

# **Electricity Authority Work Programme**

Report for the period 1 July to 31 October 2015

## **Contents**

| Exe  | cutive summary                                      | 3  |
|------|---|----|
| Intr | oduction and purpose                                | 5  |
| 1.   | Key regulatory projects                             | 6  |
|      | Programme: Competition in retail markets            | 6  |
|      | Programme: Efficient pricing                        |    |
| 2.   | Other outputs                                       | 12 |
|      | Programme: Implementation projects                  | 12 |
|      | Programme: Competition in retail markets            | 14 |
|      | Programme: Wholesale and ancillary services markets | 16 |
|      | Programme: Efficient pricing                        | 20 |
|      | Programme: Reliability                              | 22 |
|      | Programme: Fit-for-purpose market services          |    |
|      | Programme: More efficient market operations         | 25 |
|      | Programme: Compliance                               | 30 |

#### 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 31 October 2015. 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).<sup>1</sup>
- 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.

Improving retail competition and enhancing the efficient operation of the electricity industry are our top strategic priorities for 2015/16. Several projects target improving retail competition, including: hedge market improvements, retail data, and the *What's My Number* campaign. Projects to improve efficiency include the transmission pricing review and initiatives relating to distribution networks.

Wherever possible we pursue voluntary market facilitation measures rather than Code amendments. We are very mindful of the burden that additional Code provisions can impose on market participants and the value from evolving market arrangements over time rather than fixing them in the Code.

We remain flexible and responsive in the management of this work programme. Reprioritisation may be required during the year, for example if new projects may be required or if new information is available about a specific project. We review and update this work programme on a regular basis. Changes in the year to date are shown as tracked changes in this report.

**3** | Page

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

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                 | At risk  |
| 1.5 | 2        | Default distribution agreement                     | Competition in retail markets | No                              | Existing                 | On track |
| 1.6 | 1        | Transmission pricing investigation                 | Efficient pricing             | No                              | Existing                 | On 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                 | On track |
| 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 | On track |

#### Introduction and purpose

This paper provides a report on progress against our work programme. The work programme is available on our website at www.ea.govt.nz/about-us/corporate-projects/201516-planning-and-reporting-/.

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

#### The work programme is flexible

The work programme is our internal planning document. It represents a full commitment of Authority staff resources and the available project budgets. Any changes to projects will therefore be carefully managed. In the normal course of events it is anticipated that reprioritisation will be required during the year, for example as the information available about specific projects develops, and new risks or issues come to the Authority's attention. We review and update the work programme on a regular basis.

#### Amendments to the work programme are included in this report

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

#### 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.

### 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 timeframe<br>2015/16   | Status | Comment   |
|-----|----------|----------------------------------|---|--|--|--------|---|
| 1.1 | 1        | What's My<br>Number<br>programme | This campaign - promotes the benefits of comparing and switching retailers. | We are seeking increased retail competition through increased consumer awareness of savings to be made by shopping around for electricity and that it is easy to switch. | Successful programme delivery as indicated by the annual monitoring survey for the 2015 calendar year. |        | The 2015 campaign has been completed. Planning for the 2016 campaign will be completed in May 2016. |

| #   | Priority | Project             | Description  | Why we are doing this project   | Scheduled timeframe<br>2015/16   | Status | Comment   |
|-----|----------|---------------------|--|---|--|--------|---|
| 1.2 | 1        | Retail data project | Consider options to promote retail competition by improving access to retail data. | increase consumer engagement by making it easier for consumers to access and share data and information.  Improving access to retail data will enhance price comparison, product and service innovation, and retail | 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: new Code is effective from 1 February 2016. Retailers are in the process of implementation with systems testing in November.  Provision of tariff and connection data to consumers and their agents: the Board decided the direction for this work in November 2015. Decisions and reasons paper published 24 November 2015. Implementation has commenced. Investigation into access to monitoring data: to be considered at the Board's March or April 2016 meeting. |

