

Incentivising efficient expenditure

Questions regarding totex, IRIS and innovation

For use by external stakeholders

solarZero Submission, 6th December 2022

This document provides questions to guide feedback on our 7 November 2022 workshop “Forecasting and incentivising efficient expenditure for EDBs”. These questions focus on totex, IRIS, and innovation and are intended to inform our review of the Part 4 input methodologies (IM Review).

Along with these questions we have published:

1. a model that demonstrates the broad financial equivalence of the treatment of opex and capex in the respective IRIS incentive mechanisms; and
2. a brief companion staff paper.

The workshop slides and staff working paper (*Electricity distributors’ expenditure incentives under the current Part 4 approach and under a totex approach*) we published before the workshop are available [here](#) along with the recording of the workshop.

It would be useful if you could take these into account when answering the questions that follow.

Completed forms should be sent to im.review@comcom.govt.nz, with ‘INCENTIVES SUBMISSION – solarZero in the subject line of the email. Please provide us with your feedback by 5pm Tuesday 6 December 2022.

If you have supporting documents that you consider would improve our understanding of the issues, please attach them with your response and reference them in your feedback below.

All completed forms and supporting documents provided to us in this context will form part of the record for the IM Review. We intend to publish completed forms and supporting documents provided to us to enable other stakeholders to engage with them throughout the IM Review. Any request that we not publish content in a completed form or supporting document provided to us must be clear and explicit with reasons supporting why that content is confidential or commercially sensitive. We will consider any such requests on their merits.

A. Questions relating to the problem of capex bias

In paragraph 12 of our staff working paper,¹ we define ‘capex bias’ as arising where the regulatory approach to setting price-quality paths financially incentivises investment in assets (capex) over alternatives such as demand response (opex), where those alternatives are more efficient. We do not use the term ‘capex bias’ to refer to situations where favouring a traditional network solution over a non-network alternative results in greater net benefits to consumers.

A1. Do you consider that we have accurately described the general problem of capex bias? If not, please provide further description.

Answer: Yes - generally

A2. Do you consider we have accurately described the potential issue with regulatory financial incentives resulting in or reinforcing capex bias? If not, please provide further description.

Answer: Yes - generally

A3. If relevant, we would welcome examples of capex bias from your business. Please explain the source(s) of the capex bias.

Answer: It is much more than capex bias. It is a view that constraints automatically equal build. There is a cultural issue at play that is linked with the capex issue, but addressing the capex bias issue by itself may not be sufficient to achieve more efficient outcomes that make better use of technology.

A4. In your view, do regulatory financial incentives under Part 4 DPP/ CPP regulation (RAB-based building blocks approach with WACC uplift, with opex and capex IRIS) contribute to capex bias (if any) in your business?

Answer: As above, capex bias and industry culture bias work together.

A5. How important are regulatory financial considerations to your business when choosing between different solutions? We would welcome specific examples (reflecting information from actual business decisions) that illustrate how regulatory financial considerations have been considered.

Answer: N/A

A6. To help us understand the overall size of the problem of capex bias, we would appreciate your assessment of *current* opportunities where opex solutions would be more efficient – for example, from your most recent asset management plan.

¹ https://comcom.govt.nz/_data/assets/pdf_file/0025/296233/Staff-paper-for-Workshop-Forecasting-and-incentivising-efficient-expenditure-for-EDBs-1-November-2022.pdf

We are also interested in your expectation of how (quantitatively or directionally) the opportunities might change over the *next decade*, for example, due to emerging technologies.

Could you please advise or estimate:

- the aggregate size of the pool of expenditure (capex and opex) where interchangeable capex and opex solutions are currently available
- of that overall pool of expenditure, the total value of opex solutions chosen.

If you expect this to change in the future, please estimate the future values.

Answer: N/A. What we can say is that technology is rapidly evolving, both in terms of the technology itself and the deployment, e.g. consumer acceptance. We foresee significant increases in the uptake of new technologies.

