Distribution Pricing Reform Forum

8 September 2023

Summary of stakeholder forums and feedback

Auckland, Christchurch, Wellington and Online

ELECTRICITY AUTHORITY
TE MANA HIKO

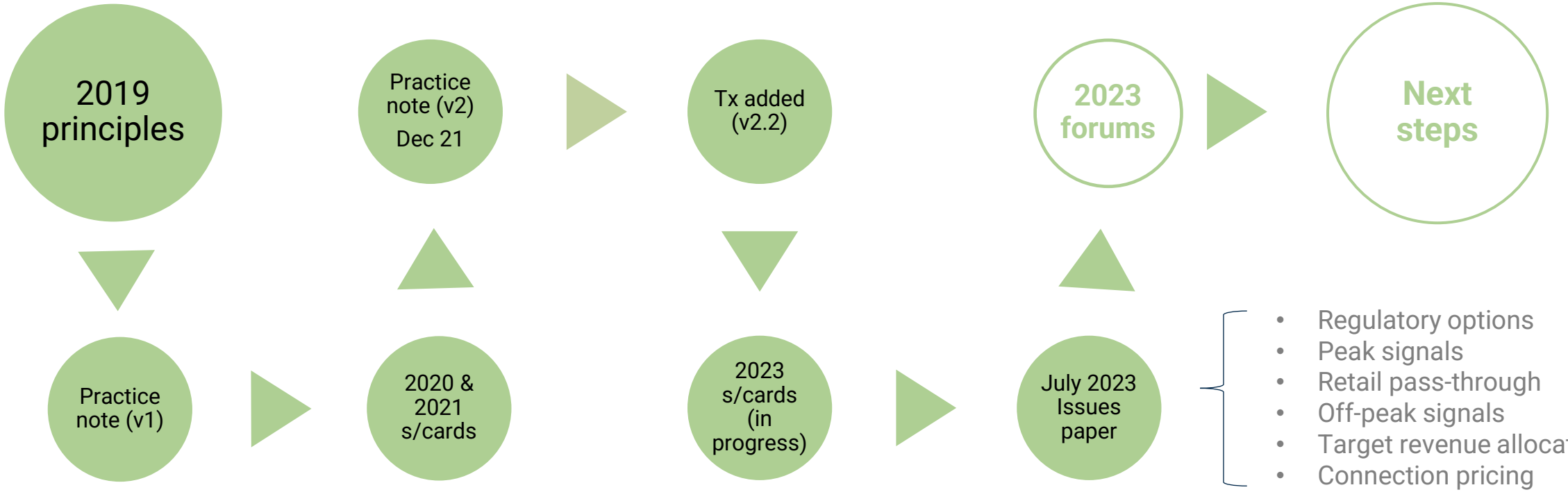
Agenda

Note - the agenda and topics varied at the forums

Item	Auckland	Christchurch	Wellington	Online
1. Shared Calendar Recap	✓	✓	✓	✓
2. Reform Journey - Interactive	✓		✓	
3. Reform Priorities – Regulatory Options Top 3 – Interactive		✓		✓
4. Consumer Impact - Interactive/Discussion		✓	✓	✓
5. Retailer Input Costs - Interactive			✓	
6. Regulatory Options Evaluation		✓		✓
7. Connection Charges - Interactive	✓	✓	✓	

Topic 1
All

Recap



Topic 2
Akld Well

Interactive – reform journey

A lot has changed since pricing principles were refreshed.

Whiteboards setup with topics:

- sector context – developments relevant to distribution pricing
- pricing practices – progress (or regression) in the state of distribution pricing
- experience and learning – insights, evolutions in thinking

You all have (colour-coded) post-it notes and pens –

- yellow = distributor;
- blue = retailer;
- pink = consumer/access seeker

We have added some starters from the issues paper and submissions.

Please add – new items, tick existing items, add comment to existing items.

At the end we will group items and discuss.

Interactive – reform journey – 1. Sector Context: Auckland

(all points provided by stakeholders)

Topic 2 Akld

Access Seeker / Consumers

EV market increasing. NZ has worst rate of public chargers to EV [ratio] in OECD - but political consensus is emerging.

Distributors are not thinking about the impact on housing of shallow versus deep connection charges

Equity considerations

Active cross subsidies versus cost reflectivity

Increased in distributed generation especially solar.✓

Cyclone Gabrielle resilience ✓✓

EDBs

DPP4 and WACC will increase revenues/prices -Massive increase in cost to consumers

Massive growth & swift pace of change

80% increase in demand – central planning transmission

Electrification of everything; transport, heating, cooking & process heat

Increased Demand and diversity of needs. Does Government have a role in funding the energy transition? Decarbonisation ~ $22b investment in the 2020s.

Step change in TOTEX: Decarb, Growth, Electrification & Resilience ↑ MAR – who pays

Timing of cashflows for resilience.

Hardship issues with these increased costs.

Who gets left behind in electrification – unable to buy an EV or move off of gas

Powerswitch savings can be up to $500/customer. The focus should be on education and switching.

Increased DG – utility scale solar

Why do we allow a metering monopoly/duopoly?

Regulation driven cost to connect are increasing – consents, traffic management

Vertical separation hinder pricing effectiveness of network benefits

Ability to fund investment ahead of demand

Regulation need to change to consider whole of system benefit rather than focusing on regulation of one part of the supply chain

Other

Distributors make decisions for existing end users in region not interest of Access seekers or NZ Inc.

Ownership is driving value judgments in pricing. Need a broader wider lens

How do they take into account the value provided by the new access seekers.

Need a whole of system view - New Zealand Energy Strategy

Interactive – reform journey – 2. Pricing practices: Auckland

(all points provided by stakeholders)

Topic 2 Akld

Access Seeker / Consumers

The differences in practices between EDBs is a challenge to deal with when trying to build a national network of public EV chargers. Also adds costs.

Investment in public EV chargers is at least part driven by where it is easy and economic to connect – rather than where demand is. It is an emerging postal code lottery.

Not understanding why prices/costs are what they are – is a challenge for developing business cases.

Some costs make an investment uneconomic to invest in EV charging. Therefore, the charger doesn't go ahead and is a waste of time and money. Who pays for this?

The regulatory boundaries around connection charges are drawn incorrectly.

Increased use of TOU ✓

EDBs

TOU Tariffs use is increasing. One party felt they are now the standard approach. However, simplicity is still important.

Cross-generational subsidisation needs to be avoided. However, still latitude in cost recovery – targeted cost recovery versus socialisation?

