

FTR Enhancements

Decision paper

24 April 2018

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1 Decision

- 1.1 The Electricity Authority (Authority) is an independent Crown entity responsible for promoting competition in, reliable supply by and the efficient operation of, the electricity industry for the long-term benefit of consumers.¹
- 1.2 The Authority has considered potential developments in the market for Financial Transmission Rights (FTRs). At this time, we have decided that the FTR market can best be enhanced by addressing issues caused by the market's complexity. We intend to do this by:
 - (a) helping participants to better understand the FTR market and how they can benefit from it through education
 - (b) considering whether transparency improvements could support easier and more efficient trading.
- 1.3 The Authority has also recently approved the development of three new FTR hubs at Whakamaru, Kikiwa and Redclyffe. These will be implemented in 2018. They will extend the ability to manage price risk to these locations, with consequent benefits for retail competition in downstream areas.
- 1.4 There were nine other developments that we evaluated. Several of those developments have some merit. In principle, we support participants being able to privately fund FTRs, participation being extended to parties based in Australia, and the development of an FTR derivative. We think these developments should remain a consideration for the future, but we do not think there is a need for significant change in the FTR market right now.
- 1.5 The Authority will identify and progress opportunities for education and transparency improvements, with the support of the FTR manager.

2 Background

- 2.1 The FTR market promotes competition in the industry by giving participants tools to manage locational spot price risk. This gives them confidence to compete for customers in regions remote from their source of supply (physical or contractual). In its current guise, the FTR market appears to be broadly successful in its effect.
- 2.2 On 28 March 2017, the Authority published an issues and options paper titled: 'Financial Transmission Rights development' (issues and options paper), seeking feedback from stakeholders.
- 2.3 We have generally been satisfied with the FTR market's performance and progression. However, over time, stakeholders, the FTR manager, clearing manager, and the Authority have identified developments that could potentially enhance the FTR market's value. The issues and options paper sought feedback on twelve potential developments to help us decide which of them, if any, are worth considering further.
- 2.4 We considered that eight of the potential developments could be appropriately assessed and advanced by our service providers. We categorised these developments as 'group two'. We sought high-level feedback on their merits and priority to help our planning, and

This is the Authority's statutory objective. Refer to section 15 of the *Electricity Industry Act 2010*.

confirm that market-led development processes can fully capture or address the issues at hand. These eight developments were to:

- (a) increase the number of locations where participants can use FTRs to manage price risks
- (b) help participants to better understand the FTR market and how they can benefit from it
- (c) auction FTR contracts more regularly
- introduce FTR contracts that only cover locational price risks that arise during certain critical times of the day and week
- (e) introduce FTR contracts that cover a calendar quarter, on top of the current monthlong contracts
- (f) enable parties to cover-off their locational price risks further in advance
- (g) split FTRs into two tranches: one tranche would provide certainty that the purchaser will receive the full payment due under the contracts; the other would feature cheaper contracts but they would come with a risk that they might not be paid in full all the time
- (h) improve the transparency around the operation of the FTR market and its participants.
- 2.5 We sought detailed comment on four other potential developments pertaining to the demand and supply of FTRs. We categorised these developments as 'group one'. We undertook to assess these developments in more depth than the group two developments, because we thought they could potentially have costs and benefits beyond the FTR market and its participants. We also wanted to consider them together, as they may be complementary or substitute developments. These four developments were to:
 - (a) allow parties that are based in Australia to directly participate in the New Zealand FTR market
 - (b) allow parties to privately fund FTRs and sell them through the existing FTR auctions
 - (c) develop a new financial derivative of an FTR that would be traded on an exchange, and would provide another way to manage locational price risk
 - (d) support developing a platform that parties could use to trade FTRs over the counter, outside of the periodic auctions, so that they could be more easily bought and sold at any time.
- 2.6 At the time of the consultation on the issues and options paper, the FTR manager had initiated a formal process for adding new FTR hubs. Despite it being underway, we included "new hubs" in our list of developments, so we could understand its priority relative to other developments. The FTR manager's process is now complete. The Authority has approved three new hubs at Whakamaru, Kikiwa and Redclyffe, which will be available to trade from June 2018.

3 Why the Authority made this decision

- 3.1 The Authority has made its decision, having considered our statutory objective, and submissions on the issues and options paper. We also took further steps to clarify and better understand the interest in, and issues associated with the various development options.
- 3.2 With many of the twelve developments, there is the potential to add to the FTR market's existing levels of complexity. The 2017 Hedge Market Survey results highlight how significant the perceived complexity of the FTR market currently is as a barrier to actively participating in it.
- 3.3 Submitters clearly supported the addition of new FTR hubs, ahead of all other developments included in the issues and options paper. In recommending a change to the FTR Allocation plan, the FTR manager demonstrated that adding new hubs at Whakamaru, Kikiwa and Redclyffe is likely to contribute to the long-term benefit of consumers. These new hubs can have a clear impact on retail competition in the associated areas. We have subsequently approved the variation.
- 3.4 However, we note that the new hubs will substantially increase the number of FTR products. We think there is a particular risk from pursuing further developments that would compound the FTR market's complexity at this stage. This is because it may put the FTR market further out of reach of participants that might otherwise benefit from it. Our decision to focus on education and transparency reflects this risk.
- 3.5 Ultimately, we do not consider there to be significant barriers involved in allowing for overseas participation, introducing an FTR derivative, allowing parties to privately fund FTRs, or developing a bulletin board. However, submissions outline that these changes, by and large, are not being called for. In our subsequent investigations, we did not identify anyone that suggested such developments are a high priority. We also doubt that these developments would have significant benefits for competition, reliability and efficiency in the near term. We have therefore decided not to pursue these developments right now. However, we do not rule out that they might become a priority in the future, and are open to revisiting them later.

