

Wholesale Advisory Group work plan update

15 September 2015

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

1 Recommendation

1.1.1 It is recommended that the Wholesale Advisory Group (WAG):

1. **note** the upcoming meetings and indicative topics of discussion in section 3
2. **note** the status of current WAG projects in section 4
3. **note** the update on projects previously considered by the WAG in section 5
4. **note** the update on other relevant Authority and Retail Advisory Group projects in section 6
5. **note** Authority progress towards the advice given by the RAG and WAG on the Authority's 2015/16 work programme in section 6.

2 Wholesale Advisory Group work plan for 2015/16

- 2.1.1 As set out in the terms of reference for the WAG, the WAG's work plan is initially prepared by the Authority, in consultation with the WAG Chair, before being presented to the WAG for its consideration.
- 2.1.2 The Board, at its 2 September meeting, discussed the WAG's 2015/16 work plan and agreed to propose to the WAG that it add three new projects to its 2015/16 work plan. The WAG is scheduled to consider the three new projects at its 15 September 2015 meeting.
- 2.1.3 In advance of these projects being added to the WAG's 2015/16 work plan, a pictorial representation of the WAG's work plan for 2015/16 is attached to this paper as Appendix A.

3 Upcoming meetings

3.1.1 The upcoming meetings and indicative topics for discussion are:

- 15 September 2015
 - i) The Manapouri power station site visit
 - ii) Consideration of the WAG's 2015/16 work plan
 - iii) Initial discussion of the wholesale information project: 13.2 exclusions (if accepted by the WAG)
 - iv) Discussion of the review of instantaneous reserve cost allocation and event charge (if accepted by the WAG)
 - v) Initial discussion of the offer and dispatch; wind generation offers project (if accepted by the WAG).
- 13 November 2015
 - vi) Discussion of the wholesale market information: review of the clause 13.2 exclusions project (if accepted by the WAG)
 - vii) Discussion of the review of instantaneous reserve cost allocation and event charge project (if accepted by the WAG)

- viii) Discussion of the offer and dispatch; wind generation offers project (if accepted by the WAG)
 - ix) WAG input in to the review of the advisory group foundational documents.
- 11 December 2015
 - i) Discussion of the wholesale market information: review of the clause 13.2 exclusions project (if accepted by the WAG)
 - ii) Discussion of the review of instantaneous reserve cost allocation and event charge project (if accepted by the WAG)
 - iii) Discussion of the offer and dispatch; wind generation offers project (if accepted by the WAG).

4 Status of current projects

4.1 The WAG's 2015/16 work plan is not yet confirmed

- 4.1.1 The WAG is scheduled to consider three projects to add to its 2015/16 work plan at its 15 September 2015 meeting. In advance of these three projects being added to the WAG's work plan, updates on those projects are set out below.

4.2 Wholesale market information: review of clause 13.2 exclusions

- 4.2.1 The WAG is scheduled, at its 15 September 2015 meeting, to hear a presentation from the secretariat on the background of the project and to give initial consideration to the issues.
- 4.2.2 The WAG gave its recommendations on its previous project, wholesale market information project, in August 2012.
- 4.2.3 This project will review if the exclusions in clause 13.2A of the Code are still appropriate and efficient.
- 4.2.4 On the assumption WAG add this project to its 2015/16 work plan, a list of the projected and completed milestones is provided in Table 1 below.

Table 1 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	
WAG development of a discussion paper	September 2015 – April 2016	
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	

Activity	Dates	Status
WAG secretariat to prepare a summary of submissions following consultation period	August 2016	
WAG development of a recommendations paper	September 2016 – March 2017	
Authority Board to consider recommendations	April 2017	

4.3 Offer and dispatch: Wind generation offers

- 4.3.1 The WAG is scheduled, at its 15 September 2015 meeting, to hear a presentation from the secretariat on the background of the project and to give initial consideration to the issues.
- 4.3.2 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.
- 4.3.3 On the assumption WAG add this project to its 2015/16 work plan, 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	
WAG development of a discussion paper	December 2015 – April 2016	
WAG consideration of a discussion paper	April 2016	
Authority Board to consider discussion paper	June 2016	
WAG development of a recommendations paper	June 2016 – August 2016	
Authority Board to consider the WAG's recommendations	August 2016	

4.4 Review of instantaneous reserve event charge and cost allocation

- 4.4.1 The WAG is scheduled, at its 15 September 2015 meeting, to hear a presentation from the secretariat on the background of the project and to give initial consideration to the issues.

