

# **Electricity Authority Work Programme**

1 July 2019 - 30 June 2020

30 July 2019

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## **Executive Summary**

The Authority's work programme details the major projects we intend to progress during the 2019/20 financial year. It also links the work programme to the Authority's strategic intentions, alongside the Government's priorities.

#### A rapidly changing environment

Since October 2018, there have been a number of changes within the Authority's external environment:

- The material wholesale market issues that began in spring 2018
- The range of proposed recommendations likely to be directed at the Authority by the Electricity Price Review (EPR) panel (based on the 2019 options paper) and the Government's response
- The Innovation and Participation Advisory Group's (IPAG) advice on the equal access framework, which suggests that a material change in facilitative and regulatory work is required to harness the benefits of distributed energy resources
- The likely recommendations from the Interim Climate Change Committee (ICCC) relating to the wholesale electricity market, particularly around growth in the quantum and mix of renewable generation.

#### A more responsive approach

To assist with responding to these changes, the work programme for 2019/20 has been prioritised in a different way to previous years, to allow us to respond to the above, while continuing to promote competition in the electricity markets, and incentivising industry participants to develop and operate the electricity system to efficiently manage security and reliability and increasing efficiency.

These external drivers sit alongside existing commitments to resolve long-standing and significant work programme projects that are set to deliver positive long-term benefits and promote wellbeing for consumers, as supported by the Authority's strategic framework.

Alongside the strategic intentions, and external drivers of the 2019/20 work programme, we will continue to focus on the issues that matter to consumers:

- Will the lights stay on? do the market arrangements ensure continued electricity supply in dry years or during foreseeable emergencies?
- Do consumers have a choice? Are there options out there for consumers and can they access them easily?
- Are prices reasonable? Do the prices consumers pay reflect the efficient costs of supplying their electricity?
- Is innovation happening? Are suppliers developing new services and pricing plans to deliver greater value to consumers?

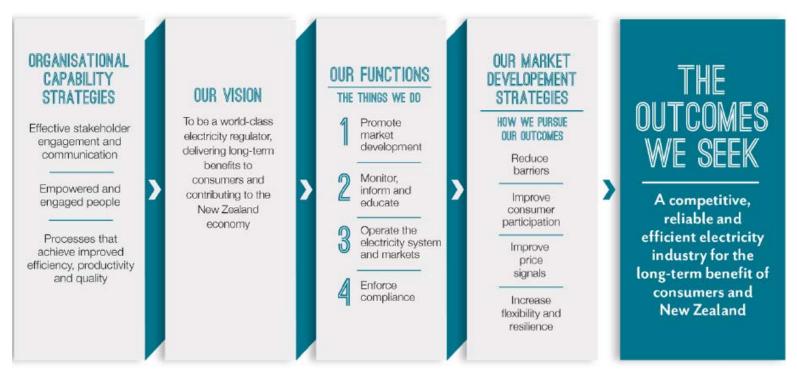
### Our strategic framework

Our 2017-21 Statement of Intent (SOI) sets out our current strategic framework, along with impact measures and targets which reflect our long-term strategic intentions for the next four years. In 2017, the strategic framework was amended slightly to:

- remove Maintain Compliance as a separate market development strategy, noting that this remains a key function for the organisation
- highlight the strategic importance of lifting our organisational capability by including our organisational capability strategies.

The SOI is due to be refreshed for the next four year period over the 2019/20 year. The current strategic framework is shown as Figure 1.

Figure 1: The Electricity Authority's strategic framework



### Linking our strategy and work programme

To remain responsive to changes in our operating environment, we review the focus of our work programme each year. We then set out in the statement of performance expectations (SPE) how our work for the coming year is expected to contribute to achieving our strategic objectives.

The work programme represents our major projects for the coming year. It does not include our business as usual activities and minor projects, or any 'pending' projects that we currently do not have the resources to pursue.

Given the likely long-term government priorities for the electricity sector, the key focus for our work programme in 2019/20 can be expressed through two key themes:

- (a) Promoting reliable, resilient and adaptable infrastructure (this aligns with our market development strategy of *increasing flexibility and resilience of the market and of market systems*)
- (b) Promoting efficient deployment of capital and technology, that is responsive to market signals (this aligns with our market development strategy of *improving price signals*).

Along with the exercise of our functions, the work programme also makes a significant contribution to achieving our strategic objectives. The work programme framework has five distinct programmes (A to E), each linked to the delivery of one or more of our key strategies. The main links between our programmes and our strategic priorities are described in Table 2 below.

