

Chair's Half Yearly Report to the Electricity Authority Board

June to December 2015

6 April 2016

Note: This paper has been prepared for the purposes of the Wholesale Advisory Group. Content should not be interpreted as representing the views or policy of the Electricity Authority.

1 Introduction

- 1.1.1 The Wholesale Advisory Group (WAG) was established by the Electricity Authority (Authority) in May 2011 to provide independent advice to the Authority on the development of the Electricity Industry Participation Code 2010 (Code) and market facilitation measures.
- 1.1.2 The role of the WAG is to investigate, analyse, and make recommendations to the Authority Board (Board) on matters agreed to and included in the WAG's work plan. The scope of WAG advice, as set out in its Terms of Reference, is to advise the Board on:
- a) the development of the wholesale electricity market, including the inter-related markets for energy (spot), ancillary services, and risk management contracts such as financial derivatives for energy and location hedges
 - b) the development of provisions relating to reliable supply (which includes system security, reliability (security) of supply, and power quality), for the long-term benefit of consumers
 - c) priorities for developing:
 - i) the Code especially in regard to Parts 4, 5, 7, 8, 9, 13, and 14; and
 - ii) market facilitation measures in regard to wholesale markets services
 - d) any other relevant policy matters in regard to wholesale markets services.
- 1.1.3 WAG's terms of reference require the Chair to report every six months to the Board on the WAG's progress against its work plan. This is WAG's ninth half-yearly report, and it covers WAG's activities for June to December 2015.
- 1.1.4 The primary focus for the WAG in this reporting period has been initiating the three projects in the group's 2015/16 work programme:
- a) wholesale market information: review of clause 13.2 exclusions
 - b) offer and dispatch: wind generation offers
 - c) review of instantaneous reserve event charge and cost allocation

2 Membership and meetings held

2.1 WAG appointments took effect at the start of this reporting period

- 2.1.1 The Authority undertook an Advisory Group appointment processes just prior to the reporting period. The results of that appointment process took effect at 1 June 2015, specifically:
- a) the Authority reappointed existing members John Carnegie (third term), Chris Jewell (second term), and Alan Eyes (second term) for two year terms

b) the Authority appointed new members James Collinson-Smith and Stephen Drew for two year terms. They replaced outgoing members Richard Spearman and Bruce Rogers.

2.1.2 In August 2015 a member, Graeme Everett, was given a leave of absence from the WAG due to illness. The WAG expressed their sympathies, and a card was sent from the group. The leave of absence remained in place at the end of the reporting period.

2.2 Four WAG meetings were held during the reporting period

2.2.1 The WAG met four times during the six month reporting period, of which:

a) three were full WAG meetings (7 August, 13 November and 11 December), held at the Authority's offices in Wellington

b) one WAG meeting (15 September) was held at Meridian Energy's Manapouri Power Station, and was combined with site visits to the power station (15 September) and to NZAS' aluminium smelter (14 September).

2.2.2 WAG members were very appreciative of the opportunity to visit the generation and smelter facilities, and sent letters of thanks to both Meridian Energy and NZAS.

2.2.3 Table 1 gives details of WAG membership and members' attendance for the four meetings.

Table 1: WAG membership details for 1 June to 31 December 2015

| Member | Affiliation | Date and term of appointment(s) | | Current term end | Meeting attendance |
|---------------------------|--|--|-------------------------------|------------------|--------------------|
| John Hancock Chair | Independent | April 2013 reappointed April 2015 | 2 years 2 years | April 2017 | 4 of 4 |
| John Carnegie | Manager, Energy, Environment & Infrastructure, Business NZ | May 2011 reappointed June 2013 reappointed June 2015 | 2 years 2 years 2 years | June 2017 | 2 of 4 |
| James Collinson- Smith | Contact Energy to 14 October 2015 then Transpower | 1 June 2015 | 2 years | June 2017 | 4 of 4 |
| Stephen Drew | EnerNOC | 1 June 2015 | 2 years | June 2017 | 4 of 4 |

