PRODUCT RULING - BR Prd 12/09

This is a product ruling made under s 91F of the Tax Administration Act 1994.

Name of the Person who applied for the Ruling

This Ruling has been applied for by the Electricity Authority.

Taxation Laws

All legislative references are to the Income Tax Act 2007 unless otherwise stated.

This Ruling applies in respect of s EW 25B.

The Arrangement to which this Ruling applies

The Arrangement is the issue of option or obligation financial transmission rights (FTRs) by the Clearing Manager to participants. The FTRs are hedge products that allow an electricity trader to manage locational price risk that arises from variations in the wholesale spot prices between two points (e.g. Benmore and Otahuhu) on the wholesale electricity grid.

Further details of the Arrangement are set out in the paragraphs below.

Background

All references to the Electricity Industry Participation Code 2010 (Code) are to the Code as at the date of this Ruling.

- 1. Electricity generators compete in the electricity spot market to generate the electricity necessary to satisfy demand. The generators submit offers through a Wholesale Information and Trading System Manager (a contestable service, currently provided by the New Zealand Stock Exchange). The System Operator (Energy Market Services, a division of Transpower New Zealand Ltd) uses a scheduling, pricing and dispatch system to rank these offers, from which the half-hourly spot prices are derived for around 285 grid nodes. Retailers and some customers then buy electricity directly from the spot market at one of the grid exit points.
- 2. The amount paid for electricity by retailers and customers in the wholesale market always exceeds the payments made to the generators, due to losses and constraints in the system. The Clearing Manager accrues these surplus funds (referred to as the "loss and constraint excess") and allocates them to grid owners who in turn allocate them to transmission customers through a transmission pricing methodology. This allocation of surplus funds occurs on a monthly basis.

"Locational price risk"

3. Electricity generators may sell electricity to the market at the location where they generate electricity. Electricity retailers buy electricity on the wholesale market at points of connection on the grid where their customers are located. As most generators are also retailers, they sell electricity to the wholesale market at different locations from where they buy it.

- 4. Locational price risk arises in the electricity market from the unpredictable movements in the price for electricity at different grid nodes throughout New Zealand. Wholesale market prices are volatile and can rise quickly and sharply if certain events occur, such as when transmission cables or power stations are taken out of service (either for faults or maintenance).
- 5. The main source of locational price risk currently occurs between the North and South Islands (across the high voltage direct current link, which is the inter-island transmission link between Haywards near Wellington and Benmore). There can be large and volatile differences in wholesale market prices between the North and South Islands. Locational price risk can also occur between locations within each island.
- 6. An example of locational price risk occurs during dry winters, when low rainfall constrains electricity generation from hydro dams, most of which are located in the South Island. This means that large volumes of electricity have to be "imported" from the North Island, causing wholesale market prices in the South Island to rise above North Island prices.
- 7. Currently, generator-retailers minimise their locational price risk by seeking retail customers in regions close to where they have their generation assets. Retailers can arrange hedge contracts with generators or other market participants. However, they are still likely to be exposed to some locational price risk. Retailers could also seek an electricity contract for difference (CFD) with another party. However, they may continue to be exposed to locational price risk if the other party was subject to weak competitive pressure and could influence the price and undermine the benefit of the CFD. There may also be insufficient counterparties available because local generation in a region often accounts for only a portion of the load served the rest is served from power imported over the transmission network.

Financial transmission rights

- 8. The Electricity Authority is required to address locational price risk under s 42 of the Electricity Industry Act 2010. In light of this, the Electricity Authority approved an amendment to the Code to introduce FTRs.
- 9. FTRs are a form of hedge product that allows an electricity trader to manage locational price risk arising from variations in wholesale spot prices between price points on the national grid. Initially, this will cover inter-island locational price risk between the Otahuhu and Benmore grid reference points. It is anticipated that this may be extended to include intra-island locational price risk.
- 10. The FTR market will consist of two types of FTRs:
 - Option FTRs will provide a payout only when the receiving end price exceeds the sending end price.
 - Obligation FTRs will provide a payout when the price at the receiving end of the FTR exceeds the sending end price, and will also require a payment to be made to the Clearing Manager when the opposite occurs.
- 11. Option FTRs will require a premium to be payable on entry into the FTR. This premium is to be determined by auction. However, the premium is not paid at the time of entry, but is to be settled at maturity. Option FTRs will

provide the participant with a cap on the FTR reference price. The FTR reference price is the sum of certain differences in final prices for electricity between the relevant hubs over the relevant contract period. For example, assuming that the relevant hubs are the nodes at Benmore (sending end) and Otahuhu (receiving end):

