

Electricity Authority Work Programme

Report for the period

1 November 2015 to 29 February 2016

Contents

Ex	recutive summary	3
Int	troduction and purpose	5
Ne	ew work initiated	6
1.	Key regulatory projects	7
	Programme: Competition in retail markets	7
	Programme: Efficient pricing	11
2.	Other outputs	13
	Programme: Implementation projects	13
	Programme: Competition in retail markets	15
	Programme: Wholesale and ancillary services markets	17
	Programme: Efficient pricing	21
	Programme: Reliability	
	Programme: Fit-for-purpose market services	24
	Programme: More efficient market operations	26
	Programme: Compliance	31

Key to colour symbols used in this report



Project milestones achieved or on track to be achieved



Project milestones are at risk



Project milestones not achieved or not able to be achieved

Executive summary

The Authority's work programme details the projects we intend to progress during the 2015/16 financial year. This report provides an update on progress as at 29 February 2016. The programme is set out in terms of:

- 1. **Key regulatory projects:** work that may result in significant new Code amendments or involves significant market facilitation initiatives. These projects could involve significant engagement with stakeholders. Table 1 details the key regulatory projects in 2015/16. Priority 1 projects are those listed in our *Statement of Performance Expectations* (SPE).¹
- 2. Other outputs: includes market service improvement projects, implementation projects, other Code amendments and market facilitation measures, post-implementation reviews, monitoring, information and education initiatives, market services projects, and compliance initiatives. Table 2 identifies the key market services and implementation projects as listed in the SPE.

We remain flexible and responsive in the management of this work programme. We review and reprioritise this work programme on a regular basis. Changes in the year to date are shown as tracked changes in this report.

Table 1: Summary of key regulatory projects from SPE (priority 1) and work programme

#	Priority	Project	Programme	Code completed in 2015/16 year?	Existing or new project?	Status
1.1	1	What's My Number (WMN) campaign	Competition in retail markets	N/A	Existing	On track
1.2	1	Retail data project	Competition in retail markets	Yes	Existing	On track
1.3	1	Hedge market development	Competition in retail markets	No	Existing	On track
1.4	1	Spot market refinements	Competition in retail markets	No	Existing	On track

3 | Page

¹ The SPE is available at http://www.ea.govt.nz/about-us/strategic-planning-and-reporting/statement-of-performance-expectations/

#	Priority	Project	Programme	Code completed in 2015/16 year?	Existing or new project?	Status
1.5	2	Default distribution agreement	Competition in retail markets	No	Existing	Off track
1.6	1	Transmission pricing investigation	Efficient pricing	No	Existing	Off track
1.7	1	Distribution pricing review	Efficient pricing	No	Existing	On track
1.8	2	Research project: effect of low fixed charges	Efficient pricing	No	Existing	Completed
1.9	2	Part 6 (distributed generation pricing principles)	Efficient pricing	No	New	On track

Table 2: Summary of key market service and implementation projects

#	Priority	Project	Programme	Completed in 2015/16?	Status
2.1	1	National market for instantaneous reserve implementation	Implementation projects	No	On track
2.2	1	Extended reserve arrangements implementation	Implementation projects	No	On track
2.21	1	Renegotiation of the system operator service provider agreement (SOSPA)	Fit-for-purpose market services	Yes	On track
2.22	1	Market operations service provider tender	Fit-for-purpose market services	Some implementation is expected	Completed

Introduction and purpose

This paper provides a report on progress against our work programme². The 'traffic lights' used in this report relate to overall progress against the project milestones, which may go beyond 30 June 2016. All milestones are for the end of the financial year unless otherwise stated.

The work programme is our internal planning document. It represents a full commitment of Authority staff resources and the available project budgets. We review and update the work programme on a regular basis.

Overall performance standards for the year

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

Changes during the year

We remain flexible and responsive in the management of this work programme. Reprioritisation takes place as required during the year, for example if new projects may be required, or if new information becomes available about a specific project. We have completed a full review of the work programme in November 2015. The review resulted in re-prioritisation of some projects to free up resources for higher priority projects. Other work has been initiated during the year as outlined below.

This report includes amendments made to the work programme as a result of reviews completed during the year. These amendments are shown as <u>tracked changes</u> revisions and new projects are *italicised*.

5 | Page

² The work programme is available on our website at www.ea.govt.nz/about-us/corporate-projects/201516-planning-and-reporting-/.

New work initiated

We have initiated work in two broad areas since the last work programme report. These are being translated into specific projects, which will be included in the 2016/17 work programme.

Security of supply long-term outlook

The closures of the Otahuhu B and Southdown thermal stations, combined with the potential closure of the two remaining coal-fired Huntly units, has led to heightened concern in the media about security of supply risks for 2019.

