

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

In the Matter of )  
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**Commission Seeks Comment on Spectrum ) ET Docket No. 02-135**  
**Policy Task Force Report )**  
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*FCC Public Notice (FCC 02-322), released )*  
*November 25, 2002. )*  
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**To: The Commission**

**COMMENTS OF THE RURAL COMMENTERS**

Submitted by:

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Dated: January 27, 2003

## SUMMARY

The Commission should foster rural access to spectrum by licensing at least a portion of future spectrum allocations on the basis of the Metropolitan Statistical Area (MSA)-Rural Service Area (RSA) assignment model. Adopting an RSA-size licensing model will help the FCC to achieve its goal of spectral efficiency because it will ensure that wireless facilities actually will be constructed and operated in rural areas. By definition, an RSA is an area made up of rural territory, without any significant urban or suburban area within its boundaries. When larger license sizes are used, the licensee can generally avoid service to rural areas by satisfying its buildout requirement with coverage to only the major population centers. To further enhance rural spectrum access, the Commission should: (1) Revise the partitioning and disaggregation rules to better facilitate such transactions, by providing large licensees with greater incentives to deal with rural carriers (including a larger reduction of a buildout requirement if a licensee partitions to a rural carrier; and/or a modified version of the cellular unserved area rule); (2) adopt Its “Secondary Spectrum Market” proposal; and (3) move forward with the proposal discussed in its Rural NOI to create rural telephone bid credits.

The Commission should allow increased power levels for rural telecommunications systems. A stumbling block has always been the exorbitant expense of deploying dozens of costly lower power transmitters to cover stretches of roadways connecting small rural towns, and expanses of sparsely populated farmland.

The Commission should create additional spectrum for unlicensed operations, but must protect licensed incumbents from interference and undue economic impact. Because “opportunistic” unlicensed radios would be allowed to operate on licensed spectrum at power levels above the interference temperature limit, such opportunistic operations should only be allowed pursuant to a spectrum lease or other negotiation with the incumbent licensee. Even if there are clear-cut incumbent protection rights on the books, identification and enforcement can be difficult.

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**To: The Commission**

**COMMENTS**

The Federal Communications Commission (“FCC”) last year established the Spectrum Policy Task Force, which recently released its recommendations on a wide array of spectrum policy issues in a November 2002 Report. On November 25, 2002, the Commission requested comment on the Task Force Report (the “Report”), but did not specify a particular framework for comments, or reach any tentative conclusions regarding the Task Force’s recommendations (FCC 02-322). The Task Force, however, essentially made recommendations in the following general categories: Market-oriented allocation and assignment policies, interference protection, spectral efficiency, public safety communications, and spectrum access issues. On behalf of the rural telephone companies listed in Attachment A hereto (the “Rural Commenters”), the Law Firm of Blooston, Mordkofsky, Dickens, Duffy & Prendergast submits these comments. In making their comments below, the Rural Commenters assume that the Commission will issue a detailed Notice of Proposed Rulemaking, with specific language for proposed rule changes, prior to adopting any final measures based on the Report and related NOI.

## **I. Statement of Interest**

The Rural Commenters are several rural telephone companies (or subsidiaries of rural telephone companies) that are trying to bring advanced telecommunications services to their rural communities. Most have participated in spectrum auctions, with mixed success. All are expending significant resources trying to determine the best way to make use of wireless technologies for the benefit of the rural communities they serve.

## **II. The Commission Should Take Decisive Action to Foster Spectrum Access in Rural Areas.**

Rather than addressing matters in the order in which they appear in the Report, the Rural Commenters will focus first on the issue that is by far most important to them, namely, access to spectrum in rural areas. In a statement on the Task Force's June 6, 2002, Public Notice, Commissioners Kevin J. Martin and Michael J. Copps emphasized the importance of rural areas.<sup>1</sup> The Commissioners wrote: "...[W]e are concerned and surprised that our obligation to use our rules to promote service to rural Americans is barely mentioned in the Public Notice. This responsibility is too important to be ignored." Further, Commissioner Copps announced last spring that the Commission planned to release a Notice of Inquiry (NOI) on whether the Commission's auction rules are promoting service to rural areas.<sup>2</sup> The Rural Commenters obviously share these concerns about rural spectrum access, and therefore applaud the Task Force for focusing on rural issues in the Report itself. See Report at pp. 57-59.