4 Matters the Authority considered in making this decision

4.1 The Authority received submissions from the 11 parties listed in Table 1. All submissions and a summary of submissions prepared by the Authority can be found on the Authority's website at: https://www.ea.govt.nz/development/work-programme/risk-management/hedge-market-development/consultations/#c16389

Table 1: List of submitters

Generator—retailers	Others
Contact Energy Limited (Contact)	OM Financial Limited (OMF)
Genesis Energy Limited (Genesis)	Transpower Limited (Transpower)
Mercury Energy Limited (Mercury)	Major Electricity Users' Group (MEUG)
Meridian Energy Limited (Meridian)	emhTrade
Trustpower Limited (Trustpower)	Smartwin Energy Trading Limited
Nova Energy Limited (Nova)	(Smartwin)

- 4.2 In addition to the submissions we received, we made our decision drawing on:
 - (a) consideration of our statutory objective
 - (b) discussions with stakeholders outside the group of those that responded to the issues and options paper. We want to ensure that the FTR market is not just being tailored to the interests of the existing FTR market users, at the potential exclusion of others. We therefore sought to engage with wider parties whose input may help to inform the market's progress
 - (c) follow-up discussions with the FTR manager and clearing manager on how various developments might work and their likely costs
 - (d) results of the 2017 Hedge Market Survey.
- 4.3 The following sections outline the rationale for our decision which is that:
 - (a) The FTR market is generally working well and has the confidence of existing participants.
 - (b) Education and transparency target complexity in the FTR market which is affecting participation.
 - (c) The Authority has a role to play in education and development but we can generally rely on market-led development.
 - (d) We are not convinced of net-benefits at this time from the group one developments.

Focusing on education and transparency is appropriate

What the Authority proposed

- 4.4 In the issues and options paper, we noted our view that the FTR market has been developing well since its inception in 2013. We referred to several improvements that have been made to the market over time.
- 4.5 However, we thought the FTR market's value could potentially be enhanced by developments targeting five issues:
 - 1. barriers to participation
 - 2. the ability to purchase or re-sell FTRs as and when desired
 - 3. volatility in the daily assessment of an FTR's value
 - 4. the extent to which FTRs can cover locational price risks
 - 5. the ability to mesh FTRs with other commonly used risk management products.

- 4.6 Submitters generally agreed with our view that the FTR market is functioning well.
- 4.7 Most submitters agreed with the issues the Authority identified, though there was no strong suggestion that any of the issues were causing them particular concern. Trustpower specifically stated that they had not experienced the issues we identified, and hence did not consider further development necessary.

- 4.8 EmhTrade, OMF, Smartwin and Transpower expressed strong support for enhancing aspects of the FTR market, but did not specifically identify which, if any, of the five issues they considered are limiting under current arrangements.
- 4.9 Nova stated that the usefulness of FTRs would be enhanced if their volumes, location and terms could be matched against futures contracts, which aligns with our fifth issue. Mercury, Meridian and Contact cautioned against developments that would increase the complexity of the FTR market or the workload required to participate—the first of our identified issues.
- 4.10 Submitters did raise some further issues we hadn't identified. These included a suggested need to have FTR development funded through fees; review the allocation of residual loss and constraint excess rentals; and address a concern that some incumbent retailers have been over-bidding for FTRs. Two submitters also affirmed the importance of promptly adding new hubs.

The Authority's response

- 4.11 The Authority is pleased that submitters are generally satisfied with the FTR market's current operation.
- 4.12 When we first implemented the FTR market we stated:

"The FTR market should significantly enhance competition in the retail and hedge markets, by reducing barriers to generator-retailers competing for retail and hedge customers on a nationwide basis, as opposed to focusing primarily in regions close to where they own generation assets."²

4.13 We also note some positive feedback from the 2017 Hedge Market Survey regarding the FTR market. Specifically, the results suggested that:

"The process for establishing FTR prices was viewed as competitive based on provision of good market information, efforts being made to improve the process, easier access to this market, and better pricing than the ASX."

- 4.14 Overall, we are pleased with the current state of the FTR market, and its impact in supporting retail competition. We emphasise that we considered the development options in the issues and options paper as potential enhancements to a market that is currently working well, rather than being a way to address fundamental concerns.
- 4.15 We note that the FTR market has been evolving, and continues to do so. The FTR manager regularly interacts with the FTR User Group to identify valuable developments, and the FTR manager is required to review the FTR Allocation Plan at least every two years. A revised Allocation plan will take effect from 1 May 2018, which will include three new hubs. It also includes a new process for removing hubs. Under the FTR manager's next review, in response to suggestions from participants, it intends to consider whether lower voltage nodes should be included in any future considerations of new hubs.
- 4.16 Given this market-led development, it is perhaps unsurprising that submitters did not appear to coalesce around any issues of concern. This suggests that:

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See https://www.ea.govt.nz/dmsdocument/11132

See pg 9, Hedge Market Survey UMR Report 2017, https://www.ea.govt.nz/dmsdocument/22267

