

2013/14 Work Programme



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Executive summary

The Authority work programme is an internal programme of projects that it intends to complete or progress during the 2013/14 financial year.

The work programme provides indicative information about projects as at the beginning of the financial year (1 July 2013). The Authority consulted on its proposed appropriations and work priorities from 24 September 2012 to 2 November 2012. Finalisation of the work programme has included consideration of feedback from consultation.

The Authority is flexible and responsive in its management of its work programme. 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. The Authority will review and update its work programme on a regular basis, and will publish summary reports on progress on a quarterly basis.

The key output-related projects the Authority intends to complete¹ in the year ending 30 June 2014 are summarised in the table on the following page. Details are provided in the body of this document.

¹ In the case of Code or market facilitation measure (MFM) projects, 'completion' means completion of the Code amendment or Authority approval of the MFM, not completion of implementation.

Summary of: key implementation and market development projects for 2013/14

#	Project name	Approx. % complete as at 1 June 2013	Existing or new project in 2013/14	Consulted on in appropriations consultation	Initial assessment of project size	Initial assessment of net public benefit
Key systems implementation projects						
A1	Scarcity pricing-implementation	95%	Existing	Yes	Medium \$0.1-0.5m	Medium
A2	Metering - Part 10 - implementation	85%	Existing	Yes	Large >\$0.5m	High
A3	Dispatchable demand - implementation	20%	Existing	Yes	Large >\$0.5m	High
A4	Locational price risk management- implementation	95%	Existing	Yes	Large >\$0.5m	High
A5	Multiple frequency keepers - implementation	95%	Existing	Yes	Large >\$0.5m	High
Top priority market development projects						
B1	Settlement and prudential security review	75%	Existing	Yes	Medium \$0.1-0.5m	High
B2	Pivotal pricing project	30%	Existing	Yes	Medium \$0.1-0.5m	High
B3	National market for frequency keeping	35%	Existing	Yes	Large >\$0.5m	High
B4	National market for instantaneous reserves	30%	Existing	Yes	Medium \$0.1-0.5m	High
B5	Within-island locational price risk management	65%	Existing	Yes	Medium \$0.1-0.5m	High
B6	Review of half hour switching process	0%	Existing	Yes	Small <\$0.1m	High
B7	Alignment of forecast and settlement prices	20%	Existing	Yes	Large >\$0.5m	High
B8	Efficient procurement of extended reserves	40%	Existing	Yes	Large >\$0.5m	Low
B9	Consumer switching fund	70%	Existing	Yes	Large >\$0.5m	High
B10	Transmission pricing investigation	40%	Existing	Yes	Large >\$0.5m	High

1 Introduction and purpose of this report

- 1.1 The Authority work programme is an internal programme of projects that it intends to progress during the coming financial year. The Authority consulted on its proposed appropriations and work priorities from 24 September 2012 to 2 November 2012². The resulting proposed appropriations were provided to the Minister in December 2012 and subsequently approved. The appropriations were included in the Estimates tabled in the house on 16 May, and the 2013–2016 Statement of Intent (SOI) tabled on 20 May 2013. Project-specific comments from the consultation were addressed as part of development of this work programme. Refinement of the work programme has also considered more recent developments, including the identification of top priority projects by the Board as listed in the SOI, a decision by the Board in June 2013 that completed the UTS review project listed in the SOI, and a decision by the Board in June to continue to give the transmission pricing investigation top priority (as per the 2012–2015 SOI).
- 1.2 As signalled in the SOI foreword, some projects have been added since the appropriations and work priorities consultation process, primarily relating to an increased focus on competition, and particularly retail competition. Key additional projects for 2013/14, added since the consultation, are set out below.

Key projects added since consultation

#	Project name	Description	Reason for addition
C8	Improving access to retail data	Improving access to retail data to enhance price comparison, product and service innovation, and retail market analysis and monitoring.	Retail competition
C14	International benchmarking	A project to design an international benchmarking study. Includes feasibility of on-going benchmarking. A component of the International engagement strategy discussed by the Board in November 2012.	Priority project in the SOI.
C18	Review of barriers to retail competition in MUoSA	Project has three parts: alignment review of MUoSA (by Market Performance); review of the MUoSA to identify provisions inhibiting retail entry, and assessment of making MUoSA a default.	Retail competition
D9	Review of retail competition in embedded and customer networks	Examination of the potential to improve retail competition in embedded networks and customer networks. RAG project scheduled to start in August 2013.	Retail competition

² The following web page sets out the Authority's planning process and includes links to the consultation paper, summary of submissions and report to the Minister on our consultation on appropriations and work priorities: <http://www.ea.govt.nz/our-work/plans-and-reports/2013-16/>

2 The work programme is flexible

- 2.1 The work programme is an internal planning document. It provides indicative information about projects as at June 2013 and the progress intended by 30 June 2014. This work programme represents a full commitment of Authority resources. Any changes to projects will therefore be carefully managed.
- 2.2 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 will review and update its work programme on a regular basis, and intends to provide summary level reports on its progress on a quarterly basis.

