Hedge Market Enhancements

Enduring market making approach

Decision Paper

27 October 2020

Executive summary

Trading ASX contracts produces the most useful and widely used forward price curve – the current price at which electricity can be bought and sold for future time periods. The futures market also provides an avenue for wholesale market participants to manage their wholesale market price risk. The presence of market making services contributes to the production of the forward price curve and the management of price risk.

In mid-2019 the Authority reinstated its hedge market enhancement project in response to recent poor market making performance on the ASX and correspondingly wide bid-ask spreads for key ASX contracts. There was high stakeholder interest in reforming the current market making arrangements. The Authority wished to ensure that consumers would continue to benefit from the forward price curve and the continued availability of risk management contracts to market partcipants.

Since that time the Authority has had several rounds of formal engagement with stakeholders, including formal consultation processes, bi-lateral meetings, and meetings with groups of stakeholders. There have also been numerous developments in the market that the Authority and stakeholders have had to respond to. One of these was the urgent Code amendment made to support the forecast risks of disruption in the futures market in early 2020, including maintenance of the inter-island High Voltage Direct Current (HVDC) transmission line and gas supply outages. It was made in order to increase confidence in the market, particularly among non-market maker participants, that risk management tools would be available at efficient prices during the known disruptions.

The existing arrangements have performed well throughout 2020 while the urgent Code amendment has been in place. Service provision at existing obligations (volume and spread) has been relatively stable throughout a series of significant price shocks, and the arrangements were flexible to the challenges posed by the Covid-19 lockdown.

In August 2020 the Authority decided to pursue an enduring market making approach that secures the benefits of the current arrangements while enhancing efficiency, improving trust and confidence in the market, and facilitating a service-oriented approach. The enduring market making approach:

- transitions, over a period of years, to an incentivised market making arrangement where market making services are performed by providers compensated on commercial terms by all generators and purchasers (including the existing market makers); and
- ensures the integrity of market making services is maintained in the transition period through a combination of mandated market makers and commercial providers.

The transition period will likely take several years, and it is also possible that the Authority decides it is appropriate physical participants provide market making services indefinitely.

This paper describes the Authority's decision in full – noting that it is a high-level decision only, and that the detailed design will be developed as part of the implementation process. The paper also sets out an implementation pathway and the priorities with which the Authority is implementing the different aspects of its decision. Throughout the implementation process stakeholders will be invited to engage with the Authority and help shape its decision-making. This paper also responds to some of the feedback the Authority has received following stakeholder engagement.

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1 The Authority has decided to enhance the current market making arrangements by introducing commercial providers

1.1 In August 2020 the Authority decided to pursue an enduring market making approach that secures the benefits of the current arrangements while enhancing efficiency, improving trust and confidence in the market, and facilitating a service-oriented approach. The enduring market making approach:

(a) transitions, over a period of years, to an incentivised market making arrangement where market making services are performed by providers compensated on commercial terms; and

(b) ensures the integrity of market making services is maintained in the transition period through a combination of mandated market makers and commercial providers.

1.2 The Authority published an initial summary of its decision in August 2020.[1] This Decision Paper:

(a) provides more detail of the Authority's decision;

(b) responds to stakeholder feedback on the Authority's consultation paper earlier in 2020; and

(c) sets out an implementation pathway.

History and background to this decision

1.3 Trading ASX contracts produces the most useful and widely used forward price curve – the current price at which electricity can be bought and sold at different periods in future. The forward price curve can be regarded as a public good, it is both non-excludable and non-rivalrous. It is non-rivalrous because its use by one party does not exclude others from using it. It is also non-excludable because it is freely available to all parties.

1.4 The futures market also provides an avenue for wholesale market participants to manage their wholesale market price risk. Electricity futures contracts help to manage risk by smoothing out the volatility of the physical spot market and giving participants certainty of the price they will pay in the future. This is an important consideration for all participants in the wholesale electricity market that buy or sell electricity – but is particularly important for smaller or new entrant participants who may be less resilient to price volatility than larger, diversified and established participants. Futures contracts allow smaller and less diversified businesses without generation or a retail presence to compete, innovate, and deliver value to customers.

1.5 The presence of market making services contribute and enhance the production of the forward price curve and the management of price risk.

