3 May 2023

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Further Submission to the Commerce Commission on Uncertainty Mechanisms

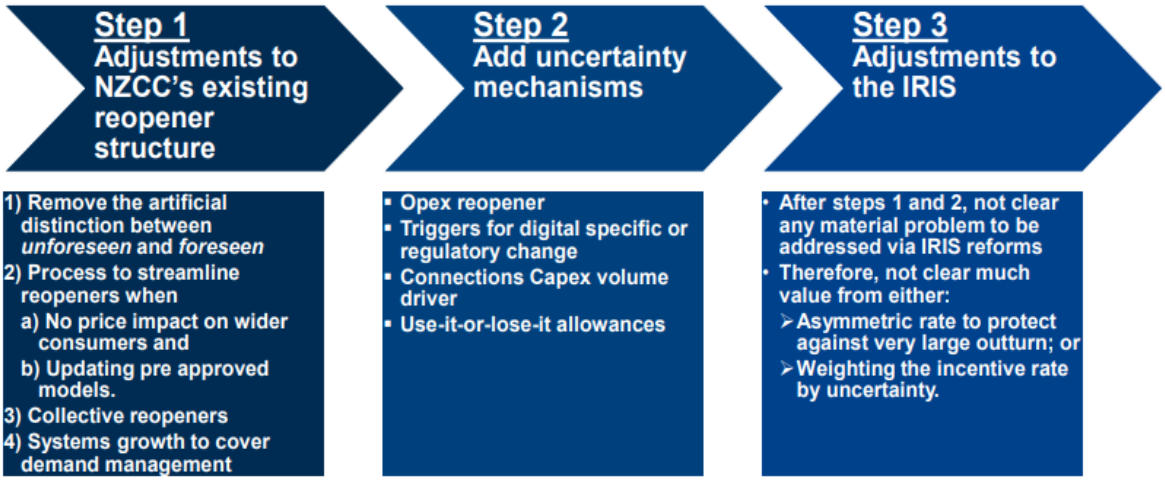
Following the Commerce Commission (Commission) calling for feedback on forecasting and re-opener mechanisms, electricity distribution businesses (EDBs) have experienced two major weather events which highlighted the importance of flexibility in the regulatory regime. In addition, EDBs have further experience of the impact of decarbonisation on capex spend, capacity need, and insights from scenario modelling, asset management plan development and flexibility trials.

Electricity Networks Aotearoa (ENA) and its members have reflected upon these events, learnings and insights, and the consequential increased focus on the resilience of New Zealand lifeline utilities, and prepared this submission on how best to address uncertainty in the Input Methodologies (IMs). ENA hopes the additional information set out below informs the Commission's Draft Determination on the EDB IMs.

Three steps to addressing uncertainty

Working with NERA Economic Consulting, ENA developed a set of recommendations for consideration by the Commission in its deliberations on uncertainty mechanisms within the IMs. In summary, the ENA recommends that the Commission take three steps:

1. adjust the existing reopener structures (step 1)
2. add uncertainty mechanisms (step 2)
3. adjust the IRIS (step 3), if material problems remain after the completion of steps 1 and 2.



These three steps are hierarchical and interdependent. The need for steps two and three is dependent on the success of step one. Additional uncertainty mechanisms (step 2) are needed only if:

- a residual problem remains after adjusting reopeners; and/or
- uncertainty mechanisms can solve problems better/differently than adjusting reopeners.

Adjustments to the IRIS to address changing expenditure needs, and uncertainty over the timing and magnitude of change (step 3) are needed only if:

- a residual problem remains after (step 1) adjusting reopeners and (step 2) adding uncertainty mechanisms; and/or
- IRIS reform can solve problems better/differently than steps 1 and 2.

