December 17, 2013

Chief, Equipment Authorization Branch Federal Communications Commission 7435 Oakland Mills Road Columbia, MD 21046

Subject: Request for unlicensed Modular Transmitter Approval LF5-M333688D001

Dear Sir:

Medtronic Inc. hereby requests FCC Equipment Authorization as a Singular Modular Transmitter FCC ID-M333688D001.

This letter addresses the information required by points one through eight of 47 CFR 15.212.

- 1. The modular transmitter must have its own RF shielding. Shielding necessary for normal operation is accomplished by a metal shield enclosure which attaches to the printed wiring board and encloses the RF circuitry, including the frequency-determining element.
- 2. The modular transmitter must have buffered modulation/data inputs. The subject transmitter receives data via the industry-standard USB 2.0 interface. This digital interface limits the data rate and modulation.
- 3. The modular transmitter must have its own power supply regulation. The module receives power from the host system and further regulates the level.
- 4. The modular transmitter antenna must comply with the antenna and transmission system requirements of sections 15.203, 15.204(b) and 15.204(c). The antenna of the of the module is a loop type, is the only antenna at this time and complies with all applicable FCC requirements.
- 5. The modular transmitter must be tested in a stand-alone configuration. As described in section 2.6.3 of the test report included in the filing for FCC Equipment Authorization. The subject module plus antenna was tested using a test fixture to supply and signal to the module which was attached to the EUT.
- 6. The modular transmitter must be equipped with either a permanently affixed label or must be capable of electronically displaying its FCC identification number. The subject module is intended to be placed within a host system enclosure unique to Medtronic. Due to the size of the module, the FCC required information is to be placed on a separate sheet that will be included with any host system with the module installed. The prescribed label with the FCC Identifier will be applied to the host system housing.
- 7. The modular transmitter must comply with any specific rule or operating requirements applicable to the transmitter.

This module complies with all requirements for FCC certification contained in Subpart C of Part 15 for modular transmitters.

8. The modular transmitter must comply with any applicable RF exposure requirements in its final configuration.

There are no RF exposure issues for this device. The RF output power is less than 1 mW assuring compliance with the Commissions RF Exposure requirements. Power output calculation is based on maximum measured level of the fundamental.

Leisa Martinez

Sr. Principal Regulatory Affairs Specialist

Medtronic, Incorporated.