B. Questions relating to a potential solution to capex bias: totex approach

B1. Should we consider introducing a totex approach for EDBs as a solution to capex bias and/or simplification of financial incentive mechanisms? Should we introduce a totex approach for other regulated services? Please provide your reasons.

Answer: For EDBs totex should definitely be explored to help ensure the most efficient power system possible.

B2. If you consider we should adopt a totex approach, do you agree with the approach described in the staff working paper? If not, please explain why not and what you would change.

Answer: Generally yes.

B3. If you consider we should adopt a totex approach, please provide your views on:

- expected benefits for your business (relative to the current RAB-based building blocks approach with WACC uplift, opex and capex IRIS)
- expected implementation costs and timelines for your business
- any other considerations

Answer: For our business (solarZero) we expect to see EDB explore non-network solutions much more than at present. We are pleased some lines companies are actively exploring these solutions and would like to see even stronger progress.

C. Questions relating to current expenditure incentive mechanisms²

C1. The model and paper published with these questions are intended to demonstrate the effects of the capex and opex IRIS incentives on investment choices. With this

² See "IRIS equivalence staff paper"

information now available, do you consider that there is broadly financial equivalence between the incentives on opex and capex?

Answer: N/A – relevant to EDB

- C2. Some suppliers submitted to us that expenditure allowances are not currently substitutable between capex and opex (i.e., the incentives are not financially neutral).³ However, with equalised incentive rates, the effect (over the relevant period of the saving or overspend) should make suppliers financially indifferent to substituting between opex and capex solutions.**

If you consider capex and opex are not substitutable under the current IRIS settings, please provide some examples from your business demonstrating why you were not financially indifferent in choosing between opex and capex solutions.

Answer: N/A – relevant to EDB

- C3. How important is the fact that IRIS does not capture the impact of savings that extend beyond the IRIS horizon (i.e., the carry-forward term of five years)? Can you provide us with examples of projects where future savings are not included within the IRIS horizon? Could you propose potential solutions to this problem (including through the IRIS mechanisms)?**

Answer: N/A – relevant to EDB

- C4. Do you consider IRIS in your business decision-making processes? If so, which stage(s) of your decision-making processes consider IRIS when contemplating substitutable solutions (whether opex or capex)?**

Answer: N/A – relevant to EDB

- C5. Suppliers have noted that the complexity of the current incentive mechanisms is a problem in the regulatory regime. How could the incentive mechanisms be simplified while still achieving the desired outcomes?⁴**

Answer: N/A – relevant to EDB

- C6. Changing the current IRIS mechanisms to apply different incentive rates to different types of expenditure (such as connection capex) would likely increase the complexity of the incentive schemes. Would the benefits of this change outweigh the increased complexity?**

Answer: N/A – relevant to EDB

³ We set a revenue cap for each non-exempt EDB within which they may choose opex and capex as they see fit. We have separate incentive mechanisms for opex and capex, so the EDBs choice affects the incentive amount they receive. If incentive amounts for opex and capex are equivalent, then these EDBs should be financially indifferent between opex and capex.

⁴ The desired outcomes are set out in Section 52A (1) (a)–(d) of Part 4 of the Commerce Act 1986.

C7. If we were to remove or make significant changes to IRIS, what would an appropriate alternative approach be that would better promote one or more of the overarching objectives of our IM Review?⁵

Answer:

C8. If we were to move to a totex approach, we would need an amended incentive mechanism. What could an incentive mechanism look like? One example is Ofgem's totex incentive mechanism (TIM).⁶

Answer: The Ofgem work is a good starting point, particularly if we can learn from the UK's successes and opportunities, given the UK is considered a leader in this area.

C9. For Transpower's IPP, we understand from stakeholders that the determination of the 'baseline adjustment term' has introduced significant complexity and uncertainty, potentially undermining incentives to achieve efficiency savings. If we were to remove this adjustment term, what other adjustments to the IPP IRIS mechanism do you consider would be necessary to achieve its purpose?

