

# 2013/14 Work Programme

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Report to 31 March 2014



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### *Key to ‘traffic light’ symbols used in this report*

 Project milestones achieved or on track to be achieved.	 Project milestone are at risk.	 Project milestones not achieved or not able to be achieved.
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# 1 Introduction

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- 1.1 This report provides a report on year-to-date progress against our work programme. The work programme is available on our website at: <http://www.ea.govt.nz/about-us/documents-publications/work-programme/>. The published work programme includes more details about the projects reported against in this report.
- 1.2 The 'traffic lights' used in this report relate to overall progress against the project milestones, which may go beyond the end of the 30 June 2014 financial year. These traffic lights are not the same as reporting against the Statement of Intent (SOI) targets in the Annual Report, which are reports as at 30 June 2014.

### ***The work programme is flexible***

- 1.3 The work programme is our internal planning document. It represents a full commitment of Authority staff resources and the available project budgets. Any changes to projects will therefore be carefully managed. In the normal course of events it is anticipated that reprioritisation will be 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. We review and update the work programme on a regular basis.

### ***Overall performance standards for 2013/14***

- 1.4 The project tables below include key milestones or deliverables for the 2013/14 year. It should be noted that for all relevant projects the milestones have been set out as if a Code amendment is required. Projects may be ended or a different path decided upon (such as market facilitation measures) at a number of points in the process, in particular after an initial investigation and cost benefit analysis (CBA) has been completed. It is not practical to set out the range of possible alternative paths for each project in the following tables. We have therefore set out the potential process and timetable as if Code amendment is required. All Code amendment milestones should be read as if "if required" were included in the text. All milestones are for the end of the financial year (30 June 2014) unless otherwise stated.

## 2 Summary of key implementation and market development projects

2.1 This section includes summary tables for the work programme. Details are provided in the sections that follow.

#	Project name	Existing or new project for 2013/14	Status as at 31 March 2014
<b>Table A: Key systems implementation projects</b>			
A1	Scarcity pricing-implementation	Existing	Completed
A2	Metering - Part 10 - implementation	Existing	Completed
A3	Dispatchable demand - implementation	Existing	On track
A4	Locational price risk management- implementation	Existing	Completed
A5	Multiple frequency keepers - implementation	Existing	On track
<b>Table B: Top priority market development projects</b>			
B1	Settlement and prudential security review	Existing	On track
B2	Pivotal pricing project	Existing	On track
B3	National market for frequency keeping	Existing	On track
B4	National market for instantaneous reserves	Existing	On track
B5	Within-island locational price risk management	Existing	Completed
B6	Review of half hour switching process	Existing	On track
B7	Alignment of forecast and settlement prices	Existing	Completed
B8	Efficient procurement of extended reserves	Existing	On track
B9	Consumer switching fund	Existing	On track
B10	Transmission pricing investigation	Existing	On track

### 3 Key system implementation projects

3.1 The table below addresses key existing projects that are at the implementation stage in 2013/14.

**Table A: Information about key system implementation projects**

#	Name	Project description	Overall performance standard for 2013/14	Status	Progress statement
A1	Scarcity pricing – implementation	Section 42 implementation project.	Go live 1 June 2013. Project closure completed by 31 July 2013.		Completed. Scarcity Pricing capability was delivered on the due date of 1 June 2013.
A2	Metering - Part 10 – implementation	Completion of Part 10 Code implementation.	Complete implementation. Implementation review completed.		Completed. Go-live date was 29 August 2013.
A3	Dispatchable demand – implementation (modified option)	Section 42 implementation project. Related to dispatchable demand modified option project for the Code change component: project C1.	Target go-live 15 May 2014. Close out report completed.		In October 2013 the Authority approved new arrangements to enable dispatchable demand to compete in the spot market for electricity. Implementation is on track to go-live on 15 May 2014.
A4	Locational price risk management – implementation	Complete implementation close out report.	Complete close out report by August 2013.		Completed. The first financial transmission rights (FTR) auction was successfully held on 12 June 2013.

#	Name	Project description	Overall performance standard for 2013/14	Status	Progress statement
A5	Multiple frequency keepers (MFK) implementation	Implement the system to coordinate multiple frequency keepers, along the lines of an automatic governor control (AGC) system but tailored to New Zealand requirements (e.g. block dispatch). NB currently can only be provided by one generator in each half hour period in each island.	<p>North Island MFK targeted for implementation 1 July 2013.</p> <p>South Island MFK implementation dependant on completion of South Island generator control system upgrade. 10 August 2014 is agreed date.</p>		<p>North Island completed.</p> <p>Tools for South Island developed as part of North Island work.</p> <p>Target date for South Island cut-over on track for August 2014.</p>

## 4 Top priority projects

- 4.1 Top priority is being given to addressing key pieces of work that strongly support the key impacts being sought by the Authority. Top priority market development projects are those where there is a strong case for proceeding as quickly as possible, including a compelling net public benefit. These are projects where Code or market facilitation deliverables are expected to be completed in 2013/14. These include completion of key existing projects and new priorities identified through development of the Statement of Intent.

**Table B: Information about top priority market development projects**

#	Output	Name	Project description	Overall performance standard for 2013/14	Status	Progress statement
B1	Market development	Settlement and prudential security review	Improvements to clearing and settlement parts of the Code to improve efficiency and competition.	Complete Code amendment. Commence implementation		Code amendment approved and gazetted in December 2013. Implementation commenced.  We intend to seek further feedback from interested parties in early 2014 on disconnection procedures for direct-connect consumers that purchase their electricity from the clearing manager.  The planned commissioning date is 24 March 2015.
B2	Market development	Pivotal pricing project	Consider options, and develop if appropriate, initiatives to bring more confidence that prices are efficient during pivotal generation situations.  Wholesale Advisory Group (WAG) project.	Finalise WAG recommendations to the Authority Board.  Complete Code amendment.  Commence implementation.		The Wholesale Advisory Group (WAG) published a discussion paper on 28 May and submissions closed on 9 July 2013.  The WAG recommendations were provided at the October 2013 Board meeting.  A Code amendment consultation paper is being developed for consideration by the Board in June 2014.