3 The projects have been prioritised

- 3.1 Projects in the work programme have been selected and prioritised on the basis of expected net public benefit and the extent to which the Authority has already progressed projects. Prioritisation has also included stakeholder feedback and assessment against the competition, reliability and efficiency limbs of the statutory objective and the key impacts set out in the SOI. The key impacts in the SOI include the market design strategic directions developed during 2012/13.
- 3.2 Top priority projects are those listed in the SOI, with the addition of the transmission pricing investigation and removal of the UTS review, which was completed in June 2013.
- 3.3 Second priority has been assigned to other key projects and priorities arising out of stakeholder feedback received in January, and subsequent Authority consideration of strategic priorities. These projects are considered to have potential to deliver substantial benefits in relation to the statutory objective.
- 3.4 Third priority has been assigned to projects with significant stakeholder interest and/or considered to have potential to deliver significant benefits in relation to the statutory objective. These projects are the most likely to be re-prioritised should the need arise during the financial year.
- 3.5 All other potential Code amendment and project proposals that warrant further consideration have been recorded as future projects. These are projects that are considered to have potential merit but cannot be resourced within this fiscal period.

4 Work programme tables reflect priorities and intended completion date

4.1 The work programme is set out in a series of tables as summarised below.

Focus	Work programme tables	Comment
2013/14 focus	Table A—Key Implementation Projects	Addresses key systems implementation projects.
	Table B—Top Priority Projects	Top priority projects. As listed in the SOI, plus the transmission pricing investigation project continuing from 2012/13.
	Table C—Other Projects for Completion in 2013/14	<p>These are projects where the Authority expects to complete Code development or implementation, as applicable, in 2013/14.</p> <p>Projects include:</p> <ul style="list-style-type: none"> • Priority 2: significant projects, including Code development projects that have already been commenced and are considered to have the potential to deliver substantial benefits in relation to the Authority's objective. • Priority 3: projects that have merit and are able to be resourced in the first instance, but may need to be reprioritised later.
2014/15 and beyond focus	Table D—Other Projects for Completion in 2014/15 or Out-years	<p>These are projects where the Authority expects to complete Code development or implementation, as applicable, in 2014/15 or later.</p> <p>Projects include priority 2 and 3 as above.</p>
	Table E—Pending Projects	Projects that will not proceed unless resources become available. Will require initial scoping and cost benefit assessment before proceeding.

5 Key implementation projects

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

5.2 Resources will also be allocated to conducting post-implementation reviews for major projects in 2014/15.

Table A: Key system implementation projects

#	Project Name	Description	2013/14 Milestone
A1	Scarcity pricing – implementation	Section 42 implementation project.	Go live 1 June 2013. Project closure completed by 31 July 2013.
A2	Metering - Part 10 – implementation	Completion of Part 10 Code implementation.	Complete implementation Implementation review completed.
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.
A4	Locational price risk management – implementation	Complete implementation close out report.	Complete close out report by August 2013.
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.	North Island MFK targeted for implementation 1 July 2013. South Island MFK implementation dependant on completion of South Island generator control system upgrade. 10 August 2014 is agreed date.

6 Top priority projects

6.1 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, in most cases, 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 SOI.

Table B: Information about top priority projects

#	Output	Project Name	Description	2013/14 Milestone
B1	Market design	Settlement and prudential security review	Improvements to clearing and settlement parts of the Code to improve efficiency and competition.	Complete Code amendment. Commence implementation
B2	Market design	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.
B3	Market design	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).
B4	Market design	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.
B5	Market design	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 FTR and loss and constraint excess (LCE) revenue.	Complete Code amendments.

#	Output	Project Name	Description	2013/14 Milestone
B6	Market services	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.
B7	Market design	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>
B8	Market design	Efficient procurement of extended reserves ³	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.
B9	Market design	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. ⁴	Successful completion of programme at 30 April 2014.
B10	Market design	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.

³ Previously named *Under-frequency management - AUFLS market development*.

