Wholesale Advisory Group

Chair's Half Yearly Report to the Electricity Authority Board

January to June 2014

25 August 2014

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.

Advisory Group

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Advisory Group

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 Group 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 interrelated 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; and
 - 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 Group's progress against its work plan. This is WAG's sixth half-yearly report, and it covers WAG's activities for January to June 2014.

2 Membership and meetings held

2.1 The Authority ran an appointment process during the period.

2.1.1 Three members' terms were due to expire in August 2014, and one position remained vacant following the sad passing of John Woods in 2013. The Authority undertook an Advisory Group appointment process during June of 2014 to fill these positions.

- 2.1.2 As a result of that process, the Authority reappointed existing members Stephen Peterson (third term), Neal Barclay (third term) and Graeme Everett (second term), and appointed Phillip Anderson of Cumulus Energy Fund, formerly of Devon Funds Management, as members of the WAG. Each of these members has been appointed for a two-year term commencing 1 August 2014.
- 2.1.3 They join the remaining members of the Group whose terms extend into 2015 (refer Table 1 below).

2.2 Four WAG meetings were held during this reporting period

- 2.2.1 The WAG has met four times during the six month reporting period. Meetings on 9 April and 5 June were held at the Authority's offices in Wellington. A meeting on 20 February was also held at the Authority's offices. However, a number of members attended via teleconference, because fog in Wellington had disrupted their inbound flights.
- 2.2.2 A meeting on 1 May was hosted by NZ Steel at their offices in Glenbrook, Auckland.
- 2.2.3 Table 1 gives details of WAG membership and members' meeting attendance for these four meetings.

Member	Affiliation	Date and term of appointment(s)		Current term end	Meeting attendance
John Hancock Chair	Independent	April 2013	2 years	April 2015	4 of 4
Bruce Rogers	Pricing Manager, Orion New Zealand	May 2011 reappointed June 2013	2 years 2 years	June 2015	4 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

Table 1:WAG membership details for 1 January to 30 June 2014

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Member	Affiliation	Date and term of appointment(s)		Current term end	Meeting attendance
John Carnegie	Manager, Energy, Environment and Infrastructure, Business NZ	May 2011 reappointed June 2013	2 years 2 years	June 2015	4 of 4
Graeme Everett	Energy Manager, Norske Skog Tasman	August 2012 reappointed August 2014	2 years 2 years	August 2016	3 of 4
Alan Eyes	Energy Manager, NZ Steel	June 2013	2 years	June 2015	3 of 4
Chris Jewell	General Manager of Trading and Portfolio Manager, Genesis Energy	June 2013	2 years	June 2015	4 of 4
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
Richard Spearman	Operations Manager, TrustPower	October 2011 reappointed June 2013	2 years 2 years	June 2015	4 of 4
Phillip Anderson	Cumulus Energy Fund, formerly of Devon Funds Management	August 2014	2 years	August 2016	n/a

2.2.4 At the invitation of the WAG Chair:

- a) Carl Hansen, Chief Executive of the Authority, attended the 5 June meeting to discuss the Board's intention to proceed with a project to encourage market-making in new ASX products, alongside the WAG's hedge market project.
- b) Lisa Dhanji of Transpower (system operator) continued her attendance at WAG meetings during the reporting period. Erich Livengood, also of Transpower, attended the 5 June meeting in Lisa's absence.
- c) A number of industry participants attended meetings to present their views and experience with aspects of the hedge market, to help inform the WAG's hedge market development project. These presentations are discussed further in section 4.3. Presenters included:
 - i) Gary Holden, Chief Executive of Pulse Energy, who presented at the 20 February meeting
 - Greg Sise of Energy Link, Radek Mierzejewski of Payless Energy, Rebecca Osborne and Grant Smith of Pioneer Generation, Chris Sadler of NZ Wind Farms, and Alister Morison of Cold Storage Nelson, who all presented at the 9 April meeting
- d) Andrea Kan of UMR Research attended the 1 May meeting to present the preliminary findings of the 2014 Hedge Market Survey to the group, discussed further in section 4.3.