| Member | Affiliation | Date and term of appointment(s) | | Current term end | Meeting attendance |
|------------------|--|--|------------------------------|------------------|--|
| Alan Eyes | Energy Manager, NZ Steel | June 2013 reappointed June 2015 | 2 years 2 years | June 2017 | 4 of 4 |
| Chris Jewell | General Manager of Trading and Portfolio Manager, Genesis Energy | June 2013 reappointed June 2015 | 2 years 2 years | June 2017 | 3 of 4 |
| Neal Barclay | General Manager Markets and Production, Meridian Energy | May 2011 reappointed August 2012 reappointed August 2014 | 1 year 2 years 2 years | August 2016 | 4 of 4 |
| Graeme Everett | Energy Manager, Norske Skog Tasman | August 2012 reappointed August 2014 | 2 years 2 years | August 2016 | Given leave of absence in August 2015 (due to illness) |
| Stephen Peterson | Chief Executive, Simply Energy | May 2011 reappointed August 2012 reappointed August 2014 | 1 year 2 years 2 years | August 2016 | 3 of 4 |
| Phillip Anderson | Cumulus Energy Fund | August 2014 | 2 years | August 2016 | 4 of 4 |

2.2.4 At the invitation of the WAG Chair:

- a) Henry Collingridge, David Godfrey and Steve Torrens of NZX attended the 11 December 2015 meeting to present NZX's planned improvements for the Wholesale Information and Trading System (WITS).
- b) Paul Baker, Nova Energy, attended the 11 December 2015 meeting for a discussion of issues relating to the WAG's wholesale market information: review of disclosure exclusions project.

- c) Carl Hansen, Chief Executive of the Authority addressed the WAG at its 11 December 2015 meeting to brief the WAG on outcomes from the Board's Strategy Day held 7 October 2015. The discussion covered other topics, including innovation occurring in the electricity market, hedge market development, demand response, distribution pricing and the Authority's presentation to the Commerce Select Committee.

2.2.5 Erich Livengood of Transpower (system operator) was invited to attend WAG meetings as an observer. He attended all of the meetings during the reporting period.

2.3 WAG has maintained the Interests Register as required by law

2.3.1 As required by the Crown Entities Act 2004, the WAG maintains an Interests Register. Members are required to disclose any interests to the Chair, and these are recorded in the register.

3 WAG adopted its 2015/16 work plan during this reporting period

3.1.1 The WAG completed the last of its 2014/15 work plan projects, the hedge market development project, in June 2015.

3.1.2 Towards the end of the previous reporting period, the WAG considered a range of potential projects for its 2015/16 work plan. The WAG was asked to provide input before the Authority Board decided what projects to suggest be included in the WAG's work plan.

3.1.3 Following further consideration and input from Authority staff, at its 7 August meeting the WAG agreed that the following three projects should be added to the WAG's 2015/16 work plan, subject to Authority Board approval:

- a) review of instantaneous reserve cost allocation and event charge
- b) offer and dispatch: wind generation offers
- c) wholesale market information: review of clause 13.2 exclusions.

3.1.4 The Authority Board, at its 2 September 2015 meeting, agreed to recommend that these three projects form the WAG 2015/16 work plan. The WAG then formally adopted this work plan at its 15 September 2015 meeting.

4 Review of instantaneous reserve cost allocation and event charge regime

4.1 The Authority sought WAG advice on instantaneous reserve cost allocation

4.1.1 At the Authority's request, the WAG agreed at its 7 August 2015 meeting to add a new project to its work plan on the instantaneous reserve cost allocation and event charge regime.

4.1.2 The project aims to conduct a 'first principles' review of the way instantaneous reserve event charges and costs are calculated and allocated, and the parties to whom they are allocated. It seeks to identify any development options that may result in more efficient outcomes than the existing arrangements.

4.1.3 The Authority initiated the project having identified a number of potential inefficiencies with the existing arrangements, and recognised that the implementation of a National Instantaneous Reserve Market (NIRM) in November 2016 would escalate some of the existing inefficiencies.