- 4.4.2 This project will review the way IR availability costs and event charges are calculated and allocated to determine whether they are efficient, and if so, identify options and develop proposals to make them more efficient.
- 4.4.3 On the assumption WAG add this project to its 2015/16 work plan, a list of the projected and completed milestones is provided in Table 3 below.

Table 3 Instantaneous reserve event charge and cost allocation

Activity	Dates	Status
WAG agrees to add project to its work plan	15 September 2015	
WAG develop discussion paper	September 2015 – April 2016	
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 Update on projects previously considered by the WAG

5.1 Hedge market development project

5.1.1 The Hedge market development project has been pursued in three parts:

1. Exploring whether ASX positions can offset energy market prudential security requirements.
 - i) The Authority is awaiting further developments from the ASX/AEMO. ASX has indicated that it is on target to release its design study report during September 2015.
2. Consideration of market making arrangements for new ASX products.
 - i) Submissions on the Authority's "Hedge Market Development: Enhancing trading of hedge products" consultation paper closed on 21 July 2015. A summary of submissions is likely to be published early October 2015.
 - ii) Staff are now considering the submissions received and will develop a decision paper outlining:
 - if the Authority will proceed with each of the four proposals put forward in the consultation paper
 - the rationale for its decision, drawing on the estimated benefits

- how the Authority will proceed with the project.
- 3. The WAG's project looking at potential improvements in hedge markets.
 - i) The WAG's recommendations on its hedge market development project were provided to the Board at the 26 June 2015 meeting.
 - ii) The WAG recommendations that relate to items 1 and 2 above (exploring whether ASX positions can offset prudential requirements, and market making arrangements) will be taken into account by the Authority as it progresses the work in item 2 above.
 - iii) The other WAG recommendations are currently recorded on the Authority's work programme as pending work and will be raised to active status as resource becomes available.

5.2 National frequency keeping market and review of frequency keeping services

- 5.2.1 At its 27 June 2014 meeting the Authority Board accepted the WAG recommendation to proceed with establishing a national frequency keeping market. Since that time, results from the system operator's trial operation of new HVDC controls have had a significant impact on the way that frequency keeping is managed. Trial results indicate that the fast acting new controls reduce the need for Multiple Frequency Keeping (MFK) (as a slower secondary form of frequency keeping) but increase the duty imposed on generator governors (that inherently provide faster primary frequency keeping).
- 5.2.2 As a result of the outcomes of the trial, the Authority and the system operator have started a strategic review of frequency keeping to determine the optimal mix of primary and secondary frequency keeping services. While MFK is a procured ancillary service, governor response is mandated. As such, there is no payment for governor response, and different classes of generating plant provide different levels of response.
- 5.2.3 At this point, a review of approaches to procured and mandated services is needed before proceeding further with the work to implement a national market for MFK. Initial investigations were completed by the system operator in early September. Output of the review is expected to be published December 2015.

5.3 Wholesale market information project

- 5.3.1 This project is included in the Authority's 2015/16 Work Programme in two parts. The first part relates to a review of the wholesale market information disclosure exclusions in Part 13 of the Code. The Board is requesting that this project be added to the 2015/16 WAG work plan. To be considered at this WAG meeting.
- 5.3.2 The second part relates to improving public access to fuel quantity information via market facilitation measures. The WAG will be updated on developments in this area.

5.4 National Instantaneous Reserve Market

The system operator implemented interim FIR sharing arrangements across the HVDC link in December 2014. It is working on a facility to allow interim SIR sharing. The system operator expects to make the facility available in September 2015. The Authority released an information paper on 8 June 2015, which proposed introducing SIR sharing at a level equal to FIR shared (eg 60 MW). The Authority is considering the two submissions it received on this proposal.

HVDC controls commissioning

- 5.4.1 The System Operator is progressing a number of small projects to enable automatic operation of a number of the new HVDC control functions which will enable SIR sharing.

Full market implementation project

- 5.4.2 The Authority has received a high level option and cost estimates for the implementation of a full national market for IR from the system operator. The next stage of development is detailed design, which is due to begin shortly and be completed by February 2016. The projected implementation date derived from the work on the high level design is November 2016.