#	Output	Name	Project description	Overall performance standard for 2013/14	Status	Progress statement
B3	Market development	National market for frequency keeping	Initial consideration of a national market for frequency keeping to enhance wholesale market competition.  Follows from multiple frequency keeper project (A5).	Consult on issues and options for national frequency keeping market (timeframe to be determined by investigation).		The WAG approved the project outline at its November 2013 meeting.  The WAG recommendations paper is expected for the June Board meeting.
B4	Market development	National market for instantaneous reserves	Provide for instantaneous reserves national market to enhance wholesale market competition. Update market design to enable the transfer of reserves from one island to the other via the HVDC. Implementation dependent on HVDC bi-pole control systems being fully in service.  WAG project.	Finalise WAG recommendations to the Board.  Further steps to be determined.		The WAG recommendations were received at the August 2013 Board meeting. The WAG report has been published.  In January 2014 the system operator reported on the feasibility, costing and timing of implementation. The report includes recommendations for interim arrangements (phase 1) as part of staged deployment to deliver early benefits.  We are planning to publish an information paper before the end of the financial year.
B5	Market development	Within-island basis risk (WIBR)	Introduction of a solution to assist parties to manage spot price risks within an island to enhance retail market competition. Review allocation of any residual financial transmission rights (FTR) and loss and constraint excess (LCE) revenue.	Complete Code amendments.		Completed. In October the Board approved the move to a multi-nodal market.  A letter of expectation sent to the FTR manager regarding amending its FTR allocation plan to introduce a multipoint FTR and developing a system-design proposal for the Authority to consider.

#	Output	Name	Project description	Overall performance standard for 2013/14	Status	Progress statement
B6	Market development	Review of half hour switching process	<p>Comprehensive review of switching rules to improve efficiency. Focus on half hour mass market including to ensure half hour AMI sites do not have to be switched manually.</p> <p>Scope includes review of status definitions and register content codes.</p> <p>Project to commence once Part 10 implementation completed.</p>	Complete Code amendment.		<p>Issues and options consultation paper published in December and closed on 28 February 2014. Most of the major issues have been addressed through changes made during the Part 10 implementation project, so only further refinements are proposed, rather than comprehensive changes.</p> <p>Code amendments are expected to be considered at the June 2014 Board meeting.</p>
B7	Market development	Alignment of forecast and settlement prices	<p>Review of options to align forecast and settlement prices, especially during periods of system stress, to improve efficiency and reliability.</p> <p>Progress depends partly on the related WAG project, which determines a CBA for this project.</p>	<p>Release WAG discussion paper, if not completed in 2012/13.</p> <p>Finalise WAG recommendation on feasibility/CBA of progressing initiative.</p>		<p>Work programme target achieved.</p> <p>WAG recommendations were received by the Board on 4 December 2013.</p> <p>Authority publication of a report reviewing pricing in the spot market is planned for later in the 2014 calendar year.</p>
B8	Market development	Efficient procurement of extended reserves <sup>1</sup>	Investigate options for a move over time towards developing a market for extended reserves (aka. AUFLS) to improve efficiency.	Complete Code amendment and commence implementation.		<p>Consultation took place on the preferred option from 21 January to 4 March 2014.</p> <p>A draft Code amendment was considered by the Board in April 2014. We are currently consulting on draft Code.</p> <p>Final Code amendments are expected to be considered at the June 2014 Board meeting.</p>

<sup>1</sup> Previously named *Under-frequency management - AUFLS market development*.

#	Output	Name	Project description	Overall performance standard for 2013/14	Status	Progress statement
B9	Market development	Consumer switching fund	On-going delivery and development of consumer switching output class to enhance retail market competition. Statutory function under s16(1)(i): to promote to consumers the benefits of comparing and switching retailers. <sup>2</sup>	Successful completion of programme at 30 April 2014.		<p>The 2013 residential campaign launched in April.</p> <p>The review of the 2012 programme was published in August 2013.</p> <p>A potential new programme for 2014/15 – 2016/2017 was consulted on as part of the appropriations and work programme consultation. The future programme is dependent on a Government funding decision, to be made in the 2014 Budget.</p>

<sup>2</sup> In addition, the Retail Advisory Group (RAG) is undertaking a review of the future direction of the programme for beyond April 2014 (see project C7).

#	Output	Name	Project description	Overall performance standard for 2013/14	Status	Progress statement
B10	Market development	Transmission pricing investigation	Review of the transmission pricing methodology to promote overall efficiency of the electricity industry.	Development of guidelines for Transpower to develop transmission pricing methodology.		<p>Steady progress is being made on the review of the transmission pricing methodology (TPM) in accordance with the revised approach and timetable published in June 2013.</p> <ul style="list-style-type: none"> <li>• Static reactive support (SRS): on 1 October a decision was made not to advance work on a new charge for SRS.</li> <li>• Cost benefit analysis working paper: working paper published 3 September. Consultation closed on 15 October 2013. Submissions are being considered.</li> <li>• Sunk costs working paper: working paper published 8 October. Consultation closed on 19 November 2013.</li> <li>• Avoided cost of transmission (ACOT) payments for distributed generation working paper: working paper published 19 November. Consultation closed on 31 January 2014.</li> <li>• Beneficiaries' pays approach working paper: working paper published on 21 January 2014. Consultation closed on 25 March. A summary of submissions will be considered at the May Board meeting.</li> <li>• Loss and constraint excess (LCE) and connection charge: working paper published on 21 January 2014. Consultation closes on 4 March. A summary of submissions will be considered at the May Board meeting.</li> <li>• The residual charge working paper has been delayed in order to fully consider congestion charging. This will delay the release of the second issues paper currently scheduled for second half of 2014.</li> </ul>

