

# Future Security and Resilience: Common Quality Technical Group (FSR CQTG)

Meeting 1: 06 July 2023

# AGENDA

Time	Item
Prior to 9:00 am	<b>Sign in at reception</b>
9:00 am	<b>Welcome and introductions (15 mins)</b>
9:15 am	<b>Overview of the FSR work programme and the CQTG's role (20 mins)</b>
9:35 am	<b>Additional common quality issues identified through consultation (35 mins)</b> <ul style="list-style-type: none"> <li>Objective: Confirm that all key issues with the common quality requirements in Part 8 of the Code have been identified</li> </ul>
10:10 am	<b>Criteria for evaluating options to address issues (20 mins)</b>
<b>10:30 am</b>	<b>Morning tea (15 minutes)</b>
10:45 am	<b>Long list of options (60 mins)</b> <ul style="list-style-type: none"> <li>Objective: Consider a long list of options to address the key Part 8 common quality issues, and confirm any additional plausible options</li> </ul>
11:45 am	<b>Shorter long list of options (35 mins)</b> <ul style="list-style-type: none"> <li>Seeking agreement on options removed from the long list based on the criteria #1</li> </ul>
<b>12:20 pm</b>	<b>Lunch (45 minutes)</b>
1:05 pm	<b>Medium list of options (90 mins)</b> <ul style="list-style-type: none"> <li>Objective: Agree a shorter list of options to address these key issues, as an interim step towards a short list of options</li> </ul>
2:35 pm	<b>No regrets system studies (20 mins)</b> <ul style="list-style-type: none"> <li>Objective: Agree some 'no-regrets' system studies the Authority can request the system operator to scope</li> </ul>
2:55pm	<b>Next meeting (5 mins)</b>
<b>3:00 pm</b>	<b>End of meeting</b>