1.6 In mid-2019 the Authority reinstated the hedge market enhancement project in response to recent poor market making performance on the ASX and correspondingly wide bid-ask spreads for key ASX contracts. There was high stakeholder interest, in particular from the Electricity Price Review Panel, in reforming the current market making

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1 Available at: https://www.ea.govt.nz/development/work-programme/risk-management/hedge-market-development/development/enduring-market-making-approach-decision-summary/.

arrangements. The Authority wished to ensure that consumers would continue to benefit from the forward price curve and the availability of risk management contracts to market participants.

1.7 In late 2019 the Authority released a discussion paper *Hedge Market Enhancements (market making): Ensuring market making arrangements are fit for-purpose over time*. More than 20 stakeholders provided submissions.[2]

1.8 In November 2019, the Authority's Chief Executive wrote to each of the four existing market makers requesting improvements to the level of market making services.[3] The new services increased market making volumes and reduced the bid-ask spread. The new service levels took effect in January 2020.

1.9 In January 2020, the Authority implemented an urgent Code amendment to introduce mandatory market making as a backstop measure if the existing market makers did not meet performance expectations.[4] The urgent Code amendment was made to support the forecast risks of disruption in the futures market in early 2020, including maintenance of the inter-island High Voltage Direct Current (HVDC) transmission line and gas supply outages. It was introduced in order to increase confidence in the market, particularly among non-market maker participants, that risk management tools would be available at efficient prices during the known disruptions. It also gave certainty if the voluntary arrangements ceased due to non-performance. The mandatory back-stop Code came into effect on 3 February 2020 and will expire on 3 November 2020.

1.10 In April 2020, the Authority released a consultation paper *Hedge Market Enhancements Market Making: Ensuring market making arrangements are fit-for-purpose over time*. Eighteen stakeholders provided submissions to the consultation paper.[5] Following the conclusions of the consultation period, the Authority decided in August 2020 the approach it would take to ensure that market making services are provided to the market in a manner that is fit-for-purpose over time.

2 The Authority's decision has been informed by engagement with stakeholders

2.1 The Authority had several rounds of formal engagement with stakeholders as it conducted its review of market making arrangements, including formal consultation processes, bi-lateral meetings, and meetings with groups of stakeholders.

2.2 The most recent engagement was the formal consultation the Authority undertook from April to June 2020. The Authority received submissions from the 18 parties listed in Table 1 below.[6] The Authority also received a proposal from a group of industry

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2 Available at: https://www.ea.govt.nz/development/work-programme/risk-management/hedge-market-development/consultations/#c18260.

3 Available at: https://www.ea.govt.nz/development/work-programme/risk-management/hedge-market-development/correspondence/correspondence-with-participants-november-2019/.

4 Available at: https://www.ea.govt.nz/development/work-programme/risk-management/hedge-market-development/development/urgent-code-amendment/.

5 Available at: https://www.ea.govt.nz/development/work-programme/risk-management/hedge-market-development/consultations/#c18424.

6 Submissions are available at: https://www.ea.govt.nz/development/work-programme/risk-management/hedge-market-development/consultations/#c18424.

members (the Industry Forum) that was established to respond to the EPR's recommendation that the industry develop an effective incentive-based scheme.[7]

Table 1: List of submitters

Submitter	Category
Contact	Generator/retailer/market maker
Ecotricity	Non-integrated retailer
emhTrade	Trader
Flick Electric	Non-integrated retailer
Fonterra	Large consumer
Genesis	Generator/retailer/market maker
Haast Trading/Electric Kiwi	Trader/non-integrated retailer
Independent retailers	Non-integrated retailer group
Mercury	Generator/retailer/market maker
Meridian	Generator/retailer/market maker
Major Electricity Users Group (MEUG)	Large consumer industry body
Nova	Generator/retailer
NZ Steel	Large consumer
New Zealand Wind Energy Association (NZWEA)	Generation industry body
OMF	Trader/intermediary
Pioneer/Pulse	Generator/retailer
Trustpower	Generator/retailer
Vector	Lines company

2.3 The table below records some of the comments raised in submissions and the Authority's response.

7 The proposal is available at: https://www.ea.govt.nz/development/work-programme/risk-management/hedge-market-development/development/industry-forums-proposal-for-an-incentivised-market-making-scheme/. Members of the forum were: Contact, Meridian, Genesis, Mercury, Trustpower, Todd/Nova, and Pulse/Pioneer.