4.1.4 This project is item 2.16 in the Authority's 2015/16 work programme and a priority 2 initiative. This remains the case under its proposed 2016/17 work programme.

4.2 The WAG has started to identify and consider the issues

4.2.1 The WAG received an initial briefing on the project at its 7 August 2015 meeting, which refreshed the details of the current costs and allocation arrangements, and identified some of the areas of inefficiency. Further analysis of the inefficiencies and their potential scale was provided to the WAG at its 13 November 2015 meeting.

4.2.2 The materials presented to the WAG have been well received, and the group has actively engaged on the issues from the outset. From its early discussions, the WAG has identified that:

- a) The project has the potential for competition, reliability and efficiency benefits, but this necessarily requires a focus on the broad market impacts of the cost allocation, rather than the narrow instantaneous reserve market effects.
- b) It appears there are inefficiencies with the current arrangements. However, the scale of these inefficiencies is unclear, as they generally hinge on the retirement or avoidance of investment in new assets, and it is difficult to determine how instantaneous reserve costs would impact those decisions in practice.
- c) It is valuable to draw on the experience and perspective of the Instantaneous Reserve Steering Committee's work, which recommended introduction of the current arrangements in 1998.

4.2.3 The WAG has identified that the inefficiencies that would arise under the current arrangements following the NIRM implementation are a concern. However, the WAG is unlikely to have completed its consideration of all of the issues in time to make the necessary changes to avoid them. Waiting for the WAG's project to conclude before implementing the NIRM could delay implementation, and the realisation of real economic benefits to New Zealand.

4.2.4 Therefore, the WAG agreed to write to the Chair of the Authority Board recommending that the Authority:

- a) develop a proposal to allocate instantaneous reserve costs on a national basis at times when the HVDC is available once a national market is introduced
- b) make preparations with the Clearing Manager in a timely fashion to ensure the timing of a national market is unaffected.

4.2.5 Addressing the NIRM issues separately will ensure that confidence in the proper functioning of the market remains intact, while allowing the WAG to give proper

consideration to the other issues associated with the cost allocation arrangements and event charge regime.

4.3 Next steps

- 4.3.1 The WAG is continuing to investigate whether there is potential to more efficiently calculate and allocate instantaneous reserve costs. It is preparing a discussion paper for engaging with stakeholders on the issues and options. It is aiming to release this in the coming months, and then provide recommendations to the Authority Board in early 2017.

| Activity | Dates | Status |
|--|-----------------------------|-----------|
| WAG agrees to add project to its work plan | 15 September 2015 | Completed |
| WAG develop discussion paper | September 2015 – April 2016 | Underway |
| Submit discussion paper to Board for comment | May 2016 | |
| Prepare summary of submissions following consultation period | July 2016 | |
| WAG develop recommendations paper | August 2016 – February 2017 | |
| Board to consider recommendations | March 2017 | |

5 Offer and dispatch: wind generation offers

5.1 This project stems from the Authority's 2015 review of gate closure and bid and offer provisions

- 5.1.1 This new project for the WAG has its origins in the Authority's work on Offer and Dispatch: review of gate closure and bid and offer revision provisions (item 2.11 in the Authority's 2015/16 work programme, a priority 2 initiative). During the course of that project the Authority determined that further work in the area of wind generation offers was required and that this should be undertaken as a separate project.
- 5.1.2 The Offer and dispatch: wind generation offers project is included in the proposed 2016/17 work programme as a priority 2 initiative.
- 5.1.3 The objective of this project is to more widely review the offer provisions covering intermittent (predominantly wind) generators to ensure that they are in the long-term interests of consumers. This will include reviewing the existing arrangements that require wind generators to offer their output at \$0.01/MWh to ensure that reliability and efficiency are being promoted.