- (a) The market-led development processes—led by the FTR manager and informed by the FTR User Group—are relatively successful in addressing issues of shared concern.
- (b) The market's current design works for most existing participants, who were the main parties represented in submissions.
- 4.17 Regarding the other specific issues that submitters raised, the Authority notes:
 - (a) The issues and options paper considered several developments that would further align FTRs with futures products, including introducing quarterly or peak FTR products, and extending the horizon. We discuss in paragraphs 4.51-4.56 why we do not prefer these developments. The Authority also recently consulted on options that would allow prudential requirements for FTRs to be offset by margins on futures contracts.
 - (b) The Electricity Industry Act 2010 does not allow the Authority to recover FTR development costs through user fees.
 - (c) Reviewing the allocation of residual loss and constraint excess rentals remains a pending project on the Authority's work programme.
 - (d) We are unclear what constitutes inefficient over-bidding. To the extent it is an issue, it will be captured in our consideration of whether transparency improvements could support easier and more efficient trading, which we discuss further in paragraphs 4.25-4.41.

Education and transparency target the issue of complexity which is affecting participation

What the Authority proposed

- 4.18 The issues and options paper noted complexity as a barrier to participation, because it requires time and cost to overcome. It recognised complexity from two angles:
 - (a) understanding FTRs and the FTR market
 - (b) analysing multiple FTR products, and participating in periodic auctions.
- 4.19 The paper identified two potential developments that could go some way to addressing the barrier that complexity presents:
 - (a) education
 - (b) transparency improvements.

- 4.20 Complexity was a theme in some submissions. For example:
 - (a) Mercury stated that it thought additional products would do little to improve the ability of participants to hedge their basis risk, while substantially increasing the workload and administrative costs for those associated with the market.
 - (b) Contact considered that some of the twelve developments could make participation and compliance increasingly complex and costly.
 - (c) Meridian stated that some of the twelve developments seemed likely to "come at a cost of adding additional complexity to what is already a complex product".

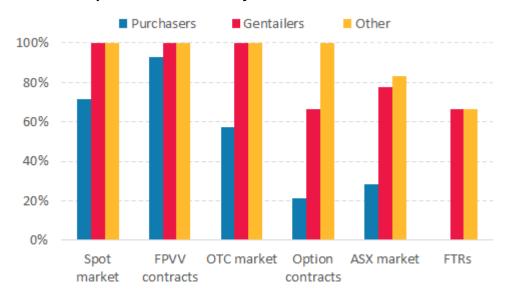
- 4.21 All submitters were broadly supportive of education as a development option. However, submitters varied in what priority they gave it. Reasons for being supportive of further FTR education included that it:
 - (a) could encourage greater participation and improved appreciation of the benefits and risks involved in the FTR market
 - (b) was likely to be low cost.
- 4.22 Submitters were also broadly supportive of increased transparency in the FTR market. Genesis, Meridian, and Smartwin all suggested it should be one of the top priorities. There were various suggestions about what information should be more transparent. Specific suggestions included:
 - (a) publishing auction bids and offers either anonymously or by participant
 - (b) providing more information about how the auction model works and the assumptions it uses
 - (c) publishing positions held by participants trading through an intermediary.
- 4.23 However, not all submitters necessarily supported transparency in all these areas. For example, Contact considered auction bids commercially sensitive, and suggested that publishing them would discourage new participants from the FTR market. Genesis also noted privacy concerns.
- 4.24 Contact noted that it believed the use of intermediaries to build anonymous positions in the FTR market was creating asymmetry of information, but did not think it was widespread enough to warrant a rule change at this stage. However, Contact was concerned that generators were using intermediaries to build up "pivotal positions" and would support the development of safeguards around this behaviour.

The Authority's response

- 4.25 We recognise that some participants find the FTR market complex, and that complexity can create cost, and may act to limit or bar participation.
- 4.26 We also recognise that some participants are better able to deal with complexity than others. The Authority supports competition as a means of driving parties to operate more efficiently. The FTR market may be an example where there is scope for that to happen. However, developing that efficiency doesn't happen overnight, and we think it is important that the FTR market remains accessible to the parties relying on it to manage risk associated with a physical position.
- 4.27 Therefore, in developing the FTR market, we need to consider whether the developments we pursue may start to affect participants' ability to engage.
- 4.28 The 2017 hedge market survey reflected views that the FTR market is already complex and resource intensive. Specifically, where respondents had no intention of trading FTRs, reasons included:
 - (a) a lack of knowledge
 - (b) a lack of internal resources
 - (c) a lack of liquidity

- (d) they considered it a market for speculators
- (e) that they did not require help managing location risk.4
- 4.29 The survey asked participants to indicate how confident they were in their knowledge of several aspects of the electricity market, on a scale of one to ten. As shown in Figure 1, FTRs were the least well-understood aspect of the market.

Figure 1: Proportion of survey respondents confident in their knowledge of aspects of the electricity market⁵



Source: Electricity Authority

4.30 When respondents were asked about their views on the FTR market, some were quoted as saying:

"It is a very complex market to understand both in terms of the value in your products and also the auction process to auction products. And the website is very poor. And there is virtually no education."

"I actually don't know how some manage it. It is quite a complex market. Understanding the reason why FTR's exist is very straight forward. But if you are actually in practise operating an account and registry, it is actually quite hard."

"In terms of FTR's we just can't do it, the level of information and detail that you need in terms of understanding what is going on and looking at prices and modelling things is just impossible."