Table 2: Submitter comments and Authority response

Submitter comment	Authority response
Submitters had varying opinions about the state of the current arrangements. Some submitters considered the current arrangements are not working (New Zealand Steel, the independent retailers), or are unsustainable (Contact and Mercury). Other submitters (Meridian, Trustpower and Genesis) consider the current arrangements to be working well.	The Authority considers the current arrangements, supported by a temporary Code amendment, are producing good outcomes in the hedge market. Current arrangements and service levels have withstood significant repeated market shock in 2020, and the volume of contracts appears to be meeting the market's need. Spreads have remained largely within 3% and have not move widely as they did in response to 2018 shocks. However, there are opportunities to secure and build on the success of changes made throughout 2020. The Authority considers the proposed changes will result in long-term benefits for consumers.
Submitters had diverse views concerning the speed of reforms to market making arrangements. The independent retailers, Vector and Electric Kiwi/Haast considered the speed of reform should be increased. Mercury noted that a timely solution was less important than a durable solution, and emh Trade observed progress was commensurate with the required level of urgency.	The Authority's decision has taken place inside a calendar year of the EPR recommendations and ahead of EPR timeframes. The Authority identified a robust and enduring solution to market making and intends to implement its decision in 2021. Delivering an enduring solution is complex and must consider the costs and benefits of the decision. In particular, a commercial solution must be progressed deliberately so potential providers are engaged in a manner that identifies the most efficient provider for the lowest end cost to consumers. The Authority has undertaken two rounds of written consultation, significant interaction with all stakeholders as well as changes to the operation of the existing market making scheme. The Authority also extended its process over the Covid-19 lockdown to ensure all interested stakeholders were able to engage with it.
Both the Independent Retailers and the NZWEA noted the EPR's recommendation should determine the outcome for market making.	The Authority is an Independent Crown Entity and makes decisions in accordance with its statutory objective for the long-term benefit of consumers. The Authority's work programme commenced in advance of the EPR and its decision was not constrained by the EPR's recommendations.

Several submitters stated vertically integrated business models caused harm and required intervention from the Authority. Electric Kiwi/Haast considered that the problem of a lack of confidence was caused by market concentration in the wholesale electricity market coupled with a high degree of vertical integration. Flick considered that vertically integrated incumbents discriminate in favour of their own retail businesses by, for example, limiting hedge products to external retailers, and offering low related party transaction prices. Vector suggested the Authority must act to compensate for the privileged financial position and market asymmetry of the big generators. Vector suggest the there is a lack of liquidity as the generators control the 'supply' of hedging products subject to their own risk management limits and business structures. emh Trade held that there is a lack of hedge market liquidity, due to the vertically integrated nature of the market. Associated with the concerns of vertical integration and lack of liquidity, submitters suggested broader solutions in addition to market making solutions. The independent retailers suggested addressing market power via structural solutions may be needed if hedge market reform and separate financial reporting do not eliminate market concentration. The independent retailers require reliable access to wholesale hedges, and at prices comparable to the vertically-integrated gentailers' internal transfer prices. Ecotricity and Pulse proposed banning transfer prices and require gentailers' retail operations to purchase only from the ASX. Flick requested all retailers purchase electricity through the same markets as independent retailers, as well as separate financial reporting and more information about costs. Electric Kiwi/Haast requested the Authority address issues with information disclosure, insider trading, and spot market trading conduct.	The Authority notes the EPR Panel considered the benefits of vertical integration outweigh the costs, and that there are a range of other recommendations from the EPR that the Authority is investigating that will reinforce wholesale market competition. These recommendations include improving the availability of wholesale market information, monitoring contract prices and new-generation costs more closely, and investigating the profitability and transfer pricing of large vertically integrated participants. The Authority has been clear that its review of market making arrangements is concerned with ensuring those arrangements are fit-for-purpose over time. It is not a review of the structure of the wholesale market or sector business models.

