Dear Ms. Dortch:

At the request of Federal Communications Commission ("FCC") staff, Hughes Network Systems, LLC ("Hughes") provides the information contained herein regarding the cost of backup batteries. Specifically, Hughes provides sample costs of Uninterrupted Power Supply ("UPS") devices that are capable of providing eight (8) hours of backup power for a Hughes modem in idle mode.

Hughes provides advanced broadband satellite service throughout the United States, including high-speed internet and voice over internet protocol ("VoIP"). In addition, Hughes manufactures the devices for its HughesNet broadband services, and also is a manufacturer of satellite terminals for other providers of advanced communications services in the United States.

In an email to Hughes, FCC staff asked what would be the necessary characteristics or parameters of a UPS device capable of providing eight (8) hours of backup power in case a consumer wanted to do comparison shopping. In addition, staff asked for an example of such a UPS devise and the cost of such device.\footnote{Email from Jerome Stanshine, Telecommunications Systems Specialist, FCC/Public Safety & Homeland Security Bureau/Cybersecurity and Communications Reliability Division to Emanuel Harrington, Senior Technical Director, Hughes (Apr. 27, 2015).}
A UPS device capable of providing eight (8) hours of standby power to a Hughes modem (either with or without Wi-Fi) would need to be in the range of 3000 VAh (volt-ampere-hours). For consumers that are interested in obtaining back-up power to support their Hughes modem, this is the sole technical characteristic that consumers will need to find an appropriate solution. Other UPS characteristics, such as digital displays, are add-on like features that a consumer could select to support his or her needs. As long as the UPS device provides 3000 VAh, consumers are able to obtain up to eight (8) hours of backup power for a Hughes modem in idle mode (either with or without Wi-Fi).

An example of such a UPS device is the APC BR1500G cascaded with the APC BR24BPG. Cascading the two 1500 VAh UPS devises together would bring the total VAh to 3000 and could allow for 8 hours of backup in idle mode. The cost for cascading these two UPS devices varies depending on the seller but will range from approximately $350 to $400. This is the lowest cost option.

Other than cascading two UPS devices together, consumers also have the option of buying one 3000 VAh UPS device. However, a single 3000 VAh unit is more expensive. For example, Office Depot’s website lists 3000 VAh UPS devises starting at $896; Best Buy’s website lists 3000 VAh UPS devises starting around $600; and Staples lists 3000 VAh devices starting at approximately $740. Moreover, these websites all show that the cost of a single 3000 VAh UPS device can go well above $1,000.

In conclusion, the sole technical characteristic that consumers need to find an appropriate battery backup solution for a Hughes modem is 3000 VAh. The APC BR1500G cascaded with the APC BR24BPG is the lowest cost example. Accordingly, consumers who wish to obtain a battery backup solution for their Hughes modem can do so on a reasonable cost basis from major consumer electronic stores.

3 See PS Dkt No. 14-174, et al. Reply Comments of Hughes Network Systems, LLC, at 3 (Mar. 9, 2015). This assumes power levels of 21Watts for standby without Wi-Fi and 33Watts for standby with Wi-Fi.

4 Consumers have the capability to use any VoIP service via HugheNet. Because Hughes would not know which VoIP provider a customer is using, this calculation does not include providing battery backup power to the VoIP adapter.


Please direct any questions to the undersigned.

Sincerely,

/s/ Jennifer A. Manner
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cc: John Healy (FCC)
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