4.31 In recent conversations, stakeholders have suggested to us that the FTR market is the aspect of hedging that parties generally seek to understand once they have mastered all other aspects. This likely reflects that other hedging instruments will cover more

See Pg 9, Hedge Market Survey UMR Report 2017, https://www.ea.govt.nz/dmsdocument/22267

Respondents were considered confident if they rated their understanding at seven or greater on a scale of one to ten. The category 'gentailers' includes independent generators and retailers, as well as integrated generator-retailers. The category 'other' includes parties such as intermediaries, agents, proprietary traders and market commentators.

- significant portions of price risk, or preclude the need for FTRs. However, it also likely reflects the complexity of the FTR market.
- 4.32 We note that our decision to support the addition of new hubs at Whakamaru, Kikiwa and Redclyffe adds to the market's complexity, as the number of products will increase significantly, from 40 to 112. In that instance, submitters were broadly supportive, and the benefits provided by the extra hubs from increased retail competition are expected to outweigh the additional costs for participants.
- 4.33 However, given these upcoming changes, we would hesitate to pursue further developments right now, if they would potentially add to the FTR market's complexity, without providing a very clear near-term benefit. We think we need to allow time for participants to adjust to the increase in the number of hubs. We also think we should make concerted efforts to maximise benefits under current FTR market arrangements. This will help to ensure the market's development doesn't out-pace stakeholders' capacity to engage, and ability to adapt, to the exclusion of participants that could otherwise benefit.
- 4.34 The 2017 hedge market survey results make it clear that we can enhance the FTR market at this stage by expanding the opportunities for participants to understand and learn about it. We can also enhance it by making it easier to engage with, through increased transparency.
- 4.35 There was broad support from submitters for education.
- 4.36 Respondents to the survey expressed interest in training opportunities, and encouraged the Authority to play a role in helping participants access quality information. Specific comments suggest that any educational opportunities should:
 - (a) relate to specific issues
 - (b) be targeted at multiple levels, given the different levels of existing understanding
 - (c) coincide with decision points within participants' price risk management activity.
- 4.37 Our service provider contract with the FTR manager includes provision for promotion and education. The Authority has a clear role to play in this as well. We therefore intend to work with the FTR manager to identify and pursue educational opportunities that will contribute to the long-term benefit of consumers.
- 4.38 Most submitters also supported increased transparency—though they did not routinely comment on the range of things that could be made more transparent.
- 4.39 The Authority generally prefers transparency unless there is a good reason. Submitters' suggestions for transparency improvements reflect different drivers—eg, that transparency could help them trade more efficiently, or provide assurances that parties aren't exploiting market power. Transparency can also provide an educational benefit.
- 4.40 We generally support transparency that achieves these objectives. However, Transparency can have drawbacks, such as introducing costs for parties that need to provide information, facilitating uncompetitive activity, and reducing incentives to innovate. At this point, we don't think we have enough information to definitely say that any of the suggested increases in transparency are a good idea. The FTR manager and FTR users group can help to identify useful improvements. However, we also think the risks are sufficient to justify the Authority's further involvement.

4.41 Moving forward, we intend to investigate the options for increased transparency further, with the support of the FTR manager and FTR users group, to identify any transparency improvements that are in the long-term benefit of consumers.

The Authority has a role to play in education and transparency but we can generally rely on market-led development

What the Authority proposed

- 4.42 In the issues and options paper, we suggested that the FTR manager and clearing manager, in collaboration with stakeholders, are best placed to assess and progress the eight group two developments in the first instance. Our rationale for this was that these developments:
 - (a) are likely to have benefits primarily for the parties involved in trading FTRs. While there will be flow-on benefits for the wider market in terms of competition, reliability and efficiency, these benefits stem from improvements in the value of FTRs to users. This means that FTR users can make a reasonable assessment of the various developments for their likely benefits and relative priority
 - (b) would have most of their costs arising from implementation, and the FTR manager and clearing manager are best placed to fully assess those
 - (c) are likely to be put into effect through changes to the allocation plan or through market facilitation measures, rather than changing the Code.
- 4.43 We asked for stakeholder feedback on the group two developments to help us understand their priority and aid our planning. We would look to support worthwhile group two developments where and how we could.

- 4.44 Submitters generally agreed that our service providers should take initial responsibility for advancing the group two developments. EmhTrade, Nova and Smartwin considered that the Authority should maintain an active role in directing or facilitating these developments. Specifically, emhTrade suggested that service providers might not prioritise changes in a way that aligns with the Authority's statutory objective.
- 4.45 Nova and Transpower both suggested that the Authority's service providers could also adequately assess, prioritise and progress the development of a bulletin board, which we had categorised as 'group one'.
- 4.46 In terms of specific feedback, the following group two developments were supported by most submitters:
 - (a) adding FTR hubs
 - (b) supporting FTR education
 - (c) improving transparency.
- 4.47 The other group two developments had little support or were given low priority by most submitters, though there was some scattered support for:
 - (a) extending the horizon of FTRs to align with futures contracts
 - (b) auctioning all FTR contracts each month
 - (c) introducing peak FTRs.

