

Anna Kominik  
Chair  
Electricity Authority Te Mana Hiko  
Level 7, AON Centre, 1 Willis Street,  
Wellington 6011  
Lodged via [fsr@ea.govt.nz](mailto:fsr@ea.govt.nz)

Melbourne, 12. August 2025

Dear Ms. Kominik,

**Re: Code amendment proposal on common quality-related information Consultation Paper**

Vestas welcomes the opportunity to provide our feedback on the Electricity Authority Te Mana Hiko (Authority) Consultation Paper regarding the Electricity Industry Participation Code 2010 (Code) amendment proposal on common quality-related information, released on 1 July 2025.

Vestas' vision is to become the global leader in sustainable energy solutions, and everything we do revolves around the development and deployment of these solutions.

Vestas acknowledges the importance of the current review of the common quality requirements in Part 8 of the Code. However, we would like to express our concern regarding the proposed amendment to Schedule 8.3 – Technical Codes, Requirements for asset information, where (2A) the system operator would receive the command to:

- (a) store unencrypted models in a secure server that is accessible only to system operator employees, contractors or advisers that require access to the unencrypted models to perform their roles; and*
- (b) not disclose unencrypted models to third parties, except as provided in subclause (a), including a grid owner or distributor, without the prior written consent of the asset owner that provided the model or as required by law.*

Vestas does not support providing unencrypted models to the system operator or third parties because:

- i. an unencrypted model contains highly sensitive Vestas owned Intellectual Property; and
- ii. the encrypted models are all that is reasonably required for the system operator to perform any studies of the performance of the network.

Alternatively, Vestas recommends the Authority to adopt the same principles and procedures applied in the Australian National Electricity Rules (NER) and implemented by the Australian Energy Market Operator (AEMO) under the Power System Model Guidelines<sup>1</sup>.

It is worth mentioning that Vestas has recently signed a non-disclosure agreement with Transpower, as the system operator, to share **encrypted** PSCAD, PowerFactory and Powertech's Transient Security Assessment Tool (TSAT) models.

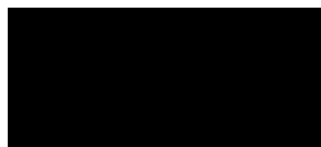
---

<sup>1</sup> <https://aemo.com.au/energy-systems/electricity/national-electricity-market-nem/participate-in-the-market/network-connections/modelling-requirements>

Please refer to the appendix for our feedback on the draft of the proposed Connected Asset Commissioning, Testing and Information Standard (CACTIS). Should you wish to discuss any aspect of our comments, please contact Marco Aurelio Lenzi Castro via [REDACTED] or the undersigned.

Yours sincerely

**Vestas – New Zealand Wind Technology Ltd.**



Dr Ragu Balanathan  
Vice President, Power Plant Solutions  
Vestas Asia Pacific



## **Appendix - Connected Asset Commissioning, Testing and Information Standard (CACTIS)**

### **Chapter 4: Modelling Requirements**

#### **GENERAL MODEL CONFIGURATION REQUIREMENTS**

##### **Section 4.10**

- (a): How is the adequacy and accuracy of models assessed?
- (e): Vestas models reflect actual products and may include disabled control blocks. This requirement could involve significant modeling and development effort. Recommend clarifying or removing it.
- (f): The technical expectations of this requirement are unclear.
- (g): Model development is a major task for OEMs. Compatibility with evolving software versions needs clearer guidance. Modeling guidelines should be well-defined, and software changes should allow enough time for OEMs to adapt.

#### **PSCAD MODEL REQUIREMENTS**

##### **Section 4.12**

- (a): The term “adequate details” is vague and needs clarification.

#### **MODEL VALIDATION**

##### **Section 4.13**

What are the criteria for model validation?

#### **MODEL DOCUMENTATION**

##### **Section 4.15**

- (i): Migrating to new software versions isn't always straightforward. Recompiling may not be enough—new models might be needed due to version incompatibility.

#### **MODEL MAINTENANCE AND UPDATE**

##### **Section 4.16**

- (b): “Shortfall in the models” is not clearly defined.

##### **Section 4.17**

A one-month deadline for model updates after a software upgrade is unrealistic. For example, transitions to PSSE V36 and PSCAD5 in Australia took 1–2 years.

### **Chapter 5: Connection Study Requirements**

#### **GENERAL CONNECTION STUDY REQUIREMENTS**

##### **Section 5.3**

- (b)(ii): How do short circuit studies relate to frequency support obligations?
- (c)(iii): How do short circuit studies relate to voltage support obligations?
- (d)(i): How do short circuit studies relate to FRT obligations?

#### **POWER-FLOW STUDY**

##### **Section 5.6**

How should a minimum 3-year horizon be covered in studies?

#### **REACTIVE POWER CAPABILITY STUDY**

##### **Section 5.7**

The proposed reactive power capability study is incomplete.

## SHORT CIRCUIT STUDY

### Section 5.14

How should a minimum 3-year horizon be covered in studies?

(b): The scope of full intact system and N-1-1 outage scenarios for short circuit studies needs better definition/clarification.

## FAULT RIDE THROUGH STUDY

### Section 5.20

(a): What is the distinction between Transient Stability and FRT studies? Both seem to involve fault scenarios—are they overlapping?

(a): Benchmarking scope should be clearly defined.

## SHARING OF ENCRYPTED MODELS FROM OTHER ASSET OWNERS

### Sections 5.22 & 5.23

Vestas does not support providing the unencrypted models to the system operator or third parties.

## General Question

What software versions are applicable (e.g., PSCAD v4 or v5)?