Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	WT Docket No. 12-40
	)	
Amendment of Parts 1 and 22 of the Commission's	)	RM No. 11510
Rules with Regard to the Cellular Service,	)	
Including Changes in Licensing of Unserved Area	)	FCC 12-20
Amendment of the Commission's Rules with	)	
Regard to Relocation of Part 24 to Part 27	)	
Interim Restrictions and Procedures for Cellular	)	
Service Applications	)	

COMMENTS IN RESPONSE TO
NOTICE OF PROPOSED RULEMAKING AND ORDER

The Law Offices of Hill & Welch, on behalf of Nsight Spectrum, LLC which is licensed and providing 800 MHz cellular radio telephone service to the public pursuant to Part 22.900 et seq., hereby submits comments in the captioned rulemaking proceeding which was noticed in the March 16, 2012 *Federal Register* (77 Fed. Red. 15665).[1] In support whereof, the following is respectfully submitted:

There is No Need for A New Licensing Regime In Substantially Licensed Markets

1) The Commission proposes to create an Overlay License in each 800 MHz cellular CMA. While the Overlay License would be for the entire market, the Overlay Licensee is required "to provide interference protection to incumbent operations." Phase I of the Overlay Licensing would occur in those markets like Nsight Spectrum, LLC's which the Commission has determined to be Substantially Licensed. *Rulemaking*, paras. 23-24. With all due respect, the proposal seems overly

[1]Nsight Spectrum, LLC is the licensee of Station KNKA547, MSA #186B, CMA186B.

complicated for what appears to be nominal additional market licensing potential in the Substantially Licensed markets, seems to ignore 20+ years of market information, will likely lead to increased licensing issues as conflicts arise between Overlay Licensees and Incumbent Licensees regarding whether interference protection is being provided, and seems completely unneeded at least for markets which are Substantially Licensed.

2) The *Rulemaking* proposes to adopt a new licensing standard in the 800 MHz cellular service which the Commission acknowledges is at an "advanced stage," which we read as a conclusion that 800 MHz cellular is a "mature industry." *Rulemaking*, para. 1. The Commission properly finds that the current licensing regime is unduly burdensome for little public interest gain, *id.*, but then the Commission proposes a licensing scheme which is much more complicated than necessary to address the problem. At least for the markets which the Commission has determined are Substantially Licensed, a much simpler solution is: a) to find that the Substantially Licensed markets are no longer subject to licensing except by the Incumbent licensee; and then b) grant the Incumbent Licensees the authority to use the proposed field strength rule to place transmitters within its own CMA without requiring prior Commission approval and without neighboring market approval provided that the specified signal level is kept within the Licensee's CMA boundaries.

3) Rather than adopt the simple rule change suggested above, the Commission proposes to establish an Overlay License licensing scheme to cover CMA market areas which, by the Commission's own definitions, could/must be deemed to be insubstantial.[2] One reading of the *Rulemaking* might be that the Overlay Licensee will be able to construct anywhere within the CMA provided that it provides "interference protection" to the Substantially Licensed Incumbent.

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[2] The Commission has designated numerous markets as Substantially Licensed. The obvious implication is that, at least for those markets, only insubstantial licensing opportunities remain.

Rulemaking, para. 23. It is unclear from the *Rulemaking* exactly how the Overlay Licensee will be precluded from causing "interference" to the Substantially Licensed Incumbent. While the *Rulemaking* notes that the Substantially Licensed 800 MHz cellular market areas were determined with reference to the Incumbent carriers' filed 32 dBu service coverage maps, *Rulemaking*, para. 20, the *Rulemaking* fails to discuss what happens to those 32 dBu coverage areas as a consequence of the *Rulemaking*.[3] At a minimum, if the proposal is adopted, the Commission must clarify that the Overlay Licensee is required to keep its 32 dBu contour from overlapping the 32 dBu contour of the Incumbent Licensee. Otherwise the Incumbent carrier licenses could subsequently be considered modified in violation of the Commission's license modification rules, the Communications Act, the requirement that "full and explicit notice" be provided before a Federal benefit is denied or existing right withdrawn, the Administrative Procedure Act's notice and comment rulemaking requirements, and Due Process as required by the 5th Amendment. *See Salzer v. FCC*, 778 F.2d 869, 871-72 (D.C. Cir. 1985) ("fundamental fairness" requires that before a party loses a substantial right, the Commission must provide "full and explicit notice" prior to application of the rule).

