Inefficient Price Discrimination in the Wholesale Electricity Market – Issues and Options

Response from Mark Hughes, Managing Director, Paua to the People

Strategic Ambition

We applaud the EA for defining their strategic ambitions, but we would like the Authority to articulate what a well operating market under these ambitions could look like. A real-world vision of each of these ambitions would make it much easier to monitor successful progress and identify when change is required.

Problem Definition

We are unsure that you have correctly identified the issue.

Willing to pay (WTP) does not adequately measure the impact of the current wholesale market on achievement of the Authority's strategic ambitions. WTP is a theoretical concept which does not illustrate current market impacts nor does it highlight changes that need to be made to meet the Authority's strategic aspirations and the urgency that change is needed.

We see the impacts of the current format of the NZ Wholesale Electricity market as.

Customer Centricity

- Higher prices mean that financially vulnerable whanau are increasingly having to choose between feeding their families or heating and lighting their homes.
- Communities are unable to get involved in the supply of electricity to their whanau because it is too risky to purchase electricity on the wholesale market and they cannot obtain competitive derivatives from gentailers chasing profits who are unwilling to assist competition for their own retail operations.

Trust & Confidence

- Current rules are inadequate to control Gentailers seeking to maximise profits. Enforcement takes too long and penalties do not reflect benefits for generators even if the Authority can pin them down (for example the UTS in 2019).

Low Emissions

- No incentive for gentailers to move to low emission generation as retaining high-cost thermal generation creates greater profits for them.

Thriving Competition

Gentailers control the unregulated derivatives market enabling them to choose who to sell them to, in what format and at what price. This has led to.

- Retail competition dying. A look at Consumer Powerswitch today illustrates that no independent retailers are currently able or willing to compete for customers.
  - Under the current market structure Gentailers control access to derivatives and have chosen not to nurture retail competition and to maximise their profits. There is no incentive for them to change this.

    - Gentailers have very effectively shifted margins from retailers to their generation operations because they control pricing through the derivatives market, constraint of supply and use murky internal transfers.
    - No current or future investment in retail is evident because of the likelihood of low or negative returns. 100% of risk in the industry is now sitting with retailers (including spot market risk, the risk of getting paid by end users, risk of not having enough cash to meet prudential or pay suppliers…) the risk to profit ratio is not at all favourable for independent retailers.
- Limited investment in new generation as gentailers work to constrain supply and ensure high-cost thermal generation is required as much as possible.

Innovation

- Innovation has been largely driven by the independent retailers who have been forced to exit by the wholesale market, Gentailer shenanigans and excessive prudential requirements
- Small retailers – like community based not-for-profit retailers cannot enter the market because of an inability to acquire competitively priced generation
- There is no margin in retail to allow innovation to occur.

In Summary

The NZ wholesale electricity market is severely broken and urgently requires change if the Authority is to achieve any of its strategic ambitions. New Zealanders need change now not at the pace set by Gentailers.

Our preference from the actions outlined by the Authority is to create a public exchange for derivatives that sets the market rate and always offers competitive cover for residential profiles on all networks. Internal Transfer pricing by Gentailers must be stopped as it is distorting the market for Independent Retailers as much as the NZAS contract.

We would also like to see a subsidised FPVV Hedge product for Community and Not-for-Profit retailers supplying financially vulnerable whanau.

Given the dire situation in Retail at the moment an interim measure needs to be available for independent retailers to enable them to purchase competitive electricity derivatives so that existing Independent Retailers can re-enter the market and new ones contemplating entering can do so.

Formal Response

Our responses to your suggested questions.

Qu. 1 **NZAS has a number of unique attributes as a consumer of electricity including size, location, the related potential for stranded water, and capacity to provide demand response. Do you agree that these factors support a discount relative to Benmore prices (as the reference South Island node)? Are there other relevant factors and how might one determine an appropriate level of discount?**

As noted in your paper the Tiwai was undertaken at the price it was to drive higher future and spot rates for all generators especially the two largest Generators. We agree that some discount for location and size was appropriate but not at the expense of a distortion of the market.

This contract is just one example of the ability of gentailers to manipulate the wholesale electricity market to maximise their profits at the expense of independent retailers and other stakeholders including end users. The current system of all generation at a single rate must change if the regulator is serious about encouraging low-cost, low emission and certainty of supply.

Qu. 2 Do you have any additional feedback or information on the efficiency of the existing Tiwai contractual arrangements and their consequences?