# INTRODUCTIONS

- **Chair:** Sheila Matthews
- **Members:**

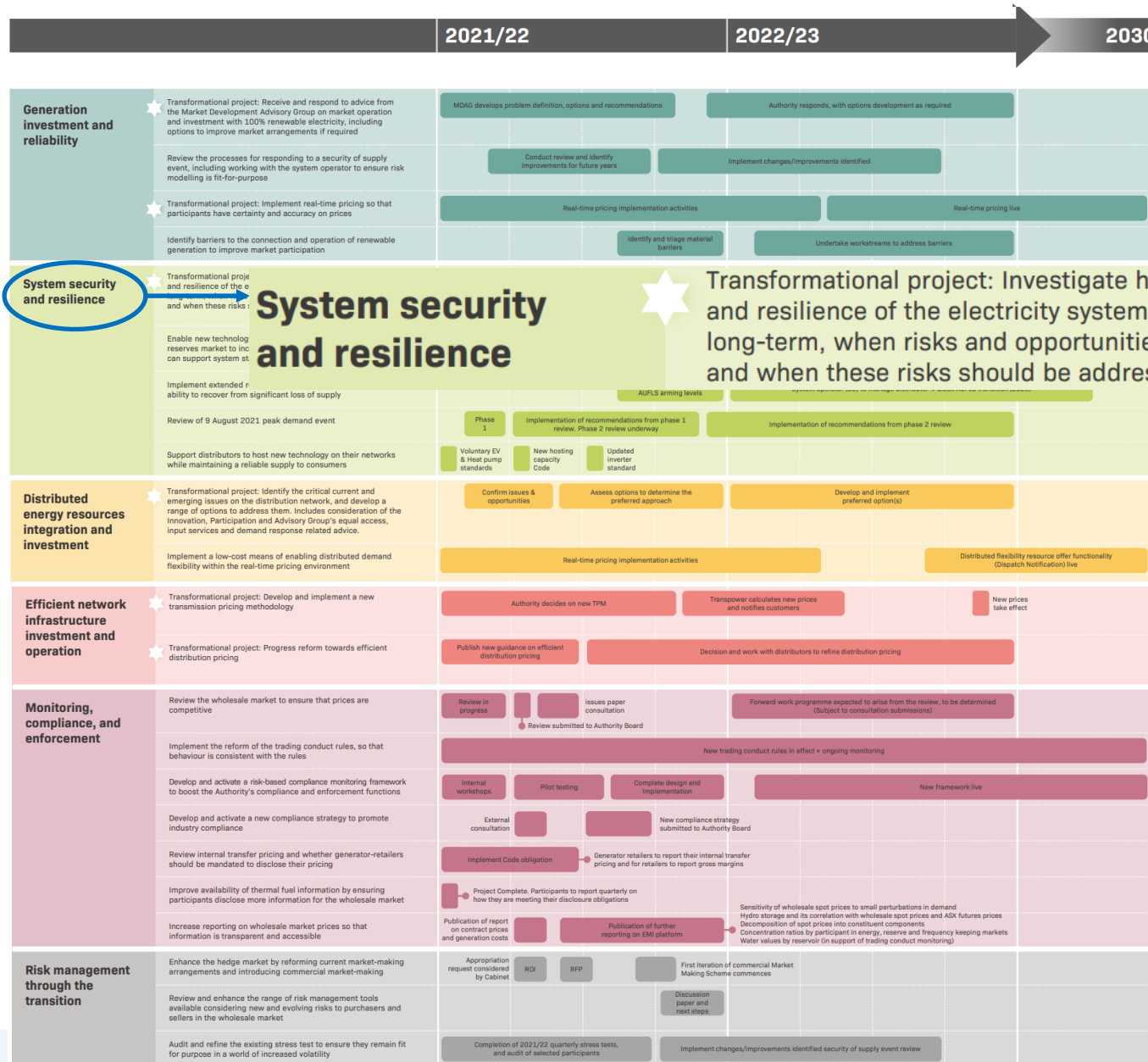
NAME	ORGANISATION
Barbara Elliston	Elliston Power Consultants
Brad Henderson	Electronet
Chris Conway	Aurora Energy
Gareth Williams	SolarZero
Graeme Ancell	WEL Networks
Jon Spiller	Meridian Energy
Matthew Copland	Transpower – System Operator
Mike Moeahu	Manawa Energy
Rob Orange	Tesla Consultants
Stuart Johnston	Electricity Engineers Association
Stuart MacDonald	Transpower – Grid Owner

- **Secretariat:** Rob Mitchell, Philip Beardmore, Vong Nyuk-Min



# ENERGY TRANSITION ROADMAP

Supporting an efficient transition to a low-emissions energy system



# Overview of the Future Security and Resilience (FSR) - work programme\*

- The objective of the FSR programme is to ensure New Zealand's power system remains stable, secure and resilient as it evolves in the coming decades.
- FSR is one of the Authority's programmes supporting the transition to a low-emissions energy system, as set out in the Authority's Energy Transition Roadmap.
- FSR focuses on how the power system is operated in real-time or close to real-time to continuously balance supply and demand and ensure power quality.

Phase 1: Identified 10 areas of opportunities and challenges that could affect security and resilience of the power system as it transitions towards a low-emissions energy system and with new technologies enabling different contributions to the power system.

Phase 2: Produced a roadmap proposing activities with timings to understand and address the 10 opportunities and challenges identified in Phase 1.

**Phase 3 (in progress):** Implementation of the activities on the FSR roadmap and other activities supporting FSR.

\*You can read more about the FSR projects here: [Future security and resilience](#) | [Our projects](#) | [Electricity Authority \(ea.govt.nz\)](#)