| #   | Priority | Project                  | Description   | Why we are doing this project  | Scheduled timeframe<br>2015/16  | Status | Comment  |
|-----|----------|--------------------------|---|--|---|--------|--|
| 1.3 | 1        | Hedge market development | enhancements to<br>the hedge market to<br>ensure that it<br>continues its upward<br>momentum. | We are seeking to improve retail competition by providing market participants with greater certainty about forward price expectations, thereby enhancing decision making and promoting greater reliability and efficiency. | Progress enhancements for the hedge market, specifically:  - consider enhanced market making arrangements for Australian Securities Exchange (ASX) products  - evaluate if ASX positions can offset energy market prudential security requirements. |        | The WAG's recommendations were accepted by the Board and were published on 4 August. WAG's recommendations were prioritised into our work programme.  A paper on enhanced trading of hedge products was published on 9 June. Submissions were published on 11 August. On 20 October we published a summary of the submissions. We also announced our decision to give priority to facilitating trading of standardised cap products and voluntary market making of those products. A decisions and reasons paper outlining this decision, and others, is planned for publication in December 2015.  ASX/AEMO design study for offsetting arrangements is expected to be published shortly. |

| #   | Priority | Project   | Description   |  | Scheduled timeframe<br>2015/16   | Status | Comment   |
|-----|----------|---|---|--|--|--------|---|
| 1.4 | 1        | Spot market refinements   | Further develop specific initiatives identified in the 2014/15 review of the spot market.   | We want to reduce any barriers to retail competition arising from current spot market arrangements. Refinements to the spot market have the potential to enhance competition in both the hedge and retail markets. | Following from the high-level assessment of options completed in 2014/15:  - identify spot market refinements for further evaluation  - complete a detailed cost benefit assessment for all refinements being evaluated. |        | On 1 September we announced our decision to further explore options for real time pricing and an hours-ahead market. Work in this area is taking longer than initially anticipated, however, could be brought back on track by year-end.  Real time pricing: the system operator has delivered a draft report on findings from consideration of real time pricing (RTP) options. The Board will consider the report and next steps in December.  Hours ahead market: a draft scope has been sent to the system operator and NZX for investigation of options. |
| 1.5 | 2        | Default<br>distribution<br>agreement<br>(previously<br>called more<br>standardisation<br>of UoSA) | Look at making the MUoSA a default agreement. The objective of the project is to promote retail competition and efficiency in the electricity industry. | retailer entry and   | Initial consultation on the draft default distribution agreement by September 2015.  |        | A consultation paper will be published in late January 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<br>2015/16  | Status | Comment   |
|-----|----------|--|---|--|---|--------|---|
| 1.6 | 1        | investigation  | Review of the<br>transmission pricing<br>methodology (TPM)<br>to promote overall<br>efficiency of the<br>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. |        | Summary of submissions on options working paper, and updated process flowchart, published on 20 October.  The draft issues paper and CBA is currently being prepared and will be issued early in the 2016 calendar year.  |
| 1.7 | 1        |  | 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.         |        | On 3 November we released a consultation paper, and a supporting companion paper, on the implications of evolving technologies for the pricing of distribution services. Submissions are due on 2 February 2016. The results of the consultation will be considered by the Board in May or June 2016. |
| 1.8 | 2        | Research<br>project: effect<br>of low fixed<br>charges |   | Participants and some consumer representatives consider the LFC Regulations may be harming retail competition, innovation in the retail sector, and causing inefficiency in the retail and distribution sectors. | RAG Research paper completed.  Recommendation paper ready for Board.  |        | RAG discussion paper being refined at Board request. Next steps are to be determined.   |

| #   | Priority | Project  | Description  | Why we are doing this project | Scheduled timeframe<br>2015/16  | Status | Comment  |
|-----|----------|--|--|-------------------------------|---|--------|--|
| 1.9 | 2        | Part 6<br>(distributed<br>generation<br>pricing<br>principles) | A review of Part 6 of<br>the Code pricing<br>principles, to ensure<br>consistency and<br>alignment with<br>distribution pricing<br>principles. |                               | Scoping of problem definition and issues prior to developing consultation paper.  Target added August 2015: release a consultation paper by 31 December 2015. |        | Review of distributed generation pricing principles (DGPP) consultation paper expected to be released shortly. |

