MAJOR ELECTRICITY USERS' GROUP

30 March 2012

Greg Williams and Gary Rogers
Electricity Authority
By email to greg.williams@ea.govt.nz and gary.rogers@ea.govt.nz

Dear Greg and Gary

Feedback on draft spot price risk disclosure statement

This letter provides feedback on the Electricity Authority draft stress tests and draft spot price risk disclosure statement (SPRDS) published on 24th February 2012[1]. The drafts are "road test" versions. We welcome the approach by the Authority to use such trials before initiating formal compliance obligations.

The first part of this letter provides some context to the specific points of feedback in the second part of the letter. The letter concludes with a list of information requests from the preceding sections.

This feedback has been prepared in consultation with MEUG members and other end customers that are disclosing participants. Some members will also be providing feedback.

Context

Paragraph 2.1 of the Authority document "Stress testing regime – stress tests: Base case, stress tests and application notes", dated 24th February 2012 states, with emphasis added by MEUG:

> "For this reason, the stress testing regime is intended to dovetail as far as possible with the arrangements that participants will already have in place for monitoring exposure to spot price risk. In particular, the Authority has sought to limit the level of prescription in the stress testing arrangements as far as possible, while still ensuring that disclosure is robust."

End customers that are disclosing participants report that the road test version does not dovetail with existing end consumer practices. In addition the assumptions are unrealistic and will create unwarranted compliance costs and more uncertainty to the market than clarity.

[1] http://www.ea.govt.nz/our-work/programmes/priority-projects/scarcity-pricing-default-buy-back/stress-tests/

The main implementation problem is that the proposed price forecasts are unrealistic. In the next section we explain why we believe the base case and stress test price assumptions are unrealistic. Use of unrealistic forecasts will undermine confidence in the Authority as the stress test regime will be seen and will in reality be a waste of time. Wasting the time of management and directors of disclosing participant companies is not improving the productivity of end consumers or the economy as a whole.

On the other hand the Authority may have other information or risk assessment techniques to justify the proposed base case and stress test price forecasts. If that is the case then those need to be disclosed.

To illustrate how pervasive the problem of unrealistic stress test price forecasts is; consider the impact on parties other than existing disclosing participants. Potential new entrants in the retail market, the generation market, futures market and FTR market may be domiciled overseas and unaware of the nuances and history of the stress test regime. In undertaking due diligence on the New Zealand market those parties will observe stress test price forecasts published by the regulator. Will they simply dismiss those forecasts or give some credence to them? To avoid misinterpretation and the risk of those new entrants deciding not to invest in New Zealand, the stress test price forecasts need to be plausible.

The second problem with the stress testing regime is that it imposes an additional bureaucratic burden over and above existing risk management processes. The view of the Authority that the stress tests will dovetail with existing processes is inconsistent with advice from end customers.

Whether the costs of implementing the stress test regime is worth it is still questionable. For example the regime is discriminatory in so far as reporting obligations only apply to a few large end consumers and not all consumers with spot exposure. Appendix D of the RFP issued for the Stress Test Registrar[2] lists 31 companies as disclosing participants with seven of those being end customers. The event on 26th March 2011 demonstrated that within the upper North Island alone there were many more businesses that, at that time, had significant spot price exposure. The seven businesses listed in appendix D of the RFP are likely to have sufficient experience to date to have established sophisticated risk management strategies. The problem of poor risk management is more likely to lie with smaller enterprises not as familiar with the risks and not subject to the price risk disclosure requirements.

There are two other aspects of the list of participants in appendix D of the RFP worth noting. First, the list is not consistent with other advice from the Authority on likely end customer disclosing participants. Second, a business like ONTRACK has been included because it is grid connected but that is a poor selection criterion when there are many industrial and commercial end customers that have aggregate nationwide annual demand greater than that of ONTRACK. This policy fault lies with the final stress test Code design; nevertheless it is worth recognising how partial or inconsistent the regime is.

Another indicator in considering the worthiness or otherwise of the stress test regime is experience over the current quarter ending 31st March 2012. As at 28th March the Otahuhu futures spot price[3] over the quarter was \$115/MWh. The highest future price for this quarter was \$128/MWh on 9th February 2012. At that date the market expectation was that this was going to be the highest priced first quarter since the market started as summarised below:

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[2] RFP for Registrar for Stress testing regime issued by the EA 29th February 2012, with tenders closing 21st March 2012, http://www.ea.govt.nz/document/16112/download/our-work/programmes/priority-projects/scarcity-pricing-default-buy-back/stress-test-registrar/

[3] All prices referred to in this letter are at Otahuhu.