Table 2: A summary of our programme framework

Programmes	Programme descriptions	Main links to our strategies
Programme A: Evolving technologies and business models	Initiatives to reduce inefficient barriers to the development and use of evolving technologies and business models across the supply chain. This includes reducing inefficient barriers to:	Reduce barriers
	<ul> <li>Any consumers purchasing directly from the wholesale electricity market or directly from local generators</li> </ul>	
	<ul> <li>Mass-market demand response (DR) and aggregators of mass-market DERs. DERs include traditional distributed generation, batteries, micro-grids and 'prosumer' situations.</li> </ul>	
Programme B: Consumer choice and competition	Initiatives to promote competition and empower consumer choice in the retail market.	Improve consumer participation
Programme C: Pricing and cost allocation	Initiatives to promote efficient pricing in markets and for monopoly services.	Improve price signals
Programme D: Risk and risk management	Initiatives to promote efficient management of capacity and energy risks.	Improve price signals Increase flexibility and resilience
Programme E: Operational efficiencies	Initiatives to increase the efficiency of electricity market operations. In particular, we look at refining processes set out in the Code and initiatives to improve market systems. This programme includes services provided by market operations service providers.	Supports all our strategies

## Our project prioritisation approach

For the 2019/20 year, we have taken a different approach to prioritising the projects included within the Authority's work programme. This is designed to ensure that the Authority's attention is directed to the work that will provide the best possible benefits for both consumers and participants.

#### **Committed Projects**

These are the projects that the Authority has committed resource to this financial year. Committed projects are the highest priority projects for the Authority; ie, those that make the strongest contribution to our statutory objectives and strategic impacts. Committed projects will have published targets within the work programme, where tangible and quantifiable targets can be identified.

Table 3

Committed project types	Description	
Pricing/cost allocation projects	The core Authority pricing/cost allocation projects that directly contribute to the efficient deployment of capital and technology, ie, TPM, distribution pricing and real-time pricing	
Consumer-focussed projects  The customer facing what's my number website and campaigns, noting that aligning this furnity.  NZ's Powerswitch site remains a priority.		
External drivers	Projects that are materially influenced by responding to external drivers (refer table 4)	
Supporting projects	Projects related to our highest priority projects that are best managed and sequenced as part of a wider programme of work, eg, participation of new generating technologies in the wholesale market, as part of our broader evolving technology programme	

#### **External Drivers**

The Authority projects that are or will be materially influenced by responding to external drivers, such as:

Table 4

External Driver	Description	
Electricity Price Review (EPR)	In anticipation of the final options being released, a targeted budget has been set aside to introduce a number of projects into the committed work programme. These projects will be introduced into the work programme as soon as the Minister has responded to the EPR recommendations.	
Undesirable Trading Situation (UTS)	Results of an investigation into an allegation of a potential UTS in the spring of 2018 raised some issues that warranted further attention, around aspects of the wholesale market that could be improved. As a result, there are a number of projects that have been included in the committed work programme under the umbrella of strengthening the wholesale market, ie, hedge market enhancements (market making) and wholesale information disclosure. Our trading conduct work also sits under this umbrella.  The Innovation and Participation Advisory Group (IPAG) provided advice on creating equal access to	
Response to IPAG equal advice	The Innovation and Participation Advisory Group (IPAG) provided advice on creating equal access to electricity networks. The open networks development programme has been included in the work programme as a direct response to IPAG's advice. A number of other projects are included in the committed work programme (under the evolving technologies banner) that will contribute to the equal access framework, and to further promote competition, reliability and efficiency in the provision of electricity and electricity related services, including network support services (including ACCES, DDA).	
Electrification of New Zealand	The Interim Climate Change Commission is due to report back on the 100% renewables challenge which will likely impact further on the already changing generation mix. We are considering the readiness of the wholesale market, and transmission and distribution networks, to respond to increased electrification of the economy.	

### **Discretionary Projects**

These are projects that are still a high priority to the authority, with the delivery of key milestones in the year a key focus for the Authority. However these projects may have fewer resources assigned to them. Discretionary projects will not have published targets within the work programme, but they could potentially elevated to committed projects during the quarterly re-prioritisation exercise. We have only listed below the discretionary projects that we consulted on in our appropriations consultation in November 2018. While we continue to see value in these projects, there is a range of other work we will consider initiating if we have the resources to do so later in this financial year.