# 2. Other outputs

# Programme: Implementation projects

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

| #  |   | Priority | Project  | Description   |  | Scheduled timeframe<br>2015/16  | Status | Comment   |
|----|---|----------|--|---|--|---|--------|---|
| 2. | 1 |          | National market<br>for<br>instantaneous<br>reserve<br>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. |        | System design is underway and is due to be completed by February 2016.  We are preparing updated information for participants about what is being implemented, why, and how it will work. |

| #   | Priority | Project                                      | Description  | Why we are doing<br>this project                                      | Scheduled timeframe<br>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.  In September NI lines companies and direct-connects were asked to provide the data that is required for the project.  We are progressing the technical requirements schedule and selection methodology.  Consultation is expected to start in June 2016. |
| 2.3 | 2        | Retail data implementation                   | Implementation of<br>the initiatives<br>resulting from the<br>retail data project<br>into service<br>provider and<br>participant<br>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 6.

| #   | Priority | Project   | Description   | Why we are doing this project   | Scheduled<br>timeframe<br>2015/16                        | Status | Comment  |
|-----|----------|---|---|---|--|--------|--|
| 2.4 | 2        | Consumer education programme  | Public education about<br>the performance of the<br>electricity market and<br>benefits that are<br>delivered through a<br>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.     |        | Consumer research has been completed and programme design is underway.   |
| 2.5 | 2        | Information<br>about spot<br>price risks<br>(previously<br>called stress<br>testing for<br>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<br>published.                               | NA     | Scheduled to start in March 2016.  |
| 2.6 | 2        | Review of secondary networks  | RAG project considering<br>the competition, reliability<br>and efficiency effects of<br>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. |        | Definition work was required on distributor & secondary networks.  A survey is being planned to determine number of secondary networks.  Work on requirements for secondary networks yet to be scoped. |

| #  | Priority | Project  | Description  | Why we are doing this project  | Scheduled<br>timeframe<br>2015/16  | Status | Comment                       |
|----|----------|--|--|--|--|--------|-------------------------------|
| 2. | 7 3      | Review of data requirements to enhance retail competition and efficiency (previously called EIEP review) | data exchanges between 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 operates as efficiently as possible. | In recent years the retail market has seen increased levels of competition, the increased penetration of 'data-rich' smart meters, new retail product initiatives, an increase and diversification in customer service expectations and new market initiatives such as the Authority's retail data project. Some stakeholders have indicated that efficient data exchange is a key issue for them and that improvements in this area could greatly reduce transaction costs. | Scoping of problem definition and issues prior to developing consultation paper. | NA     | Due to start in January 2016. |

### 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<br>2015/16   | Status | Comment   |
|-----|----------|--|---|--|--|--------|---|
| 2.8 | 1        | Demand side<br>bidding and<br>forecasting -<br>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. Expected to be completed by the end of the financial year.   |
| 2.9 | 2        | Review of<br>frequency<br>keeping<br>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.   |        | Investigations have been completed, which identified two areas of additional work.  The system operator is carrying out additional investigations, which are expected to be reported by March 2016.  Information paper expected to be published late in the financial year. |

| #    | Priority | Project                                 | Description  | Why we are doing<br>this project  | Scheduled timeframe<br>2015/16   | Status | Comment  |
|------|----------|---|--|---|--|--------|--|
| 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. |        | In January 2015, we asked the system operator to review the instantaneous reserve markets. The objectives were to determine whether the current markets for fast and sustained instantaneous reserve could be combined into one single market and whether new product definitions could be introduced to replace the current products for fast and sustained instantaneous reserve. The report was published on 18 August 2015.  Project timetable updated in November 2015 to reflect detailed planning with the system operator: report from system operator changed from June 2016 to November 2016. <sup>2</sup> |

<sup>&</sup>lt;sup>2</sup> This change was signalled in the 2016/17 appropriations and work programme consultation paper published on 13 October 2015.