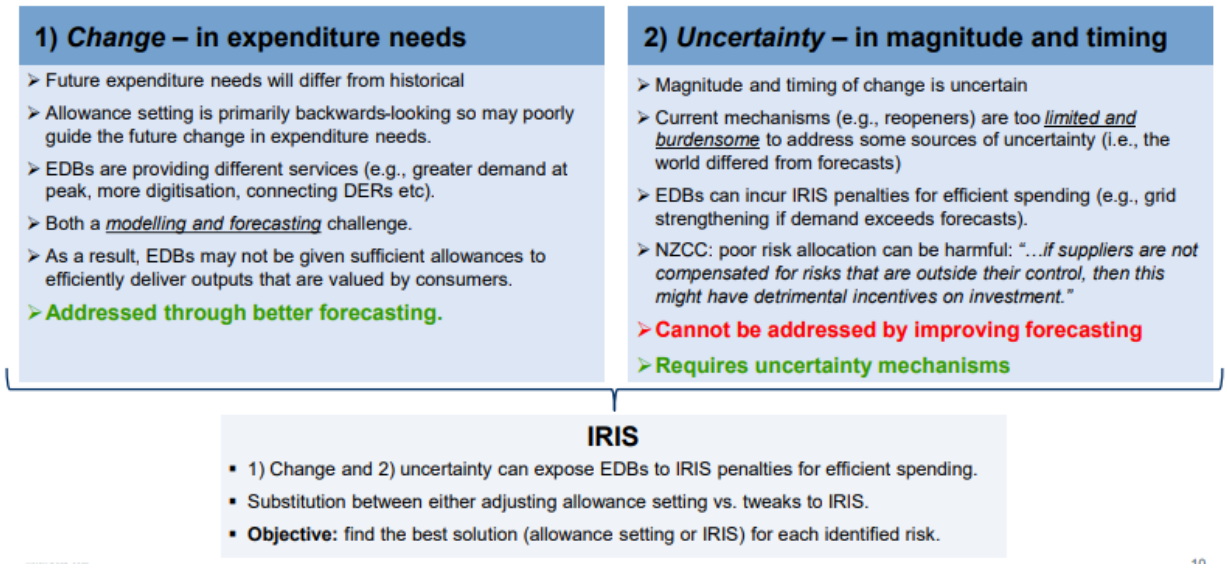
These recommendations are based on a ground-up assessment of options facilitated by NERA Economic Consulting and driven by ENA members that included:

- identifying the problems that uncertainty mechanisms seek to address and challenges ENA members find with the current arrangements
- developing a framework for the assessment of options to address these problems
- compiling a selection of potential options to address the problems identified
- assessing the potential options against the framework.

Which problems should uncertainty mechanisms seek to address?

There are two fundamental challenges facing EDBs that should be addressed by reform of the IMs. These are a material change in the level of expenditure needed to ensure that the expectations of consumers are met, and uncertainty about the magnitude and timing of fundamental changes to New Zealand's electricity and energy future.

ENA's view is that the IRIS should adapt as EDBs and the Commission address these key problems. However, the changes to the IRIS should be used only to address issues that cannot entirely be addressed by other means, as IRIS-related problems are (largely) symptoms of the existing framework's inability to accommodate and mitigate uncertainty.



Framework for assessing changes to the IMs

In developing its recommendations to address the issues identified above, ENA applied six assessment criteria to a range of options:

Criteria	Explanation
Low cost	The DPP regime is intended to be low-cost (both monetary and other regulatory resources).
Simplicity	Should be simple and easy to understand, which minimises any risk of unintended consequences and differences in understanding between stakeholders.
Forward-looking	Should be forward-looking (opex and capex) in the sense that it accounts for reasonably expected changes in expenditures
Accommodates uncertainty	Ability to deal with several uncertain variables.
Limits manipulation and gaming	Should not allow firms to earn profits through manipulation. For example by reallocating expenses or gaming their forecasts.
Strong incentives	Provides strong incentives to reduce costs and find the most efficient system-wide solutions.

Assessment of reform options

Drawing on information presented by the Commission at its 2022 workshop[1], and feedback provided by ENA members, NERA and ENA identified and assessed a range of options for the IMs to address uncertainty. These options fall into three categories:

- adjustments to existing IM reopeners
- new uncertainty mechanisms
- IRIS reform.

Importantly, these three categories of reforms are hierarchical and sequential. A summary of the ENA's assessment of these three categories of reform is set out in the tables below.