⁴ 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	Project Name	Description	2013/14 Milestone
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>
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"> - 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 - addressing the impact of fee changes on levy payers - renegotiation of SOSPA. 	Complete review and update SOSPA in 2013/14.
B13	Compliance	Review of enforcement regulations	<p>Review of the Electricity Industry (Enforcement) Regulations and draft replacement regulations.</p> <p>Dependent on the Ministry of Business, Innovation and Employment (MBIE) work programme and priorities (requires Cabinet approval).</p>	Complete the review and draft replacement regulations, if required.
B14	Market performance	Electricity market performance review	Development and publication of the Electricity market performance review report.	Publication of the report by March 2014.

#	Output	Project Name	Description	2013/14 Milestone
B15	Market performance	Data warehouse	<p>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.</p> <p>Specifically in 2013/14 – improving access to retail data (see project C8).</p>	<p>Expanding and improving the data warehouse: continuous improvement of the data warehouse and website portal.</p> <p>99% availability of the Authority data web portal during business hours.</p> <p>20-30 data sets available on the portal.</p>

7 Other priority projects for completion in 2013/14

7.1 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	Output	Project Name	Description	2013/14 Milestone
C1	2 - high	Market design	Dispatchable demand modified option (MODD)	<p>Facilitating greater demand-side participation in the wholesale market</p> <p>Related to dispatchable demand – implementation: project A3.</p>	Complete Code amendment for modified option, in time to ensure go-live on 15 May 2014.
C2	2 - high	Market design	Wholesale market information	<p>Implement Board decisions made in June 2013.</p> <p>Improved access to WITS and planning outage coordination protocol (POCP) for wider range of participants.</p> <p>Builds on initiatives recommended by WAG in 2012/13.</p>	<p>Finalise POCP (Red Spider system) enhancements (MFM).</p> <p>Finalise guideline for clause 13.2.</p> <p>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.</p>

#	Priority	Output	Project Name	Description	2013/14 Milestone
C3	2 - high	Market design	Grid configuration arrangements	Development of efficient arrangements for making a temporary change to the grid configuration.	Code amendments completed by December 2013.
C4	2 - high	Market design	Improving transparency of consumer electricity charges ⁵	Review to improve the transparency of consumers' electricity charges. RAG project.	RAG report expected April 2014. Authority response to RAG recommendations.
C5	2 - high	Market design	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.
C6	2 - high	Market design	Distribution pricing review	Review of distributors' alignment with <i>Distribution Pricing Principles and Information Disclosure Guidelines</i> . Following from the review consideration of further actions required, if any.	Review (report on alignment) completed. Report due December 2013. Evaluation of findings and development of response, if required.
C7	2 - high	Market design	Review of consumer switching programme	RAG review of consumer switching programme and initiatives beyond April 2014. Related to Consumer Switching Fund programme (B9).	RAG is expected to report to the Board in September 2013 on its review of the consumer switching function for beyond 30 April 2014.

⁵ Previously called *Breakdown of customer billings* project.

#	Priority	Output	Project Name	Description	2013/14 Milestone
C8	2 - high	Market design 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"> - enable collection of data through standardisation of formats (including Code amendment if required) - integration of existing market datasets (may include additional Registry fields) - development of a national retail price database for electricity and gas. - enhanced retail market analysis, metrics and monitoring. <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>Complete development of National Database for retail price data in 2014/15.</p>
C9	2 - high	Market design	AUFLS standard review	<p>A project in which the system operator will determine what events AUFLS are actually covering (part of the security policy review).</p> <p>Potential amendment to system operator policy statement and technical Codes.</p>	<p>Code amendment proposal due from system operator in December 2013.</p> <p>Complete Code amendment by 30 June 2014.</p>
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.

#	Priority	Output	Project Name	Description	2013/14 Milestone
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.
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.
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).
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.
C15	3 - important	Market design	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.
C16	3 - important	Market design	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.
C17	3 - important	Market design	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.

#	Priority	Output	Project Name	Description	2013/14 Milestone
C18	3 - important	Market design	Review of barriers to retail competition in MUoSA	Project has three parts: <ul style="list-style-type: none"> - 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.
C19	3 - important	Market design	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.
C20	3 - important	Market design	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.)
C21	3 - important	Market design	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.
C22	3 - important	Market design	Frequency regulation: review normal frequency band and AOPOs	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.	Complete Code amendments for: (1) frequency deviation targets (2) minimum governor response.

#	Priority	Output	Project Name	Description	2013/14 Milestone
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 8 retailers.
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.
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.
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 TBA.
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.

