

2012/13 Work Programme

Report to 31 March 2013



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1 Introduction

- 1.1 This report provides a report on progress against the 2012/13 work programme as at 31 March 2013. The work programme is available on the Authority's 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 including project descriptions, initial assessment of project size and initial assessment of net public benefit.
- 1.2 The 'traffic lights' used in the report relate to overall progress against the project milestones, which may go beyond the end of the 30 June 2013 financial year. These traffic lights are not the same as reporting against the SOI targets in the Annual Report, which are reports as at 30 June 2013.

Key to traffic light symbols used in this report

Symbol	Interpretation.
	Project milestones achieved or on track to be achieved.
	Project milestone are at risk.
	Project milestones not achieved or not able to be achieved.

The work programme is flexible

- 1.3 The work programme is an 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. The Authority reviews and updates its work programme on a regular basis. Reviews have been completed in November 2012 and March 2013, resulting in some adjustments to projects and budgets, and some projects being put on hold.

Overall performance standards for 2012/13

- 1.4 The project tables below include key milestones or deliverables for the 2012/13 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. The Authority has 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 2013) 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 (section 3 to 8).

#	Project name	Existing or new project for 2012/13	Status as at 31 March 2013
Table A: Key systems implementation projects			
A1	Scarcity pricing - implementation	Existing	
A2	Demand side bidding and forecasting (DSBF) – implementation ¹	Existing	Completed
A3	Locational price risk management - implementation	Existing	
A4	Metering (Part 10) – implementation	Existing	
A5	Dispatchable demand – implementation	Existing	
Table B: Top priority market development projects			
B1	Under-frequency management: AUFLS exemptions	Existing	Completed
B2	Frequency regulation: multiple frequency keepers (MFK)	Existing	
B3	Under-frequency management project including AUFLS technical review	Existing	
B4	Settlement and prudential security review	Existing	
B5	Wholesale market information	Existing	
B6	Retailer default provisions	Existing	
B7	Consumer switching fund	Existing	
B8	Transmission pricing investigation	Existing	
B9	Review of UTS provisions	Existing	²
B10	Hedge market development	Existing	
B11	Improving pricing efficiency when a generator is pivotal	New	

¹ Dispatchable demand implementation is being progressed following completion of the DSBF project.

² Project restarted after Genesis Energy decision to withdraw its appeal. Timetable impacted by appeal process.

3 Key system implementation projects

3.1 The table below addresses key existing projects that are at the implementation stage in 2012/13.

Table A: Information about key system implementation projects

#	Name	Project description	Overall performance standard for 2012/13	Status	Progress statement
A1	Scarcity pricing-implementation	Implementation of s42 changes. Capital project.	- Complete go-live by 30 June 2013.		Two design options were considered by the Board in October 2012 and a decision was made to proceed with option 2. The system operator and pricing manager teams have prepared project plans and detailed design has started. The implementation target date is proving challenging, but is still considered achievable. A contingency plan is also being put in place.
A2	Demand side bidding and forecasting (DSBF) - implementation	Section 42 implementation project. Capital project.	- Should be finished by 30 June 2012, but potentially some post completion actions required.		Completed. Go live took place on 28 June 2012.
A3	Locational price risk management - implementation	Section 42 implementation project. Capital project.	- Go-live date: 1 May 2013.		The 'go-live' date for the first FTR auction has been deferred from May to June 2013 to allow for the Pole 3 commissioning timeframe. Energy Market Services (EMS), a division of Transpower, is the FTR manager. System development is on track.
A4	Metering (Part 10) - implementation	Operating costs include some Registry costs, data clean-up, and testing. Capital project.	- Complete implementation by June 2013.		There are some risks in this project, including participant readiness, data clean-up, and some timetable, scope and cost risks within the implementation project. Data clean-up is being addressed by a technical group. In response to submissions from industry participants it is proposed that the implementation date be changed to 29 August 2013. Consultation is taking place in April with a view to the Board announcing a decision on 30 April.

#	Name	Project description	Overall performance standard for 2012/13	Status	Progress statement
A5	Dispatchable demand – implementation NB not being completed in 2012/13.	Section s42 implementation project. Capital project.	- A go-live date of 30 June 2013 was adopted in the Code amendment pending detailed planning by the system operator. The system operator had indicated at the time that the go-live date may be as late as 30 June 2015.		<p>A modified option has been approved by the Board for further detailed design. This solution promises much reduced cost and a shorter timeline but with some functionality compromises.</p> <p>The detailed design stage is progressing with the design and confirmed cost to be delivered in April 2013.</p> <p>A collaborative working environment has been set up including the Authority, system operator and NZX. Code amendments are being designed in parallel with the systems design.</p> <p>Consultation is taking place on a proposal to amend the commencement date of the dispatchable demand code to 1 May 2014.</p>

4 Top priority market development projects

- 4.1 Top priority is being given to addressing key pieces of work 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 2012/13. 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

#	Name	Project description	Overall performance standard for 2012/13	Status	Progress statement
B1	Under-frequency management: automatic under-frequency load shedding (AUFLS) exemptions	Project to clarify AUFLS requirements for exemptions and alternatives (ie dispensations, equivalence). Also includes processing exemption applications, if required.	SOI 1. - Complete clarification Code amendments for exemptions dispensations, and equivalence codes. - Implementation to follow.		Completed. Exemptions Gazetted 13 September 2012.