| #    | Priority | Project  | Description  | Why we are doing this project  | Scheduled timeframe<br>2015/16   | Status | Comment   |
|------|----------|--|--|--|--|--------|---|
| 2.11 | 2        | Offer and<br>Dispatch:<br>review of gate<br>closure and<br>bid and offer<br>revision<br>provisions | 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. Gazettal timetable to be determined in April 2016.   |
| 2.12 | 2        | Inter-island<br>instantaneous<br>reserve<br>sharing  | 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 | Stronger competition in the instantaneous reserves market from the interim arrangements is expected to reduce the cost of procuring reserves. The interim arrangements also facilitate the development of the full national instantaneous  | Implementation of sustained instantaneous reserves (SIR) sharing between the two islands in December 2015. |        | Completed: on 8 September we announced our decision to request that the system operator enable and use a new facility to share sustained instantaneous reserve across the HVDC interisland link.  The system operator will implement the changes. |
| 2.13 | 2        | Dispatchable demand-constrained on/off   | Amend the Code to ensure dispatchable demand constrained-on/off payments provide the   | We are seeking to encourage the efficient use of dispatchable demand.  | Late-bid changes<br>Complete Code<br>amendment by March<br>2016.   |        | Late-bid changes: completed and announced 27 October. Code amendment completed, goes live 1 December.   |
|      |          | payments   | correct incentives.  |  | Price Infeasibility: solution<br>developed and consulted<br>on by June 2016                                |        | <b>Price Infeasibility:</b> consultation paper approved in November, to be released shortly.  |

| #    | Priority | Project  | Description  | Why we are doing<br>this project  | Scheduled timeframe<br>2015/16  | Status | Comment  |
|------|----------|--|--|---|---|--------|--|
| 2.14 | 3        | Frequency<br>keeping<br>constrained<br>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.  Project implementation is now underway. |
| 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. | NA     | Our project is scheduled to start in January 2016. 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<br>this project  | Scheduled timeframe<br>2015/16  | Status | Comment   |
|------|----------|---|--|---|---|--------|---|
| 2.16 | 2        | Instantaneous<br>reserve event<br>charge and<br>cost allocation<br>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. |        | WAG has been working on this project. The problem definition and scope are to be considered by WAG in November 2015. Options are to be considered by WAG in early 2016.                         |
| 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.          | NA     | Work on the issues paper to be commenced later in the financial year.   |

| #    | Priority | Project  | Description   | Why we are doing<br>this project   | Scheduled timeframe<br>2015/16   | Status | Comment  |
|------|----------|--|---|--|--|--------|--|
| 2.19 | 3        | Wholesale<br>market<br>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.  | Facilitates an active hedge market by enhancing the disclosure of information that influences the forward price curve. A more active hedge market assists with enhancing retail market competition.  | Initiate work on information disclosure provisions.  Progress an information paper on options for fuel information (for publication in 2016/17). |        | Work on information disclosure provisions underway by 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. Detailed discussion planned for WAG December meeting.  |

### 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<br>2015/16                 | Status | Comment   |
|------|----------|---------|--|--|--|--------|---|
| 2.20 | 2        |         | 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<br>amendment by<br>30 June 2016. |        | We consulted from 25 August to 6 October 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. |
|      |          |         |  |  |  |        | We are currently reviewing the submissions.   |
|      |          |         |  |  |  |        | Code/Decision paper expected to be considered by the Board in the last quarter of the financial year.   |

#### 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<br>2015/16   | Status | Comment   |
|------|----------|-----------------|---|--|--|--------|---|
| 2.21 | 1        | SOSPA<br>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 | 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. |        | New SOSPA and Code largely completed. On track for work programme milestones. |

| #    | Priority | Project  | Description  | Why we are doing this project  | Scheduled timeframe<br>2015/16  | Status | Comment   |
|------|----------|--|--|--|---|--------|---|
| 2.22 | 1        | Tender for<br>WITS,<br>pricing<br>manager,<br>reconciliatio<br>n manager<br>and clearing<br>manager<br>MOSPs | Tender for WITS, pricing manager, reconciliation manager and clearing manager MOSP roles and systems.  | 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. | New contract<br>arrangements for pricing<br>manager, clearing<br>manager, reconciliation<br>manager and WITS<br>manager in place, or<br>existing contracts<br>renewed, effective 1 May<br>2016.   | 000    | 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<br>for new service provider<br>arrangements to be in<br>place by<br>September/October 2016.  |        | Procurement plan and timetable approved by the Board in November 2015.  On track for new contract for 1 May 2017. We expect to publish the RFP in January 2016. |
| 2.24 | 2        | Systems<br>access<br>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.                    | Complete the WITS access arrangements, including a Code amendment enabling the Authority to set terms and conditions for WITS access.  Updated registry access policy published in 2015/16 (timing is subject to the completion of phase 2 of the retail data project). |        | Awaiting feedback on the draft access arrangements for WITS from NZX.   |

