



## Wholesale Market Advisory Group

**3 May 2007**

**Electricity Commission  
ASB Bank Tower  
Level 7, 2 Hunter Street  
Wellington**

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### **Members present**

Bill Heaps (Chair)  
Rod Boyte  
Doug Goodwin  
John Scott  
Graham Stairmand  
Grant Sullivan  
Therese Thorn  
Kit Wilson

### **Also in attendance**

Tim Street (Electricity Commission, Senior Adviser Wholesale)  
Laurie Counsell (Electricity Commission, Adviser Wholesale)  
Rick Liew (Electricity Commission, Adviser Wholesale)  
Andrew Jefferies (Concept Consulting)  
Greg Williams (Concept Consulting) (agenda items 1 to 6)

### **Introduction**

The meeting opened at 9.10am once a quorum had been achieved.

### **1. Apologies**

An apology was received from Phil Gibson. Kit Wilson and Grant Sullivan provided apologies for lateness.

It was noted that Doug Goodwin, John Scott, Grant Sullivan and Kit Wilson have had their WMAG membership period extended until the end of May 2007.

## **2. Minutes of previous meeting**

The minutes of the 8 March 2007 meeting were accepted as a true and accurate record, with one minor revision to item 9 to avoid the implication that it is the WMAG or Commission that makes rules – in fact it is the Minister who makes rules.

## **3. Matters arising from the previous meeting**

**Action point 1 from 8 March 2007 meeting:** *Work plan - The WMAG administrator to draft a scope for investigating how to encourage more demand response.*

That action point has been completed though the preparation of a WMAG paper to be discussed as item 8 on the agenda for 3 May 2007.

**Action point 2 from 8 March 2007 meeting:** *Review of offer and dispatch rules - The WMAG administrator to provide a detailed scope and suggest relative priorities for the remaining offer and dispatch issues.*

That action point has been completed though the preparation of a WMAG paper to be discussed as item 7 on the agenda for 3 May 2007.

**Action point 3 from 8 March 2007 meeting:** *Administration - The WMAG administrator to circulate an email seeking other topics for discussion [at a WMAG forum].*

Commission staff will circulate an email shortly.

There were no other matters arising from the minutes.

## **4. Correspondence**

No correspondence relevant for WMAG has been received since the previous meeting.

## **5. Dispatch compliance and timetable for two-hour rule reports**

WMAG agreed that the Commission should proceed to consultation on a proposed rule change to change the timetable for two-hour rule reports. The proposal is to make the reports due by 1700 hours on the next business day.

WMAG considered that the Commission should consult on a proposal to amend the definition of “bona fide physical reason” in part A of the Rules. The amendment would clarify that an ancillary service agent (and especially a distributor providing IL) can experience a bona fide physical reason. A WMAG member suggested that the Commission should also consider making changes to paragraphs (c)(i) and (c)(iii) of the definition to reflect the change that is being made to paragraph (b)(i) as part of the co-generation rule change.

WMAG discussed the process for making minor rule changes. WMAG recommended that the Senior Advisor recommend to the Board that the minimum length of time for consultation (the Board has set this period at four weeks) should be reduced to two weeks to facilitate more rapid progress for minor rule changes. WMAG noted that the Electricity Act still

requires consultation on minor rule changes, although no assessment is required (section 172F(3)).

WMAG noted that there is no ability for the Commission to issue “binding rulings” to clarify the meaning of rules (as for IRD for example).

WMAG noted the history of the  $\pm 1\text{MW}$  rule (G.III.4.16). It does not, and was not intended to, provide a tolerance band around a dispatch instruction. Rather it enables some dispatch instructions to be acknowledged automatically in GENCO and removes any suggestion that a generator needs to make frequent very small adjustments to their set point to comply with very small changes in dispatch instructions.

WMAG discussed the system operator’s practice in terms of when it alleges breaches of dispatch compliance (rule G.III.4.11). It was noted that many generators provide unrestrained governor action so that the plant reacts to frequency variations by ramping up or down to stabilise the system at 50hz. (The responsiveness of a generator is determined by their “droop” setting). Consequently, it may be positively beneficial for a generator to be operating outside a  $\pm 1\text{MW}$  guideline tolerance for dispatch if it is responding to frequency. This is one reason why the system operator adopts a pragmatic approach to alleging breaches of the dispatch compliance provision, and why any tolerance limit can only be a guideline, not a rigid band.

WMAG appeared broadly comfortable with the system operator’s practice (in terms of when it alleges a breach of the dispatch compliance provision). It was noted that, if a particular generation unit has difficulty complying with dispatch instructions, even after using the available re-offering processes (including bona fide provisions), it can apply for an exemption, and the Commission will consider the application on its merits. The Commission would review exemptions granted over time to determine if a rule change would be appropriate.

WMAG advised that the Commission and the system operator should publish an information paper on dispatch compliance, providing information on their practices in terms of alleging breaches and pursuing those breaches through the compliance regime. The information paper should mention the benefits of unrestrained governor action, and note that there is a process for parties to apply for an exemption.