5.2 The WAG considered the issues and possible approaches to the problems identified

- 5.2.1 At its 15 September meeting the WAG received a presentation on the background, problem definition, and key deliverables and milestones for the project. The WAG discussed the issues and possible approaches to the problem, and gave initial guidance to the secretariat on how to progress the project.
- 5.2.2 Drawing on the WAG guidance, the secretariat prepared a draft discussion paper and presentation material for WAG consideration at its 11 December meeting.
- 5.2.3 The WAG has identified two key problems relating to wind offers:
- a) lack of a clear mechanism for economic withdrawal
 - b) the possibility of non-notified (or inadequately notified) withdrawal of wind generation, which has been observed in practice
- 5.2.4 The WAG's preliminary view is that there are benefits in introducing a clearer mechanism for economic withdrawal but large-scale changes to wind offer provisions are unlikely to be justifiable, and a low-cost, small-scale approach is likely preferable.

5.3 Next steps

- 5.3.1 The WAG concluded that industry consultation is not necessary prior to making recommendations to the Board. It intends submitting a brief recommendation paper by June 2016.
- 5.3.2 A list of the projected and completed milestones is provided in Table 2 below.

Table 2: Offer and dispatch: Wind generation offers milestones

| Activity | Dates | Status |
|--|----------------------------|-----------|
| WAG agrees to add project to its work plan | 15 September 2015 | Completed |
| WAG development of a recommendation paper | December 2015 – April 2016 | Underway |
| WAG consideration of a recommendation paper | May 2016 | |
| Authority Board to consider the WAG's recommendation paper | June 2016 | |

6 Wholesale market information: review of clause 13.2 exclusions

6.1 The Authority has sought further WAG advice on wholesale market information issues

- 6.1.1 The WAG considered wholesale market information disclosure issues in an earlier project, culminating in a set of recommendations it made to the Board in August 2012. After

considering the WAG's recommendations the Authority progressed a Code amendment process that resulted in new wholesale market information disclosure provisions, clause 13.2A, coming into force in October 2013.

- 6.1.2 The Code imposes a 'continuous disclosure' obligation for information that is relevant to the wholesale electricity markets. It also includes a specified set of circumstances, the exclusions, where such information does not have to be disclosed. When the Code amendment was made in 2013 the Authority noted its intention to review the exclusions after a period of time.
- 6.1.3 Accordingly, the Authority's 2015/16 work programme includes a review of the clause 13.2 exclusions in the Code to determine if they are appropriate and efficient. It is item 2.19 in the Authority's work programme and is a priority 3 initiative. This remains the case under its proposed 2016/17 work programme.
- 6.1.4 The key goal of the project is to facilitate an active hedge market by enhancing the disclosure of information that influences the forward price curve. A more active hedge market assists with enhancing retail market competition.
- 6.1.5 The WAG is pleased to be given the opportunity to provide further advice to the Authority on wholesale market information issues.

6.2 The WAG is adopting a case study approach to reviewing the exclusions

- 6.2.1 At its 15 September meeting the WAG received a presentation on the background, context, key questions and possible next steps for the project. The presentation included examples of situations where wholesale market information disclosure outcomes appeared to have been substandard. These included issues with notification of generation outages and plant closures decisions.
- 6.2.2 The WAG briefly explored the prospects for implementing a few quick fixes, but determined that a more methodical approach to the project was warranted, particularly in view of some of the substandard disclosure situations.
- 6.2.3 At the WAG's request the secretariat undertook a case study assessment of the exclusions. This involved:
 - a) developing case studies of situations where disclosure has been (or has the potential to be) substandard
 - b) assessing the possible applicability of each exclusion across the case studies
 - c) making an assessment of whether one or more exclusions might be leading to information disclosure outcomes that do not optimally encourage competition, efficiency and reliability in the electricity market for the long term benefit of consumers.
- 6.2.4 The secretariat also held discussions with various stakeholders suggested by the WAG (NZX, Gas Industry Company, and Nova Energy for example) as input to progressing development of a discussion paper. Further stakeholder discussions are planned for early in 2016.

