



## **Report Against the 2011/12 Work Programme**

**For the Period 1 July 2011 to 31 March 2012**



## **Table of Contents**

<b>Abbreviations Used in this Document .....</b>	<b>3</b>
<b>Introduction .....</b>	<b>4</b>
<b>Priority One Projects .....</b>	<b>5</b>
<b>Priority Two Projects .....</b>	<b>9</b>
<b>Priority Three Projects .....</b>	<b>14</b>
<b>Projects Pending / Future Projects Register .....</b>	<b>16</b>

## Abbreviations Used in this Document

Act	Electricity Industry Act 2010
AMI	Advanced meter interface
AUFLS	Automatic under-frequency load shedding
Authority	Electricity Authority
Code	Electricity Industry Participation Code
CRE	Competition, reliability and efficiency (components of the Authority's statutory objective)
DSBF	Demand side bidding and forecasting
EIEPs	Electricity information exchange protocols
EMI	Electricity market information tool
FTR	Financial transmission right
HVDC	High voltage direct current
MEP	Metering equipment provider
MFK	Multiple frequency keepers
Minister	Minister of Energy and Resources
RAG	Retail Advisory Group
s42	Section 42 of the Electricity Industry Act 2010
SO	System operator
TPM	Transmission pricing methodology
UFM	Under-frequency management
UoSA	Use of system agreement
UTS	Undesirable trading situation
WAG	Wholesale Advisory Group
WITS	Wholesale information trading system

## Introduction

This report provides an update on progress against the internal 2011/12 work programme, by the priority assigned in the work programme.

The Authority work programme is an internal programme of projects that it intends to progress during the coming financial year.

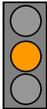
The Authority consults annually on its proposed appropriations and work priorities. The resulting appropriations are included in the Government's Budget, and the Authority's Statement of Intent (SOI). Project-specific comments from submissions are addressed as part of development of the work programme.

In the normal course of events work programme reprioritisation is required during the year, for example as the information available about specific project develops, and new risks or issues come to the Authority's attention. The Authority reviews and updates its work programme on a regular basis, and provides summary level reports on its progress on a quarterly basis.

The report sets out the achievement against projects in three priority tiers. Priority one being completion of section 42 matters from the Electricity Industry Act 2010, implementation of the s42 matters, completing and implementing the new metering Code and associated work , plus the consumer switching fund programme and establishment of the Authority's monitoring function.

The 'traffic lights' relate to whether or not the Authority considers that it can meet its 2011/12 internal milestone targets for the end of the 30 June 2012 financial year.

### KEY TO 'TRAFFIC LIGHT' SYMBOLS

Symbol	Interpretation. The traffic lights relate to the Authority's 2011/12 work programme internal milestones
	The Authority expects the project to achieve its 2011/12 internal milestone targets.
	The achievement of 2011/12 milestones is at risk.
	The Authority considers that it is no longer possible to achieve the 2011/12 internal milestones.

## Priority One Projects

Priority one projects include completion of section 42 matters from the Electricity Industry Act 2010, implementation of the s42 matters, addressing matters from the October 2012 Letter of Expectations from the Minister of Energy and Resources, plus the consumer switching fund programme and establishment of the Authority's monitoring function.

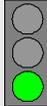
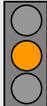
Priority one projects		
Name	Status	Progress statement
<b>Customer compensation scheme s42(2)(a)</b>		<b>Completed.</b> The scheme was implemented prior to winter 2011. Report provided to the Minister on 31 October 2011.
<b>Scarcity pricing Code s42(2)(b)</b>		<b>Project completed.</b> Code amendments completed: - scarcity pricing gazetted 28 October 2011; and - stress testing gazetted 3 November 2011. Report provided to the Minister on 31 October 2011.
<b>Scarcity pricing-implementation</b>		Discussions are being held with NZX and system operator on the way forward/options/solutions - three options are being assessed. NZX is to drive the design of the project and the system operator is providing resource to NZX to assist with an integrated design.
<b>Stress testing-implementation</b>		The Authority is finalising the stress test specification. Participants will then put in place the processes to provide quarterly stress test results and annual company declarations. The draft stress tests were published in February 2012. Feedback has been received. The Authority will appoint an independent registrar to consolidate and present the results to the Authority. A request for proposals for the registrar position was released in February 2012. The registrar has been selected and contract is being finalised in April. A trial run of the tests will be undertaken in April with the first full tests as per the Code being undertaken for the quarter starting 1 July 2012.

