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REDACTED FOR PUBLIC INSPECTION

January 8, 2015

Marlene Dortch
Secretary
Federal Communications Commission
Washington, DC 20554

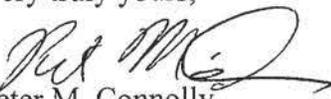
Re: Application of Hardy Cellular Telephone Company and McBride Spectrum Partners
LLC For Consent To Assign License (WT Docket No. 14-240)

Dear Ms. Dortch:

Transmitted herewith, on behalf of Hardy Cellular Telephone Company and its parent company, United States Cellular Corporation, is a redacted version of its Response to the December 9, 2014 letter from Roger Sherman, Chief of the Wireless Telecommunications Bureau, to John Gockley of United States Cellular Corporation seeking additional information concerning the above-referenced application.

In the event there are any questions concerning this matter please communicate with the undersigned.

Very truly yours,


Peter M. Connolly

cc (via email):

Scott Patrick (FCC)
Kate Mathews (FCC)
Jim Bird (FCC)

#34427621_v1

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January 8, 2015

Roger C. Sherman
Chief, Wireless Telecommunications Bureau
Federal Communications Commission
Washington, DC 20554

Re: Application of Hardy Cellular Telephone Company and McBride Spectrum Partners, LLC For Consent to Assign License (WT Docket No. 14-240)
(Confidential Information – Subject to Protective Order in WT Docket No. 14-240 Before Federal Communications Commission)

Dear Mr. Sherman:

On behalf of Hardy Cellular Telephone Company and its parent company United States Cellular Company (collectively “USCC”), this will respond to your letter of December 9, 2014 seeking “additional information, documents and clarification of certain matters discussed in the application and other information provided to the Commission.”

For convenience, we will reprint each of the Commission’s questions before providing our response.

QUESTION 1. On page 1 of the Public Interest Statement, the Applicants claim that USCC “plans to use the 700 MHz spectrum to implement its Long Term Evolution (‘LTE’) deployment in the relevant counties.” Further, on page 2-3 of the Public Interest Statement, the Applicants assert that additional 700 MHz spectrum is needed to allow USCC “to offer their customers a 10 x 10 channel with throughput speeds comparable to those of the larger carriers,” and that “this acquisition will allow USCC to improve its low frequency service.” For each Relevant Area, provide:

a. A detailed discussion of the Company’s plans to provide advanced mobile telephony/broadband services prior to the Proposed Transaction, including a detailed description of the Company’s current and planned deployment of LTE, which identifies the spectrum bands and the total amount of spectrum used for LTE deployment.

b. A detailed description of how the Company would use the spectrum that it would acquire under the Proposed Transaction, including its timeline for deployment, to provide

advanced mobile telephony/broadband services to consumers, on a standalone basis and/or in conjunction with any other of the Company's spectrum holdings.

c. A detailed description of how deployment of a 10 x 10 MHz LTE network would improve throughput speeds.

d. A detailed explanation of why the Company needs more than one-third of the suitable and available spectrum below 1 GHz for the provision of mobile wireless services

e. Provide all documents relied on in preparing the responses to 2(a)-2(d). (sic). [Presumably 1(a)-1(d) is intended].

Answer to QUESTION 1(a):

This proposed acquisition involves nine West Virginia counties, namely Barbour, Doddridge, Harrison, Lewis, Marion, Monongalia, Preston, Taylor and Upshur ("Relevant Area"). In order to provide competitive LTE service, USCC plans to utilize the additional 12 MHz of 700 MHz A Block Spectrum it seeks to acquire in the Proposed Transaction to upgrade and enhance its existing 700 MHz LTE deployment from a 5x5 MHz channel to a 10x10 MHz channel. This will allow USCC to provide an LTE experience comparable to its competitors. West Virginia RSA#3, comprised of Barbour, Harrison, Marion, Monongalia, Preston and Taylor counties, substantially overlaps with the Relevant Area. AT&T Wireless, nTelos, Sprint, and Verizon all provide service in that market. If this application is granted, USCC commits to bringing this spectrum into use in the Relevant Area within 90 days of closing where it is possible to do so. USCC, will of course also have to deal with the continued operation of WTAE-TV, Pittsburgh, PA on TV Channel 51, as well as West Virginia "Quiet Zone" considerations.

Attachment A hereto is a map depicting the counties in the Relevant Area which will be affected by Channel 51 operations and Quiet Zone restrictions. As shown on the map, Marion, Monongalia, Taylor and Preston counties will be affected by the Channel 51 contour and "buffer zone." Upshur and Barbour counties are, respectively, wholly and mostly within the Quiet Zone. Lewis and Harrison counties are partially within the Quiet Zone and small portions of Taylor and Preston counties are also covered by the Quiet Zone. These will be substantial constraints on USCC's 700 MHz A Block operations but USCC is determined to use these frequencies to the maximum extent possible.