Table 1: January to March quarter average prices		
January to March quarter (ranked)	Average Otahuhu spot price over the quarter $/MWh	Date ASX trade
Mar-12 max	*$128*	*9th February 2012*
Mar-11	$119.58	
Mar-06	$116.52	
Mar-12 recent	*$115*	*28th March 2012*
Mar-08	$114.80	
Mar-03	$106.55	
Mar-10	$84.07	
Mar-99	$67.12	
Mar-05	$61.46	
Mar-97	$52.24	
Mar-01	$51.12	
Mar-98	$46.44	
Mar-07	$44.32	
Mar-09	$42.41	
Mar-04	$41.93	
Mar-02	$40.79	
Mar-00	$30.45	
Average excluding 2012	$67.99	

MEUG notes the sector has effectively managed heightened hydro storage risks without politicisation of the issue to the general media. In other words the lessons from the last major dry event in 2008 and reforms since then have made a material change to risk management by the industry; albeit with favourable lower demand growth and several large new generators commissioned also.

All of this begs the question what policy problem is the stress test regime solving and is the added bureaucratic cost worth it.

Detailed feedback

1. MEUG recommend the basis of the assumed average spot price of $100/MWh for the base case for the quarter starting 1st April 2012 needs to be justified relative to the price traded on ASX or some other market derived price. Clarity is also needed on whether the base case spot price will remain fixed for future quarters or be adjusted, and if so, then how.

   If the $100/MWh will only apply for the quarter starting 1st April 2012 and will change in the future, then for the purpose of this road test the best market price for next quarter as at 20th February 2011 (30 working days ahead of the start of the quarter) was $161/MWh.

   If the $100/MWh is a proxy for several future quarters, then using the 20th February actual ASX futures the base case should be $96.50/MWh (average quarters ending June 2012 to December 2015).

   If the $100/MWh is a proxy for the next step in LRMC then it is significantly higher than recently reported new wind investment by Meridian Energy at less than $85/MWh[4]. Note

[4] Meridian Energy Ltd, analyst and Investor Presentation, 28th March 2012, slides 22 and 23, http://operationpowersave.co.nz/company/investors/reports-and-presentations/investor-presentations/

MEUG does not accept some generator statements that near term spot prices should be no lower than LRMC.

It is important the market understands how the $100/MWh assumption was derived because disclosing participants will need to ensure their directors understand any divergence between market set expectations and Authority prescribed estimates. Disclosing participants would also prefer certainty on the methodology used for setting base case price parameters from quarter to quarter.

If for instance the $100/MWh were simply an ad hoc guess, then that would create uncertainty on how parties managed compliance processes because the Authority could in the future choose any ad hoc approach and therefore increase the cost of end customer senior staff and directors being briefed as periodic ad hoc changes were made. Our preference would be for the Authority when setting base case price parameters to use the most recent ASX futures price available or some other market derived price. We note while ASX traded volumes have increased significantly over the last 4 months, the futures market remains a relatively thinly traded instrument.

MEUG requests the Authority disclose the source, background papers and calculations used for the $100/MWh assumption for the base case and advise if the base case price forecast will be revised ahead of every quarter or remain constant for several quarters.

2. MEUG recommend the stress test price forecast assumptions for E1 and E2 be reviewed because the road test assumptions are unrealistic and if prescribed will undermine confidence in the Authority and the market as noted in the context section of this letter.

The assumption for stress test E1 that average prices over the whole quarter starting 1st April 2012 will be 400/MWh is almost twice the historic average for that quarter since the market started 15 years ago, 2 ½ times the ASX futures price as at 20th February 2012 (the date 30 working days prior to 1st April that stress test assumptions would have been set at) and over 5 times the average as summarised below:

Table 2: April to June quarter average prices

April to June quarter (ranked)	Average Otahuhu spot price over the quarter $/MWh	Scaling to replicate $400/MWh
Jun-08	$207.32	x 1.93 = $400
Jun-12 (ASX)	*$161*	*x 2.5 = $400*
Jun-03	$130.52	
Jun-01	$96.72	
Jun-06	$89.88	
Jun-05	$71.42	
Jun-07	$65.85	
Jun-09	$58.60	
Jun-10	$58.14	
Jun-02	$57.72	
Jun-97	$54.10	
Jun-11	$46.16	
Jun-00	$44.79	
Jun-04	$42.53	
Jun-98	$39.29	
Jun-99	$31.67	
Average excluding 2012	$72.98	x 5.48 = $400

Based on the evidence to date the assumed stress test of $400/MWh averaged over the quarter starting 1st April 2012 is unrealistic.