#	Output	Name	Project description	Overall performance standard for 2013/14	Status	Progress statement
B11	Market services	Service provider software review	<p>Fit for purpose review of service provider software and systems (excluding system operator and FTR manager) to improve efficiency.</p> <p>Review of market operations service provider (MOSP) systems to ensure the technology remains current with performance and functionality requirements and the development of the electricity market.</p> <p>Possible capital cost at point of next renewal of provider contracts.</p>	<p>Scoping study (including scope, timetable and high-level costs) completed by December 2013.</p> <p>Complete review and make any recommendations on system changes required (for subsequent development into an implementation project).</p>		<p>A consultant has been engaged to carry out the review.</p> <p>The review is expected to be completed by June 2014.</p>
B12	Market services	SOSPA Review	<p>A wide ranging review of the SOSPA arrangements to improve efficiency, including:</p> <ul style="list-style-type: none"> <li>- alignment of SOSPA objectives with s15 of the Electricity Industry Act 2010</li> <li>- development of a wider range of performance measures</li> <li>- addressing capital plan and spending arrangements</li> <li>- addressing the impact of fee changes on levy payers</li> <li>- renegotiation of SOSPA.</li> </ul>	Complete review and update SOSPA in 2013/14.		<p>The Statement of Intent did not specify a target date. Initially the Authority hoped to complete the review in 2013/14 and this was the target in our work programme. However, after initial discussions with the system operator, the target date for new SOSPA was revised to 1 July 2015.</p> <p>We are on track for the revised timetable.</p>

#	Output	Name	Project description	Overall performance standard for 2013/14	Status	Progress statement
B13	Compliance	Review of enforcement regulations	Review of the Electricity Industry (Enforcement) Regulations and draft replacement regulations.  Dependent on the Ministry of Business, Innovation and Employment (MBIE) work programme and priorities (requires Cabinet approval).	Complete the review and draft replacement regulations, if required.		Completed. Review considered at March Board meeting. Report sent to the Ministry of Business, Innovation and Employment (MBIE).
B14	Market performance	Electricity market performance review	Development and publication of the Electricity market performance review report.	Publication of the report by March 2014.		Completed. Published in March 2014.
B15	Market performance	Data warehouse	Project to enable market monitoring and analysis function and enhanced public data availability and analysis tools. Core function launched in 2011/12. There is on-going project work to add new data sets and reports.  Specifically in 2013/14 – improving access to retail data (see project C8).	Expanding and improving the data warehouse: continuous improvement of the data warehouse and website portal.  99% availability of the Authority data web portal during business hours.  20-30 data sets available on the portal.		Dissemination of data has been transitioned to a new Electricity Market Information (EMI) website, <a href="http://www.emi.ea.govt.nz">www.emi.ea.govt.nz</a>  As part of the transition the DVD version of the CDS will no longer be required. The October 2013 CDS was the last one in the DVD format.
B16	Market performance	Post implementation reviews of s42 projects	Post implementation reviews for major Code amendment projects will generally commence after the initiative has been in operation for two years. The reviews will focus on the impact on the market.	Commence post implementation reviews, if appropriate.	NA	

## 5 Other priority projects for completion in 2013/14

5.1 The table below sets out second and third priority projects where Code or market facilitation deliverables are expected to be completed in 2013/14. This includes completion of existing projects and new priorities identified through development of the SOI and work programme.

**Table C: Information about second and third priority projects for completion in 2013/14**

#	Priority 2013/14	Output	Project name	Project description	Overall performance standard for 2013/14	Status	Progress statement
C1	2 - high	Market development	Dispatchable demand modified option (MODD)	Facilitating greater demand-side participation in the wholesale market.  Related to dispatchable demand – implementation: project A3.	Complete Code amendment for modified option, in time to ensure go-live on 15 May 2014.		Code amendment gazetted 12 December 2013.  Implementation project is on track to go live on 15 May 2014.
C2	2 - high	Market development	Wholesale market information	Implement Board decisions made in June 2013.  Improved access to WITS and planning outage coordination protocol (POCP) for wider range of participants.  Builds on initiatives recommended by WAG in 2012/13.	Finalise POCP (Red Spider system) enhancements (MFM).  Finalise guideline for clause 13.2.  NB in addition to the core project the Authority will consider progressing "additional suggestions for improving wholesale market information" - identified in submissions on WAG discussion paper.		Completed. The POCP process is underway. The final report from the system operator is has been received.  The POCP public viewer was implemented in October 2013 to assist participants in compliance with new 13.2 requirements.  Guidelines for 13.2 have been issued and came into effect on 1 October 2013.  Additional work is being considered by the WAG on further improvements to accessing wholesale market information. Further work is planned for 2014/15 on facilitated disclosure of generators' fuel stock and forward contracts (quantities only).

#	Priority 2013/14	Output	Project name	Project description	Overall performance standard for 2013/14	Status	Progress statement
C3	2 - high	Market development	Grid configuration arrangements	Development of efficient arrangements for making a temporary change to the grid configuration.	Code amendments completed by December 2013.		Completed. The new Code came into force on 16 December 2013.  An examples paper has been provided to Transpower, which may result in further work.
C4	2 - high	Market development	Improving transparency of consumer electricity charges <sup>3</sup>	Review to improve the transparency of consumers' electricity charges.  RAG project.	RAG report expected April 2014.  Authority response to RAG recommendations.		The Retail Advisory Group (RAG) considered submissions on its issues paper and next steps at its September 2013 meeting.  A research survey was conducted of consumer information requirements.  The RAG reported to the Board in April 2014.
C5	2 - high	Market development	Retailer default provisions	Identify arrangements to ensure an orderly resolution of a retailer default situation when a retailer becomes insolvent or discontinues service (e.g. exits the market).  RAG project in 2012/13.  Related to C12 – implementation stage	Consultation taking place in June/July 2013.  Code amendments completed by December 2013 subject to consultation feedback.		Completed. Code amendments came into force on 16 December 2013.

<sup>3</sup> Previously called *Breakdown of customer billings* project.