Attachment B hereto consists of an internal USCC "PowerPoint" presentation from July 2014, describing USCC's "valuation" of the Relevant Area. It was prepared when USCC was deciding whether to bid on a partitioned license for the Relevant Area. It also contains a detailed analysis of the value of other licensees' networks in the market.

Attachment C hereto consists in part of analytic charts prepared for USCC by the Nielsen Company comparing, in detail, USCC's network performance in the Relevant Area and that of other carriers.

USCC currently offers CDMA, EVDO and LTE services in the Relevant Area. Those services are deployed on USCC's current spectrum holdings. These consist, in part, of 25 MHz of Cellular B-Block spectrum in seven of the nine counties, namely Barbour, Harrison, Marion, Monongalia, Preston, Taylor and Upshur (Upshur County, not included in West Virginia RSA#3, is served by USCC's West Virginia RSA#5 cellular licensee). The cellular spectrum band is used to support [REDACTED] services in those counties. USCC is also licensed for 10 MHz of PCS A Block spectrum in all nine counties in the Relevant Area [REDACTED]

[REDACTED] However, PCS spectrum characteristics are not ideal for LTE in rural, mountainous areas, which predominate in the Relevant Area and USCC would prefer to expand its LTE capacity on lower frequency 700 MHz spectrum.

Lastly, 12 MHz of 700 MHz spectrum (Band 12) is licensed to King Street Wireless, L.P. ("King Street"), a Commission licensee in which is an affiliate of USCC is a limited partner, in each of the counties in the Relevant Area. [REDACTED]

The chart below, taken from the pending application, graphically describes USCC's present (as well as proposed) spectrum holdings in each of the relevant counties, together with the King Street spectrum to which USCC has access.

License Area	County	ST	County FRS 1	Overlap CDMA	Overlap U.S. Cellular	Overlap U.S. Cellular	Proposed USCC Spectrum (MHz)	Currently Licensed U.S. Cellular Spectrum (MHz)	Currently Licensed U.S. Cellular Spectrum (MHz)	Currently Licensed U.S. Cellular Spectrum (MHz)	Total Available USCC Spectrum (MHz)
BEA003 - Pittsburgh, PA - WV (Cell Sign W02576 - partitioned areas include Barbour, Doddridge, Harrison, Lewis, Marion, Monongalia, Preston, Taylor, and Upshur, WV Counties only)	Barbour	WV	54001	703 - West Virginia 3 - Monongalia	082 - Clarksburg-Ebens, WV	021 - Pittsburgh	12 MHz	25 MHz (U)	10 MHz (U)	12 MHz (G)	59 MHz
	Doddridge	WV	54017	702 - West Virginia 2 - Weeab	082 - Clarksburg-Ebens, WV	021 - Pittsburgh	12 MHz		10 MHz (U)	12 MHz (G)	34 MHz
	Harrison	WV	54033	703 - West Virginia 3 - Monongalia	082 - Clarksburg-Ebens, WV	021 - Pittsburgh	12 MHz	25 MHz (U)	10 MHz (U)	12 MHz (G)	59 MHz
	Lewis	WV	54041	702 - West Virginia 2 - Weeab	082 - Clarksburg-Ebens, WV	021 - Pittsburgh	12 MHz		10 MHz (U)	12 MHz (G)	34 MHz
	Marion	WV	54046	703 - West Virginia 3 - Monongalia	137 - Fairmont, WV	021 - Pittsburgh	12 MHz	25 MHz (U)	10 MHz (U)	12 MHz (G)	59 MHz
	Monongalia	WV	54051	703 - West Virginia 3 - Monongalia	306 - Morgantown, WV	021 - Pittsburgh	12 MHz	25 MHz (U)	10 MHz (U)	12 MHz (G)	59 MHz
	Preston	WV	54077	703 - West Virginia 3 - Monongalia	306 - Morgantown, WV	021 - Pittsburgh	12 MHz	25 MHz (U)	10 MHz (U)	12 MHz (G)	59 MHz
	Taylor	WV	54091	703 - West Virginia 3 - Monongalia	082 - Clarksburg-Ebens, WV	021 - Pittsburgh	12 MHz	25 MHz (U)	10 MHz (U)	12 MHz (G)	59 MHz
	Upshur	WV	54097	705 - West Virginia 5 - Tucker	082 - Clarksburg-Ebens, WV	021 - Pittsburgh	12 MHz	25 MHz (U)	10 MHz (U)	12 MHz (G)	59 MHz

U - attributable spectrum held through King Street Wireless, L.P., of which US Cellular holds an indirect, non-controlling 99% interest.
 G - spectrum held directly by US Cellular controlled entities.