EDB pricing – for the retailer or the end consumer? Are end users meant to see and response to distributor prices? Only with pass-though can consumers react.

EV: There is a need for EV specific retail plans and some form of mandatory standards (tariffs?)

Capital Contributions:

- The cost of capital contributions is increasing. This is linked to the First Mover Disadvantage.
- Connection charges must be agnostic to the connecting party – no preferential treatment (Public EV chargers?)
- Capital contributions and UoS Pricing are Ying and Yang. Changes to one will impact the other.
- It is unfair to charge the beneficiaries of new investments that are require because of climate events or past underinvestment.
- It is important to understand the purpose of the contribution: risk, locational signal and

Part 6 is no longer fit for purpose.

There needs to be parity between grid connected and distributed generation.

The TPM RCPD signal has now gone. Hot water and demand response now have a lower value. Need new TPM and pass-through guidance – illustrated examples

Pricing notices in local newspapers is not useful. No one sees them.

Consumers need to understand signal

This [distribution pricing reform] takes time!

Retailers

It feels like the Authority wants a moving target. For example, in 2019 the proposal was to remove price signals for the impact of additional usage or future investment.

Interactive – reform journey – 3. Experience & Learning: Auckland

(all points provided by stakeholders)

Topic 2 Akld

Access Seeker / Consumers

Connection charges are not transparent.

There is no EDB planning around connections.

Connections represent illegal contacts.

Connection charges is akin to playing a game of prisoner's dilemma.

For an emerging industry (presumably EVs?) that is dependent on connections, the regulatory regime is quite complicated. This maybe a barrier.

EDBs

Pricing and reform:

- Need to get alignment across regulators on what pricing is to achieve. Clear example to avoid second guessing.
- The form of regulation has a massive impact on the incentives to reform pricing.
- Pricing reform takes time – TPM. We do not have time.
- Perfect can be the enemy of the good.
- Cycle time in pricing: guidance – pricing – scorecard
- Recued complexity

Consumer:

- Consumer education still problematic – need price signals
- Customer impact is important and will vary in consumer types
- Opt-in tariffs do not work

Retailer Pass through: The way retailers pass through costs – it may be difficult to achieve the intended outcomes. Retailers should have the freedom to absorb or pass through costs.

Metering:

- Access to meter data needed to make informed decisions. Pricing reform cannot occur without good data and appropriate legislative settings.
- Meter deployment – no consumer access to new tech.
- Access to meter data under a non-regulatory accroach has not worked.

Increased herding of DER on our networks

Retailers

There is a rise of TOU and other innovative pricing.

Rise of aggregators.

Increased access to flex resources – it is not just ripple anymore. There are EV charges, batteries.

Strong peak signals are important for network pricing.

Increased clarity on what the Authority wants is needed.

Interactive – reform journey – 1. Sector Context: Wellington

Topic 2 Wgtn

(all points provided by stakeholders)

Access Seeker / Consumers

Network Companies should be able to compete & grow outside their territory.

We need an affordable transition over an "optimized" and hypothetical transition

Incorporate load flexibility into network capacity availability

Request for new connection: 29 EDBS + embedded networks increase complexity for connection and tariffs

Business starting to scope requirements to electrify part of operations

Govt funding (ie. DIGI) could accelerate conversion

Different experiences with different EDBs - Some good, some less so.

Costs for EV charges should be user-pays not a funded by cross-subsidiary

EDBs

Uncertainty as to how fast change will happen

(Risky) business look for ways to avoid costs and get others to pay

Orders of magnitude move generation on network – part 6 presents allocation of costs

Utility generation: Emergence of DER aggregators

Utility generation: Many more manageable devices/ loads

Utility generation:

Transitions to low carbon

High demand at electricity due to EV's etc

Industry heating switch to electricity from gas

Coordination -Alignment across whole system impacts of network pricing Eg. DSO, SO Operations- Alignment with EA's FSR programme which is looking @DER

Risk if out of steps with each other will have to rework.

Tipping points - (ie EV uptake, decarb from DIGI) somewhat predictable but hard to know "when" it will tip

Process hear elec: Evolution and development of flexibility traders? (provide flexibility services to EDBs?)

Utility generation: Transpower – ability to value stack for DER

Retailers

Connections requests: huge variation in network costs for EV charging sites

One in two new cars purchased in June 23 were an EV!

Process heat electrification

Big investment ambition for EV charging network

Business starting to scope requirements to electrify part of operations

Govt funding (ie. DIGI) could accelerate conversion

Different experiences with different EDBs - some good, some less so.

Costs for EV charges should be user-pays

Interactive – reform journey – 2. Pricing practices: Wellington

(all points provided by stakeholders)

Topic 2 Well

Access Seeker / Consumers

Innovation is stymied by no regulation on large customer connections

Decarb projects need access to redundant capacity at marginal cost

Consumer option to notionally embed with Transpower

ToU pricing offers are becoming more popular because they are simple to understand

Lack of clarity around TPM charges + how calculated

-Some biz have stopped monitoring peaks as closely

-Biz lead negative impact when reduce demand but face higher TPM charges due to historical demand approach

-No real consultation on pricing approach – felt we can't provide comment + just have to take it.

-Some large consumers would prefer direct engagement with distributors (# just retailer)

EDBs

Keep pricing simple and understandable

Stable and predictable pricing

-Dynamic ToU pricing

-TOU dx charges becoming widespread (but are ---- the end state?)

-TOU: Only where there are avoidable costs to signal

-Helping in educating consumers

-Confusion about what EDBs need to consider - Consumer elasticity, Complexity, Retail accommodation, Consumer preferences

DER uptake has increased

Guidance required for standard simple pricing

TPM allocation

-Who pay for decarbonization

No RCPD Pass thru

LFC phase out

-Transpower: Consideration of phased implementation to avoid step-changes in load at XX:XX -impact on DSO + SO + wholesale market

Retailers

More TOU/innovation

-Important EA is clear about what it wants/expects e.g. support for LRMC is new/not in DPPN

-Would like more standardization in pricing practices across networks

Consumer uptake of TOU increasing (retail tariffs)

The retailers' role is to provide bundled pricing. They manage risk so cost- reflective pricing shouldn't hit consumers

Consumer habits, culture take a long time to build up (ie if you change signals response drops, can take a while to get back.