Mercury wished to minimise information asymmetry by imposing stringent information disclosure obligations	
Many submitters noted that flexibility was an important characteristic to consider, particularly as the scheme would be required to adapt and change over time. These submitters included Fonterra, Electric Kiwi/Haast, the Industry Forum, Genesis, Meridian and emh Trade.	The Authority agrees that the flexibility of a scheme is important. An incentivised scheme is well suited to adjusting to short- and medium-term changes in requirements in the futures market. The introduction of a benefit-based charge would ensure there is a channel by which the changing demands for market making services can be robustly signalled and shown to satisfy a cost-benefit analysis.
The ability for market makers to subcontract their obligations to a third party was considered an important design feature by some submitters. The industry forum, Meridian and Mercury all consider this should be able to occur in all times, with ultimate liability remaining with the market maker. The independent retailers observed a transferable obligation could exist under a mandatory scheme.	The Authority considers a transferable obligation may enhance the efficiency of the provision of market making services. However, the first order priority for the Authority is securing the success of the current arrangements (which do not include a transferrable obligation). The Authority will consider if a transferable obligation will be required in conjunction with a mandatory scheme in future design work.
Increasing the diversity of market makers was mentioned by submitters, including Fonterra, the independent retailers and the industry forum. Trustpower saw increasing diversity as less important.	The Authority considers there are several benefits to increasing the diversity of market makers, including increased trust and confidence in market outcomes, and improved robustness of the forward price curve. Opening service provision to a diverse group of providers will also facilitate innovation and more efficient providers of market making services.

The issue of who should pay for the costs of market making attracted diverse comments. An exacerbator pays approach was supported by the independent retailers who held that the need for regulation in the hedge market exists because the five large incumbents are vertically integrated and have market power. Electric Kiwi/Haast suggested continuation of the current cost allocation. Emh Trade considered the cost of liquidity support mechanisms, including market making, should be borne on an exacerbator-pays basis by those parties that engage in vertical integration (not limited to the current market makers). A beneficiary pays approach was supported by the industry forum. The forum observed that without a beneficiary pays approach, a market making scheme will suffer from free-rider issues. Free-riders (scheme beneficiaries) will demand increased market making services because they are not exposed to the additional costs of providing those service improvements. Nova considered it appropriate for market making beneficiaries to support a liquid hedge market. Mercury observed even a small charge to beneficiaries could potentially achieve an outcome where efficient levels of service are derived by a beneficiary pays system. Genesis suggested that the beneficiaries should be defined as solely retailers and purchasers of load. Trustpower considered the willingness to pay of beneficiaries is a priority action for the Authority.	The Authority considers a beneficiary pays approach to market making allows the services to be service-oriented. A beneficiary pays approach ensures the participants that benefit from market making services are incentivised to advocate for an efficient level of service. The Authority also does not consider an exacerbator pays approach is an appropriate method to address perceived issues of vertical integration or market power in the electricity market. An exacerbator pays model would also lose the link between service and payment, increasing the likelihood of producing an inefficient level of market making.
Electric Kiwi/Haast and the independent retailers claimed that the Authority prefers an exacerbator-pays approach over a beneficiary pays approach, based on the transmission pricing methodology decision paper in 2019.	The Authority acknowledges its preference for exacerbator pays in a small component of the TPM, however the Authority is open to other approaches. It also observes that market-based, exacerbators pay, and beneficiary pays approaches are all consistent with the Authority's interpretation of its statutory objective. In relation to market making the Authority has consistently stated it considers there are benefits to consumers of a beneficiary pays approach to market making.

3 The Authority has decided to enhance the current market making arrangements

3.1 The current market making arrangements, supported by a mandatory backstop in the Code, have supported good outcomes in the futures market in 2020. Market making has largely been provided in accordance with service expectations during periods of stress in the wholesale and futures market, including the uncertainty surrounding Covid-19, the potential closure of New Zealand Aluminium Smelter, outages on the inter-island HVDC, and ongoing uncertainty in gas supply.