NZ cannot continue to rely on publicly listed companies seeking profit maximisation to be responsible for activity that should be regulated by the Regulator. Tasks such as certainty of supply, affordable electricity generation and nurturing competition are all incompatible with the profit maximisation objective of gentailers.

Qu. 3 Do you agree that the Authority should investigate price discrimination in relation to wholesale contracts?

Yes. However, we believe that the Authority should widen the scope of this investigation so that the outcomes progress the sector towards its strategic ambitions.

The focus on WTP in particular does not reflect that some consumers with high WTP are unable to pay a “market price” for their energy such as financially vulnerable whanau in energy hardship. We request that the Authority regulate to achieve measurable objectives like cost-reflective pricing, investment in low-cost and low emission generation, thriving competition in retail for example rather than regulate using economic theory. It is much easier to monitor and act if outcomes are not present than calculate and prove an economic theory.

Qu. 4 Should the Authority’s consideration of policy implications from price-discrimination practices extend to situations where electricity is supplied both at discounts and premiums to market prices

Yes. In addition to variances from market price the Authority needs to ensure.

- that independent retailers have access to appropriate and competitively priced derivatives which is not currently the case
- that gentailers are unable to use transfer pricing that is unavailable to independent retailers

A point to note is that Market price is currently determined by gentailers through constraint of supply (lack of competition), and control of the derivatives market. Without a public exchange for Hedging to set the market price we do not see how this could be monitored and or policed effectively.

Qu. 5 Do you agree these baseline assumptions are reasonable? What other assumptions should be tested?

Your calculations are based on the highest cost to supply generation rather than reflect the true costs to generate each kWh consumed. We consider the overcharging of New Zealanders by price discrimination is in reality significantly higher than you calculate.

Your assumption that high spot rates and futures drives investment in generation cannot be substantiated given that we have had very high rates for some time and an under investment in new generation.

Furthermore, in 2020 FY generation made up 45% of the cost of electricity supplied to my customers. The difference in actual versus the 33% estimate used by the EA is startling and possibly reflects our lack of access to competitive hedging, a complete lack of competition in generation and the advantage of transfer pricing for gentailers.

Qu. 6 Do you agree that any investment issues raised by the Tiwai contracts are best addressed through a review of barriers to new investment more generally, as the Authority intends to undertake in 2022?

We agree that the EA needs to investigate barriers to investment given that a massive transfer of wealth from consumers to Generators has not attracted much new generation. In our opinion however, just looking at barriers to investment is too narrow.

The regulator should be seeking to introduce competition to Generation in New Zealand in a manner that encourages low cost and low emission generation that can flow through to consumers as more cost reflective prices. At present there is too much incentive from the current structure for gentailers to constrain supply and retain Thermal generation plant to meet normal demand.

Qu. 7 Beyond the Tiwai context, do you consider discriminatory pricing or discriminatory terms and conditions are adversely affecting efficiency and competition in the electricity system? If so, please provide evidence.

Yes. Price discrimination has successfully maximised profits for Gentailers.

Gentailers have used price discrimination to.

- Kill retail competition provided by independent retailers.
  - In Wellington only one independent retailer (with no generation) appears on Consumer Powerswitch. All other independent retailers have withdrawn from active customer acquisition.
  - Retail prices have not risen by the same rate that the spot market has, shifting significant margin from retail to generation
  - Internal transfer pricing has enabled generators to offer competitive rates to preferred customers with no regard to their actual cost to supply
  - With the volatility of the market pricing for generation is set by the unregulated derivatives market which is dominated by the gentailers. To protect their retail operations and to maximise profits Gentailers have chosen to withhold derivatives in a format at a volume and at a competitive price from independent retailers.
  - A lack of certainty that Retail will be able to access competitive rates in the future is affecting current and future investment in retail
  - Significantly increased risks for retailers (volatility of generation, extremely high prudential, increasing bad debt from higher prices and a higher cost of living) is further reducing margins.
- Stop community and other small retailers from launching because of the risk of generation pricing, need for specialist trading knowledge and the lack of certainty of future prices.
- Made electricity a luxury good for financially vulnerable whanau. Relying on WTP directs available electricity away from whanau in energy hardship who cannot afford the increased rates set by gentailers.
- Halted innovation in retail.
- Reduced competition in generation so that high-cost generation is now frequently required to supply normal volumes and gentailers can maximise their profits.

