Financial transmission rights (FTRs)

The Electricity Authority is establishing a market for trading financial transmission rights (FTRs) from mid-2013. The FTR market is designed to help promote competition in the retail market to benefit consumers.

An FTR is a locational hedge product

FTRs are hedges designed to assist wholesale electricity market participants to manage their locational price risk.

Locational price risk is the risk that wholesale electricity market participants face due to unexpected changes in the difference between prices at different locations across the transmission grid. The prices at different locations can rise and fall significantly and are not easily predicted, as they are caused by a mix of transmission constraints, electricity losses along the grid, and how much reserve power is available.

To start with, FTRs will cover the price differences between the South Island (at Benmore) and the North Island (at Otahuhu, Auckland).

The Electricity Authority is introducing FTRs to promote competition in the retail market for the long-term benefit of consumers.

FTRs insure against large unpredictable electricity price movements on the wholesale electricity market.

An FTR provides insurance for unexpected electricity price movements

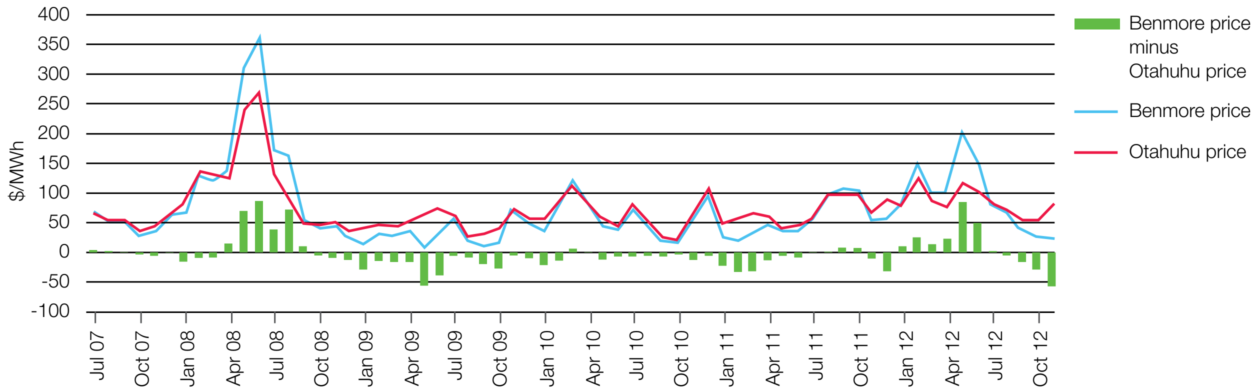
FTRs allow the holder of an FTR to cover their price risk between two locations on the national grid. Effectively, they are a hedge product that can protect wholesale electricity market participants from half-hourly variations in spot market prices in one location versus another.

The inter-island FTR has been designed to complement existing hedge products. FTRs are offered for periods of one calendar month between Benmore and Otahuhu and are available for purchase via auction. FTRs will be available for a given month up to two years in advance. The number of FTRs available for any one month will be based on predicted market conditions.

An FTR is designed to pay out the price difference between the two points. If a participant purchases an FTR from Benmore to Otahuhu for a given month they will receive the difference in price between Otahuhu and Benmore, assuming the price at Otahuhu is higher than at Benmore. For example, if the price on the wholesale market for electricity is $10 per megawatt hour (MWh) at Benmore and $100 per MWh at Otahuhu, a retailer who needs to buy electricity to supply their customers near Otahuhu has to pay $100 per MWh on the wholesale market. However, if they hold a Benmore to Otahuhu FTR, they receive $90 per MWh back (the price difference between Benmore and Otahuhu), less the price they paid for the FTR.

By bidding successfully for an FTR, the holder reduces their price risk between the North and South Islands. The FTR holder knows that if the volatility in the market causes prices in one island to suddenly surge upwards then they should be covered for the amount of FTRs they hold, and will receive a pay-out from the FTR.