2.3 The WAG was also involved in a joint session with the Retail Advisory Group

- 2.3.1 At the request of the Authority, the WAG met with the Retail Advisory Group on 9 April, in order to provide combined input into the Authority's 2014/15 work programme. Members participated in constructive discussions about a wide range of industry issues that they believe necessitate the Authority's attention. Broadly speaking, the group:
 - a) expressed a concern about the complexity of the industry and suggested this in itself presented a key barrier to entry
 - expressed a concern about the industry's poor reputation amongst consumers and suggested there was a need to educate and improve outcomes for end-users

- c) suggested a need to anticipate and prepare the industry for new technologies and ways of doing business
- d) suggested that some issues were being overlooking that could have a significant impact on end-user outcomes, while comparatively lower-value projects were given high priority
- 2.3.2 Specifically the meeting expressed a view that a reduction in the complexity brought about by the number of network distribution companies was a barrier to entry. At its meeting of 15 August 2014 the WAG were provided with the Authority's 2014/15 work programme. The WAG asked that the Authority consider raising the priority ranking of project 3.1 "Distribution Company arrangements". This project is a research project to consider the efficiency of distribution network company arrangements. The WAG acknowledged that the project is outside of its scope of work. However, it requested that the Board elevate its priority because many members of the WAG and the Retail Advisory Group regarded it as a "must do" project at their joint session.

2.4 WAG has maintained the Interests Register as required by law

2.4.1 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's 2013/14 work plan was adopted in September 2013

- 3.1.1 In September 2013, the WAG agreed to adopt three projects as its work plan for 2013/14. These projects are:
 - a) hedge market development
 - b) national market for frequency keeping
 - c) investigation into alternative reserve arrangements
- 3.1.2 The WAG began these projects late in 2013, and has made meaningful progress on each during this reporting period, as discussed in later sections of this report.
- 3.1.3 Initially, these projects were expected to be substantially completed by June 2014. However, this is no longer the case.

- 3.1.4 There has been a change in the scope of the investigation into altered reserve arrangements which has therefore altered the timeline for that project.
- 3.1.5 In addition, given the need for thorough investigation of the underlying issues within the hedge market, the timeline for the hedge market development project was relaxed in February 2014. The WAG now intends to make recommendations to the Board by the end of the Calendar year.
- 3.1.6 To meet this milestone, the Group has attempted to progress its other two projects to a point that allows it to focus primarily on the hedge market development project for the second half of the calendar year. In this regard the WAG:
 - a) made recommendations to the Board on a national market for frequency keeping in June
 - b) notes a need for further analysis by the Authority and system operator on altered reserve arrangements, with a view to the Group being able to provide input on preferred design options at a later stage
- 3.1.7 The WAG has also maintained an interest in the Authority's progress with earlier WAG projects; specifically, those relating to pricing in pivotal supplier situations, wholesale market information, and aligning forecast and final prices.

4 Hedge market development

4.1 Authority sought WAG advice on opportunities to further develop the hedge market

- 4.1.1 A deep and competitive hedge market is an essential element of an efficient and competitive electricity market because it allows generators, retailers and customers to better manage electricity price risk, and provides important information about likely forward electricity prices.
- 4.1.2 Significant improvement has been observed in the hedge market since the Authority first began its hedge market development project in 2011. However, price risk management remains a significant concern for small and new-entrant retailers, as well as large consumers, and the competitiveness of the wider market remains a topic of public debate.
- 4.1.3 The Authority requested the WAG examine opportunities to further develop the New Zealand electricity hedge market, in order to maintain its forward

momentum and develop its value to the wholesale and retail markets. The project is to include:

- a) a thorough examination of the extent to which barriers to the hedge market's continued development remain
- b) consideration of how any issues might be addressed, and what opportunities exist for further improvement
- c) establishment of some measures and standards to enable hedge market performance to be assessed going forward
- 4.1.4 This project is item D1 in the Authority's 2013/14 work programme, and as such is an important priority initiative. The Authority has elevated this project to priority 1 (one of the top six projects) within the Authority's 2014/15 work programme.

4.2 The WAG intends to make final recommendations to the Board by the end of 2014

- 4.2.1 As discussed, the timeline for the hedge market project was relaxed in February 2014. The timetable the Group is now working toward is shown in Table 2.
- 4.2.2 Recommendations are to be presented to the Authority Board by the end of the calendar year. To this end, the Group is targeting the release of a discussion paper in September, which will outline the issues and development options it has identified. Development of this paper is now underway.
- 4.2.3 For the entirety of the reporting period, the Group was heavily involved in the fact finding phase of the project. This phase is now coming to an end, with some final data and information to be discussed at the group's August meeting.

