To: **File**
From: **James L. Stortz**
Subject: [Subject], **FCC ID:** [Category] **Limited Modular Approval Request** **February 10, 2022**

Scope

47CFR 15.212 communicates requirements for products requesting modular approval. In particular, eight requirements are enumerated along with a request that each of the eight be explained for any product requesting such approval. It is the purpose of this document to respond to those eight requirements in regard to the Landis+Gyr product: [Subject].

Modular Approval Requirements

1.1 RF Shielding

The [Subject] module is self-shielding and is not dependent on any component or characteristic of the device into which it is embedded. Shielding is accomplished through a combination of metallic self-shielding components, copper planes, guards, and vias in the PCB. The result is a design that has been proven to be neither sensitive to outside influence nor capable of introducing interference into outside components.

1.2 Buffered Modulation / Data Inputs

The [Subject] module does not have external modulation or data inputs. Rather, the RF sections are driven by an on-board microprocessor which directly controls the RF data lines and operates so as to not allow excessive modulation.

1.3 Power Supply Regulation

The [Subject] module uses linear, low-dropout regulators to provide all the electronics with a supply that is fixed, even when the input voltage is varied.

1.4 Antenna Requirement

The [Subject] module comes with a planar inverted-F antenna (PIFA) printed on the board.

1.5 Stand-Alone Testing

All testing on the [Subject] module was conducted standalone, or just the board by itself. No shields or enclosures were used, other than those fully integrated into the modules themselves. No ferrites were used on data or power lines during testing. These devices are DC powered, and exceed applicable conducted emission requirements.

1.6 Labeling

There are two transmitters on the same PCB assembly (or AXei host), the on-board Zigbee radio (AXei) and the S5-MCM0 module. The S5-MCM0 is a fully modular certified radio.

There is no label of the FCC ID on the PCB assembly where the AXei Zigbee radio is located, hence it is certified as limited modular approval. In the final assembly or host, where the radios are contained, a label with the following information must be visible on the outside. The exact text shall be as specified in 47CFR 15.212.

CONTAINS FCC ID: R7PNG0R1S7
CONTAINS IC: 5294A-NG0R1S7

CONTAINS FCC ID: R7PEG1R2X6
CONTAINS IC: 5294A-EG1R2X6

1.7 Specific Rules and Operating Requirements

The [Subject] module complies with all pertinent rules for its section.

1.8 RF Exposure Requirements

The [Subject] module complies with all exposure requirements. As a component used in the Utility industry, this product is not intended for use near human operators.

2.0 In Reference to 15.212(b)

The [Subject] module is always professionally installed and is not sold to the general public.

This module undergoes continuous, rigorous testing to ensure that full compliance is always maintained.

Sincerely,
James L. Stortz

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