#	Name	Project description	Overall performance standard for 2012/13	Status	Progress statement
B2	Frequency regulation: multiple frequency keepers (MFK)	Develop a 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.	SOI 2. - Complete Code amendment by June 2013. - Multiple frequency keeper Code in place by June 2013. - 1-2 year implementation period to enable all current FK parties to put systems in place to participate.		The system operator has completed design of control software. Installation and testing of software is targeted for April 2013. Work is progressing through incumbent providers to interface to the new software. Providers in the North Island are expected to be ready by June 2013 (except Mighty River Power-October 2013). A target date for the South Island has been set of 4 August 2014.
B3	Under-frequency management (UFM) project including AUFLS technical review	Review of all under frequency management tools, including verifying modelling formats. ³	SOI 3. - Complete collective review of AUFLS and published by system operator by June 2012. - Code amendment proposals to be provided by the system operator by September 2012. - Code amendments - timetable to be determined by October 2012.		Project initiated: the UFM project includes multiple components. Completed - Instantaneous reserves: report published August 2011. - AUFLS Stage II: report published August 2011. - AUFLS Stage III (relay testing): completed. - Asset owner performance obligations (AOPOs) and principal performance obligations (PPOs): report published November 2011. - Phase 1 UFM collective review: report finalised May 2012. The report recommended Code amendments for early implementation and a roadmap to future improvements over the next 3 to 5 years. - An AUFLS information paper (May 2012) and an AUFLS future direction paper (April 2012) have been published on the Authority website. Underway - Phase 2 UFM collective review: A draft code amendment has been consulted on (closed 27 March 2013). The proposal covers of the metering resolution recommendation from the collective review. - A UFM work programme is being developed covering the other recommendations of the collective review.

³ 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.

#	Name	Project description	Overall performance standard for 2012/13	Status	Progress statement
B4	Settlement and prudential security review	On-going improvements to clearing and settlement parts of the Code. May include: <ul style="list-style-type: none"> - variable prudential security; - review of acceptable forms of security; - review of clearing and settlement process; and - settlement of islanded embedded generation. 	SOI 4. 2012/13: <ul style="list-style-type: none"> - Finalise WAG recommendations to the Board. - Publish any subsequent WAG discussion paper, summary of submissions, etc. - Publish consultation paper on Code amendments and CBA. - Possibly second round of Authority consultation. 2013/14: <ul style="list-style-type: none"> - Complete Code amendment. 		<p>The WAG provided its recommendations to the Board's September 2012 meeting.</p> <p>The Authority is to publish a Code amendment consultation paper by 30 June 2013.</p> <p>The Settlement and Prudential Security Technical Group (SPSTG) has been formed to assist with Code development. The Group is meeting regularly.</p>
B5	Wholesale market information	Amendments to the Code (or other initiatives) to improve information available to market participants, eg access to snow pack data, improved access to WITS for wider range of participants.	SOI 5. <ul style="list-style-type: none"> - Finalise WAG recommendations to the Board. - Publish any subsequent WAG discussion paper, summary of submissions, etc. - Publish consultation paper on Code amendments and CBA. - Complete Code amendment. - Transfer to Operations Development for implementation. 		<p>The WAG recommendations were endorsed at the Board's September 2012 meeting.</p> <p>The Authority consulted on a Code amendment (on clause 13.2 amendment), which closed on 21 December 2012.</p> <p>Consultation is also taking place on guidelines, closing on 7 May 2012.</p> <p>The Code and guidelines are expected to be considered by the Board in June 2013.</p> <p>The Authority is progressing other initiatives, such as facilitated disclosure. Discussions are also underway with Transpower on ways to improve the planning and outage protocol (POCP) system.</p> <p>Meridian has started publishing snowpack information.</p> <p>Contact is providing information on gas storage.</p> <p>Discussions are taking place with Genesis and Mighty River Power on publishing storage information.</p>
B6	Retailer default provisions (RAG project)	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).	SOI 6. <ul style="list-style-type: none"> - Complete Code amendment, if necessary. - No implementation project expected. 		<p>The RAG provided its recommendations were endorsed at the Board's December 2012 meeting.</p> <p>A workshop is being held on 23 April 2013.</p> <p>The Authority plans to consult on draft Code in June or July 2013, in parallel with security and prudential Code.</p>

#	Name	Project description	Overall performance standard for 2012/13	Status	Progress statement
B7	Consumer switching fund	On-going delivery of consumer switching output class (continues into 2013/14).	SOI 7. - SOI pages 25–26: impact measures and output performance measures.		In November the Board reviewed the results from 2012 and approved the programme for 2013. The 2013 residential campaign launched in April. The Authority's tool for small to medium enterprises (SME) was formally launched on 1 October. On-going promotion is taking place.
B8	Transmission pricing investigation	Completion of review of transmission pricing - involves changes to schedule 12.4. A need to review subpart 4 of part 12 has been identified.	SOI 8. - Complete transmission pricing methodology Code amendment. - Handover to BAU for on-going monitoring.		The initial target was to complete the Code in 2012/13. This is now likely to extend into 2014/15. The Authority published the issues paper on 10 October. Submissions were extended to 1 March 2013 with cross submissions closing on 28 March 2013 (a five month consultation process). The Board will consider the next steps in May 2013.
B9	Review of UTS provisions	Project to review Parts 1 and 5 of the Code: UTS provisions and remedies. The review covers: - the definition of a UTS; - the processes set out in the Code in regard to a potential or actual UTS; and - the remedies available to the Authority when a UTS has occurred.	SOI 9. - Consultation completed. - Code amendments made.		Consultation is taking place with submissions closing on 1 May 2013. A Code amendment proposal is scheduled for consideration by the Board in June 2013.
B10	Hedge market development	Monitoring industry progress and developing further initiatives to improve the hedge market. Includes education material on the hedge market.	SOI 10. - Continue to undertake information paper reports analysing market performance and outlining revised initiatives. - Performing CBA of proposed market facilitation measures or Code amendments. - Hedge market booklet—information on spot price risk and mechanisms for managing that risk.		The Authority is working on on-going improvements that will improve the hedge market, including: Information papers were published in April, June and November 2012 that reviewed hedge market performance. Hedge market booklet— <i>Managing Electricity Price Risk Guide</i> and flyer were published in October 2012. NZICA to publish a journal article on risk management (prepared by KPMG). An ASX product development report was published in October 2012. Market making agreements signed by the four largest generators. Weekly hedge market reports are published.

