6 July 2011

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Carl Hansen
Chief Executive
Electricity Authority
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Dear Carl

Government expectations for standardised and active hedge market

Thank you for your letter of 24 June 2011, following the conference call of 20 June.

We are pleased that:

- The process to address the development of the hedge market has included these efficient and high-level discussions;
- The Electricity Authority (EA) believes that *good progress has been made in developing the ASX futures market and that the intent of the 3,000 GWh target has been largely achieved*;
- The EA believes that conversion of OTC deals into futures is a positive outcome. Subject to both acceptable costs and product fungibility, Mighty River Power will seek to undertake OTC transactions through the futures exchange where practical; and
- The EA would like to achieve *further progress in the hedge market without making Code amendments.*

With respect to the initiatives outlined in your letter we make the following comments:

- We would support the ASX developing a standardised market making agreement with the characteristics outlined. However, we note that before consideration of any reduction in the requirement of the 'big 5' to participate equally, the terms of the market-making agreement (and a landing on product size) need to be addressed. I note that the conference call did not reach a conclusion that any generator could have less rigorous market making requirements. In considering movement from 'best endeavours' to firm commitment, care needs to be taken to design appropriate 'market stress' clauses where market-making wouldn't apply to prevent manipulation and other undesirable trading situations, intentional or not. The ASX should be able to provide useful guidance and precedent in that regard when developing the standardised market making agreement.

- With regards increased transparency on virtual asset swap contracts, I am not sure what additional information would be required to provide comfort that the ongoing pricing of those contracts is linked to the ASX price. We do note, with respect to the Meridian:Mighty River Power virtual asset swap, that ongoing price setting occurs over an extended reference period.[1] That is, there is no specific period where the futures prices risk being subject to strong influence due to price setting of the VAS contracts at both the Benmore and Otahuhu nodes.
- We would support the introduction of new products though believe this should be developed by the market, and led by interested parties and the ASX, rather than, for example, market making in caps being mandatory.

The ASX can comment on the timeline for development of a standardised market making agreement, though Mighty River Power commits to undertaking everything reasonable to support this initiative. As noted previously, we are the largest trader in ASX electricity futures in New Zealand and desire higher liquidity and tighter spreads at the earliest opportunity.

We will comment on the EnergyLink report directly through submissions, and thank the EA for distributing this.

Lastly, we reiterate that additional participation is essential for the development of the hedge market and that intermediaries such as financial institutions are critical to this outcome. In that regard we would support discussion between the EA, ASX and potential financial institutions to ensure that their issues receive strong consideration as the development of the futures market is contemplated.

Yours sincerely

Fraser Whineray
General Manager Operations

[1] Meridian has consented to make this disclosure publicly.

6 July 2011

Carl Hansen
Chief Executive
Electricity Authority
Level 7, ASB Bank Tower
PO Box 10041
WELLINGTON 6143

GOVERNMENT EXPECTATIONS FOR STANDARDISED AND ACTIVE HEDGE MARKET

References:

A. EA Letter 24 June 2011
B. EnergyLink Report: Evaluation of Hedge Market Liquidity dated June 2011
(http://www.ea.govt.nz/document/14218/download/our-work/programmes/market/hedge-market-development/)

Dear Carl

1. In response to your letter at Reference A, I am able to comment on the initiatives under way to improve hedge market activity.

2. TrustPower is pleased that the EA considers that the intent of the unmatched open interest target has been largely achieved. We agree that the establishment of a robust forward price curve is a critical element in the NZ electricity market, as a benchmark for both wholesale and retail pricing. It appears that the current level of volume commitment to the ASX, combined with the investment in initial margin required of the major gentailers, is acting to provide a reasonably robust pricing curve, and we agree with the EA that this result represents real progress.

3. We also agree in general with the measures underway to ensure that this progress continues, particularly:

   - Standardised market making arrangements; and
   - Indexation of virtual asset swaps to ASX prices to ensure the commitment of SOE participants to efficient pricing

4. As requested in your letter, we have also reviewed the Energy Link report at Reference B and consider it represents a balanced view on the state of liquidity in the electricity futures market, along with some logical measures to assist further progress. Specific comments on the report recommendations and on the state of the hedge market follow.