[1] Commerce Commission, Workshop #3 (Price-quality path in-period adjustment mechanisms) held 29 November 2022

Assessment of adjustments to existing reopeners (Step 1)

Driver of uncertainty	Possible adjustment	Assessment	Assessed value
Demand	**Combine the foreseeable and unforeseeable reopener** in the IM	• Removes a possibly artificial distinction. A combined reopener might better address the uncertainty that bridges both foreseen and unforeseen drivers.	High Value
	Joint reopener that combines multiple projects (that do not share a common driver) into a single reopener event.	• Improves efficiency if an EDB has multiple projects near the threshold. • Arguably against the nature of a reopener, which is designed to address sufficiently large issues to warrant the upfront cost of reopening. • While clear how a joint reopener could be applied to two simultaneous applications, not clear how to deal with reopeners that arise at different times.	Medium Value
	Streamline/lower burden reopener process		
	1) No price impact on wider customers	• Increases ability to accommodate uncertainty by providing faster responses. • Removes potential distortions around requiring capital contributions to avoid reopeners. • Customer specific projects will have already been efficiency tested by that customer committing to pay. • Maintains strong incentives as reopeners are more intensely reviewed when there is a wider price impact. • Risk there may be a price impact if the project becomes stranded in the future.	High Value
	2) Specific types of "preapproved" remodelling/reforecasting	• It simplifies and lowers the cost for a more "mechanical" application. • Increases ability to accommodate uncertainty by providing faster responses. • Maintains strong incentives as reopeners are more intensely reviewed when they deviate from a change in circumstance that is easy to specify in advance. • May be a concern around manipulation if EDBs only reopen for changes that increase their allowances (and not for decreases).	High Value
Regulatory	**Collective reopener** for changes that affect multiple EDB	• Simplifies and lowers costs by reducing duplication. • A single joint submission may improve efficiency as the quality of a combined reopener is likely to exceed multiple separate reopeners.	High Value

Flexibility	**Change growth definition** to allow for demand management spending.	• Improves efficiency by allowing for lower-cost methods for accommodating growth. • Less resilience on sunk assets also better accommodates uncertainty. • Should not lead to manipulation as EDBs just have a choice on the best way to address growth.	High Value

Assessment of additional uncertainty mechanism (Step 2)

Uncertainty Mechanisms	Residual Issue addressed	Assessment	Assessed value
Opex reopener	Reopeners do not allow for more efficient opex solutions.	• Improves efficiency by finding the lowest cost solution e.g., avoids potential capex bias from reopener definitions.	High Value
Trigger for digital specific or regulatory change	The reopener process is slow if the only uncertainty is timing. Clarifies NZCC position, reduces the risk of failed reopener application	• Improves efficiency and ability to address uncertainty by giving clarity on reopeners for digital-type expenses. • Beyond more obvious examples (e.g., EDBs gaining access to specific types of data) may be hard to specify.	High Value
Connections Capex volume driver	High reopener thresholds may still allocate material volume risk to EDBs.	• Mechanistic/simple as only requires estimating a cost per connection. • Cannot be gamed as EDBs have no control over the volume of connections. Also flexes down as well as up so avoids the risk that reopeners only used for costs increases. • Regulatory precedent by NZCC for fibre. • Accommodates uncertainty as allowances flex with actual connections. • Strong incentives to deliver connections at the lowest cost (for which EDBs have some control)	High Value
Secondary reinforcement volume driver	Reopeners are slow, uncertain, and subject to thresholds so other adjustments may not provide EDBs sufficient ability to increase capacity.	• Facilitates EDBs to add capacity as needed but Ofgem experience suggests active monitoring e.g., “robust monitoring and controls combined with wider price control measures” given “a key challenge” is “to ensure sufficiently strong incentives for the DNOs to make optimal choices between network upgrades and the procurement of flexibility services.”	Low Value