#	Name	Project description	Overall performance standard for 2012/13	Status	Progress statement
B11	Improving pricing efficiency when a generator is pivotal	New for 2012/13: consider options to bring more confidence that prices during pivotal situations are consistent with prices in a workably competitive market.	<ul style="list-style-type: none"> - Initial report - investigation, issues/options paper to Board. - Further steps to be determined based on initial report. 		<p>The WAG is undertaking this project.</p> <p>A problem definition has been developed.</p> <p>Publication of a WAG discussion paper is expected before 30 June 2013.</p>

5 Other priority projects for completion in 2012/13

5.1 The table below sets out second and third priority projects where Code or market facilitation deliverables are expected to be completed in 2012/13. This includes completion of existing projects and new priorities identified through development of the Statement of Intent and work programme.

Table C: Information about second and third priority projects for completion in 2012/13

#	Name	Priority 2012/13	Project description	Overall performance standard for 2012/13	Status	Progress statement
C1	Allocation of constrained-on costs	2 - High priority	New for 2012/13: Review the calculation and allocation of constrained-on costs to ensure efficiency (Code amendment proposal from the system operator).	<ul style="list-style-type: none"> - Complete investigation of problem. - Prepare consultation paper on preferred option, with CBA and any required Code amendments. - Transition to Operations Development team for implementation. 		<p>A problem definition has been prepared and a proposal has been received from the system operator.</p> <p>A consultation paper is being prepared.</p> <p>Additional time may be required in order to ensure the preferred option is clearly understood and input from consultation is analysed.</p>
C2	Distribution pricing review	2 - High priority	Review of distributors' alignment with <i>Distribution pricing principles and information disclosure guidelines</i> - to start following a decision on an economic and decision-making framework.	- Complete review (project will end).		<p>Progress delayed due to focus on TPM but should still be completed this financial year.</p> <p>The Board approved the economic and decision-making framework in December 2012.</p> <p>The Authority is scoping the review of the extent that distributors' pricing methodologies align with the pricing principles and information disclosure guidelines.</p>
C3	Grid configuration arrangements	2 - High priority	New for 2012/13: assess efficient grid configuration arrangements. Involves changes to subpart 6 of part 12.	- Complete Code amendment follow up process (confirm/not confirm).		Consultation paper being drafted and is expected to be considered by the Board in June 2012.

#	Name	Priority 2012/13	Project description	Overall performance standard for 2012/13	Status	Progress statement
C4	Research project - scarcity pricing	2 - High priority	New for 2012/13: 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 (PCCs) (consideration of price floors that are dynamic rather than fixed).	<ul style="list-style-type: none"> - Research project completed. - Key findings passed on to improving real-time spot pricing project and sensitive prices review 	On hold	This project was put on hold as a result of a work programme and budget reprioritisation completed in November 2012.
C5	Value of lost load (VoLL)	2 - High priority	Completion of review of value of lost load. Output will be useful for transmission and distribution purposes - involves changes to subpart 3 of part 12. This work has implications for scarcity pricing and AUFLS.	- Complete project - Code amendment.		<p>Further surveys and analysis completed. Consultation paper planned for May 2013. Completion of Code amendment dependent on the results of consultation and unlikely to be completed by 30 June 2013.</p>
C6	Wholesale information trading system (WITS) strategy	2 - High priority	New for 2012/13: Preparing a medium-to long-term strategy to develop the wholesale information trading system (WITS). Specifically with a view to capturing the needs of smaller and new entrant market participants such as demand aggregators, financial intermediaries, and non-participants.	<ul style="list-style-type: none"> - Prepare WITS strategy document and obtain Board approval to progress. - Transition to Operations Development team for implementation. - Develop project plan for implementation. 		<p>Development completed. The work has now transitioned to the Operations Development team for implementation. Implementation project plan to be prepared.</p>
C7	Asset owner performance obligations (AOPOs): fault ride-through	2 - High priority	Review of low voltage fault ride-through AOPOs to determine if fit for purpose with changing generation mix (ie significant wind generation).	<ul style="list-style-type: none"> - Decision on whether re-consultation is required August/September 2012. - Completion by June 2013. 		<p>Timetable delay. Further work was carried out on the fault ride-through standard by the system operator following review of the submissions received by the Authority. Development of Code amendments has been delayed. Discussion is on-going with Transpower because generators do not accept the current proposal.</p>
C8	Definition of trader under the Act	2 - High priority	Address the issue of the introduction of financial traders and a review of type 2 retailers.	<ul style="list-style-type: none"> - Project to be scoped and costed - ASAP. - New definition in place by June 2013. 	On hold	This project was put on hold as a result of a work programme and budget reprioritisation completed in November 2012.