4) The *Rulemaking*, para. 23, provides that

> An overlay license is issued for the entire geographic area (in this case, the entire CMA Block), but requires the overlay licensee to provide interference protection to incumbent operations (in this case, Cellular Service incumbents' CGSAs existing as of a certain cut-off date).

Nevertheless, the *Rulemaking* is silent regarding how "interference protection" to Incumbent systems is to be determined. The Commission should plainly state what standard will be used to determine whether interference will likely exist as a result of the Overlay Licensee's proposed operation.

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[3] As used herein, 32 dBu service is a shorthand reference to the level of service defined by Section 22.911's formula which determines SAB distances and CGSA boundaries.

5) The discussion above notwithstanding, the Commission's interference protection goal is not defined in a more general sense. Is the Commission's stated interference concern a matter of theoretical interference as shown by overlapping 32 dBu contours placed on a map -- this view is suggested by the Commission's reliance upon the Incumbents' existing CGSA system coverage maps to determine Substantially Licensed market areas. Or is the Commission's interference concern concerned with actual, real world interference which could be suggested by the discussion at *Rulemaking*, para. 57 (stating that licensees are to coordinate spectrum usage to avoid "mutually destructive interference . . . e.g., through channel choice, sectors, codes, site locations, antenna patterns, and azimuths"). In other words, the Commission must clarify whether the intent of this Overlay License *Rulemaking* is to permit the Overlay Licensee the opportunity to co-locate transmission facilities anywhere within the Incumbent's CGSA provided that "actual, real world" destructive interference is avoided.[4] If the Commission's intent is to provide the Overlay Licensee with authority to build anywhere within the CMA, then the Commission should plainly state that licensing goal so that everyone has notice regarding what the proposed rule change would entail thereby enabling the public an opportunity to comment on proposed substantial changes to Incumbent licenses.[5] While this may not be the Commission's objective, one can glean such an objective from the *Rulemaking* document and clarification is appropriate.[6]

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[4] If this is the intent the Commission should explain why Cellular licensing will differ in this regard compared to PCS, AWS, LMDS, and 700 MHz--in these other services same frequency co-location is not permitted.

[5] Currently, Incumbent licensees are authorized to use all frequencies contained within the frequency block for which they are licensed and no other entity may use those frequencies.

[6] The Commission concluded that site-by-site licensing in the 800 MHz Cellular service entails significant burdens with limited public interest benefits. *Rulemaking*, para. 1. Requiring an Incumbent Licensee to engage in site-by-site coordination with an Overlay Licensee in all areas of the

6) If the Commission does not intend to allow Overlay Licensees to construct sites within the Incumbent Licensee's CGSA as speculated in paragraph 5 above, then the *Rulemaking* does not explain why the Commission proposes to create a new set of regulations to license market areas which the Commission has defined as insubstantial. The *Rulemaking* designates a large number of markets as "Substantially Licensed." The conclusion which shouts, even if unwritten, is that the unlicensed areas constitute "insubstantial" portions of the CMA markets. Moreover, the *Rulemaking* seems to ignore the facts that after 20+ years in what is now a mature industry, and after years of being available to anyone who wanted to be licensed in those unserved areas without paying anything to the Government except for an application filing fee, areas which are not currently served are not being served because of insufficient market demand.[7]

7) At this late date there does not appear to be any public interest benefit from creating a complicated set of new licensing rules to cover insubstantial market areas in which for 20+ years no one has found sufficient demand to justify the provision of service. Because the unserved areas in Substantially Licensed markets are necessarily insubstantial, and because those areas have been available to anyone for a multitude of years had market demand warranted, but no such proposals were forthcoming, the Commission should determine a) that the Incumbent Licensees in Substantially Licensed markets are the Licensee for their entire CMA market area; and b) allow the Incumbent Licensee to provide service to the unserved areas, within the licensed CMA, and to fill in their CMA

Incumbent Licensee's CGSA would not meet the Commission's goal of eliminating the burdens imposed by the current site-by-site licensing scheme.