USCC undertook research to determine how its present network operations in the Relevant Area compare with those of Verizon, Sprint and AT&T, which are also present in the Relevant Area. Nielsen, under contract to USCC, made the comparative analysis, which is summarized in the detailed charts included in Attachment C. The charts describe network "throughput" rankings in the Relevant Area. They provide information regarding network "throughput" speeds both to

wireless handsets (“GET”) and from wireless handsets (“POST”). [REDACTED]

[REDACTED] Thus, USCC seeks the additional spectrum to improve its system throughput and thus bolster its long term competitive position.

Answer to QUESTION 1(b):

To put it simply, a 10x10 MHz LTE deployment provides throughput speeds and additional capacity that are approximately two times the speed and capacity of a 5x5 MHz LTE deployment. Attached hereto as Attachment D is a PowerPoint presentation, prepared by USCC, which compares the operations of 1X EV-DO Rev.A, 5x5 MHz LTE, and 10x10 MHz LTE systems with respect to download speeds, upload speeds, airlink latency, connection setup times, movie download times, MP3 download times, and e-mail and attachment download times. As shown in the chart, 10x10 MHz LTE performance is far superior to that of 5x5 MHz operations.

In that connection, we would note that the FCC has repeatedly stressed the importance of improving carrier broadband speed to meet its educational and other public interest goals. See, e.g., In the Matter of Modernizing the E-Rate Program For Schools and Libraries Connect America Fund, Second Report and Order on Reconsideration, W.C. Docket Nos 13-184 and 10-90, FCC 14-189, released December 19, 2014, ¶68 (“We require high-cost support recipients to offer high-speed broadband connections sufficient to meet the targets set forth in the E-Rate Modernization Order...”).

Answer to QUESTION 1(c):

As noted above, USCC made a judgment that it needed the additional 700 MHz spectrum to improve its network in the Relevant Area and provide an LTE experience comparable to that provided by its competitors. As is also noted above, Attachment C hereto consists of detailed comparative charts comparing the network “throughput” in the Relevant Area of Verizon Wireless, AT&T, Sprint, and USCC. [REDACTED]

Answer to QUESTION 1(d):

[REDACTED] Certain A Block 700 MHz spectrum compatible with USCC’s network was available in the Relevant Area and USCC believed that that spectrum was essential to the achievement of an improved network and competitive parity with its larger rivals.

Answer to QUESTION 1(e):

The documents are provided in Attachments A-D and are discussed above.

QUESTION 2. Provide polygons in an ESRI shapefile format representing geographic coverage for USCC, including each mobile broadband network technology (e.g., CDMA, EV-DO, EV-DO Rev. A, GSM, EDGE, UMTS, HSPA, HSPA+, LTE) deployed in each frequency band (e.g., Lower 700 MHz, Cellular, AWS-1, PCS). Provide all assumptions, methodology (e.g., propagation, projection, field measurements), calculations (including link budgets), tools (e.g., predictive and field measurements) and data (e.g., terrain, morphology, buildings) used in the production of the polygons, and identify the propagation tool used, the propagation model used within that tool, including but not limited to, the coefficients used in the model and any additions, corrections or modifications made to the model.

Answer to Question 2:

The requested ESRI shape files and spectrum coverage maps, along with the relevant “link budgets,” are attached hereto as Attachment E. The maps depict USCC’s present cellular (Band 5), PCS (Band 2), and LTE (Band 12) coverage of the Relevant Area. The information provided in the shape files with respect to USCC’s CDMA, EVDO, and LTE coverage is described below.

The ESRI shape files are provided for the following types of network coverage in the Relevant Area.

- CDMA Coverage
We attach analysis of USCC’s CDMA 1XRTT reverse link budget. It provides a threshold for expected “In-Vehicle” coverage as identified by Reverse Link Required Effective Isotropic Radiated Power(EIRP). Industry standard coverage prediction tools were used to create predicted coverage plots. The threshold value was then used to create the provided contour showing where USCC expects to have at minimum “In-Vehicle” coverage. The predictions are based on mathematical estimations at a 30x30 meter grid level, and resized to a 180x180 meter due to processing constraints. Actual coverage will vary and depend on many factors typical of radio technologies including but not limited to distance to cell, cell/resource loading, subscriber speed, indoor/outdoor usage, etc.).
- EVDO Coverage
Similarly, analysis is provided for USCC’s EVDO reverse link budget. It provides a threshold for expected “In-Vehicle” coverage as identified by Reverse Link Required Effective Isotropic Radiated Power(EIRP). Industry standard coverage prediction tools were used to create predicted coverage plots. The threshold value was then used to create the provided contour showing where USCC expects to have at least mobile “In-Vehicle” coverage. The predictions are based on mathematical estimations at a 30x30 meter grid level, and resized to a 180x180 meter due to processing constraints. Actual coverage will vary and depend on many factors typical of radio technologies including but not limited to distance to cell, cell/resource loading, subscriber speed, indoor/outdoor usage, etc.).

