Landis+Gyr 241 O'Riordan St Mascot, NSW 2020



16th February 2023

Jessica Curtis Australian Energy Market Commission GPO Box 2603 Sydney NSW 2000

Re: Consultancy on Unlocking CER Benefits Through Flexible Trading

Dear Jessica,

Thank you for the opportunity for Landis+Gyr to provide our response to the AEMC's consultation regarding the rule amendment: "Unlocking CER Benefits Through Flexible Trading". Landis+Gyr recognises and supports the objective of increasing market flexibility and providing the means for innovative and cost optimised solutions for the end-consumer. However, it is Landis+Gyr's view that the proposed model for subtractive metering may be susceptible to problems due to complexities in implementation and operation. Referring to new metering requirements for minor energy flow, Landis+Gyr wishes to submit concerns that a reduced specification for secondary settlement points may compromise the operational performance that is required by the market and the market operator.

Landis+Gyr outlines these points in our submission below. We welcome the opportunity to contribute further as the AEMC's consultation process progresses.

Overview of Landis+Gyr

Operating for over 120 years, Landis+Gyr is a global organisation with local presence in more than 30 countries. Worldwide, we have deployed more than 300 million meters to customers, and we have become the leading provider of integrated energy management solutions for the utility sector. Offering one of the broadest portfolios in the market, Landis+Gyr delivers innovative and flexible solutions to help utilities solve their complex challenges in smart metering, across electricity, gas and water, grid edge intelligence and smart infrastructure. With sales of USD 1.8 billion, Landis+Gyr employs approximately 6,000 people in over 30 countries across five continents, with the sole mission of helping the world manage energy better. Australia is one of our key markets and we are committed to supporting future industry needs through innovation, value-add and reliability of our products and services, while helping to reduce costs.

Landis+Gyr's focus is on providing leading technology and a roadmap to support future industry needs. We always welcome the chance to work with industry participants and stakeholders to understand their drivers and requirements. Accordingly, we thank you for the opportunity to contribute to this consultation.

Consultancy Objectives

The objectives of the AEMC's consultation paper are positive and Landis+Gyr is aligned to help achieve greater flexibility in metering solutions. Landis+Gyr has concerns that the subtractive metering model may not be the best framework for achieving these objectives. This is because of the complexity of implementation and possible sources of error that could arise in real-world applications.

Metering Installation

In a typical household, it is likely that the primary and secondary settlement points will utilise multiple measuring elements. This leads to having many permutations of wiring arrangements between the settlement

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points. Each site will be unique and an incorrect record of how the appliances and metering are connected could lead to errors in the calculation of energy values being offered under the tariff(s).

To avoid this, standardisation of sites may be possible, but this could mean costly rewiring or a 'vanilla' primary settlement point that would limit the ability for FRMP1 to offer innovative tariffs or services. Alternatively, metering installers may capture details of each site, but this could be time consuming and may need to be repeated as consumers add or upgrade major appliances. Potential for errors would remain either inadvertent by the installer or subsequently via re-configuration of loads by the consumer.

Further to this, consideration should be given to the location at which secondary meters are installed. Rules are in place for the location of primary meters to ensure that the meter(s) are easily accessible for maintenance and operational purposes without having to schedule an appointment with the consumer. Delays in accessing meters would increase cost and/or reduce customer satisfaction.

Interval Periods

Another consideration that would require addressing in the implementation of a subtractive metering model, is that today the majority of meters in Australia are limited to 30-minute interval data and this is likely to be the case for several years. With this in mind, a process of how to manage a site with an older generation meter would need to be documented. For example, the primary meter could be upgraded, the secondary meter could be limited to 30-minute data, or the site may not be deemed suitable for subtractive metering until the primary meter churns. Each of these options are non-optimal.

Systems Infrastructure

Landis+Gyr also wishes to submit that adding an additional metering point at a site, including a separate communications device, would mean at a minimum duplicating current systems and practices, thereby duplicating infrastructure and operating costs.

Minor Energy Meter

The other major topic in the AEMC's consultation paper is the definition of a minor energy flow meter to create a reduced category of installation. Landis+Gyr wishes to request clarification through this consulting process as to what would constitute the threshold for minor energy, noting that the generation and loads being considered for secondary settlement points could be substantial.

Meter Display

In terms of the proposed reduction to the requirements of a minor energy flow meter, Landis+Gyr notes that the consultation paper explains that a physical display is already not mandatory. Therefore, meter suppliers have the flexibility to include or exclude this as part of managing market preferences. We note that a display is generally favoured by installers, to verify the installation, and consumers, to validate energy usage.

Disconnection Relay

Regarding AEMC's proposal that a relay for connection and disconnection is not required, Landis+Gyr observes that the inability to disconnect CER at the meter will greatly limit the option of selective load curtailment and emergency backstop in securing the grid, and for CER assets to be disconnected due to non-payment of energy.

The inclusion of a disconnect relay was one of the key requirements in the specification of the Power of Choice meter. The primary driver was the avoidance of a site visit for the disconnection of power for non-payment of energy, and this same relay is now being leveraged as an emergency backstop to improve grid security. In developing the framework for flexible trading, rules and procedures need to be developed for the disconnection of appliances behind the primary meter for non-payment and breaching connection requirements.

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Standards Compliance

Landis+Gyr agrees with AEMC's proposal that the accuracy of the meter and capability of communications should be consistent with the primary meter. The consultation paper was silent on other requirements, including but not limited to standards compliance and infield statistical sampling of meter accuracy. Landis+Gyr believes these requirements should also be consistent with the primary meter.

Data Security

The data provided by metering is used for market financial settlement. Security and accuracy of the data is therefore paramount. The design of meters encompasses access rights, data encryption, the design of the data structures within the meter, and the tools and applications that can access the physical meter. As a minimum the meter values measured, stored, and exported must not be edited by any tools. In transferring the data from the meter, private communications channels are used with end-to-end encryption of the communications path and also the encryption of the data being transported. There are various international standards that cover these aspects including an Australian Signals Directorate document, the Information Security Manual. These same standards and design practices should be applied to meters employed at the secondary settlement point.

Street Furniture

The topic of metering street furniture, discussed in the consultation paper, can be addressed separately to the metering of secondary settlement points. Landis+Gyr notes that, should the market wish to measure these assets, this could be done with a simpler meter more in line with what is proposed in the consultation paper.

Initiatives Currently Driving CER.

Landis+Gyr was interested in the description of various flexible offers and trials currently in the market (refer Appendix A of the consultancy paper) under the existing market framework. Landis+Gyr welcomes the opportunity for further discussion through the consultation process on how the proposed changes under this consultancy would increase participation or value to the market.

Landis+Gyr once again thanks the AEMC for the opportunity to participate in the consultation process. We wish to re-iterate our commitment and support to the Australian energy market and our enthusiasm for innovation and market flexibility. As well as the discussion points raised in this letter, Landis+Gyr remains available to provide expert opinion on the capability of metering technology as well as the process for developing functionality and meter design.

Yours sincerely,

Opi Taumalolo Head of ANZ Product Management Mark Bell Account Director - Queensland