5.5 Review of instantaneous reserve markets

- 5.5.1 This project is item 2.10 in the 2015/16 work programme, and is a second priority project. It is closely related to one of the Authority's six Top Priority projects, development of a national IR market.
- 5.5.2 The system operator completed a high level review in June 2014, and will shortly be underway with more detailed review that is to be completed in 2015. A report was published by the Authority on results to date by the system operator in late August 2015.
- 5.5.3 The objective of this project is to develop a firm definition of an Instantaneous Reserve (IR) product or products that achieves the following:
1. future proofed IR product(s) to maintain system security due to decreasing system inertia
 2. improved procurement efficiency
 3. increased competition.
- 5.5.4 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. The initial project brief focussed on FIR only. Following further work performed by the secretariat at the WAG's request, it became apparent that additionally considering SIR in any developments could significantly improve the potential benefits.
- 5.5.5 The work on SIR this year involves detailed technical and economic analysis on whether SIR could be procured on less than a 1:1 basis (under the current regime the procured quantity of SIR equals the size or the largest risk for a contingent event).
- 5.5.6 The work on FIR this year involves detailed technical and economic analysis on a new method of procuring under frequency reserve. This new method would include an area-under-the-curve type of IR product. A fast reserve based on the average response of the reserve provider over the first six seconds.
- 5.5.7 The Authority is progressing the work towards consulting on any Code amendments after June 2016.

6 Update on other relevant Authority projects and topics

- 6.1.1 The Authority's work programme for 2015/16 was released on 23 June 2015 and is available on its website at <http://www.ea.govt.nz/about-us/strategic-planning-and-reporting/our-work-programme/>.
- 6.1.2 The Authority's progress with projects on the 2015/16 work programme is described in the Authority's consultation calendar. The consultation calendar is updated every two months and is available on the Authority's website at <http://www.ea.govt.nz/about-us/strategic-planning-and-reporting/our-work-programme/>.

6.2 Retail Advisory Group projects

6.2.1 *Review of domestic contracting arrangements*

The current consumer switching arrangements set out in the Electricity Industry Participation Code make no reference to medically dependent consumers (MDC). There is a risk that MDC information may 'fall through the cracks' during the consumer switching process, resulting in MDCs being accidentally disconnected during switching (e.g. a losing trader fails to revoke a disconnection request on a vacant property and the property is subject to a move-in switch to another retailer by an MDC).

With no centralised storage of MDC information, there is the risk that emergency management agencies will be unable to check on the well-being of MDCs in emergency situations, if the emergency management agencies cannot obtain MDC information from distributors or retailers.

At its 10 September 2014 meeting the RAG identified the storage of MDC information in the registry as its preferred solution to this problem. At its 9 December 2014 meeting the RAG agreed that before consideration can be given to holding MDC information centrally and accessibly, such information must be accurate. To allow this, it is desirable that retailers align their processes for managing MDC information by adopting a good practice benchmark. To facilitate this, the RAG requested the Retailer Working Group (RWG) focussing on improving outcomes for vulnerable electricity consumers develop a good practice benchmark for giving effect to the Authority's Guideline on arrangements to assist medically dependent consumers.

The RWG agreed to develop the good practice benchmark and will progress this workstream throughout 2015 with the aim of completion in early 2016. The RWG will prioritise implementation of interim measures and expects these to be in place by December 2015. The RAG has placed this project on hold until the RWG has completed its investigations.

6.2.2 *Review of secondary networks*

The purpose of this project is to identify and recommend potential options that promote competition and efficiency on secondary networks for the long term benefit of consumers. The project was identified after the RAG noted possible issues with the ability of retailers, particularly small retailers, to compete to supply consumers on customer networks and embedded networks.

Secondary networks are networks that are connected to the transmission grid via another network. There are three different types of secondary networks

- Customer networks

- Embedded networks
- Network extensions

Initial research suggests that issues may exist that are inhibiting competition and efficiency on secondary networks. Retail competition is reduced because retailers are discouraged from supplying consumers on embedded networks. The efficiency with which the electricity industry operates is reduced by the existence of non-standard and poor processes. Reliability of supply is reduced due to difficulties locating or reaching faults.

The RAG released a discussion paper, submissions for which closed 2 June 2015 with 20 submissions received. The RAG work has raised awareness of a number of issues which have delayed this project. The RAG is working to develop a revised timeline once these issues are investigated fully.

6.2.3 *Research project: low fixed charges*

The purpose of this project is to review and quantify the effects of the Low Fixed Charge (LFC) Regulations on competition, reliable supply and efficiency to determine the net benefits or net dis-benefits.