# Future Security and Resilience (FSR) – opportunities and challenges

Theme	Opportunities & Challenges	Activity
<b>The opportunity and challenges related to the changing generation portfolio</b>	<b>1 Accommodating future changes within technical requirements</b>	Review and update Part 8 of the Code Review and update Parts 6, 7, 13, 14 of the Code to ensure they align to Part 8 Identify standard to support technical requirements in the Code Update the Policy Statement to manage emerging risks Update the System Operator's policies, procedures, guidelines and tools
	<b>2 Operating with low system strength</b>	Investigate system strength challenges and opportunities Amend the Code to support performance criteria Develop suitable market products and tools
	<b>3 Balancing variable and intermittent generation</b>	Improve market system and generation/demand forecast Consider new or revised ancillary services to maintain balancing
	<b>4 Managing reducing system inertia</b>	Create a frequency reserve strategy to manage low inertia Ensure that the Code and market system can accommodate new reserve types Incorporate new reserve types into the Procurement Plan & testing methodology Update operational procedures and tools
<b>The opportunity and challenges related to the rise of DER and inverter-based resources (IBR)</b>	<b>5 Coordination of increased connections</b>	Update Grid Owner and System Operator commissioning processes and benchmark agreement Review the approach to planning connection studies Review operational study tools
	<b>6 Enabling DER services for efficient power system operations</b>	Enhance the Code and market system dispatch capability to accommodate DER offers Improve real-time security modelling within operational tools Investigate new DER services to support efficient operation of the power system
	<b>7 Visibility and observability of DER</b>	Establish the impact of DER Determine the credible event risk of DER Update the Code to clarify DER obligations and operational requirements Update procedures and tools to include DER asset information
<b>Foundational opportunities and challenges</b>	<b>8 Leveraging new technology to enhance ancillary services</b>	Investigate changes to ancillary services Ensure tools monitor the performance of the power system Update the Code, market system and Procurement Plan to enable new technology to provide ancillary services
	<b>9 Maintaining cyber security</b>	Continually review and update cyber security measures
	<b>10 Growing skills and capabilities of the workforce</b>	Encourage and train the workforce's next generation

# Future Security and Resilience (FSR) - work streams

## Dashboard of FSR indicators\*:

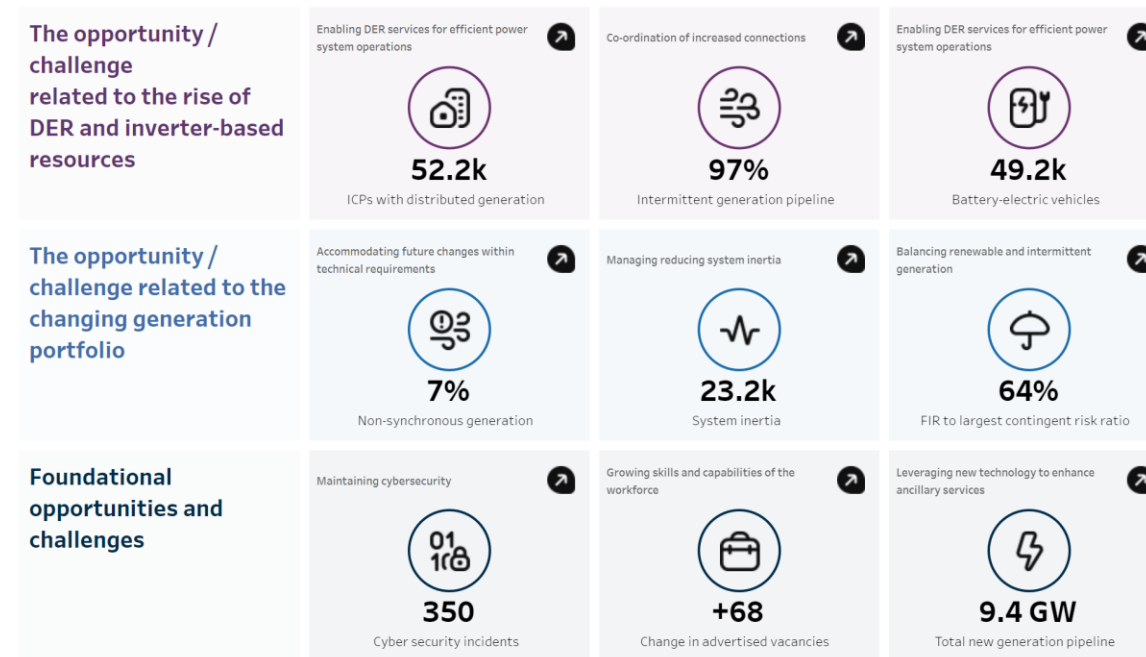
The purpose of the FSR indicators is to monitor the risks and opportunities affecting security and resilience of the power system, and to ensure correct prioritisation of activities in the road map.