#	Name	Priority 2012/13	Project description	Overall performance standard for 2012/13	Status	Progress statement
C9	Domestic contracting arrangements – 2012 alignment assessment	2 - High priority	Review of retailer alignment with standard terms and conditions. Second (and final) review at two years after implementation. Results to be used in reviewing retail contracting arrangements over July-August.	- Publish report by December 2012.		Completed. Consolidated report published 4 December 2012. Individual reports sent to retailers.
C10	Electronic information exchange protocols (EIEPs)	2 - High priority	Review and update of EIEPs.	- Results of consultation reported to Board on 1 August 2012. - Second consultation for mandating EIEPs - to take place in August. Recommendation to the Board by January 2013. - Implementation target 1 April 2013 (prior to Part 10 go-live).		Timetable delay. A consultation paper to mandate the use of EIEPs 1, 2, and 3 (Code amendment) published February 2013. Analysis and Code amendment scheduled for 2013/14.
C11	Frequency regulation: frequency keeping (FK) constrained on/off	2 - High priority	Removal of constrained on/off from the FK selection methodology and from the FK cost allocation. Includes initial investigation.	- Complete Code amendment by June 2013.		Project has been initiated. Investigation being started. Consultation paper expected to be released in May or June 2013.
C12	Frequency regulation: review normal frequency band and AOPOs	2 - High priority	Review of the frequency keeping Hz band, MW band and related AOPO's 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.	- Investigation reports produced by the system operator in 2011. - Develop Code amendment proposal for (1) frequency deviation targets, (2) time error standard, (3) minimum governor response, and (4) cost allocation related to (3).		This project has been delayed in order to give priority to the HVDC Pole 3 Code amendments, however, it is still expected that proposals for items 1 and 2 will be well progressed by 30 June 2013. An industry survey is being prepared on the impact of the modifications to the time error Code requirements (item 2).
C13	Metering - advanced metering policy implementation project	2 - High priority	Publication of guidelines as necessary to facilitate advanced meters. Scope of this project is: - complete review of advanced metering interface (AMI) guidelines; and - consult on industry-agreed formats for exchanging AMI information.	- Complete review of guidelines (post Part 10 review), consult on them and publish update. NB Current initiatives will be completed but there is the potential for on-going improvement initiatives - outside of scope of this project.		Alignment with Part 10 underway.

#	Name	Priority 2012/13	Project description	Overall performance standard for 2012/13	Status	Progress statement
C14	Review of service provider agreement (excluding the system operator service provider agreement (SOSPA))	2 - High priority	Decision on renewal of market operation service provider agreements for next three year term.	SOI page 40: - completing an analysis of market operation service provider performance reviews over the current term of the contracts and make a decision on whether to re-tender; and - if re-tendering of market operation services is required, carry out a best practice tender and selection process, including ensuring seamless handovers if new providers are selected.		Completed. Registry service provider agreement (SPA) (Jade) contract variation signed and published. Notice of SPA renewal has been given. The Authority has given NZX notice of intention to renew its contracts. The SPA contract variations have been signed and published on the Authority website. Project closure underway.
C15	System operation alignment review	2 - High priority	New for 2012/13: a wide ranging review of the SOSPA arrangements, including: - alignment of SOSPA objectives with s15 of the Electricity Industry Act 2010; - development of a wider range of performance measures; - addressing capital plan and spending arrangements; and - addressing the impact of fee changes on levy payers.	- Complete review and update SOSPA, if required.	On hold	This project is currently on hold pending outcome of system operator value-for-money review and possible SOSPA renegotiation. Initial meetings held with the system operator to initiate project. Investigation into reform history complete. Gap analysis completed by the system operator. Discussions have taken place at a senior level to facilitate progress.
C16	Review of security standards – Part 7	2 - High priority	Review of the security standard in Part 7 of the Code. Review of winter energy and capacity standards and the creation of a summer security standard.	- Analysis of winter security standards will be complete in 2011/12 period. - Code amendment proposal will cross over into the 2012/13 period. - Analysis for the new summer capacity standard will cross over into the 2012/13 period and a code amendment proposal will be consulted on in September/October 2012.		Completed. The Board approved an updated winter security of supply standard in November 2012. Amendments take effect in January 2013. The Board has decided to take no further action at this stage on the summer security of supply standard.
C17	System operator monthly reporting	2 - High priority	A review of the value of system operator monthly reporting.	- Complete minor Code amendment, if required.	On hold	This is currently being given a low priority. It is unlikely that further work will be completed in 2012/13.

#	Name	Priority 2012/13	Project description	Overall performance standard for 2012/13	Status	Progress statement
C18	Under-frequency management: AUFLS standard review	2 - High priority	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. Linked to collective review project.	- Potential Code amendments to system operator policy statement, security policy section, completed by 30 June 2013.		A draft AUFLS standard has been developed by the system operator. Re-evaluation of the project requirements by the system operator has had a consequential impact on the project timetable with Code amendment recommendations from the system operator now due in August or September 2013.
C19	Demand side bidding and forecasting - impact review	2 - High priority	Post implementation review of impacts and outcomes.	- Complete report.	On hold	Not yet started. Further time is required for the changes to bed-in before a review can be completed.
C20	2012 winter review	2 - High priority	New for 2012/13: review of winter 2012.	- Complete report.		Review underway.
C21	Review of the Consultation Charter	2 - High priority	Statement of Intent signals a move to six weeks of consultation.	- Amend the <i>Consultation Charter</i> to increase the standard consultation period from four to six weeks. - Complete review of <i>Consultation Charter</i> by 30 November 2012.		Completed. New version published on the Authority's website.
C22	Review of advisory group terms of reference	3 - Important	New for 2012/13: specifically addresses SOI strategic priority 5: Embedding and enhancing the effectiveness of advisory groups.	- SOI page 41: Complete a review of current Advisory Group arrangements and work to date, and assess opportunities for improvement in supporting the work of the Advisory Groups.		Consultation document published in March 2013. Submissions closed 16 April 2013. Scheduled for consideration by the Board June 2013.
C23	Asset owner performance obligations (AOPOs): under-frequency rules	3 - Important	Review of under-frequency AOPO's to determine if fit for purpose with changing generation mix (ie significant wind generation).	- Initiate investigation into better Code clarity, with Code amendments to follow if required. - Code amendments consulted on. - Completion by June 2013.	On hold	This project was put on hold as a result of a work programme and budget reprioritisation completed in November 2012.