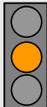
Priority one projects		
Name	Status	Progress statement
<b>Locational price risk management Code</b> s42(2)(c)		<p>Phase 1 completed: Code amendments were gazetted 11 August 2011 and came into force on 1 October 2011. Report provided to the Minister on 31 October 2011.</p> <p>First trades expected to occur by May 2013 (inter-island solution).</p> <p>Phase 2 work has commenced on within-island basis risk (WIBR). No Code amendment likely until financial transmission rights (FTR) system is live, but investigation and options analysis is progressing. A report is being prepared on where within each island, 'within-island basis risk' is likely to occur in the future. Due to go to the Locational Price Risk Technical Group (LPRTG) in May.</p>
<b>Financial transmission rights (FTRs) implementation</b>		<p><b>Timetable delay.</b> Initial go-live date was October 2012, now revised to May 2013. Targets updated in March 2012 as part of finalisation of FTR manager contract:</p> <ul style="list-style-type: none"> <li>- Approval of FTR allocation plan by 29 June 2012; and</li> <li>- Go-live by 1 May 2013.</li> </ul>
<b>Demand side bidding and forecasting (DSBF) Code</b> s42(2)(d)		<p><b>Completed.</b> Involving Code amendment. Code amendment gazetted 20 October 2011. Report provided to the Minister on 31 October 2011.</p> <p>Minor amendments to the Policy Statement and Procurement Plan were consulted on over December and January, with a Board decision completed in March.</p>
<b>Demand side bidding and forecasting (DSBF) - implementation</b>		<p>Two implementation fora have been held.</p> <p>28 June 2012 is the gazetted go-live date and is expected to be achieved.</p> <p>Participant user acceptance testing (UAT) completed 5 May 2012 with no major issues raised.</p> <p>Consultation on criteria for departing from the methodology to determine non-conforming grid exit point, closed 26 April 2012.</p> <p>Non-conforming grid exit points will be finalised following consultation and review of submissions.</p>
<b>Dispatchable demand Code</b> s42(2)(d)		<p><b>Completed:</b> Code amendment gazetted 20 October 2011.</p>
<b>Dispatchable demand - implementation</b>		<p>The system operator has been carrying out requirements analysis to implement the Code. High-level design and project timetable expected June 2012.</p> <p>Further steps dependent on completion of design stage.</p>

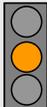
Priority one projects		
Name	Status	Progress statement
<b>More standardisation programme s42(2)(e) and (f)</b>		<p>Completed Code amendment requirements of section 42. Report provided to the Minister on 31 October 2011.</p> <p>Model use of system agreements are being finalised. Submissions closed on 11 April and are being reviewed. The target is 29 June Board meeting and end of July for finalisation.</p> <p>Voluntary guidelines for consultation on distributor tariff change proposals are being developed. This work arose from the more standardisation project. Consultation period (mid-April to early May 2012 - currently underway). Expect to publish final guidelines end June 2012.</p>
<b>Energy hedge market s42(2)(g)</b>		<p>Section 42 requirements completed. Report provided to the Minister on 31 October 2011.</p> <p>The Authority is also working on information improvements that will assist with decision-making and enabling others to participate in the hedge market.</p> <p>Information paper published in April that reviewed hedge market performance (against 1 March 2000GWh target). The report provided a list of initiatives the Authority intends to pursue.</p> <p>The hedge market survey took place February-March 2012. Results are expected to be reported within 2011/12 financial year.</p>
<b>Metering - Review of part 10 of the Code</b>		<p><b>Completed.</b> New Metering code gazetted 10 January 2012 and comes into force 6 June 2013.</p> <p>The Authority decision has been published on data access arrangements and the nomination of metering equipment providers (MEPs).</p>
<b>Customer switching fund</b>		<p>Programmes to fund switching facilitators and online tools to promote and facilitate switching evaluated (closed 11-4-11) Closing extended a month. Contracts signed with three suppliers. Two are underway.</p> <p>A new tool for small to medium enterprise switching will be launched in Winter 2012.</p> <p>24 February – What's My Number (WMN) was recognised at the Marketing Association RSVP awards, where it won the 2011 RSVP grand prix award, along with two gold medals and a bronze award for:</p> <ul style="list-style-type: none"> <li>- best strategy – gold;</li> <li>- customer acquisition – gold; and</li> <li>- customer engagement – bronze.</li> </ul> <p>12 April - WMN won digital strategy overall award.</p> <p>WMN communications document published - a changing landscape for electricity consumers - early April.</p> <p>15 April - launch of 2012 WMN campaign.</p>

