4 July 2022

Electricity Authority
PO Box 10041
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Via email to: WholesaleConsultation@ea.govt.nz

Dear Sir/Madam

Financial Transmission Rights (FTR) Market Review

EMS is the FTR Manager and has responded to the consultation paper on the FTR Market Review from its unique position in terms of insight and operation of the market. Some questions we have left unanswered as these are for the market participants to comment on.

FTR is one of a number of trading products employed by the industry participants and in our view is a key risk management tool that delivers net benefits to consumers. The review portrays the market in a somewhat negative light, questioning the use of LCE and the trading of FTRs by speculators.

We have concerns that some of the Authority's observations and statements are not supported fully by empirical evidence. There are many factors that impact the outcomes of the market and some of the observations could be due to various root causes outside of the FTR market.

On the topic of Revenue Adequacy, the FTR Manager is due to complete a market review to reassess the scaling factor. We have put this review on hold while the Authority completes its market review.

Please see the table attached for our response to the observations and questions.

Yours faithfully

Richard Rowell
Manager EMS Delivery
Energy Market Services

Response to specific observations and questions

Observation 1: Changes in the make-up of renewable generation will see LPR continue to change over the next 10 years.	We agree with the observations made regarding the potential future impact on LPR from new generation and changes to the market from RTP and TPM. The level of change to LPR with the introduction of new renewal resources will likely depend on whether the transmission assets are in place or additional investment is made to deliver the generation. The FTR market can assist renewable generation participants if they want to hedge. If there is a price difference/risk between their location and the nearest FTR hub that needs to be managed they can request a new hub closer to their generation. FTRs are a reliable tool for managing LPR, making entry and competition in areas with high LPR viable.
Q1 What is your view on how LPR might evolve over the next decade?	Assumptions on future changes in LPR will depend on congestion and available transmission. The congestion may be set by more conventional generation units. LPR could become less predictable. Under RTP we can expect to see some load shedding, or exceptionally high prices. It is expected that this will mean participants will need to hedge.
Q2 Do you see LPR as a genuine risk to your business? Why/why not?	No comment by the FTR Manager

Observation 2: Retail competition has increased over time, however it is difficult to determine the influence that FTRs have on retail competition.	FTRs are a reliable tool for managing LPR, making entry and competition in areas with high LPR viable. Not having FTRs may be seen as a barrier to retail competition. The consultation paper makes the following statement: *Retail competition data in both the Hawkes Bay and Gisborne suggests there is no obvious improvement in retail competition in the Hawkes Bay relative to Gisborne since the Redclyffe FTR hub was added*. Looking at Fig 9 in the consultation paper, Hawkes Bay retail market share for small and medium retailers, there is a clear trend over the years 2013-2016 which is relatively flat, but this changes to a steeper trend line from 2017-2021. The proposal for the Redclyffe FTR hub would have been announced in advance of its actual introduction, which may explain the change in trendline from 2017. However, it is difficult to conclude if this is related to FTR or not. Having the Redclyffe FTR hub has given the opportunity and supported retail competition, which may not have occurred in its absence.
Q3 What influence has the availability of FTRs had on your decision to compete for consumers?	No comment by the FTR Manager
Q4 What benefits do you see the FTR market providing in terms of consumer outcomes? Why/why not?	A robust and revenue adequate FTR market helps participants manage risk, which provides a benefit to consumers.
Observation 3: There has been no apparent impact on generator competition due to FTRs.	FTRs give the load/demand side price certainty, which is expected to make generators more competitive – this may not only be determined by where they are located but also the price they can offer at the hub.

