Submitter:	Powerco

Question	Comments
Q1. Do you agree that failing to provide key information will have an impact on the commissioning of an asset, power system security and the system operator's ability to meet the PPOs and dispatch objective?	Yes. Yes.
Q2. Do you agree with the proposal to mandate minimum time frames for the activities in Chapter 1 of the proposed CACTIS?	Yes, as long as Transpower can conform to the agreed timescales. Is it going to be a uniform timescale or case by case? Yes. Mandated and realistic time frames would allow expectations to be predetermined.
Q3. Do you agree with the proposed time frames for asset owners to submit a commissioning plan and for the system operator to review them?	Yes. Yes.
Q4. Do you agree that requiring asset owners to use a standard commissioning plan template would help streamline the preparation and review process?	Yes. But flexibility should be built into the program. Yes, but need to make the requirements of the commissioning plan scalable with respect to the size of the generation asset.
Q5. Do you agree with the proposed time frames for asset owners to submit asset capability statements at the planning, pre-commissioning, and final stages of the commissioning process, and for the system operator to review them?	Yes Yes. Assuming that if there are no changes to capability then full pre-commissioning and final ACS's not required.
Q6. Do you agree that formalising the asset capability statement assessment requirements will provide clarity for asset owners?	Yes, but requirements need to be scalable with respect to size of the generation asset.
Q7. Do you agree with the proposal to formalise requirements for asset owners	Yes.

to provide urgent or temporary changes to asset capability statements?	
Q8. Do you agree with the proposed time frames for asset owners to submit m1 and m2 models, and for the system operator to review them?	Yes.
Q9. Do you agree that the updated modelling requirements are necessary to reflect the increasing complexity and changing generation mix within the New Zealand power system?	Agree for an ideal world however very difficult to complete when there are different connections happening during close timescales. Definition of accurate may be required. Yes.
Q10. Do you agree that the system operator needs TSAT and PSCAD software models to conduct the studies needed to maintain power system security and meet the PPOs?	Yes, a uniformed approach using the proposed software makes sense. However you may find difficult to implement when capturing all scenarios.. I have no experience with any of the models that have been specified. It makes sense to standardise and specify models, but I would be wary of adding complexity, time and cost to the process, particularly for the smaller generation plants.
Q11. Do you agree with the proposed time frames for asset owners to submit a final connection study report, and for the system operator to review it?	Yes Yes.
Q12. Do you agree with the proposed approach of using RMS studies for scenario screening and EMT studies for detailed fault ride through analysis of IBRs?	Yes, but how you manage multiple projects that fund the studies may become an issue. Yes, but EMT only when the asset has FRT requirements
Q13. Do you agree with the proposal to require asset owners to repeat fault ride through studies when control system parameters are modified during or after commissioning?	Yes Yes, when the asset has FRT requirements
Q14. Do you support the proposed process for accessing encrypted models from other	Yes

asset owners when needed for fault ride through studies?	Yes, FRT studies done without the models of third party assets would seem a waste of time and money.
Q15. Do you agree with the proposed time frames for asset owners to submit a commissioning plan and for the system operator to review it?	Yes, as per above comment Transpower are expected to stick to their proposed timelines. It must be a working relationship, not a contractual one. Yes.
Q16. Do you agree with the proposed time frames for asset owners to submit a final engineering methodology, and for the system operator to review it?	Yes, to meet timescales Transpower must also meet their timescales of reviews. No, suggest making the lead time the same as the other items sitting at (T-2m) to reduce the number of different time frames in the process.
Q17. Do you agree with the proposed testing requirements for wind, solar photovoltaic and BESS technologies?	Yes Yes.
Q18. Do you agree that the system operator needs the additional data identified in this section to maintain power system security and meet the PPOs?	What additional data? Are you referring to the minimum data in Table 1? According to the document this standard practice… Cant explain, or answer this question sufficiently. Yes. The data listed would presumably already be available from the generators control system. The data set should be tailored to suit the size of the plant
Q19. Do you agree with the proposal to use high-speed monitoring data to verify asset performance and reduce the need for routine testing of generating stations between 10 MW and 30 MW?	Yes Yes.
Q20. Do you agree with the data quality requirements as described in Chapter 9 of the proposed CACTIS for high-speed monitoring and operational reporting?	Not enough information provided to answer in detail Yes, for larger generator assets only

Q21. Do you currently have the ability to provide the additional information proposed in the draft CACTIS? If not, when do you expect to be able to meet these requirements?	Not enough information provided to make an informed answer. More detailed required. No, the additional information that the draft requires is from generator the asset owners, we are Network owners. I would expect that the smaller (<4MW) asset owners may struggle to have some of what is being requested readily available.