Priority one projects		
Name	Status	Progress statement
<b>Small scale distributed generation-mandatory terms and conditions</b>		On track. Scope agreed at the Retail Advisory Group (RAG) meeting of 7 September 2011. Discussion paper released 7 February 2012. Submissions closed on 19 March 2012. The RAG considered response on 23 April. Report to the Board expected in June.
<b>Wholesale Market Information</b>		The Authority is working directly with NZX (Wholesale information trading system (WITS)) on 'quick wins'. The Authority is also working on other 'quick wins' internally -outside the scope of Wholesale Advisory Group (WAG) work.) The WAG focus is on information that would influence the forward price curve. WAG are undertaking an informal negotiation between large generators regarding voluntary provision of information on holding and expected delivery of fuel quantities - including coal, gas and snow pack information. WAG discussion paper is currently out for consultation, closing 7 May 2012.
<b>Metering - advanced metering policy implementation project</b>		Advanced meter data access and functionality and Part 10 were separated and dealt with separately. AMI forum held 30 November 2011. It is expected that the project and AMI guidelines will be completed by June 2012.
<b>More standardised tariff structures and use of system agreements</b>		<b>Completed.</b> The Code amendments, except as described below, came into force on 1 December 2011: - clauses relating to exchanging information about changes to distribution tariffs (i.e. EIEP12), using standard tariff codes and negotiating UoSAs (for existing UoSAs) will apply from 1 July 2013; and - clauses relating to prudentials and consultation applied from 1 May 2012.
<b>Electricity information exchange protocols (EIEPs)</b>		On 7 December 2011 the Board approved a paper for consultation. Consultation has been completed and submissions are being reviewed. A second consultation round will be recommended to mandate the use of EIEPs 1, 2, and 3.
<b>Industry and market monitoring</b>		On 7 December 2011 the Authority released its one-year market performance report. The next report will be in 2012/13 year.

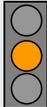
## Priority Two Projects

Priority two projects		
Name	Status	Progress statement
<b>Review of undesirable trading situation (UTS) provisions</b>		<p>The Authority publicly announced the Review of the undesirable trading situation (UTS) provisions in the Code in September 2011.</p> <p>The review covers:</p> <ul style="list-style-type: none"> <li>- the definition of a UTS;</li> <li>- the processes set out in the Code in regard to a potential or actual UTS; and</li> <li>- the remedies available to the Authority when a UTS has occurred.</li> </ul> <p>Authority Board delayed consultation until after High Court decision on 26 March 2011 UTS decision issued - late February 2012. Now on hold pending Genesis appeal process.</p>
<b>Settlement and prudential security review</b>		<p>Changes to the software and operations manual to accommodate 'quick wins' have been signed off with the clearing manager.</p> <p>The prudential security calculation methodology consultations were run by NZX - resulting in minor changes to the initial plan with no cost impact. Implementation is currently underway.</p> <p>First principles review - further draft discussion paper for WAG went to 20 April 2012 meeting (having taken longer than anticipated due to extended discussion and analytical work).</p> <p>The current timetable pushes out WAG report. The WAG discussion paper for consultation is now scheduled for May 2012. Recommendations now expected to Board in August 2012 if no further consultation or substantial work is required.</p>
<b>Metering - Part 10 - implementation</b>		<p>An 18 month implementation started in January 2012 and planned to finish on 6 June 2013 (when the Code becomes effective).</p> <p>An implementation forum was held for participants in February 2012.</p> <p>Metering equipment provider (MEP) workshop and workshop on proposed customer switching process were held in March 2012.</p> <p>The Authority will be consulting with the wider industry on the proposed customer switching process - April/May 2012.</p> <p>The Authority will be consulting on a draft MEP guideline - April/May 2012.</p>
<b>Reconciliation loss factor methodology</b>		<p>A consultation paper will be taken to the Board in June 2012.</p> <p>Completion is now likely in September 2012.</p>