Interactive – reform journey – 3. Experience & Learning: Wellington

(all points provided by stakeholders)

Topic 2 Wgtn

Access Seeker / Consumers

Consumers seek tangible rewards from flexibility, not only cost avoidance

-Seeking pricing to set simple for household

-Scorecards create good avenue for review is there an alternative + efficient way to get the gains without the pain

Need to engage with EDBs earlier (Biz +EDB timeframes didn't always align)

-Not all consumption can be moved off peak, eg, cooking, lights

Retailers

Our experience show that flexibility markets work how do we increase the amount of DER to reach the scale required

-More standardisation needed in pricing practices

-Increased consumer uptake of subscription pricing/all-you-can-ear e.g. Netflix, UFB.

-Little consumer appetite for exposure to wholesale prices (but nay doesn't mean we don't need them)

EDBs

Moving planning and engineering teams from allocation to incentives is a big change

-Commercial customer connections increasing, cost and time not like an app click process

-More interest explaining what prices cover (risk, dedicated vs shared assets)

-Consumers need to be part of the process and know what/why they are paying for service

-Cross industry interactive

A change in the one area will have impact in others

i.e. RCPD impact on demand/wholesale balance.

-Need time (years) to implement significant pricing changes and new tariffs (learning)

TOU more cost reflective as it recovers incremental opportunity cost (CAPEX) from the peak demand/consumption. However there can't be one uniform TOU model across all EDB's due to unique differences.

TOU pricing had little impact on peak energy use.

-Retailers do not like TOU. Provide poor data /their info system not ready

-Are consumers ready and willing for TOU?

Will they shift load?

-Scorecards help tell us what "good" looks like

EDBs

We spend a lot time talking about residential, commercial, industrial.

-As an industry we are terrible at telling the story

-Consumer behaviour (theory Vs reality)

-Exploring impact of other regulations leg, ComCom: price

Cap revenue cap

E.g. Lower user fixed charges)

-LV studies overtime may give a clearer picture to quantify the benefits of congestion management vs building capacity

-Impact of strong network price signals on consumption when added/removed

E.g. RCPD removal

Topic 3
ChCh Online

Regulatory Options - Interactive – your priorities

Issues paper:

focussed on five topics (peak; off-peak; allocation; connection; retail)

discussed high-level options (guidance; call-in; control)

canvassed multiple options for each topic

Four whiteboards setup (regulator; distributor; retailer; consumer)

Cheat sheet with options from issues paper

Use your stickies to identify (up to) three priorities:

standing in your shoes (distributors or retailers)

standing in consumer shoes or regulator's shoes

You can add new stickies, or add a tick to existing stickies

or

Facilitated discussion

Interactive – reform journey: Christchurch

(all points provided by stakeholders)

Topic 3 Chch

Top priorities from perspective of

Consumer

Equity

-Costs paid by those that cause the costs

Equity

-for those unable to participate no EV or PV

Choice of retailer pricing plan eg TOU, flat tariff or EV tariff depend on what I want

Prohibit AMD charges

Equity- Costs paid by those that cause the costs

Prevent remove volatility for consumer (helps more efficient decisions)

Low tolerance of fixed charges from residential - balance

Affordability

Consumers need sector to solve problem for us eg, not double network size to enable electrification of transport

Remove complexity, provide education

Education on pricing – bridge understanding gap when is peak when is off-peak

Pricing for consumers connection cost /Lines pricing

- Simplicity - Reliability

Distributor

Support transition to billing for energy & network on actual data

Demand side response guidance over regulation

Retailer Pass through of congestion and peak signals/tariffs ✓

Guidance on LRMC, subsidy free

Better access to HH metering data, no barriers to access & use

Enable pricing beyond TOU, enable innovation - TOU a stepping stone don't stifle innovation

Regulator

Systems data

Collaboration

Guidance on connection charges

More in-depth scorecards

Interactive – reform journey: Christchurch

(all points provided by stakeholders)

Topic 3
Chch

Notes on top priorities from perspective of:

Consumer

- AMD is a handbrake on decarb – commercial consumers may have decarb options that require off-peak use. Handbrake on efficient network use
- Volatility: consumer may not make a decarb decision if there is a risk that someone else's decision will affect their bill.
- Our customers dislike fixed charges. Need an education piece to address this. Taken away their ability to affect their charges. And fixed charges they may deter solar. And there's an equity issue – big house vs small house. Could address through capacity or usage bands.
- Education for consumers – terminology
- Ability for consumers to participate – who can afford EVs, solar

Distributor

- Need access to data: identify where peaks are – enable more granular pricing
- Base some pricing on fuse size – could customize more if had access to data
- Default wording in DDA doesn't allow flexible use of data – only data team – plus cost barrier. Need monthly access to data in the registry – real-time access at no cost, managed by EA. MEP profiteering.
- Enabling innovation: need a model that will enable innovation in pricing beyond ToU – don't want to lock in one pricing mechanism / stifle EDBs' and retailers' ability to innovate. It's the retailers and aggregators who will pass it through – they need to be able to innovate in pricing.
- Good to have a standardized list of how to think about connection prices – objectives rather than "this is how you do it".
- One portal for consumers – this is how you do it (eg trucking).
- There is a trade-off re standardization: if all the EDBs have to change that is a cost too. To trade off against the cost of Drive Electric dealing with 29 different distributors.

Interactive – reform journey – Online - Notes from each group

(all points provided by stakeholders)

Topic 3 Online

Group 1 'Critical peak'

Top 3 priorities

1. Clear peak signal (consistent across consumer groups)/ Applying LRMC to the peak signal (guidance needed)
2. Opt-in/Opt-out for TOU/Clarity on retailer pass through/ Data quality
3. Connection pricing and terms
4. GXP vs ICP pricing and residential consumer groups? Questions around this

Group 2 'Rahui'

Top 3 priorities

1. Connections charges ✓✓✓ ✓✓

Comments on connection charges

- Particularly Evs – political ✓✓
- Many different approaches
- EDBs has a different context
- Consistency across EDBs
- Noted deviation from the cost reflectivity theme in the rest of the issues paper
- Why would we favour one type of access seeker (Evs)

2. Peak charges ✓✓ ✓
   - Include LRMC review
   - Reduce off-peak charges not justified
3. Data sharing data access ✓✓ ✓
   - Simple solution central repository

Group 3 'Ranu'

Top 3 priorities

1. New Connections Guidance ✓✓✓
2. What call-in is - better to have more guidance ✓✓✓
3. Clarity around outcomes for end consumers (they don't want complex pricing)
4. Subdivision
5. Rewarding load control