- If the final price at both Benmore and Otahuhu is \$60 per megawatt hour (MWh), then the FTR reference price will be zero.
- If the final price at Benmore is \$40/MWh and the final price at Otahuhu is \$100/MWh for every trading period in the contract period, then the FTR reference price will be \$60/MWh multiplied by the number of trading periods in the contract period.
- If the final price at Benmore is \$100/MWh and the final price at Otahuhu is \$40/MWh for every trading period in the contract period, then the FTR reference price will be zero (as the differences in final prices are all negative \$60/MWh).
- 12. An obligation FTR has a two-way obligation to pay the difference between the FTR reference price and the initial price (or the price disclosed under clause 13.249(1)(b) of the Code if the FTR has been assigned) on settlement day. For an obligation FTR, the FTR reference price is the sum of all differences in final prices for electricity between the relevant hubs over the relevant contract period. Participants do not pay a premium for an obligation FTR. The initial price for the obligation FTR is determined at auction. Under the obligation FTR, if the FTR reference price exceeds the initial price (or the price disclosed under clause 13.249(1)(b) of the Code), the participant will receive the difference between the FTR reference price and the initial price (or the price disclosed under clause 13.249(1)(b)). However, if the initial price (or the price disclosed under clause 13.249(1)(b)). However, if the initial price (or the price disclosed under clause 13.249(1)(b)). However, if the initial price (or the price disclosed under clause 13.249(1)(b)). However, if the initial price (or the price disclosed under clause 13.249(1)(b)). However, if the initial price (or the price disclosed under clause 13.249(1)(b)). However, if the initial price (or the price disclosed under clause 13.249(1)(b)). However, if the initial price (or the price disclosed under clause 13.249(1)(b)).
- 13. The FTRs will be centrally funded from amounts accruing within the wholesale electricity market (loss and constraint excess) and auction premiums. FTRs will allow participants to manage their inter-island locational price risk, including that which arises from losses and constraints within the system. Ownership of an obligation FTR or option FTR does not entitle the participant to any rights for physical delivery of electricity.
- 14. Payments made under the FTRs to participants may be scaled in the event that there are insufficient funds. This may occur if events create a substantial difference between the notional grid used to determine the volume of FTRs issued, and the actual grid available in real time.
- 15. The key features of an FTR include:
 - Each FTR will have a calendar month duration and will be available in multiples of 0.1MW with a minimum quantity of 0.1MW.
 - FTRs will be available through monthly auctions at least 12 months in advance by the end of year 1; and at least 24 months in advance by the end of year 3.
 - Any premium payable on entry into an option FTR by market participants will be settled when the FTR matures.

- On assignment, specific rules apply to impose an obligation on the assignee when the FTR matures. These rules may also impose an obligation on the assignor at the time of assignment or the Clearing Manager at the time the FTR matures.
- Payments to FTR holders will be funded by the loss and constraint excess as well as from FTR auction proceeds. It is intended that FTR payouts will reflect the full price difference between the Otahuhu and Benmore grid reference points. However, where revenue adequacy is not achieved, scaling of the FTR payout will occur.
- Any residual loss and constraint excess in the FTR account (that is, an amount remaining in the FTR account that relates to the relevant billing period and is not required to settle FTRs for that billing period) will be treated as loss and constraint excess, and will be paid to the grid owner for allocation to its transmission customers (as is the current position).
- A participant wishing to bid or trade FTRs will be required to post security. A participant may also be required to provide further security.

The Applicant

16. The Electricity Authority is an independent Crown entity responsible for the operation and regulation of the New Zealand electricity market. The Electricity Authority must pursue the statutory objective set out in the Electricity Industry Act 2010 to promote competition in, reliable supply by, and the efficient operation of, the electricity industry for the long-term benefit of consumers.

The participants

- 17. This Ruling only applies to participants who prepare accounts in accordance with International Financial Reporting Standards (IFRS).
- 18. The participants will include (but are not limited to) electricity generators and retailers. The parties who may apply to be an FTR participant are those who meet the following criteria:
 - Parties who meet the prudential requirements in relation to FTRs set out in Part 14 of the Code.
 - Parties who are within the category of persons to whom the FTR manager is authorised to issue FTRs. These are natural persons or a body corporate incorporated in New Zealand and is within one of the categories of "approved participant" in the Authorised Futures Dealers (Financial Transmission Rights) Notice 2012.
 - Parties who are registered by the Electricity Authority as an Industry Participant under s 9 of the Electricity Industry Act 2010 as a trader in electricity, and
 - Parties who agree to the standard FTR participation agreement.
- 19. The Authorised Futures Dealers (Financial Transmission Rights) Notice 2012 defines an "approved participant" as follows:

- (a) A person whose principal business is purchasing or selling electricity; or
- (b) A person who uses in excess of 10 GWh per annum of electricity; or
- (c) Her Majesty The Queen in right of New Zealand, a Crown entity named in the Crown Entities Act 2004, or a State enterprise named in the First or Second Schedule to the State-Owned Enterprises Act 1986 (each as amended from time to time); or
- (d) A member of the trade association known as the Major Electricity Users Group; or
- (e) A registered bank as defined in the Reserve Bank of New Zealand Act 1989; or
- A person whose principal business is the investment of money or who, in the course of and for the purposes of their business, habitually invests money; or
- (g) A person who is authorised to carry on the business of dealing in futures contracts under the Act; or
- (h) A person authorised in another jurisdiction by the competent authority of that jurisdiction to deal in futures contracts; or
- A person that is a related body corporate of any of the persons listed in (a) to (h) above.
- 20. The participants may also be a party to ASX New Zealand electricity futures or options, electricity CFDs or other types of forward contract or other derivative instrument (Other Derivative Instruments).

The FTR Auction process

- 21. FTRs will be allocated to Participants by way of a monthly auction conducted by the FTR Manager.
- 22. The FTR Allocation Plan provides for a single-stage, sealed bid uniform price auction approach. This requires all bidders to submit bids for simultaneous assessment allowing optimisation of the allocation of FTRs amongst all the products on offer. All bidders will pay the FTR Auction Clearing Price (based on the lowest cleared bid) required to fill the allocation of FTRs across all FTR products for that FTR period.
- 23. The current proposal is for two sealed-bid auctions per month. The Primary Auction is where previously unlisted FTR periods are auctioned. For the primary auction, a proportion of FTR capacity will be offered. The Variation Auction is where additional FTRs for any of the previously listed FTR periods might be added.
- 24. The volume of FTRs to be issued will be based on the expected grid capacity at the time of auction or up to two years in advance. The actual grid capacity (in real time) might differ from the expected grid. To manage this, it is proposed that only a portion of the assessed FTR capacity will be issued in the Primary Auction, with subsequent Variation Auctions offering the majority of the remaining capacity.
- 25. It is also proposed that there will be Reconfiguration Auctions where FTRs may be sold back into Variation Auctions, facilitating secondary trading of FTRs. However, these may not be available from the outset and may require a Code amendment.

Assignments

- 26. Specific rules apply where FTRs are assigned from one party to another. The rules are outlined in clauses 13.248, 13.249 and 13.250 of the Code.
- 27. If the notification of assignment discloses the price at which the FTR has been assigned, the assignee becomes liable to pay that price to the Clearing Manager. Where the assignment price is less than the premium (for an option FTR) or the initial price (for an obligation FTR) or the previous price disclosed under clause 13.249(1)(b) of the Code if the FTR has previously been assigned, the assignor must pay the difference to the Clearing Manager at the time of assignment. If the assignment price is greater than the premium, initial price or the previous price disclosed under clause 13.249(1)(b) of the Code, the assignor is entitled to be paid the difference by the Clearing Manager when the FTR matures.
- 28. If the notification does not disclose the price at which the FTR has been assigned, the assignee is liable to pay the premium (for an option FTR) or the initial price (for an obligation FTR) or the previous price disclosed under clause 13.249(1)(b) of the Code (if the FTR has previously been assigned) to the Clearing Manager when the FTR matures.
- 29. It is expected that on-market secondary trading will eventually be permitted in FTRs.

This Ruling is made subject to the following conditions:

- a) At all times, each participant will use the same spreading method for all FTRs held by them, unless a different accounting treatment under IFRSs is used.
- b) During the period for which the Ruling applies, clause 2 of the FTR Allocation Plan will not be materially altered or amended from the FTR Allocation Plan approved on 29 June 2012 and provided to Inland Revenue on 12 October 2012.

How the Taxation Law applies to the Arrangement

Subject in all respects to any condition stated above, the Taxation Law applies to the Arrangement as follows:

a) The FTRs are not the "same as, or similar to" Other Derivative Instruments in terms of s EW 25B(1)(b). Therefore, s EW 25B will not require participants to use the same spreading method for FTRs as used for Other Derivative Instruments.

The period for which this Ruling applies

This Ruling will apply for the period beginning on 1 April 2013 and ending on 31 March 2017.

This Ruling is signed by me on the 13th day of December 2012. **Howard Davis** Director (Taxpayer Rulings)