	The primary focus is the energy market and spot market, if there is congestion then generators have the ability to take advantage of the FTR market and manage that risk. The FTR market provides flexibility for generation to be established anywhere. Not having FTRs, or not having the correct FTR Hubs, may be seen as a barrier to generator competition.
Q5 What influence has the availability of FTRs had on your generation investment decisions?	No comment by the FTR Manager
Q6 Has the FTR market allowed your business to build new generation plant in new geographic areas? Why/why not?	No comment by the FTR Manager

Observation 4: FTRs currently use an average of $5.29 million per month from LCE (~47% of total LCE) to settle.	Under 14.3 the FTR Manager determines the % of LCE to be used for settlement based on the portion of the Grid covered by FTRs. We assume the increase in the % of LCE is in direct correlation to the number of hubs and the location of these hubs. The use of LCE provides certainly of settlement, supports prices and confidence for participants to bid into the market. This market certainty is important to allay any stakeholder concerns that the FTRs would not be firm. Having a relatively firm market ensures market support and FTR prices that reflect the true product risk and not uncertainty over firmness. The consultation paper makes a point of highlighting the increased use of LCE to support the FTR market, which has been higher during the period of higher spot market prices. In our view this is exactly what the FTR market was designed to do, provide a hedge product to manage price risk, which in turn is providing benefit to the consumer. Section 4.22 of the consultation paper notes *"the Authority have observed aggregate FTR funding to have increased over time since the FTR market started in 2013.* ***This suggests a misalignment with the efficiency limb of the Authority's statutory objective.*** *This is largely due to increases in the number of FTR hubs in 2014 (from two hubs to five hubs) and in 2018 (to eight hubs). Auction revenue has increased (due to auctioning additional FTRs) and there has also been an increase in the LCE allocation for FTR rentals due to contributions from additional network sections."* We are unsure why the Authority considers this a misalignment with efficient operation under the statutory objective. There are several factors that contribute such as adding new hubs, increasing release factor, and spot prices increasing year on year. The pressures that are pushing spot prices up also appear to be a contributing factor in each graph and historic piece of data in the consultation.
Q7 Does the current use of LCE to support the settlement of the FTR market deliver the best outcomes for	Section 4.21 of the consultation paper quotes the following reference from the original Authority consultation paper that proposed the establishment of the FTR market: *It was proposed that the revenue to support revenue adequacy would come from any premium above the value of the FTR rental. This was assuming a risk-averse buyer would pay a premium above the full value of the*

consumers? Why/why not?	*FTR rental, which would result in total auction revenue exceeding the quantity of rentals for FTR settlement.* The remainder of this paragraph in the original market proposal has been left out, but it goes on to state: *It is of course uncertain, however, whether this will occur in reality so the extent that auction revenue would support revenue adequacy is also uncertain.* It was always expected and accepted that in addition to the FTR income, the FTR settlement would be supported by a portion of LCE to ensure a better market outcome. If LCE wasn't included and the market was smaller or regularly inadequate then the participants couldn't rely on it for hedging. This would damage the market reputation and likely result in lower FTR values. The market performance in managing LPR risk would then be sub-optimal, with low/no benefit or even potentially detrimental to consumers. Use of LCE to support the FTR market leaves consumers in a "balanced position" by providing participants with a risk management product that contributes effectively in managing their portfolio, thus providing net benefits to consumers.

Observation 5: Some parties may be consistently profiting from FTRs without a clear benefit to consumers.	While the focus of the observation is on profit from the FTR market, participants may not have actually profited when taking their wider market position or portfolio into account. The 'profit' in FTR auction was a hedge to help manage or offset against losses in the spot market, which is why they acquire FTRs. As noted in our response to Q7 above, it was always expected and accepted that in addition to the FTR income, the FTR settlement would be supported by a portion of LCE to ensure a better market outcome. This provides certainty and a level of firmness to the FTR market, with a risk management product that contributes effectively in managing participant portfolios, thus providing net benefits to consumers. Therefore, a robust FTR market, which helps participants manage risk, provides benefit to consumers.
Q8 Why do you think some FTR participants are profiting from FTRs more than others?	There are several factors at play in terms of the FTR pay-out beyond the obvious, e.g. size of FTR holding and prices awarded vs market outcomes. Larger profits may reflect larger holding or differing trading strategies. Some participants may be taking certain positions to reflect their portfolio risk - they may not be concerned with the level of profit but rather managing the price risk. Agile businesses can adapt and leverage FTRs for their business while some of the bigger businesses have previously disclosed that there are high overhead cost in managing their FTR portfolio, as demonstrated by the cost benefit analysis for new hubs. We understand that the overhead costs to participants from a new FTR hub can vary significantly. Some FTR participants have a very low costs incremental costs from a new FTR hub to the market, while we have heard that larger businesses have seen costs increase by $1 mill per annum from an additional hub. Profit from the FTR market needs to also take into account the overhead cost of participation in the market.