Other points

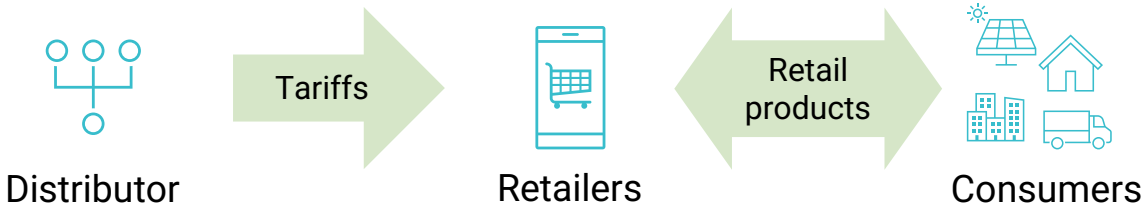
- *Depending on what network profile - zero off-peak might not be a good idea may create distortions*
- *Zero off peak is ok*

Other points

- *Some users are unable to to shift load -affordability & vulnerability perspective – holistic approach needed,*
- *Issue paper didn't consider a lot of people representing the consumer,*
- *Retailers will follow if prices are stronger enough but not distributors job to tell retailers how to price*
- *Need to understand why retailers not using TOU – the level of smart meters deployed is high*
- *Also need to look at UOSA prices for EVs*

Topic 4
ChCh Online

Consumer impact – moving parts



Higher fixed, low off-peak, calibrated peak, appliance discount.

Target revenue:
- allowable return
- expenditure
- capital contribution policy

Consumer group burden:
- target revenue allocation

Structure of charges:
- how fixed
- time profile

Consumer choices
- electrification
- flexibility

Increases likely (from 2025)

Approaches vary, and impacts vary

Historical shift to residential.

LFC phase-out (2022 to 2026) TOU shifts off-peak to fixed

Would mean (all things being equal)…

- more EVs (cheaper fuel)
- less gas and more electric heating (space and water) and cooking
- more EV and HWC flexibility
- more off-peak usage
- less pure PV and more battery PV
- less month-to-month bill variation
- higher bills for low users (near term)
- long-term more efficient network costs ($/GWh)

Consumer impact – interactive

(responses provided by stakeholders)

Topic 4 ChCh & Online

What would good consumer impact analysis look like for the Authority? (not distributors)

- Refine and extend representative impact models?
- Research consumer profile drivers?
- Provide communications?

" Chasing economically efficient prices without consideration of the health and welfare of consumers is in direct conflict with the Authority's statutory objective to work to the long-term benefit of consumers…"

"[Retailer] is also concerned about the potential adverse effects on consumers, especially vulnerable groups, if pricing structures are mandated. … For example, many elderly or lower socio- economic customers do not have the means or desire to purchase electric vehicles (EVs) or battery storage. Consequently, they wouldn't reap the advantages of specific pricing structures tailored for flexible services"

"…Higher peak prices will increase payment difficulty for consumers on prepay meters and likely increase auto-disconnections. Vulnerable consumers who restrict electricity consumption are at higher risk of hypothermia, heat-related illnesses, exacerbation of existing health conditions, and winter mortality…"

Consumer profile drivers (example)				
	Low	High	Off-peaky	Peaky
Small household	*		*	
Large household		*		*
Gas water	*			
Gas space heating	*		*	
Poor insulation		*		*
Inefficient heaters		*		*
Inefficient lighting		*		*
EV (smart)		*	*	
EV (on demand)		*		*
At-home		*	*	
Working	*			*
Eat at home		*		*
Eat out	*		*	
Pool		*	*	
Airconditioning		*	*	
Holiday home	*			*
PV	*			*
PV and battery	*		*	
Low income	*	*	?	?
High income	*	*	?	?

Note: representative (not research-based)

Responses from electricity retailers? Consider consumer circumstances and deprivation?

Consumer Impact - What would good look like ? ChCh

(all points provided by stakeholders)

Topic 4
Chch

Notes from discussion

- Consumer profile / personas are useful – would need to plug in the relevant figures for different regions. Could ask EDBs to do the work.
- EDBs are already doing case studies using profiles. Having better data would help.
- We could pull that from EDBs and use it for communications cross NZ.
- Need transition to avoid price shocks. Might have to do it sequentially. Already transitioning out of LFC. Sometimes you can do two at once (offsetting) but always outliers who get the worst of both.
- Transition must be slow enough that other mechanisms (benefits etc) can take up the slack to protect vulnerable customers
- Consumers can't deal with too much complexity. Retailers tell EDBs that their customers don't like complexity.
- Almost all retailers offer ToU pricing in Christchurch. Peak signal is strong and has been in place since 1999. 30% of market was already on Day/Night. Also the first smart meter rollout was in ChCh.
- EDBs have to do their best in terms of pricing for retailers and then it's up to retailers to take it forward and collaboration.
- Who is going to lead and bring it all together?
- People will change if the incentives are large enough and well explained.
- Options for LV visibility – There is a business that is mapping LV network capacity and could address the LV issue raised by Vector
- Many EDBs have their peak periods set too broadly so that they capture periods when the sun is shining – so they are inadvertently sending a strong price signal to customers to install solar panels to avoid peak prices. Allan Miller wrote a paper on Commercial scale solar in New Zealand discussing the financial performance of solar in NZ.

Consumer Impact - What would good look like ? Online

(all points provided by stakeholders)

Topic 4 Online

Critical Peak

1. EA should forecast distribution charge portion of total
2. Require price transparency in the bill/ make retailer plans easier to compare
3. Careful transitions? Retailer and distributor coordination of transitions
4. Money for flex reward has to come from somewhere
5. Authority could give leeway on cost-reflective pricing to manage transition

Rahui

1. A lot more alignment with other regulators eg MBIE on hardship good to see the map at the beginning ComCom EA pathway
2. EA pass through some not all. EA has view that market will drive the best, cost reflectivity is going to slow result in cheaper prices overall consumer incentivised to make changes on their side complete pass through too much of a shock some pass through control over EV charges Increase in prices
3. Highlight the <u>essential nature</u> not a pure commodity less choice e.g. gas going, bans of wood heating. Need to build that into the analysis on changes
4. Develop tools to help assess impacts – such as representative consumer profiles (high, low, peaky, off-peaky)**7/7 said EA needed to do this** *Do we fully understand consumer do we understand what impacts the changes will have on every consumer a little different*
5. Non network solutions may have a consumer impact