**Status:** Published in May 2023. **Next steps:** The indicators will be reviewed and updated every six months

## Future security and resilience

### Monitoring changes to the opportunities and challenges to future security and resilience

The purpose of the FSR indicators is to monitor how and when changes to the opportunities and challenges to future security and resilience of the power system may materialise. The indicators will be used to inform the prioritisation of FSR activities to address the challenges and capture the opportunities.



\*You can view the FSR indicators at [Future security and resilience indicators | Tableau Public](#)

# Future Security and Resilience (FSR) - work streams (contd)

## Future System Operations:

The purpose of this work stream is to ensure New Zealand's power system operation model best promotes the long-term benefit of consumers, by providing a stable, secure, and resilient power system.

With the transition to renewables and increase in distributed energy resources (DER), changes on the power system could, for example:

- affect how the system operator meets its obligations under the Code, and
- create opportunities for new operating arrangements at the distribution network level.

This work stream will cover the operation of the entire power system, including transmission and distribution system operation and is envisaged to be a multi-year work programme given the complexity and importance of system operations.

**Status:** Discussion paper in progress. **Next steps:** Publish discussion paper for consultation in the latter half of 2023.



# Future Security and Resilience (FSR) - work streams (contd)

## Ensuring an orderly thermal transition:

The Authority has identified some risks that could prevent an orderly thermal transition:

- The commitment risk that slow-start, combined-cycle thermal generators might not be offered when their capacity is needed, because they cannot be started in time, and their start-up costs are not recovered if they are not dispatched.
- The investment risk that existing thermal units are retired prematurely when they are still required by the market.
- The investment risk that if new open-cycle thermal generators are required during the transition, there are insufficient incentives to invest in them.

The purpose of this work stream is to focus on the investment risks.

The commitment risk has been considered as part of the Authority's Winter 2023 work.

**Status:** Consultation paper published June 2023. **Next steps:** Consultation closes 25 July 2023.

# Future Security and Resilience (FSR) - work streams (contd)

## Review of Part 8 of the Code relating to common quality obligations:

The purpose of this work stream is to ensure it accommodates and facilitates changes due to increase of renewables and new technologies.

An issues paper discussing the following seven common quality issues was published for consultation and feedback in April 2023:

1. **FREQUENCY:** Inverter-based variable and intermittent resources cause more frequency fluctuations, which are likely to be exacerbated over time by decreasing system inertia.
2. **VOLTAGE:** Inverter-based variable and intermittent resources cause greater voltage deviations, which are exacerbated by changing patterns of reactive power flows.
3. **SYSTEM STABILITY:** Inverter-based variable and intermittent resources can increase the likelihood of network performance issues due to inverter-based resources disconnecting from the power system.
4. **FAULT RIDE THROUGH:** Over time, far less generation capacity is expected to be subject to fault ride-through obligations in the Code, as more generating stations export less than 30 MW to a network.
5. **HARMONICS:** There is some ambiguity around the applicability of harmonics standards.
6. **DER VISIBILITY:** Network operators have insufficient information on (i.e. visibility of) assets wanting to connect, or which are connected, to the power system to provide for the planning and operation of the power system in a safe, reliable, and economically efficient manner.
7. **CODE:** The Code is missing some terms that would accommodate and enable new technologies, and contains some terms that will not enable new technologies.

# Future Security and Resilience (FSR) - work streams (contd)

## Review of Part 8 of the Code relating to common quality obligations: *Common Quality Technical Group (CQTG)*

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#### Recent comments

##### NZ Battery Project's green peaker cost assumptions challenged (15)

Oh I agree that there have been failures of the market that have led us to the current supply issues and a failure of...

##### NZ Battery Project's green peaker cost assumptions challenged (15)

So, not an electricity market structural or investment problem then...?

