MARKET BRIEF

13 September 2011



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Transmission Pricing Advisory Group (TPAG) final report

The Authority has received the final report from TPAG, which was appointed in January to provide independent advice to assist with the Transmission Pricing Review. Although TPAG has been unable to make a recommendation on pricing for the HVDC link, the group completed considerable analysis within a challenging time frame, which will significantly assist the Authority's deliberations on this contentious and complex issue.

The Authority will now evaluate the analysis provided by TPAG, earlier work conducted by the Electricity Commission (Stages I and II), the independent expert review, and submissions made on TPAG's discussion paper.

TPAG has recommended additional analysis be undertaken by the Authority in relation to the Generation Expansion Model (GEM), and also to address issues raised by the independent reviewer. Work on this has commenced.

Based on this analysis, the Authority will determine whether or not there is a case for a change from the status quo to some other means of allocating transmission costs. There is also the possibility the Authority may consider other options not considered by TPAG.

TPAG's final report, the TPAG Chair's presentation to the Board and note on Beneficiary Pays, and the Authority's letter acknowledging the report are available at:

http://www.ea.govt.nz/our-work/advisory-working-groups/tpag/

Call for nominations for Code of Practice 10.5 Panel (COP10.5): Vacancy

The Authority is calling for nominations to fill a vacancy on the Code of Practice 10.5 Panel (COP10.5). Nominees should have in-depth experience in metering and relevant knowledge of Part 10 of the Code and may be interviewed by the Authority.

The COP10.5 Panel reviews every application for variation from any requirement of the Code of Practice and also advises the Authority on metering issues.

Further information on the COP10.5 panel can be found at:

http://www.ea.govt.nz/industry/market/metering/code-of-practice/



Nominations with 'Nomination for COP10.5' in the subject line should be emailed to info@ea.govt.nz by 4.00pm, Tuesday 20 September 2011. Please include a brief biography of the nominee and a full, updated CV.

Call for nominations for Retail Advisory Group: Vacancy

The Authority is calling for nominations to fill a vacancy in the Retail Advisory Group (RAG). RAG has been established to provide advice to the Board about the development of the retail electricity market, encompassing the retailer/distributor/consumer interface.

Further information, including a nomination form, is available at:

http://www.ea.govt.nz/our-work/advisory-working-groups/rag

Nominations with 'Nomination for Retail Advisory Group' in the subject line should be emailed to info@ea.govt.nz by 4.00pm, Tuesday 27 September 2011.

Retail market statistics for August 2011

Retail market statistics, including consumer switching statistics for August 2011, have been published and are available at:

http://www.ea.govt.nz/industry/market/statistics-reports/

Hedge market arrangements: Summary of submissions published

A summary of submissions on the consultation paper 'Improving the Opportunities to Hedge New Zealand Electricity Prices' has been published and is available at:

http://www.ea.govt.nz/our-work/consultations/priority-projects/-improving-opportunities-hedge-electricity-prices/submissions/

Current consultations

 Consultation on criteria for assessing alignment against the Information Disclosure Guidelines and Pricing Principles

The consultation paper presents the Authority's review of the pricing methodologies of a representative sample of distributors, proposes refinements to the guidelines, and sets out initial criteria for assessing alignment with the pricing principles.

The consultation paper is available at:

http://www.ea.govt.nz/our-work/consultations/retail/criteria-for-assessing-alignment-information-disclosure-guidelines/

Starting: 06/09/2011, Ending: 17/10/2011 5:00pm





HVDC price separation and fast reserves

The HVDC link causes the bulk of the locational price separation occurring in the New Zealand wholesale electricity market. Prices at the Benmore end of the link differ from prices at the Haywards end when it is operating at full capacity, or when power flows change direction and the link is temporarily switched off. Most frequently, however, price separation occurs when the link becomes the risk setter in either the fast instantaneous reserves (FIR) market or the sustained instantaneous reserves (SIR) market. Price separation occurs in these situations because the cost of acquiring additional reserves from one of the instantaneous reserves markets limits the amount of electricity transmitted on the HVDC link.