The assumption of spot prices averaging $400/MWh over a whole quarter is also unrealistic if you consider the effect on prudential requirements and the flow on effect of these cash flows to the economy. If demand was expected to be 3,000 GWh for a winter month when prices were likely to be extreme, and the Clearing and Settlement Manager were to call cash prudential requirements using $400/MWh, initial calls would equal $2.5 billion[5]. To put this into perspective in an "average" spot price year total spot trades would be valued at about $3.2 billion. If we ever got to the situation where the electricity market sucked out $2.5 billion for prudential requirements in one month because prices were expected to average $400/MWh over the forthcoming month, then the market would truly have failed.

MEUG notes much has changed to the governance and risk management practices in the industry since the highest year to date April to June quarter in 2008. Those changes have been, by and large, for the better as is evidenced by the way the recent dry event has been managed along with fortuitous low demand growth and several large increments in new supply. There are more changes in train that will improve risk management practices across the supply and demand side.

More market innovation and more market driven pricing may lead to greater volatility on a trading period to trading period, day to day and week to week basis. However over the 12 weeks of a quarter we expect improved and more diverse market responses than in the past. If anything the seasonal volatility is likely to be better managed compared to the high price events of the past that were set in a much less competitive environment[6] and where Ministerial intervention was possible[7].

The notion that prices may average well in excess of $400/MWh assumed for stress test E2 (ie $500/MWh for the first 7 weeks and thereafter $750/MWh coinciding with an official conservation campaign) is even less realistic. Stress test E2 assumes storage falls below the 10% Hydro Risk Curve nationally and a national official conservation campaign is then triggered. MEUG does not believe this is plausible for two reasons:

- It's more likely an official conservation campaign will be triggered for the South Island only or first rather than nationally. There may be a case that only South Island based disclosing participants need then apply an extreme E2 type stress.

- There is currently an extremely remote chance South Island storage will fall below the 10% Hydro Risk Curve by 20th May (ie 1st April plus 7 weeks as assumed in E2)

[5] $2.5 b is estimated as the product of expected demand over the month (3,000 GWh being less than an average winter month of 3,500 GWh due to demand response) times forecast price ($400/MWh) plus a 10% margin above that price forecast added by the Clearing Manager times 57 days over 30 days. This estimate does not consider hedges or other securities or evidence of an acceptable credit rating lodged by participants with the Clearing Manager to meet prudential requirements.

[6] Refer changes in Herfindahl-Hirschman Index for the retail electricity market between January 2004 and December 2011 reported in the Electricity Authority Information on the Market #9, Big changes in regional retail markets since 2004, 13th March 2012, http://www.ea.govt.nz/industry/monitoring/i-on-the-market/number9/

[7] The passage of the Electricity Industry Act 2010 establishing an independent Electricity Authority and other governance changes to the industry has limited Ministerial and regulatory discretion. For example the ability of opportunistic lobbying to affect the timing of Official Conservation Campaigns (refer cl.9.23 of the Code) or persuade government to purchase either supply or demand response has essentially been removed.

let alone the end of the quarter or for that matter this year[8]. Why impose a compliance cost to assess and report an E2 type stress test for the quarter starting 1st April 2012 if currently the prospect of a South Island event is so remote?

An extreme stress test designed like E2 might be needed in the future if storage in the current quarter is very near the 10% Hydro Risk Curve; though more thought is needed as to what prices would be plausible in that case.

Imposing stress test E2 creates unnecessary uncertainty that perhaps the Authority knows something about the next quarter to justify these extreme assumptions. If so, then that needs to be disclosed.

MEUG requests the Authority disclose the source, background papers and calculations used for the pricing assumptions for stress tests E1 and E2.

3. MEUG recommend the stress test price forecast assumptions for C1 be reviewed because the road test assumptions are unrealistic and if prescribed will undermine confidence in the Authority and the market as noted in the context section of this letter[9].

From an initial analysis it appears there have been only three events since the market started where average spot prices have exceeded $1,000/MWh for more than two hours. Those were all in 2011, namely 17th March, 26th March and 13th December. The events of 26th March and 13th December are widely considered as being extreme events. While the financial impact was very large for both of those events, they were of much shorter duration compared to the assumptions proposed for C1. Given actual capacity events to date in the market, it appears highly unlikely that the assumed stress test assumption for C1 of prices in excess of $10,000/MWh across 8 peak hours for 2 consecutive days is realistic.

