

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of	)	
	)	
Service Rules for Advanced Wireless Services	)	WT Docket No. 04-356
in the 1915-1920 MHz, 1995-2000 MHz,	)	
2020-2025 MHz and 2175-2180 MHz Bands	)	

**REPLY COMMENTS OF SPRINT NEXTEL CORPORATION**

Michele C. Farquhar  
Mark W. Brennan  
HOGAN & HARTSON LLP  
555 Thirteenth Street, NW  
Washington, D.C. 20004  
(202) 637-5663  
  
*Counsel for Sprint Nextel Corporation*

Lawrence R. Krevor  
*Vice President, Government Affairs – Spectrum*  
Trey Hanbury  
*Director, Government Affairs*  
Richard B. Engelman  
*Director, Government Affairs*  
SPRINT NEXTEL CORPORATION  
2001 Edmund Halley Drive  
Reston, VA 20191  
(703) 433-4141

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## EXECUTIVE SUMMARY

Commenters unanimously agree with Sprint Nextel that the mobile power limit for the H Block must be significantly lower than the Commission's proposed 23 dBm/MHz EIRP limit to protect the millions of existing PCS devices operating in the 1930-1990 MHz band from harmful interference. Because the threat of harmful interference is greatest from devices in the 1917-1920 MHz portion of the H Block, the Commission should adopt bifurcated mobile transmit power limits. The Commission should limit mobile and portable devices to 6 dBm EIRP in the 1917-1920 MHz portion of the band, but permit those devices to operate at up to 30 dBm EIRP in the 1915-1917 MHz portion, where interference is highly unlikely to be generated. This approach would provide adequate interference protection while still enabling efficient and flexible use of the band.

Commenters are also in agreement that the out-of-band emission ("OOBE") limit of  $90 + 10 \log P$  dB (in the 1930-1990 MHz band) suggested by the Commission is insufficient to prevent harmful interference. Sprint Nextel recommends a limit of -76 dBm/MHz (derived as an average RMS measurement) as an adequate, technology-neutral limit that can be met by CDMA, GSM and next generation handsets.

Although reasonable limits on operations are needed to prevent interference, the Commission should not take the drastic approach of altogether prohibiting the deployment of mobile services in the H Block, as AT&T has self-servingly advocated. As the last major PCS expansion band available, there is great demand for deploying innovative next-generation mobile services in the H Block. Any attempt to restrict competition should be avoided, especially given that even AT&T agrees that appropriate mobile transmit and OOBE limits could be used to prevent harmful interference.

With regard to the proposed H Block licensing rules, many commenters, like Sprint Nextel, support the Commission's proposal to use small geographic areas such as Basic Trading Areas ("BTAs") for auctioning the spectrum. Several other PCS blocks are already licensed on a BTA basis. Making this band available on a BTA basis would facilitate the ability of existing operators to obtain spectrum to fill-in capacity-constrained areas.

Finally, the Sprint Nextel opposes the Commission's proposal to impose inflexible population-based construction benchmarks for the H Block, which would unnecessarily restrict operators' network deployment options and could cause potential bidders to avoid the auction altogether. The Commission should also reject the extraordinarily burdensome coverage benchmarks proposed by NTCH, which would make it less viable financially to provide service using the H Block, especially in rural areas. Instead of the population-based requirements, the Commission should adopt a flexible substantial service performance requirement, which has proven successful for many other services. The additional flexibility will be particularly beneficial to licensees given the stricter transmit and OOBE limits that are needed to prevent harmful interference.

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Sprint Nextel hereby files its Reply Comments regarding the Commission’s proposed rules for the 1915-1920 MHz and 1995-2000 MHz bands (the “H Block”) as set forth in the Further Notice of Proposed Rulemaking in the above-captioned proceeding.<sup>1</sup> In its initial comments,<sup>2</sup> Sprint Nextel expressed serious concerns that the Commission’s proposed power limits and out-of-band emissions (“OOBE”) limits for the upper portion of the H Block mobile transmit band were insufficient to protect existing Personal Communications Services (“PCS”) operations against harmful interference from H Block operations. All commenters that addressed the issue agreed with Sprint Nextel: permitting power of up to 23 dBm in the 1917-1920 MHz will cause harmful interference to incumbent operators. The Commission must reduce its proposed power limits and OOBE limits for the upper portion of the H Block mobile transmit band to avoid severely disrupting existing PCS operations.