3.2 In August 2020 the Authority published a summary of its decision to build on the success of the current market making arrangements.[8]

The current mandatory backstop is supporting good futures market outcomes

3.3 Under the current arrangements the existing four market makers (Contact, Meridian, Genesis, and Mercury) each have an agreement with the ASX to provide market making services. Their performance of those services is reported to the Authority and to the wider market daily.[9] The Authority has supported the performance of services under those agreements with a mandatory backstop in the Code that would come into effect for any market maker that did not meet performance expectations on three or more occasions in a ninety day period. Under these arrangements there is no payment made from the Authority to market makers.

3.4 The existing arrangements have performed well throughout 2020. Service provision at existing obligations (volume and spread) has been relatively stable throughout a series of significant price shocks, and the arrangements were flexible to the challenges posed by the Covid-19 lockdown. The Authority also notes that market makers increased their level of service in early 2020 with increases in volumes market made, and reduced bid-ask spreads.

3.5 Accordingly, the Authority intends to continue these arrangements because they have proven successful in supporting stable service provision, they are flexible to the changing needs of the market, and they are known and understood by the market. The current arrangements are supported by a temporary Code amendment that came into force in early 2020 and will expire in November 2020. To continue the success of the current arrangements the Authority will amend the Code on a permanent basis.

3.6 The Authority’s immediate priority in implementing its August 2020 decision is to secure the success of the current arrangements by amending the Code to ensure the mandatory backstop for market making is permanently included in the Code. To do so the Authority will develop a regulatory statement (including a cost benefit analysis) and proposed Code amendment for consultation.

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8 Available on the Authority’s website: https://www.ea.govt.nz/development/work-programme/risk-management/hedge-market-development/development/enduring-market-making-approach-decision-summary/.

9 Reporting is available on the Authority’s EMI website: https://www.emi.ea.govt.nz/Forward%20markets/Reports/X1Y1L5?_si=v|3.

The Authority will seek to change market making service levels if it receives compelling evidence to support a change

3.7 The Authority intends to continue the current market making scheme service levels unless it receives compelling evidence to support a change. If evidence suggests that a different level of service would be in the long-term benefit of consumers, the Authority will consider whether a change is warranted. The Authority will gather its own evidence about the likely trade-offs between cost and benefit of service levels for the scheme:

(a) the Authority's cost-benefit analysis assessing the net benefit to consumers of permanently implementing a mandatory backstop in the Code; and

(b) the tender process to procure potential providers of commercial market making services will provide robust commercially determined evidence of the cost of different service levels.

3.8 Key aspects of the current service levels are:

(a) a maximum bid-ask spread (3%);

(b) a set of contracts (front six monthly baseload contracts, and all quarterly baseload contracts);

(c) a set volume (120 futures contracts of 0.1MW available to buy and to sell made up of four market makers providing bids and offers for 30 contracts each for each contract market made); and

(d) service availability (each market maker must contribute its share of the volume daily, with up to five exemptions available to each market maker each calendar month).

The Authority will recover the costs of an incentivised market making scheme through a levy on market participants

3.9 The addition of commercial market making service providers will strengthen and support the operation of the hedge market. Introducing commercial market making providers will help improve the reliability and efficiency of the hedge market, while increasing the diversity of participants.

3.10 Introducing a commercial market maker would add further value to those who currently benefit from market making services. The Authority considers there are many beneficiaries of market making services, including:

(a) **Market and non-market participants that benefit from a robust and liquid forward price curve**

This group of beneficiaries includes **all** market participants who buy or sell physical electricity from the spot market. They benefit from using the forward price curve to inform their short-term decision concerning use and supply of electricity and long-term investment decisions. Participants also benefit by being able to manage risk with ASX contracts, or OTC contracts backed by ASX contracts. Beneficiaries of the forward price curve also include non-industry participants in New Zealand that use the forward price curve to assist their decision-making processes.

(b) **All entities that trade ASX New Zealand electricity contracts**

Most of these are New Zealand based physical participants, but there is also a material number of trades that are conducted by traders (based in New Zealand

and overseas). These entities benefit from the liquidity and price efficiency that market making provides to the market to either manage their risk positions, or to take positions in the market.

(c) **New Zealand consumers**

New Zealand consumers indirectly benefit from market making as these services allow retailers to manage future price risk through hedging. Without these services, electricity consumers would likely face higher prices as retailers price this risk in other ways. New Zealand consumers also benefit from the forward price curve as it ensures efficient decisions are made within the electricity industry, which should reduce the cost of electricity for consumers.