We have carried out a review of the market outlook and current market settings. Our initial assessment was completed in December 2015. No significant deficiencies have been identified with current market arrangements for dealing with the changes in the supply outlook. However, we have identified possible areas for further work. These look at fine-tuning current arrangements, in particular reviewing the customer compensation scheme and stress testing regime to ensure they are consistent with delivering ongoing security of supply in the face of the recent and potential closures of thermal plants.

Several projects in our 2015/16 work programme will also have a positive impact on market incentives to manage security of supply risks, for example, hedge and spot market improvements, and introduction of the national market for instantaneous reserve in late 2016.

We are actively monitoring the security of supply outlook.

Review of market arrangements for consumers utilising emerging end-user technologies

The potential for new technologies such as solar panels, battery technology, smart meters and smart devices to change how consumers obtain and use electricity is becoming the subject of increasing focus and attention across the electricity sector. We recognise that the regulatory framework, the Code and the market systems need to keep pace with these changes to avoid unnecessary barriers to innovation and the new business models associated with them.

With this in mind we are doing a scoping exercise to take a broad look at new technologies and business models, consider the potential implications for our market systems, the Code, and the delivery of our statutory functions, and assess what this may mean for our work programme in 2016/17 and beyond.

We expect to conclude this exercise in May 2016, and it may result in the identification of specific projects for the 2016/17 work programme.

1. Key regulatory projects

This section identifies projects that typically involve addressing policy issues about the market, and will generally result in significant Code amendments or market facilitation measures. This work will require significant consultation and engagement with consumers, generators, retailers and lines businesses.

Programme: Competition in retail markets

This programme includes initiatives to promote retail competition by reducing barriers to entry and expansion of retailers (the supply side) and by facilitating consumer participation (the demand side). Many of the supply side initiatives are in the spot, hedge and distribution segments of the market. The demand side initiatives are primarily about providing consumers with better access to information and tools to make choices between retailers. Part of the work in this area is supported by new funding approved in the 2014 Budget for facilitating consumer participation (FCP). The funding runs from 1 July 2014 to 30 June 2017. The scope of the FCP work includes:

- raising consumer awareness about the benefits of switching using promotional activities such as the What's My Number campaign or similar
- improving consumer understanding, motivation and action by enhancing the tools available to consumers to seek and compare information, and switch retailers
- improving consumer understanding by making it easier to access appropriate and accurate information to compare retailers' offerings.

#	Priority	Project	Description	Why we are doing this project	Scheduled timeframe2015/16	Status	Comment
1.1	1	What's My Number programme	This campaign - promotes the benefits of comparing and switching retailers.		Successful programme delivery as indicated by the annual monitoring survey for the 2015 calendar year.	000	The 2015 campaign has been completed. The March campaign was launched on 6 March 2016 and runs for three weeks. Campaign advertising involves multiple media channels. Planning for the main 2016 campaign will be completed in May 2016.
1.2	1	Retail data project	Consider options to promote retail competition by improving access to retail data.	to access and share	Implement Code amendment to allow consumers, or their agents, access to consumption data to come into effect in 2016. Decide on a direction for the provision of tariff and connection data to consumers and their agents, and commence implementation.		Access to consumption data, and connection and tariff information: New Code came into effect on 1 February 2016. Implementation has been completed. Development has commenced on a voluntary format for tariff data. We expect to complete this within 12 months. A cross-industry working group is being set up to lead development.

#	Priority	Project	Description	Why we are doing this project	Scheduled timeframe2015/16	Status	Comment					
1.3	1	Hedge market development	Investigating and making ongoing enhancements to the hedge market	improve retail competition by	Progress enhancements for the hedge market, specifically:		The WAG's recommendations were accepted by the Board and were published on 4 August 2015. WAG's recommendations were prioritised into our work programme.					
			continues its great upward forward experience enhalm making great	greater certainty about forward price	consider enhanced market making arrangements for Australian Securities Exchange (ASX)	market making arrangements for Australian Securities Exchange (ASX)	market making arrangements for Australian Securities	market making arrangements for Australian Securities Exchange (ASX) products evaluate if ASX positions can offset energy market	market making arrangements for ereby Australian Securities Exchange (ASX) products and - evaluate if ASX positions can offset energy market	market making arrangements for Australian Securities Exchange (ASX)		Priority is being given to facilitating trading of standardised cap products and voluntary market making of those products. A decisions and reasons paper outlining this decision, and others, was published in December 2015.
					greater reliability and	greater reliability and				We are working on a cap product. ASX has announced its intention to list a cap product by the end of the 2016 calendar year. We will work with interested parties to identify an appropriate cap product design.		
					requirements.		ASX/AEMO are overdue in publication of their design study for offsetting arrangements for the Australian electricity market. We expect it to be published in April 2016. Once this is published, we plan to consider the application of the design study to the NZ situation.					