Qu. 8 Are there other options the Authority could implement to mitigate inefficient price discrimination?

Probably.

Qu. 9 What are the pros and cons of the status quo?

PROs

- Gentailers can continue to make excessive returns to their shareholders using the generation assets that were largely developed by public funds at the expense of end users
- The Authority can continue to pretend that all is well with the industry and that competition exists in retail

CONs

- More financially vulnerable whanau will have to choose between heating and lighting their homes and feeding their children
- The Authority fails to achieve its strategic ambitions as consumers are forgotten, competition is squashed, innovation dies, trust and confidence continues to plummet, and generators continue to produce greater emissions than necessary.
- Gentailers continued dominance and abuse of the electricity derivatives market
- Spot rates and futures are not reflective of costs to generate.
- Disincentivises current and future investment in Retail as margins are uncertain and risks are too high. Retail competition will return to being limited to Gentailers (Independent Retailers have already stopped competing for new customers or exited the market).

Qu.10 Do you consider that the status quo addresses the problem identified?

No. The current wholesale electricity market is severely broken – the only certainty is the dominance and abuse of power by the gentailers and the lack of any ability for the Authority to regulate.

- Recent profitability of gentailers indicates that they can command spot prices significantly in excess of their costs of generating electricity
- Sustained high spot rates are not driving new generation investment in low-cost and low-emission generation
- The continued need for high-cost generation (often Thermal) on a regular basis to satisfy normal demand at a cost of both carbon emissions and higher prices for NZ consumers
- The subsidisation of large energy users at the expense of other electricity consumers through hedging agreements such as the NZAS contract
- Increasing instances of ‘poor conduct’ by gentailers - encouraged because the cost of getting caught is significantly lower than rewards gained.
- Generators are rightfully so emphasising their profitability over certainty of supply for New Zealand
- There has been a significant decline in retail competition since 2018. Most independent retailers have now ceased to compete for new customers or

been forced to exit the market completely because of the difficulty and uncertainty of sourcing competitive electricity hedging

If the Authority is to deliver on its strategic ambitions then it needs to develop strategies to move the sector rather than focussing on economic models and theory such as WTP.

Qu. 11 Do use-it-or-lose-it clauses have a legitimate commercial role? What would the effect be of prohibiting them in wholesale electricity markets?

The size of the NZAS hedge is the key factor in the distortion of the NZ Wholesale Electricity market. Would elimination of these clauses just encourage large energy users to over purchase and on-sell to other users. Do we want to encourage the development of an unregulated secondary hedge market?

We do not see much benefit in this option and believe that stronger measures need to be taken if the EA wants to address price discrimination.

Qu. 12 Which contracts (eg, minimum size) should be subject to a prohibition on a use-it-or-lose-it clause?

See above.

Qu. 13 What are the pros and cons of prohibiting use-it-or-lose it clauses?

Use-It-Or-Lose-It terms will just be replaced by something else. We need to address the underlying issues causing price discrimination and constraint of supply not clauses in a couple of contracts.

PROs

- Easy to do.
- Gentailers will find another mechanism to manipulate the spot market. Whack-a-Mole.

CONs

- Ineffective at addressing Price Discrimination, Constraint of Supply and Control of Hedging market.
- More financially vulnerable whanau will have to choose between heating and lighting their homes and feeding their children
- The Authority fails to achieve its strategic ambitions as consumers are forgotten, competition is squashed, innovation dies, trust and confidence continues to plummet, and generators continue to produce greater emissions than necessary.
- Gentailers continued dominance and abuse of the electricity derivatives market
- Spot rates and futures are not reflective of costs to generate.
- Disincentivises current and future investment in Retail as margins are uncertain and risks are too high. Retail competition will return to being limited to Gentailers (Independent Retailers have already stopped competing for new customers or exited the market).

Qu. 14 Do you consider that prohibiting use-it-or-lose it clauses addresses the problem identified?

No as it does not address price discrimination, dominance of the Hedging market nor the ongoing manipulation of the spot market by gentailers.

We do see value in it being one of the tools the Authority has to stop pricing discrimination when used in conjunction with other options presented.

Qu. 15 Should this option be limited to pre-approval of contracts, or extended to apply to offers that one party considers are discriminatory?

Cover all contracts.

Qu. 16 What criteria should the Authority consider in pre-approving large contracts?

All contracts that deviate significantly from a competitive market price should require pre-approval if you are to address price discrimination.