### **Work Programme Reporting**

To summarise the progress of our committed projects over the year, we will publish a quarterly work programme report. Project performance is also an organisational performance measure, set out in the 2019/20 SPE as part of our 'promote market development' function. Accordingly, the 2019/20 Annual Report will also indicate the percentage of projects that are 'on track' as at 30 June 2020, consistent with the 12-month work programme report.

The format and content of the 2019/20 work programme is based on committed projects, in order of continuing with rapid completion (ie, nearing complete), continuing and starting/resuming, with the discretionary projects following. Note that project targets will only be published for committed projects where a tangible, quantifiable target can be determined.

## **Committed projects**

				cle, and targets	
Project name	Description	Why we are doing this project	Link to programme	Indicative Project completion	2019/20 target descriptions
		Continuing with rapid completion	1		
Dispatch Service Enhancement (DSE) Implementation	Amendments to the Code and the Approved Systems Document are needed to enable the systems operator to complete its DSE project.	These amendments allow the system operator to replace GENCO as the approved system for issuing dispatch instructions with two alternate communication protocols (ICCP and web services).  The project aims to improve efficiency and competition in the wholesale market by lowering entry and operational costs for dispatch and enabling potential new features. DSE is regarded as a key enabling project for settling on real-time pricing, and for greater participation in dispatch by new technologies.	E — Operational efficiencies	New system go-live Q1 19/20 (BAU) Transition participants to new system complete Q2 20/21	Implement DSE.
Implementation of new wind generation offer provisions	This project will implement improvements to offer and dispatch Code provisions for wind generators	To improve offer provisions covering wind generators to ensure that they promote reliability and efficiency in the long-term interests of consumers	C – Pricing and cost allocation	Complete implementation Q2 19/20	Implement new wind generation offer provisions
Ramping down constrained on payments	Review of whether constrained-on payments should continue to be made when generation is ramping down.	We want the constrained on payments to promote efficiency, including more efficient dispatch, investment, and use of electricity and risk management.	C — Pricing and cost allocation	Q3 19/20	Complete removal of constrained on payments for down generation.

				Project lifecyc	le, and targets
Project name	Description	Why we are doing this project	Link to programme	Indicative Project completion	2019/20 target descriptions
		Continuing			
Transmission pricing review	A review of the transmission pricing guidelines	We want to improve operational and investment efficiency in the transmission sector. This will also contribute to efficiency in the broader electricity market.  More efficient transmission pricing will promote more efficient use of the transmission network and more efficient investment in the network and by parties using the transmission network.	C — Pricing and cost allocation	Guidelines completion: Q4 19/20 Implementation phase beginning Q4 19/20	Complete consulation and release decision.
Review of spot market trading conduct provisions	Review trading conduct provisions in light of events that have tested these provisions. Take into account any findings from case studies, performance reports and compliance reports.	To ensure the trading conduct provisions are effective in promoting outcomes consistent with workable competition.  MDAG is initially looking a subset of the full range of trading conduct issues, focussed on spot market trading conduct when pivotal.	C — Pricing and cost allocation	2020/21	Board response to MDAG advice (focussed on conduct when pivotal)
Extended reserve implementation	Consider the appropriateness of current measures to minimise disruption of supply in the event of unexpected adverse events.	To improve the security and flexibility of the electricity system through improved extended reserves.	D — Risk and risk management	Indicative Board decision Q2 19/20	Board approval of project reset proposal

				Project lifecyc	le, and targets
Project name	Description	Why we are doing this project	Link to programme	Indicative Project completion	2019/20 target descriptions
		Continuing			
Spot market settlement on real-time pricing (implementation)	This project will develop and implement system changes to introduce Code amendments for real-time pricing market service provider systems, to change the way spot prices are calculated and published, so everything is done in real-time.	We want to reduce barriers to retail competition and new technologies for demand response arising from current spot market arrangements.  Enhancements to the spot market pricing arrangements have the potential to increase competition in the hedge and retail markets, and improve reliability and operational efficiency through greater technology adoption and demand responsiveness to spot market prices.	C — Pricing and cost allocation	2022/23	No targets published as yet, as requirements are with the system operator for development. The Authority are providing project steering only for this phase.