2015/16 work programme report

#	Priority	Project	Description	Why we are doing this project	Scheduled timeframe2015/16	Status	Comment
1.4	1	Spot market refinements	Further develop specific initiatives identified in the 2014/15 review of the spot market.		high-level assessment of options completed in 2014/15: - identify spot market		 On 1 September 2015 we announced our decision to further explore options for real time pricing and an hours-ahead market. Real time pricing: The system operator has completed a TASC that considers the merits and costs of four RTP alternatives (ex-ante 30-min price, dispatch-based prices, ex-post 5-min prices, ex-post 30-min price). A paper on the findings of the RTP investigation, including an evaluation of the potential costs and benefits, was considered at the March meeting. The consultation paper (including CBA) is being finalised for publication by the end of March. Some form of an hours-ahead market: Work has begun on investigation of an hours-ahead market and alternatives. CBA will be completed by 30 June, and will be incorporated into a consultation paper in early 2016/17 financial year.
1.5	2	Default distribution agreement (previously called more standardisation of UoSA)	MUoSA a default agreement. The objective of the project is to				On 26 January 2016 we published a consultation paper describing a proposal to amend the Code to introduce a default distributor agreement. Consultation closes on 19 April 2016.

Programme: Efficient pricing

The programme seeks to improve the efficiency of spot market pricing in the wholesale market and develop appropriate arrangements for allocating the costs of transmission and distribution services.

#	Priority	Project	Description	Why we are doing this project	Scheduled timeframe 2015/16	Status	Comment
1.6	1	investigation	Review of the transmission pricing methodology (TPM) to promote overall efficiency of the electricity industry	We are reviewing the current arrangements in order to better promote operational and investment efficiency in the transmission sector and the broader electricity market.	Complete consultation on options and issues relating to Transmission pricing. Develop a decisions and reasons paper.		On 20 October 2015 we published a summary of the submissions received on our Transmission pricing methodology (TPM) options working paper. We expect to release the transmission pricing investigation second issues paper papers at the latest by mid-May 2016. Preparation of this paper has involved more modelling and analysis than originally anticipated.
1.7	1	Distribution pricing review	A review to investigate efficient distribution pricing arrangements.	We are reviewing the current arrangements in order to achieve better operational and investment efficiency in the distribution sector and the broader electricity market.	Develop options and consult on a recommended approach for identified issues relating to distribution pricing.		Target achieved: A consultation paper and a supporting companion paper were released on 3 November 2015. Consultation closed on 2 February 2016. The summary of submissions and next steps are to be considered by the Board in late June 2016.
1.8	2		to investigate the competition, reliability and efficiency effects of the Electricity (Low Fixed Charge Tariff Option for Domestic	Participants and some consumer representatives consider	RAG Research paper completed. Recommendation paper ready for Board.	0	Completed: The RAG has finalised its report to the Authority Board on the competition, reliability and efficiency effects of the LFC Regulations. The Board considered the report at its 1 March 2016 meeting. The report has been provided to the Minister. The Authority response will be addressed through the distribution pricing project.

#	Priority	Project	Description	Why we are doing this project	Scheduled timeframe 2015/16	Status	Comment
1.9	2	Part 6 (distributed generation pricing principles)	A review of Part 6 of the Code pricing principles, to ensure consistency and alignment with distribution pricing principles.	We will review the pricing principles to ensure that they are not preventing distributors from pricing and charging on a cost-reflective basis.	Scoping of problem definition and issues prior to developing consultation paper. Target added August 2015: release a consultation paper by 31 December 2015.		The Board approved release of the consultation paper in December 2015. It will be released at the same time as the TPM second issues paper, because the issues covered by the two papers are interrelated.

2. Other outputs

Programme: Implementation projects

This programme covers the effective and efficient implementation of market development initiatives completed in previous years.

#	ŧ	Priority	Project	Description	Why we are doing this project	Scheduled timeframe 2015/16	Status	Comment
2.	1		National market for instantaneous reserve implementation	Implement a national market for instantaneous reserves to enhance wholesale market competition.	We are seeking to enable parties in the North Island to compete in the South Island and vice versa. We also expect efficiency gains as national markets are expected to reduce total procurement requirements.	Development of the national market completed. Commence implementation.		Procurement plan and timetable approved by Board in November 2015. On track for new contract for 1 May 2017. We are preparing information for participants about what is being implemented, why, and how it will work. We expect to publish this information in April 2016.