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<sup>1</sup> *Service Rules for Advanced Wireless Services in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz Bands*, Further Notice of Proposed Rulemaking, FCC 08-158 (Jun. 20, 2008) (“*FNPRM*”).

<sup>2</sup> Comments of Sprint Nextel Corporation, WT Docket 04-356 (filed Jul. 25, 2008) (“*Sprint Nextel Comments*”).

**I. COMMENTERS AGREE THAT THE FCC'S PROPOSED TECHNICAL RULES FOR THE H BLOCK WOULD NOT PROTECT EXISTING PCS OPERATIONS FROM INTERFERENCE.**

**A. The FCC's Power Limits Proposal Would Cause Harmful Interference to Existing PCS Operations.**

In its comments, Sprint Nextel explained that the Commission's proposed 23 dBm/MHz EIRP mobile power limit in the *FNPRM* for the 1915-1920 MHz band would create unavoidable harmful interference to existing PCS operations.<sup>3</sup> To prevent such interference from disrupting millions of PCS users, Sprint Nextel again recommended that the Commission instead adopt bifurcated power limits of 6 dBm EIRP for mobile or portable device operations at 1917-1920 MHz and 30 dBm EIRP for mobile or portable device operations at 1915-1917 MHz, which were previously proposed jointly by Sprint, Verizon Wireless and Nextel.<sup>4</sup>

Other commenters have *unanimously* agreed that the mobile power limit for the upper three megahertz of the H Block mobile transmit band must be significantly lower than the Commission's proposed 23 dBm/MHz EIRP limit to protect existing PCS operations from harmful interference. These parties include a wide variety of wireless carriers, manufacturers, and trade associations, not ordinarily known for their ability to reach consensus on regulatory and technical issues. For example, AT&T stated that "the proposed technical and operational rules will require substantial modification to avoid debilitating interference to adjacent . . . broadband PCS licensees."<sup>5</sup> U.S. Cellular agreed, noting that "the Commission's proposed

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<sup>3</sup> Sprint Nextel Comments at 2-11.

<sup>4</sup> See Joint Reply Comments of Sprint Corporation, Verizon Wireless and Nextel Communications, WT Docket No. 04-356 (filed Feb. 8, 2005).

<sup>5</sup> Comments of AT&T, Inc., WT Docket No. 04-356, at i (filed Jul. 25, 2008) ("AT&T Comments"). AT&T proposed a limit of 13 dBm EIRP across the 1915-1920 MHz band in its comments.

power limit for 1915-1920 MHz for H-Band devices, 23 dBm EIRP, is inadequate to mitigate potential harmful interference.”<sup>6</sup> It recommended that the Commission “impose more stringent limits on the transmitted power of mobile H-Block transceivers.”<sup>7</sup> Likewise, Leap Wireless stated that “mobile transmissions in the 1915-1920 MHz band have the potential to cause significant harmful interference to many millions of wireless devices operating in the 1930-1990 MHz PCS receive band unless more stringent protections are adopted.”<sup>8</sup>

Motorola also supported stricter power limits, noting that “in some cases the Commission’s proposals are not sufficiently restrictive and would create significant interference risks to adjacent band operations.”<sup>9</sup> Moreover, CTIA reminded the Commission that previous handset testing “showed that the Commission’s proposal would subject PCS handsets to harmful interference where H Block devices transmit 8 meters (26 feet) away in some instances.”<sup>10</sup> QUALCOMM added that the Commission “cannot just pretend” that extensive H Block testing did not occur, and requested that the Commission adopt greater interference protections in accordance with the test results.<sup>11</sup>

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<sup>6</sup> Comments of United States Cellular Corporation, WT Docket No. 04-356, at 7 (filed Jul. 25, 2008) (“U.S. Cellular Comments”).

<sup>7</sup> *Id.*

<sup>8</sup> Comments of Leap Wireless International, Inc., WT Docket No. 04-356, at 4 (filed Jul. 25, 2008) (“Leap Wireless Comments”).