The Authority's response

- 4.48 Submitters did not raise any fundamental concerns with having group two developments led by the FTR manager and clearing manager, working in collaboration with stakeholders.
- 4.49 We agree with submitters that the Authority should support the FTR manager and clearing manager with these developments, and ensure that they are adequately assessed against our statutory objective. In this regard, we note the Authority already provides input into, and oversees the market's development by:
 - (a) attending FTR user group meetings, which means we are aware of any developments the group may be considering, or not considering, and can provide input into group conversations
 - (b) requesting that the FTR manager consider specific changes to the FTR Allocation Plan. We must also approve any variation to the FTR Allocation Plan or Prudential Methodology that the FTR manager or clearing manager might request before it is implemented, and allocate any required development funds
 - (c) proactively analysing the relative costs and benefits of initiatives where these may not be fully appreciated by the FTR users group, FTR manager and clearing manager. This underlies our rationale for splitting the twelve potential developments into group one and group two, and seeking stakeholder feedback through the issues and options paper
 - (d) taking an active role in supporting market facilitation measures where and how we can.
- 4.50 We approved the addition of three new hubs based on the process in the FTR Allocation Plan, and a cost benefit assessment undertaken by the FTR manager.
- 4.51 We think the FTR manager and FTR user group will play an important role in education and transparency improvements. However, as discussed in the previous section, the Authority should also play a role in those developments, and will hence lead those initiatives going forward.
- 4.52 The FTR manager has undertaken an informal estimate of the benefit and cost involved in implementing quarterly FTRs, peak FTRs, auctioning all products, extending out the contract horizon, and introducing FTRs with priority pay-outs. The FTR manager has suggested that these developments are likely to be high cost, or could not be implemented in a way that provided the benefits participants would hope to gain.
- 4.53 We consider that the FTR manager has soundly assessed their merit and approximate costs. We do not think any of these options warrant further analysis than what the FTR manager has already performed, particularly in light of the lack of support in submissions. We think these options should remain the responsibility of the FTR manager to assess and prioritise going forward.
- 4.54 The FTR manager is also well placed to assess and prioritise some group one developments going forward—including development of a bulletin board. We considered the group one developments because they were potentially complements or substitutes for each other. We discuss our position on a bulletin board further in paragraphs 4.101-4.109.
- 4.55 Overall, the Authority's position on the group two developments is outlined in Table 2.

Table 2: Summary of position on group two developments

Development	Authority Position	Explanation
New FTR	Approved	Approved this development given:
hubs		likelihood of net benefits against the Authority's statutory objective, as assessed by the FTR manager
		 broad support from submitters on the issues and options paper
		 broad support from submitters on the FTR manager's consultation on a revised FTR Allocation Plan.
Education	Authority to progress	Support this development because it is a low cost development that should lessen the perceived complexity of the FTR market, thereby reducing barriers to entry for new participants.
Transparency	Authority to	Generally support this development but:
improvements	consider this development further	 several suggestions for improvements with different drivers behind them
		risks to each suggestion.
		Needs FTR manager and FTR user group input, but Authority leadership and oversight
Auction all contracts each month	Do not progress now, FTR manager to consider priority	Benefits from this development due to more predictable auction cycle (ie all products available at all auctions), and more regular market-based settlement price.
	going forward	However, do not support right now because:
		 volumes available at auction would be very small for some products, increasing need for active reconfiguration trades to ensure sufficient volume, or otherwise reducing viability of auction process
		adds cost due to increased number of products at auction – both in terms of participant cost, and step change in processing requirements for the FTR auction IT system
		 very limited support in submissions.
Introduce	Do not progress	Do not support right now because:
peak FTRs	now, FTR manager to consider priority going forward	doubles the number of products which increases cost— both in terms of participant cost, and FTR auction IT system costs
		competes for volume of baseload product
		limited activity in peak futures, which suggests limited benefit from aligning products
		very limited support in submissions.
Introduce	Do not progress	Do not support right now because:
quarterly FTRs or	now, FTR manager to	challenging to implement a strip product due to FTR auction approach

quarterly strips	consider priority going forward	 quarterly FTR product would increase number of products (adding cost) and compete for volume of monthly products very limited support in submissions.
Extend FTR horizon to align with futures contracts	Do not progress now, FTR manager to consider priority going forward	Benefits from this development as it would better align FTRs with futures products. However, do not currently support because: Transpower's grid planning horizon is two years, so: early volume available would be very small to account for unknown risk of outages creates greater risk of mismatch between units auctioned and actual grid availability low levels of trading and open interest in long-dated futures contracts, which suggests limited benefit from aligning products very limited support in submissions.
Introduce two tranches, one with no risk of payment shortfall	Do not progress now, FTR manager to consider priority going forward	Do not support because: would add complexity with no clear benefit— noting no instance of payment shortfall to date not apparent that distinction between two tranches would be viable or sustainable no support in submissions.

Our decision to focus on education and transparency reflects that the group one developments are not needed right now

4.56 Table 3 provides a summary of our position on each of the group one developments. We explain this position in detail in subsequent sub-sections.

Table 3: Summary of position on group one developments

Development	Authority Position	Explanation
Overseas participation	Do not progress now, Authority to reassess if new information	 Current arrangements present a low barrier to entry, so unlikely benefits will offset even moderate costs. Should be reconsidered at another time. Should not precede origination or FTR derivative developments given supply constraints.
Origination	Do not progress now, FTR manager to consider priority going forward	 FTR manager suggests ways this could be implemented with current software, while maintaining simultaneous feasibility. Moderate costs to investigate feasibility, to implement, and to operate. But not apparent this development is required yet
FTR derivative	Support in principle, but	 Don't consider our involvement is necessary. Prefer to maintain focus on developing electricity

	no action being taken	•	price cap product. Would support if the market wanted to pursue.
Bulletin board	Do not progress now, FTR manager to consider priority going forward	•	No evidence this is necessary or desired.