#	Priority	Project	Description	Why we are doing this project	Scheduled timeframe 2015/16	Status	Comment
2.2	1	Extended reserve arrangements implementation		We are seeking more efficient provision and use of extended reserves.	Complete implementation of relevant milestones for extended reserve arrangements including for the extended reserve manager, system operator and clearing manager. It is anticipated that the development of the extended reserve selection optimisation model will be completed within the year, and consultation on the selection methodology and technical requirements schedule will have at least commenced. Implementation activities and commencement of operations are expected in 2016/17.		Workshops are being held with participants. A system delivery agreement has been agreed with NZX. We asked North Island lines companies and direct-connects to provide the data required for the project in September 2015. This information has now been received. The technical requirements schedule and selection methodology are being developed. Consultation is expected to start in June 2016.
2.3	2	Retail data implementation	Implementation of the initiatives resulting from the retail data project into service provider and participant systems.	See description of the retail data project above.	Subject to consultation, Phase 2 - access to metering and connection information - is expected to be undertaken in 2015/16. This may be wrapped into the registry retender as a 'new service', but the technical and functional requirements will need to be established regardless.		See description of the retail data project above.

Programme: Competition in retail markets

This programme includes initiatives to promote retail competition by reducing barriers to entry and expansion of retailers (the supply side) and by facilitating consumer participation (the demand side). See full description on page 7.

#	Priority	Project	Description	Why we are doing this project	Scheduled timeframe 2015/16	Status	Comment
2.4	2	Consumer education programme	Public education about the performance of the electricity market and benefits that are delivered through a competitive market.	Improved information availability is expected to increase consumer awareness, understanding and motivation to participate in both the wholesale and retail markets.	Complete development of programme design and launch.		Target achieved: Consumer research completed and draft programme completed. Some quick steps have been implemented. Ongoing programme to be considered by Board in June 2016. We have released an updated and refreshed version of Electricity in New Zealand. Electricity in New Zealand tells the story of the electricity industry in a simple and engaging way. It provides a high-level overview of retail companies, distribution companies, the transmission grid, generation companies and the electricity market. It also shows how these areas interact with each other, so it is a handy reference tool for those who are learning about the industry.
2.5	2	Information about spot price risks (previously called stress testing for consumers)	Providing information about spot price risk to consumers, especially residential consumers exposed to the spot market.	Highlighted through the appropriations consultation. There needs to be an investigation of whether consumers (particularly residential consumers) on spot pricing are fully aware of the risks.	Issues paper published.		Started in March 2016.

#	Priority	Project	Description	Why we are doing this project	Scheduled timeframe 2015/16	Status	Comment
2.6	2	Review of secondary networks	. ,	We want to remove unnecessary barriers to retail competition in secondary networks and promote efficient operation of the industry.	RAG discussion paper and recommendation paper completed.		The RAG is considering competition and efficiency issues with secondary networks (Customer networks, embedded networks and network extensions). RAG issues and options paper published April 2015. Submissions have been considered. In March 2016 the Board requested the RAG to extend the project scope to consider the appropriate scope of the Authority's regulatory activities, given broad definitions of retailer and distributor. MBIE is working to amend the definition of distributor in the Act.
2.7	3	to enhance retail	participants (including service providers) to ensure that the right information is being provided at the right times, and at an appropriate level of accuracy, to ensure that retail competition is being facilitated and the market	and diversification in customer service expectations and new market initiatives such as the Authority's retail data project.	Scoping of problem definition and issues prior to developing consultation paper.	On hold	Not yet started. Resources not available to start at this stage.

Programme: Wholesale and ancillary services markets

This programme includes projects enhance the wholesale market, in particular to:

- improve the process for offer and dispatch in the spot market
- improve the competition and efficiency in instantaneous reserves, frequency keeping, extended reserves and potentially other ancillary service markets.

#	Priority	Project	Description	Why we are doing this project	Scheduled timeframe 2015/16	Status	Comment
2.8	1	Demand side bidding and forecasting - impact review	Post implementation review of impacts and outcomes.	Evaluation of the impacts and outcomes of key projects is an important step in the regulatory process.	Complete post implementation review of the demand-side bidding and forecasting Code amendments that went live on 28 June 2012.		Review underway and largely completed. Expected to be completed by the end of the financial year. Consultation on draft report will take place early in the 2016/17 financial year.