#	Priority 2013/14	Output	Project name	Project description	Overall performance standard for 2013/14	Status	Progress statement
C6	2 - high	Market development	Distribution pricing review	<p>Review of distributors' alignment with <i>Distribution pricing principles and information disclosure guidelines</i>.</p> <p>Following from the review consideration of further actions required, if any.</p>	<p>Review (report on alignment) completed. Report due December 2013.</p> <p>Evaluation of findings and development of response, if required.</p>	<input type="checkbox"/>	<p>Work programme target met. Review report and evaluations were released 17 December 2013.</p> <p>New target set in December 2013: release of consultation paper on next steps by June or July 2014.</p>
C7	2 - high	Market development	Review of consumer switching programme	<p>RAG review of consumer switching programme and initiatives beyond April 2014.</p> <p>Related to Consumer Switching Fund programme (B9).</p>	<p>RAG is expected to report to the Board in September 2013 on its review of the consumer switching function for beyond 30 April 2014.</p>	<input type="checkbox"/>	<p>Timing of the RAG review was amended to align with a separate review carried out by MBIE.</p> <p>The RAG reported to the Board in March and the report was published on 18 March 2014.</p>

#	Priority 2013/14	Output	Project name	Project description	Overall performance standard for 2013/14	Status	Progress statement
C8	2 - high	Market development and Market performance	Improving access to retail data	<p>Improving access to retail data to enhance price comparison, product and service innovation, and retail market analysis and monitoring</p> <p>This project has four parts:</p> <ul style="list-style-type: none"> <li>- enable collection of data through standardisation of formats (including Code amendment if required)</li> <li>- integration of existing market datasets (may include additional Registry fields)</li> <li>- development of a national retail price database for electricity and gas.</li> <li>- enhanced retail market analysis, metrics and monitoring.</li> </ul> <p>A key outcome will be to provide consumers and the energy services industry with access to data.</p> <p>Related to data warehouse (B15) distributor tariff codes project (C10).</p>	<p>Project plan including feasibility assessment and CBA.</p> <p>Complete standardisation of price formats.</p> <p>Development of pilot database of retail price data – Auckland.</p> <p>Provide enhanced monitoring and retail market performance metrics.</p> <p>Development of National Database for retail price data in 2014/15.</p>	<div style="border: 1px solid black; width: 20px; height: 20px; display: inline-block;"></div>	<p>Project brief approved in February 2014.</p> <p>Issues paper published 28 January and closed on 27 March 2014.</p> <p>Three workstreams have been identified:</p> <ul style="list-style-type: none"> <li>- consult on options for making consumption data available</li> <li>- consult on options for retail monitoring data</li> <li>- trial tariff database and end-to-end energy services solution.</li> </ul>

#	Priority 2013/14	Output	Project name	Project description	Overall performance standard for 2013/14	Status	Progress statement
C9	2 - high	Market development	AUFLS standard review	A project in which the system operator will determine what events AUFLS are actually covering (part of the security policy review).  Potential amendment to system operator policy statement and technical Codes.	Code amendment proposal due from system operator in December 2013.  Complete Code amendment by 30 June 2014.	<input type="checkbox"/>	The AUFLS technical and standard work being progressed together under project B8.  On track with milestones.
C10	2 - high	Market services	More standardisation programme - implementation	Complete update of distributor tariff codes.	Complete distributor tariff codes by 31 December 2013. Effective immediately.	<input type="checkbox"/>	Completed. This project was closed as a result of decisions made by the Board in September 2013 to revoke the Code requirement to use distributor tariff codes.
C11	2 - high	Market services	Systems access policies	Preparation of a WITS access policy, finalisation of Registry access policy, and development of WITS use of systems agreement (with NZX).	Complete WITS access policy by June 2014 (dependent on NZX - use of system agreement (UoSA)).  Complete registry access policy by 31 December 2013.	<input type="checkbox"/>	The registry policy has been completed and was published on 18 November 2013.  Work on the WITS policy has commenced and is expected to be considered at the June 2014 Board meeting.
C12	2 - high	Market services	Retailer default provisions - implementation	Dependent on outcome of Market Design project (C5). Implementation of retailer default provisions into market operations systems (may involve changes to MOSP systems).	Consultation taking place in June/July 2013.  Code amendments completed by December 2013 subject to consultation feedback.	<input type="checkbox"/>	Work programme milestone completed: Code amendments came into force on 16 December 2013.  Implementation is on track.  Consultation may be required for fine-tuning Code amendments.

#	Priority 2013/14	Output	Project name	Project description	Overall performance standard for 2013/14	Status	Progress statement
C13	2 - high	Market services	Settlement and prudential security review - implementation	Implementation of outcomes of WAG prudential and security review (project B1) into clearing manager systems (and other operational changes as required).	Some level of implementation progress (depends on the timing of the completion of the review and the extent of systems development required).	<input type="checkbox"/>	<p>System design has commenced.</p> <p>NZX is preparing prudential methodology consultation for implementation.</p> <p>High level design has been completed, reviewed and approved. Detailed design and requirements to be completed by mid-May along with pricing options.</p>
C14	2 - high	Market performance	International benchmarking	A project to design an international benchmarking study. Includes feasibility of on-going benchmarking.	Complete feasibility study by 24 December 2013. Further steps to be determined.	<input type="checkbox"/>	<p>Work programme milestone completed: the feasibility was reported to the Board in December 2013, concluding that the project as originally envisaged is not feasible.</p> <p>Alternatives are being assessed.</p>
C15	3 - important	Market development	Allocation of constrained-on costs	Review the calculation and allocation of constrained-on costs to ensure efficiency.	Decide on Code amendments required (Board approves, but not necessarily gazetted). Begin implementation stage: clearing manager and system operator changes.	<input type="checkbox"/>	<p>Code amendments approved in July 2013. Not yet gazetted while implementation is being planned</p> <p>We are in discussion with the system operator regarding implementation.</p>
C16	3 - important	Market development	Value of lost load (VoLL)	Completion of investigation of value of lost load. Outputs will contribute to transmission and distribution network planning purposes – may have implications for scarcity pricing and AUFLS.	Publication of information paper and methodology for undertaking research of value of lost load. Code amendments, as necessary.	<input type="checkbox"/>	<p>Completed. Information paper and methodology published in July 2013. The Authority announced that Code amendments are desirable but not necessary at this stage.</p>

