

4 July 2022

Nova Energy Limited
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Submissions
Electricity Authority
PO Box 10041
Wellington 6143

By email: wholesaleconsultation@ea.govt.nz

Re: Financial Transmission Rights market review

Nova Energy (Nova) agrees that a review of the FTR market is appropriate.

Given that Nova does not currently trade in the FTR market, its views on the issues and questions raised by the Authority will likely be interpreted as reflecting directly on Nova's internal commercial arrangements. Nova therefore requests that the attached submission be treated in-confidence and withheld from public release.

FTRs originated around the world and were introduced to provide financial transmission rights to market participants. Ideally the FTR market would be fully integrated with the costs of delivering of electricity transmission. As such it would be incumbent on the transmission grid owner to maintain its network to meet the demand for FTRs. In turn, the transmission owner secures FTR revenue to apply to increasing transmission capacity for the long term i.e. to keep removing constraints where they arise or are expected to arise. Therein they can be used to solve the problem of who pays and who benefits from increases in transmission capacity.

In contrast, under the TPM and the current FTR market, Transpower's revenues bear no relationship to the existence or otherwise of transmission constraints or locational pricing risk (LPR). The FTR market as designed helps mitigate locational price volatility but offers no long-term security over access to transmission capacity for generation or load, i.e. there is no capacity 'right' as such. Currently FTR payments are also dominated by the financial costs of lines losses rather than constraints.

Going forward, if NZ is to increase its electricity demand by 50-100%, then building new transmission capacity will become very important. The FTRs could be used as a key instrument to ensure transmission capacity is built where there are actual constraints on expanding generation or meeting demand. Generation developers face a range of technical and financial risks when investing in new projects. Transmission capacity is one risk that developers should be able to mitigate against, but FTRs with a three year horizon cannot provide that. Generation projects need transmission access rights with time frames of ten years and longer.

The slow development of the FTR market reflects the lack of transparency on the financial benefits that have been accruing to parties participating in the FTR market. Nor has there been sufficient incentive for parties to provide training and support for market participants considering entering the FTR market. This is likely due to the small number of generators and retailers that participate in the market for hedging purposes, and the complexity of the FTR market. Parties with the requisite skills are more likely to trade on their own account rather than provide education and support to market participants.

In effect, the FTR market has been more akin to an 'insiders club' than an open market. That needs to change.

It is Nova's view that despite the concerns raised by the Authority, the FTR market should be retained, albeit with changes. Simply, the FTR market needs better design, greater promotion, and increased support for prospective market participants.

Nova's further responses to the Authority's questions are appended to this letter.


Yours sincerely



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Q No.	Question	Response
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?	<p>As the number and capacity of new renewable generation grows, we can expect to see more variation in power flows than the historical pattern of south to north or vice versa, depending on hydro inflows. With an expected increase in solar PV generation, LPR is also likely to become more seasonally variable. Increasing intermittent generation share may also drive intraday pricing volatility and exacerbate LPR. With retail prices largely fixed through the year, retailers are likely to want to hedge against divergences from expected patterns of LPR.</p>
Q2	Do you see LPR as a genuine risk to your business? Why/why not?	<p>LPR risk has become more significant to Nova with its expansion of generation capacity in Taranaki and increased market share. The lack of an FTR node at Stratford has been a factor in Nova not participating in FTRs to this point.</p> <p>The closure of the Southdown and Otahuhu B power stations in 2015 increased the location factor differences between Taranaki and Auckland from that time, which has made the need for location factor risk management more important to Nova.</p> <p>The offset to Nova of the LPR has been the natural hedge of increased electricity prices when the price spread between SFD and OTA is highest, i.e. during periods of low hydro inflows. LPR has therefore not been a risk to the business as such, but it does detract from the retail margins that should be realised at times, increased earnings volatility, and the ability to compete effectively in some regions.</p>
Observation 2	Retail competition has increased over time, however it is difficult to determine the influence that FTRs have on retail competition.	
Q3	What influence has the availability of FTRs had on your decision to compete for consumers?	