#	Priority	Project	Description	Why we are doing this project	Scheduled timeframe 2015/16	Status	Comment
2.9	2	Review of frequency keeping services	Review future frequency keeping service requirements with use of HVDC frequency keeping controls (FKC). This project combines what was referred to as national market for frequency keeping and normal frequency AOPOs in the 2014/15 programme.	Technical requirements for frequency keeping have changed with the introduction of FKC. Depending on the volume of national frequency keeping required there may still be benefits in introducing a national market for frequency keeping and/or introducing incentives for governor response.	Publish strategy as an information paper and consider submissions.	000	Investigations have been completed, which identified two areas of additional work. - assess the effect of smaller MFK bands on time error control - assess the effect of additional governor response on system stability. The system operator is carrying out additional investigations, which are expected to be reported by March 2016. Information paper expected to the Board in June 2016. Publication target for the year is still achievable, but submissions will not close until early in the 2016/17 financial year.
2.10	2	Review of instantaneous reserve markets	Undertake a fundamental review of the instantaneous reserve markets to reduce barriers and enhance performance. This was a WAG project in 2014/15, which resulted in recommendations to the Board in March 2015. The Authority is now progressing this work.	Current arrangements may create barriers for some and emerging types of instantaneous reserve. The Authority will consider options to reduce unnecessary barriers to increase competition and efficiency.	Report from the system operator to test findings with stakeholders by 30 June 2016 – now November 2016. Dependent on the results indicating net benefits, develop and publish a consultation paper on high level options.		First work programme target achieved. The system operator is working on proof of concept. Started later than expected but work will now ramp up. The report is now expected by December 2016. The November 2015 work programme review slowed this project down - development delayed on consultation paper on high level options.

#	Priority	Project	Description	Why we are doing this project	Scheduled timeframe 2015/16	Status	Comment
2.11	2	Offer and Dispatch: review of gate closure and bid and offer revision provisions	Review of gate closure and the offer and bid revision provisions.	Reduced gate closure times should lead to more efficient use of resources and increased levels of wholesale market competition. Better bid and offer revision provisions will simplify the existing Code and clarify dispatch obligations.	Code amendment completed by March 2016.		Code amendment, including decision paper, approved by Board in November 2015. Decisions and reasons paper published 17 November 2015. The Code amendment will be gazetted after the system operator has completed some more design work which will determine implementation timetable. The system operator design work to begin in June 2016.
2.12	2	Inter-island instantaneous reserve sharing	A system operator initiative to use some of the increased capabilities of the new HVDC control system to reduce instantaneous reserves procurement costs in advance of the full national instantaneous reserves market implementation. A fast instantaneous reserves (FIR) solution is already live. Options for a sustained instantaneous reserve (SIR) solution are under investigation.	Stronger competition in the instantaneous reserves market from the interim	Implementation of sustained instantaneous reserves (SIR) sharing between the two islands in December 2015.		Completed: on 8 September 2015 we announced our decision to request that the system operator enable and use a new facility to share sustained instantaneous reserve across the HVDC inter-island link. The system operator will implement the changes.

#	Priority	Project	Description	Why we are doing this project	Scheduled timeframe 2015/16	Status	Comment
2.13	2	Dispatchable demand-constrained on/off	Amend the Code to ensure dispatchable demand constrained- on/off payments provide	We are seeking to encourage the efficient use of dispatchable demand.	Late-bid changes Complete Code amendment by March 2016.		Late-bid changes: completed and announced 27 October 2015. Code amendment completed, went live 1 December 2015.
		payments	the correct incentives.		Price Infeasibility: solution developed and consulted on by June 2016.		Dispatchable demand price Infeasibility: consultation completed 1 March 2016. Submissions published 15 March. Summary of submissions and decision paper planned for May 2016.
2.14	3	Frequency keeping constrained on/off	Removal of constrained on/off from the frequency keeping selection methodology and from the frequency keeping cost allocation.	More efficient frequency keeping selection ensures that lowest cost providers are selected for each trading period.	Code amendment completed by 31 December 2015.		Completed: Code amendment decision published 13 October 2015. The amendment prevents the system operator from paying a frequency keeping ancillary service agent for either in-band constrained on compensation or in-band constrained off compensation, while providing frequency keeping.
2.15	3	Transpower demand response protocol management	Incorporate Transpower's demand- side response (DSR) into spot market and facilitate the completion of other elements of the Transpower demand response protocol.	We are seeking to increase the efficiency of Transpower's DSR.	Develop Initiate development of options on incorporating Transpower's DSR into the spot market.		Goes live 1 May 2016. This project was scheduled to start in January 2016 but was put on hold in the November work programme review. If resource becomes available we will start work in 2015/16 in order to progress the project. We will seek to substantially progress the project in the 2016/17 financial year. In the meantime we are keeping abreast of work that Transpower is currently doing in this space.