#	Name	Priority 2012/13	Project description	Overall performance standard for 2012/13	Status	Progress statement
C24	Operational review of Part 6	3 - Important	A review of Part 6 of the Code to address perceived low notification rates of DG, 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.	<ul style="list-style-type: none"> - Complete consultation August 2012. - Code amendment recommendation to Board October 2012. - Target effective date 1 April 2013. 		Consultation closed in November 2012. Timetable delay. Target effective date now 30 June 2013.
C25	Closure review of the Reserve Energy Scheme	3 - Important	New for 2012/13: complete a review of the Reserve Energy Scheme.	- Complete review.		Not started, awaiting completion of winter 2012 review.
C26	Technical year in review	3 - Important	New for 2012/13: technical document (separate from annual assessment).	- Technical document completed.		Report published in April 2013.
C27	Compliance framework review project	3 - Important	First principles review of the compliance framework - covers Act, Code and regulations. Excludes review of compliance philosophy.	- Complete the review.		Review underway. Gap analysis and 'straw man' enforcement regulations considered by the Board in March 2013.
C28	Force majeure Code provisions review	3 - Important	New for 2012/13: initiated in 2011/12. To be completed in 2012/13.	<ul style="list-style-type: none"> - Draft consultation paper to 6 June Board meeting. - Consultation June/July. - Code amendment to Board September/October 2012. 		Completed. Code amendments approved at the September 2012 Board meeting and came into force on 1 November 2012.

6 Other priority projects for completion in 2013/14 and out-years

6.1 The table below sets out key projects in line with the Authority's statutory objective and Path to CRE priority areas, where Code amendments or market facilitation measures are not expected to be completed in 2012/13.

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

#	Name	Priority 2012/13	Project description	Overall performance standard for 2012/13	Status	Progress statement
D1	More standardisation programme - impact review	2 - High priority	Post implementation review of impacts and outcomes.	- Initiate review - Complete report in 2013/14.		Review started in March 2013.
D2	Research project - efficiency of system operator arrangements	2 - High priority	New for 2012/13: review service provider arrangements relating to system coordination and related market services. Links to SOSPA review.	- Complete report.	On hold	Will commence when SOSPA review completed.
D3	Alternative funding arrangements investigation	2 - High priority	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.	- Initial deliverable is a report on the merits of alternative means of funding the Authority's operational functions. - Further steps to be determined.		Work programme deliverables achieved: consultation and proposal completed. Not proceeding at this stage. Awaiting appropriate legislative vehicle for change to the Electricity Industry Act 2010 (the Act).
D4	Dispatchable demand (DD): phase 2 – conforming load	2 - High priority	New for 2012/13: Facilitating greater demand-side participation in the wholesale market – for nodes where centralised load forecasts are used rather than bids (conforming nodes).	- Complete investigation and cost benefit assessment. - Complete options analysis and design. - Consultation paper.		November Board meeting agreed to put Phase 1 implementation on hold and proceed with a modified option which has a lower cost estimate and earlier implementation date (April 2014). This option allows for the implementation to be extended to conforming GXPs as well as non-conforming GXPs (effectively doing phase 2 and phase 1 together). Update published in March 2013. Consultation planned for June 2013.

#	Name	Priority 2012/13	Project description	Overall performance standard for 2012/13	Status	Progress statement
D5	Improving forecast and settlement prices	2 - High priority	New for 2012/13: Review of options to improve forecast and settlement prices, especially during periods of system stress. Related/ prerequisite work to do: eg address RAF to zero, infeasibilities, reserve shortage pricing. (Previously named: Ex-ante/real-time spot pricing.)	<ul style="list-style-type: none"> - Undertake initial cost benefit assessment to consider whether to pursue. - Dependent upon outcome of analysis, prepare detailed project plan, and scope of work for the system operator. - Potentially develop pilot programmes, publishing alternative real-time prices that could be used for settlement. 		<p>The WAG has added this project to its 2012/13 work plan.</p> <p>WAG discussion paper on target to be released before the end of this financial year.</p>
D6	Improvements to existing spot pricing process	2 - High priority	New for 2012/13: changes to the existing spot pricing process, including: <ul style="list-style-type: none"> - improved modelling of constraints in scheduling, pricing and dispatch software - wind generation inputs into final pricing; - infeasibility resolution improvement process; - time limit on the republication of final prices; and - interim pricing period deadline changes. 	<ul style="list-style-type: none"> - Finalisation of constraint softening concepts. - Locational Price Risk Technical Group (LPRTG) advice on practicable options and preferred option. - Prepare consultation on Code amendments and cost benefit assessment. 		<p>Interim pricing completed in 2010/11.</p> <p>Current components include:</p> <ol style="list-style-type: none"> 1. High spring washer work split into two components, both of which are underway/completed: <ul style="list-style-type: none"> - Fundamental review of inputs into final pricing & considering suggestions such as constraints softening (high level concepts tested with the LPRTG, on target to release consultation paper on high level concepts this financial year). - Specific improvement to address the change in constraint inputs caused by the introduction of simultaneous feasibility test in 2011—Code amendment completed under urgency, and follow up consultation and Code amendment now completed. 2. Review the timeframe allowed for republishing final prices. Consultation included in UTS provision review, closing 1 May 2013. 3. Improving wind generation information inputs into final prices. Lowest priority element of this project. Currently on-hold.

#	Name	Priority 2012/13	Project description	Overall performance standard for 2012/13	Status	Progress statement
D7	Locational price risk management: phase 2 – within-island basis risk (WIBR)	2 - High priority	New for 2012/13: introduction of a solution to assist parties to manage spot price risks within an island. Review allocation of any residual FTR and loss and constraint excess (LCE) revenue. Potential to also address any Code amendments for inter-island FTRs.	<ul style="list-style-type: none"> - Finalise cost benefit assessment on residual LCE, and possibly picking work up again near the end of the financial year (depending upon the timing of TPM progress). - Prepare and release consultation paper on preferred option and any required Code amendments for intra-island price risk. - Transition intra-island price risk solution to Operations Development team for eventual implementation. 		Information paper outlining CBA for residual LCE published. Feedback reviewed. LCE Code amendments are now being considered as part of the TPM process. On target to release consultation on within-island basis risk solution by 30 June 2013.
D8	Research project - distribution company arrangements	2 - High priority	New for 2012/13: Research project to review the efficiency of distribution network company arrangements. Commitment made to consult on scope.	<ul style="list-style-type: none"> - Draft scope and project outline. - Further deliverables to be determined. 	On hold	Schedule is to start later in 2013.
D9	Potential research project - low fixed charges	2 - High priority	New for 2012/13: A potential research project looking into the effects on efficiency and competition of the Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004. Scope to be discussed with the Ministry of Economic Development.	<ul style="list-style-type: none"> - Draft scope and project outline. - Further deliverables to be determined. 	On hold	Project put on hold in July 2012
D10	Review of half hour switching rules	2 - High priority	Review of half hour switching rules - consideration of Trustpower rule change proposal.	<ul style="list-style-type: none"> - Code amendments consulted on. - Completion in June 2013/14. 		There are two separate projects involved: <ol style="list-style-type: none"> 1. Temporary fix to allow AMI switching to continue by 6 June 2013. On track for completion in 2012/13. 2. Re-engineer all ICP switching. This is dependent on completion of Part 10 implementation. This is now scheduled to take place in 2013/14.

