

4 July 2022

Submissions
Electricity Authority
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By email: WholesaleConsultation@ea.govt.nz

Re: Issues Paper—Financial Transmission Rights market observations – Ensuring arrangements are fit-for-purpose

This submission is by Nodal Traders Limited on the 'Financial Transmission Rights market observations' issues paper published by the Electricity Authority (Authority).

Regards,

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Director
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Feedback from Nodal Traders Limited on the observations and questions identified within the Issues Paper.

Observation 1: Changes in the make-up of renewable generation will see LPR continue to change over the next 10 years.

Q1 What is your view on how LPR might evolve over the next decade?

Market commentators, and the recent paper released by MDAG, consider that spot prices are likely to increase in volatility as the proportion of renewable electricity on the grid increases. This is due to periods of excess renewable generation and periods of reduced renewable generation due to its intermittent nature. We agree and consider that there is likely to be a similar increase in associated LPR. This may be partly offset by increased transmission investment, and localised responses such as demand response and new storage technologies, such as batteries.

Q2 Do you see LPR as a genuine risk to your business? Why/why not?

We have limited exposure to spot price risk at this time, but this may increase as we evolve our business strategy. We consider any party that faces spot price risk, either by purchasing or selling electricity directly to the CM, or via an intermediary (such as via a retailer, or via peer-to-peer trading, both of which are likely to become increasingly common), faces associated LPR and should actively manage this risk.

Observation 2: Retail competition has increased over time, however it is difficult to determine the influence that FTRs have on retail competition.

We consider that the difficulty in determining benefit would apply to any initiative taken to improve retail competition. For example, improvements to the settlement and prudential security arrangements are likely to have had a significant impact on improving retail competition, but it is difficult to quantify that specific benefit when other factors have been at play.

It is also important to consider the wholesale market benefits of the FTR market.

Q3 What influence has the availability of FTRs had on your decision to compete for consumers?

The management of LPR, and the use of FTRs, would be a requirement before we compete for consumers.

Q4 What benefits do you see the FTR market providing in terms of consumer outcomes? Why/why not?

The primary benefits to consumers are:

- Enables participants to manage LPR, increasing participation and competition within the wholesale and retail markets
- Compared to LCE (from spot market settlement), the FTR market provides a more stable (less volatile) stream of LCE related funds (Non-FTR Rentals + Residual LCE) that is distributed to transmission customers, which in turn, is passed through to consumers. Note that the original goal of LCE distribution was to reduce the linkage to LPR so as not to distort the nodal pricing signal, and that in the past network companies have signalled that a more stable stream of LCE funds is easier to forecast, budget for, and distribute to consumers.
- With improved levels of participation in the FTR market, the average price paid for FTRs should increase above the average pay-out for FTRs. This is what typically occurs for energy hedging (see historical hedge market analysis performed by MDAG). This would increase the volume of funds distributed to consumers, potentially greater than the original LCE on average. This addresses the concern expressed in observation 4.
- Provides forward locational price information that informs decision making by participants.

Observation 3: There has been no apparent impact on generator competition due to FTRs.

We agree with the Authority that there are a range of factors that influence a decision to invest in generation, also when the investor chooses to build the generation, and where it is located. It is important to note that a generator has the opposite risk to a purchaser, a generator is concerned about extended periods of time when spot prices are low at their point of generation. The primary way generators would manage this risk, is to locate their generation in areas where spot prices are expected to be higher, and the Ngawha – Expansion is a classic example of this.

The benefit of FTRs to generators is not so much where they choose to build their plant, but that they choose to build it and when. A key consideration for a generator, is how certain is its income stream. It may improve certainty by periodically forward contracting, either via a CfD or more specifically a virtual PPA. A generator can add value to its forward contract by choosing a hedging location point closer to where the purchaser would benefit. FTRs enable the LPR risk of doing this to be better managed. In this way, the FTR market supports new and timely investment in generation no matter where it is located.

Q5 What influence has the availability of FTRs had on your generation investment decisions?

We have not invested in generation, our view on this is described above.