#	Priority 2013/14	Output	Project name	Project description	Overall performance standard for 2013/14	Status	Progress statement
C17	3 - important	Market development	Domestic contracting arrangements	Consideration of suite of arrangements for improving the consumer and distributor/retailer relationship, including medically dependent and vulnerable consumers. RAG project.	RAG report expected to Board in March 2014. Authority response to RAG recommendations.	<input type="checkbox"/>	The RAG discussion paper was released on 5 November and closed on 17 December 2013.  The WAG expects to provide its recommendations to the Board this financial year.
C18	3 - important	Market development	Review of more standardisation of use of system agreements (UoSA)	Project has three parts: - alignment review of UoSA (by Market Performance) - review of the MUoSA to identify provisions inhibiting retail entry - assessment of making MUoSA a default.	Scope, approach and timetable to be determined.	<input type="checkbox"/>	Consultation paper on options to improve standardisation released on 8 April, closing on 20 May 2014.
C19	3 - important	Market development	Review of barriers to group switching and mass market aggregation	Project to identify barriers to group switching and to identify options to reduce barriers if they exist.	Scope, approach and timetable to be determined.	<input type="checkbox"/>	Work programme milestone completed: project brief approved by RAG and the Board in September 2013.  RAG discussion paper released on 8 April, closing on 20 May 2014.
C20	3 - important	Market development	Asset owner performance obligations (AOPO): fault ride-through	Review of low voltage fault ride-through AOPO to determine if they are fit for purpose with the changing generation mix (ie significant wind generation).	Complete Code amendment. (Implementation is by future generators.)	<input type="checkbox"/>	Discussion is on-going with the system operator about standards. The system operator study report has been updated.  A second consultation is to take place following completion of the system operator study report.

#	Priority 2013/14	Output	Project name	Project description	Overall performance standard for 2013/14	Status	Progress statement
C21	3 - important	Market development	Frequency regulation: frequency keeping constrained-on/off	Removal of constrained-on/off from the frequency keeping selection methodology and from the frequency keeping cost allocation.  Includes initial investigation being undertaken by the system operator.	Consult on Code. Complete Code amendment. Complete implementation.	<input type="checkbox"/>	Consultation on methodology and Code closed 17 September 2013. Submissions have been considered.  Code implementation will be post dispatchable demand implementation as both projects touch the same Code provisions.  Code amendment expected to be considered by the Board in June 2014.
C22	3 - important	Market development	Frequency regulation: review normal frequency band and AOPOs	Review of the frequency keeping Hz band, MW band and related AOPOs to determine if fit for purpose.  Investigation reports produced by the system operator in 2011.  Further system operator investigation may be required - implications for software.	Complete Code amendments for:  (1) frequency deviation targets  (2) minimum governor response.	<input type="checkbox"/>	Work commenced in January 2014.  A Code amendment is being prepared for consideration by the Board in June 2014.
C23	3 - important	Market services	Domestic contracting arrangements - 2013 alignment review	Review of alignment of retailer standard terms and conditions with the model / guidelines (8 retailers whose standard terms were deficient in last review – 2012).	Complete review of eight retailers.	<input type="checkbox"/>	Completed. Review completed and reported to the Board in April 2014. Minor follow up required.

#	Priority 2013/14	Output	Project name	Project description	Overall performance standard for 2013/14	Status	Progress statement
C24	3 - important	Market services	Livening and energisation guidelines	Following from Part 10 project, complete review of submissions, and decide whether Code amendment is required.	Complete review of submissions, and decide whether Code amendment is required.  Publish guidelines.  Complete Code amendment, if required.	<input type="checkbox"/>	The guidelines are being finalised. Approval is expected in by the end of the financial year.
C25	3 - important	Market services	Implementation review - Part 10	Implementation review to assess effectiveness of project management and delivery, including participant actions.	Complete and publish review.	<input type="checkbox"/>	An independent review has been completed and was considered at the May Board meeting.
C26	3 - important	Market services	Business continuity review for market operations service providers (MOSP)	Business continuity review for market operations service providers.  Initial stage is assessment of current state and gap analysis, from which the need for a more detailed plan will be established.	Complete review and gap analysis.  Further steps to be determined.	On hold	To be commenced in the 2014/15 financial year.
C27	3 - important	Market services	Participant definitions under the Act	Includes addressing the issue of the introduction of financial traders and a review of type 2 retailers. Review of definitions of 'generator', 'distributor' and 'trader' under the Act. Potential class exemptions for last two.	Definitions completed in 2013/14.	<input type="checkbox"/>	Initial legal review carried out and scope being developed.  Definitions are being progressively worked through, but may not be completed in 2013/14 as scope is larger than initially anticipated.

#	Priority 2013/14	Output	Project name	Project description	Overall performance standard for 2013/14	Status	Progress statement
C28	3 - important	Market services	Operational review of Part 6	A review of Part 6 of the Code to address perceived low notification rates of distributed generation, and approximately 40 operational issues identified since inception of the legislation in August 2007. This review excludes the pricing principles of Part 6, which is to be covered by the review of distribution pricing.	Finalise Code amendment by 30 June 2014.	<input type="checkbox"/>	Second consultation published on 3 December 2013 and closed on 31 January 2014. Submissions being reviewed.
C29	3 - important	Market services	Reconciliation loss factor methodology	Develop final recommendations for: <ul style="list-style-type: none"> <li>- calculation and management of distribution losses used in the reconciliation process (complete guidelines and publish)</li> <li>- developing and publishing approach to monitoring and implementation.</li> </ul>	Complete Guidelines and publish by 30 June 2014.	<input type="checkbox"/>	Consultation closed April 2013. Submissions being analysed.  The project currently has a low priority and guidelines are not expected to be completed by June 2014.

