

Potential projects for the 2018/19 work programme

3 May 2018

This document is a working draft of projects for the Authority 2018/19 work programme. The list of projects has not been considered by the Board.

Green shading is for existing projects which are proposed to continue. Red shading is for existing projects which may be halted or put to pending. Orange shading is for proposed new projects.

Please note:

- this does not include implementation projects
- this document includes information on a project by project basis, however when the 2018/19 work programme is announced, some projects with close interlinkages may be amalgamated by category

PROGRAMME A: Evolving technologies and business models

| Project name | Description of the project | Rationale – why we think it's a worthwhile project |
|--------------|---|---|
| Equal Access | The Innovation and Participation Advisory Group is investigating CRE impacts relating to equal access to distribution and transmission networks. It is to consider and report on: (a) whether the operation of the existing equal access framework for transmission and distribution networks is sufficiently effective at promoting competition, efficiency and reliability for the long term benefit of consumers. This may involve, for example, establishing the current feasibility for competitive supply of network support services (b) potential options to strengthen the equal access framework to further promote competition, reliability and efficiency in the provision of electricity related services, including network support services (c) the design, cost and benefits of any changes (regulations and/or market facilitation measures) identified to strengthen the equal access framework (including arrangements for exchange of network support services). | The Authority wants to ensure that network users are confident that they are treated equally when connecting to, or using, the distribution and transmission networks to either deliver services over the network or provide services to the network itself. We have detected a lack of confidence between network users that this is the case. The concern is that there will be adverse effects on competition, reliability and efficiency. The Innovation and Participation Advisory Group is currently undertaking this project. |

| Project name | Description of the project | Rationale – why we think it's a worthwhile project |
|---------------------------------|---|--|
| Integration of hosting capacity | Hosting capacity is the capacity of distributed generation that a network can tolerate without exceeding its quality thresholds. | We are seeking to improve competition and efficiency by allowing more consumers to become more self-sufficient, eg, using photo-voltaic and batteries. |
| | We need to replace "congestion period" with "hosting capacity" within Part 6. Recent guidelines released by the University of Canterbury makes this work more urgent. Possible changes to Part 1A process to allow distributors to require inverter settings for network protection. | Allowing distributors to use hosting capacity and to specify inverter settings allows distributors to allocate DG connections efficiently rather than on the current 'first come first served' basis. |
| Monitoring for new technologies | Investigating and implementing changes to market systems required to monitor and enable new technologies, including any Code changes required to support data gathering. | Supporting the programme of work around enabling new technologies and business models. This will support better policy and market design, better information for public and private investment decisions, better information for government, as well as for the Authority monitoring. |

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| Multiple Trading Relationships | This project explores the issues involved in allowing multiple trading relationships at each connection point. | Consumers are increasingly able to obtain electricity services (including retail, generation, and demand response) from multiple suppliers. At present, the Code and industry practices limit consumers' ability to establish relationships with more than one electricity services provider. Allowing multiple trading relationships could promote competition, for example by facilitating development of new business models and services. There is also potential to promote reliability by using diverse, small-scale distributed energy resources. |
| Participation of new generating technologies in the wholesale market | Investigate and address 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). Note that participation of smaller scale storage technology being investigated as part of the enabling mass participation project. | Removing any barriers to different forms of generating technologies in the wholesale market could improve supply side competition, contribute to reliability and potentially improve the operational efficiency of the electricity industry. |
| Review of distribution sector | The Authority anticipates that rapid technological change is going to have an increasing effect on electricity distribution businesses (EDBs). EDBs have varied governance arrangements and widely varying sizes. Some have ancillary businesses that are not regulated. | We want a better understanding of the factors that influence the ability of EDBs to respond to technological change. |