<sup>9</sup> Comments of Motorola, Inc., WT Docket No. 04-356, at 2 (filed Jul. 25, 2008) (“Motorola Comments”).

<sup>10</sup> Comments of CTIA – The Wireless Association®, WT Docket No. 04-356, at 37 (filed Jul. 25, 2008); *see also* Comments of PCIA – The Wireless Infrastructure Association, WT Docket No. 04-356, at 2 (filed Jul. 25, 2008) (expressing general interference concerns regarding the H Block). An earlier report by V-COMM, an engineering consulting firm, indicated that intermodulation interference could be caused to PCS handsets within 12.5 meters (41 feet) of an H Block device. *See* V-Comm Report attached to Joint Comments of Sprint Corporation and Verizon Wireless, WT Docket No. 04-356 at 16-17 (filed on Dec. 8, 2004).

<sup>11</sup> Comments of QUALCOMM Incorporated, WT Docket No. 04-356, at 7 (filed Jul. 25, 2008) (“QUALCOMM Comments”). Sprint Nextel and other parties have detailed the results of extensive H Block testing in prior filings in this proceeding. *See, e.g., id.*; Joint Comments of Sprint Corporation and Verizon Wireless, WT Docket No. 04-356

Notwithstanding the extensive testing already in the record, MetroPCS has proposed additional testing for the H Block.<sup>12</sup> Although CTIA and many of the parties, including Sprint Nextel, have already conducted extensive testing in the lab and in the field, Sprint Nextel has no objection to MetroPCS's proposal. Additional data will further validate the prior testing conducted for this proceeding and will supplement the already robust record on which the Commission can base its H Block rules. Furthermore, it may be appropriate to conduct additional testing to determine the potential impact of the FCC's proposed high power mobile EIRP limit on Unlicensed PCS ("UPCS") devices.

As Sprint Nextel demonstrated in its comments, the potential for generating harmful interference is substantially greater for the 1917-1920 MHz portion of the H Block, as compared to the 1915-1917 MHz portion.<sup>13</sup> Therefore, Sprint Nextel encouraged the Commission to establish mobile device power limits that are more stringent for the 1917-1920 MHz band, and recommended a 6 dBm EIRP for mobile or portable device operations at 1917-1920 MHz and a 30 dBm EIRP limit for mobile or portable device operations at 1915-1917 MHz, as originally supported by Verizon Wireless, Sprint Corporation and Nextel Communications in their Joint H Block Proposal in 2005.<sup>14</sup> This bifurcated power limit reflects the downward sloping curve of tolerable operating power in the 1915-1920 MHz band, and would permit higher mobile transmit power in the 1915-1917 MHz portion of the band without risk of intermodulation ("IM") or

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(filed Dec. 8, 2004) (attaching the V-COMM Report); Comments of CTIA – The Wireless Association,® WT Docket No. 04-356 (filed Dec. 8, 2004) (attaching the WINLAB and PCTest Reports).

<sup>12</sup> See *Ex Parte* filing by MetroPCS Communications, Inc. (filed Jul. 30, 2008).

<sup>13</sup> Sprint Nextel Comments at 3-14.

<sup>14</sup> Joint Reply Comments of Sprint Corporation, Verizon Wireless and Nextel Communications, WT Docket No. 04-356 (filed Feb. 8, 2005).

receiver overload interference. Adopting a 30 dBm EIRP limit for this portion of the band would provide for more efficient and flexible use of this portion of the band, as well as providing a higher level of consistency with the PCS rules that apply to the adjacent G Block, thereby facilitating economies in the design of H Block equipment.<sup>15</sup> Moreover, no party has submitted any test data to demonstrate that the proposal to permit 30 dBm EIRP in the 1915-1917 MHz portion of the band, which was based on the numerous measurements submitted in this proceeding, would cause harmful interference to PCS operations.