**Action point**     **The WMAG Administrator** to prepare, in consultation with the system operator, an information paper on the system operator’s practice and the Commission’s practice in relation to monitoring and enforcing dispatch compliance. Circulate information paper to WMAG members by e-mail for comment.

## **6. Interruptible load availability and offer and dispatch of instantaneous reserve**

Greg Williams (Concept Consulting) outlined the paper.

WMAG discussed the diagram on page 8 of the WMAG paper. The diagram shows a decline in the quantity of offered interruptible load (IL) over recent years. It was noted that this could be interpreted as the loss of a valuable resource, or as a move towards a more conservative (and possibly appropriate) estimate of a given resource.

One member noted that the system operator procures sufficient reserve to meet its principal performance obligations (PPOs), but passes on the cost of reserve to purchasers. This means there is no mechanism to make trade-offs between the conservatism of the system operator in delivering its PPOs, and the cost of reserves. The member also considered that the current approach to dispatch compliance for IL (namely, no tolerance for any under-provision except in relation to measurement) effectively under-values IL resources that are relatively less certain (i.e. more spread out random distribution), even though that uncertainty is largely removed by combining with other IL resources with their own independent uncertainties. The member questioned whether the analysis could say at this point that the net benefits of a review are not sufficiently high at this point to justify further development as a priority.

Another member noted that, to some extent, participants may be able to aggregate those IL resources themselves to obtain (effectively) better prices for the resource by utilising the diversity within a portfolio of IL resources. It was also noted that, in some cases, the system operator measures an IL provider's delivery across aggregated GXPs.

One member noted that paragraph 53 of the paper (“...[the existing regime] is developing reasonably well and should be allowed more time to do so...”) does not seem consistent with the comment in paragraph 50 in which an industrial provider comments that they will be making less conservative IL offers because of a perceived failure on the part of the Commission and system operator to clarify expectations in terms of the level of conservatism expected in offers.

WMAG noted that there is conservatism in many areas of procurement of instantaneous reserve because of the uncertainties in the performance of reserve provided by generators and IL providers. WMAG noted that the Commission already has projects underway to reduce the conservatism in certain areas.

One member noted that the hot water IL resource can be used for a range of purposes. Consequently, the withdrawal of some IL from the market might be efficient if it is being used for another more valuable purpose.

A majority of WMAG members agreed that the IL compliance regime should be allowed to develop and no further action is required at this stage.

**Action point**     **The WMAG Administrator** to present information to WMAG every six months (next due November 2007) on aggregate IL offers and IL prices.

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| <b>Action point</b> | <b>The WMAG Administrator</b> to prepare and publish an analysis paper outlining the Commission's response to the recommendations in Stratagen's original investigation report.   |
| <b>Action point</b> | <b>The WMAG Administrator</b> to work with the system operator to prepare an information paper on the system operator's practice and the Commission's practice in relation to monitoring and enforcing IL dispatch compliance and the "reasonable estimate" obligation for IL offers. |

One member disagreed with the majority view, arguing that a more thorough review was required to ensure that IL resources can play a full part in delivering the system operator's PPOs at least cost. The member also considered that an analysis paper should encourage wider involvement of, and consultation with, the industry and should focus on the cost-quality trade-off the system operator employs in its procurement of instantaneous reserve.

## 7. Priorities for offer and dispatch

Andrew Jefferies presented the paper, and distributed a 1-page handout that summarised some initial thoughts on priorities. That document is attached as Appendix A to these minutes.

WMAG discussed the priority of some individual tasks listed in the table in Appendix A.

One member considered that the run-of-river dispatch compliance proposal might not be appropriate because it would cause the Rules to move in the direction of containing too many special cases. The member considered it might be better if the Rules covered all generators, and dealt with special cases as exemptions to the Rules. Another member suggested the Rules could deal with special cases in schedules rather than in the main body of the Rules.

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| <b>Action point</b> | <b>The WMAG Administrator</b> to distribute a MSWord table of prioritised rule change proposals for comment from WMAG members. The table may include further information such as how important each proposal is to the “integrity” of the market. |
| <b>Action point</b> | <b>The WMAG Administrator</b> to prepare a 1-page summary showing how long each of the projects is expected to take to complete (e.g. Gantt chart).   |

## 8. Demand-side participation

Andrew Jefferies presented the paper, which draws on the work the Commission has been preparing on market design.

One member suggested that Figure 3 (Pre-requisites for effective demand-side participation) should recognise, as part of part I of the diagram, that information may be too complex for parties to use effectively, or that the market itself may be too complex. A suggestion was to add “understanding of markets” to part I. Part III of the diagram could recognise the role of technology.

One member noted that distributors have been quite active in promoting demand response, but retailers have not been so active. One member suggested that retailers were the right parties to encourage demand-side participation, but questioned their incentives to do so at present. A number of members suggested that the structure of the industry was not conducive to retailers promoting demand-side participation. Another member considered that retailers were actively involved in promoting demand response.