Programme: Efficient pricing

The programme seeks to improve the efficiency of spot market pricing in the wholesale market and develop appropriate arrangements for allocating the costs of transmission and distribution services.

#	Priority	Project	Description	Why we are doing this project	Scheduled timeframe 2015/16	Status	Comment
2.16	2	Instantaneous reserve event charge and cost allocation review	Improve the efficiency in allocation of instantaneous reserve costs and the event charge. Includes consideration of the costs of commissioning new generation.	supply of	Develop options for instantaneous reserve event charge and cost allocation.		The WAG has been working on this project. The problem definition and options were considered in March 2016. More work is to be done for further discussion at the May 2016 WAG meeting.
							Development of options is considered on track. Publication of a discussion paper expected in early in the 2016/17 financial year.
2.17	2	Transpower's proposed changes to current TPM	Transpower has completed an operational review of the current TPM. They have submitted proposals and the Authority is reviewing the proposals	The Code requires us to consider TPM proposals submitted by Transpower provided there is not more than one proposal per 12 month period.	Code amendments completed by September 2015, if required.		Completed: on 25 August we announced our decision to amend the TPM to change the way that the charges for the costs of the inter-island High Voltage Direct Current (HVDC) link are calculated.
2.18	2	Why prices matter	A paper describing the importance of electricity pricing for consumers: how prices are formed, why prices should reflect costs, and the implications of inefficient price signals.	Supporting all pricing work the Authority is involved with by describing the importance of promoting efficient pricing from a consumer perspective.	Analysis and issues paper for the Board and possible consultation.		Early draft work carried out at the end of 2014/15. Put on hold in the November work programme review.

#	Priority	Project	Description	Why we are doing this project	Scheduled timeframe 2015/16	Status	Comment
2.19	3	Wholesale market information	Review of wholesale market information disclosure exclusions in Part 13 of the Code. Improved public access to fuel quantity information via market facilitation measures. Builds on initiatives recommended by WAG in 2012/13.	hedge market by	Initiate work on information disclosure provisions. Progress an information paper on options for fuel information (for publication in 2016/17).	000	Work on information disclosure provisions underway by the WAG. The information paper on options for fuel information may not be progressed in 2015/16.
2.35	2	Offer and dispatch: wind generation offers (Added to work programme August 2015 as this work was no longer being covered by the shortened gate closure and revised bid and offer provisions)	WAG project: This project will review the offer and dispatch Code provisions for intermittent (wind) generators. In particular, our review will consider whether intermittent generators should be able to deliberately decrease their generation offered with little or no notice to the system operator. The review will also consider whether wind generators should be able to offer at a price above \$0.01/MWh.	This project is to address concerns about the current offer behaviour of wind generators. This project is also expected to contribute to the efficiency limb of the Authority's statutory objective by improving the flexibility of generators, dispatchable load purchasers, and instantaneous reserve providers to respond to changing power system circumstances, while maintaining system security.	WAG information paper expected to be published in 2015/16. WAG report to Board with recommendations in 2016/17.		Added to WAG work plan. Work is proceeding. Discussed at three WAG meetings to date. The WAG is investigating the benefits of allowing wind generation to withdraw for economic reasons and is considering: - wind generation offer obligations - wind generating input information into schedules including pricing schedules - wind generation dispatch obligations. The WAG is not expecting to consult at this stage and plans to make recommendations to the Board by the end of June 2016.

Programme: Reliability

This programme includes initiatives to improve the resilience (quality and reliability) of the electricity system.

#	Priority	Project	Description	Why we are doing this project	Scheduled timeframe 2015/16	Status	Comment
2.2	2	AOPO: fault ride-through	Review low and high voltage fault ride-through Asset Owner Performance Obligations (AOPOs) to ensure fit for purpose with the changing generation mix.	We're concerned that current arrangements may be creating uncertainty for asset owners, potentially harming reliability.	Complete Code amendment by 30 June 2016.		We consulted from 25 August to 6 October 2015 on generation fault ride through provisions. This was a second consultation taking into account submissions received on a consultation carried out in February 2011. We published the submissions on 20 October 2015. Code/decision paper expected to be considered by the Board in April 2016.

Programme: Fit-for-purpose market services

This programme includes the market operations service providers (MOSPs) and the system operator-provided systems and services that ensure effective market operation, increase market efficiency and facilitate market development.

In addition to the business-as-usual work in relation to operation of the electricity system and markets, we are carrying out projects to improve fitness for purpose and operational efficiency.

