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Transpower  
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### **Ancillary Services Procurement Plan Review 2025**

Meridian appreciates the opportunity to comment on Transpower's consultation document for the Ancillary Services Procurement Plan Review 2025.

The proposed changes appear broadly reasonable. However, Meridian has concerns regarding proposed changes to the technical requirements for ancillary services, in particular black start and instantaneous reserves. These concerns are detailed below.

In general, the changes raise the bar on technical requirements for monitoring and testing. In Meridian's opinion some of these changes could result in significant costs for ancillary service providers, meaning potentially higher costs to Transpower, and ultimately consumers, to procure those services. At worst, participants could be deterred from offering certain ancillary services as a result. Meridian encourages Transpower to:

- consider the costs and benefits of increasing the technical requirements in the Procurement Plan; and
- consider whether the requirements in the Procurement Plan should be minimum technical requirements with any increased technical requirements better considered in individual ancillary service contracts that can account for the unique characteristics of the relevant equipment or service provider.

We have also identified some areas where increased clarity would better enable potential service providers to cost and tender to provide the service.

## Instantaneous Reserve

The changes proposed to the monitoring requirements for instantaneous reserve at new clause B51.2 of the draft Procurement Plan would be onerous and could lead to significant cost increases for Meridian to provide this service. The proposed requirement is that:

- B51. The **ancillary service agent** must provide monitoring equipment that accurately measures and records the **instantaneous reserve** response (in **MW**) from the **ancillary service agent's IR equipment**:

...

B51.2 in the case of monitoring equipment used for **generation reserve** including **battery energy storage systems**:

B51.2.1 for **fast** instantaneous **reserve**, at no greater than 0.1 second intervals commencing not less than 5 minutes prior to, and continuing until 5 minutes after, the **UFE time**; and

B51.2.2 for sustained instantaneous reserve, at no greater than 0.1 second intervals commencing not less than 5 minutes prior to, and continuing until 60 seconds after, the UFE time, and then at no greater than 1 second intervals until 15 minutes after, the UFE time; and

Meridian's revenue meters that carry out such recording are not likely capable of recording at this frequency of interval or for long enough before and after any under frequency event (UFE). We may be able to reconfigure our revenue meters but we do not currently know their limitations and to what extent reconfiguration might enable compliance with this increased monitoring requirement.

In addition, higher frequency data would create larger file sizes and lead to data handling difficulties such as limitations on data transfer. This could add further costs.

It is not clear to Meridian what benefit would result from this proposed change. To our knowledge, the data currently provided for monitoring purposes is sufficient. Meridian encourages Transpower to use the Procurement Plan to set out minimum monitoring requirements rather than aspirational data logging. Any increase on minimum requirements could be agreed with providers on a case-by-case basis through their contracts.

## Black Start

### *Increased data logging requirements*

The changes proposed to the testing requirements for black start at new clause B111 of the draft Procurement Plan would also be onerous and could lead to significant cost increases for Meridian to provide this service. The proposed requirement is that:

- B111. The **ancillary service agent** must ensure that during a **baseline test or on-demand test of black start**, the monitoring equipment accurately measures and records the active power, active power setpoint, reactive power, generator speed, generator terminal voltage, generator voltage setpoint and gate position for the **black start generating unit**. This data must:
- B111.1 be measured and recorded (in a time tagged manner) over intervals no greater than 0.02 seconds;
  - B111.2 commence not less than 6 seconds prior to the test and ending not less than 60 seconds after the response has stabilised to a steady state; and
  - B111.3 be held by the **ancillary service agent** for a period of not less than 2 years.

Meridian logs setpoints, generator speed, and gate position at 100ms (not 20ms as proposed) because this data is recorded internally in the PLC of a generator unit, not via an external datalogger. Meridian suggests this clause be amended to required recording of electrical signals at 20ms and all other signals at 100ms for practicality.

Meridian also seeks clarification in the drafting of the proposed amendment that the monitoring requirements and high-speed (20ms) data logging is only required for one generator unit (not all at the station) as this is done via a manually connected external datalogger.

Alternatively, Transpower could consider not including this change in the Procurement Plan. Recording requirements could instead be agreed with service providers through the tender and contracting process. This could take the form of a Schedule of data logging and equipment testing requirements agreed by the parties based on the specifics of each provider.

### *Clarification of baseline test requirements*

In Meridian's opinion, clause B109 in the draft Procurement Plan should be amended to clarify that a baseline test or on-demand test of black start need not require a full station

shutdown if the provider is able to otherwise demonstrate that the black start equipment is able to start without power being obtained from the grid or any local network. The current drafting specifying that a full station shutdown will be required “unless the system operator determines otherwise” leaves too much scope for an individual exercising that discretion to impose far greater costs on the provider for a full station shutdown. There is a significant difference between a baseline test of *Aviemore station’s* black start capability as opposed to *Aviemore’s diesel generator*. In the absence of a clarification that reduces that discretion, Meridian may need to build the cost of a full station shutdown into future black start tenders. Alternatively, Meridian would seek that any future ancillary service contract for black start set out how Transpower’s discretion will be exercised by agreeing what a baseline test will involve.

#### *Frequency of baseline tests*

Clause B106 of the draft Procurement Plan says “The ancillary service agent must conduct and pass a baseline test of each item of black start equipment at least once every 6 weeks...” This conflicts with the later statement in clause B108 of the draft Procurement Plan, which says “the system operator may require the ancillary service agent to conduct a baseline test of black start no more than once every 1 year.”

This inconsistency should be resolved. Given the 6-week testing requirement, an ability to request another baseline test once a year would seem to add little of value. It may be that clause B108 intends to provide for no more than one “on-demand test” per year. If that is the case, then the language of “on-demand test” should be used (as defined in the Procurement Plan) rather than referring to baseline tests again in a seemingly contradictory manner.

If retained, the drafting of “no more than once every 1 year” is also unclear. The drafting should clarify whether the intention is that:

- there be no more than one additional test per rolling 12-month period; or
- there be no more than one additional test per calendar year.

The latter interpretation could lead to additional testing in quick succession, for example in December and January.

Meridian looks forward to engaging with Transpower and the Electricity Authority in the next stages of this review of the Procurement Plan.

Please contact me if you have any queries regarding this submission.

Nāku noa, nā

A handwritten signature in blue ink, consisting of a large, loopy 'S' followed by a horizontal line and a small flourish.

Sam Fleming  
**Manager Regulatory and Government Relations**