One member suggested that the paper should state more clearly that it does not cover demand response to transmission and distribution prices (it covers only response to energy prices), and it does not cover reserves (interruptible load).

One member questioned the numbers in Table 3 and suggested that some smaller users may not be aware of the nature of the contracts they are really on. A member noted it was not clear what “Volume based time of use” meant.

One member noted that Meridian’s demand exchange is not currently active. There was a suggestion that the WMAG Administrator might wish to contact Orion to discuss how they encourage demand response on their network.

One member suggested that council-owned distributors had demonstrated more enthusiasm than privately owned distributors for promoting demand response on their networks to reduce overall costs to their customers

One member noted the difficulty of separating out the effect of conservation campaigns from price-based responses in Figure 7.

One member suggested superimposing national load on Figure 8.

One member suggested adding a section on reserves.

Some members emphasised the role of 5-minute prices for short term demand response. They suggested adding 5-minute prices to Figures 9, 10 and 12.

Comments on the conclusions in paragraph 59 were:

- 2<sup>nd</sup> bullet: some residential and small commercial medium-term response will be a response to the savings campaigns rather than a response to price. It is rare for small commercial customers to have spot market price signals passed through.
- 3<sup>rd</sup> bullet: It was noted that hot water tends to be used primarily for managing distribution and transmission issues with some quantities offered into the reserves market.
- 4<sup>th</sup> bullet: Given the fact that fixed price variable volume contracts mute/remove price signals, it would be useful to have more information on contractual arrangements between retailers and their customers.
- 5<sup>th</sup> bullet: One member suggested an important strategic consideration was whether the Commission should be attempting to facilitate direct demand-side participation from end users, or whether it should be working through intermediaries.

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| <b>Action point</b> | <b>The WMAG Administrator</b> to pass on these comments to those who are finalising the market design issues paper. |
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## 9. General business

WMAG discussed the background to the incident on Sunday 29 April 2007, when final prices for trading period 37 were delayed. In order for normal April settlement to occur, final prices are required by the 7<sup>th</sup> business day in May.

An HVDC outage was due to end after trading period 36, but it continued into trading period 37. A spring-washer effect caused very high prices at some nodes. At one node the price was \$38,000. Negative prices were calculated for other nodes.

WMAG noted that a rule change affecting the calculation of prices in situations where there is a high spring-washer effect will come into force on 1 September 2007. It was also noted that, if those rule changes had been in effect on 29 April 2007, the very high final prices at some nodes would have been substantially lower.

## **10. Forum Discussion**

No forum discussion was held.

*The meeting closed at 2:35pm.*

**Next meeting: 14 June 2007**

## Action points

The following action points arose from the 3 May 2007 meeting.

| No. | Issue                                    | Action / comment   | Due date                |
|-----|--|--|-------------------------|
| 1.  | <b>Dispatch compliance</b>               | <b>The WMAG Administrator</b> to prepare, in consultation with the system operator, an information paper on the system operator's practice and the Commission's practice in relation to monitoring and enforcing dispatch compliance. Circulate information paper to WMAG members by e-mail for comment. | By next meeting         |
| 2.  | <b>Interruptible load availability</b>   | <b>The WMAG Administrator</b> to present information to WMAG every six months on aggregate IL offers and IL prices.  | November 2007           |
| 3.  | <b>Interruptible load availability</b>   | <b>The WMAG Administrator</b> to prepare and publish an analysis paper outlining the Commission's response to the recommendations in Stratagen's original investigation report.  | Next meeting            |
| 4.  | <b>Interruptible load availability</b>   | <b>The WMAG Administrator</b> to work with the system operator to prepare an information paper on the system operator's practice and the Commission's practice in relation to monitoring and enforcing IL dispatch compliance and the "reasonable estimate" obligation for IL offers.                    | Next meeting            |
| 5.  | <b>Priorities for offer and dispatch</b> | <b>The WMAG Administrator</b> to distribute a MSWord table of prioritised rule change proposals for comment from WMAG members. The table may include further information such as how important each proposal is to the "integrity" of the market.  | By Thursday 17 May 2007 |
| 6.  | <b>Priorities for offer and dispatch</b> | <b>The WMAG Administrator</b> to prepare a 1-page summary showing how long each of the projects is expected to take to complete (e.g. Gantt chart).  | Next meeting            |
| 7.  | <b>Demand-side participation</b>         | <b>The WMAG Administrator</b> to pass on WMAG comments on demand-side participation to those who are finalising the market design issues paper.  | By 7 May 2007           |

The following action points are carried over from the previous meeting (8 March 2007).

| No. | Issue                 | Action / comment   | Due date     |
|-----|-----------------------|--|--------------|
| 8.  | <b>Administration</b> | <b>The WMAG administrator</b> to circulate an email seeking other topics for discussion [at a WMAG 'forum']. | Next meeting |