Observation 6: The LPR due to losses is highly	Correct, because losses are a function of the grid characteristics. However, constraints cannot be predicted because they are caused by factors such as

correlated with energy prices while LPR due to constraints is not.	weather or outages (planned and unplanned). It is our expectation that this unpredictable nature of the market (risk) that participants are mostly hedging, not the very predictable (calculable) price differences due to losses.
Q9 Is it for the benefit of consumers to use loss rentals, constraint rentals and auction income to support the settlement of the FTR market? Why/why not?	A robust and revenue adequate market, which helps participants manage risk, provides benefit to consumers.

Observation 7: Many parties (particularly direct connect consumers and independent retailers) who are subject to LPR are not using the FTR market.	We understand that at least one participant in the FTR market acts as a broker and trades on behalf of other market participants, which is likely to include smaller retailers or direct consumers. The FTR Manager is aware of participants that have expressed interest in joining the market but are yet to do so.
Q10 Why do you think organisations that are exposed to LPR are not participating in the FTR market (directly or indirectly)?	Many industry participants have indicated an intention to participate in the FTR market. However, it can take a number of years to prepare before joining the market, depending on resources and priorities. It is a complex market, traders need to study it and understand it to manage risk and take positions. Some participants have a team of people that manage risk including FTRs, but equally it seems many don't have the staff to do this.
Q11 What do you think can be done to maximise the efficient use of LCE for the benefit of consumers?	No comment from the FTR Manager.
Q12 Do you consider LPR to be an impediment to effective retail and generation competition? Why/why not?	No comment from the FTR Manager.
Q13 How does the FTR market allow you to manage LPR? What non-FTR market tools do you use to manage LPR?	No comment from the FTR Manager.
Q14 Are changes required to the FTR market for the long-term benefit of consumers? Why/why not?	No comment from the FTR Manager.

Observation 8: FTRs tend to trade somewhat below 'fair value.'	What has been observed is auction prices lower than what we see in the spot market. The key question is, why did the market price differ so much, up to 2 years later? We expect this is of no fault of the FTR market or participant behaviour and is simply the market working as intended, allowing participants to manage the risk of price fluctuations.

Q15 Do you agree with the view that FTRs are currently traded below 'fair value'? If yes, why do they trade below fair value?	Competition through bids determines the FTR price. When participants bid for FTR quantities, say 100MW (a-b), 100MW (c-d) this may overload a constraint in which case bid price comes into play, one that values the FTR the most will be awarded the most. If participants undervalue the FTR then they may miss out on securing the required FTRs. In deciding what to bid participants take into account what they predict as forecast prices but are also likely to be taking into account other factors in terms of their portfolio and the wider market. One factor might also be that the FTR pay-out may be scaled if the market was inadequate. Therefore, FTR price may consistently tend to trade below what the Authority believe is 'fair value'.
Q16 Should FTRs be traded at/closer to 'fair value?'	What would need to be different for FTRs to be closer to "fair value", and how might that happen? It would seem that if fair value matched settlement price then a hedge would not be so important because participants would always know what the market prices would settle at.