4.57 Two alternative developments were suggested by submitters. Our position on these proposals is summarised in Table 4.

Table 4: Summary of position on alternative developments submitters proposed

Development	Authority Position	Explanation	
JETRA	Do not progress now, FTR manager to consider priority going forward	 Idea has conceptual merit, but represents significant departure from status quo, and has risks that we don't think can be justified right now. 	
Short-selling	Do not progress	Lower implementation costs than 'origination', but with lower transparency and oversight.	

Development (a): Direct Australian participation

What the Authority proposed

- 4.58 We proposed extending participation to parties based overseas. We considered that direct participation by these parties—likely to be operating on a proprietary basis—could support a greater volume of secondary trading. We also thought they could play a role in repackaging products for parties that don't directly participate in the FTR market, and have flow-on benefits for the wider hedge market.
- 4.59 We noted that legal issues would need to be assessed for each country where parties were to trade directly. We suggested that extending participation to Australia only would keep these assessments to a manageable level, while capturing most of parties likely to be interested in participating.
- 4.60 We recognised the limited supply of FTRs, and that high levels of proprietary traders could make it more difficult to trade these for hedging purposes. However, we thought overseas based parties might be willing to sell FTRs, and hence supported concurrent developments that would overcome supply constraints.

- 4.61 Six of the eleven submitters (Contact, emhTrade, Mercury, Meridian, OMF, and Smartwin) did not support extending direct participation in the FTR market to parties based in Australia. A further two submitters (Nova, Trustpower) doubted there was any real need for extending participation to Australia. Reasons for not supporting this development included:
 - (a) the need to work through legal issues

- (b) the barrier to entry for these parties being low, because they can trade through intermediaries
- (c) a lack of evidence of benefits, including doubt that it would increase futures trading activity, or that New Zealand based parties would be willing to work with an Australian based party as an intermediary
- (d) concerns that it will make it more difficult for New Zealand based participants to hedge their risk
- (e) concerns it would increase complexity.
- 4.62 MEUG and Transpower expressed support for extending participation to Australia, and Genesis expressed support conditional on concurrent developments to address supply constraints.

Authority response

- 4.63 The Authority does not consider submitters have raised any issues it had not considered in extending participation to parties based in Australia.
- 4.64 The primary costs of this development would be implementation and operational costs for the FTR manager and clearing manager in complying with Australian legal and regulatory requirements. We would expect the operational impact on our service providers and existing participants to be minor, so do not agree with suggestions this development would significantly increase the market's complexity.
- 4.65 Based on the advice received to date, we understand that New Zealand finance laws would apply to parties trading from Australia. However, secondary trading between Australian-based parties could create complications. The clearing manager has also suggested that there are legal processes that Australian-based traders would need to go through with them to protect against money laundering, but these are not new.
- 4.66 The remaining concerns raised by submitters largely pertain to whether this development would provide any material benefits.
- 4.67 We agree with submitters who suggested the barriers to participation by overseas-based parties are not high. In conversation with various stakeholders, we determined that there are parties based overseas that participate through an intermediary, and that find the current arrangements satisfactory.
- 4.68 The FTR manager has also informed us that it has directed potential participants to information about setting up a company in New Zealand, and those parties have not seen the steps required to do that as a significant barrier to their participation.
- 4.69 These examples will not represent the views of all potential FTR participants based overseas. However, we consider that the barrier posed is sufficiently low as to significantly limit the scale of benefit currently available from this development. Further, the fact parties are willing to overcome these barriers suggests the costs of doing so do not exceed the private benefits from participating. It may be that the costs become more of a barrier to participation as competition for those benefits increases. However, given the feedback we've received, we do not expect that to currently be the case.
- 4.70 There are clear synergies between extending direct participation to parties based in Australia, and developments that would ease the supply constraints of FTRs. This is because parties based in Australia would be likely to both:

- drive the need for these developments by increasing demand for the limited supply of FTRs
- (b) increase the effectiveness of these developments, by playing an active role in helping to ease the supply constraints (ie, by 'originating' option FTRs, or an FTRlike derivative).
- 4.71 We think that gaining net benefits from Australian participation would rely on concurrent developments to ease supply constraints. We discuss our position on these developments in subsequent sections.
- 4.72 Overall, we continue to see potential merit in extending direct participation to parties based in Australia. However, we do not consider it to be a priority development at this stage, because the near-term potential for benefits appears limited. However, we consider it could become a beneficial development when the FTR market further matures.
- 4.73 Existing FTR market participants are unlikely to benefit from broader participation. We may not be able to rely on market-led development processes to appropriately assess and prioritise when, or if this development should progress. Therefore, the Authority will maintain oversight of this development. As part of this, we will ask the FTR manager to keep us up-to-date about participation enquiries it receives from overseas based parties.

Development (b): Origination

What the Authority proposed

- 4.74 Currently the supply of FTRs is limited to the amount that can be supported by loss and constraint excess rentals, which help fund them. The issues and options paper suggested that the supply of option FTRs could potentially be increased by allowing private parties to fund them instead—which we called 'originating'.
- 4.75 Allowing parties other than the FTR manager to originate FTRs would, in theory, allow for unconstrained volume. In practice, the additional volume would depend on the extent to which there were willing sellers.
- 4.76 The idea was that originated FTRs would be sold through the existing auction process.