				Project lifecyc	le, and targets
Project name	Description	Why we are doing this project	Link to programme	Indicative Project completion	2019/20 target descriptions
		Continuing			
What's my number and repurposed information campaign	Promote to consumers the benefits of comparing and switching retailers using a multi-channel advertising campaign – and consider the benefits of continuing WMN in its current form, to determine whether the campaign needs to evolve given innovation in services and products and emerging technologies.	WMN encourages consumers to shop around by increasing awareness of the possible savings available and that it is easy to switch. However, consumers are increasingly choosing between traditional and emerging innovative services and products, and between suppliers of these products (eg, solar, batteries, electric vehicles, etc.). In this changing environment, the Board has asked us to try different approaches to target the 40% of New Zealanders who have not checked if they're on the best deal. This more agile, and targeted approach aligns with the EPR and allows us to leverage off the previously successful WMN campaign while awaiting the EPR panel's final recommendations to the Government about the future of the WMN website.	A — Evolving technologies and business models	on-going with calendar year on year campaigns	Deliver 2019 campaign.  If necessary, develop service level standards and contract for integrated powerswitch/WMN service.

				Project lifecyc	le, and targets
Project name	Description	Why we are doing this project	Link to programme	Indicative Project completion	2019/20 target descriptions
		Continuing			
Switch process review	To address known shortcomings that inhibit innovation and implement changes to the switching process in response to emerging retail business models.	With the smart meter (AMI) rollouts nearing completion, new retail business models have emerged and become established, the current switching processes are causing issues and need to be reviewed and refined to ensure they are fit for purpose.	E — Operational Efficencies	2021/22	If necessary, amend the Code for easy to resolve issues.
Market enhancements omnibus	This project includes a suite of non 'sector-shaping' market enhancement initiatives. This will include initiatives such as operational or fit-for purpose reviews, the annual Code review programme and enhancements to the current market.	These rapidly realisable initiatives are implemented to ensure the smooth running of the market.	E – Operational efficiencies	Q4 19/20	At least 80% of market enhancements achieve planned process deliverables for the year.
Saves and Win backs	A project to consider whether changes to the Code are required in response to the post-implementation review of the 'saves' Code provisions. It is important that new entrant retailers have a level playing field for competing for customers, and that saves and win-backs do not impede efficient competition.	MDAG provided saves and winbacks advice to the Authority in April 2019. The Electricity Price Review Panel's February 2019 options paper took a different approach. The Authority will determine next steps, and a target, for this project once it receives the Electricity Price Review Panel's final recommendations.	B – Consumer choice and competition	TBC	Target to be determined.

				Project lifecy	cle, and targets
Project name	Description	Why we are doing this project	Link to programme	Indicative Project completion	2019/20 target descriptions
		Continuing			
Default distribution agreement (DDA)	A review to consider amending the Code to introduce a default distributor agreement, to set out the terms of service provided by a distributor to the retailers trading on its network.	The DDA is an important part of developing an equal access framework and promoting more participation, innovation and competition.  A DDA is likely to promote retail competition, reliability and efficient operation. It could reduce entry and expansion barriers, reduce the costs of doing business, and enhance innovation in the retail  This project contributes to the response to IPAG's equal access advice.	B – Consumer choice and competition	Q4 2019/20	Implement DDA

				Project lifecycle, and ta		
Project name	Description	Why we are doing this project	Link to programme	Indicative Project completion	2019/20 target descriptions	
		Continuing				
Additional Consumer choice of electricity services (ACCES)	This project will investigate the benefits of enabling additional consumer choice of electricity services and any barriers that may prevent this choice. The project will effectively allow for the un-bundling of service offerings.	This project will allow consumers (as buyers and sellers of electricity services) to interact with multiple service providers.  Un-bundling service offerings (EV, hot water, general use etc.) will increase unique service offerings and lower the overall cost to consumers. This will:  • increase opportunities to buy and sell services which will increase investment and competition  • increase investment in distributed energy resources and other services which will deliver increased renewables and lower CO2 emissions.  This project contributes to the response to IPAG's equal access advice	A – Evolving technologies and business models	Q4 2021/22	Board response to IPAG advice (input services)  Quick wins implemented	

				Project lifecyc	le, and targets
Project name	Description	Why we are doing this project	Link to programme	Indicative Project completion	2019/20 target descriptions
		Continuing			
Open networks development programme	This programme will be Identifying ways of providing for uptake of new technology on distribution networks.	This will ensure distribution networks remain flexible and open to emerging consumer preferences and new technologies, including for instance; greater use of distributed generation and electric vehicles.  This project contributes to the response to IPAG's equal access advice	A – Evolving technologies and business models	TBC	Finalise Open Networks Development Programme  Further specific targets to be determined.
Participation of new generating technologies in the wholesale market	Investigate any barriers in the Code to the efficient operation of new generating technologies in the wholesale market (e.g. offer, dispatch, spot price arbitrage and ancillary service market participation)	Removing any barriers to different forms of generating technologies in the wholesale market could improve competition, contribute to reliability and potentially improve e the operational efficiency of the electricity industry.  Linked to electrification of New Zealand driver.	A – Evolving Technologies and business models	MDAG requirements completion Q2 2020/21	MDAG <b>publish</b> discussion paper.