Enhancing Competition

5. The fundamental aim of the hedge market reforms is to enhance retail competition. Even if potential new retailers do not participate in ASX futures trading, whether directly or indirectly, the simple availability of an efficient price curve should enhance competition by providing:

   - An aggregate view of spot price over time; and
   - A benchmark for the pricing of wholesale OTC deals, offtake agreements, retail hedges, etc

6. As the Authority has suggested, the “skin in the game” that can be achieved by block trading and virtual asset swap indexing is likely to be sufficient to ensure that pricing is efficient.

New Entrants

7. The Energy Link report (p.23) confirms that the entry of new players (one or more retailers and one or more intermediaries) is required to demonstrate that the changes to the hedge market are providing open access.

8. It is TrustPower’s opinion that the entry of new players is already occurring, as we are aware of at least one broker who is active on behalf of industrial customers and facilitating the matching of block trades between ASX parties. The arrival of larger scale financial institutions is often quoted as the “enabler” for the hedge market to reach higher volumes and real depth, and the proposed tightening of market making arrangements may assist in this, although the natural volatility of the NZ electricity market and the relatively small number of participants may remain a deterrent.

Market Making

9. We note the Energy Link recommendations that market making arrangements be tightened in order to reduce the risk to new entrants by allowing them to exit the market as easily as they enter it. These recommendations are sound, but the risks to market makers are correspondingly increased as they may find themselves in adverse futures positions as a result of their obligations.

10. It is TrustPower’s opinion that market making should only be compulsory for those gentailers who are likely to be able to adjust their own generation portfolio to offset an acquired futures position. For example, if a market maker acquires a short position by selling a set of quarterly contracts which are not efficiently priced, then the cost of settlement should be able to be offset by selling energy in the spot market. This in turn requires the ability to shift energy production in time, i.e., for storable fuel (either thermal or hydro) to be available.

11. TrustPower has not undertaken a market making obligation on the ASX to date because we have a very limited ability to offset an acquired position with stored energy. Most of TrustPower’s generation capacity is wind or run-of-river hydro, with less than a quarter having any reasonable storage available. TrustPower’s hydro storage is only 2-3% of the national hydro storage capacity . To this extent, we are not able to support market making at the same level as other gentailers who have much greater hydro and/or thermal fuel reserves to carry them through periods when futures contracts may be inefficiently priced.

12. Generally , TrustPower is a price taker in the spot market, with our generation offer being the price setter on very infrequent occasions. Larger generators have more input into the spot market and hence control over the price of hedges and their consequent settlement value.

13. TrustPower is also a substantial net retailer, producing around 5% of the national generation but supplying around 10% of the retail load. Generation is spread around NZ and not concentrated at the ASX nodes. Being a net purchaser of hedges, it does not make economic sense for us to be exposed to compulsory selling as a market maker on the ASX, particularly at nodes where we have little or no surplus generation.

14. We note the suggestion in the Energy Link report (p28) that “the Authority should consider increasing the threshold for mandatory market making to 1,000 MW of capacity (up from 500 MW), with additional requirements around net position, i.e., large net retailers might also need to be excluded”. TrustPower supports a review of mandatory market making along these lines.

Prudential Requirements

15. We note the Energy Link suggestion (p 29) that “the Authority should investigate how a net futures position could be taken into account in calculating prudential requirements …”. This may not be necessary, given that ASX contracts that are “in the money” are effectively a liquid cash fund for the

account holder, so can be used in any case to meet prudential requirements in the spot market, without any reporting being required between the ASX and the clearing manager.

Open Interest Target

16. The slow progress towards the Open Interest target of 3,000 GWh is fully described in the Energy Link report. TrustPower has contributed towards current Open Interest in proportion to our generation market share, and expect to continue to participate as a net retailer to acquire further Open Interest. We support the development of an enhanced hedge market, as we supported the development of its predecessor Energy Hedge.

17. In general, we believe that the recommendations of the Energy Link report are a sound basis for further consultation.

18. If you have any questions regarding this response, please do not hesitate to contact me.

Regards

Vince Hawksworth
CHIEF EXECUTIVE

contact

6 July 2011

Carl Hansen
Electricity Authority
Level 7, ASB Bank Tower
2 Hunter Street
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WELLINGTON 6143

Re: Hedge Market

Dear Carl

I am following up on your letter of 24 June to Dennis regarding the hedge market. I note that Contact is not a party to the virtual asset swaps and so not in a position to comment on them.