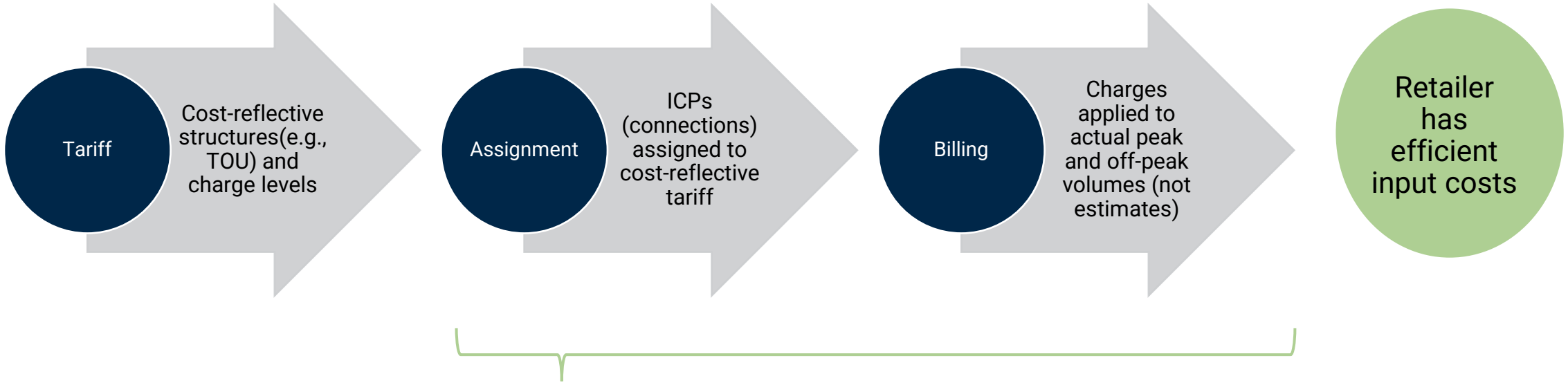
Ranu

1. EDBs could help not only though pricing e.g. home insulation, education programmes
2. Special program for low-income users within the market
3. Cost burden – commercial vs residential customer historical perspective. What subsidy free looks like ?
4. Payment in winter for energy users
5. Discounts? They are distortionary

Topic 5
Wgtn

Interactive – retail input costs

Good support for ensuring retail input cost signals effective.



Discussion
- initiatives
- considerations

Interactive – Retailer Input Costs Wgtn

(all points provided by stakeholders)

Topic 5 Wgtn

Considerations for Authority

EA to mandate 5 min (or 30 min) metering to align with wholesale pricing and TOU requirements.

EA to monitor and /or access metering data

Targeted guidance and support for EDBs

Communicate Change to consumers

Be completely explicit and foster shared understanding on:

1. Purpose of dx pricing reform
2. Role of retailers (eg. pass-through or not)

Strict limits on opt assignment

Information exchange system - EIEPs that don't use 1980's technology

Compulsory opt-in for retail customers, if want to see economic & consumption efficacy of TOU.

Ensure retailers system are up to scratch – lots of poor EIP3 submissions for TOU.

Distributors have a very close connection to end consumers in their area and still feel they are pricing to them

A choice of tariff TOU/fixed could lead to "cherry picking" tariffs

Distributors

Whose role is it to average out any complexity in distribution charges - The EDB's or the retailers?

Direct access to meter reads for pricing and billing

Where doing SO would be cost reflective

Mandate retailers bring billed via time-varying tariffs

Modernisation of billing systems will have a cost

Minimum set of requirements set by industry/EA?

Standard language and terminology

Retailers

How do we deal with all pricing

- Wholesale
- Transmission
- Distributions

Taking actions that support behaviour chances by consumer - consideration

- More robust data
- QA and validation
- Automated

Also applies to MEP – Metering Equipment provider

Dichotomy of views on retail pass-through (even more entrenched).

-Think consumer pricing not distribution pricing

Provide value for money affordability for consumers.

Help/encourage consumers to adapt to a changing environment

Consumer behaviour can be hard to change

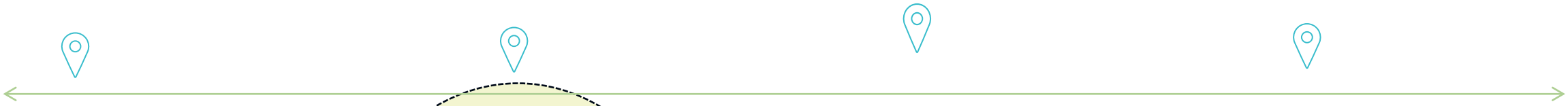
Designing retail products that customers actually want to use

Detailed price signals offer not attractive

Retailers will need to package pricing in a way that works for customers

Must be what consumers want /need

Regulatory options – Evaluation



Guidance scorecards

Progress is slow (and not universal).

Allows organic evolution that fits with each business.

Supports learning process (for regulator, distributors and stakeholders).

Collaboration

Incorporates in-depth industry understanding

Progress may not be universal

Supports learning

Targeted call-in

Mere existence may reinforce progress.

Allows nuanced resolution of trouble spots, but relatively slow and resource intensive.

Existence may deter organic progress.

Guardrails; prescription (control)

Relatively speedy, can overcome roadblocks, can improve consistency.

Risk of regulatory error and unintended consequences.

Targeted use and exemptions as mitigants.

Topic 6
ChCh

Interactive – Regulatory option evaluation

Christchurch

Issues for which option is particularly good fit

Good practice – pointers on how to design/use this option most effectively

Risks and hazards– pointers on how **not** to design/use this option

Online Sessions

Options:

- No change
- Use practice notes and scorecards to drive change
- Call-in issues for examination and resolution
- Control – requirements, guardrails
- Collaboration – timebound effort to “solve” an issue

Discuss where there is a good fit between option and issue (e.g., guardrails for connection charges; collaboration for subsidy-free and long-run marginal cost methodologies)

good practice pointers for use of any of the options (e.g., exemption regime for control)

risks for any of the options (e.g., long cycle-time for practice notes)

Interactive Regulatory options – Evaluation - Notes from board

(all points provided by stakeholders)

Topic 6 ChCh

Guidance scorecards

Good fit for

- Providing stability
- Promoting standardisation

Useful for bringing new players up to speed

Good for LRMC and subsidy- free

Good practice

Scoring system metrics

Sync with pricing process

Risks/Hazards

Timeliness

Resourcing

Untested ideas (discuss guidance with industry before publishing)

Collaboration

Good fit for

- Sharing Knowledge
- Proactivity / customer perspective / knowledge EDBS/retailer Authority and Consumers

Good practice

Involvement/ inclusion across supply chain

Manage scope, $ timeframe with actions/milestones

Risks/Hazards

Talkfest!