Activity	Dates	Status	
WAG agreed to add project to its work plan	5 September 2013	Complete	
Fact finding phase			
Presentation to WAG – Introduction to the hedge market project	28 November 2013	Complete	
WAG paper – Hedge Market Development Project update and development of metrics	20 February 2014	Complete	

Table 2: Hedge market project – key milestones and target timetable

Advisory Group

Presentations to WAG:		
 OMF Pulse EnergyLink Pioneer Generation Payless Energy NZ Windfarms Cold Storage Nelson ASX 	28 November 2013 20 February 2014 9 April 2014 9 April 2014 9 April 2014 9 April 2014 9 April 2014 9 April 2014 15 August 2014	Compete Complete Complete Complete Complete Complete Complete Complete
Development of problem definition	June - July 2014	Underway
Assessment of issues and options	June – August 2014	Underway
Develop discussion paper	May – October 2014	Underway
Consider submissions	December 2014/January 2015	tbc
Present recommendations to Authority Board	March 2015	tbc

4.3 The WAG has taken an in-depth approach to identifying hedge market issues

- 4.3.1 The fact finding phase of the hedge market development project was intended to provide the WAG with a detailed understanding of the state of the hedge market, drawing on a wide range of perspectives, from which it could develop an appreciation for the underlying issues. It has also provided an opportunity to canvas development ideas.
- 4.3.2 The fact finding phase of the project aimed to gather information sufficient to answer questions such as:
 - a) What really comprises the hedge market?
 - b) How is the hedge market performing?
 - c) What issues do different participants face, either in the spot, FTR, futures and over-the-counter hedge markets, or that could be improved by those markets?
 - d) What is the extent of those issues? How widespread are they? Are they visible/measurable? Are they real?
 - e) Can the issues reasonably be solved?

- f) What developments would contribute most toward the Authority's statutory objective?
- 4.3.3 The fact finding phase comprised three broad approaches to gathering information on the hedge market. These are discussed in turn.
- 4.3.4 The information obtained is being used to inform the Group's issues and options discussion paper.

Presentations from stakeholders provided a number of different perspectives.

- 4.3.5 The WAG considered a wide range of potential parties who might present to the group on their experience of the hedge market. Ultimately, the Group heard from:
 - a) Gary Holden, Chief Executive of Pulse Energy, who provided the perspective of an independent retailer
 - b) Greg Sise of Energy Link, who provided the perspective of an independent analyst
 - c) Radek Mierzejewski of Payless Energy, who provided the perspective of a micro-retailer and new-entrant
 - d) Rebecca Osborne and Grant Smith of Pioneer Generation, who provided the perspective of an independent generator that has recently expanded into retail
 - e) Chris Sadler of NZ Wind Farms, who provided his perspective based on his previous experience as a financial trader
 - f) Alister Morison of Cold Storage Nelson, who provided the perspective of a large industrial consumer that takes an active interest in the industry
- 4.3.6 The Group also heard from Daniel Crawford of OMF during the previous reporting period, and is due to hear from a representative of ASX during the next reporting period.
- 4.3.7 Each presenter was given an opportunity to discuss their perceptions of the hedge market, areas where they felt problems existed, and changes that might address those problems.
- 4.3.8 The group was able to explore a large number of issues and development possibilities with the speakers.

Metrics and statistics helped objectively measure progress and performance, and the magnitude of any issues.

- 4.3.9 The secretariat assisted the WAG by preparing and presenting a large number of metrics and analyses for the group to consider. This included data on volumes, prices, liquidity, and other barriers to entry, in both the over-the-counter and futures markets.
- 4.3.10 This data prompted the group to
 - a) Contemplate whether some of the observations made are a result of deficiencies in the market, or might rather be a fair reflection of the market's underlying fundamentals (e.g. highly weather-dependent risk etc.)
 - b) Delve into the factors influencing the reported price adder, and unbundle the challenges in analysing forward prices using historic data
 - c) Consider the role of market makers and the reliance of the ASX futures market on their trading activity
 - d) Consider the role of financial intermediaries, what may be stopping them from taking a more active role in the market given the reported existence of a price adder, and therefore, what would need to change to entice them to participate

A survey on the hedge market to determine the areas of concern

- 4.3.11 Andrea Kan of UMR Research gave a presentation on the preliminary results of the in-depth interviews which had been undertaken as part of the 2014 Hedge Market Survey.
- 4.3.12 The results were incomplete pending two further interviews with survey respondents. The Group looks forward to reading the full results when the final report becomes available.
- 4.3.13 Based on Andrea's presentation, the WAG noted that, generally, perceptions of the hedge market appear to have improved since 2012, which is very positive. However, there is still a significant proportion of respondents that see the market as uncompetitive including a number of generator-retailers.
- 4.3.14 The group noted that respondents variously reported:
 - a) a significant adder in the futures price above spot prices
 - b) a need for greater liquidity