#	Priority	Project	Description	Why we are doing this project	Scheduled timeframe 2015/16	Status	Comment
2.21	1	SOSPA Review	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; improving capital plan and spending arrangements; addressing the impact of fee changes on levy payers; renegotiation of SOSPA.	SOSPA to ensure that its arrangements bring appropriate commercial disciplines to the services being provided. We are also seeking to improve the system operator's strategic alignment with the Authority's statutory objective and market development programme.	Commence the transition to the new SOSPA and have the new SOSPA become fully effective from 1 July 2016. Complete any necessary Code amendments to give effect to the new arrangements.		The new SOSPA was completed and signed 22 February 2016. Rollout and close-out activities underway. Completion in May 2016. We have largely completed work on Code amendments to give effect to new system operation and market operations service provider arrangements. We expect to make a decision in April.

#	Priority	Project	Description	Why we are doing this project	Scheduled timeframe 2015/16	Status	Comment
2.22	1	manager, reconciliation	Tender for WITS, pricing manager, reconciliation manager and clearing manager MOSP roles and systems.	services and systems remain suitable for evolving market requirements, can be developed in a timely and cost-effective manner and are suitably resilient to	New contract arrangements for pricing manager, clearing manager, reconciliation manager and WITS manager in place, or existing contracts renewed, effective 1 May 2016.		Completed: WITS, pricing manager, clearing manager, reconciliation manager agreements signed 30 October 2015.
2.23	1	Tender for registry MOSP	Tender for registry MOSP role and system.	We want to ensure that services and systems remain suitable for evolving market requirements, can be developed in a timely and cost-effective manner and are suitably resilient to potential systems failures and outages.	Tender process on target for new service provider arrangements to be in place by September/October 2016.	0	Registry tender underway. We expect to make a decision on a preferred supplier by June 2016
2.24	2	Systems access policies	Preparation of a WITS access policy incorporating NZX WITS use of systems agreement. Also includes review of the registry access policy ensure that it is facilitating competition while ensuring core Code requirements are being delivered.	We want to ensure clear information is available to participants on how they can access and use WITS and ensure that the WITS system performance requirements are not compromised by inappropriate use. We need to ensure that the registry is facilitating competition as well as Code compliance.			NZX have the second draft system access policy for WITS. We expect a response in March 2016. We have published an updated registry access policy that recognises the differences between the registry and API and web portal for connection data.

Programme: More efficient market operations

This programme involves increasing the efficiency of electricity market operations through refining processes proscribed in the Code.

#	Priority	Project	Description	Why we are doing this project	Scheduled timeframe 2015/16	Status	Comment
2.25	2	Review of half hour switching process	Code amendment approved 27 June 2014 for a range of minor switching issues becomes effective in October 2015. A Board decision on an additional amendment is expected in June 2015. If approved, that change would also become effective in October 2015.		New Code becomes effective 9 October 2015. Necessary registry changes expected to be completed in 2014/15. 2015/16 activities include any necessary engagement with the registry manager and the industry to ensure the effective implementation and operation of the new arrangements.		Completed: Code in place and the registry has been amended. The new Code came into effect on 9 October 2015.
2.26	2	Reconciliation loss factor methodology	Development of final recommendations for the calculation and management of distribution losses used in the reconciliation process, including completing and publishing industry guidelines and publish). Developing and publishing the approach to monitoring. Implementation of the guidelines.			0	Not yet started. Will start late March 2016. Timetable could come under risk if we re-consult.

#	Priority	Project	Description	Why we are doing this project	Scheduled timeframe 2015/16	Status	Comment
2.27	2	Review of trader default arrangements for direct connected participants	Review of certain operational aspects of the new settlement and prudential security (SPS) arrangements: - review the post default exit period provisions within 12 months of new SPS regime coming into effect on 24 March 2015 - review the process for a large consumer to set up as a direct purchaser in the event of their retailer defaulting - establish a policy for considering shortened post-default exit periods.	of the new settlement and prudential security regime are working in the manner that was envisaged when the Code was drafted. These actions were requested by the Authority Board in March 2015.	Reviews of post-default exit period provisions and process for large consumer to become a direct purchaser completed. Policy for considering shortened post-default exit period established and any applications received considered against the policy.		The policy has been approved for considering shortened post-default exit period. One application has been received and is being considered against the policy. More information has been sought. Reviews of post-default exit period provisions to be addressed after March 2016 with the main effort in 2016/17. The process has been completed for large consumers to become direct purchasers.
2.28	3	Provision of interconnection asset capability information	Remove incorporation by reference into the Code of interconnection asset capability information and have Transpower provide this information more actively through their website.	The version of the interconnection asset capability information that is incorporated into the Code will always lag behind the actual, current information, as it cannot be updated dynamically and is not easily accessible to interested participants. The information can be made available in other formats that are more useful to participants, while ensuring the intention of the Code is achieved.	Complete consultation on the necessary Code amendment and, if appropriate, gazette the amendment.	_	Put on hold in the November work programme review.