AT&T has raised concerns that adoption of a bifurcated power limit would not be “technologically neutral,” because it would require lower power in a portion of the band and higher power in another portion, thereby favoring technologies with narrower bandwidths and discriminating against W-CDMA (UMTS).<sup>16</sup> Sprint Nextel certainly favors technology neutrality in the Commission’s rules, and a bifurcated power limit would not inhibit such neutrality. LTE, a wireless technology that is being deployed by 3GPP to improve the W-CDMA (UMTS) standard, will be capable of operating in spectrum allocations as small as 1.25 MHz and 1.6 MHz.<sup>17</sup> Furthermore, requiring a lower power limit than necessary to be adopted in the 1915-1917 MHz portion of the band would be spectrally inefficient and would significantly devalue the H Block spectrum.

In addition to the threatened interference to PCS operations, some commenters raised the possibility that the Commission’s proposed power and OOB limits for the mobile and base station transmit bands may cause harmful interference to other bands. For example, the DECT

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<sup>15</sup> See Sprint Nextel Comments at 13.

<sup>16</sup> AT&T Comments at 12.

<sup>17</sup> See <http://www.3gpp.org/Highlights/LTE/lte.htm>.

Forum and SiTel Semiconductor B.V. raised concerns about the potential impact that would be caused by having high-powered H Block operations in the spectrum just below the UPCS band at 1920-1930 MHz.<sup>18</sup> Although these comments focus on the OOB limits proposed by the Commission as well as potential changes that could be made to the Part 15 UPCS rules, it is also clear that the reduced 6 dBm mobile and portable EIRP limit in the 1917-1920 MHz band proposed by Sprint Nextel would help avoid potential receiver overload problems for UPCS devices.

Similarly, licensees in the 2 GHz mobile satellite service (MSS) raised concerns about the potential for H Block base station transmit emissions from the 1995-2000 MHz band to generate adjacent channel interference into MSS and MSS ancillary terrestrial component (ATC) base stations.<sup>19</sup> Sprint Nextel previously has indicated that coordination and site selection should mitigate, if not eliminate, the MSS licensees' concerns. Sprint Nextel recently contacted both 2 GHz MSS licensees to better understand their interference concerns and, if necessary, develop more detailed recommendations to address any remaining issues that might affect MSS or MSS ATC operations.

In essence, commenters continue to agree that the Commission's 2004 proposed limit of 200 mW peak EIRP (the equivalent of 23 dBm EIRP) for the entire 1915-1920 MHz band is insufficiently protective of incumbent operations, as Sprint Nextel described in its comments.<sup>20</sup>

Based on commenters' repeated calls for greater interference protections and a clear record

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<sup>18</sup> See Comments from the DECT Forum, WT Docket No. 04-356 (filed Jul. 21, 2008) ("DECT Forum Comments") and Comments from SiTel Semiconductor B.V., WT Docket No. 04-356 (filed Jul. 31, 2008).

<sup>19</sup> See Comments of TerreStar Networks Inc., WT Docket No. 04-356, at 6-7 (filed July 25, 2008); Comments of New ICO Satellite Services G.P., WT Docket No. 04-356, at 3-5 (filed July 25, 2008).

<sup>20</sup> Sprint Nextel Comments at 6.

demonstrating that higher power can be permitted in the lower portion of the 1915-1920 MHz band, the Commission should adopt bifurcated limits that are more restrictive in the 1917-1920 MHz band segment most prone to causing interference and less restrictive in the 1915-1917 MHz portion that will not cause harmful interference to other incumbent operations.

**B. The Vast Majority of Commenters Agree that the Commission's Proposed Out-of-Band Emissions Limit Should Be Revised.**

Sprint Nextel encourages the Commission to establish an OOB limit of  $-76$  dBm/MHz (derived as an average RMS measurement) for all H Block emissions that fall into the 1930-1990 MHz band.<sup>21</sup> Although the Commission proposed to “require mobiles at 1915-1920 MHz to attenuate OOB by  $90 + 10 \log P$  dB within the PCS band (1930-1990 MHz band),”<sup>22</sup> which is equivalent to  $-60$  dBm/MHz, commenters in this proceeding agree with Sprint Nextel that more stringent OOB limits are necessary to ensure that H Block mobiles in the 1915-1920 MHz band do not cause harmful interference to existing PCS operations.<sup>23</sup>

In its comments, AT&T noted that the Commission's proposed OOB limits “are insufficient to ensure the hundreds of millions of PCS handsets currently used by consumers are safe from harmful interference.”<sup>24</sup> U.S. Cellular similarly criticized the Commission's proposal, arguing that it “does not satisfy the OOB problem” and “will cause significant interference into

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<sup>21</sup> See *id.* at 14-15.