Q6 Has the FTR market allowed your business to build new generation plant in new geographic areas? Why/why not?

We have not invested in generation, our view on this is described above. To reiterate, the benefits to generators are less about where the generation is located, but that the generation is built and the timing of that.

Observation 4: FTRs currently use an average of \$5.29 million per month from LCE (~47% of total LCE) to settle.

Q7 Does the current use of LCE to support the settlement of the FTR market deliver the best outcomes for consumers? Why/why not?

The best outcome for consumers is when:

- the FTR market provides a product that enables parties to effectively manage LPR, and revenue adequacy is an essential element of that
- the price paid for FTRs matches (or is above) the settlement value over time. In part, this is achieved by providing an FTR with high revenue adequacy, this will be factored into the price participants are willing to pay for the FTRs.

Observation 5: Some parties may be consistently profiting from FTRs without a clear benefit to consumers.

Q8 Why do you think some FTR participants are profiting from FTRs more than others?

We can only comment in detail on our own performance, but we can speculate on the reasons why there are different levels of profitability amongst FTR participants. Some FTR participants:

- will be using FTRs to manage risk in another portfolio, and they might well be losing money on FTRs, but profiting in the other portfolio
- may have made mistakes in their FTR bids and offers
- are more competent than others and invest more time and resources analysing the underlying spot market
- may close out positions early, providing liquidity and releasing FTR capacity into the system.

More generally, we don't see an issue at all with parties profiting from FTRs. All commercial businesses have a goal of making profit. A good point is raised regarding consistent profits, but the issue isn't with the activity that is occurring, it's that there is not enough of it. By, this we mean, there needs to be more parties participating in the FTR market, increasing the demand for FTRs, and moving the acquisition cost to or above settlement values. When this occurs, the scope for profiting from trading FTRs declines or is eliminated.

Observation 6: The LPR due to losses is highly correlated with energy prices while LPR due to constraints is not.

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?

This question is similar to question 7. So, the same applies here, using the three sources of funds including loss rentals increases the coverage of the FTR, increases the revenue adequacy of the FTR,

and thereby will increase the usefulness of the FTR to manage LPR and the amount paid for the FTRs, which gets distributed back to consumers.

The discussion within the Issues Paper does raise a concern regarding the fact that loss rentals are not as volatile as constraint rentals, and in this sense, covering loss rentals in an FTR is in part an energy hedge rather than solely a LPR hedge. This should not be viewed as a negative but be fully embraced as a positive. The fact that in part people are able to hedge energy risk via an FTR is a great thing, given that energy hedge risk in volume is greater than LPR risk, and enabling both risks to be managed is very positive for competition and hence is in the long-term interest of consumers. This hedging value is reflected in the price paid for the FTRs and is distributed to consumers. Additionally, if loss rentals were to be separated out of an FTR, this would dramatically complicate the FTR product and make it harder to understand, thereby introducing an unnecessary barrier to FTR market participation.

Observation 7: Many parties (particularly direct connect consumers and independent retailers) who are subject to LPR are not using the FTR market.

Q10 Why do you think organisations that are exposed to LPR are not participating in the FTR market (directly or indirectly)?

Several observations before answering this question:

- some of these parties may be using FTRs to manage LPR, but they are doing so via a broker, so are not visible to the Authority
- participants can benefit from FTRs while not directly trading them. This may be via improved price offers at nodes they would prefer to hedge at, such offers being provided by parties that are trading FTRs to manage LPR.

Based on the Authority's observations and our own additional observations, we believe the reasons are as follows:

- There is the misunderstanding that FTRs are complex, they are not, they are simple. At its most basic, an FTR is just the difference in price between two points (hubs) on the grid. Yes, there are complications, revenue adequacy, grid configurations, etc. But participants do not need to understand all the details of a market to participate. We have a gross pool wholesale market, what proportion of those who participate in the spot market understand every detail of its operation? We imagine, very few. So, the key thing is to dispel the idea that the market is difficult to participate in. This could be done through education and the FTR manager being incentivised to promote the use of the FTR market.
- A key element, not covered in the Issues Paper, is how FTR products integrate with other forms of hedging. This in our view, is the area if improved would significantly increase FTR market participation. The positives of FTR market product design are that FTRs settle monthly, alongside the spot market, and FTR positions can be used to offset prudential requirements. But, compared to a standard CfD, where a party can contract once and purchase coverage for multiple years, FTRs are much more time intensive to purchase. You can't buy a strip of FTRs, you must buy them individually per month. This means you need to enter repeat auctions to build up an FTR portfolio. This could be improved by changing the FTR products on offer, so that they better match other forms of forward contracting.
- Another key element, not covered in the Issues Paper, is the benefit of forward price curve transparency. The Authority has supported the development of NZ electricity derivatives on the ASX, most recently through funding market making. ASX futures are not a great fit for

managing price risk, they are only at two nodes, limited profile options, with high transaction cost (initial margin and variation margins), cannot be used to offset prudential requirements, and do not settle on the same timeframe as the spot market. But a key benefit of ASX futures, is the provision of a robust forward price curve. Much more could be done, to analyse FTR prices and provide a robust locational forward price curve for the benefit of participants.

Q11 What do you think can be done to maximise the efficient use of LCE for the benefit of consumers?

As discussed previously, using LCE to fund pay-out of FTRs does benefit consumers, this benefit would be increased if:

- the FTR products on offer align better with other forms of forward contracting, improving their application as a LPR management tool, and
- participation in the FTR market increases, resulting in more parties making use of the LPR management benefits, and increasing the demand for FTRs, thereby increasing the average price paid for FTRs to at or above the average price paid out for FTRs.

Q12 Do you consider LPR to be an impediment to effective retail and generation competition? Why/why not?

The benefits of a locational (nodal) spot pricing signal are significant, for both real time management and security of the electricity system, and in the longer-term for signalling new investment. Inherently, nodal pricing creates LPR, which creates risk for both generators and purchasers. However, we do not consider that LPR creates an effective impediment to effective retail and generation competition because:

- there are tools that participants can use to manage that risk
 - use FTRs directly
 - hedge nodes close to source, supported by the seller or buyer trading FTRs
 - facilitate demand response
- to varying degrees, all participants face the same risk in the market.

Q13 How does the FTR market allow you to manage LPR? What non-FTR market tools do you use to manage LPR?

From our perspective, reconfiguration auctions are a way for us to manage LPR associated with our FTR positions. We do not use other tools to manage LPR but have considered trading NZ electricity derivatives on the ASX.

Q14 Are changes required to the FTR market for the long-term benefit of consumers? Why/why not?

Yes, we believe consumers would benefit from changes to the FTR market, primarily increased FTR market participation, improved FTR products and the provision of a locational forward price curve. Please see our answers to question 10. In summary,

- increase FTR Market participation by:
 - dispelling the myth that FTRs are complicated, or that the FTR market is very risky to participate in

- educate and promote the FTR market (we believe the FTR manager is in an excellent position to do so). Demonstrate the benefits, including offsetting of prudential security requirements, same day settlement of the spot market
- consider how FTR products may be better designed to integrate with other forms of forward contracting, such as CfDs and more specifically PPAs
- develop a locational forward price curve based on FTR settlement prices, of tremendous value to short- and medium-term decision making
- remove the embargo on considering other improvements to the FTR market, such as the hubs selected, and the time period over which FTRs are available (great if this was at a minimum extended to the same time period as ASX futures).

Observation 8: FTRs tend to trade somewhat below 'fair value.'

Q15 Do you agree with the view that FTRs are currently traded below 'fair value'? If yes, why do they trade below fair value?

Yes, on average, FTRs have traded below fair value. But it is important to note that FTRs often pay out less than the acquisition cost. There are certain FTRs that more frequently trade for below fair value, and others that frequently trade above fair value. The pay-out on FTRs is highly dependent on a number of factors, including transmission capacity, hydrology, plant availability, gas prices, and the supply and demand for FTRs.