#### EA appoints common quality group

Jacob McSweeney - Mon, 19 Jun 2023

The Electricity Authority has appointed 11 people to its future security and resilience common quality technical group.

The EA says the group will provide independent advice on common quality requirements during the regulator's review of part 8 of the Electricity Industry Participation Code.

The appointees are: Graeme Ancell, Chris Conway, Matt Copland, Barbara Elliston, Brad Henderson, Stuart Johnston, Stuart MacDonald, Mike Moeahu, Rob Orange, Jon Spiller and Gareth Williams.

"We have formed this advisory group as we want to ensure any decisions we make are well informed, reflect the needs of the industry and enable innovation into the future," the EA says.

The group members were appointed for a two-year term.

To ensure we get the review done efficiently,

**Status:** Issues paper published April 2023 and consultation closed 30 May 2023.

**Next steps:** Summary of submissions under review.

# Additional CQ issues identified through consultation

Are there issues that have not been identified as part of the issue paper and/or the submissions for the issues paper?

# Criteria for evaluating options to address common quality issues

# Introduction

The Authority has developed a set of **7 criteria** against which to evaluate options to address the identified issues with the common quality requirements in Part 8 of the Code.

The evaluation criteria are drawn from, in particular:

- The Authority's Code amendment principles in the Authority's consultation charter
- MDAG's proposed principles to guide the development of proposals by the FSR project, set out in MDAG's 6 December 2022 'Library of options' paper on price discovery in a renewables-based electricity system
- The principles to guide the design of Code arrangements for new generating technologies set out in MDAG's 30 June 2020 final recommendations paper on enabling participation of new generating technologies in the wholesale electricity market

# Criteria for evaluating options to address common quality issues

## 1. *The option is feasible / implementable with little or no risk of unintended consequences*

- Feasibility / ease of implementation, and little or no risk of unintended consequences are important
- Preference is given to options/solutions that are flexible, scalable and relatively easily reversible

### Elaboration:

- The Authority considers that, when evaluating options to address common quality issues, the feasibility / ease of implementation of an option/solution, and the risk of an option/solution having unintended consequences, are important considerations.
- Preference is given to options/solutions that are flexible, scalable and relatively easily reversible (with relatively low value transfers associated with doing so). In these circumstances the Authority will monitor the effects of the implemented option/solution and reject, refine or expand that option/solution in accordance with the results from the monitoring.

## 2. *The option is consistent with the Authority's statutory objectives*

### Elaboration:

- The Authority's main statutory objective is "To promote competition in, reliable supply by, and the efficient operation of, the electricity industry for the long-term benefit of consumers."
- The additional objective is to "protect the interests of domestic consumers and small business consumers in relation to the supply of electricity to those consumers".
- Refer to the Authority's interpretation of its original (2010) statutory objective for guidance on this criterion
  - NB: The Authority is yet to include an interpretation of its additional (December 2022) statutory objective in its interpretation document
- To further the Authority's statutory objectives, the benefits of an option must outweigh its costs
  - NB: This assessment of costs and benefits is a separate matter to the criterion 'Signal full costs and benefits'

## Criteria for evaluating options to address common quality issues

### 3. *The option promotes competitive neutrality amongst technologies / fuels*

- The option/solution should be neutral as to which technology / fuel can provide the required service/output

#### Elaboration:

- Reflecting a preference for greater competition, the option/solution should be neutral as to which technology / fuel can provide the required service/output in the most economically and technically efficient manner. The option/solution should facilitate a 'level playing field' from a competition standpoint -- that is to say, it should not 'pick winners' or give some technologies / fuels special treatment relative to others.

### 4. *The option signals full costs and benefits*

- The option/solution should signal the full marginal costs and benefits to participants / consumers associated with alternative technologies / fuels providing the required service/output

#### Elaboration:

- The option/solution should signal the full marginal costs and benefits to participants / consumers associated with alternative technologies / fuels providing the required service/output, including reliability, security of supply, voltage support and frequency keeping.