PROGRAMME B: Consumer choice and competition

| Project name | Description of the project | Rationale – why we think it's a worthwhile project |
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| What's My Number (WMN) | The WMN campaign promotes to consumers the benefits of comparing and switching retailers using a multi-channel advertising campaign. As part of WMN we partly fund the ConsumerNZ Powerswitch website, which is an independent electricity price comparison website. | and find the best electricity deal for their needs. |
| Default Distributor Agreement (DDA) | A review to consider amending the Code to introduce a default distributor agreement. The contractual relationship between a distributor and retailers is set out in a distribution agreement (also known as a use-of-system agreement (UoSA)). The UoSA sets out the terms of the service provided by a distributor to the retailers trading on its network. | A DDA could promote retail competition and efficient operation. A DDA could reduce entry and expansion barriers, reduce the costs of doing business, and enhance innovation in the retail market. The terms of the relationship between a distributor and retailers are important for retail competition and efficiency. |
| 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. | Saves and win-backs are at the crux of competition between retailers. It is important that new entrant retailers have a 'level playing field' for competing for customers. This project is important for promoting retail competition. |

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| Review of switching process | Work was previously carried out and consulted on in 2014/15 on possible improvements to switching processes. At the time, participants were not supportive as the implementation costs were considered high compared to benefits. Participants have recently indicated that they wish this to be revisited. | We are seeking to improve the efficiency of the switching process. |
| Re-purposed information campaign | Consider benefits of continuing WMN in its current form, and options and benefits of a repurposed information campaign given increased innovation in technology and business models. | We want to make sure WMN in its current form continues to deliver long-term benefits to consumers, and whether a repurposed information campaign might deliver additional benefits. |

PROGRAMME C: Pricing and cost allocation

| Project name | Description of the project | Rationale – why we think it's a worthwhile project |
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| Distribution Pricing | The purpose of this project is to determine whether any changes should be made to the current arrangements for distribution pricing (distribution pricing principles and information disclosure guidelines). | We want to ensure distribution services have price structures and levels that are more efficient, ie, cost reflective and service based. We want to get better operational and investment efficiency in the distribution sector. This will also contribute to efficiency in the broader electricity market. |
| 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 transmission network and by parties using the transmission network. |
| Spot market settlement on real-time pricing | Design and implement the systems, processes and Code amendments required to enable dispatch based settlement on real-time pricing. | 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. |

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| Improving accuracy of spot price forecasts | 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. |
| Review of spot market trading conduct provisions | Review of 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. | Improved wholesale market competition by ensuring the trading conduct provisions are practicable and well understood. The Market Development Advisory Group is currently undertaking tis project. |
| Guidelines for secondary networks: network extensions and customer networks | The secondary network guidelines were published in 2008. This project has been awaiting the outcome of a consultation on secondary networks. It is becoming more necessary as the potential for microgrids and embedded networks is increasing significantly. Also, the definition of distributor in the Electricity Industry Act 2010 changed 1 July 2017. This project is to amend and update the existing guidelines to the requirements of the Act and the Code. | We want to make sure that secondary network operators understand their Code obligations, and that these networks are operated as efficiently as possible. Guidelines published. |
| Allocation of residual loss and constraint excess | Residual loss and constraint excess (LCE) is paid by Transpower to distributors. The convention has been for distributors to pass these monies on to retailers. Retailers have requested this convention be codified. | We want to make sure residual LCE is allocated in a way which promotes competition and efficiency. |

