

15 November 2024

Electricity Authority Level 7 AON Centre 1 Willis Street Wellington

Via email: fsr@ea.govt.nz

Manawa Energy's Submission: Part 8 common quality requirements review

Introduction

Manawa Energy (**Manawa**) welcomes the opportunity to provide a submission to the Electricity Authority (**Authority**) on its two consultations paper relating to the ongoing part 8 common quality requirements review:

- Addressing common quality information requirements (Information Consultation Paper), and
- Part 8 Code amendment proposal (Code Consultation Paper).

Manawa is an independent power producer with a proven track record of investing in local and grid scale renewable generation. Manawa operates a diverse portfolio of 44 power stations across 25 hydro-electric power schemes, supplying around 5% of New Zealand's electricity needs. In addition to this Manawa also supplies around 600 Commercial and Industrial customers with electricity.

Submission

Manawa is largely in agreement with the issues that the Authority is looking to address in these two consultation papers but is concerned about the timing of them in relation to the wider part 8 common quality requirements review. As per Manawa's submission on the most recent set of common quality consultations (submission dated 22 August 2024), grandfathering arrangements for some existing assets will be required. No formal decision has been made by the Authority about how existing assets are to be treated in relation to common quality and therefore it's important that any decisions made relating to these current papers fully consider the implications to the wider review.

Information Consultation Paper

Manawa is largely in agreement with the issue that the Authority is looking to address and that the shortlist of options being considered is appropriate.

Again, Manawa would like to make clear that while agreeing with the whole of system approach taken by the Authority, there can be significant differences between existing assets and future connections and encourages the Authority to consider Manawa's previous submission on the part 8 common quality review (dated 22 August 2024) where the need for grandfathering existing assets is detailed. It will also be important as part of this process to keep in mind that some information is provided on the assets already in Asset Capability Statements (ACS) and repetition of this information elsewhere would be inefficient.

Please see Appendix A below for Manawa's response to the specific questions in the Information Consultation Paper.

Code Consultation Paper

Manawa is largely in agreement with the issues that the Authority are looking to address in the Code Consultation Paper. However, similar to above, there are instances where existing assets and future connections will need to be considered separately. Manawa has highlighted these instances in Appendix B below (Manawa's response to the specific questions in the Code Consultation Paper) and would like to refer the Authority to Manawa's submission dated 22 August 2024 for further detail.

If you have any questions regarding the content of this submission, please contact Mike Moeahu, Principal Engineer Generation

Question	Manawa's response
Do you agree with the key drivers of change in power system modelling requirements identified in this section? If you disagree, please explain why	In general, Manawa agrees with the key drivers listed.
Are there any other drivers of change in power system modelling requirements which are not covered in this section? If so, please elaborate.	No further additions to add.
Do you agree with the Authority's elaboration on the common quality-related information issue set out in this section? If you disagree, please explain why.	No further comments to add.
Do you agree that the current provisions in the Code are insufficient to address the common quality-related information issue described in this section? If you disagree, please explain why Do you consider there to be any other aspects of the common quality-related asset	Yes, Manawa agrees there are limitations in some provisions in the Code. However, there currently appears to be no common standard or clarity around how this information is managed. It therefore may be that the Code is not the main cause of the issue but rather, individual entities need to have clearer guidelines around how to manage common quality-related information. No further comments to add.
information issue that are not covered in this section? If so, please elaborate	
Do you agree with the shortlisted options presented by the Authority? If you disagree, please explain why.	Yes.
Do you have any feedback on the desirability of a document incorporated by reference in the Code specifying various common quality- related information requirements	Manawa does not have a view at this stage, however, would be open to contributing to its development.

Do you agree with the pros and cons	Yes.
associated with each option? What costs are	
likely to arise for affected parties (eg, asset	There will likely be cost reductions if the sharing
owners, network operators and network	of data is adopted however, the cost to manage
owners) under each of the options?	the data and by who may be a challenge.
owners) under each of the options:	the data and by who may be a challenge.
	There is potential for a higher cost initially, and
	any ongoing costs must be distributed evenly.
Do you consider any perceived conflicts of	Yes, the conflicts outlined in options 2 & 3 are
interest under the second and third	real and Manawa believes these will be material
shortlisted options to be material in nature?	issues. Sharing non-proprietary information is
If so, please elaborate	likely to be acceptable.
	For example, with suppliars of black bayes and
	For example, with suppliers of black boxes and
	their Intellectual Property. This has been
	discussed with the System Operator (SO), and it
	has been difficult for them in recent times to
	gain Intellectual Property on the vendors'
	equipment.
Do you propose any alternative options to	No.
address the common quality-related	
information issue? If so, please elaborate.	However, clarification in the Code as to how the
information issue: it so, please elaborate.	
	SO will set the guidelines to meet the Code
	amendments may be necessary. It may also be
	necessary to clarify the process for if the asset
	owners do not agree or cannot meet the
	obligations.
Do you agree with the Authority's high-level	Yes.
evaluation of the short-listed options to help	
address the common quality related	
information issue? If you disagree, please	
, <u> </u>	
explain why.	