- 4.77 Seven submitters (Contact, emhTrade, Genesis, Mercury, Meridian, OMF, and Smartwin) expressed support in principle for allowing parties other than the FTR manager to originate FTRs. However, most of these submitters questioned whether origination would be practical because of:
 - (a) uncertainty about all the risks and operational implications, and how the idea would work in practice
 - (b) doubts there would be parties willing to originate FTRs.
- 4.78 EmhTrade and Genesis both considered origination a pre-requisite to allowing direct overseas participation.
- 4.79 Nova and Trustpower considered this development unnecessary.
- 4.80 Nova and Transpower suggested alternative developments that would avoid the need for origination. We discuss these starting at paragraph 4.110.

Authority response

- 4.81 The issues and options paper was relatively non-specific about how origination would be implemented, and we appreciate that this is reflected in some of the comments from submitters.
- 4.82 In suggesting origination, we intended this to mean that a participant could hold a negative volume of option FTRs. Therefore, if a specific option FTR had a positive payout at final settlement (ie, final settlement greater than purchase price), a party holding that position would owe the settlement amount rather than earn it. This would likely mean the amount owed would be scaled back in the case of revenue inadequacy.
- 4.83 We have engaged with the FTR manager about the practicality of origination. It sought input from Nexant—the provider of the FTR auction software. Nextant has quoted \$20,000 to investigate the feasibility of configuring the software to allow origination in this 'negative volume' way, while maintaining "simultaneous feasibility". Nexant has also estimated that the costs of developing this concept of origination could be around \$200,000.
- 4.84 The FTR manager suggests a Joint Energy and Financial Transmission Rights Auction as an alternative way to accommodate way to allow more volume of FTRs, which we discuss starting at paragraph 4.110.
- 4.85 We also asked the clearing manager whether it was feasible for it to allow a party to hold a negative volume of option FTRs, and whether it would cause concern from a prudential security perspective. It has advised that its existing methodologies for assessing prudential security would hold, and that the changes necessary to implement this development within its systems would be minor.
- 4.86 We note that submissions were broadly supportive of origination, with no apparent objections beyond these practical questions. We think origination would be an effective way to overcome the inherent constraints in the supply of FTRs. It would allow for unconstrained volume, and allow participants to 'bet against' an FTR price if they thought it were inefficiently high, supporting price efficiency.
- 4.87 However, the supply of FTRs can increase if participants trade obligation FTRs in the opposite direction. An FTR derivative would also reduce the benefits of this development.
- 4.88 In summary, we support origination in principle. However, we are not convinced it is of sufficient priority to pursue a development with uncertain feasibility. As a sole development, we do not think there are any reasons why market-led development processes cannot appropriately assess if origination might become a priority. Therefore, moving forward, we will look to the FTR manager and FTR user group to prioritise this development.

Development (c): FTR-like derivative

What the Authority proposed

4.89 The issues and options paper suggested another way to overcome the supply constraints for FTRs could be to introduce a new derivative product for managing

Simultaneous feasibility means that the auction process identifies an optimal solution across all FTRs, in which all FTRs can be settled with the available funding. This assumes the FTR manager's assumptions about supply do not prove incorrect in real-time, which can cause settlement payments to be scaled back.

- locational price risk. Buyers and sellers would fund settlement of this product themselves, and trade between each other on an exchange or over-the-counter.
- 4.90 The issues and options paper noted several potential ways to design and implement an FTR-like derivative. It identified potential benefits in terms of:
 - (a) more open access to trading the product
 - (b) introducing a new reference price, which could improve the efficiency of the daily settlement price for FTRs
 - (c) allow for arbitrage with FTRs, and with ASX futures, which could increase liquidity and price efficiency in all products.
- 4.91 It noted the key challenge would be in attracting buyers and sellers to create liquidity across two markets for managing locational price risk.

Submitters' views

- 4.92 Three submitters expressed support for an FTR-like derivative, suggesting it was the lowest cost and lowest risk way of addressing the issues we identified in the issues and options paper. EmhTrade and OMF saw it as an alternative to the other group one developments, while Genesis considered it complementary.
- 4.93 Five submitters (Contact, Mercury, Meridian, Smartwin, Transpower) didn't support developing an FTR-like derivative product. Their reasons were that:
 - (a) they doubted an FTR-like derivative would attract enough buyers and sellers
 - (b) a derivative product would add to an already large number of exchange-traded energy derivatives
 - (c) it would add an extra layer of complexity to the market.

Authority response

- 4.94 The Authority considers submitters to have identified the primary issues at play with the development of an FTR-like derivative. There are likely to be some benefits. However, it would rely on buyers and sellers to make the product successful, and there are challenges to realising that.
- 4.95 We note there are no barriers to this development occurring at present—the market itself could drive development of an FTR-like derivative, if it saw sufficient benefit in it.
- 4.96 We have facilitated the development of other energy derivatives. We maintain an interest in developing trading of the derivatives already available on the Australian Securities Exchange (ASX). We are also currently focussed on facilitating the development of an electricity price cap derivative on the ASX.
- 4.97 We have been actively involved in those developments for two key reasons:
 - (a) We identified significant benefits from the price discovery and transparency provided by trading in electricity baseload and price cap derivatives. That transparency has characteristics of a 'public good', and tends to be under-provided by the market if left to its own devices.
 - (b) While vertical integration has benefits for consumers, it also reduces the incentives on participants to offset risk with others. This can result in inefficient decision making and investments, and create barriers to entry. The market-making

arrangements for baseload derivatives on the ASX help to overcome these externalities.