MEUG requests the Authority disclose the source, background papers and calculations used for the pricing assumptions for stress test C1.

4. MEUG notes there will be "not applicable" answers to questions 2 to 8 of the draft SPRDS from disclosing participants where those parties do not have audited financial statements and are not the primary entity where risk management policies are set.

MEUG understands this will apply to several end customers listed in the participant register that are subsidiaries of holding companies.

5. MEUG notes that for disclosing participants that have an annual target ratio approach to risk management then while they will reply "yes" to question 7 in the draft SPRDS (ie do you have an explicit risk management policy?), the detailed analysis in the follow on question is only relevant for the immediate next quarter and therefore they will enter "not applicable" for question 8.

Most end customers will have an annual risk management strategy. An annual risk management strategy aligns with primary budget and reporting cycles. Quarterly and monthly and even weekly reporting cycles are also undertaken, but these are operational within the overall annual strategic plan. What matters to most end customers is the effect

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[8] The System Operator web page (http://www.systemoperator.co.nz/n3933.html) has reports on Hydro Risk Curves updated weekly and a recent simulated storage trajectories (South Island) dated March 2012 (often called spaghetti diagrams) that clearly show the risks for the quarter starting 1st April 2012 is very remote.

[9] For end customer disclosing participants the price forecast assumptions are the same for C1 and C2.

over a whole year, ie they may "lose" in a high priced quarter but they will expect on average to achieve certain annual budget targets and management will re-adjust operations to achieve annual targets to take into account quarters where high spot prices occur. The target ratios in the draft SPRDS are for the next quarter only and for most end customers is not how they manage risk. Entering "not applicable" in the table to question 8 is therefore appropriate unless they have a specific quarterly target ratio risk management policy.

Note that if disclosing participants that manage on an annual strategic planning cycle were to enter quarterly data using Authority assumptions then the results will be difficult to interpret unless all quarters in the annual budget and reporting cycle were considered. That would require the Authority to forecast base and stress tests for several quarters out and adding forecasts of possible low price scenarios and apply weightings to those. That should not be the role of the Authority.

6. MEUG notes uncertainty over the duties of a director(s) when signing the SPRDS compared to the annual certification.

   The Authority has given the impression that quarterly disclosures have a low compliance cost. However as directors ultimately have to sign annual certificates[10] "verifying that the board of a disclosing participant has considered" every SPRDS submitted over the last year; then we can't see how this can be low cost. There may be an aspect of this that we don't understand.

   MEUG requests clarification of any difference between the duties required of disclosing participant directors between signing quarterly SPRDS and signing annual certifications.

7. MEUG recommends the term for appointing the Stress Testing Registrar be changed from 3 years to 2 years to keep open the option of a post implementation review finding the stress test is not necessary.

   The RFP for the Stress Test Registrar[11] provides for an initial three year contract plus a two year right of renewal exercisable by the Authority. The Authority is planning for post-implementation reviews of the s.42 New Matters starting 2013/14[12]. We think the case for reviewing the stress test is strong and if we are correct, the regime should be discontinued. The Stress Testing Registrar should therefore be on as short a contract as possible or an option for the contact to end at no additional cost to the Authority and hence levy payers.

8. MEUG recommends the Authority consult on the proposed format of the summary information to be published by the Stress Test Registrar before finalising the SPRDS.

   There are four reasons we think this would be prudent:

   - Obtaining feedback from disclosing participants will be another useful check that the results of any individual disclosing participant cannot be identified. Relying solely on the Authority and Stress test Registrar to consider how market analysts might interrogate the summary data carries risks.

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[10] Code cl. 13.26F(1)(a)

[11] RFP for Registrar for Stress testing regime, section 1.3, and Appendix A, draft contract cl. 8.1

[12] Electricity Authority consultation paper, 2012/13 Appropriations, authority Path to CRE, and EECA work programme, 29th November 2011, Appendix D, paragraph D.41.http://www.ea.govt.nz/our-work/consultations/corporate/proposed-appropriations-2012-3/

- To provide a feedback loop to ensure only information that is necessary and can be aggregated and published is collected in the first place. MEUG suggests that only after the end point is known, that is the format of summary information to be published, can an efficient design of the SPRDS be concluded.

- The RFP for the Stress Test Registrar does not provide for any evolutionary improvements (or budget to achieve those) to the public summary information or SPRDS design[13]. That means the initial design of the way information is to be summarised and published and the SPRDS to capture information in the first place must be optimal. A consultation process would help achieve the best opening position.