## Criteria for evaluating options to address common quality issues

### 5. *The option is a market-based approach*

- Preference is given to market-based approaches to providing the required service/output, to promote innovation and transparency of the full costs and benefits of an option/solution

#### Elaboration:

- Preference is given to market-based approaches to providing the required service/output, including reliability, security of supply, voltage support and frequency keeping, to promote innovation and transparency of the full costs and benefits of an option/solution.

### 6. *The option is output-based rather than prescriptive*

- If practicable the option/solution should specify outcomes required of industry participants

#### Elaboration:

- If practicable, the option/solution specifies the outcomes required of industry participants rather than prescribing what they must do and how they must do it. That is, outcome standards are preferred to input standards, wherever possible.

# Criteria for evaluating options to address common quality issues

## 7. *The option is durable*

- The option/solution should be durable across a range of uncertain future scenarios

### Elaboration:

- The option/solution should be durable across a range of uncertain future scenarios and allow for the efficient evolution of rules to enable better ways of providing the required service/output.
- Preference will be given to options/solutions that provide industry participants with greater freedom and lower costs to adapt to the option/solution as they see fit, unless more restrictive options/solutions are justified on the grounds of non-rivalry and/or non-excludability conditions.<sup>1</sup>
- Where these conditions (non-rivalry and non-excludability) hold perfectly, it is generally efficient to adopt a 'one size fits all' approach, such as uniform standards. Where these conditions do not hold, it may be more efficient to utilise flexible mechanisms, such as incentives.

<sup>1</sup> A good or service is non-rival when additional consumption by one party does not reduce the amount available for any other party to consume. For example, electricity consumption is rival but security of supply is non-rival.

A good or service is non-excludable when it is not economically viable to exclude parties from consuming the good or service. For example, electricity consumption is excludable because retailers generally incur a relatively low economic cost to cut power supply to consumers that do not pay their electricity bills. On the other hand, market prices are non-excludable because it is too costly to prevent disclosure of prices to parties that do not contribute to the costs of operating the market.

## Evaluation criterion 1 – evaluation rating

Evaluation criterion 1	Evaluation rating	
The option is feasible / implementable with little or no risk of unintended consequences	✓✓	Strongly feasible with no risk of unintended consequences (<1 year to change the Code, <2 years to change assets, <\$10m implementation cost)
	✓	Moderately feasible with low risk of unintended consequences (<2 years to change the Code, <3 years to change assets, <\$20m implementation cost)
	-	Feasible with uncertain risk of unintended consequences
	xx	Feasible but expensive to implement <u>or</u> has long implementation <u>and/or</u> moderate risk of unintended consequences (>3 years to change the Code, >5 years to change assets, >\$50m implementation cost)
	xxx	Feasible but expensive <u>and</u> has long implementation <u>and/or</u> significant risk of unintended consequences (>5 years to change the Code, >7 years to change assets, >\$100m implementation cost)

## Evaluation criterion 1 – evaluation rating (cont)

Evaluation criterion 1	Notes
The option is feasible / implementable with little or no risk of unintended consequences	<ul style="list-style-type: none"><li>• Evaluation criterion 1 and evaluation criterion 2 (consistency with the Authority’s statutory objectives) are considered more important than the remaining five evaluation criteria</li><li>• The ticks and crosses have been assigned to enable the summing of an option’s assessments under the seven evaluation criteria</li><li>• <b>Evaluation criterion 1 is used twice:</b><ul style="list-style-type: none"><li>○ <u>To remove from the long list of options</u> those options that are feasible but:<ul style="list-style-type: none"><li>▪ expensive or have a long implementation and/or a moderate risk of unintended consequences (&gt;3 year code change, &gt;5 year asset change, &gt;\$50m)</li><li>▪ expensive and have a long implementation and/or a significant risk of unintended consequences (&gt;5 year code change, &gt;7 year asset change, &gt;\$100m)</li></ul></li><li>○ <u>To prioritise the short list of options</u> based on the extent to which a short-listed option is flexible, scalable and relatively easily reversible (with there being relatively low value transfers associated with doing so)</li></ul></li></ul>