- 4.98 We do not consider an FTR-like derivative to have the same benefits arising from price discovery and transparency, because that is already largely provided by the FTR market. Further, because FTRs do not rely on interested sellers, vertical integration does not pose the same constraints on liquidity for managing locational price risk, as exists for managing electricity price risk more generally.
- 4.99 Therefore, we do not consider there to be the same need for the Authority to facilitate the development of an FTR-like derivative, as for other derivatives. Further, we would prefer to maintain the current focus on facilitating the development of electricity price cap products—for which we see significant benefit—rather than divert attention to an FTR-like derivative.
- 4.100 That being said, we would support development of an FTR-like derivative in future, if the market wanted to pursue it, and could find a platform interested in listing one. We consider the FTR users group can make the decision to pursue an FTR-like derivative in the first instance, and attract the interest of an appropriate platform provider.

Development (d): Bulletin Board

What the Authority proposed

- 4.101 The issues and options paper identified the potential for the Authority to support the development of a bulletin board. A bulletin board would provide a platform that could make it easier to buy and sell FTRs outside of regular auctions through secondary trading.
- 4.102 We thought a bulletin board could have benefits if it increased levels of secondary trading of FTRs, which:
 - (a) helps to ensure participants maintain an efficient FTR position
 - (b) makes it easier for people to access FTRs between auctions, and understand changes in price that might occur.
- 4.103 We suggested a bulletin board may complement developments to extend participation to parties based overseas, who may have a greater propensity to on-sell FTRs they acquire.

- 4.104 Most submitters either didn't support the development of a bulletin board, or thought it was a low priority. Reasons for the lack of the support included:
 - (a) high set up costs and limited benefits
 - (b) existing services provided by brokers being sufficient
 - (c) low desire for secondary trades, and a preference for using reconfiguration auctions
 - (d) a preference for other developments that would achieve a similar effect
- 4.105 Mercury thought a bulletin board would provide more transparency and further understanding of the market, while MEUG supported the development of a privately-owned bulletin board that was user pays.

Authority's response

- 4.106 As with an FTR derivative, we note there are no existing barriers to the development of a bulletin board, which the market could pursue if it saw sufficient benefit.
- 4.107 The FTR manager has estimated the costs of it developing a bulletin board to be relatively high—although we note another party could potentially provide one at lower cost. Given the low level of support in submissions, and the points raised, it seems unlikely there would be benefits greater than those costs.
- 4.108 Further, as we do not propose to extend participation to parties based overseas, there is no complementary effect with that development.
- 4.109 We consider that the FTR manager, in collaboration with the FTR user group can appropriately assess and prioritise any future development of a bulletin board.

Alternative proposals

4.110 Submitters raised two alternative developments that could achieve similar objectives to the group one developments.

JETRA

- 4.111 Transpower suggested the Authority consider a joint energy and transmission rights auction (JETRA). Under JETRA:
 - (a) Participants would trade contracts-for-differences at FTR hubs, through FTR auctions. Buying and selling contracts-for-differences at two FTR hubs essentially provides funding for an FTR between the hubs, increasing supply.
 - (b) An energy price would be established at each hub, compared with the current FTR market, which only discovers price relativities between hubs.
- 4.112 Transpower suggested that JETRA would have benefits because, while maintaining simultaneous feasibility, it would
 - (a) increase supply within the existing auction system
 - (b) provide new financial products that assist participants to hedge.

Authority's response

- 4.113 The Authority spent time engaging with the FTR manager to better understand what JETRA is, and what it could mean for the long-term benefit of consumers.
- 4.114 We consider the idea has some merit. It would overcome the inherent constraints in the supply of FTRs, and may have some appeal to parties that would otherwise trade contracts-for-differences over-the-counter.
- 4.115 However, JETRA would mean a significant change to how the FTR market currently works. We think the FTR market is generally functioning quite well. A large-scale change may risk undermining what has been achieved in the FTR and other hedge markets to date. In particular, JETRA may create confusion, and cannibalise some existing activity in the over-the-counter and ASX markets.
- 4.116 We've been considering developments to the FTR market that could potentially enhance the contribution that it makes to retail competition. At this stage of the FTR market's maturity, we think JETRA carries too much uncertainty and risk in its execution and ongoing use to be merely considered an enhancement.

4.117 Transpower's suggestion was predicated on their view that origination would not be a feasible development. However, in subsequent conversations we understand that a 'negative volume' type approach to origination may be feasible. We think origination would be a less disruptive way to increase FTR supply, and would hence preference that development in the first instance.

Short-selling of borrowed FTRs

- 4.118 Nova preferred arrangements that would allow parties to 'borrow' FTRs from an existing holder, and sell them to a third party through a secondary market.
- 4.119 Nova suggested that:
 - (a) the secondary trade could still be cleared by the clearing manager
 - (b) short-selling would avoid the need for origination or developing an FTR-like derivative
 - (c) the Authority could facilitate this development by helping establish standardised legal documentation for trades.

Authority's response

- 4.120 The Authority sees some merit in this idea, as it would functionally achieve a similar thing to origination, while avoiding much of the implementation cost.
- 4.121 However, we note that short-selling comes with high risk. The lender of an FTR would also be exposed to some risk under this development. We would prefer origination because the short-selling activity would be more transparent, and ensure greater oversight. However, as we discussed in paragraphs 4.74-4.88, we do not consider origination to be a priority right now either.