- c) a need for more participation including from intermediaries and banks
- d) significant barriers to entry including issues around prudential offsetting
- e) a need for more products including peak products and a smaller contract size

4.4 The WAG is now working to define the problem and preparing a discussion paper

- 4.4.1 Drawing on the information and data the WAG was presented with during the fact-finding phase of this project, the group has begun to develop a definition of the key underlying problems. The secretariat is also assisting the WAG in drafting its discussion paper outlining the issues.
- 4.4.2 The problem definition has been tied back to the Electricity Authority's statutory objective. The emphasis is on the competition and efficiency limbs, where the objective is:

"to provide more transparent and robust forward price signals, and an electricity market that is more competitive, being readily accessible for existing participants and purchasers, as well as for new entrant generators and retailers"

- 4.4.3 The WAG has identified a number of barriers to participation that affect access to risk management products. These include a number of issues relating to the availability of products and prices, the ease of trading, and issues with credit and prudential security.
- 4.4.4 WAG has also been particularly interested in teasing out the nature and scale of the risk that is being managed by participants through the hedge market, and how that influences the functioning of the hedge market and perceptions of performance. The WAG has requested that the secretariat engage an independent expert to conduct analysis that will provide insight into the relationship between futures prices and spot price volatility, in order to help inform its views in this area.
- 4.4.5 The WAG will consider that analysis, along with further drafts of the problem definition and discussion paper at its 15 August meeting.

4.5 Next steps

4.5.1 The WAG is working toward a November 2014 release date for its discussion paper. The WAG will consider any issues raised in submissions, with a view to finalising a set of recommendations for the Authority Board in 2015

5 National market for frequency keeping

5.1 Authority sought WAG advice on the introduction of a national market for frequency keeping

- 5.1.1 The Authority previously identified that enabling the transfer of frequency keeping between the islands using the HVDC link could contribute to the Authority's statutory objective by:
 - a) ensuring that the most efficient providers available nationally are selected in each trading period
 - b) improving the operational efficiency of the service by reducing the overall quantity of frequency keeping that is required
- 5.1.2 In September 2013 the Authority asked the WAG to add a project regarding a national frequency keeping market to its work programme.
- 5.1.3 The objective of WAG's national frequency keeping market project is to consider the benefits of developing a national frequency keeping market and, if feasible, to develop market arrangements to give effect to it.
- 5.1.4 This project is item B3 in the Authority's 2013/14 work programme, and as such is a high priority initiative. It follows on from the Authority's multiple frequency keeper project.

5.2 The WAG has completed this project within the target timeframe

- 5.2.1 Progress against the project milestones is outlined in Table 3. The WAG has now achieved all of its milestones for this project.
- 5.2.2 The WAG initially considered publishing a discussion paper to seek feedback from the wider industry on the benefits of a national market for frequency keeping.
- 5.2.3 However, it decided to proceed directly to making its recommendations to the Authority on the basis that the project has substantial net benefits and is largely uncontentious. Furthermore, the project, if approved, would require the Authority to seek feedback from the wider industry as part of the Code

amendment process to finalise and confirm the detailed design elements, and create enabling regulatory provisions.

Activity	Dates	Status	
WAG agreed to add project to its work plan	5 September 2013	Complete	
Consideration of a briefing paper	17 October 2013	Complete	
Defining the scope of the WAG's involvement	28 November 2013/20 February 2014	Complete	
WAG recommendations paper approved for forwarding to the Board	5 June 2014	Complete	

Table 3: National market for frequency keeping milestones

5.3 The WAG presented its final recommendation to the Board in June 2014

- 5.3.1 The WAG identified three areas of inefficiency in the current frequency keeping market:
 - a) competition in the island-based markets is limited
 - b) the selection of frequency keepers is not co-optimised with energy and reserves, and constrained on/off payments for frequency keepers in the energy market arise as result
 - c) the MW quantity of island-based frequency keeping procured by the system operator is larger than would be required if frequency keeping was co-ordinated nationally
- 5.3.2 The WAG identified benefits of the order of \$101m on a net present value basis (NPV), arising from:
 - a) lower price diversity between the islands,
 - b) a reduction in the quantity of frequency keeping required
 - c) co-optimisation of frequency keeping with energy and reserve
 - d) deferred investment in peaking capacity
- 5.3.3 It also identified corresponding one-off costs of the order of \$7.35m.
- 5.3.4 The WAG concluded that implementing a national FK market would result in a substantial net economic benefit, and that doing so would be consistent with the Authority's statutory objective and Code amendment principles.