- 6.2.5 The WAG has identified some scenarios where a participant that does not wish to disclose certain information could claim that one or more of the existing exclusions apply and that therefore disclosure could be avoided. Although the WAG is yet to reach any settled conclusions, it appears that there may be some scenarios where the existing exclusions in the Code may not deliver the desired disclosure outcome.
- 6.2.6 The WAG is particularly focussing on exclusion (b) in clause 13.2A (2) which states that “[a participant is not required to make disclosure information readily available to the public if...] doing so will commercially disadvantage the participant in a material manner”.
- 6.2.7 In parallel with completing its assessment, the WAG is exploring a range of possible options. These include Code amendments as well as market facilitation measures such as augmenting the Authority’s existing wholesale market information disclosure guidelines and undertaking participant education.

6.3 Next steps

- 6.3.1 The WAG is further considering the case study assessment outcomes, feedback from stakeholder meetings, and possible options to address issues identified. It is preparing a discussion paper for engaging with stakeholders on the issues and options. It is aiming to release this in the coming months, and then provide recommendations to the Authority Board in early 2017.
- 6.3.2 A list of the projected and completed milestones is provided in Table 1 below.

Table 3 Wholesale market information: review of clause 13.2 exclusions milestones

| Activity | Dates | Status |
|---|-----------------------------|-----------|
| WAG agrees to add project to its work plan | 15 September 2015 | Completed |
| WAG development of a discussion paper | September 2015 – April 2016 | Underway |
| WAG consideration of a discussion paper | April 2016 | |
| Authority Board to consider discussion paper | June 2016 | |
| WAG releases discussion paper for consultation | June 2016 – August 2016 | |
| WAG secretariat to prepare a summary of submissions following consultation period | August 2016 | |
| WAG development of a recommendations paper | September 2016 – March 2017 | |

| Activity | Dates | Status |
|---|------------|--------|
| Authority Board to consider recommendations | April 2017 | |

7 The WAG conducted an informal review of its hedge market development project

7.1.1 In September 2013, the Authority requested the WAG's assistance for the purpose of examining:

"...opportunities to further develop the hedge market, in order to maintain its current forward momentum and develop its value to the wholesale and retail markets".

7.1.2 The WAG delivered its recommendations to the Authority Board in June 2015, signalling the completion of its work. While the Authority's *Charter about Advisory Groups* provides strong encouragement to provide consensus recommendations, the WAG's recommendations for the project included a dissenting view on one issue.

7.1.3 The WAG decided to conduct an informal review of the project at its August 2015 meeting, in order to:

- a) reflect on whether it would have been possible to achieve a full consensus by focussing on the task of providing recommendations to the Authority Board
- b) identify how the WAG can learn from the project, and further improve its effectiveness in future projects
- c) identify whether there are ways the secretariat could better support the WAG, to ensure the Authority gets the most from the members' collective expertise.

7.1.4 In its review, the WAG identified a number of challenges it faced with the project – many inherent in the nature and scope of the issue, and some that arose because of the approach taken. The group identified some valuable lessons to take forward. These were:

- a) the trial use of terms sheets to support its more complex projects - like those used to document the key terms of a contract negotiation. A terms sheet would track the group's views and positions from meeting-to-meeting at a high level.
- b) put a soft deadline on the problem definition, to ensure earlier discussion of the issues. It could also allow parties to 'agree to disagree' earlier, which may help in bridging gaps between views before project deadlines become imposing.
- c) agreeing that if there are any dissenting views in future, these should be attributed to individual members in the group's reports.