## Evaluation criterion 2 – evaluation rating

Evaluation criterion 2	Evaluation rating	
The option is consistent with the Authority's statutory objectives	✓✓✓	Strongly promotes one or more limbs (Expected net benefit > \$20m over 30 years)
	✓✓	Moderately promotes one or more limbs (Expected net benefit 0 to \$20m over 30 years)
	✓	Weakly promotes one or more limbs (Uncertain expected net benefit)
	xx	Uncertain whether promotes any limbs (No expected net benefit)

## Evaluation criterion 2 – evaluation rating (cont)

Evaluation criterion 2	Notes
The option is consistent with the Authority's statutory objectives	<ul style="list-style-type: none"><li>• Evaluation criterion 2 and evaluation criterion 1 (The option is feasible / implementable with little or no risk of unintended consequences) are considered more important than the remaining five evaluation criteria</li><li>• The main statutory objective is given more weighting than the additional statutory objective</li><li>• A 'limb' refers to any of the three limbs of the Authority's main statutory objective and also, for the purposes of this evaluation, the Authority's additional statutory objective</li><li>• Within the main statutory objective, 'reliable supply' is given more weighting than competition and efficiency</li></ul>

## Evaluation criterion 3 – evaluation rating

Evaluation criterion 3	Evaluation rating	
The option promotes competitive neutrality amongst technologies / fuels	<b>Yes</b> (✓✓)	Option is neutral as to which technology (synchronous / inverter-based) and fuel type can provide the required service/output
	<b>Somewhat</b> (✓)	One technology or one fuel type cannot provide the required service/output
	<b>Little</b> (x)	Two or three technologies and/or two or three fuel types cannot provide the required service/output
	<b>No</b> (xx)	Option requires a specific technology to provide the required service/output

## Evaluation criterion 3 – evaluation rating (cont)

Evaluation criterion 3	Notes
The option promotes competitive neutrality amongst technologies / fuels	<ul style="list-style-type: none"><li>• The ticks and crosses have been assigned to enable the summing of an option's assessments under the evaluation criteria</li><li>• The maximum of two ticks for 'yes' is intended to acknowledge that promoting competitive neutrality amongst technologies / fuels, while desirable, is not as important to an option's overall ranking as the first two evaluation criteria</li><li>• 'Technology' refers to synchronous and inverter-based technologies</li><li>• 'Fuel' refers to coal, gas, geothermal, hydro, hydrogen, solar, wind, etc.</li></ul>



## Evaluation criterion 4 – evaluation rating

Evaluation criterion 4	Evaluation rating
The option signals full costs and benefits	<p><b>Yes</b> (✓✓)</p> <p>Option signals the full marginal costs and benefits to participants / consumers associated with alternative technologies / fuels providing the required service/output (Marginal cost pricing and costs allocated to beneficiaries or causers)</p>
	<p><b>Somewhat</b> (✓)</p> <p>Marginal cost pricing and costs not allocated solely to beneficiaries or causers</p>
	<p><b>Somewhat</b> (✓)</p> <p>Non-marginal cost pricing and costs allocated to beneficiaries or causers</p>
	<p><b>No</b> (xx)</p> <p>Option does not signal the full marginal costs and benefits to participants / consumers associated with alternative technologies / fuels providing the required service/output (Non-marginal cost pricing and costs not allocated solely to beneficiaries or causers)</p>

## Evaluation criterion 4 – evaluation rating (cont)

Evaluation criterion 4	Notes
The option signals full costs and benefits	<ul style="list-style-type: none"><li>• The ticks and crosses have been assigned to enable the summing of an option's assessments under the evaluation criteria</li><li>• The maximum of two ticks for 'yes' is intended to acknowledge that signalling the full marginal costs and benefits of alternative technologies / fuels, while desirable, is not as important to an option's overall ranking as the first two evaluation criteria</li></ul>