[7] An exception would exist for any market which is not fully constructed because of a licensing issue which was particular to that particular market. Licensing delays which delayed buildouts by a substantial period of time compared to other cellular markets should be afforded additional time to build out so that the buildout time is equivalent.

market areas, without prior Commission approval provided that the proposed 40 dBμV/m market border field strengths are honored as discussed in the *Rulemaking*, para. 55.[8]

The Commission Should Clarify How Field Strength Should Be Determined

8) As a final matter, we request clarification regarding the method to be used to calculate the field strength discussed in the *Rulemaking*, paras. 54-58. Footnote 148 refers to PCS Rule Section 24.236.[9] However, Section 24.236 does not contain a methodology for determining the field strength. We request that the Commission publish an appropriate free space propagation model, if that model is to be used, or designate some other model which the Commission would like to use to standardize signal analysis across 800 MHz cellular markets. The following model, for instance, assumes transmit and receive antenna gains:

$$P_r(d) = \frac{P_t G_t G_r \lambda^2}{(4\pi)^2 d^2 L}$$

Where, P_t is the transmitted signal power; G_t and G_r are the transmitter and receive antenna gains respectively; L ($L \geq 1$) is the system loss; and λ is the frequency wavelength.[10]

9) L, G_t, and G_r in the formula above can be assumed to be "1,"[11] but the Commission should

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[8] The Auction Statute requires the Commission to establish auctions when there are mutually exclusive applications for new systems; auctions are not required for system modification applications and there is nothing in the statute which requires the Commission to create new markets in established industries for the purpose of trying to create mutually exclusive applications.

[9] Section 24.236 provides:

> The predicted or measured median field strength at any location on the border of the PCS service area shall not exceed 47 dBuV/m unless the parties agree to a higher field strength.

[10] http://www.isi.edu/nsnam/ns/doc/node217.html

[11] The creator of the formula presented above is not clear regarding what "P_t" represents, but because "L" exists in the denominator one can assume that "P_t" = Transmitter Output Power. It seems that the equation could be simplified by assuming that L=1 and that P_t = the power in watts (?)

indicate whether such assumptions are appropriate, especially regarding the antenna gains so that everyone is on the same page. Also, does the Commission want licensees to use standardized antenna heights Above Mean Sea Level for the transmit and receive antennas? or relative heights between the transmit and receive antennas? or does the industry assume no antenna heights? If the industry is to consider antenna heights in some fashion, the Commission should standardize a formula which accounts for antenna heights. One can assume that a transmitting antenna on top of a hill produces a larger service signal compared to one operating at the same power but located at the bottom of the same hill. Or the Commission could conclude that for purposes of going forward antenna height is no longer relevant to 800 MHz Cellular licensing because of reasons X, Y, and/or Z. However, because consideration of antenna height in determining the distance to the theoretical service boundary has been policy in 800 MHz cellular licensing matters for decades, discussion for reasons supporting the decision to change that long standing policy is required as a matter of long settled administrative procedure[12] and to ensure that the industry is making service contour/interference contour calculations in the same manner across the country.[13]

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emanating from the transmit antenna with L=Losses already taken into account beforehand (the creator of the formula does not seem to define what TOP power unit should be used).

[12] The failure to explain departures from prior practice renders an agency decision unreasoned. *Communications and Control, Inc. v FCC*, 374 F.3d 1329, 1335-36 (D.C. Cir. 2004) citing *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 57 (1983) ("[a]n agency changing its course must supply a reasoned analysis"); *see also Tilak Ramaprakash v. FAA*, 346 F.3d 1121, 1125 (D.C. Cir. 2003) *quoting CBS v. FCC*, 454 F.2d 1018, 1027 (D.C. Cir. 1971) ("an agency's failure to come to grips with conflicting precedent constitutes 'an inexcusable departure from the essential requirement of reasoned decision making'"); *Achernar Broadcasting Co. v. FCC*, 62 F.3d 1441, 1448 (D.C. Cir. 1995); *Greater Boston Television Corp. v. FCC*, 444 F.2d 841, 852 (D.C. Cir.), *cert. denied*, 403 U.S. 923 (1971).

[13] Our intent is not to argue about the methodology chosen by the Commission to determine field strength determinations, but to ensure that everyone is using the same methodology.

WHEREFORE, in view of the information presented herein, it is respectfully requested that 1) the Commission determine that "Substantially Licensed" markets will not be subject to Overlay Licensing; 2) that Licensees in Substantially Licensed markets be granted authority to buildout any remaining unserved areas in their respective CMAs and that the new field strength rule be available to assist with any such buildout efforts; and 3) that the Commission standardize the field strength methodology.

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