Answer:

D. Questions relating to innovation and sandboxing⁷

D1. Currently, the implementation details of the innovation project allowance and the size of the allowance paid out following successful projects are determined as part of the DPP reset rather than in the IMs. Are there any changes to the IMs⁸ we should consider to better enable innovation?

Answer: Learning is time consuming and expensive. Given the substantial change the electricity industry is going through EDB need to be incentivised to learn more quickly than they have, ever. Whatever the mechanism more support is needed for innovation.

D2. Are there innovative projects or initiatives in the supply of electricity distribution services that you consider the current IM and DPP settings prevent you from doing? If so, it would be helpful if you could give examples of business cases you did not take forward or that you consider would not be possible under the current regime.

⁵ The three overarching objectives for the IM Review are set out at para X20 of the [Part 4 Input Methodologies Review 2023 decision-making framework paper](#), which we published on 13 October 2022.

⁶ See section 10 of Ofgem's Decision – RII0-2 Final Determinations – Core Document https://www.ofgem.gov.uk/sites/default/files/docs/2020/12/final_determinations_-_core_document.pdf.

⁷ See "Forecasting and incentivising efficient expenditure for EDBs" slides 54-59: https://comcom.govt.nz/_data/assets/pdf_file/0029/298055/Forecasting-and-incentivising-efficient-expenditure-for-EDBs-Full-slide-deck-07-November-2022.pdf

⁸ See clause 3.1.3(1)(x) and the definitions of 'innovation project' and 'innovation project allowance' under clause 1.1.4(2) of the Electricity Distribution Services Input Methodologies Determination 2012: https://comcom.govt.nz/_data/assets/pdf_file/0017/60542/Electricity-distribution-services-input-methodologies-determination-2012-consolidated-20-May-2020-20-May-2020.pdf

Answer: N/A

- D3. Innovative activities and projects can be riskier than business-as-usual activities and projects. Can you describe the downside risks associated with innovation under the current regulatory rules, and if possible, quantify those risks?**

Answer: Our experience is that lines companies we are working with have spent a lot of time figuring out the projects and details, such as contracts. The learnings are being shared, which is good. A downside risk is the amount of learning time and liens companies need to be recognised for this.

- D4. Given that innovation is risky, who do you consider is better suited to bear the downside risk under Part 4 regulation – suppliers or consumers? What is your rationale for this?**

Answer: N/A

- D5. What should compensation look like for the downside risk retained by suppliers? What level of compensation is required to enable efficient innovation considering these downside risks?**

Answer: N/A

- D6. What are they key ingredients of an effective regulatory sandbox? What aspects of the regulatory sandboxes implemented by the AER⁹, OEB¹⁰ and Ofgem¹¹ do you consider should be implemented under Part 4 regulation and why are these elements important for your business?**

Answer: From our perspective it is not so much of a regulatory sandbox rather than supporting the cost of learning and innovation. The Electricity Code and other regulation may well be a barrier – for non-network solutions to date we have not bumped into major regulatory barriers but we have observed the amount of tiem EDB staff have spent learning.

- D7. To what extent should a regulatory sandbox regime under Part 4 focus on each of the following: advice, rule exemptions, trial rule changes and financial incentives?**

Answer: All of these. The importance of these could vary depending on the project.

- D8. What projects do you have planned that would benefit from the implementation of a regulatory sandbox?**

Answer: N/A.

⁹ Regulatory Sandboxing – Energy Innovation Toolkit: <https://www.aer.gov.au/networks-pipelines/regulatory-sandboxing-%E2%80%93-energy-innovation-toolkit#:~:text=Regulatory%20sandboxing%20aims%20to%20help,cheaper%20energy%20options%20for%20consumers>

¹⁰ OEB Innovation Sandbox: <https://www.oeb.ca/html/sandbox/index.php>

¹¹ Ofgem – What is a regulatory sandbox?: <https://www.ofgem.gov.uk/publications/what-regulatory-sandbox>