## Evaluation criterion 5 – evaluation rating

Evaluation criterion 5	Evaluation rating	
The option is a market-based approach	<b>Yes</b> (✓✓)	Option is a market-based approach to providing the required service/output, to promote innovation and transparency of the full costs and benefits of an option/solution
	<b>Yes</b> (✓)	Option is a tender-based approach to providing the required service/output, to promote innovation and transparency of the full costs and benefits of an option/solution
	<b>No</b> (xx)	Option is not a market-based / tender-based approach to providing the required service/output

## Evaluation criterion 5 – evaluation rating (cont)

Evaluation criterion 5	Notes
The option is a market-based approach	<ul style="list-style-type: none"><li data-bbox="741 401 2193 496">• The ticks and crosses have been assigned to enable the summing of an option's assessments under the evaluation criteria</li><li data-bbox="741 519 2237 668">• The maximum of two ticks for 'yes' are intended to acknowledge that a market-based approach, while desirable, is not as important to an option's overall ranking as the first two evaluation criteria</li></ul>

## Evaluation criterion 6 – evaluation rating

Evaluation criterion 6	Evaluation rating	
The option is output-based rather than prescriptive	<b>Yes</b> (✓✓)	Option focuses on the outcome required in relation to common quality and leaves participants to decide how best to achieve the outcome (A participant can enter into an equivalence arrangement)
	<b>Not practicable</b> (-)	Option is prescriptive as to what a participant must do/provide to achieve the common quality outcome because an output-based option is not practicable (A dispensation to a participant will not impose costs on other participants)
	<b>No</b> (x)	Option is prescriptive as to what a participant must do/provide to achieve the common quality outcome (A dispensation to a participant will impose costs on other participants)

## Evaluation criterion 6 – evaluation rating (cont)

Evaluation criterion 6	Notes
The option is output-based rather than prescriptive	<ul style="list-style-type: none"><li>• The ticks, crosses and null values have been assigned to enable the summing of an option's assessments under the evaluation criteria</li><li>• The maximum of two ticks for 'yes' are intended to acknowledge that an output-based approach, while desirable, is not as important to an option's overall ranking as the first two evaluation criteria</li><li>• The one cross for 'no' is intended to acknowledge that a prescriptive approach, while less favourable than an output-based approach, is not necessarily a bad design option</li></ul>

## Evaluation criterion 7 – evaluation rating

Evaluation criterion 7	Evaluation rating
The option is durable	✓✓ The option is durable across a wide (>3) range of uncertain future scenarios that may happen in the next 15 years
	✓ The option is durable across a narrow (1-2) range of uncertain future scenarios that may happen in the next 15 years
	- The option's durability is uncertain across 1-2 uncertain future scenarios that may happen in the next 15 years
	✗ The option is not durable across a wide (>3) range of uncertain future scenarios that may happen in the next 15 years
	✗✗ The option is not durable across a narrow (1-2) range of uncertain future scenarios that may happen in the next 15 years

## Evaluation criterion 7 – evaluation rating (cont)

Evaluation criterion 7	Notes
The option is durable	<ul style="list-style-type: none"><li data-bbox="741 396 2193 482">• The ticks and crosses have been assigned to enable the summing of an option's assessments under the evaluation criteria</li><li data-bbox="741 504 2232 639">• The maximum of two ticks for an option that is durable is intended to acknowledge that the degree of durability is not as important to the option's overall ranking as the first two evaluation criteria</li></ul>



# Options: Long list Medium list

Refer to briefing document for the options

# No regrets system studies

## NEXT STEPS

- Next meeting date/time:
  - Wednesday, August 9<sup>th</sup> 09.00 am - 2.00 pm *or*
  - Thursday, August 10<sup>th</sup> 09.30 am - 3.00 pm
- Action (EA): CQTG Meeting 1 briefing and slides
  - Agree to have these put on the EA website
- Action (EA):
  - Provide the CQTG, a draft 'short' list of options, i.e. the list after considering the options against the remaining 6 criteria by Friday 28<sup>th</sup> July.
- Action (CQTG):
  - Consider the draft 'short' list to be finalised at next meeting.

**ELECTRICITY  
AUTHORITY**  
TE MANA HIKO



**NGĀ MIHI**