3.11 Introducing a commercial provider of market making services will require payment. The Authority considers it fair (to the extent that it is practicable) that the beneficiaries of these services fund their operation. On this basis the Authority is intending to recover the costs of these market making service through an increase to the Electricity Authority Levy (the levy).

3.12 The Authority takes a pragmatic view that the primary beneficiaries of the forward curve are very likely to be either current market participants, or market participants in the future.

3.13 On a 12-month rolling basis, currently at least 92% of ASX futures electricity volume traded involves at least one New Zealand electricity market participant. Moreover, future participants who use the forward curve to inform a commercial or investment decision can be charged in the periods they actively participate in the physical electricity market.

3.14 Recovering the costs of market making services through the levy will allow beneficiaries to influence the level of service through the annual levy consultation process.

3.15 Different cost categories receive different cost allocations within the levy. The Authority considers market operations, specifically trading arrangements, as the most appropriate cost allocation category. Market operations allocates costs 50% to generators and 50% to purchasers, where generator and purchaser costs are related to the total quantity of electricity. The Authority intends to apply the same cost allocation to the cost of market making.

3.16 An alternative the Authority did consider is whether a fee could be applied to trades on the futures market. However, this is likely to be impractical, because not all participants in the futures market are within the Authority's jurisdiction.

3.17 Such a fee is also likely to be counterproductive because it would disincentivise futures trading, and would likely lead to increased transactions being conducted off market, for example through bilateral trades. A reduction in on-market trading would reduce the robustness of the forward price curve, reduce liquidity and lower confidence in the futures market.

3.18 The Authority is mindful that that obtaining efficient and cost-effective market making services is critical. Efficiency in procurement will be achieved by operating an open tender for provision of market making services, ensuring competitive prices. Efficiency in setting the levels of service is also important. The Authority will gain information on the trade-offs between service levels and cost during the procurement process.

4 The Authority will continue engaging stakeholders when implementing its decision

4.1 Resolving the transition from the current market making arrangements, where market making is provided voluntarily, with a mandatory backstop, to the addition of one or more commercial providers of market making services requires a set of deliberate steps. The Authority anticipates the transition arrangements will follow two stages:

(a) introduce a permanent mandatory backstop arrangement into the Code; and then

(b) introduce an initial set of commercial providers of market making services.

4.2 The first stage is to formally introduce a mandatory backstop provision for the existing market makers into the Code. With the impending expiration of the current temporary mandatory backstop on 3 November 2020, this is the Authority's immediate priority. The Code amendment process will include a cost-benefit assessment and a consultation process. The Authority expects this Code amendment to come into force in early 2021.

4.3 Concurrent with the introduction of a permanent backstop arrangement, the Authority will progress the procurement of commercial providers. The Authority will take a deliberate approach to the procurement process, with an anticipated period of market engagement, information gathering and formal procurement. Accompanying this will be engagement with participants to inform the required service levels that best meet cost and benefit expectations. Any required changes to the Code will be signalled in advance, and will be accompanied by consultation and cost-benefit analysis.

4.4 The Authority expects the incentivised market making scheme to come into force in late 2021 at the earliest. Timeframes are subject to securing approval to increase Electricity Authority appropriations and commercial negotiations with potential providers.

4.5 Further enhancement to the market making scheme will be assessed against the continued performance of market makers in the futures market. It is anticipated that the number of commercial market makers will increase over time, and the number of mandatory market makers will decline. Any future changes will require to be in the long-term interests of consumers.

4.6 The Authority will continue to engage with stakeholders through the coming changes, in the near-term through introduction of the permanent mandatory backstop, and the introduction of commercial market making services. Stakeholder engagement will take place both through formal channels such as in the Code change process and through informal engagement.

4.7 The Authority welcomes any feedback on this decision paper. Please direct any specific questions or queries to: HME.feedback@ea.govt.nz

Further information

4.8 The Authority's website contains useful background material about the Authority's previous work, the work of its advisory groups, and the work of its predecessor (the Electricity Commission) relating to hedge markets.[10]

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10 Available at: https://www.ea.govt.nz/development/work-programme/risk-management/hedge-marketdevelopment.