#	Name	Priority 2012/13	Project description	Overall performance standard for 2012/13	Status	Progress statement
D11	Frequency Regulation: National market for frequency keeping	2 - High priority	Initial consideration of a national market for frequency keeping. Resource provided for national market Code / investigation of how to develop a national market.	<ul style="list-style-type: none"> - Prerequisite is access to HVDC bi-pole control system and potentially round-power (Grid Owner). - Timetable to be developed. - Target is to have market set up and ready to go when control system is made available by Grid Owner. 		Project has been initiated. Draft report received in December 2012 from the system operator proposing an implementation plan. Next steps being considered.
D12	Review of UTS provisions-implementation	2 - High priority	Implementation work to review and updated internal Authority procedures for management of UTS claims. Dependent on review of UTS provisions project.	<ul style="list-style-type: none"> - Deliverables to be determined - dependent on review of UTS Code, which is on hold pending Genesis appeal. 		The review of UTS provisions has recommenced. The update of the procedures / guidelines has commenced. Scheduled to be considered by the Board in June 2013 along with the review of UTS provisions.
D13	Efficient procurement of extended reserves (Previously named: Under-frequency management - AUFLS market development)	2 - High priority	Investigate options for a move over time towards developing an AUFLS market.	<ul style="list-style-type: none"> - Issues and options report to Board August/September 2012. - Further steps dependent on issues and options report. 		Consultation closed on 14 November. Submissions have been considered. A further consultation round is expected to take place in May or June 2013, with Code amendments to be completed in 2013/14.
D14	Participant education	2 - High priority	New for 2012/13: Educate participants on the operation of the Code, with specific focus on new areas of Code development. Coordination / alignment / look and feel by Corporate with most input coming from teams. Includes: refresh existing and complete new Guidelines to facilitate market operational knowledge; subject specific industry fora; and alignment with compliance conference.	<ul style="list-style-type: none"> - SOI Page 41: completing implementation of the communication strategy developed in 2011/12. - Implementation completed and content for Annual Report provided. 		The Authority has been undertaking public and stakeholder briefings for relevant subjects, eg it held four TPM fora during October, and briefings were held for the release of the <i>Electricity Market Performance: a Review of 2012</i> publication. Fact sheets being published on a regular basis.

#	Name	Priority 2012/13	Project description	Overall performance standard for 2012/13	Status	Progress statement
D15	Consumer education	2 - High priority	New for 2012/13: Educate the general public about trade-offs (e.g. reliability vs. cost) and benefits that are delivered through a competitive market and resilience of the industry to adverse events. Led by Corporate with input from other teams.	- SOI Page 41: completing implementation of the communication strategy developed in 2011/12. - Implementation completed and content for Annual Report provided.		The Authority has been undertaking public and stakeholder briefings for relevant subjects, eg it held four TPM fora during October, and briefings were held for the release of the <i>Electricity Market Performance: a Review of 2012</i> publication. A guide to managing spot price risk was published in October. Fact sheets being published on a regular basis.
D16	Breakdown of customer billings (RAG project)	3 - Important	New for 2012/13: Review whether there should be mandatory disclosure of the component parts of customer electricity bills.	- Provide a recommendation to the Board on whether MFM or Code changes are required to give effect to more transparency.		This is a RAG project. Scope and approach to be considered in April 2013. Timetable to be determined.
D17	Domestic contracting arrangements (RAG project)	3 - Important	Consideration of suite of arrangements for consumer and distributor/retailer relationship, including MDC and VDC.	- Scope completed. - Further deliverables to be to be determined.		Scope agreed by RAG in August 2012. The RAG released an issues paper in April 2013, with an eight week consultation period.
D18	Review: extending the Consumer Guarantees Act indemnity to Transpower	3 - Important	New for 2012/13: Review whether the Consumer Guarantees Act indemnity obligations on lines companies should be extended to Transpower.	- Scope and project outline being developed. - Complete Code amendment, if necessary (2013/14). - No implementation for the Authority.	On hold	This project was put on hold as a result of a work programme and budget reprioritisation completed in November 2012.
D19	Improved market modelling of losses	3 - Important	New for 2012/13: improve the representation of losses in the system operator's scheduling, pricing and dispatch model (SPD) – provides for a lower cost market solution.	- Complete investigation of problem. - Prepare consultation paper on preferred option, with cost benefit assessment and any required Code amendments. - Transition to Operations Development for implementation.		Project commenced October 2012. An information paper is expected to be released by the end of June 2013.
D20	Instantaneous reserve cost allocation methodology	3 - Important	Review of the instantaneous reserve cost allocation methodology.	- To be determined.	On hold	Project on hold for 2012/13. Possible WAG project for 2013/14.