<sup>22</sup> FNPRM, Appendix B at ¶ 25.

<sup>23</sup> See AT&T Comments at 5; U.S. Cellular Comments at 7-8; Comments of Ericsson Inc. and Sony Ericsson Mobile Communications (USA) Inc., WT Docket No. 04-356, at 12-13 (filed Jul. 25, 2008); DECT Forum Comments at 2, 9. Motorola was the lone supporter for the Commission's OOB proposal for emissions from the 1915-1920 MHz band. Motorola Comments at 4.

<sup>24</sup> AT&T Comments at 5.

the PCS mobile receive band, 1930-1990 MHz.”<sup>25</sup> Echoing AT&T’s concern regarding interference to current subscribers, U.S. Cellular also warned that “the Commission has every reason to proceed cautiously where the consequences of a premature and uninformed decision ... could have unintended adverse consequences for existing broadband PCS subscribers.”<sup>26</sup> Moreover, the DECT Forum’s comments indicate that H Block emissions also could interfere with the Unlicensed PCS Band in addition to the licensed PCS bands, claiming that the proposed OOB limits pose a “severe interference problem” that “could deny use of large portions or even the entire [Unlicensed PCS] band.”<sup>27</sup>

Although commenters disagree as to the specific OOB limit that should apply to emissions from the 1915-1920 MHz band, Sprint Nextel believes that  $-76$  dBm/MHz remains the technology-neutral limit that protects incumbent operations while permitting a wide variety of devices and systems to operate economically in the H Block mobile transmit band. As mentioned in Sprint Nextel’s Comments, the Telecommunications Industry Association (“TIA”) has established  $-76$  dBm/MHz as the industry standard for CDMA technologies.<sup>28</sup> Existing GSM handsets – as well as planned next-generation handsets – can meet that limit, provided that compliance with the limits is measured on an RMS average basis as proposed by Sprint Nextel.<sup>29</sup>

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<sup>25</sup> U.S. Cellular Comments at 7-8.

<sup>26</sup> *Id.* at 8.

<sup>27</sup> DECT Forum Comments at 2, 9.

<sup>28</sup> Sprint Nextel Comments at 14.

<sup>29</sup> As support for its proposed OOB limit of  $-66$  dBm/MHz, AT&T relies on a statement in a 2004 *ex parte* filing by Agilent Technologies (“Agilent”) that Agilent “does not presently believe it can produce a single duplexer that would cover A through H blocks and meet  $-76$  dBm/MHz OOB.” AT&T Comments at 7. As mentioned in Sprint Nextel’s Comments, T-Mobile previously stated (around the same time that Agilent made its statement) that it believes “all existing CDMA and GSM PCS hand-sets fully comply with OOB limits of  $-76$  dBm/MHz,

**C. The Commission Should Authorize the 1915-1920 MHz Band for Both Fixed and Mobile Services.**

In its comments, AT&T recommends that the Commission prohibit the use of mobile services throughout the entire H Block, asserting that it would be more “prudent” for the Commission to limit the H Block to services that would be “more compatible” with its existing PCS operations.”<sup>30</sup> AT&T’s request is self-serving and anticompetitive, and the Commission should reject its call to cripple the H Block’s utility for deploying a wide array of mobile services to consumers.

The record in this proceeding confirms that mobile services in the 1915-1920 MHz band can co-exist with existing PCS operations. Multiple parties have submitted the results of extensive testing regarding the potential for interference from mobile use of the H Block.<sup>31</sup> Although the test results highlight the critical need for the Commission to adopt stringent power and OOB limits for the uppermost portion of the H Block mobile transmit band (as Sprint Nextel has consistently maintained), such technical rules can easily address the interference concerns while allowing mobile H Block operations in the 1915-1920 MHz band. These test results have been part of the record in this docket for more than *three and a half years*, and neither AT&T nor any other party has disputed these test results. Furthermore, no party – including AT&T – has provided any technical analysis indicating that the potential for interference from mobile operations in the 1915-1920 MHz band cannot be prevented through

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confirming that such OOB restrictions are eminently achievable and commercially viable.” See Sprint Nextel Comments at 14; Comments of T-Mobile USA, Inc., WT Docket No. 04-356, at 10 (filed Dec. 8, 2004).

