control.

34. Their key findings are as follows:

1. Significant uncertainty over how New Zealand's energy transition will unfold has increased materially the difficulty of forecasting gas demand accurately. In these circumstances, a WAPC is more likely to produce outcomes that would not promote the long-term benefit of consumers;
2. Regulators overseas are considering a switch to revenue caps, or have already done so, for the purposes of regulating GDBs; and
3. A revenue cap form of control for GDBs would better promote the long-term benefit of consumers than a WAPC approach.

35. In conclusion Frontier explains that:

"The combination of a revenue cap and the 'overs and unders' account ensures that regulated suppliers can expect to recover their prudent and efficient costs, and no more. This outcome is consistent with the ex-ante FCM principle and would promote the Part 4 purpose."

A revenue cap also has the benefit of being simpler to implement and enforce than a WAPC, thus reducing the regulatory burden for both the Commission and GDBs. The Commission has already implemented revenue caps for electricity distribution businesses (EDBs) and gas transmission businesses (GTBs). This means that implementation of revenue caps for GDBs should be a relatively low-cost change for the Commission to make.”

36. Vector recommends that the Commission moves GDBs to a revenue cap to properly take account of GDBs' inability to influence demand. Now more than ever, in an environment where Government decarbonisation policies are expected to incentivise consumers to switch from fossil gas to alternative fuels, and adoption of low carbon gas is highly uncertain, there is a strong case to move GDBs away from WAPCs to revenue caps.

Yours sincerely



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