8 Interest in other projects

8.1 Hedge market development

- 8.1.1 The WAG has maintained an interest in the hedge market development project, having made recommendations on the project to the Authority Board in June 2015. The WAG appreciates the updates that the secretariat has provided on:
- a) the Australian Securities Exchange's progress in reducing the New Zealand electricity derivatives contract size from 1 MW to 0.1 MW. Encouraging this development formed part of the WAG's recommendations.
 - b) the Australian Securities Exchange and Australian Electricity Market Operator's design study into using futures to offset prudential security requirements in the National Electricity Market. Improving participants' ability to manage the need for capital to provide prudential security was part of the recommendations made by the WAG. The Australian design study is hence of interest to the group as it would help to inform the potential for similar arrangements in New Zealand.
 - c) the Authority's plans to release a decision paper on enhancing trading of hedge products, which it did in December 2015. The WAG appreciated the address from the Chief Executive of the Authority at the 11 December 2015 meeting, which gave the group valuable insight into the Authority's decision to develop a cap product.

8.2 Spot market review

- 8.2.1 At its meeting on 13 November, the WAG received an update on the Authority's spot market refinement project.
- 8.2.2 The WAG appreciates being given the opportunity to provide its input, and looks forward to further updates on the Authority's direction and progress.

8.3 Reserve and frequency management programme

- 8.3.1 The WAG appreciates being kept up to date with the Authority and system operator's joint work on the reserve and frequency management programme. That work programme captures a number of projects, including the following that the WAG has been involved in:
- a) Multiple frequency keeping
 - b) National Market for Instantaneous Reserve
 - c) National Market for Frequency Keeping
 - d) Under Frequency Management.
- 8.3.2 The WAG maintains an interest in the progress and timelines for the reserve and frequency management work, and is interested in providing further input into the various projects as appropriate.

9 Chair's commentary on overall performance of the WAG and the Secretariat

- 9.1.1 The first 6 months of 2015 were particularly busy for WAG members with monthly meetings and, at times, weekly teleconferences as we finalised our recommendations on the Hedge Market investigation. We are privileged to have senior industry participants as WAG members and I am particularly grateful to them for accommodating the time demands that this peak in the Group's workload represented in their busy schedules.
- 9.1.2 It is appropriate, therefore, that the Group's work has been less intense in the 6 months covered by this report: Members have begun 3 focused projects, considering the allocation of instantaneous reserve costs and the role of the event charge; rules around the offer and dispatch of wind generation and exclusions to wholesale market information disclosure requirements.
- 9.1.3 In this work, we have carried forward several learnings from the Hedge Market investigation: to ensure advice is consistent with the Authority Board's own obligations and guided by the same Code Amendment and Regulatory Strategy Principles. The recommendations that we make at the end of these investigations are likely to be for small and incremental changes to current arrangements – being proportionate to the size of benefits on offer.
- 9.1.4 Another recommendation from our review of the Hedge Market investigation was the use of Term Sheets as a tool to allow the Group to manage the development of consensus positions (as we are encouraged to by the Board). It will be interesting to see whether this initiative, with its origins in commercial negotiation, translates successfully to a multi-stakeholder process.
- 9.1.5 The Group has held at least one meeting a year out of Wellington since 2014. Visiting active wholesale market participants and seeing the challenges that they face at first hand reinforces the importance of electricity market outcomes for our stakeholders and New Zealand more widely.
- 9.1.6 In September, members met at the Manapouri Power Station, with most visiting the Aluminium smelter at Bluff en route. It was valuable to hear from station operators how this iconic asset in the NZ power system interacts with the market arrangements as well as to hear NZAS's perspectives on electricity as a major input to their business and provide context around the nature of the global aluminium market.
- 9.1.7 The trip was not without its logistical complexity – my thanks to the Authority staff and to both NZAS and Meridian Energy for making it happen.
- 9.1.8 As noted above, Graeme Everett has been on an extended leave of absence from the Group. We have missed his insights and challenges and have welcomed news of his steady recovery.
- 9.1.9 James Collinson-Smith and Stephen Drew joined the Group at the start of the reporting period. They have both demonstrated their experience and command of the complexities in the wholesale market by their fulsome engagement in discussions from their very first meeting. It is a testament to the value the industry perceives in previous work by the

Group that we are consistently able to attract new members of such high calibre. My thanks, as ever, to all members for their continued commitment to it.

John Hancock
Chair, Wholesale Advisory Group
7 March 2016