Use-it-or-lose-it allowances	Reopener adjustments may not provide adequate allowances for "uncompensated" outputs	• Simple/low cost when EDBs learn they need to spend a small amount of opex during the period. • Improves efficiency by lowering the costs of learning within the period. • Designed to address spending that is below the reopener threshold	High Value
Real Price Effects	EDBs may still be exposed to input prices	• Mechanistic/simple once index specified. • Some risk that index will pick up prices that EDBs have some control e.g., labour. • NZCC precedent of preferring simpler PPI/LCI index. • Accommodates uncertainty as allowances flex with actual input prices. • Strong incentives to deliver outputs at the lowest volume	Medium Value
Pass-through	EDBs subject to material cost events	• Likely better addressed through reopeners or triggers unless clear there are new levies.	Medium Value

Assessment of IRIS reforms (stage 3)

IRIS Reform	**Residual Issue addressed**	**Assessment**	**Assessed value**
Tiered Rate	*Only* if the risk that allowance could be materially too low after applying steps 1 and 2 i.e., if reopeners don't address uncertainty.	• Some complexity in choosing how the rate varies with the extent of overspending and in understanding how/why different rates apply to different levels of spending. • Only changes the ex-ante sharing rate, so doesn't introduce additional gaming possibilities. • Incentives remain strong unless the forecast is materially wrong. • Designed to address large over/underspends, so may not be necessary due to the existence of reopeners	Medium Value
Asymmetrical rate		• Simple/low-cost as only changing the sharing rate for the IRIS to differ between over vs. under spending. Not subject to gaming. • Incentives change if the allowance process under/over estimates (e.g., because of uncertainty): • Underestimates – the overspending rate falls below 23.5%. On the one hand, the lower rate removes a possible disincentive to invest. On other hand, a lower sharing rate possibly dulls the incentive to cut back costs, which are more in control of the EDB.	Medium Value

	• Otherwise – the rate remains at 23.5% – so that EDBs maintain strong incentives to efficiently deliver outputs.	
Confidence Dependent Incentive Rate	• Requires assessment of uncertainty for different categories of expenditure, which may be costly/burdensome. • Requires judgement by NZCC to set sharing rate. Further, the process might not be easily interpreted by stakeholders. • Addresses uncertainty by explicitly adjusting the sharing rate to account for future uncertainty. • Requires significant input by EDBs, so depending on implementation, EDBs could influence their confidence score. • EDBs should have strong incentives to efficiently deliver outputs that are within their control and protected from IRIS penalties for costs that are outside of their control.	Medium Value

Recommendations

Drawing on the above assessment, the ENA recommends that the Commission implement a three-stage reform of the IMs to address the uncertainty facing EDBs. These stages are:

Stage 1: Reform the existing re-opener structures to:

- remove the artificial distinction between unforeseen and foreseen re-openers
- introduce a process to streamline reopeners for when
    a. there is no price impact on wider consumers, and
    b. updating pre-approved models
- allow collective reopeners
- alter the system growth re-opener to allow for demand management spending.

Stage 2: If residual problems remain after adjusting reopeners, ENA recommends the Commission introduce new uncertainty mechanisms including:

- an opex specific reopener
- new re-opener triggers for digital-specific or regulatory change
- a connections volume driver to allow connections capex to adjust with actual rather than forecast connections
- use-it-or-lose it allowances to capture necessary but uncertain opex that crystallises during the period (avoiding the need for a burdensome reopener).

Stage 2: Reform the IRIS only if material problems remain after stages 1 and 2 by:

a) applying asymmetric rates (lower penalty rates and higher benefits rates) or
b) weighting the incentive rate by uncertainty.

Please don't hesitate to get in touch with ENA if you'd like to discuss our submission. Contact Keith Hutchinson ([redacted] in the first instance.

Yours sincerely,

[redacted]

Keith Hutchinson
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Electricity Networks Aotearoa

Appendix A – ENA Members

The Electricity Networks Aotearoa makes this submission along with the support of the members, listed below.

Alpine Energy
Aurora Energy
Buller Electricity
CentraLines
Counties Energy
Firstlight Network
Electra
EA Networks
Horizon Energy Distribution
Mainpower NZ
Marlborough Lines
Nelson Electricity
Network Tasman
Network Waitaki
Northpower
Orion New Zealand
Powerco
PowerNet
Scanpower
Top Energy
The Lines Company
Unison Networks
Vector
Waipa Networks
WEL Networks
Wellington Electricity Lines
Westpower