PROGRAMME D: Risk and risk management

| Project name | Description of the project | Rationale – why we think it's a worthwhile project |
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| Introduction of hedge market cap products | Introduction of exchange traded cap products to provide more transparent pricing of supply risks and encourage the provision of infrequently dispatched generation plant. Will have both energy (lower strike price) and capacity (higher strike price) products listed. Ensuring the Electricity Contracts webpage is able to record cap transactions. | We seek to improve retail competition and security of supply by giving market participants greater certainty about forward price expectations. |
| Review Regulatory Settings for official conservation campaigns (OCCs) | Review of settings for OCCs, including arrangements for sub-national OCCs, and nature and size of OCC start/stop triggers drawn from HRCs. | The low 2017 hydro inflow sequence has highlighted a number of potential improvements to the triggering of OCCs, including the appropriate incorporation of contingent storage in the calculation of the HRCs. In addition, the system operator is due to undertake its schedule review of the Security of Supply Forecasting and Information Policy (SOSFIP) (that sets out the process for calculating HRCs). It is timely for the Authority to review the OCC arrangements to maintain system security and efficient management and dispatch of resources during dry years. |
| Frequency control market | Develop arrangements to improve the generator governor asset owner performance obligations to maintain effective frequency management. | Provide stable frequency of an acceptable quality to consumers at the lowest long-term cost – a productive efficiency improvement for the long-term benefit of consumers. |

| Project name | Description of the project | Rationale – why we think it's a worthwhile project |
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| Further development of the hedge market | Investigating and making ongoing enhancements to the hedge market. This may include the further development of exchange traded products, evaluation of incentive based arrangements for market making and reviewing the hedge disclosure website. | We seek to improve reliability and competition by giving market participants greater certainty about forward price expectations and improved mechanisms to manage risk. This will enhance decision-making. |

PROGRAMME E: Operational efficiencies

| Project name | Description of the project | Rationale – why we think it's a worthwhile project |
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| Code Review Programme | Ordinarily, each Authority Code change proposal has a single theme, and is advanced independently of other proposals. However, the <i>Code Review Programme</i> takes an 'omnibus' approach that allows the Authority to make a number of relatively small amendments, each with a different theme, all at once. | The Authority considers that the 'omnibus' approach allows it to use its resources efficiently, and that the Code will benefit from improvements that might not otherwise have been possible. The <i>Code Review Programme</i> focuses particularly on improving the operational efficiency of the industry, which reduces participants' costs of transacting in the industry. By improving the clarity and operation of the Code, the <i>Code Review Programme</i> can also deliver dynamic efficiency benefits. |
| Single reporting methodology for distributor billing and efficiencies of outage notifications | This project has come from the 2017/18 review of the EIEPs. The project is to implement the industry supported changes to the distributor billing reporting methodology and the method for implementing the notifications for planned outages. | As part of the 2017/18 review of EIEPs, industry strongly supported a single distributor billing reporting methodology, and a centralised, registry based, process for managing distributor planned outage notifications. |
| Operational review of registry fields | A project to determine if additional information is required in the registry and if so, to implement the required new fields, including updating of any related reports. | We have had feedback from participants directly and through several projects (such as the Part 10 operational review and Monitoring new technologies) that new fields are needed in the registry. |

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| Operational review of metering and registry processes | A review of operational elements of Part 10 of the Code to ensure efficient operation of the metering, registry and the related processes. We will also review related sections in other Parts of the Code. | The new Part 10, which came into effect in 2013, introduced a number of new obligations and processes relating to metering, switching and the registry. The operation of the market has continued to evolve since that time. We want to make sure these processes are as efficient as possible. |
| Review of trader default disconnection process for direct connected participants | Ensure the Code is fit for purpose, and there is a smooth process for disconnecting a defaulting direct purchaser. | We want to make sure the Code allows the direct purchaser default process, including any necessary disconnections, to work smoothly |
| Participant register database | Deliver automated participant register online, including integration to NZBN. | Current register is Excel-based and past its useful life. This will integrate registers and processes across the operations and compliance, and also addresses Government expectation for NZBN. |
| Review of wholesale market trading arrangements | Review Part 13 (also potentially Part 8 and elements of Part 1) of the Code relating to trading. This includes the spot market, scheduling, offering, dispatch, pricing, hedge market and FTR trading information. This would include removing unnecessary barriers to new technology. Possible MDAG project. | Improve the efficiency and competition of the wholesale market by clarifying operational processes and requirements, removing unnecessary barriers, and providing useful information to participants. |