Appendix B – response to the Code Consultation Paper questions

Proposal	Question	Comments
FSR-001:	Do you support the	Manawa cannot comment on this until
Remove the exclusion for wind-powered generation from periodic testing	Authority's proposal to apply the periodic testing requirements in Appendix B of Technical Code A of Schedule 8.3 to wind	further information on how and what periodic testing can be performed. These will need to be defined before a view can be provided.
requirements	generation? If you disagree, please give reasons and provide alternatives that address the identified problem with wind generation being excluded from the periodic testing requirements.	As an example, it needs to be clear whether this will apply to individual turbines or whole windfarms.

FSR-002: Clarify that embedded progrators must apperletable to the other option identified? If you disagree, please explain why and give your preferred option identified? If you disagree, please explain why and give your preferred option interms consistent with the Authority's main statutory objective in section 15 of the Electricity Industry Act 2010 No, further information on how testing cab achieved is clear. FSR-002: Clarify that embedded apability statement? in a capability statement? Do you support the authority's proposal to amend the Code to clarify that:		· · ·	
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such an amendment? Please explain your answers.capacity, will be managed if they cannot comply.Do you agree with the proposed Code amendment?Fundamentally Agree. However, it is important to consider that some current		Do you see any unintended	Unsure. The unknown factors are around how
explain your answers.comply.Do you agree with the proposed Code amendment?Fundamentally Agree. However, it is important to consider that some current		consequences in making	the generating units, if above the 1MW.
Do you agree with the proposed Code amendment?Fundamentally Agree. However, it is important to consider that some current		such an amendment? Please	capacity, will be managed if they cannot
proposed Code amendment? important to consider that some current		explain your answers.	comply.
		Do you agree with the	Fundamentally Agree. However, it is
			important to consider that some current
if you disagree, please assets may not be able to meet the		lf you disagree, please	assets may not be able to meet the
explain why and give your requirements under the Code and the ACS		explain why and give your	requirements under the Code and the ACS

	preferred option in terms	requirements. This will need to be managed
	consistent with the	through grandfathering or dispensations.
	Authority's main statutory	
	objective in section 15 of the	
	Electricity Industry Act 2010	
	Do you agree with the	Agree, but as per comments above.
	analysis presented in this	
	Regulatory Statement? If not,	
	why not.	
FSR-003: Include	Do you support the	Yes.
distributors and	Authority's proposal to	
energy storage	amend the definition of	
systems as	'causer' in clause 1.1 of the	
potential	Code so that it refers to the	
causers of	action that results in a UFE,	
	-	
under-frequency	including an increase in	
events	electricity demand (load),	
	and the consequential	
	amendments to clauses 8.60	
	to 8.66, including proposed	
	new clause 8.64A?	
	Do you see any unintended	No.
	consequences in making	
	such an amendment? Please	
	explain your answers.	
	Do you agree the proposed	Yes.
	Code amendment is	
	preferable to the other	
	options identified? If you	
	disagree, please explain why	
	and give your preferred	
	option in terms consistent	
	with the Authority's main	
	,	
	statutory objective in section	
	15 of the Electricity Industry	
	Act 2010.	
	Do you agree with the	Yes.
	analysis presented in this	
	Regulatory Statement? If not,	
	why not?	
FSR-004: Amend	Do you support the	At a conceptual level, Manawa agrees,
the requirement	Authority's proposal to	however, as per our previous submission
to have a speed	amend clause 1.1 of the	(dated 22 August 2024) grandfathering
governor	Code, and clauses 3, 4 and 5	arrangements will be required for existing
5	of Appendix B of Technical	assets unable to achieve this requirement.
	Code A of Schedule 8.3, to	
	broaden them to apply to	
	inverter-based generation	
	-	
	technologies?	
	Do you see any unintended	As per above comment, this requirement will
	consequences in making	not work for some existing assets (see
		previous submission dated 22 August 2024).