Observation 9: Some features of the FTR market appear to be unintended and have no direct link to consumer benefit.	The paper implies that reverse direction FTRs are unintended when in fact they are a feature of FTR markets. This type of trade may take into account other factors: - Transmission going to change - New patterns of congestion A trader trading counterflow FTR allows them to alleviate an alternate path and buy more FTR on the alternate path, e.g. a participant may take a position on counter flow a-b, which assists with the FTR solve/allocation on a different path (c-d) which may be worth a lot more - this behaviour assists with that and doesn't mean it is a bad outcome or an unintended consequence. Having the ability to sell an FTR in a subsequent market provides a benefit to the market.
Q17 Are there other features of the FTR market that appear unintended or to have no clear consumer benefit?	No comment from the FTR Manager.
Q18 Does the feature of the FTR market identified by the Authority negatively impact consumers? How?	No comment from the FTR Manager.

Observation 10: The Financial Markets Authority does not regulate trading conduct in the FTR market.	The Authority has not identified any specific concerns and we have seen no behaviour or outcome that would suggest a need for additional regulation on trading conduct.
Q19 Do you think there is a requirement for enhanced oversight of the FTR market?	We believe the Authority already monitors the market performance and assess market efficiency, including any type of misconduct or potential market manipulation. NZX already perform verification steps before allowing a participant to trade FTRs.

Observation 11: Revenue adequacy settings of the FTR market contribute to the profitability of FTRs.	Adequacy settings effectively determine the volume of FTRs available in each auction. Allowing more FTR would potentially reduce FTR prices but it should be expected that FTR participants would change their bid strategy if FTR volumes change. Increasing FTR volumes also increases FTR auction income, which in turn increases FTR adequacy. What actually impacts the profitability of FTR is the price separation between the hubs – settlement prices. The use of LCE in the NZ market provides market confidence in the firmness of NZ FTRs. In other jurisdictions where revenue adequacy is a regular issue the FTR auction bid price is discounted on the assumption that the pay-out will be scaled. The scaling factor cannot simply be adjusted at will. It requires steady periods of market behaviour in order to generate datasets to empirically justify an increase (or decrease) in scaling factor. It is worth noting that a draft FTR review up to April 2022 indicates the scaling factor only needs to be increased 3% to achieve 1/12 inadequate months. This shows that FTRs are very close to optimum settings.
Q20 What are your views on speculators benefiting from the design of the FTR market?	Speculators are important to markets because they bring liquidity and assume market risk. They also add to auction income and innovate, which is good for the industry as a whole. They will only do this if there is a benefit. Without them there is also the potential for large participants to dominate and control the market, to their advantage. Speculators can buy long, sell short, take profits (Buy in same direction as hedger, buy low and take profit). However, if there is not enough transmission capacity the speculator will potentially take a position on a counterflow FTR, and the market will pay the speculator to take on that risk, which is a benefit to the FTR market. Theoretically, Generators should be happy to pay fair market (or a premium) to be 'price hedged'. Without speculators there would be an increase in capacity available to traditional participants meaning the price may go down below a perceived fair value (FTRs would be awarded lower than current FTRs), but they would still get a price from market resulting in increased profits for the retailer/ generators but also driving down revenue adequacy. As noted in response to Observation 7 above, some trading participants may not actually be speculating and could be trading as a broker, trading in the FTR market on behalf of smaller market participants. Counter to that, traditional generator/retailers may also be taking speculative FTRs (on paths that are away from their assets and customers) and taking profit from them. This will depend on the level of risk each participant wants to take in the market.
Q21 What benefit does speculation provide to the FTR market, and what link does this provide to consumer benefit?	Speculators bring a level of robustness and aid price discovery. They may also be prepared to take on risk that traditional market participants wish to offload. Overall, we believe allowing speculators to trade FTRs drives a better market outcome, ensuring everyone pays a fair market price, even if it may be seen by the Authority as 'below fair value'. Without speculators the market price could be lower. Overall, FTR is one of a suite of products allowing participants to effectively manage risk, which provides benefit to consumers.