#	Priority	Output	Project Name	Description	2013/14 Milestone
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.
C29	3 - important	Market services	Reconciliation loss factor methodology	Develop final recommendations for: <ul style="list-style-type: none"> - calculation and management of distribution losses used in the reconciliation process (complete guidelines and publish) - developing and publishing approach to monitoring and implementation. 	Complete Guidelines and publish by 30 June 2014.
C30	3 - important	Market services	Metering-advanced metering policy implementation project	Scope of this project is: <ul style="list-style-type: none"> - complete review of AMI guidelines - consult on industry-agreed formats for exchanging AMI information. <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.
C31	3 - important	Market performance	Winter review	Review of winter 2012 and winter 2013.	Complete the review.
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.

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

8.1 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 2014/15.

Table D: Information about second and third priority projects for completion in 2014/15 and out-years

#	Priority	Output	Project Name	Description	2013/14 Milestone
D1	2 - high	Market design	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>
D2	2 - high	Market design	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.	<p>Complete project plan, including scope, approach and timetable.</p> <p>Complete consultation on issues and options.</p> <p>Report to the Minister.</p>

#	Priority	Output	Project Name	Description	2013/14 Milestone
D3	2 - high	Market design	Under-frequency management - including AUFLS technical review	<p>Review of all under frequency management tools, including verifying modelling formats.</p> <p>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.</p> <p>Includes system operator consideration of dispensations and equivalence with respect to AUFLS exemptions.</p>	<p>Review to be completed and Code amendment proposal received from the system operator by 31 December 2013.</p> <p>Complete investigation report and feasibility studies in 2013/14 for the following::</p> <ul style="list-style-type: none"> - IL over-delivery - Over-frequency product - Inertia market - Wind generators to provide reserves - IL modelled according to tripping time.
D4	2 - high	Market design	Under-frequency management - reserves arrangements	Investigation into reserve arrangements.	Investigation and review to be completed in 2013/14.
D5	2 - high	Market services	Electricity information exchange protocols	Review and update of Electricity information exchange protocols (EIEPs).	<p>Code amended by October 2013.</p> <p>Commence implementation.</p> <p>Go live 1 July 2014.</p>

#	Priority	Output	Project Name	Description	2013/14 Milestone
D6	3 - important	Market design	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"> - improved modelling of constraints in the system operator' scheduling, pricing and dispatch model (SPD) - constraint softening - wind generation inputs into final pricing - infeasibility resolution improvement process - interim pricing period deadline changes. 	<p>Progress constraint softening initiative to the point of draft Code amendments.</p> <p>Start review of wind generation inputs into final pricing.</p>
D7	3 - important	Market design	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.
D8	3 - important	Market design	Offer and dispatch Code development	<p>Improve the offer and dispatch rules to improve operational efficiency, eg:</p> <ul style="list-style-type: none"> - review of gate closure - potential further work (potential to delay if needed) - reserve offers - other areas where we are getting Code amendment proposals - will need to be prioritised and progressed as resources permit. 	<p>Complete gate closure Code amendments (depending upon feasibility study completed the previous year). Evaluate and develop Code amendments for the following initiatives:</p> <ol style="list-style-type: none"> 1. Clarify code provisions 13.18, 13.19, 13.19a (Compliance Committee recommendations) 2. Review reserve offer algorithm (Genesis Energy proposal) 3. Intermittent generation (wind) re-offer provisions 4. Minimum offer price for interruptible load (13.43, issue identified in WITS audit).

#	Priority	Output	Project Name	Description	2013/14 Milestone
D9	3 - important	Market design	Review of retail competition in embedded and customer networks	Examination of the potential to improve retail competition in embedded networks and customer networks. RAG project.	Scope, approach and timetable to be decided.
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.

9 Pending projects

9.1 The table below lists projects that have had an initial assessment as having merit but are scheduled for initiation after the 2013/14 year. Included in the table are first and second priority pending projects. First priority pending projects are the projects that would get first consideration for initiation in 2013/14 should resources become available.

Table E: Information about pending projects

#	Output	Project Name	Description
E1	Market design	Review of Part 6 (pricing principles)	<p>Related to reviews of distribution and transmission pricing. Dependent on distribution pricing alignment review.</p> <p>A review of the pricing principles for distributed generation in Part 6 of the Code, to ensure consistency and alignment with distribution pricing principles.</p>
E2	Market design	Research project - distribution company arrangements	Research project to review the efficiency of distribution network company arrangements.
E3	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>
E4	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	Market services	Registry communications improvements	Improving efficiency of communication between participants and the registry. Encouraging participants to take up communication facilities that currently exist.
E6	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	Market Design	Short-term hedge instruments	Consider the need for a short-term market for hedge instruments (e.g. day-ahead). Possible WAG project.