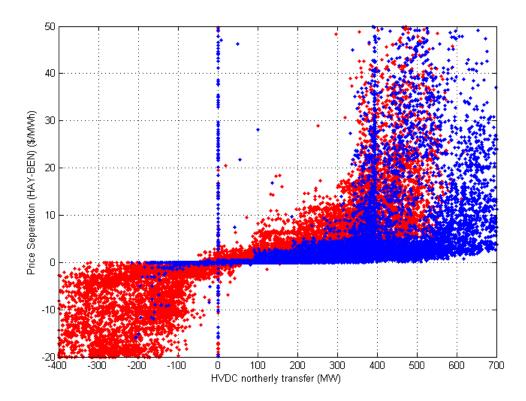


Figure 1: HVDC price separation and HVDC transfer

Figure 1 illustrates how price separation is related to transfer volumes on the link. The horizontal axis is the transfer from the South Island to the North Island, and the vertical axis is price separation across the link, calculated as the Haywards price minus the Benmore price. For each half hour of historical market data, a dot has been placed according to the transfer volume and price separation in that half hour, to make a 'scattergram'. Data from 2011 is plotted in blue and from 2008, in red.

A number of observations can be made from this graph. When the transfer is zero, i.e. the link is turned off, there can be price separation. At higher transfers, the chance of the HVDC link being the risk setter increases, resulting in price separation. There are two 'lobes' of blue on the right hand side of the graph, and a vertical line at just under 400MW north transfer. The two lobes probably correspond to high price separation at differing levels of transfer according to whether Pole 1 is able to assist in providing some self cover for the HVDC risk. The vertical line at 400MW is probably



associated with price separation occurring during peak demand periods, with Pole 1 not available, as under these conditions the HVDC will be the risk setter when the transfer exceeds full dispatch of the largest North Island gas-fired generator at about 400MW.

Unsurprisingly the data for 2008 indicates the price separation is likely to occur in south transfer as well.

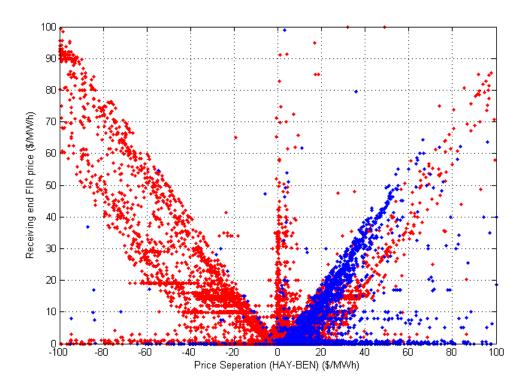


Figure 2: Importing island fast reserve price and HVDC price separation

Figure 2 plots the price in the FIR market in the island receiving energy from the HVDC link (vertical axis) against HVDC price separation (horizontal axis). A somewhat unexpected pattern emerges in that the price separation, when it occurs, is closely related to the FIR price. In 2011, most price separation occurred during north transfer as illustrated by the blue diagonal.

In contrast, during 2008, most price separation occurred during south transfer. In south transfer, Pole 1 of the HVDC link is not enabled, so that price separation can usually occur whenever the transfer is greater than the normal South Island risk of the largest generator, itself much smaller in comparison to the North Island, at 120MW.

The restriction of HVDC transfer due to the cost of supporting reserves provides a possible mechanism for participants to exert some control over HVDC flows. A generator holding a significant portfolio of fast reserves in the receiving island can try to throttle the link by offering reserves at a high price.

This could have the effect of reducing HVDC transfers and increasing energy prices in the receiving island. The profitability of this strategy would depend on the participant's net position (purchases versus sales) in the receiving island reserves and energy markets.

The Authority has seen some evidence of this behaviour in both north and south transfer on the HVDC link. The ability to engage in this sort of strategic behaviour is expected to decline significantly when the HVDC Pole 3 is commissioned, and with further development of a national reserves market, using the new HVDC capability.



Subscription

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