Targeted call-in

Good fit for

- Issues that need a 'deep slice'
- TPM pass-through
- Could use to 'get under the hood' eg. connection prices to understand

Good practice

Risks/Hazards

Risk no one moves

Fast movers

Guardrails; prescription (control)

Good fit for

- Things that are difficult/costly
- Not areas where innovation is highly likely or needed.
- Billed H/H
- GXP/ICP pricing
- EIPs
- Enablers – data access
- Those areas that need resourcing

Good practice

Pitching it a right level

Risks/Hazards

Authority changes mind – 9ncreases risk of higher impact

DG part 6 nature of access seeker change

Interactive Regulatory options – Evaluation - Notes from discussion

Topic 6 ChCh

(all points provided by stakeholders)

Guidance scorecards

- Information on metrics and weightings is important
- EA needs to give better info about what are we looking for and what's important to us
- Good fit for easy stuff, not hard/costly
- "I see it the other way": impact of change can be significant. A Guidance / scorecards approach allows more stability but control risks unwinding changes
- Good way to drive standardization – EDBs can pick up work that others have done
- Scorecards need to be timely to work properly – synchronization with pricing cycle
- Resource-intensive
- Risk of scorecards – new ideas come out that have not been tested in wider market – eg: strong encouragement to charge customers based on historical usage

Collaboration

- More fluid – who is collaborating and when?
- Ensuring reality of pricing practitioners is brought into process
- EA can bring together different parts of sector so everyone understands the way pricing actually works: knowledge-sharing
- EVs, retailers and EDBs and users all collaborating together
- Risk: becomes a talk-fest – need project management, actions

Targeted call-in

- ComCom have used this in the past – eg AMPs
- Deep slice: eg, TPM pass-through, connection prices [eg EA could use it to understand what is going on across the country]
- "targeted collaboration": can be a positive – not necessarily naughty stool
- Risk: how do you unwind a pricing methodology after it's already been notified to customers
- Risk of delay: EDBs are not going to move / reform if risk it gets unwound

Guardrails; prescription (control)

- Risk that the EA will change its mind and force EA Networks to unwind a change it has made
- Risk of delay: EDBs are not going to move / reform if risk it gets unwound
- Smother innovation and limit the ways customers can respond
- Good for technical things, eg GXP/ICP; EIEPs
- Connections could be a good candidate for standardisation
- Things that are easy – format same for everyone: removes grit in the system, data access
- Risk of mistakes

Interactive Regulatory options – Discussion online

(all points provided by stakeholders)

Topic 6 Online

Critical Peak

- More consistent scorecards usage across years
- Metering standardization
- Regulation is best when consistency is desired
- Expanding guidance and scorecards process (eg LRMC and subsidy free ranges)
- New practice note for connections? An umpire?

Discussion points

- *where there is a good fit between option and issue (e.g., guardrails for connection charges; collaboration for subsidy-free and long-run marginal cost methodologies)*
- *good practice pointers for use of any of the options (e.g., exemption regime for control)*
- *risks for any of the options (e.g., long cycle-time for practice notes)*

Rahui

- Regulatory options can not be seen as blanket approach across all elements especially given change - ensuring EDBs have the flexibility need to mange their circumstances more essential with the transition
- Control - mandates data access to EDBs
- Guidelines - for Peak off-peak pricing sharing calcs LRMC collaboration
- Worse case scenario off peak time of 9pm over coordination of manageable Load
- Connection charges - EV mandate terminology and types of tariffs and connections charges
- No mandation of pass through just trying to get out of the LFC support of stronger input costs and recognize what consumers needs
- Engage with Edbs not limited ID find out what we do how we engage with consumers limited understanding of what pricing is and what we are trying to achieve ascertain who is biggest concern what with the bottom 20% Scorecards
- Would be efficient to focus on those with gaps
- Control for who- some standardization an easy wins especially in residential
- Call in for GXP pricing

Ranu

- Guidelines and practice notes, scorecards- Connection issues
- Flexibility for EDBs to manage connection- recognition of the network circumstances
- Leaving room for collaboration when regulating
- Call-in: resourcing intensive for EDBs and EA;
- For non-exempt EDBs especially is simply to be told- facing customer or boards
- About the urgency and importance of addressing with connection issues: electrification, huge capitals coming in so need of guidance, uptake may be different to other type of connections, political push
- Collaboration is needed, e.g non-network solutions and shift on thinking, working with flexibility providers, non-traditional solutions that EDB itself can provide,
- Customer discount to help address energy hardship, tailored discounts
- Leading nature of pricing signals
- Clarity in roles

Topic 7
Akld ChCh Wgtn

Connection charges – contribution landscape

<100%

Some portion of direct costs recovered over time (through RAB and use of system charges).

100%

Direct cost of dedicated assets, their installation and their connection to existing line or transformer

>100%

Future-proofing (currently) dedicated assets

- Anticipatory capacity

Shared assets upgraded as direct consequence

- Up to 100%
- May include anticipatory capacity

or

General system growth capex

- Up to 100%
- Based on forecast or historical average ($/kW)

Topic 7
Akld ChCh Wgtn

Connection charges – subsidy-free

Subsidy-free is necessary (not sufficient) condition for efficient pricing

Of relevance here:

- access seeker vs. all existing users
- access seeker vs. existing users in their consumer group

Up-front (capital contribution) and ongoing (use of system) payments relevant to both analyses

Subsidy-free means all classes of consumer benefit in the long-run from sharing a network

Consider extremes:

- Consumer Group A sits high in subsidy free range, making a large contribution to shared costs. Every new "A" customer reduces the shared cost burden for every existing user. Even a low (or zero) capital contribution could be subsidy-free (and they may pay much more than 100% over time).

- Consumer Group B sits at the bottom subsidy free range, making no contribution to shared costs. Even with 100% capital contribution, a new "B" may not be subsidy free – especially if they contribute to network reinforcement pressures.

Topic 7
Akld ChCh Wgtn

Interactive – connection charges issue map

Whiteboard setup for small, mid and large access seekers. Each divided into “issues” and “approaches”.

Use stickies to identify:

issues most relevant to each type of access seeker

approaches that are (or could) suit each type

Small

(residential; general)

Mid

(irrigation; EV station)

Large

(industrial)

Interactive – Connection Charges Auckland

(all points provided by stakeholders)

Topic 7 Akld

Issues /Approaches - Small

Issues

Known $ and speed to quote

Not workable to separate process and pricing

There is no incentive for the networks to plan and undertake works efficiently. No incentive for networks to plan properly for future growth.