#	Output	Project Name	Description
E8	Market Design	Trading arrangements (Part 13) review	Review the Code relating to trading. Includes scheduling, dispatch, pricing, information and information disclosure. Possible WAG project.
E9	Market Design	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	Market Design	Instantaneous reserve cost allocation methodology	Review of the instantaneous reserves cost allocation methodology. Possible WAG project.
E11	Market Design	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	Market Design	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, currently before Parliament (awaiting 3rd reading).
E13	Market Design	Arrangements for management of load control	Review of arrangements for management of load control (distribution system operator).
E14	Market Design	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	Market Design	Credible event management: under voltage management	Review appropriateness of the Code for under-voltages during events.
E16	Market Design	Asset owner performance obligations: voltage rules	Review of voltage asset owner performance obligations (AOPO's) to determine if fit for purpose with changing generation mix (ie significant wind generation).
E17	Market Design	Asset owner performance obligations: under-frequency rules	Review of under-frequency AOPO's to determine if fit for purpose with changing generation mix (ie significant wind generation).
E18	Market Design	Frequency regulation: frequency keeping cost allocation	On hold until after MFK which will determine a better price for frequency keeping. (2014/15 project probably.) 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.

#	Output	Project Name	Description
E19	Market Design	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	Market Design	Under-frequency management - Instantaneous reserve AOPOs	Review of instantaneous reserve AOPOs. (Part 8 of the Code - fit for purpose eg for wind farms.)
E21	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	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	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	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	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	Market Services	Optimisation of non-technical distribution losses	Investigate the reduction in non-technical losses.
E27	Market Services	Guidelines for secondary networks - network extensions and customer networks	Development of arrangements for network extensions and the establishment of compliance requirements.
E28	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.)

#	Output	Project Name	Description
E29	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	Market Performance	Metering - Part 10 -impact review	Post implementation review of impacts and outcomes.
E31	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 February 2013. On hold until appropriate legislative vehicle is available.
E32	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	Market Design	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.

Notes to the project tables

These notes apply to all project tables above.

- (a) **Milestones**—the project tables below include key milestones or deliverables for the 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 projects in the following tables. The Authority has set out the potential process and timetable as if Code amendment is required and all Code amendment milestones should therefore be read as if “if required” were included in the text.

All milestones are for the end of the financial year (30 June) unless otherwise stated.

- (b) **Project size key**—this addresses the overall estimate of project size, including direct Authority costs and staff time and level of consultant input. The cost assessment does not include costs to others. The assessment gives an indication of the quantum of overall levy cost.
- * Large: major project for the Authority involving substantial staff effort and/or expenditure (indicative levy cost over \$0.5m).
 - * Medium: significant project for the Authority involving substantial or moderate staff effort and/or moderate expenditure (indicative cost range \$0.1m to \$0.5m).
 - * Small: smaller project for the Authority involving moderate or low levels of staff effort and/or relatively low or no expenditure (indicative cost range under \$0.1m).
- (c) **Net public benefit key**—this addresses the perceived net public benefit for the project. In some cases the net public benefit assessment is very preliminary and is therefore intended to be indicative only. The investigation and cost benefit assessment will be an initial stage of these projects.
- * High: potentially very high net public benefit.
 - * Medium: potentially moderate to high net public benefit.
 - * Low: potentially low net public benefit.

Glossary of Abbreviations and Terms

Act	Electricity Industry Act 2010	MFM	Market facilitation measures
AGC	Automatic governor control	MOSP	Market operations service providers
AMI	Advanced metering interface	MUoSA	Model use of system agreement
AOPO	Asset owner performance obligations	POPC	Planning outage coordination protocol
AUFLS	Automatic under-frequency load shedding	Regulations	Electricity Industry (Enforcement) Regulations 2010
Authority	Electricity Authority	RAG	Retail Advisory Group
CBA	Cost benefit analysis	SOI	Statement of Intent (SOI)
Code	Electricity Industry Participation Code 2010	SOSPA	System operator service provider agreement
EIEPs	Electronic information exchange protocols	SPD	Scheduling and dispatch model
FK	Frequency keeping	UoSA	Use of system agreement
FTR	Financial transmission right	VoLL	Value of lost load
LCE	Loss and constraint excess	WAG	Wholesale Advisory Group
MBIE	Ministry of Business, Innovation and Employment	WITS	Wholesale information trading system
MFK	Multiple frequency keepers		