We also note that over the last few years there has been a progressive increase in spot prices, the drivers of which may not have been anticipated by FTR market participants, leading to a period where FTR products have settled on average at a value above acquisition cost. These factors affecting spot prices could change, and we could move into a period of FTRs settling on average below acquisition.

Q16 Should FTRs be traded at/closer to 'fair value?'

The observation that FTRs on average trade for less than fair value indicates that there is room for improvement as described in question 10. On average, FTRs should trade at fair value, potentially above fair value, as is observed with other forms of forward contracting.

Observation 9: Some features of the FTR market appear to be unintended and have no direct link to consumer benefit.

Q17 Are there other features of the FTR market that appear unintended or to have no clear consumer benefit?

This is a leading question, because it infers that the feature described in the issues paper (model buy back of FTRs when FTR capacity is tight) was unintended. That is not the case, in our view it was always expected that this would happen, and on a regular basis, that's why the variation auction is referred to as a reconfiguration auction.

This is also not a feature limited to FTRs that typically sell for low values, expensive FTRs are also bought by the model (no FTR participant has purchased them), when the model is tight on capacity, again, this is normal operation of the reconfiguration auction.

It's also the case, that the decision to buy low value FTRs is not guaranteed to make a profit, many of these FTRs settle for below acquisition cost. When they do, they support revenue adequacy and the level of eventual LCE pay-out to transmission customers. We have also noticed that the price paid

for these low value FTRs has increased, and as with all FTRs, that is the solution, increased participation moving FTR prices to their fair values.

We are not aware of any feature of the FTR market that was either unintended or does not have a clear consumer benefit.

Q18 Does the feature of the FTR market identified by the Authority negatively impact consumers? How?

Our answer to this question is provided in our answer to question 17. The solution to the concern the issues paper raises is increased FTR market participation and education on the operation of the FTR market.

Observation 10: The Financial Markets Authority does not regulate trading conduct in the FTR market.

Q19 Do you think there is a requirement for enhanced oversight of the FTR market?

The Issues paper does not cover this topic in detail, nor does it describe the reasons why enhanced oversight might be necessary. There appears to be an inconsistency in that the Authority observes that the FMA does not regulate trading conduct in the FTR market, but that the Financial Markets Conduct regime is applicable. We also note the Authority does have some conduct related provisions that apply to the FTR market, namely the Undesirable Trading Situation provisions that apply to the Wholesale market, which includes the FTR market. We would support the Authority doing more work in this area and suggest this is done in coordination with the FMA.

Observation 11: Revenue adequacy settings of the FTR market contribute to the profitability of FTRs.

Q20 What are your views on speculators benefiting from the design of the FTR market?

Firstly, an observation, from our analysis it is the case that the majority (if not all) of FTR participants are undertaking speculative activity. There are also blurred lines between what activity is speculative and what activity is not. For example, FTRs are often not an exact match to portfolio LPR, so a degree of creative licence is required in their application to this task. Often, this involves a degree of speculation.

In short, speculation is not a problem, it's a feature of open markets. There are speculators and hedge funds openly purchasing NZUs with no intention of using them to offset carbon emissions. There are speculators taking positions in ASX NZ electricity derivatives that the Authority is supporting via market making. If there were higher levels of activity in the FTR market, driven by either or both hedging and speculative activity, this would move FTR prices towards fair value.

Q21 What benefit does speculation provide to the FTR market, and what link does this provide to consumer benefit?

This has been covered in answers to previous questions, but to briefly summarise:

- speculative activity increases demand for FTRs and thereby moves settlement prices closer to fair value. This:
 - improves the robustness of a location forward price, of benefit to participants, improving decision making, with flow on efficiency benefits to consumers
 - returns more funds to consumers via the distribution of the final LCE (Non-FTR Rentals + Residual LCE) to transmission customers and then passed on to consumers

- non speculators, can still buy all the FTRs they require for LPR management, they just have to be prepared to pay a fair value for them.
- Without speculators, the demand for FTRs would drop, the price paid for FTRs would drop, and the final LCE distributed to transmission customers and passed on to consumers would drop.
- If FTR Market participation increases, then the scope for speculation will reduce, and naturally decline of its own accord.