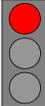
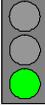
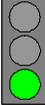
Priority two projects		
Name	Status	Progress statement
<b>Normal frequency management: review of the normal frequency band</b>		<p>A consultation paper is being drafted. It is expected that this will be provided to the Board in August 2012 for consultation in August/September 2012.</p> <p>Code amendment is expected in November 2012.</p> <p>The delay is due to priority being given to the high voltage direct current (HVDC) Pole 3 proposed Code amendments.</p>
<b>Normal frequency management: multiple frequency keepers</b>		<p>Now a system operator capital project. Contact Energy/system operator prototype testing completed. A report has been completed on the testing, and was discussed at technical stakeholder meeting 25 August 2011.</p> <p>A paper was provided at 5 October 2011 Board meeting to advise project costs and timetable.</p> <p>The technical stakeholder group discussed ancillary service contracts - January/February 2012. Relevant changes in the ancillary service procurement plan will go live 1 December 2012.</p> <p>The system operator is designing software (capital stage for allowing multiple frequency keeper (MFK) intra-island) - target for completion June 2013.</p> <p>An interim design arrangement that had the ability for providers to switch between frequency keeper offers and MFK offers in a half hour isn't viable because of the software development costs therefore the design will now focus on only allowing MFK offers. A revised implementation plan is being developed.</p>
<b>Credible event management: instantaneous reserves</b>		<p>On hold for 2011/12. Rescheduled for 2012/13:</p> <ul style="list-style-type: none"> <li>- Instantaneous reserves review - consult September 2012.</li> <li>- Instantaneous reserves cost allocation – on hold.</li> </ul>
<b>Credible event management: under-frequency management (UFM)</b>		<p>The UFM project includes several components including four automatic under-frequency load shedding (AUFLS) components.</p> <p>Draft UFM collective review by the system operator received on 13 April 2012. UFM collective review finalised 18 May 2012.</p> <p>The system operator proposal provided for AUFLS stage 3 (relay testing) received 3 November 2011. Relay testing underway May – July 2012.</p> <p>AUFLS relay specification expected from system operator in August/September 2012 with a recommendation from system operator for Code amendment to the Board in October 2012.</p> <p>Outcomes of UFM collective review work expected to generate several Code amendment proposals which will be developed over June – August 2012.</p>
<b>Intermittent generation: cost allocation</b>	NA	<p>On hold. This project is now likely to start in 2014 based on advice from the industry that MFK is considered a prerequisite.</p>

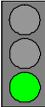
Priority two projects		
Name	Status	Progress statement
<b>Intermittent generation: fault ride-through</b>		The system operator is carrying out further analysis and its report due by the end of May 2012. Proposed Code amendment will follow.
<b>Intermittent generation: normal frequency quality</b>		Now covered under normal frequency project.
<b>Intermittent generation: under-frequency rules</b>		Starting this project is dependent on other project work being completed. Expected to start in 2012/13 year.
<b>Plant commissioning Code</b>		The Board considered proposed Code amendments on 14 September 2011. Further consideration at 5 October meeting. Consultation completed (there were some issues). The Board approved consultation on asset testing and commissioning issues - currently out for consultation, closes 15 May 2012. June 2012 being targeted for the Board with Code amendments.
<b>Credible event management: AUFLS rules</b>		AUFLS technical review consultation planned for November 2012 and AUFLS market review consultation planned for September 2012. Parallel process to be run for exemptions which expire 30 September 2012. Risk associated with resource availability, scope and cost need to be determined and a transition programme for exemption expiry is to be developed. An AUFLS information paper and an AUFLS future direction paper have been posted on the Authority website. Several meetings have been held with MEUG and the system operator is in bilateral discussions with exemption holders.