- MEUG is concerned that the stress test regime might be seen as being a source of aggregate industry statistics beyond what is likely to be achieved. For example the Wholesale Advisory Group (WAG) discussion paper "Wholesale Market Information" in relation to information gathered under the stress test regime states[14]:

  > "The results which would be publicly released from the regime would provide an indication of the hedge cover available under each stress test for each quarter for participants collectively and individually, but without identifying the results of any individual participant."

  Contrary to the Wholesale Advisory Group view, MEUG does not see any robust aggregate contract cover statistics either for the base case or any stress test being obtained from the stress test regime. There may be some aggregate data but because the stress test is only partial, many disclosures will effectively have nil returns (eg feedback points 4 and 5 above and companies that do not use minimum forward cover approaches[15]) and the date of audited financial statements will differ from company to company, then the aggregate results will not be robust or comparable from quarter to quarter. Having a consultation round on the format of the summary results will help flush out any untested expectations such as those by WAG.

9. MEUG recommends the Authority publish the methods for determining inconsistencies to be used by the Stress Test Registrar to allow feedback where appropriate.

   MEUG is very concerned at the likely focus of the Stress Test Registrar on analysing information from listed disclosing participants because information on other companies will be negligible. There is a risk that the Stress Test Registrar will have an incentive to promote further investigations in order to justify their role. Worse, the Registrar may seek to expand their powers of discovery to validate disclosures, particularly of non-listed companies that tend to keep confidential all financial statement information. Making public

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[13] Stress Test RFP for Registrar for Stress testing regime, Appendix B Stress testing process map, has no feedback loop into task 11 to allow continuous improvement to either the public summary report or SPRDS.

[14] Wholesale Market Information project, A WAG discussion paper, 23rd March 2012, paragraph 8.6.5, http://www.ea.govt.nz/document/16256/download/our-work/consultations/advisory-group/wholesale-market-information-wag-discussion-paper/

[15] Refer Electricity Authority, Stress testing regime – stress tests: Base case, stress tests and application notes, 24th February 2012, refer paragraph 2.63 and 2.64 that discusses the situation "where a participant's risk management policy is not expressed in a form that sets a minimum or expected level of forward cover, it will not be feasible to calculate a meaningful target cover ratio"

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the proposed method for determining inconsistencies in the successful tender documents of the appointed Stress Test Registrar may help allay our concerns.

MEUG notes that the tender documents are also discoverable under the Official Information Act.

10. MEUG requests clarification of the requirement in the draft Service Provider Contract for the Stress Test Registrar to notify any possible Code breach by a participant at the same time keeping the name of that party confidential[16].

This provision seems to put the Stress Test Registrar in a no win situation. Is it possible for the Stress Test Registrar to notify a possible breach without giving the identity of that party away? If there is any scenario where the answer is yes then the Stress Test Registrar will have broken the Code requirement not to allow identification of disclosing participants. If the answer is that in no situation ever will the Stress Test Registrar's notification of a breach allow that party to be identified then what is the point of requiring the breach to be notified in the first place?

Concluding comments

Implementation of the spot price disclosure statement requirements was always going to be difficult. MEUG recommend the Authority introduce the regime once it is sure the cost of disclosing participants in complying and uncertainty on how the Authority intend to implement the requirements is minimised. The risks of undermining confidence in the Authority and market are too great to rush implementation.

The market has effectively managed a very dry period for the lower South Island since November last year without the politicisation risks that were the basis for the stress test regime; albeit with fortuitous low demand growth and new generation having been commissioned. With lake levels in better shape than a month ago we see no urgency to implement a less than realistic stress test. There is time to get it right and that time should be used.

In this feedback we have asked the Authority for more information on:

- The source, background papers and calculations used for the $100/MWh assumption for the base case and advise if the base case price forecast will be revised ahead of every quarter or remain constant for several quarters;
- The source, background papers and calculations used for the pricing assumptions for stress tests E1 and E2;
- The source, background papers and calculations used for the pricing assumptions for stress test C1;
- Clarification of any difference between the duties required of disclosing Participant Directors between signing quarterly SPRDS and signing annual certifications; and
- Clarification of the requirement in the draft Service Provider Contract for the Stress Test Registrar to notify any possible Code breach by a participant at the same time keeping the name of that party confidential.

[16] RFP for Registrar for Stress testing regime, Appendix A draft contract, cl. 18.1 and 18.2.

To avoid any doubt, the Official Information Act applies to the above requests for information.

We look forward to the Authority’s reply to the above questions and consideration of this feedback.

Yours sincerely

Ralph Matthes
Executive Director