Monthly average price and price differences



This graph shows the average monthly electricity price experienced at Benmore and Otahuhu, and the monthly average price difference between each location.

The aim is to achieve better prices for consumers

The FTR market is expected to significantly enhance competition in the retail and hedge markets, by reducing a barrier to generator-retailers when competing for retail customers. The retailers will be able to compete for retail and hedge customers across the country, rather than focusing only on regions close to where they own generation assets.

The FTR initiative builds on the overall reforms in the electricity sector, particularly the asset swaps, the What's my number campaign, the review of prudential arrangements, and developments in the ASX electricity futures market. Collectively, these measures enhance retail market competition for the long-term benefit of consumers.

Once the FTR market is up and running, consumers should see more competitive retail offers from a wider number of retailers and greater competitive pressure on prices throughout the country.

The FTR manager will run auctions

The Electricity Authority has contracted two market operation service providers to establish and support FTR trading:

- The FTR manager, Energy Market Services (EMS) (a division of Transpower New Zealand Limited) is responsible for creating and allocating FTRs via auction, and for listing all FTR holdings in a publicly viewable FTR register. EMS is also responsible for publishing an FTR allocation plan that describes the auction rules and FTR grid design, for registering parties to be FTR participants, and for promoting the FTR market.
- The clearing manager, NZX Limited, has developed a prudential security assessment methodology for FTRs to manage FTR participants' prudential status. The clearing manager is responsible for invoicing FTR payments (payable or to be paid) as part of the monthly settlement of the wholesale electricity market.

Purchase of FTRs is restricted

Wholesale electricity market participants, including generators, retailers, and large electricity consumers, are likely to have a direct interest in holding FTRs as a hedge for their wholesale electricity market sales or purchases. Other parties with an interest in holding futures products, such as banks, may also wish to hold FTRs.

The Financial Markets Authority (FMA) has approved the categories of people who can trade FTRs in the Authorised Futures Dealers (Financial Transmission Rights) Notice 2012. FTRs are not available to the public or to retail investors. FTRs are not being offered outside New Zealand.

FTRs can be traded between FTR holders

FTRs are initially released by auction. They can be traded between registered FTR participants. Any trade must be approved by the FTR manager and recorded in the FTR register. A secondary market for trading is expected to be set up within the first year or so.

FTRs are governed by electricity and financial market rules

FTRs come under electricity legislation, regulations, and the market rules set by the Electricity Authority, and also under securities legislation and Financial Market Authority rules.

What the inter-island FTR does not cover

There are around 250 locations, called nodes, throughout the country where electricity can be bought and sold on the wholesale market. The inter-island FTR covers the biggest source of locational price risk, which is between the two islands. It does not cover more localised price risk within an island, such as between Otahuhu and Haywards (Wellington), or between Hamilton and Tauranga.

The Electricity Authority is undertaking a separate project to develop a solution to price risk within each island, which may involve creating more localised FTRs or possibly adopting a different approach.

The establishment of the FTR market is funded by electricity levy payers

The Authority has funded the establishment of, and service provision relating to, the FTR market through the electricity industry levy, which is paid according to the Electricity Industry (Levy of Industry Participants) Regulations.

FTR pay-outs will be partially funded by FTR auction revenue, and partially funded by the surplus funds that arise on the wholesale spot market, when a purchaser buys electricity for a higher price at one location than a generator sold it at another location.

Where to find out more

This fact sheet has been prepared to give an overview of FTRs for general information. More detailed information is available online for those wishing to find out more, and for those interested in trading in FTRs.

- For more Electricity Authority information, visit our website and search for FTR market: **www.ea.govt.nz**
- Information for potential traders is available on the FTR manager's website: **www.ftr.co.nz**
- Information about the clearing and settlement of FTRs is on the clearing manager's website: **www.ftrclearing.co.nz**

Fact sheets in this series cover the operation of the New Zealand electricity market, which includes the operation of several related wholesale, retail, and ancillary services markets.

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