FMD may appear later; not obvious at time of works.

Work contracts have unfair terms, and they breach the Fair Trading Act.

Regulation is driving cost increases and time to connect – consents and traffic management.

Most residential developments are done by small developers not equipped to deal with the networks.

Network relies on developer capital to improve their proposal

Best solution is to redraw regulatory boundary where possible to allow competition

Approaches

When does the need for simplicity trump the need for cost reflectivity?

When connection parameters are met (based on an average) then the cost of connection and the speed of connection can be used for a "standard" connection.

Mid-size

Issues

The differences in approach to pricing makes it difficult to navigate and build into business cases.

Connection costs can be a barrier to investing in EV charging infrastructure. This issue can result in fewer chargers and a post-code lottery of who gets one.

Efficiency as a driver of process may run counter to other objectives – decarbonization.

EV solar - Expectation that social benefits are considered

Implication is the EV charges are going to places most affordable to connect

Approaches

Some form of access regime would be useful to deal with the range of price and non-price issues.

Network transparency for site selection would help the find the most cost-effective sites.

There can be contracted trickle charge when there is peak congestion. This can be included in the connection process.

Other points from discussion

2009 Ministerial enquiry recommended access seeker standard - decades later still talking about it

Connection charge ComCom / EA overlap

Large

Issues

Price/Quality security of supply trade-offs

Flexibility Innovation e.g. firmness

Need assurance around the prudency of costs [cost to connection]

Access to Arbitration

Need negotiate arbitrate type approach

Scarce resources should be prioritised based on decarbonisation impact

Data centres – timeframes, resilience, clarity of costs & site selection

Venue shopping choice of connection - Transmission vs Distribution

Charge $ difference for costs above standards design eg. N-1 supply / Cost of N-1 supply

Approaches

Early engagement

Access to Arbitration

Working with Transpower + customer to find the best solutions

NPV model for connection

Engagement and understanding of their needs

Interactive – Connection Charges Christchurch

(all points provided by stakeholders)

Topic 7 ChCh

Issues /Approaches

Small

Issues

Equity – Average across broad range of customers

Each side of the street treated the same way (residentials noting power supply on only one side of road.)

Upfront clarify of charges – difficulty understanding

Approaches

Standardisation

Mid-size

Issues

More knowledgeable counterparty

Rural residential subdivisions

Approaches

Pass through, mixed connection charges and lines charges – timing delays

Accommodate any range of potential kW

1MW vs 2MW economies of scale

Standardisation

Large

Issues

More dedicated assets

Risk of stranded assets

More knowledgeable counterparty

Access seekers negotiating price quality trade-offs

- rather than 'n-1' wanting 'n' lower cost lower security
- data centres wanting n-2

Approaches

Umpire

Say in engineering solution

- Big incremental change eg zone substation (or GXP): everyone funds that (not just the person who pushes you over the boundary). Trade-off between up-front and ongoing charges. Up-front reduces risk, helps encourage customer to right-size the capacity they need – which is efficient. Not really a problem if everyone is contributing on a similar basis to the cost of upstream assets.
- Who is funding the anticipatory capacity? Prudent. Negotiating with large industries: have to be flexible: can't be one-size-fits-all as they have different funding models / business cases that need to stack up. 4 major projects in last few years.
- Small consumers: equity consideration: network on one side of street – don't want luck vs unlucky customers penalized because on one of street. Want to average across large groups not granular cost-reflective.
- Large customers have a greater stranding risk and one way to address that is to pay up-front.
- Up-front clarity for consumers on what charges are and how calculated. Less problematic at larger end where talking to an engineer.
- More bespoke at large end. Large customers are wanting only N-security.
- All large solar is N-security. Most are seeking lower cost; lower security. Some (eg data centers) want higher N-2 security.
- Wise to use std size conduits that can accommodate any size capacity customer that comes along – eg for developers in new subdivisions. Costs 2, 3, 4 times as much to do it retrospectively so makes sense to do it when the conduit is first put in.

Interactive – Connection Charges Wgtn

(all points provided by stakeholders)

Topic 7
Wgtn

Issues /Approaches

Small

Standardised connections cost when "simple" Ie. within X meter of existing assets

Free connections

Mandate ADMD through negotiations

Private EV connections (ie suburbs of Wellington with street parking. If consumer has to pay for new ICP will they have confidence & info that price is fair before buying Tesla?

Little ability to avoid costs, ex-post i.e. once a subdivision has been developed, wires are in the grand. What happens if consumer behaviour changes.

Upfront information available to public (rather than confusing process to get a quote and finding it takes weeks to get an answer)

Allow connecting parties to do their own works-civil, traffic mgmt., etc (Some EDBs already enable it

Increasing network costs could be a challenge for affordability

EA could take lead on communicating changes esp WRT increasing network costs

Mid size

Providing high capacity connections for relatively low volume (EV/irrigation)

Customer's lead time much shorter than EDB network/infrastructure ie. dropping a pump on EV charger takes days not months

Cost-reflectivity = user-pays (Relevant to all three groups of access seekers)

Fairness & equity

Flexibility to reduce connection charges (relevant to all three) i.e. flexible connections eg. Panmure e-bus charging

Information accessible so mid-size business understands what is involved (i.e. realistic lead times to increase capacity, other options i.e. meter side flexibility)

Counterparty Risk – EV charging is low capex game, cf. subdivision or data centre

Accountability for impact on quality? - i.e. using cheap noisy power electronics

Not "capacity" but may require pricing incentive?

-EDBs could provide standard pricing for the additional capacity e.g. 5MVA/10MVA/15MVA but no intermediary (e.g. 13)

Huge variation in capital contribution changes – see Drive Electric Submissions range $120 – 160.000

-Lack of good/open info on capacity/Constraints for potential charging locations "like throwing darts at a map"

Marginal cost for interruptible load/EV

Interactive – Connection Charges Wgtn

(all points provided by stakeholders)

Topic 7
Well

Issues /Approaches

Large Connections

Credit risk of the connected party

Ability to finance the connection assets

-Consider internal flexibility to support large new connection

-Consistency across NZ

(help investor decision making)

Clear communication on the "fairness" of decisions.

Politics / options when large user triggers substation upgrade

Who pays for the additional capacity before it gets used by future load

Reopeners required if customer not pay for costs

Perceived/ real counter party risk.