#	Priority 2013/14	Output	Project name	Project description	Overall performance standard for 2013/14	Status	Progress statement
C30	3 - important	Market services	Metering-advanced metering policy implementation project	<p>Scope of this project is:</p> <ul style="list-style-type: none"> <li>- complete review of advanced metering interface (AMI) guidelines</li> <li>- consult on industry-agreed formats for exchanging AMI information.</li> </ul> <p>Current initiatives will be completed but there is the potential for on-going improvement initiatives outside of scope of this project.</p>	Finalise amendments to advanced metering policy and guidelines completed by 30 June 2014.	<input type="checkbox"/>	The guidelines are being finalised.
C31	3 - important	Market performance	Winter review	Review of winter 2012 and winter 2013.	Complete the review.	<input type="checkbox"/>	Project started. Draft report expected to be completed in the financial year (by 30 June 2014).
C32	3 - important	Market performance	Closure review of the Reserve Energy Scheme	Complete a review of the Reserve Energy Scheme.	Dependent on completion of 2012 winter review, complete the closure review of the reserve energy scheme.	NA	This review has been combined with the winter review.

## 6 Other priority projects for completion in 2014/15 and out-years

6.1 The table below sets out key projects in line with the Authority's statutory objective and priority areas, where Code amendments or market facilitation measures are not expected to be completed in 2013/14.

**Table D: Information about second and third priority projects for completion in 2013/14 and out-years**

#	Priority	Output	Name	Project description	Overall performance standard for 2013/14	Status	Progress statement
D11	2 – high	Market development	Win-backs investigation	Project added to the work programme in November 2013.	Develop project brief - including scope and timetable.	<input type="checkbox"/>	<p>Project added to the work programme in November 2013.</p> <p>1 on the market published in December 2013.</p> <p>Discussion paper expected to be provided to the Board this financial year.</p>
D1	2 – high	Market development	Hedge market development	Monitoring industry progress and developing further market facilitation initiatives to improve the hedge market.	<p>New ASX products: quarterly options, quarterly peak, and monthly base load products (MFM).</p> <p>Market-making for options (MFM).</p> <p>Explore ASX positions offset energy market prudential security requirements (Code amendment).</p> <p>Hedge market survey.</p> <p>Quarterly reporting on progress to be undertaken by the Market Performance team.</p>	<input type="checkbox"/>	<p>The WAG is taking a fresh look at this area, including the over the counter (OTC) market. A survey was carried out and the results were considered by the WAG in May with publication expected to follow.</p> <p>The Authority is progressing other matters directly, including improving the level of market-making in hedge products.</p>

#	Priority	Output	Name	Project description	Overall performance standard for 2013/14	Status	Progress statement
D2	2 – high	Market development	Research project: effects of low fixed charges	An investigation into the effects on efficiency and competition of the Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004 and other means of achieving the social welfare outcomes sought by government.	Complete project plan, including scope, approach and timetable. Complete consultation on issues and options. Report to the Minister.	On hold	Put on hold in September 2013.
D3	2 - high	Market development	Under-frequency management - including automatic under frequency load shedding (AUFLS) technical review	Review of all under frequency management tools, including verifying modelling formats. Overall event management comment: Some components i.e. AUFLS block sizing and trigger points, will be progressed in conjunction with the AUFLS review work carried out by the system operator. Includes system operator consideration of dispensations and equivalence with respect to AUFLS exemptions.	Review to be completed and Code amendment proposal received from the system operator by 31 December 2013. Complete investigation report and feasibility studies in 2013/14 for the following: - IL over-delivery - Over-frequency product - Inertia market - Wind generators to provide reserves - IL modelled according to tripping time.	<input type="checkbox"/>	Technical work has been completed. An AUFLS Code amendment is being addressed as part of the efficient procurement of extended reserves project (B8). Other investigations and feasibility studies are underway.

#	Priority	Output	Name	Project description	Overall performance standard for 2013/14	Status	Progress statement
D4	2 - high	Market development	Under-frequency management - reserves arrangements	Investigation into reserve arrangements.	Investigation and review to be completed in 2013/14.	<input type="checkbox"/>	<p>The Authority is investigating feasibility. The system operator has provided an alternate proposal for faster reserves for Authority consideration.</p> <p>We expect to complete the review and report on the results of the investigation and next steps at the June or August Board meeting.</p>
D5	2 - high	Market services	Electricity information exchange protocols	Review and update of Electricity information exchange protocols (EIEP).	Code amended by October 2013. Commence implementation. Go live 1 July 2014.	<input type="checkbox"/>	<p>Completed. Code amendment approved in October 2013.</p> <p>Implementation is primarily by participants.</p>
D6	3 - important	Market development	Improvements to existing spot pricing process	<p>Review the need for changes to the existing spot pricing process, potentially including:</p> <ul style="list-style-type: none"> <li>- improved modelling of constraints in the system operator' scheduling, pricing and dispatch model (SPD) - constraint softening</li> <li>- wind generation inputs into final pricing</li> <li>- infeasibility resolution improvement process</li> <li>- interim pricing period deadline changes.</li> </ul>	<p>Progress constraint softening initiative to the point of draft Code amendments.</p> <p>Start review of wind generation inputs into final pricing.</p>	On hold	<p>Draft consultation paper prepared on constraint softening.</p> <p>Wind inputs to final pricing not yet started, but may begin in 2014.</p> <p>This project was put on hold in November to give resource priority to other projects.</p>