- LTE Coverage

Lastly, analysis is provided for USCC's LTE reverse link budget. It provides expected "In-Vehicle" coverage as identified by Reverse Link Required Effective Isotropic Radiated Power (EIRP). Industry standard coverage prediction tools were used to create predicted coverage plots. The threshold value was then used to create the provided contour showing where US Cellular expects to have at least mobile "In-Vehicle" coverage. The predictions are based on mathematical estimations at a 30x30 meter grid level, and resized to a 180x180 meter due to processing constraints. Actual coverage will vary and depend on many factors typical of radio technologies including but not limited to distance to cell, cell/resource loading, subscriber speed, indoor/outdoor usage, etc.).

QUESTION 3. On page 3 of the Public Interest Statement, the Applicants submit that the proposed transaction "will undoubtedly improve USCC's network and strengthen its ability to compete with its larger rivals." For each Relevant Area, provide a detailed discussion of how the Proposed Transaction promotes and preserves meaningful competition, would still allow rival service providers and potential new entrants to provide an effective competitive constraint, and how it would allow the Company to become a more effective competitor. Provide all documents relied on in preparing the response.

Answer to Question 3:

As noted above, the additional 12 MHz of 700 MHz A Block spectrum would better enable USCC to compete in the Relevant Area, now and in the future. Future competition is not something which can be estimated or quantified precisely but competition is now thriving in the Relevant Area and likely will do so in the future.

Attachment C hereto contains detailed comparisons of the network performance of USCC and its competitors in the Relevant Area. The comparisons indicate that the additional spectrum will help USCC make its network more competitive with its competitors, [REDACTED]. That attachment also contains summaries of the spectrum holdings of USCC's main competitors in the Relevant Area. For example, in West Virginia RSA#3, which largely overlaps with the Relevant Area, Verizon Wireless holds 77 MHz of AWS, PCS and 700 MHz spectrum and AT&T holds 143 MHz of AWS, PCS, WCS, 700 MHz, and Cellular spectrum. [REDACTED]

[REDACTED]

[REDACTED]

Roger C. Sherman

January 8, 2015

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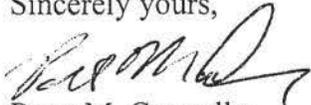
Those market share percentages demonstrate: (a) that competition is flourishing in the market, with no one carrier holding more than a 50 percent market share; (b) [REDACTED] and (c) that USCC is now competing in the market with three of the largest carriers in the United States, namely, AT&T, Verizon Wireless and Sprint, as well as with a strong regional carrier, nTelos. USCC's acquisition of additional 700 MHz spectrum, particularly spectrum encumbered by Channel 51 operations and Quiet Zone considerations, will not upset the competitive balance, except to strengthen USCC against its larger rivals, and will thus benefit competition overall.

It is also worth noting that competition in the Relevant Area will be strengthened by the awarding of six new licenses as a result of the current AWS-3 auction and by the award of new licenses in the 600 MHz auction in 2016.

In closing, USCC would also stress that it is one of the few remaining mid-sized wireless carriers, a category which formerly included such strong competitors as Alltel, Midwest Wireless, Western Wireless, Leap, MetroPCS, Atlantic Cellular, and Dobson Cellular. Such carriers once provided disciplining competition to the largest wireless carriers. But they are now gone, absorbed by larger carriers. USCC however has chosen to remain a wireless carrier and is pursuing a long term strategy which involves strengthening its spectrum position in regions and markets where it has the strongest position and largest market share, and thus the best chance to succeed. The Proposed Transaction is part of USCC's acquisition strategy, [REDACTED]

We ask the FCC to permit this relatively small acquisition of spectrum to go forward, precisely to strengthen USCC as a competitor to the "Big Four" and other carriers. The Proposed Transaction will strengthen competition nationally and locally.

Sincerely yours,



Peter M. Connolly

cc: Katherine Harris, FCC (katherine.harris@fcc.gov)

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**Attachments A through E
Redacted from Public Inspection**

**Confidential Information Subject to
Protective Order in WT Docket 14-240
Before the Federal Communications Commission**