Contact would support market making agreements with stronger commitments, provided that the process for establishing these agreements assures us that other market makers are also increasing their commitment. Contact would be prepared to market make at the suggested 5% spread. This will be subject to Contact's internal review. I have been in contact with the ASX and understand that it is aiming to have new agreements in place by October. Contact can meet this timeline.

Contact is not convinced that Trustpower is unable to take on significant market making commitments. Trustpower is well capitalised and resourced. Market making need not expose them to significant risk.

Contact would support the introduction of a volatility product on the ASX, either a cap product or an asian option product. Contact has indicated to the ASX that it could support one or other of these products through market making. I understand that the ASX will make a firm recommendation to the steering group in October, and that it would then take six months for the product to be listed. I see no difficulty with this timeline.

I would be happy to discuss further.

Yours sincerely

John Woods
General Manager Wholesale

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R551

meridian
6 July 2011

Carl Hansen — Sent 6/7
Chief Executive
Electricity Authority
P O Box 10-041
Wellington

Dear Carl

Government expectations for standardised and active hedge market

Further to your letter dated 24 June 2011.

Meridian will work with ASX to develop a standardised market making agreement with the following characteristics:

- requirement for a reduced maximum bid/offer spread;
- transparency around the key characteristics of the market making agreement; and
- transition from a best endeavours requirement to a more firm commitment.

Obviously, before entering into any new arrangement Meridian will work through its own governance processes and the timeline will depend on both the ASX and any adjustments to Meridian's legal documentation necessary to effect such a decision.

Meridian is also comfortable disclosing that the Virtual Asset Swap arrangements that were mandated as part of the Ministerial Review utilise the ASX for the purpose of determining prices under those arrangements. While the arrangements between Meridian, Mighty River Power and Genesis differ, the effect is that up to 1,150GWh of contracted volume relies on the ASX futures price to underpin the arrangements each year for 15 years at each ASX trading node. As a result, Meridian has a strong incentive to support development of the ASX futures market[1] .

Meridian looks forward to commenting on the consultation paper by the Electricity Authority, including the report commissioned by the Authority from Energy Link considering progress that has been made towards achieving the Government's objectives on establishing an active hedge market.

Meridian acknowledges that this letter will be published.

Yours sincerely

Tim Lusk
Chief Executive

[1] Meridian has the consent of Mighty River Power and Genesis to make the above statements.

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4 July 2011

Carl Hansen
Chief Executive
Electricity Authority
Level 7, 2 Hunter Street
WELLINGTON, 6143

29 June 2011

Dear Carl,

I am writing in response to your letter of the 24 June 2011 titled "Government expectations for standardized and active hedge market".

ASX can confirm that it intends to progress a number of initiatives along the lines indicated in your letter to assist in the further development of the New Zealand Electricity Futures market.

The next ASX NZ Electricity Futures User Group meeting is planned to be held in Wellington on 4 October 2011. By the time of this meeting, ASX intends to have in place new market making agreements, which will incorporate a tighter than current bid/offer spread requirement as well as other more robust requirements to be met by market makers.

At the October meeting, it is also proposed that agreement be reached on the proposed new products and their priority. ASX's current preference is that an options or cap product be given the highest priority. ASX will be canvassing market views regarding the structure (e.g. cap levels, term, etc) of a cap contract and the willingness for the market to provide commensurate support in the form of market making.

Once priority is determined, ASX would work to develop an indicative timeline for implementing new products taking into account the requirement to undertake system maintenance, obtain regulatory approvals and associated market communications prior to listing.

With regard to Trustpower's market position, ASX believes that this is a matter for the Electricity Authority to determine but I can confirm that ASX is prepared (as we have been in the past) to accommodate reasonable requests for changes to the standardized market making agreements where appropriate.

ASX welcomes the opportunity to further discuss these matters with you as required so please don't hesitate to contact me should you wish to engage prior to the 6 July 2011 deadline for response submissions.