#	Priority	Output	Name	Project description	Overall performance standard for 2013/14	Status	Progress statement
D7	3 - important	Market development	Improved market modelling of losses	<p>Improve the representation of losses in the SPD – provides for a lower cost market solution.</p> <p>NB current settings are based on historical computing capacity constraints that no longer apply. Dependent on system operator resource commitment.</p>	To be determined - timetable to be established with system operator.	<input type="checkbox"/>	<p>A new investigation stage is being carried out to determine the impacts of increasing the number of loss tranches in SPD for complex trading periods. These trading periods require mixed integer programming to solve. The investigation stage is being carried out in two phases.</p> <p>Investigation phase 1 has been completed.</p> <p>Investigation phase 2, scoping requirements for changes to the loss segments used in SPD, is to commence in April 2014.</p> <p>Consultation on increasing the number of loss tranches is expected before the end of the financial year.</p>

#	Priority	Output	Name	Project description	Overall performance standard for 2013/14	Status	Progress statement
D8	3 - important	Market development	Offer and dispatch Code development	<p>Improve the offer and dispatch rules to improve operational efficiency, eg:</p> <ul style="list-style-type: none"> <li>- review of gate closure - potential further work (potential to delay if needed)</li> <li>- reserve offers</li> <li>- other areas where we are getting Code amendment proposals - will need to be prioritised and progressed as resources permit.</li> </ul>	<p>Complete gate closure Code amendments (depending upon feasibility study completed the previous year).</p> <p>Evaluate and develop Code amendments for the following initiatives:</p> <ol style="list-style-type: none"> <li>1. Clarify code provisions 13.18, 13.19, 13.19a (Compliance Committee recommendations)</li> <li>2. Review reserve offer algorithm (Genesis Energy proposal)</li> <li>3. Intermittent generation (wind) re-offer provisions</li> <li>4. Minimum offer price for interruptible load (13.43, issue identified in WITS audit).</li> </ol>	<input type="checkbox"/>	<p>Gate closure testing has been successfully completed and a report received. Further work has been initiated with the system operator to provide firm estimates of costs and a timeline for implementation. Completion of a Code amendment in 2013/14 is at risk timing-wise.</p> <p>The Authority is considering several other Code amendment proposals, including bid-offer revisions, and treatment of industrial embedded generation as if it was intermittent. These are on track.</p>
D9	3 – important	Market development	Review of retail competition in embedded and customer networks	<p>Examination of the potential to improve retail competition in embedded networks and customer networks.</p> <p>RAG project.</p>	Scope, approach and timetable to be decided.	<input type="checkbox"/>	<p>A project scope and approach was agreed by the RAG in April 2014.</p> <p>Recommendations are expected to be provided to the Board in August 2014.</p>

#	Priority	Output	Name	Project description	Overall performance standard for 2013/14	Status	Progress statement
D10	3 - important	Legal	Code upgrade project	A project to address identified legal deficiencies in the Code to the extent possible without having to consider substantive policy matters. It is not a redraft to introduce a performance-based approach to drafting the Code.	NB this project has been initiated, but will only be progressed in 2013/14 if resources become available.	On hold	Some progress was made as in the first half of the financial year.  This project is currently on-hold due to resource availability and the need for further consideration of the project scope. There is potential for the project to be assimilated into other Code-related projects.

## 7 Future projects

- 7.1 The table below lists projects that have had an initial assessment as having merit but are scheduled for initiation after the 2013/14 year.
- 7.2 No pending projects have been initiated during the 2013/14 year to date.

**Table E: Information about proposed future projects**

#	Pending priority	Output	Project Name	Description
E1	First	Market development	Review of Part 6 (pricing principles)	Related to reviews of distribution and transmission pricing. Dependent on distribution pricing alignment review. A review of the pricing principles for distributed generation in Part 6 of the Code, to ensure consistency and alignment with distribution pricing principles.
E2	First	Market development	Research project - distribution company arrangements	Research project to review the efficiency of distribution network company arrangements.
E3	First	Market services	Review of liability limits for market operations service providers	<p>Review the liability limits for the pricing manager, reconciliation manager, clearing manager, WITS manager, registry manager and FTR manager to ensure these remain consistent with the services provided and the balance of risk between the providers and industry participants.</p> <p>The liability limits are not set down in the Code, but in the Electricity Industry (Enforcement) Regulations 2010. Any change in the limits would then require a change in the Regulations (coordinated with MBIE).</p> <p>A review of the liability limits for service providers (and other parties) is included in the review of the enforcement regulations (Project B13).</p>
E4	First	Market services	Wholesale information trading system (WITS) vision	Addressing the improvements to WITS set out in the vision document. Prioritisation is a first step.
E5	First	Market services	Registry communications improvements	Improving efficiency of communication between participants and the registry. Encouraging participants to take up communication facilities that currently exist.

#	Pending priority	Output	Project Name	Description
E6	Second	Market performance	Post implementation reviews –section 42 of the Act	Post implementation reviews of section 42 projects (these are now expected to commence in 2014/15).
E7	Second	Market development	Short-term hedge instruments	Consider the need for a short-term market for hedge instruments (e.g. day-ahead). Possible WAG project.
E8	Second	Market development	Trading arrangements (Part 13) review	Review the Code relating to trading. Includes scheduling, dispatch, pricing, information and information disclosure. Possible WAG project.
E9	Second	Market development	Research project - scarcity pricing	Carry out research into the potential for model-based approaches to scarcity pricing, for example the setting and application of price floors during public conservation campaigns (consideration of price floors that are dynamic rather than fixed).
E10	Second	Market development	Instantaneous reserve cost allocation methodology	Review of the instantaneous reserves cost allocation methodology.
E11	Second	Market development	Review of Part 12	Review of Part 12 of the Code to ensure it is fit for purpose. Includes Benchmark Agreement, Connection Code, Grid Reliability Standards.
E12	Second	Market development	Extend Consumer Guarantees Act indemnity to Transpower	Review whether the Consumer Guarantees Act indemnity obligations on lines companies should be extended to Transpower. Dependent on passage of Consumer Law Reform Bill.
E13	Second	Market development	Arrangements for management of load control	Review of arrangements for management of load control (distribution system operator).
E14	Second	Market development	Common quality development plan - further items	Possible initiatives as listed in the Common Quality Development Plan - not prioritised or costed but including development of a reactive market and review of kvar procurement.
E15	Second	Market development	Credible event management: under voltage management	Review appropriateness of the Code for under-voltages during events.
E16	Second	Market development	Asset owner performance obligations: voltage rules	Review of voltage asset owner performance obligations (AOPOs) to determine if fit for purpose with changing generation mix (ie significant wind generation).