Priority two projects		
Name	Status	Progress statement
<b>Transmission pricing investigation</b>		<p>Transmission Pricing Advisory Group paper received on 6 September 2011 and published 13 September 2011. In December 2011 the Board decided to:</p> <ul style="list-style-type: none"> <li>- publish a consultation paper in January 2012 to seek industry and consumer feedback on the Authority's proposed economic and decision making framework for transmission pricing (released 27 January - submissions due 24 February, cross submissions due 12 March 2012);</li> <li>- progress the transmission pricing methodology as two separate streams;</li> <li>- changes to the transmission pricing methodology; and</li> <li>- introducing a network reactive support component into the transmission pricing methodology.</li> </ul> <p>Economic framework consultation paper closed 24 February 2012. Next step is issues paper - to the Board in June 2012.</p>
<b>Value of unserved energy - value of lost load</b>		<p>Further surveys planned for April - June 2012. Consultation paper planned for July/August 2012.</p>
<b>Distribution pricing review</b>		<p>On 7 December 2011 the Board requested development of economic framework paper and consultation prior to preceding with review of electricity distribution businesses (EDBs) against principles and guidelines. Economic framework consultation paper released 8 May 2012. The Authority expects to begin a review of the extent that distributors' pricing methodologies align with the pricing principles and information disclosure guidelines in September 2012.</p>
<b>Data warehouse project</b>		<p>Data warehouse initial infrastructure has been built. Beta version of the electricity market information tool (EMI) currently being trialed. Retail statistics now included and reports are being produced. Data warehouse website being progressed.</p>
<b>Retailer default provisions</b>		<p>Discussion paper considered at October and December RAG meetings. Released for consultation 7 February 2012. Submissions closed 19 March 2012. Further discussion paper being developed for May RAG meeting. Likely to go to the Board in June 2012.</p>
<b>Website review</b>		<p>Review has commenced with developing an understanding of the users' experience. User testing completed and report received. Website strategy being developed.</p>

<b>Priority two projects</b>		
<b>Name</b>	<b>Status</b>	<b>Progress statement</b>
<b>Path to world class</b>		A number of specific areas of work to improve Authority performance have commenced.
<b>Review of Operational Development processes and procedures</b>		Review completed. Next steps being considered. Implementation to be completed in 2012/13.
<b>Operational review of Part 6</b>		To the Board 2 May 2012 for consultation. Implementation planned for 2012/13.
<b>Competition, reliability and efficiency (CRE) work programme development</b>		Work programme on track to be finalised in June 2012. Suitable projects to be assigned to advisory groups (potential list of projects published on 8 May 2012).

## Priority Three Projects

Priority three projects		
Name	Status	Progress statement
<b>Offer and dispatch Code development</b>		<p>Wind forecasting reporting – completed.</p> <p>Offer and dispatch: Discussion completed with system operator on wind forecast accuracy reporting. Regular reporting on wind accuracy is now occurring.</p> <p>Gate closure review: next step is to involve the system operator to carry out some testing of systems and processes on the effect of a reduced gate closure.</p> <p>Possible consultation on gate closure Code in September/October 2012.</p>
<b>Pricing process improvement</b>		<p>Interim pricing completed in 2010/11.</p> <p>Current components include:</p> <ol style="list-style-type: none"> <li>1. High spring washer work split into two components, both of which are underway: <ul style="list-style-type: none"> <li>- fundamental review of inputs into final pricing and considering suggestions such as constraints softening;</li> <li>- specific improvement to address the change in constraint inputs caused by the introduction of the simultaneous feasibility test in 2011 - Code amendment completed under urgency, now in process of follow up consultation to confirm/not confirm;</li> </ul> </li> <li>2. Review the timeframe allowed for republishing final prices, to start (possible consultation on issues and options in August/September 2012); and</li> <li>3. Improving wind generation information inputs into final prices. Work started in January 2012.</li> </ol>
<b>Domestic contracting arrangements</b>		<p>Scope considered by RAG. Seeking advice from the Board in June about scope.</p>
<b>Domestic contracting arrangements-implementation</b>		<p>Completed. Annual monitoring as at 1 July, was approved at 5 October 2011 Board meeting. A consolidated report has been published. Individual retailer reports have been sent to the retailers.</p> <p>Full review to commence in June/July 2012.</p> <p>Ad-hoc reviews completed.</p>
<b>System security forecast</b>		<p>Issues and options paper to 2 May 2012 Board meeting. Minor Code amendments to 6 June 2012 Board meeting.</p>