Q No.	Question	Response
Q4	What benefits do you see the FTR market providing in terms of consumer outcomes? Why/why not?	<p>The mix of available FTR nodes and complexity of the 'point to point' FTR network has also been a factor in Nova not adopting FTRs as a high priority, in particular the lack of nodes in Taranaki and Bay of Plenty. That has diluted the potential benefits of FTRs for Nova, with generation in Taranaki and a large retail market share in Eastern Bay of Plenty.</p> <p>Financial returns from the FTR market can reduce retail margin volatility, and therefore enable the retailer to work with lower risk premiums associated with location. By using FTRs to reduce margin volatility, retailers can potentially operate with lower capital, or grow market share with the same capital. As such, increased competition leads to improved consumer outcomes, even if the evidence is not immediately apparent in the Authority's analysis of regional competition.</p> <p>It is possible that the benefit to consumers of increased competition facilitated by the availability of FTRs exceeds the net cost of providing FTRs, but Nova does not have evidence to reach any firm conclusions on that.</p>
Observation 3	There has been no apparent impact on generator competition due to FTRs.	
Q5	What influence has the availability of FTRs had on your generation investment decisions?	<p>As recognised in the Consultation paper, the location of generation projects is dictated by factors that have a much more significant impact on generator profitability than the availability of FTRs. For example, the expected locational pricing benefits of locating gas-fired peaker closer to the market, e.g. Auckland is largely offset by increased gas transmission costs. Location of renewable generation projects are generally driven by the availability of suitable land and the probability of gaining resource consents.</p> <p>That said, the presence of a FTR node reasonably close from a LPR perspective would improve the value of a proposed site for new generation, and could be a tie breaker where other factors are closely balanced.</p> <p>Generation investments are of a long term nature (15-20 years or more) and as such the short term nature of FTR market (much like the ASX futures market) means that market does not play a significant role in investment decisions which are often made two years or more before commissioning. The FTR time frames are much more aligned with the shorter term contracting timeframes in the retail market.</p>

Q No.	Question	Response
Q6	Has the FTR market allowed your business to build new generation plant in new geographic areas? Why/why not?	<p>Of more value to generation would be transmission access rights, or FTRs specific to the part of the grid supporting a generator that has a term of ten years or more. This would help offset the risk of new generation being built adjacent to the original project that potentially creates constraints and price impacts for the original project.</p> <p>No. Nova's investment in sites for solar PV have been determined by the solar values, economic access to suitable transmission lines or substations, and suitable land of sufficient scale to accommodate large developments.</p>
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?	<p>Nova's view is that the current abnormal profits made on FTR's is a function of the speed at which electricity prices moved to their current levels and the extent to which these prices have been sustained, i.e. it does not believe that the amount of LCE currently supporting the FTR market will necessarily continue over the long run. That said, as per Q.8 below there are also reasons why the level of LCE required to support FTRs may be greater than desirable.</p> <p>Nevertheless, it is appropriate for LCE to underwrite FTRs, so long as the FTR market is operating with the appropriate parameters.</p>
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?	<p>If the major gentailers limit their FTR exposures to a limited proportion of their physical exposure, it appears likely that the FTR volumes made available exceed the sum of the exposure caps employed by the major gentailers. That implies that there will be an overhang of FTR volume available in the auction process, and as such there is limited competition to secure FTRs. The net result is that auction prices may not be reflecting their true market value.</p> <p>All participants in the FTR market benefit financially from an over-supply of FTRs; for so long as the over-supply is underwritten by the LCE. Parties that can take a speculative position unconstrained by the relationship to their spot market exposure can capitalise on the over-supply more effectively than parties using FTRs to hedge market risk only.</p>

Q No.	Question	Response
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?	<p>It is not surprising that LPR is not highly correlated with line constraints as constraints are only expected to occur periodically. The current set of FTR nodes includes nodes where there is limited or no directional change in power-flows and few constraints are expected, e.g. WKM-OTA, WKM-RDF, BEN-ISL-KIK. Given the value of transmission losses is closely related to energy prices, the high correlation is expected.</p> <p>As such, the auction clearing price for FTRs should reflect expected spot market prices and lines losses, plus a probability weighted expectation of constraints (which is likely to be minimal for many of the existing FTRs).</p> <p>The fact that auction income has not matched FTR distributions reflect the overhang of supply (as discussed in Q.8), and the fact that electricity spot prices have exceeded expected prices for the last three years or so. (They have provided the added benefit of being price hedge for FTR holders.)</p> <p>It is appropriate to use LCE to underwrite FTRs as the availability of FTRs does help retailers manage LPR.</p>
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)?	<p>Dealing with any form of financial derivative creates a risk for managers and directors of a business that can extend beyond normal operating risks. The complexity of the FTR market, including the potential exposure associated with 'obligations', creates a barrier to be overcome. While these things can be managed, they do require developing internal controls and clear evidence of the benefits of participating in the market.</p> <p>Until the Authority produced its consultation paper the financial benefits of participating have not been particularly transparent to parties not participating in the market, and even less so to key decision makers (Directors, CEO, CFO).</p>