Qu. 17 What should the MW or dollar threshold be for contracts requiring pre-approval?

All contracts that deviate significantly from a competitive market price should require pre-approval if you are to address price discrimination.

Qu. 18 What are the pros and cons of Authority pre-approval?

PRO

- Can be used to ensure that large contracts such as Tiwai do not distort the market
- Useful tool for the Authority to use in conjunction with other measures
- If costs to approve were passed back to the seller and timeframes to approve were lengthy it could help limit the number of contracts deviating from the market price.

CONs

- It will not address price discrimination

Qu. 19 Do you consider that pre-approval of large contracts addresses the problem identified?

No. The measure is not strong enough to address the systemic market issues.

Qu. 20 Would greater reliance on exchange-traded derivatives provide as much risk mitigation as current arrangements that also encompass over-the-counter risk products? Please explain your reasoning.

We do not see that a publicly traded derivative need limit any flexibility in the coverage if it is done correctly. The objective of such an exchange is that prices are competitive with any variation able to be justified.

A public exchange for derivatives would increase the availability and competitiveness of cover for Independent Retailers. Gentailers have dominance in the offering of hedges and control who has access and the products they are willing to sell. There is no requirement for nor incentive for gentailers to nurture and support competition in retail.

It is a significant cost to small independent and community retailers to have access to a high degree of trading expertise to enable the purchase of any hedging. This is stifling both competition and innovation in retail.

Not having to purchase derivatives from our competitors would revitalise the retail sector where uncertainty over availability of competitive hedging has driven many independents from competing in the retail market.

Qu. 21 What products would you want to be offered in addition to the existing publicly traded hedge products?

Competitively priced FPVV contracts for residential profiles for all regions that can be sourced by any retailer. This would enable small independent and community retailers to have certainty that they can source competitively priced generation. Having a standard defined derivative simplifies and negates the derivatives expertise required within small retailers. This product could be used to set the benchmark of “competitive pricing” for comparison to other products.

A subsidised hedge available for community and not-for-profit retailers supplying financially vulnerable whanau.

All hedges would need to be offset by Prudential held at NZX (including those purchased by gentailers) unlike ASX based hedges. This would level the playing field as well as providing an incentive to make prudential more realistic.

Qu. 22 What percentage of hedge contracts should be offered publicly?

Almost 100% to bring it in line with the Wholesale Electricity market. This would ensure that all hedges would be visible and impact on market price and that the Authority can monitor.

Any hedge contracts outside the publicly traded contracts should be pre-approved by the Authority.

A complete ban on internal transfers.

Qu. 23 What are the pros and cons of public offering of hedge contracts?

PROS

- Re-introduces competition in retail without the requirement to break up the vertically integrated retailers
- Will encourage investment in the Retail sector by giving more certainty to margins and risk
- Least impact on the current operations of the market
- 100% transparency will facilitate easier compliance by all parties and enforcement by the Regulator

CONS

- May take time to set up so may require interim actions revive competition in retail

Qu. 24 **Do you consider that public offering of hedge contracts addresses the problem identified?**

We believe that this is the best option presented by the Authority for addressing Price Discrimination.

A public exchange has the potential to address the current market domination of gentailers in the hedging market, give confidence to retailers that they would always have access to competitively priced derivatives and remove the issue for retailers having to compete against "internal transfer pricing" of gentailers.

Qu. 25 **How should 'large' hedges be defined?**

Any hedge not traded on the public exchange should be considered 'large' and require approval.

The more wiggle room extended to gentailers the greater the number of discounts from market rates will be written.

Qu. 26 **What are the pros and cons of this option?**

PROs

- Could be used successfully with publicly traded hedges. In fact we see it as a key component to enable very complex trades to be undertaken.

CONs

- Will not by itself address price discrimination.

Qu. 27 **Do you consider that the option addresses the problem identified?**

Not by itself. We do see a need for some consumers to receive deviations from a market-based price (location, size or need) and this would keep a cap on it to reasonable levels.

Qu. 28 **Which types of contracts should be covered by trading conduct-type provisions?**

Every contract that is not publicly traded.

Qu. 29 **How would trading conduct-type provisions be monitored:**

Any derivative that differs significantly from the market price should be justified by both parties

Qu. 30 **What are the pros and cons of extending trading conduct-type provisions?**

PROs

- Quick and easy lipstick for the pig

CONs

- Will not address price discrimination.
- Too hard to enforce
- Penalties will never be sufficient to a deterrent
- Very likely to be ineffective as gentailers have shown a complete lack of regard to date for any restraint in regards following rules of conduct
- Would likely require constant changes of Code to 'Keep Up' with undesirable Gentailer activities.