#	Name	Priority 2012/13	Project description	Overall performance standard for 2012/13	Status	Progress statement
D21	Instantaneous reserve national market (WAG project)	3 - Important	New for 2012/13: Instantaneous reserve national market (HVDC transfer). Allows transfer of reserves from one island to the other via the HVDC. Dependent on HVDC bi-pole control systems being fully in service.	Project to start late in the 2012/13 year: - Cost estimate for implementation provided by system operator. - Cost benefit assessment prepared. - Consultation paper prepared.		Added to WAG's work plan. Consultation will be in the form of a WAG discussion paper. Project briefs being prepared for both ancillary markets (frequency keeping and instantaneous reserves) and these will set out the process for coordinating the work between these two projects. Initial consideration took place at the WAG March 2013 meeting.
D22	Offer and dispatch Code development	3 - Important	Improve the offer and dispatch rules to improve operational efficiency, eg: - review of gate closure - potential further work - reserve offers - other Code amendment proposals.	- Complete gate closure feasibility study.		Gate closure review underway. The system operator has been requested to carry out testing of its systems and processes on the effect of a reduced gate closure. A report from the system operator is now expected later in the calendar year.
D23	Review of use of profiles	3 - Important	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.	- Complete initial investigation.	On hold	This project was put on hold as a result of a work programme and budget reprioritisation completed in November 2012.
D24	Under-frequency management - instantaneous reserve AOPOs	3 - Important	Review of instantaneous reserve cost allocation methodology.	- If resources available, initiate a first principles review of instantaneous reserves. - Code to follow, if required - timetable to be determined by review.	On hold	This project was put on hold as a result of a work programme and budget reprioritisation completed in November 2012.

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 2012/13 year.

Table E: Information about proposed future projects

#	Team	Name	Project description
E1	Operations Development	Asset owner performance obligations: voltage rules	Review of voltage AOPO's to determine if fit for purpose with changing generation mix (ie significant wind generation).
E2	Operations Development	CQ development plan - further items	Extensive list of possible initiatives as listed in the Common Quality Development Plan that have not yet been prioritised or costed.
E3	Operations Development	Credible event management: under voltage management	Review appropriateness of the Code for under-voltages during events.
E4	Market Performance	Dispatchable demand - post implementation review	Post implementation review of impacts and outcomes.
E5	Operations Development	Frequency regulation: frequency keeping cost allocation	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.
E6	Operations Development	Guidelines for secondary networks - network extensions & customer networks	Development of arrangements for network extensions and the establishment of compliance requirements.
E7	Market Performance	Locational price risk management-impact review	Post implementation review of impacts and outcomes.
E8	Market Performance	Metering - Part 10 -impact review	Post implementation review of impacts and outcomes.

#	Team	Name	Project description
E10	Operations Development	Optimisation of non-technical distribution losses	Develop recommendations for the management, minimisation and allocation of non-technical distribution losses, and monitor uptake of recommendations. Production of a discussion document for consultation that includes: (a) establishing the current and likely 'business as usual' position (b) research the technology and techniques that can be adopted (c) identifying the potential improvements that could be achieved (d) identifying the options available for providing appropriate incentives for improved losses management (e) identifying and proposing performance benchmarks, measurement systems and reporting.
E11	Operations development	Pre-certification stage investigation	Board requested 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.
E12	Operations Development	Responsibility for maintenance of consumer service lines	Scope the work that may be required to establish a project to investigate options resolve the consumer service line ownership issue. An information paper has been published providing some guidance on how to determine ownership on a case by case basis, however there is a need to look at the issues and possible long term solutions. There is a question about whether this is a broader policy issue that needs to be dealt with by the Ministry of Business, Innovation and Employment.
E13	Market Design	Review of Part 12	This picks up connection process, (subpart 2 of part 12), benchmark agreements, GRS, and other areas.
E14	Market Performance	Scarcity pricing-impact review	Post implementation review of impacts and outcomes.
E15	Market Design	Short-term hedge instruments	Consider the need for a short-term market for hedge instruments (e.g. day-ahead).
E16	Operations Development	TPM: monitoring issues and audit, if required	BAU follow up and Authority-commissioned external audit of Transpower's application of the TPM. NB no Authority-commissioned external audit planned until new TPM in place and operating.
E17	Market Design	Trading arrangements (Part 13) review	Review the Code relating to trading. Includes scheduling, dispatch, pricing, information and information disclosure.

8 Organisational development projects

8.1 The table below addresses existing and planned projects that are being carried out for organisation development purposes. These projects do not have a direct net public benefit and are included in the work programme as they are key projects to enable the effective and efficient operation of the Authority.

Table G: Information about organisational development projects

#	Name	Priority 2012/13	Project description	Overall performance standard for 2012/13	Status	Progress statement
G1	Implementation of Operations Development process review	2 - High priority	Implementation of the review carried out in 2011/12. Initial step is workflow tool.	<ul style="list-style-type: none"> - SOI Page 42: completing implementation of the review of operational development systems and processes. - Implementation programme will flow out of the review to be completed by the end of the 2011/12 year. - Request for proposal (RFP), including specification, being developed for workflow tool - to be released July, closing end of July. - Further steps dependent on RFP results. 		<p>Implementation of workflow tool stopped as the RFP indicated that the business case could not be justified.</p> <p>Changes to the Authority structure currently underway are expected to improve resources and processes in the operations area.</p>
G2	Service provider (NZX) hardware refresh	2 - High priority	Capital project - to update and replace NZX service provider hardware (owned by the Authority).	- To be completed by 14 October 2013.		Completed.
G3	Path to World Class	2 - High priority	Completing the organisational development strategy.	- SOI page 41: completing the Authority's organisational development strategy to improve organisational performance to achieve the vision of being a world class electricity regulator.		A number of specific areas of work to improve Authority performance are underway. These include the refresh of the communications strategy, development of an information systems strategic plan, review of the vision and valuesA comprehensive review of the organisational policies. A Performance Improvement Framework (PIF) self-assessment is planned. ⁴