Link between connection costs/approach and on-going pricing structures.

Fairness – not wanting corporates to be subsidised by households

EDB funding for consumer connections is an EDB Board's choice, and approved by the ComCom.

More customised, more dynamic, integrate with planning/Comcom

Encourage efficient location decisions c.f. wind farms: we don't subsidise those who want to locate a long way from a tx connection

Commercial customers are often getting good deals which may mean other customers paying for them

Isolate concerns about cost of project from how EDB assesses customers risk and/or planning impacts

There's no one size fits all type of connection price for large customers.

Business type capacity requirement

Existing network capacity -Cost to upgrade the network is needed

Estimated project life, etc are taken into account when connection costs are calculated

Proactively release GIS inform on capacity for constraints

Incentivising EDBs for undertaking other efficient investment at the same time as a connecting. But not punishing the customer.

-Exploring an EDB access regime

-Standardised processes and access terms

-Fist mover disadvantage

-Opportunities for non-firmed load

Marginal cost prices

-Right to connect to network on standard tariff

-Network embedded of Transpower charges

-Deep assets recorded as general costs

Business feel they are paying for network capacity beyond what they need

If EDB costs are considered "too high", could see connection to transmission network considered

Thank you

Three forums, plus online.

Submissions and cross-submissions available on our website.

Cheat Sheet Options Page 1 of 2

Topic 3

No	Description	Reg. Option	Issues Paper Ref.
1	Pricing principles into the Code	NA	3.18
2	**Peak Time - varying charge and appliance tariffs**		
3	Detailed guidance explanation of congestion & LRMC (how to calculate) practice note, incl. scorecards	Guidance/Scorecards	3.14(a), 4.31(b)
4	Rapid phase out (prohibit) of uniform usage tariffs - if network congested	Call-in, Control	4.29(a)
5	Mandate tariff assignment where AMI	Control	4.31(c)ii
6	Mandate anaylsis & disclosure of peak signal strengths (incl differentails)	Control	4.31(c)iii
7	Mandate use of approved LRMC meth anaylsis	Control	
8	Mandate availibility of applicance tariffs w disc (reqs structure & availibility) prices that signal flexbility (not tied to ripple , incl HWC & EV)	Control	4.31(c)iv, 4.29(d)
9	Mandate use of actual HHR data (Rapid phase out of deemed & residual profiles for smart meters)	Control	4.31(c)v 4.29(b)
10	Prohibit GXP pricing (grandfather/sunset) / call in GXP pricing - ICP pricing only	Control	4.31(c)vi, 4.29(f)
11	Call in Peak pricing for review/ Peak off peak differentials	G&SC, Call-in	4.31(d), 4.29(c)
12	Support establishment of coherent signals ToU cf HW, process heat, transport	G&SC, Call-in	4.29(e)
	Off peak (incl. TPM pass through in least distortionery as per guidance)		
13	Do nothing evidence gradually occuring	NA	5.22(a)
14	Extend practice note on off-peak, incl. scorecards	Guidance/Scorecards	5.22(b)
15	Prohibit uniform usage tariffs where congestion (narrow exemption criteria) *see peak*	Control	5.22(c)
16	Set a cap on off-peak usage charges - could be descending cap	Control	5.22(c)
17	Prohibit use of AMD as charging metric	Control	5.22(c)
18	Call-in (where significant) use of AMD as charging metric	Call-in,	5.22(c)
19	General call-in off-peak pricing	Call-in,	5.22(d)

note preferred pricing sharpen practice note, increased focus on off-peak in next scorecard and introduce control & call-in backstops

Cheat Sheet Options Page 2 of 2

Topic 3

	Description	Reg. Option	Issues Paper Ref.
	Target Revenue Allocation		
20	Expand practice note to include subsidy free range, purpose & process revenue allocation testing relativities	Guidance/Scorecards	6.23(b)
21	Prohibit/specify allocation metrics GWh or AMD	Control	6.23(c)
22	Prescribe consideration for subsidy free range that must be documented	Control	6.23(c)
23	Require residential group	Control	6.23(c)
24	Call-in revenue allocation specific distributors (risk based or with another issue)	Call-in,	6.23(d)
25	Call-in revenue allocation all distributors	Call-in,	6.23(d)
	Connection Costs		
26	Expand practice note to incl. Connection charges & scorecards (terminology, design, preferred approches)	Guidance/Scorecards	7.2(b)
27	Prohibit PM that allow overly deep connections	Control	7.2(c)i
28	Prohibit PM that allow contributions to anticipatory CAPEX	Control	7.2(c)i
29	Prohibit PM that allow overly high contributions to system growth	Control	7.2(c)i
30	Mandate set cap on fees, or on cummulative fees (if multiple applns)	Control	7.2(c)ii
31	Mandate approach standardised charges or building blocks for public EV charges	Control	7.2(c)iii
32	Mandate approach standardised charges or building blocks for housing	Control	7.2(c)iii
33	Mandate TPM pass through guidelines	Control	7.2(c)iv
34	Call-in Meth high risk , % Cap Cpntn, high activity, access disatisfaction	Call-in,	7.2(d)iii
35	Call in treatment of cummulative fees	Call-in,	7.2(d)iii
36	Call-in TPM pass through guidelines	Call-in,	7.2(d)iii
	Retailer Response		
37	Do nothing - mkt dynamic create pressure on Ret. to improve performance	NA	8.21(a)
38	Expand practice note to incl. assignment billing on actuals scorecard monitor	Guidance/Scorecards	8.21(b)
39	Support transition to billing for energy and Network on actual data (see option 9)	Guidance/Scorecards	8.21(c) 8.23(a)
40	Monitor retail pricing incl availibility and uptake of non-uniform and appliance tariffs	Guidance/Scorecards	8.21(e)
41	Call-in retail pricing high risk	Call-in,	8.21(f)
42	Control retail pricing mandate certain options	Control	8.21(f)

Agenda Auckland

Icebreaker

Recap

Interactive – reform journey

Connection charges

Interactive – access seeker issue map

Consumer impact ?

Interactive – What does good look like

Agenda Christchurch

Shared Calendar & Recap

Regulatory options

Interactive –your top three priorities

Consumer impact

Discussion – What does good look like

Regulatory Options

Interactive – Regulatory Option evaluation

Connection Charges

Discussion –issues / approaches small medium large access seekers

Agenda Wellington

Shared Calendar & Recap

Interactive – reform journey

Consumer impact – discussion

Break

Interactive – input cost signals

Connection charges

Wrap up