Scanpower Limited

Voltage and Quality Constraints Disclosure

August 2024

Electricity Distribution Information Disclosure Determination 2012

Requirement 2.6.1B

Each EDB is required to publicly disclose qualitative information in narrative form that describes its practices in a manner that complies with 17.2.2 of Attachment A by 31 August 2024 in a standalone document.

Introduction

Under the Electricity Distribution Information Disclosure (Targeted Review 2024) Amendment Determination 2024 (ID), Scanpower is required to, under section 2.6.1B to publicly disclose qualitative information in narrative form that describes its practices in a manner that complies with clause 17.2.2 of Attachment A by 31 August 2024 in a standalone document.

In relation to the monitoring of load and injection constraits, Section 17.2.2 of the Information Disclosure Determination requires Scanpower to provide commentary on:

(a) any challenges, and progress, towards collecting or procuring data required to inform the EDB of current and forecast constraints on its low voltage network, including historical consumption data; and

(b) any analysis and modelling (including any assumptions and limitations) the EDB undertakes, or intends to undertake, with the data described in clause 17.2.2(a).

Disclosure

Summary Overview

Like many distribution companies, Scanpower's high voltage network is well understood and monitored, making capacity-related investment decisions relatively straightforward.

However, understanding and managing the low voltage network currently poses some challenges. To make better investment decisions, Scanpower recognises the importance of having accurate data.

To address this, Scanpower’s Asset Management Plan 2024-2034 lists out key objectives and strategies to improve the quality data received, as well as plans to increase capacity and reduce constraints on the network.

17.2.2 (A) challenges, and progress, towards collecting or procuring data required to inform the EDB of current and forecast constraints on its low voltage network, including historical consumption data;

Section 6.6 of Scanpower’s Asset Management Plan 2024-2034 gives a good overview of the currently technologies we have for gathering consumption and quality data on our high voltage network. This includes our SCADA system in our control room for controlling and monitoring and various parts of our 11 kV network.

However, currently Scanpower only has limited visibility of the LV network and decision making tends to be reactive in response to stimuli such as new connection requests of life-cycle asset replacements.

As documented in Sections 9.16.1, 9.17 and 12.3.7, Scanpower is working to improve visibility of loadings on the LV network and is working through a programme of installing monitoring equipment on key transformers throughout the network (in particular in urban areas). To date, sixteen loggers have been installed (eleven on pad mount transformers and five on pole top transformers).

The data collected from these loggers provides Scanpower with information on transformer and circuit loadings that improve our ability to identify / predict network constraints, and make better informed asset renewal and network development decisions.

At present we are in discussion with several providers of LV monitoring equipment and related software in anticipation of commencing a more widespread roll-out in the coming year.

17.2.2 (B) analysis and modelling (including any assumptions and limitations) the EDB undertakes, or intends to undertake, with the data described in clause 17.2.2(a).

Section 6.6.6 of Scanpower's Asset Management Plan 2024-2034 provides an overview of Milsoft, our load flow and faults analysis software / distribution management system.

Milsoft is used to model both our 11kV and 400V networks up to the point of supply on an actual and hypothetical basis (i.e. scenarios can be modelled). Section 6.6.5 of the Asset Management Plan provides an overview of the network connection database we have developed to feed into the model making it electrically more accurate.

With the recent deployment of Milsoft, we have expanded our ability to model voltages up to the supply point. By combining this modelling with field monitoring devices, we can fine-tune our analysis and conduct more detailed scenario assessments. These findings, along with anticipated load growth, will guide our future asset management plan of how we manage new connections and congestion on our network. This plan will steer network development projects aimed at enhancing voltage quality and overall performance.

Director Certification

Schedule 18 Certification for Year-end Disclosures

Clause 2.9.2

We, Allan Benbow and David Veale, being directors of Scanpower Limited certify that, having made all reasonable enquiry, to the best of our knowledge-

a) the information prepared for the purposes of clause 2.6.1B of the Electricity Distribution Information Disclosure Determination 2012 in all material respects complies with that determination.

Allan Benbow **David Veale**

30 August 2024