Q No.	Question	Response
Q11	What do you think can be done to maximise the efficient use of LCE for the benefit of consumers?	<p>As well as the lack of transparency, there has been a lack of support for parties considering entry to the market. From Nova's perspective, the support has consisted of 'These are the forms that you need to complete, for the FTR Manager and Clearing Manager'. If the FTR manager had a financial interest in promoting the FTRs it would be expected they would at least provide references to parties that could assist with implementation, and perhaps offer to come into businesses to make presentations on how FTRs could be used, internal controls, the benefits, and managing risks etc.</p> <p>The number and location of FTRs has also not been overly helpful: the split between ISL & KIK from BEN seems superfluous, as is the inclusion of WKM given the transmission capacity between that and OTA and power-flows are always northward.</p> <p>SFD should be included because the LPR is highly dependent on power-flows that are dictated by hydro generation levels. Some of the existing nodes have added complexity for very marginal benefit. It is difficult to justify entering the FTR market in the expectation that SFD may be added to the available nodes.</p> <p>Simplify the structure to a hub & spoke model, i.e. BEN & OTA as SI and NI hubs (OTA rather than HAY because OTA is used for ASX trading). The rest of the FTRs should pair with those nodes in each island respectively. That would reduce the scope for speculative trading.</p> <p>It would be even more valuable if the prudential security required for ASX futures contracts could be held and offset by the Clearing Manager. That would then enable retailers to manage their exposures much more cost effectively and the BEN-OTA FTRs could be directly traded against net futures exposures at those nodes.</p> <p>Add SFD in Taranaki (and possibly TRK or similar in the Bay Plenty). If the hub & spoke model is adopted then ISL and WKM could be retained, but otherwise should be removed from the list of FTR nodes on offer.</p> <p>Reduce the volume of FTRs to be released. This would ensure the FTRs trade at a price closer to their true value.</p>
Q12	Do you consider LPR to be an impediment to effective retail and generation competition? Why/why not?	Yes.

Q No.	Question	Response
		<p>Risk must be priced into margins if a retailer wishes to maintain its business over the long term. This is most apparent when parties bid for large industrial contracts, where the margins can be tight and LPR can have a significant impact on realised margins.</p> <p>When the thermal generators in Taranaki are required to run to back up low hydro conditions or peak load, the location factor at SFD is reduced because of the power-flows out of the region. Given the high SRMC of the thermal generators, the net effect is that prices across the rest of the market are pushed up to a higher level to support generation in Taranaki. If FTRs were available at SFD, then the LPR created by high Taranaki generation levels could be offset by FTRs. This would reduce the financial impact of SFD spot prices falling below SRMC and therefore make generation in Taranaki more competitive. That would benefit the wider retail market.</p>
Q13	How does the FTR market allow you to manage LPR? What non-FTR market tools do you use to manage LPR?	<p>Nova currently has limited tools available to manage LPR.</p> <p>The primary tool is to maintain hedge plus generation cover in excess of retail volumes and developing a geographically diverse customer base .</p>
Q14	Are changes required to the FTR market for the long-term benefit of consumers? Why/why not?	Yes, as per the comments above.
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, as explained above
Q16	Should FTRs be traded at/closer to 'fair value?'	<p>Yes</p> <p>This could be supported by the FTR Manager taking a more pro-active role in helping facilitate parties entering the FTR market.</p>
Observation 9	Some features of the FTR market appear to be unintended and have no direct link to consumer benefit.	

Q No.	Question	Response
Q17	Are there other features of the FTR market that appear unintended or to have no clear consumer benefit?	<p>The complexity of offering FTRs for every available nodal pair is excessive and has minimal practical value other than offering opportunities for speculation.</p> <p>The selection of nodes is not optimal, as commented above.</p>
Q18	Does the feature of the FTR market identified by the Authority negatively impact consumers? How?	<p>Yes.</p> <p>The increased complexity and availability of nodal pairs that have no direct relationship still require an underwrite by LCE yet have a minimal role in assisting in reducing LPR in a retail portfolio.</p>
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?	That is a possibility, but the nature of the oversight and resources required from parties including participants and the FMA should be carefully considered before any decision is made. It could have a negative impact if the only outcome was to create an additional barrier for parties to trade FTRs.
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?	Nova is not in favour of supporting a market for whom the primary beneficiaries are speculators. As described above, that is a failing of the market design and lack of support for generators and retailers that can benefit from improved LPR management to enter the market. The objective should be to refine the design and operation of the FTR market such that it becomes more competitive and profits for speculators are more limited.
Q21	What benefit does speculation provide to the FTR market, and what link does this provide to consumer benefit?	<p>If the market is adequately designed and managed, then speculators should only be able to profit from occasional mispricing and overall should help market liquidity.</p> <p>Once the returns available to speculators are reduced then some parties with expertise in FTR pricing might it more lucrative to provide advisory and support services to retailers and generators rather than trading on their own account. This would also help reduce retail margins through active competition.</p>