5.3.5 Final recommendations were presented to the Board at its June meeting. The recommendations paper includes the WAG's full cost benefit analysis and problem definition.

- 5.3.6 The WAG recommended that the Authority:
 - a) progress the national frequency keeping market as a priority project, to be developed in parallel with the national reserves market initiative
 - b) jointly with the system operator, continue investigation work to identify the best options for implementing a national frequency keeping market
 - consider in the design, the extent to which enabling provisions are centralised in part 13 of the Code, and the HVDC bi-pole control system functions can be utilised

5.4 Next steps

- 5.4.1 The WAG's immediate involvement in the project has come to an end. However, the WAG has recommended that the Authority maintain the WAG's involvement:
 - a) with respect to investigations into unintended pricing consequences (specifically in terms of convergence of the SPD model and establishment of provably marginal prices), and refer the matter back to the WAG if pricing complications are found that would affect the cost benefit analysis
 - b) via representation on any technical group established by the Authority to support its work
 - c) via regular updates on the project
- 5.4.2 The WAG also expressed its interest in being involved in any future work on frequency keeping cost allocation.

6 Review of instantaneous reserve (IR) markets

- 6.1.1 Fast Instantaneous Reserve (FIR) and Sustained Instantaneous Reserve (SIR) are products that were introduced to the New Zealand power system over 10 years ago. The power system has since changed with the addition of a new HVDC Pole, renewable energy integration, SMART grid technology, and many other changes.
- 6.1.2 At the Authority's request, the WAG agreed in September 2013 to add a project on alternative reserve arrangements to its 2013/14 work plan.

6.1.3 The objective of this project was to review the current FIR products and market arrangements to determine if they are still applicable to today's power system, and whether new reserve products and market arrangements could be introduced that could improve procurement efficiencies and security outcomes.

6.1.4 This project is item 1.12 in the Authority's 2014/15 work programme, it is a priority 2 initiative and the project in the current work plan has been renamed to "review of IR markets".

6.2 The WAG is awaiting more information to determine the scope of its involvement

- 6.2.1 The initial project brief focussed on FIR only. The target of the investigations was an "area-under-the-curve" and "very fast reserve" type of new reserve product.
- 6.2.2 Following further work performed by the secretariat at the WAG's request, it appears that considering SIR in any developments could significantly improve the potential benefits.
- 6.2.3 The final scope of the review work is yet to be agreed upon with the system operator. The scope is expected to be locked-in early September, after which the review will commence.
- 6.2.4 The review in early stages will consist of the AUTC modelling to be extended to SIR with an aim to understand whether the FIR and SIR markets could be combined into one single IR market, where the system operator procures capability from the providers of IR.
- 6.2.5 Faster acting products would be remunerated better than slower acting products. Slower acting interruptible load (IL) could now also be offered by participants as the current codified one second rule would no longer apply for the IL to trip.
- 6.2.6 At the end of the review cost benefit analysis will be updated and a recommendation paper should be produced by the WAG.
- 6.2.7 Due to budget constraints the review cannot be completed over the current financial year. It is expected that the results of the review are available to the WAG by the end of June 2016.

6.3 The WAG has given its support to the Authority's continued investigation into alternative arrangements and review of the IR markets

- 6.3.1 At its November 2013 meeting, the WAG requested that the secretariat prepare information on the scale of the potential benefits from altered reserve arrangements. The results of that investigation, which suggested greatest benefit from an approach that also considered Sustained Instantaneous Reserve, were considered at the group's 5 June 2014 meeting.
- 6.3.2 The Group discussed the potential for a revised approach to reserve procurement that would address both Fast and Sustained Instantaneous Reserve. The Group agreed it was a conceptually superior solution to the existing arrangements, assuming such a solution was technically feasible, and could be implemented without significant cost.
- 6.3.3 The WAG considers that the benefits appear sufficiently high that it is worthwhile for the Authority and system operator to continue their work on the technical side of the project.
- 6.3.4 The group considers that it is important that this project be coordinated with the other initiatives that have an impact on the Reserve Management Tool (or its replacement) and the Scheduling Pricing and Dispatch model, to ensure consistency of approach, and capture potential synergies between the projects.

