

26 September 2017.

Submissions
Electricity Authority
Wellington

Real-time pricing proposal – Consultation Paper 1 August 2017.

Thank you for the opportunity to submit on this paper. We note that of necessity this is submitted ahead of the extended closure date and without the benefit of clarification of various points through the on-going Q&A process.

New Zealand Steel (NZS) supports the work of the Authority to improve the pricing signals provided under the current ex-post mechanism. We have also expressed support in principle for a Real-Time Pricing (RTP) regime.

We are mindful of the Authority work programme “Improving the accuracy of spot price forecasts”. The current RTP proposal contains elements that will also assist in improving the accuracy of predicted prices, in addition to the real-time price calculation. However, the way it is proposed to achieve the RTP regime raises some issues and concerns:

1. The proposal is for a 5-minute ex-ante calculation of unit price. The inputs (supply and demand) required for this calculation bring into question whether this is in effect RTP. Our comments largely focus on demand side non-conforming GXPs.
2. The real-time unit price would be derived from the forecast load and available supply. The forecast load component of this equation requires further consideration:
 - a. Pricing is a combination of volume and unit price. The unit price determined by the SO pricing model is only part of the equation.
 - b. Conforming nodes have predicted load calculated by the SO. We note however, the Authority work has shown conforming load to have the largest variation to actual¹. Until the project of work to address this issue is completed, it will impact on the RTP regime proposed.
 - c. Non-conforming GXPs are required to nominate load and price on a half-hourly basis before gate closure ie one-hour out. The current and proposed mechanisms for altering load bids within gate closure are far from clear.
 - d. The result is consumers at conforming nodes get the full benefit of RTP ie the price is known before (and during) each trading period and load can be varied at will.
 - e. For non-conforming GXPs we suggest what is being proposed is not RTP. The unit price will be known, but consumers at these GXPs need to

¹ Electricity Authority, “Making hours-ahead price forecasts more accurate”, Consultation paper, 9 February 2016.

meet certain (unclear) criteria before the load nominated an hour before the unit price is determined, can be varied.

- f. Given a. & b. above, RTP as proposed disadvantages consumers at non-conforming GXPs and there are no immediate plans to address the issue of conforming loads impacting the supply/demand equation, nor to further reduce Gate Closure.
3. Referring to 2c & 2e above, variations to load bids inside Gate Closure are proposed by various means. However, each of these has unresolved issues/questions:
 - a. Dispatchable Demand (DD). Currently there is only one participant. Despite 'tweaking', DD is still not seen as a workable option for other consumers. NZS participated in the initial trials, but the nature of our operations raised for us concerns that we could always meet dispatch-on instructions. As things stand DD is not a workable option for our site.
 - b. DD lite. The concept proposed has possibilities, but requires further development before we can comment on its workability, particularly for large consumers.
 - c. Demand side bidding and Forecasting (DSBF). While it appears this mechanism will remain, it is not clear currently as to its importance and how this actually works. The importance will change with non-conforming load bids to be included in the dispatch calculations.
 - d. Bona fide physical reason. On the demand side there is lack of clarity as to how this applies now, and is proposed to apply under the proposed RTP regime.
 4. Underlying the current DD regime is a concern anecdotally that load and price bids from non-conforming GXPs are in effect setting the price. While we can understand this will occur in a minority of situations when that bid is at the margin, the concern is DD has moved from a price the demand side is not prepared to pay greater than, to a price load side is prepared to pay. This is at variance to the purpose of DD - "Dispatchable Demand (DD) was introduced to the wholesale electricity market to enable demand-side participants to have certainty over consumption decisions and to put downward pressure on spot prices"². We await the result of the current Authority enquiry into the matter of demand side price bids setting the price at that GXP.
 5. One hour Gate Closure and discrete 30 minute Trading Periods exacerbate the situation outlined in point 4 above. What a consumer at a non-conforming GXP may be prepared to pay for one trading period does not mean that is the price/load combination they are prepared to be pay for multiple periods. The RTP proposal embeds rather than alleviates this situation.

² Section 3.5.1, Transpower, Real Time Pricing Report (TAS060), February 2017.

6. To be able to make informed decisions greater visibility is required of the demand supply stack.
7. Implementation of RTP as proposed will require NZS to review Trading Period load and price bidding procedures. We are concerned the requirements to operate within the intent of the proposed RTP will impact the currently outsourced 24 hour energy load-bidding functions with increased costs potentially outweighing the CBA for NZS of improved unit price certainty.

While there are peripheral issues included above, the key issues in summary are:

- The concept of RTP is supported by NZS. However, what is being proposed does not appear to be a real-time option for consumers at non-conforming GXPs.
- Workable options for non-conforming GXPs to vary load within one-hour gate closure are still being developed. We see this as essential to delivery of real-time pricing for all consumers.
- The issue of inaccurate load forecasting at conforming nodes has not been resolved and is hindering pricing forecasts. (we note the Authority work programme includes “Improving the accuracy of spot price forecasts”).

We will be pleased to provide further comment on the points raised, and to engage with Authority staff with a view to the RTP proposal being workable for all consumers.

Alan Eyes | New Zealand Steel

Energy Manager

Private Bag 92121, Auckland, New Zealand

Mission Bush Road, Glenbrook, New Zealand

T. +64 9 375 8393 | M. +64 21 870629

alan.eyes@bluescopesteel.com | www.bluescopesteel.com