		<u>ا</u>
	such an amendment? Please	
	explain your answers.	
	Do you agree the proposed	Yes.
	Code amendment is	
	preferable to the other	
	option identified? If you	
	disagree, please explain why	
	and give your preferred	
	option in terms consistent	
	with the Authority's main	
	statutory objective in section	
	15 of the Electricity Industry	
	Act 2010.	
	Do you agree with the	Yes, subject to grandfathering comments
	analysis presented in this	above.
	Regulatory Statement? If not,	
	why not?	
FSR-005: Amend	Do you support the	At a conceptual level, Manawa agrees,
the requirement	Authority's proposal to	however, as per our previous submission
to have an	amend the Code to replace	(dated 22 August 2024) grandfathering
excitation	the requirement for an	arrangements will be required for existing
system	excitation system with a	assets unable to achieve this requirement.
	requirement for a voltage	
	control system, to	
	encompass all generating	
	technologies? Please explain	
	your answers.	
	Do you see any unintended	As per above comment, this requirement will
	consequences in making	not work for some existing assets (see
	such an amendment? Please	previous submission dated 22 August 2024).
	explain your answers.	
	Do you agree the proposed	Yes.
	Code amendment is	
	preferable to the other	
	option identified? If you	
	disagree, please explain why	
	and give your preferred	
	option in terms consistent	
	with the Authority's main	
	statutory objective in section	
	15 of the Electricity Industry	
	Act 2010.	
	Do you agree with the	Yes, subject to grandfathering comments
	analysis presented in this	above.
	Regulatory Statement? If not,	
	why not?	
FSR-006: Amend	Do you support the	Yes, subject to a reasonable de minimis being
the Code to	Authority's proposal to	applied. The cost of undertaking the testing
apply to all	amend the Code to require	on small IBRs is not justifiable.
dynamic	all dynamic reactive power	
reactive power	compensation devices to	
1	undergo periodic testing?	

		Vac additional acata for minimultane fit
compensation	Do you see any unintended	Yes, additional costs for minimal benefit
devices	consequences in making	(particularly for small IBRs).
	such an amendment? Please	
	explain your answers.	
	Do you agree the proposed	Yes.
	Code amendment is	
	preferable to the other	
	option identified? If you	
	disagree, please explain why	
	and give your preferred	
	option in terms consistent	
	with the Authority's main	
	statutory objective in section	
	15 of the Electricity Industry	
	Act 2010.	
	Do you agree with the	Yes, subject to a reasonable threshold being
	analysis presented in this	applied.
	Regulatory Statement? If not,	apprica.
	why not?	
FSR-007: Treat	Do you support the	Yes.
energy storage	Authority's proposal to	103.
systems as only	amend the Code to treat	
generation for	ESSs as generation for the	
the purposes of	purposes of Part 8?	
Part 8		No
Parto	Do you see any unintended	No.
	consequences in making	
	such an amendment? Please	
	explain your answers.	
	Do you agree the proposed	Yes.
	Code amendment is	
	preferable to the other	
	options identified? If you	
	disagree, please explain why	
	and give your preferred	
	option in terms consistent	
	with the Authority's main	
	statutory objective in section	
	15 of the Electricity Industry	
	Act 2010	
	Do you agree with the	Yes.
	analysis presented in this	
	Regulatory Statement? If not,	
	why not?	
FSR-008: Clarify	Do you support the	Fundamentally yes, but Manawa sees that the
the definition of	Authority's proposal to	definition could be clearer. Clarification will
generating unit	amend the definition of	be needed for example, about whether this
	generating unit in clause 1.1	will apply to a single generating turbine or an
	of the Code so that it refers	entire windfarm.
	to a generating unit having a	
	frequency and/or voltage	However, as per above comment, this
	control system?	requirement will not work for some existing
		assets (see previous submission dated 22
	1	

		August 2024). For example, asynchronous
		generators with no speed control or voltage control.
	Do you see any unintended consequences in making such an amendment? Please explain your answers.	Yes. See above comment.
	Do you agree the proposed Code amendment is preferable to the other option identified? If you disagree, please explain why and give your preferred option in terms consistent with the Authority's main statutory objective in section 15 of the Electricity Industry Act 2010.	No. As discussed above, further clarification is needed.
	Do you agree with the analysis presented in this Regulatory Statement? If not, why not?	No, as above.
FSR-009: Clarify the Code's fault ride through requirements	Do you support the Authority's proposal to amend the Code to allow a machine-based synchronous generating unit to be deemed compliant with the Code's FRT requirements if full compliance is not possible due to the generating unit's inherent stability characteristics and the generator has taken all reasonable measures to support grid stability taking into account the generating unit's inherent stability characteristics?	Yes, at a conceptual level. However, again there needs to be clarification that existing generators will need to be grandfathered (see previous submission dated 22 August 2024).
	Do you see any unintended consequences in making such an amendment? Please explain your answers.	As per above comment, this requirement will not work for some existing assets (see previous submission dated 22 August 2024).
	Do you agree the proposed Code amendment is preferable to the other option identified? If you disagree, please explain why and give your preferred option in terms consistent with the Authority's main	Yes.

statutory objective in section 15 of the Electricity Industry Act 2010	
Do you agree with the analysis presented in this Regulatory Statement? If not, why not?	Yes, subject to our grandfathering comments above.