6.4 The next stage of the project will be technical

6.4.1 From the WAG's perspective, the project requires further technical analysis by the Authority and Transpower on new product options and designs, before the Group can provide contribute further. The WAG is keen to provide its input as the technical work progresses. WAG will be updated on progress in its' November 2014 meeting.

7 Overlap of Authority and WAG projects

- 7.1.1 The WAG has noted a significant degree of overlap between the Authority's and WAG's various projects. For example, multiple projects are underway that affect the frequency keeping market, the reserve market, and extended reserve arrangements. A number of projects are likely to affect the Scheduling Pricing and Dispatch software or Reserve Management Tool.
- 7.1.2 The Group is unclear as to the extent to which:

- a) the projects might impact on each other, including with respect to their assumed costs and benefits
- b) links between projects are being properly considered
- c) a consistent approach is being used, and synergies between the projects are being captured, particularly with regard to software development
- 7.1.3 Having expressed these concerns to the secretariat, the secretariat has agreed to present the WAG with information explaining how all of the Authority's technical projects fit together.

8 On-going interest in previous projects

8.1 Pivotal pricing project

8.1.1 The WAG appreciates the updates it has received on the pivotal pricing project, including on the Authority's pursuit of Code changes, and areas where these have departed from the Group's recommendations.

8.2 Wholesale market information project

- 8.2.1 The WAG has maintained a watching brief on the Authority's progress with the wholesale market information project.
- 8.2.2 In particular, the WAG has noted little progress against the "facilitated disclosure" approach to enhancing the availability and accessibility of thermal fuel quantity information and snowpack information.
- 8.2.3 The Authority requested the WAG's further input on this matter at its 20 February meeting, and the group agreed to offline discussions that might advance the issue, noting the Authority's intention to review the arrangements in the second half of 2014.
- 8.2.4 The group has also expressed its interest in the Authority undertaking further development work on the availability of transmission outage data, and for the group to be kept updated on progress on that front.

8.3 Aligning forecast and final prices

- 8.3.1 The WAG made its recommendations on the alignment of forecast and final prices project in October 2013. However, the WAG maintains a consideration for further issues affecting the alignment of forecast and final prices.
- 8.3.2 At the 20 February 2014 meeting, the group discussed a number of process issues (rather than regulatory design issues) that may be causing some

misalignment. The Chair remains in discussion with Authority staff on these issues.

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

- 9.1.1 One of the major industry accomplishments of the past decade has been Transpower's commissioning of upgrades to the HVDC link between the North and South Islands. A by-product of this engineering work has been the establishment of new control software for the link which makes the cooptimisation of ancillary service and reserve markets across both islands technically feasible for the first time.
- 9.1.2 Having concluded 3 major investigations in 2013, the last 6 months have seen the Group developing its thinking on arrangements for two ancillary service markets facilitated by the new HVDC control systems: frequency keeping and instantaneous reserves. I am particularly grateful for the work of the System Operator and the Secretariat in ensuring that the Group's time is focused on questions of market design which materially affect competition, reliability and efficiency in the market despite the fact that the operation of our ancillary markets is a technical field in which it is easy to lose sight of the wood for the trees.
- 9.1.3 Our third investigation in the period concerns the broader operation of the hedge markets for electricity. These are key enablers of risk management for electricity prices and thus crucial for facilitating market access by both physical and financial new entrants whose disruptive activities can improve wider market efficiency at the margin.
- 9.1.4 This has been a challenging piece of work. Hedge market performance is affected by a range of factors that are difficult to isolate and the risk of unintended adverse consequences from regulatory intervention in such an environment is high. Group members have made many constructive suggestions as to how we might unpick these factors to isolate genuine market failures. We hope to share our thinking with the industry on these issues later in the calendar year.
- 9.1.5 Once again I must express my appreciation for the professionalism with which members have behaved through the period: we sit on the Group as independent experts and are tasked with providing advice that is not coloured by responsibilities to employers or other parties in the industry.

Advisory Group

This is a difficult path to tread but members have repeatedly demonstrated their ability to do this, despite the materiality of the issues that we are discussing for their own organisations. It is a group of distinguished individuals genuinely pursuing the broader national interest that the Authority Board is charged with.

John Hancock Chair, Wholesale Advisory Group August 2014