#	Priority	Project	Description	Why we are doing this project	Scheduled timeframe 2015/16	Status	Comment
2.29	3	Part 10 operational review	Review of the operational elements of the new Part 10 of the Code (and relevant, related sections of other Parts of the Code) to ensure that the operation of the registry and its functions is efficient.	The new Part 10 introduced a number of new obligations and processes. The operation of the market has continued to evolve since this time, so we'd like to make sure these processes are as efficient as possible.	and options, and commence Code		We are developing an issues paper and expect to start pre-consultation in May-June 2016. Slower than anticipated progress due to resource re-prioritisation in the November work programme review.
2.30	3	Review of Code amendment proposals for scarcity pricing	Review the Code amendments proposed by the pricing manager and take any necessary actions, including any necessary consultation.	The pricing manager has identified some potential issues with the scarcity pricing Code amendments that came into effect in June 2013. We need to review these issues to see if they might prevent the scarcity pricing regime from operating in the intended manner.	Review the Code amendments proposed by the pricing manager and take any necessary actions, including commencing any necessary consultation.		This project arose from the scarcity pricing project in 2014. It addresses a known error. Resource availability meant that the start was delayed. Scheduled to go to the Board in April 2016.

#	Priority	Project	Description	Why we are doing this project	Scheduled timeframe 2015/16	Status	Comment
2.31	3	Review of participant audit arrangements	The review of participant audit requirements in the Code to improve efficiency and align with good practice. Does not include MOSP audits.	We're reviewing audit requirements to improve efficiency and align with good risk management practice.	Complete consultation on recommended changes to audit regime, and commence any necessary implementation.		We are proposing a number of changes to the participant audit regime (regime). Consultation took place in November and December 2015. The submissions have been published. We also consulted on two additional questions in January 2016, and have published these submissions. Summary of submissions published 22 March 2016. We expect to take a decisions paper to the Board in May 2016.
2.32	3	Livening and energisation guidelines	Completion and publishing of the livening and energisation guidelines. The development of the guidelines was commenced under the project to implement the new Part 10 of the Code but was not completed as other projects had higher priority.	We need to ensure that all relevant participants understand their Code obligations regarding the livening and energisation of ICPs. There have been observations that there may be misunderstandings in this area with consequences for Code compliance.	Complete the guidelines and undertake any necessary follow-up education (such as recommending that participants review and update their business processes). To be discussed at Reconciliation Participant Forum on 23 June 2015.		Draft guidelines have been consulted on. The draft is being refined as a result of the consultation. Re-consultation expected over July-August 2016. Start was dependent on retail data project (resourcing). Also impacted by work programme review in November 2015.

#	Priority	Project	Description	Why we are doing this project	Scheduled timeframe 2015/16	Status	Comment
2.33	3	2015 Code amendment omnibus	Minor Code amendments to address operational or other market efficiency issues that arise during the year.	We need to ensure that the operational aspects of the Code are achieving the most efficient outcomes.	Specific Code amendment proposals were identified during 2014/15 and are now under investigation. Consultation and a final Code amendment are expected to be completed in 2015/16.		Omnibus of minor Code amendments approved on 1 December 2015. (2014/15 review programme). We are reviewing the Code to address material relating to outdated technologies and processes. A consultation paper is expected to be released in June or early July 2016.

Programme: Compliance

Compliance plays an integral role in ensuring the integrity of the electricity market by enabling compliance by the industry with the Act, regulations and Code. We take a risk-based and proportionate approach to compliance recognising that most industry participants want to comply with their regulatory obligations voluntarily, or can be encouraged or induced to do so. Our focus is on facilitating voluntary compliance by providing information, education, encouragement, and assistance. However, serious compliance matters are formally investigated and may be subject to enforcement action.

#	Priority	Project	Description	Why we are doing this project	Scheduled timeframe 2015/16	Status	Comment
2.34	2		Educate participants on the operation of the Code, the market, and market systems and processes.	participants can obtain the information necessary to enter and participate in the market. We also ensure that this information is accurate, and is presented in an	A pilot of web-based tool for presenting the material currently included in guidelines is expected to be completed in June 2015. If successful, further development of that tool will continue into 2015/16. Ongoing participant education including training sessions and workshops on specific topics.		A pilot of web-based tool for presenting the material currently included in guidelines has been developed, and reviewed by the technical group. We have received a proposal for full development, which will be considered for budget in the 2016/17 financial year. We are planning further hands-on training courses for registry users in June 2016. One will be a two-day beginners' course and the other is a one-day refresher course.