<sup>30</sup> AT&T Comments at 10.

<sup>31</sup> See *supra* n.11.

appropriate technical limitations.<sup>32</sup> In fact, AT&T itself agrees that mobile operations in the 1915-1920 MHz band can operate without harming existing PCS operations if the Commission adopts certain OOB and mobile transmit power limits.<sup>33</sup>

AT&T's attempt to prevent H Block licensees from offering mobile services is patently anticompetitive. As the last major PCS expansion band available, there is great demand by existing PCS incumbents for deploying innovative next-generation mobile services in the H Block.<sup>34</sup> Moreover, new entrants also may be interested in the H Block for a variety of new mobile services. Given that the Commission can adopt sufficient interference protections, there simply is no justification for closing the door on competitive mobile services and reducing the entire H Block to limited fixed use. As such, the Commission should adopt its proposal to authorize the 1915-1920 MHz band for mobile services, subject to appropriate technical safeguards.

## **II. COMMENTERS SUPPORT THE FCC'S PROPOSED LICENSING RULES, INCLUDING LICENSING THE H BLOCK ON A BTA BASIS.**

As detailed in its comments, Sprint Nextel broadly supports the Commission's proposed H Block licensing rules.<sup>35</sup> Numerous diverse commenters in this proceeding support the proposed rules, particularly with respect to auctioning the H Block using small geographic areas

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<sup>32</sup> AT&T also is incorrect that there is "uniform and overwhelming opposition" to mobile use of the H Block "from existing PCS license holders and PCS equipment vendors." AT&T Comments at 10. To Sprint Nextel's knowledge, no commenter other than AT&T has completely opposed mobile use of the entire H Block.

<sup>33</sup> *Id.* at 11-12.

<sup>34</sup> Other existing service providers, including AWS licensees, may be interested in expanding their mobile service offerings through use of the H Block.

<sup>35</sup> One exception to Sprint Nextel's support for the proposed licensing framework is that it encourages the Commission to license the H Block under the rules that apply to the PCS, rather than AWS, bands. *See* Sprint Nextel Comments at 23.

such as Basic Trading Areas (“BTAs”).<sup>36</sup> Given this broad support, the Commission should license the H Block on a BTA basis and should adopt its other licensing proposals.

Several other PCS blocks already are licensed on a BTA basis. As a result, existing operators can acquire H Block spectrum in areas where they currently are capacity constrained or are looking to deploy next-generation wireless services to consumers. The H Block is the last major PCS expansion band expected to be available in the foreseeable future and, as discussed above, there is likely to be significant interest in using the band for a variety of services. Given the unique status of the H Block, Sprint Nextel agrees that the Commission should maximize the number of opportunities – and auction participants – for the band by licensing it on a BTA basis.

***The Commission Should Adopt Substantial Service Performance Requirements for the H Block.*** In its comments, Sprint Nextel urged the Commission to adopt “substantial service” performance requirements for the H Block instead of the Commission’s proposal to require licensees to construct facilities sufficient to cover “1) at least 35 percent of the population in each licensed area within four years and 2) at least 70 percent of the population in each licensed area [by] the end of the license term.”<sup>37</sup> As previously noted, a flexible substantial service requirement has proven successful in the marketplace and would best promote the Commission’s policy goals.<sup>38</sup> The Commission’s proposal, however, would reduce the flexibility of wireless operators to design and deploy their networks in a manner that best promotes their business plans

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<sup>36</sup> See, e.g., Comments of MetroPCS Communications, Inc., WT Docket No. 04-356, at 57-58 (filed Jul. 25, 2008) (“MetroPCS Comments”) (supporting the use of BTAs and ten-year license terms); U.S. Cellular Comments at 9 (supporting the use of BTAs); Comments of the Rural Telecommunications Group, Inc., WT Docket No. 04-356, at 11 (filed Jul. 24, 2008) (“RTG Comments”) (“RTG supports the use of BTAs or the smaller CMAs.”). No commenter supported the use of geographic areas larger than BTAs.

