

**EXHIBIT – NARRATIVE DISCUSSION
AND STA EXTENSION JUSTIFICATION**

Pursuant to Section 5.61(c) of the Commission’s Rules, Deere & Company (“Deere”) provides this narrative statement in support of the extension requested for the special temporary authority (“STA”) to continue operational testing using 3550-3700 MHz Citizens Broadband Radio Service (“CBRS”) spectrum from discrete sites near Deere facilities in Moline, Illinois and three experimental farms nearby in close proximity in Iowa.¹ Deere was originally granted a Special Temporary Authority (“STA”) authorization on May 24, 2019, pursuant to file number 0643-EX-ST-2019, call sign WO9XOA (“initial STA”). Subsequently on November 8, 2019, Deere filed a conventional experimental license consistent with the terms of the STA, file number 0949-EX-CN-2019, to extend the operational testing of the CBRS band. Accordingly, Deere requests the grant of this STA as soon as possible but no later than November 24, 2019 for up to six (6) months to allow continued operation while the conventional experimental license is pending.² As this STA extension makes no modifications to the initial STA grant, Deere incorporates by reference Exhibit B from the initial STA which provides technical characteristics for the station sites.

Consistent with Commission Rules, the Commission may grant extensions of an STA while an application for a conventional experimental license is pending.³ Further as originally determined in the grant of the initial STA, “good cause” exists to support the extension.⁴

The proposed locations in Illinois and Iowa continue to represent optimal experimental license test site for CBRS 3550-3700 MHz spectrum. Among other characteristics, these test sites enjoy flat topographies that facilitate line-of-sight transmission with minimal links. Moreover, Deere has an extensive presence in the region, which will facilitate the installation and maintenance of equipment under test.

Deere’s continued testing does not represent an interference threat to incumbent operations. The test sites are located hundreds of miles from coastal radar operations, far outside Part 96 exclusion zones. No international ground stations requiring protection in the 3650-3700 MHz band operate in Illinois or Iowa.⁵ Deere will continue to coordinate with Wireless Broadband Services (“WBS”) operated under Subpart Z of the Commission’s Part 90 Rules.⁶ Deere will also continue to comply with the power levels in Section 96.41. As described in the initial STA Exhibit B, Deere will also continue to provide a 24/7 point of contact with “kill switch” capability in the unlikely event of harmful interference with incumbent users.

Initial STA Exhibit B provides the unit volume and technical characteristics for the experimental license station sites proposed by Deere for the instant extension. Deere requests

¹ 47 CFR § 5.61(c).

² *Id.*

³ *Id.*

⁴ 47 CFR § 5.61(a)(2).

⁵ See <https://transition.fcc.gov/bureaus/ib/sd/3650/grandftr.pdf> (last visited 11/5/2019).

⁶ See 47 C.F.R. §§ 90.1301, *et seq.*

continued authority for the minimal number of devices needed to evaluate the viability of the 3550-3700 MHz to support next generation IoT applications. Moreover, all equipment proposed to be used by Deere pursuant to this STA complies with adopted CBRS rules.

For the foregoing reasons, Deere respectfully requests that the Commission expeditiously grant the requested STA extension while the conventional experimental license is pending.