⁴ PIF reviews are a State Service Commission (SSC) led initiative. Information about the review process is available at: <http://www.ssc.govt.nz/pif>

#	Name	Priority 2012/13	Project description	Overall performance standard for 2012/13	Status	Progress statement
G4	Data warehouse	2 - High priority	Project to enable market monitoring and analysis function. Data strategy document developed re publication of data in accessible formats for participants via a web based database server encompassing query and visualisation facilities.	- Measured by each data source being migrated to the data warehouse and being accessible to staff.		Data warehouse and portal in production (main development completed). On-going development (adding new data sources).
G5	Programme Management Office	2 - High priority	Establishment of Virtual project management office. Development of project management policy, tools and practice.	- Set out roadmap to achieving desired future state (best practice).		Roadmap for improving project management completed. Project management policy updated. Implementation (including templates and training) taking place in May–June 2013.
G6	Website review and refresh	2 - High priority	Review to ensure website is fit for purpose.	- Project plan and budget approved - July 2012. - Complete and launch new website - June 2013.		Delivery of new website re-scheduled to October 2013. On track for revised timetable.
G7	Non-Financial performance information	2 - High priority	Ensuring system and processes in place for reporting against non-financial performance information in the Statement of Intent. Includes ensuring OAG and Audit NZ requirements are met (e.g. AG4 standard).	- Documented support for all non-financial reporting for 2012/13 Annual Report.		Several initiatives have been completed, including an update of the Planning and Reporting Policy. Comprehensive review performance information completed for 2013–2016 Statement of Intent.
G8	Enhancements to work programme reporting	2 - High priority	Work with business units to refine work programme development and reporting process and systems. Specifically to ensure streamlined / aligned reporting tools.	- Improved internal planning and reporting tools - enable meeting Audit NZ requirements for non-financial performance information - rating of 'good' or 'very good'.		Enhanced work programme reporting has been implemented. Improvements to performance measurement resulted in 2011/12 Audit NZ rating moving from 'needs improvement' to 'good'.
G9	Improvements to Code Amendment Register	3 - Important	Improving the register tool and processes. Improving knowledge of and compliance with processes to support the register. Ensuring that proposals are assessed and acted upon appropriately.	- Quarterly update rounds completed. - Six monthly updates published that are accurate.		Improvement work completed. Refresh and publication of the register completed. On-going business as usual maintenance and quarterly updates taking place.

#	Name	Priority 2012/13	Project description	Overall performance standard for 2012/13	Status	Progress statement
G10	Improvements to Contracts Register	3 – Important	Improving the register tool and processes. Improving knowledge of and compliance with processes to support the register. Improving the accuracy and timeliness of data in the register.	- Register is up to date and accurate reports are available on demand.		Completed. Review of register completed in July 2012.
G11	Knowledge and Records management enhancements	3 - Important	Project work to ensure that the Authority moves towards required practice for knowledge management, record keeping and archiving.	- Achieve at least minimum compliance with Public Records Act requirements as measured by audit process. - Classification tidy up completed and implemented.		Public Records Act compliance being met. Classification tidy up completed and implemented. Further enhancements taking place in line with the all of government records management initiative.
G12	Information systems strategic plan	2 - High priority	Part of organisational development strategy (Path to world class): complete "roadmap" plan of information technology requirements for "future state" (5 years). Includes systems and hardware for the Authority and service providers (excluding system operator).	- Information systems strategic plan completed.		Completed. Information systems strategic plan completed July 2012.
G13	Communications Strategy Implementation	2 - High priority	Implementation of the strategy completed in 2011/12. Aligns with consumer and participant education programmes (see table D: D14 and D15).	- SOI Page 41: completing implementation of the communication strategy developed in 2011/12. - Implementation completed and content for Annual Report provided.		Strategy implementation taking place. Review and update of strategy underway. Annual Report completed in line with strategy.
G14	2013/14 appropriations consultation	2 - High priority	Business as usual consultation process plus address ensuring all appropriate inputs are assessed prior to consultation - specifically addressing the system operator capital-related costs identified in 2012–2015 Statement of Intent.	- Appropriations consultation completed and report provided to the Minister by 31 December 2012.		Appropriations consultation completed and report approved by the Minister in December 2012.
G15	Refresh participants register	2 - High priority	A project to refresh contents of register to ensure it is up to date and accurate. NB is not business as usual maintenance of register or a review of the format and scope of the register.	- Refresh of register completed.		Refresh completed. Business as usual updates taking place.

Glossary of abbreviations and terms

AGC	Automatic governor control
AMI	Advanced metering interface
AOPOs	Asset owner performance obligations
AUFLS	Automatic under-frequency load shedding
Authority	Electricity Authority
Act	Electricity Industry Act 2010
AGC	Automatic governor control
BAU	Business as usual
CBA	Cost benefit analysis
Code	Electricity Industry Participation Code 2010
CRE	Competition, reliability and efficiency – key limbs of the Authority’s statutory objective.
DD	Dispatchable demand
DG	Distributed generation
EIEPs	Electronic information exchange protocols
FK	Frequency keeping
GXP	Grid exit point
ICP	Inter-connection point
LCE	Loss and constraint excess
LPRTG	Locational Price Risk Technical Group
MFK	Multiple frequency keepers
HVDC	High voltage direct current
PCC	Public conservation campaign

MFM	Market facilitation measures
Regulations	Electricity Industry (Enforcement) Regulations 2010
RAG	Retail Advisory Group
RFP	Request for proposal
SOI	Statement of Intent
SOSPA	System operator service provider agreement
SPA	Service provider agreement
TPM	Transmission pricing methodology
UFM	Under-frequency management
UTS	Undesirable trading situation
VoLL	Value of lost load
WAG	Wholesale Advisory Group
WITS	Wholesale information trading system

Note: a glossary of terms used in the electricity industry is available at: <http://www.ea.govt.nz/footer-elements/glossary/>