<sup>37</sup> See Sprint Nextel Comments at 16; FNPRM at ¶ 19.

<sup>38</sup> Sprint Nextel Comments at 16-17.

and coverage models, and could cause potential bidders to avoid the auction altogether.<sup>39</sup>

Moreover, if the Commission adopts bifurcated power limits for the H Block as Sprint Nextel recommends, H Block licensees will need additional flexibility regarding build-out and service deployment to accommodate technical limits that constrain more typical coverage options for some time period and differ significantly from limits applicable to other PCS and AWS bands. Therefore, Sprint Nextel reiterates its support for a substantial service build-out requirement in the H Block.<sup>40</sup>

The Commission also should reject NTCH's efforts to impose extraordinarily burdensome performance requirements on H Block licensees. In its comments, NTCH requests that the Commission require licensees to construct facilities sufficient to cover at least 35 percent of the population in each licensed area within *three* years or risk a complete forfeiture of the license.<sup>41</sup> It also requests that licensees be required to cover at least 70 percent of the population in each licensed area within *six* years and that the Commission adopt a "use-it-or-lose-it" framework for the six-year build-out requirement.<sup>42</sup> Although NTCH asserts that its extreme proposal would "serve both to speed construction and widen availability of service at lower costs,"<sup>43</sup> the proposal in fact would make it less viable financially to provide service using the H Block in many markets – especially rural areas – and would hinder the deployment of next-

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<sup>39</sup> *Id.* at 18.

<sup>40</sup> This assumes that the Commission will heed the unanimous call within the comments for a reduction in mobile EIRP in the 1917-1920 MHz band. If the Commission, however, were to adopt its proposed 23 dBm/MHz mobile EIRP limit, then the substantial service dates or any other build-out dates should be adjusted to commence only after PCS handsets can be designed using a single duplexer to overcome the likely IM and receiver overload interference.

<sup>41</sup> Comments of NTCH, Inc., WT Docket No. 04-356, at 15 (filed Jul. 18, 2008).

<sup>42</sup> *Id.* No other commenter proposed performance requirements more burdensome than the Commission's proposal.

<sup>43</sup> *Id.*

generation networks in those markets. In addition, as Sprint Nextel detailed in its comments, overly burdensome performance requirements would make it financially challenging for carriers to justify the level of network deployment necessary in less densely populated areas, making those areas much less attractive to acquire at auction and further exacerbating the disparity between network coverage in urban and rural areas.<sup>44</sup>

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<sup>44</sup> Sprint Nextel Comments at 18.

### III. CONCLUSION

To prevent harmful interference to the existing PCS band, the Commission should follow the unopposed recommendations of commenters in this proceeding and adopt more stringent mobile transmit limits in the 1917-1920 MHz band and more stringent OOB limits measured on a technology-neutral average RMS basis. To maximize flexibility and efficiency, the Commission should permit higher power in the 1915-1917 MHz band where operations are highly unlikely to generate harmful interference. Finally, the Commission should forgo the proposed population-based coverage benchmarks, however, and instead implement a substantial service performance requirement that would be particularly well suited to the unique features of the H Block.

Respectfully submitted,

**SPRINT NEXTEL CORPORATION**

*/s/ Lawrence R. Krevor*

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Lawrence R. Krevor  
*Vice President, Government Affairs – Spectrum*  
Trey Hanbury  
*Director, Government Affairs*  
Richard B. Engelman  
*Director, Government Affairs*  
SPRINT NEXTEL CORPORATION  
2001 Edmund Halley Drive  
Reston, VA 20191  
(703) 433-4141

Michele C. Farquhar  
Mark W. Brennan  
HOGAN & HARTSON LLP  
555 Thirteenth Street, NW  
Washington, D.C. 20004  
(202) 637-5663  
  
*Counsel for Sprint Nextel Corporation*

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