



Federal Communications Commission  
7435 Oakland Mills Road  
Columbia MD 21046

Subject: FCC Class II Permissive Change for FCC ID: 2ADNG-MS550  
(Original Grant Date: 04/21/2020)  
Applicant: Energous Corporation

Dear Sir/Madam:

Energous is submitting an application for Class II Permissive Change for FCC ID: 2ADNG-MS550 regarding the extension of the charging zone from 40cm to 1m. This letter provides justification for the changes being made.

### **Increasing the Charging Zone to 1 meter**

The WPT Transmitter currently has a charging zone up to 40 centimeters and a transmitter output power of up to 5.5W. Energous is extending the charging zone to 1 meter without increasing the transmit power. This extension will be accomplished by tuning the Energous WPT receiver which will allow the receiver to utilize lower energy. This will increase the charging distance without any changes to the Transmitter hardware or transmit power levels. The only change to the WPT Transmitter required to enable this use case is a software modification that will allow the WPT Transmitter to operate when the receiver is within the charging zone, up to 1 meter. All the RF parameters of the Transmitter will remain unchanged and will remain in compliance with the parameters listed on the Grant of Equipment Authorization for FCC ID: 2ADNG-MS550. Additionally, the proposed change to increase the charging distance through upgrades in the WPT receiver performance do not impact the Bluetooth transmitter and there are no changes to the WPT transmitter Bluetooth hardware or firmware associated with the improvements in receiver performance.

### **Impact on RF Exposure**

It is observed as per the original Grant filing via FCC ID: 2ADNG-MS550 that the maximum WPT transmitted output power is 5.5 W and will not be increased to operate with up to a 1 meter charging zone. RF exposure compliance has been evaluated at 20 cm in the original filing and since there is no change to WPT transmitter output power or directionality/gain of the transmitter's antenna, the highest RF exposure value compliance is demonstrated in the original Grant at 20 cm.

Best Regards,

A handwritten signature in black ink, appearing to read 'William Manning'.

William Manning  
Sr Director, Regulatory Operations  
Energous Corporation  
August 11th, 2020