### 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<br>2015/16  | Status | Comment  |
|------|----------|--|--|---|---|--------|--|
| 2.25 | 2        | Review of half<br>hour switching<br>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.  | to the switching process for half-hour meters that  | 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. |        | Code in place and the registry has been amended. The new Code came into effect on 9 October 2015. We have received a request from a participant to amend registry validation. We are expecting two more requests. This matter is being considered. |
| 2.26 | 2        | Reconciliation<br>loss factor<br>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. | Determination of distribution losses is important for the accurate operation of the reconciliation system, and to the accuracy of consumer pricing. | Complete review of consultation responses and publish the finalised guidelines.   | NA     | Scheduled to start in February 2016.   |

| #    | Priority | Project  | Description  | Why we are doing this project   | Scheduled timeframe<br>2015/16 | Status | Comment   |
|------|----------|--|--|---|--------------------------------|--------|---|
| 2.27 | 2        | Review of trader<br>default<br>arrangements<br>for direct<br>connected<br>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. | consumer to become a           |        | The policy has been approved for considering shortened post-default exit period. One application has been received and is being considered against the policy. Reviews of post-default exit period provisions to be addressed after March 2016. The process has been completed for large consumers to become direct purchasers. |

| #    | Priority | Project   | Description  | Why we are doing this project  | Scheduled timeframe<br>2015/16   | Status | Comment                              |
|------|----------|---|--|--|--|--------|--------------------------------------|
| 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.                          |  | Complete consultation on the necessary Code amendment and, if appropriate, gazette the amendment.              | NA     | Scheduled to start in February 2016. |
| 2.29 | 3        | Part 10<br>operational<br>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. | Complete analysis of issues and options, and commence Code amendment consultation process for relevant issues. |        | The project is underway.             |

| #    | Priority | Project  | Description  | Why we are doing this project   | Scheduled timeframe<br>2015/16  | Status | Comment  |
|------|----------|--|--|---|---|--------|--|
| 2.30 | 3        | Review of Code<br>amendment<br>proposals for<br>scarcity pricing | Review the Code<br>amendments proposed by<br>the pricing manager and<br>take any necessary<br>actions, including any<br>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. | actions, including commencing any   | NA     | Scheduled to start in November 2015.   |
| 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.  |        | Consultation started on<br>10 November and closes on<br>22 December 2015.  |
| 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 requires expansion and amendment, and possibly re-consultation. |

| #    | Priority | Project                           | Description  | Why we are doing this project   | Scheduled timeframe<br>2015/16   | Status | Comment   |
|------|----------|-----------------------------------|--|---|--|--------|---|
| 2.33 | 3        | 2015 Code<br>amendment<br>omnibus | Minor Code amendments<br>to address operational or<br>other market efficiency<br>issues that arise during<br>the year. | We need to ensure that<br>the operational aspects of<br>the Code are achieving<br>the most efficient<br>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. |        | Consultation paper on review of Code for outdated technologies and processes expected to go to the Board in March 2016 for approval to release.  Completion of Code is expected by June 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<br>2015/16  | Status | Comment  |
|------|----------|--------------------------|--|--|---|--------|--|
| 2.34 | 2        | Participant<br>education | Educate participants on<br>the operation of the<br>Code, the market, and<br>market systems and<br>processes. | participants can obtain<br>the information<br>necessary to enter and | 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 is underway of a web-based tool for presenting the material currently included in guidelines.  Consideration will be given to full development once the pilot has completed (by the end of December 2015). |