



MAJOR ELECTRICITY USERS' GROUP

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Greg Williams
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By email to submissions@ea.govt.nz

Dear Greg

Consultation paper – Making hours-ahead price forecasts more accurate

1. This is a submission by the Major Electricity Users' Group (MEUG) on the Electricity Authority (EA) consultation paper "Making hours-ahead price forecasts more accurate" dated 9 February 2017.¹
2. MEUG members have been consulted in the preparation of this submission. This submission is not confidential. Some members may make separate submissions.
3. In preparing this submission we benefited from representatives from the EA, advisors to the EA and System Operator attending the MEUG meeting on 22 March 2017 to discuss the consultation paper and the related topic of implementing Real-Time-Pricing (RTP) that the EA will be consulting on in the near term.²
4. MEUG views implementing RTP as essential and options to improve hours-ahead price forecasts as complementing RTP for discovering efficient spot prices.
5. The primary question posed in the consultation paper is "At this point, the Authority is inviting submissions on whether to seek improvements to the conforming load forecast as a step toward exploring other options later."³ In summary, the response from MEUG is we agree with that approach.
6. Responses to selected questions in the consultation paper follow. We have not answered questions 1 to 7 because those ask for anything missing in relation to feasible options (including quick wins as an alternative to the proposal to improve conforming load forecasts) and relevant factors and qualitative benefits and costs for each option that need

¹ URL <http://www.ea.govt.nz/dmsdocument/21777> at <http://www.ea.govt.nz/development/work-programme/pricing-cost-allocation/exploring-refinements-to-the-spot-market/consultations/#c16353>.

² The EA on 9 August 2016 announced "We have decided to develop the details of a 'look-ahead' dispatch-based price (option B from the information paper published in April 2016). We intend to develop this option in the 2016/17 financial year in sufficient detail to publish a proposal to amend the Electricity Industry Participation Code 2010 (Code)", refer <http://www.ea.govt.nz/dmsdocument/21127>. The proposed RTP approach is for final prices in a half-hour trading period to be the average of 5 minute "look-ahead" intra-trading period dispatch prices.

³ Consultation paper, piii.

to be considered. MEUG either has no additional factors that should be considered or we cover how factors are considered and weighted in questions 8 to 11.

Question	MEUG response
8. Do you disagree with the options chosen for quantitative assessment?	MEUG agrees with selecting options A and D for the CBA because they represent the two ends of the spectrum between light and heavy intervention.
9. Do you agree with the cost benefit assessment? If not, why not?	<p>The CBA helps realise the complexity of the interaction of various factors that incentivises actual market participant behaviour. No CBA could exactly replicate historic behaviour let alone accurately predict the future with and without better hours-ahead forecast prices. With that caveat the CBA is helpful to give an indication of the relative scale of impacts for different options. Hence the CBA assists choose between the 2 main paths forward of light or heavy intervention, where the option of more heavy intervention can follow an initial light intervention path. For example, MEUG notes:</p> <ul style="list-style-type: none"> • The estimated NPV of option A and D for improving hours-ahead price forecasts of \$20m and \$38m respectively are both less than the expected NPV for RTP of \$58m.⁴ The analysis in the consultation paper assumes RTP proceeds. That there is likely to be more value in implementing RTP than work on improving hours-ahead price forecasts seems intuitively correct. This supports our preferred priority to implement RTP noted in paragraph 4 of this submission. We still support work on improving hours-ahead price forecasting because any work that has an expected positive NPV should be considered; the only question is with what priority and that in part depends on the relevant risk and NPV under various scenarios. • The relative higher cost of implementing option D compared to option A also appears intuitively correct. • For both options the benefit of improved dispatch efficiency is more than twice the combined benefit of commercial and industrial (C&I) and retail demand side response (DSR) and innovation. The combined C&I and retail DSR benefits alone just cover implementation costs for option A and are just under those costs for option D. It is therefore the estimates of improved dispatch efficiency that drive the benefits for both options to be significantly greater than costs. <p>The paper acknowledges there are many assumptions in the estimate of the benefits of improved dispatch including the assumed capture ratio (reduction in forecast error compared to a perfect world) of 19% for option A and 33% for option D.</p>

⁴ Refer EA information paper, Assessment of RTP options, 12 April 2016.

Question	MEUG response
	<p>It is this difference in the capture ratio that drives the PV gross benefits for improved dispatch in option D to be twice that for option A. Given the number of uncertainties and assumptions that need to be made we're unsure the estimated gross benefit for option D over A for dispatch efficiency is robust as a predictor of future benefits. The outcome we would have expected would be a wider spread, in percentage terms, between the low and high estimates for improved dispatch relative to the percentage spread between low and high estimated gross benefits for C&I and retail DSR.</p> <p>We have not tested what parameters of the estimates might need changing to widen the spread in the NPV estimates for improving dispatch to match our expectation. That detailed analysis is not needed because we have sufficient information to conclude that option A is preferred over option D as summarised by the EA in the consultation paper:</p> <p style="padding-left: 40px;">"We prefer Option A as the best approach at this stage. We think it will provide worthwhile net benefits, and that it has relatively low risks. Although the other options could provide higher benefits in some scenarios, they are subject to greater levels of uncertainty and have more implementation risk."⁵</p>
10. Do you agree that Option A is preferred at this point? If not, why not?	Yes.
11. If Option A is implemented, are there any factors that should be taken into account to maintain the potential to move on to Options B, C or D at a later point?	None that we are aware of.

7. We look forward to the EA considering this submission.

Yours sincerely



Ralph Matthes
Executive Director

⁵ Consultation paper, piii.