- Will not introduce Trust nor Confidence
- Does not address the dominance of the Hedging market by gentailers.

Qu. 31 Do you consider that extending trading-conduct provisions to hedge contracts would address the problem identified?

No. Gentailers have shown a complete lack of regard for any restraint in regards following rules of conduct.

Independent retailers need certainty of access to competitive hedges. This would not provide any certainty at all as it leaves gentailers in charge of following hard to regulate rules.

Qu. 32 What attributes of a contract should be permitted reasons for price discrimination? What attributes should be expressly precluded?

Qu. 33 What remedies would be appropriate if discriminatory pricing was found?

Given recent history we do not believe that the Authority will ever be able to enforce discriminatory pricing on a generator as it is just too hard. We would prefer a different approach.

- Take away the incentive to constrain supply by making generation more cost-reflective and incentivising low-cost and low emission generation. We consider that this approach would have a substantial calming effect on the wholesale market reducing the risks for retailers and end users
- Make all derivatives publicly traded and have competitively priced standard residential derivatives available for all retailers at all times.

Qu. 34 Are the current penalties under the Electricity Industry Act 2010 sufficient to deter inefficient price discrimination of the scale potentially associated with the Tiwai contracts?

No. The rewards of inappropriate behaviour by gentailers far outweighs the risks of a successful conviction and even if held accountable any penalty imposed.

Qu. 35 What are the pros and cons of non-discriminatory pricing rules?

PROs

- Quick and easy lipstick for the pig

CONs

- Will not address price discrimination.
- More financially vulnerable whanau will have to choose between heating and lighting their homes and feeding their children
- The Authority fails to achieve its strategic ambitions as consumers are forgotten, competition is squashed, innovation dies, trust and confidence continues to plummet, and generators continue to produce greater emissions than necessary.
- Gentailers continued dominance and abuse of the electricity derivatives market
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- Too hard to enforce
- Penalties will never be sufficient to a deterrent

- Very likely to be ineffective as gentailers have shown a complete lack of regard to date for any restraint in regards following rules of conduct
- Would likely require constant changes of Code to ‘Keep Up’ with undesirable Gentailer activities.
- Does not address the dominance of the Hedging market by gentailers.

Qu. 36 Do you consider that non-discriminatory pricing rules would address the problem identified?

No as they would be too hard to regulate. Gentailers want to maximise profits and regulation just wouldn’t have the ability to keep up.

Independent and community-based retailers require certainty not loosely formed ‘Good Conduct’ suggestions for gentailers.

Qu. 37 What are the biggest risks of implementing this hybrid combination of non-discriminatory pricing and pre-approval of contracts?

We do not believe it would be effective at all. See above.

Qu. 38 What are the pros and cons of this hybrid option?

PROs

- Quick and easy lipstick for the pig

CONs

- Will not address price discrimination.
- More financially vulnerable whanau will have to choose between heating and lighting their homes and feeding their children
- The Authority fails to achieve its strategic ambitions as consumers are forgotten, competition is squashed, innovation dies, trust and confidence continues to plummet, and generators continue to produce greater emissions than necessary.
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- Will not introduce Trust nor Confidence
- Does not address the dominance of the Hedging market by gentailers.

Qu. 39 Do you consider that this hybrid option would address the problem identified?

No. See above.

Qu. 40 **Is inefficient price discrimination best addressed through an amendment to the Electricity Industry Participation Code 2010 or through structural options that would involve other parts of government?**

We need action now. A roadmap that introduces improvements as quickly and as thoroughly as possible needs to be developed. It is likely that elements of both will be required.

Qu. 41 **Which structural options do you think should be considered further? Please explain your reasoning.**

We don't think that structural change will address the underlying issues driving Price Discrimination.

Qu. 42 **Do you agree with the criteria proposed to assess the options? If not, what additional criteria should be used to evaluate policy options?**

The criteria you outline are a good start but fall short of what is required based on public policy and your strategic ambitions outlined earlier in the paper. Missing are.

- Access for vulnerable whanau
- Nurturing and promoting competition in Generation and Retail
- Encouraging low cost and low emission generation
- Promoting certainty of supply