	Description	Why we are doing this project	Link to programme	Project lifecycle, and targets			
Project name				Indicative project completion	2019/20 target descriptions		
	Starting						
Distribution pricing — Monitoring distributors adoption of more efficient prices	This project will implement and operate the monitoring framework developed as part of the Distribution pricing review.	Distribution price reform is currently industry led. The Authority wants distributors to move as quickly as practical to reform their prices. The Authority will monitor the speed and quality of industry reform efforts.	C- Pricing and cost allocation	Ongoing	Finalise monitoring regime  Baseline distributor progress		
Are there barriers to renewables in the wholesale market?	This project investigates whether there are any impediments in the wholesale market to achieving the Government's commitments relating to renewable electricity generation.	To ensure the wholesale market is not an impediment to achieving the Government's commitments relating to renewable electricity generation:  1. introduce a Zero Carbon Act and an independent climate commission, based on the recs of the Parliamentary Commissioner for the Environment  2. request the Climate Commission to plan the transition to renewable electricity by 2035 (which includes Geothermal) in a normal hydrological year.  Linked to electrification of New Zealand driver.	C – Pricing and cost allocation	Q3 20/21	Finalisation of project plan		

Project name	Description	Why we are doing this project	Link to programme	Project lifecycle, and targets			
				Indicative Project completion	2019/20 target descriptions		
	Resuming						
Hedge market enhancements	<ul> <li>A project to progress the hedge market recommendation resulting from the Authority's review of winter 2017:</li> <li>investigate and make on-going enhancements to the hedge market</li> <li>investigate the value of further development of exchange traded (ASX) products</li> <li>Evaluation of incentive based arrangements for market making Review of the hedge disclosure website.</li> </ul>	To provide more transparent and robust forward price signals, and an electricity market that is more competitive, being readily accessible for existing participants and purchasers, as well as for new entrant generators and retailers.  This project is in response to the results of the investigation around potential UTS.	C – Pricing and cost allocation	Q3 20/21	Decide design of enduring market making		
Wholesale market information disclosure	A project to identify any gaps in the Authority's power to require further information disclosure (such as contract fuel supplies) and strengthen disclosure rules to include information on the availability of generation fuel.	Effective information disclosure is important for a well-functioning market. We seek to facilitate an active hedge market by enhancing the disclosure of information that influences the forward price curve. A more active hedge market enhances retail competition.	C – Pricing and cost allocation	Q1 22/23	Target to be determined after project initiation		

# **Discretionary projects**

Project name	Description	Why we are doing this project	Link to Programme
Review of Code provisions for wholesale market arrangements	Review Part 13 of the Code relating to trading. This includes the spot market, scheduling, offering, dispatch, pricing, hedge market and Financial Transmission Rights (FTR) trading information. This would include removing unnecessary barriers to new technology.	Improve the efficiency and competition of the wholesale market by clarifying operational processes and requirements, removing unnecessary barriers, and providing useful information to participants.	E — Operational efficiencies
Barriers due to legacy systems and processes	A market performance review of the retail electricity market, with a particular focus on identifying barriers to new entrants transacting with incumbents.	Over time some retailers have developed workarounds and side-arrangements to cater for limitations in their legacy systems. Sometimes these processes make it unnecessarily difficult for new entrants to transact with incumbent retailers and meet their code requirements.  We want to remove these inefficient barriers so that new entrants can compete on a 'level playing field'. We also want to facilitate increased.	A – Evolving Technologies and business models
		also want to facilitate increased automation in the retail sector as this can lead to greater innovation and lower costs.	

Project name	Description	Why we are doing this project	Link to Programme
Improving accuracy of spot price forecasts	A project to improve the accuracy of prices in the spot market forecast schedules available up to 36 hours in advance of real-time.	We want to reduce barriers to retail competition and demand response arising from current spot market arrangements.  Improving the accuracy of spot price forecasts is expected to encourage more efficient demand-response and generation scheduling, and benefit those parties looking to employ new technology and business models.	C – Pricing and cost allocation

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