Priority three projects		
Name	Status	Progress statement
Registry web services and data hub		Completed.
Intermittent Generation rule changes: voltage rules	NA	On hold for 2011/12.
Review of the Grid Reliability Standard		At its June 2011 meeting the Board considered that there are other projects that should proceed ahead of this project at this stage. This is now a priority 3 project for 2011/12.
Security - review of Part 9 consultation requirements		No work carried out to date.
Security - review of security standards - Part 7		Planning to complete winter standard by the end of the financial year (objective is to be in time for the system operator to do annual security assessment in October 2012). Summer standard will be developed in 2012/13.
Value of system operator monthly report		Expect to complete by June 2012.

## Projects Pending / Future Projects Register

The projects pending / future projects register is a list of potential projects warranting further consideration that will not proceed unless resources become available, and projects that are known to be required at a future time, e.g. post implementation impact reviews, but which have not been programmed or budgeted at this time.

It is expected that any pending / future projects would require an initial scoping and cost benefit assessment to be completed before they become part of the active work programme.

Pending and future projects	
Name	Description
<b>Scarcity pricing-impact review</b>	Post implementation review of impacts and outcomes.
<b>Locational price risk management-impact review</b>	Post implementation review of impacts and outcomes.
<b>Demand side bidding and forecasting (DSBF) - impact review</b>	Post implementation review of impacts and outcomes.
<b>Dispatchable demand - post implementation review</b>	Post implementation review of impacts and outcomes.
<b>Offer and dispatch rule development - pending projects</b>	Potential projects under offer and dispatch rule development: - complex offers (inter-temporal offers); and - constrained on cost allocation.
<b>Review of half hour switching rules</b>	Review of half hour switching rules.
<b>Mass market half hour settlement</b>	The Authority has granted exemptions to enable participants to operate in this market. Code amendment implications need to be considered - will become progressively more urgent. Using half hour meter reads the same way a currently using time of use meters for reconciliation and settlement. Review processes in relation to half-hour for residential consumers.
<b>Guidelines for secondary networks - network extensions and customer networks</b>	Development of arrangements for network extensions and the establishment of compliance requirements.
<b>Responsibility for maintenance of consumer service lines</b>	Scope the work that may be required to establish a project to investigate options resolve the consumer service line ownership issue.

<b>Pending and future projects</b>	
<b>Name</b>	<b>Description</b>
<b>Optimisation of non-technical distribution losses</b>	<p>Develop recommendations for the management, minimisation and allocation of non-technical distribution losses, and monitor uptake of recommendations.</p> <p>Production of a discussion document for consultation that includes:</p> <ul style="list-style-type: none"> <li>(a) establishing the current and likely business as usual position;</li> <li>(b) research the technology and techniques that can be adopted;</li> <li>(c) identifying the potential improvements that could be achieved;</li> <li>(d) identifying the options available to the Authority for providing appropriate incentives for improved losses management; and</li> <li>(e) identifying and proposing performance benchmarks, measurement systems and reporting.</li> </ul>
<b>Credible event management: under voltage management</b>	Development of under-voltage management performance objectives.
<b>Frequency regulation - frequency keeper offer selection</b>	<p>A project to determine a more efficient means of the system operator selecting a service provider in each half hour.</p> <p>Stage 1 (including constrained on to the band in the system operator dispatch decisions) completed.</p> <p>Stage 2 (removal of constrained on and off within the band) under consideration for 2012/13.</p>
<b>Common quality development plan - further items</b>	Extensive list of possible initiatives as listed in the common quality development plan.
<b>New connection process issues and policy options</b>	Investigate and consider options for regulating the process and requirements for new connections to the grid. Supports the review of the benchmark agreement and interconnection rules.
<b>Investigation of sites with high levels of frequency distortions</b>	Common quality – investigation of sites with high levels of frequency distortions – refresh of potential for project work based on previous report.