Yours sincerely

Ken Chapman
GM – Futures & Options

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ENERGY

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6 July 2011

Carl Hansen

Electricity Authority

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By email: carl.hansen@ea.govt.nz

Dear Mr Hansen

Increasing futures market activity

Thank you for your letter of 24 June 2011 headed "Government expectations for standardised and active hedge market". In your letter you asked for an update on several matters discussed at our meeting on 22 July 2011 and at an earlier meeting the Electricity Authority ("**the Authority**") had with ASX, Contact Energy, Meridian Energy, Mighty River Power and Trustpower on 20 July 2011. This letter provides our update.

We understand that the Authority may wish to publish this letter and we confirm that this letter is not confidential.

Market Making Agreements

Genesis Energy shares the Authority's interest in seeing narrower trading spreads on ASX electricity futures and greater depth and liquidity. Market making agreements naturally have an important role to play in supporting these goals, but are not a substitute for growth in active participation by other parties.

We understand that there is an action on ASX in the first instance to develop a standardised market making agreement. We will gladly engage with ASX on a commercial basis to negotiate a revised, more rigorous, market making agreement. We note that our current agreement reflects our commercial judgement of the market conditions at the time and our willingness to accept anticipated costs and risks. If we are confident that other market makers will be increasing their commitment then we will be more able to step up our commitment.

We note that we would also welcome the additional market depth that TrustPower would provide if it were to enter into a market making agreement. We accept that it may be appropriate for Trustpower to agree to larger spreads or a less firm commitment than the other major generators.

Transparency Regarding Price-Indexation

You have noted that potential futures market participants may take comfort from knowing that some major over-the-counter ("**OTC**") contracts are indexed to futures pricing. We can confirm that pricing for our virtual asset swap contract with Meridian Energy is linked to ASX electricity futures products. This means that we have a strong incentive to support efficient price discovery in the futures market.

Product Development

Your letter notes that the Authority has suggested development of new futures products, such as some form of Asian option. We agree that new products should be developed if they will be supported by market participants. Product selection should be guided by considering whether there is a specific risk management need that the product would fill and whether the product will have broad appeal. The ASX NZ Electricity Futures User Group provides a good forum for ascertaining which products are worth development and Genesis Energy is an active participant in this forum.

Our view is that there would be value in an "option on futures" product of some type and we would consider market making for such a product. However, the details of any new product should be developed via a forum that allows market participants, including generators, large users and intermediaries, to shape the product to meet their needs.

We note that we expect OTC trading of bespoke cap products will continue to be a useful way for many participants to meet their specific risk management needs. We are continuing our efforts to stimulate ongoing development of the OTC market.

Energy Link Report

We note that since our meeting and your letter, the Authority has released a report by Energy Link that evaluates hedge market liquidity and discuss possible intervention options. We have not had time to review the report in full and expect to have an opportunity to comment more fully when the Authority consults on hedge market matters later this month.

However, we would like to comment now on one item mentioned in the report. The following excerpt is from page 17 of the report:

> "A second potential barrier to participation is the high value of the initial margins, currently ranging from $5,700 up to $46,300, which is high relative to the equivalent Australian electricity futures (AUD $3,100 - $12,200) and most (but not all) initial margins on other electricity futures exchanges. Our discussions with stakeholders indicate that they are not currently seen as a barrier to those who are currently interested in trading. Nevertheless, these are still substantial sums, set relative to worst-case scenarios for changes in futures prices from day-today [sic]. They are expected to fall significantly (down to between a few and several thousand dollars) as liquidity develops and also as certainty is obtained around pricing during events such as 26 March 2011 when provisional spot prices hit $20,000/MWh in the upper North Island. Events such as 26 March create uncertainty over future price levels which can translate into sudden changes in futures price, or into lower volumes of trade."

We acknowledge that high and volatile prices may increase initial margin requirements for parties wishing to directly trade in electricity futures. However, we wish to note again for the record our view that using the UTS regime to shield market participants from the consequences of poor commercial risk management will have had a detrimental overall impact on hedge market development. The decision by the Authority to cap prices encourages reliance on intervention and deters the kind of active hedging activity that the Authority wishes to promote. This is a far more serious concern than the effect of price volatility on initial margin requirements.

I trust that this letter addresses your questions satisfactorily. If you would like to discuss any of these matters further, please contact Ross Parry on (04) 495 3348.

Yours sincerely

Albert Brantley
Chief Executive Officer

genesis ENERGY