#	Pending priority	Output	Project Name	Description
E17	Second	Market development	Asset owner performance obligations: under-frequency rules	Review of under-frequency AOPOs to determine if fit for purpose with changing generation mix (ie significant wind generation).
E18	Second	Market development	Frequency regulation: frequency keeping cost allocation	On hold until after MFK which will determine a better price for frequency keeping. Project purpose is to allow anticipated wind generation to be successfully integrated into the New Zealand electricity system over the next five-10 years. Phase 3: Frequency keeping cost allocations, AOPO/dispensation/equivalence review.
E19	Second	Market development	Under-frequency management: AUFLS exemptions	Project to clarify AUFLS requirements for exemptions and alternatives (ie dispensations, equivalence). Depending on implementation of the AUFLS market and AUFLS technical review, the AUFLS exemptions may need to be revoked.
E20	Second	Market development	Under-frequency management - Instantaneous reserve AOPOs	Review of instantaneous reserve AOPOs. (Part 8 of the Code - fit for purpose eg for wind farms.)
E21	Second	Market services	Review definitions under the Electricity Industry Act 2010 (the Act) and the Code that may apply to islanded networks	Potential for this to be covered by the Code upgrade project. Determine what extent of obligations under the Act and Code apply to networks that are not connected to the grid. Inaccurate definitions will lead to participants being required to register as participants with the Authority, and we do not need them to. Including sections of network that are islanded under the continuance of supply requirements of the Act (may require the project to be started sooner rather than later).
E22	Second	Market services	Review of market administrator role	General tidy up review. Includes determining if: a) some market administrator tasks can be addressed in a different manner b) market administrator obligations in the Code should be changed to Authority obligations.
E23	Second	Market services	Review use of seasonal adjustment shape	Determine if the reconciliation process should be modified to allow seasonal adjustment shape or residual profile shape for calculation of historic estimates.
E24	Second	Market services	Pre-certification stage investigation	Project to facilitate new entrant retailers - look at Board discretion around period for new retailers to gain certification. Potentially able to be addressed as a minor code amendment.
E25	Second	Market services	Review of use of profiles	Review of the extent of use of profiles and whether they are being efficiently applied. Initial work will be required to investigate extent of the issue.
E26	Second	Market services	Optimisation of non-technical distribution losses	Investigate the reduction in non-technical losses.

#	Pending priority	Output	Project Name	Description
E27	Second	Market services	Guidelines for secondary networks - network extensions and customer networks	Development of arrangements for network extensions and the establishment of compliance requirements.
E28	Second	Market services	System operator monthly reporting	A review of the value of system operator monthly reporting. (Requested by the Systems Operations Committee in April 2011.)
E29	Second	Market performance	Research project - efficiency of system operator arrangements	Review service provider arrangements relating to system coordination and related market services. To start after system operator alignment review project. (Dependent on SOSPA review.)
E30	Second	Market performance	Metering - Part 10 - impact review	Post implementation review of impacts and outcomes.
E31	Second	Legal and compliance	Alternative funding arrangements	A review to consider possible alternative funding arrangements to determine whether there are more efficient means of funding specific Authority operations (eg service providers). NB if change is required, legislation will be required. Report provided to Minister in February 2013. On hold until appropriate legislative vehicle is available.
E32	Second	Legal and compliance	Review of advisory group conflict of interest provisions	Reviewing the requirements in the Act to address an unintended conflict of interest requirement / provision.
E33	Second	Market development	Plant commissioning Code	E3P and Stratford commissioning highlighted some shortcomings in the relevant part of the Code. The Code amendment has been approved, however, the initial implementation proposal from SO came in at a higher costs than expected. This has caused delay while alternative options are investigated. A decision is to be made on whether to continue with the project and if so when as substantial cost and commitment of SO developer resource is involved.

## Glossary of abbreviations and terms

<b>ACOT</b>	Avoided costs of transmissions
<b>AGC</b>	Automatic governor control
<b>AMI</b>	Advanced metering interface
<b>AOPOs</b>	Asset owner performance obligations
<b>AUFLS</b>	Automatic under-frequency load shedding
<b>Authority</b>	Electricity Authority
<b>CBA</b>	Cost benefit analysis
<b>Code</b>	Electricity Industry Participation Code 2010
<b>EIEP</b>	Electronic information exchange protocols
<b>FTR</b>	Financial transmission rights
<b>HVDC</b>	High voltage direct current
<b>LCE</b>	Loss and constraint excess
<b>MBIE</b>	Ministry of Business, Innovation and Employment
<b>MFK</b>	Multiple frequency keepers
<b>MFM</b>	Market facilitation measures
<b>MODD</b>	Modified option for dispatchable demand

<b>MOSP</b>	Market operations service providers
<b>OTC</b>	Over the counter hedges
<b>POCP</b>	Planning outage coordination protocol
<b>Regulations</b>	Electricity Industry (Enforcement) Regulations 2010
<b>RAG</b>	Retail Advisory Group
<b>SOI</b>	Statement of Intent
<b>SOSPA</b>	System operator service provider agreement
<b>SPD</b>	The system operator's scheduling, pricing and dispatch model
<b>TPM</b>	Transmission pricing methodology
<b>UoSA</b>	Use of system agreement
<b>VoLL</b>	Value of lost load
<b>WAG</b>	Wholesale Advisory Group
<b>WIBR</b>	Within island basis risk (a form of FTR)
<b>WITS</b>	Wholesale information trading system

**Note:** a glossary of terms used in the electricity industry is available at: [www.ea.govt.nz/glossary/](http://www.ea.govt.nz/glossary/)