

Before the
COMMUNICATIONS C
Washington, DC 20554

In the Matter of)
)
Petition To Amend the Commission’s Rules to) RM-11815
Allow Next-Generation Wireless Charging)
Technology for Electric Vehicles Under Part 18)

To: The Commission

**COMMENTS OF
THE BOEING COMPANY**

The Boeing Company (“Boeing”) provides these comments in support of the Petition for Rulemaking that was filed by four major automobile manufacturers seeking changes to Part 18 of the Commission’s rules to enable the deployment of next-generation wireless charging technologies for light-duty electric vehicles (“*Wireless Charging Petition*”).¹

The Commission placed the *Wireless Charging Petition* on public notice for comment on the same day that the Commission placed on public notice a petition for rulemaking that was filed by Boeing seeking to streamline certain of the Part 18 rules.² Specifically, Boeing seeks to modify Section 18.121 of the rules so that it includes the same exemption that has long existed in Section 15.103(a) for digital devices used exclusively as components within transportation vehicles. As modified, Section 18.121 would exempt from the Commission's equipment certification rules

¹ See Amendment of the Commission’s Rules to Allow Next-Generation Wireless Charging Technology for Electric Vehicles Under Part 18, *Petition for Rulemaking*, RM-11815 (Sept. 5, 2018) (“*Wireless Charging Petition*”).

² See Amendment of Part 18 of the Rules to Expand the Exemption for ISM Devices Used as Components in Transportation Vehicles, *Petition for Rulemaking of The Boeing Company*, RM No. 11814 (Aug. 6, 2018) (“*Boeing Petition*”).

industrial, scientific, and medical (“ISM”) equipment used exclusively in the monitoring and control systems of transportation vehicles, as long as they are not used to power the vehicle or electric devices within the vehicle.

The *Wireless Charging Petition* and the *Boeing Petition* are similar in that they both involve Part 18 of the Commission’s rules. The petitions are also similar in that they both seek changes to the Commission’s rules that would help significantly to advance U.S. leadership in the development of autonomous and electric-powered vehicles, be they cars, trucks, aircraft, or maritime vessels.

In all other respects, however, the two petitions are entirely different. The petitions address different types of RF-generating components in vehicles, the *Wireless Charging Petition* solely addressing wireless charging systems and the *Boeing Petition* expressly excluding wireless charging systems from the scope of the streamlining relief requested. Thus, although Boeing recognizes the administrative efficiencies that may be achieved by considering these petitions concurrently, Boeing urges that great care be taken to ensure that confusion does not result within the wireless industry regarding whether the two petitions might be related. Each petition addresses very distinct issues that are unrelated to each other.

This said, Boeing is a strong supporter of both petitions. Boeing explained within its petition the reasons why Section 18.121 of the rules should be expanded to reflect the same exemption that has long existed in Section 15.103(a) of the rules for certain RF-emitting components in transportation vehicles and Boeing will not repeat those justifications here.

With respect to the *Wireless Charging Petition*, Boeing urges the Commission to modify its Part 18 rules to facilitate the wireless charging of vehicles in a safe and effective manner in

order to support U.S. leadership in this critical growth area for U.S. industry. Although Boeing does not manufacture cars or trucks, Boeing is a global leader in the design and manufacture of aircraft and aerospace systems, including autonomous flight vehicles that are increasingly being used to support commercial activities. Boeing also has a growing involvement in the development of autonomous vessels for use in maritime applications.

Boeing recognizes that the scope of the *Wireless Charging Petition* is limited to light-duty automobiles. Nevertheless, these same capabilities could also be applied eventually to small trucks and other vehicles used at airports to service aircraft, move baggage and passengers, and maintain airport security. One could also easily envision the near term conversion of wireless charging systems that were developed for automobiles so that they can be used for small aircraft and maritime vessels. As just one example, wireless charging could be used in remote locations for unmanned recharging stations where the lack of a physical interconnection between the autonomous vehicle and the charging system would permit an autonomous drone aircraft or small maritime vessel to arrive at the recharging facility, recharge its electric cells, and resume its mission, all without any human involvement.

Countless other examples of potential uses of wireless charging in the aviation, aerospace and maritime industries can easily be envisioned and Boeing is exploring their practical applications. To facilitate these efforts by Boeing and other major U.S. manufacturers, the Commission should adopt either one consolidated (or two parallel) Notices of Proposed Rulemaking seeking public comment on the regulatory measures requested in the *Wireless*

Charging Petition and in the *Boeing Petition* addressing these important proposed changes to Part 18 of the Commission's rules.

Respectfully submitted,

THE BOEING COMPANY

By:

A handwritten signature in black ink, appearing to be "Bruce A. Olcott", written over a horizontal line.

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