The LFC regulations were introduced in 2004 to require retailers to offer a low fixed charge tariff option. This was to provide low-use consumers with a tariff option that is more equitable for low energy usage and in line with the government energy efficiency objectives. Industry participants and consumer representatives have highlighted issues with the LFC Regulations for the retail and distribution sectors of the electricity market, including undermining the efficient operation of the retail and distribution segments of the electricity market and impeding retail competition.

The RAG provided the Authority Board with a draft discussion paper at the 26 June Board meeting. The Board gave several comments on the paper which the RAG is currently considering.

6.3 Other Authority projects of interest:

6.3.1 *Spot Market refinements*

This project was established by the Authority after the WAG completed a review of options to improve alignment of forecast and settlement prices.

The Authority reviewed real time pricing, zonal pricing, and other options to determine which, if any, have the best potential to improve retail and hedge market competition. It released a paper proposing the Authority investigate two options (real time pricing and an hours ahead market) in detail as part of its 2015/16 work programme. Submissions on this proposal have been received. The Board considered these submissions at its meeting on 14 August 2015. A Decision paper was published on 1 September 2015 announcing the Authority's intention to further explore options for real time pricing and an hours-ahead market.

6.4 Projects that promote the WAG's feedback on the Authority's work programme

6.4.1 At the joint meeting of the RAG and WAG on 12 March 2015 the groups made three suggestions to the Authority. The RAG and WAG advised that the Authority should:

1. *Reduce complexity within the industry and the related costs of doing business and also barriers to new entry* - The Groups noted that many policy initiatives and Code changes often come with incremental increases in complexity. This complexity puts costs on participants, costs that impact consumers and can act as a barrier to entry.
2. *Develop standardised information exchange protocols* – Members consider that there are large transaction costs arising from the differing methods of information exchange across the distributor-retailer interface. Better adoption and use of standard information exchange protocols could significantly reduce costs faced by retailers.
3. *Emerging technologies* - Members consider that the industry is beginning to see emerging issues that need to be pre-emptively addressed. Examples of this are the continued uptake of photo-voltaic distributed generation and the expected growth of electric vehicles.

6.4.2 *Authority initiatives to address the comments of the RAG and WAG*

- 6.4.3 Reduce complexity, costs of doing business and barriers to new entry – The Authority is progressing the hedge market development project that aims to develop a competitive futures market that will enable new entrants to effectively manage risk, lowering barriers to entry. The RAG project, research project: the effects of low fixed charges is assessing the effects of the low fixed charges regulations against the Authority's statutory objective. A possible outcome of this project is a finding that the low fixed charge regulations impose operational costs on retailers. The Authority is also progressing the default distributor agreement project which aims to reduce operational costs in the industry.
- 6.4.4 Develop standardised information exchange protocols. The Authority has added a project called *review of data requirements to enhance retail competition and efficiency* to its 2015/16 work programme which will review the data and data exchanges between participants. This project is a candidate to be added to the 2015/16 RAG work plan.
- 6.4.5 Emerging technologies. The Authority's strategic directions for market development document states rapid development of technology as one of three challenges and characteristics influencing the electricity sector over the next 10 years. Under this direction the Authority is progressing several projects that are related to the issue of emerging technology. The retail data project is assessing the benefits of improving consumers' access to data to enable consumers to enable them to better participate in the retail market. Other projects under the efficient pricing programme such as the distribution pricing review, the research project: effects of low fixed charges, the Part 6 distributed generation pricing principles project, and the transmission pricing investigation are also related to this concern.

Appendix A Wholesale Advisory Group work plan for 2015/16

Project	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May -16	Jun-16
Wholesale market information: review of clause 13.2 exclusions	WAG consider project background and initial discussion of issues		WAG consideration of issues and begin development of discussion paper	WAG develop discussion paper		WAG develop discussion paper	WAG develop/finalise discussion paper	WAG finalise discussion paper		Board to consider WAG discussion paper prior to release for consultation
										
Offer and dispatch: wind generation offers	WAG consider project background and initial discussion of issues		WAG consideration of issues and begin development of discussion paper	WAG develop discussion paper		WAG develop discussion paper	WAG develop/finalise discussion paper	WAG finalise discussion paper		Board to consider WAG discussion paper prior to release for consultation
										
Review of Instantaneous reserve event charge and cost allocation			WAG consideration of issues and begin development of discussion paper	WAG develop discussion paper		WAG develop discussion paper	WAG develop/finalise discussion paper		Board to consider WAG discussion paper prior to release for consultation	
										

Key

 = Action at WAG meeting

 = Action at Authority Board Meeting