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<sup>1</sup> Statement of Commissioners Kevin J. Martin and Michael J. Copps on the Spectrum Policy Task Force's Public Notice on Spectrum Policies (Public Notice, ET Docket No. 02-135), June 6, 2002.

<sup>2</sup> Statement of Commissioner Michael J. Copps, *In the Matter of Amendments to Parts 1, 2, 27, and 90 of the Commission's Rules to License Services in the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz and 2385-2390 MHz Government Transfer Bands (Report and Order)*, WT Docket No. 02-08, statement released May 16, 2002. *In the Matter of Facilitating the Provision of Spectrum-Based Services*

Specifically, the Report addresses the rural access issue at Section VIII. C. and recommends that the Commission “explore ways to promote spectrum access and flexibility in rural areas.” *Id.* at p. 59. However, the Report identifies industry concern as to how the term “rural areas” should be defined. The Rural Commenters believe that the Commission has already begun to explore a rural spectrum allocation path that will eliminate this concern, without creating unduly complicated definitions of the term “rural.” In particular, the Commission should license at least a portion of future spectrum allocations on the basis of the Metropolitan Statistical Area (MSA)-Rural Service Area (RSA) assignment model. The Commission has already taken a positive first step by assigning MSA/RSA licenses to the 12 MHz C-block in the Lower 700 MHz Band (710-716 MHz/740-746 MHz).<sup>3</sup> As reflected in the Auction No. 44 results, rural carriers were very active in this spectrum sale, and most were successful bidders.

Creating meaningful access to spectrum in rural areas is critical. Section 309(j)(3) of the Communications Act directs the Commission to design competitive bidding systems so as to promote certain public interest objectives, including “promoting economic opportunity and competition and ensuring that new and innovative technologies are readily accessible to the American people by avoiding excessive concentration of licenses and disseminating licenses among a wide variety of applicants, including small businesses, rural telephone companies, and businesses owned by minority groups and women.” 47 U.S.C. § 309(j)(3)(B).

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*to Rural Areas and Promoting Opportunities for Rural Telephone Companies to Provide Spectrum-Based Services*, WT Docket No. 02-381, released December 20, 2002 (“Rural NOI”).

<sup>3</sup> *Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59)*, GN Docket No. 01-74, released January 18, 2002.

When Congress gave the Commission the authority to conduct spectrum auctions in the Omnibus Budget Reconciliation Act of 1993, many legislators were concerned that competitive bidding would result in a much greater concentration of wireless licenses and facilities in the hands of large and “deep-pocketed” entities, and in the more populous and financially lucrative urban areas. *H.R. Report 103-111*, 103d Congress, 1<sup>st</sup> Session, at pp. 254-55. As a result, Congress granted competitive bidding authority to the Commission only on the condition that the auction methodologies to be implemented would include safeguards to protect the public interest in the use of spectrum, and to advance the objectives of Section 309(j).

Congress expressly required the Commission to adopt and implement specific spectrum auction regulations that would:

- “consistent with the public interest, convenience and necessity, the purposes of this Act, and the characteristics of the proposed service, prescribe area designations and bandwidth assignments that promote (i) an equitable distribution of licenses and services among geographic areas, (ii) economic opportunity for a wide variety of applicants, including small businesses, rural telephone companies, and businesses owned by members of minority groups and women, and (iii) investment in and rapid development of new technologies and services,” 47 U.S.C. § 309(j)(4)(C); and
- “ensure that small businesses, rural telephone companies, and businesses owned by members of minority groups and women are given the opportunity to participate in the provision of spectrum-based services, and for such purposes, consider the use of tax certificates, bidding preferences, and other procedures.” 47 U.S.C. § 309(j)(4)(D).

These statutory provisions require the Commission to monitor and adjust its spectrum auction procedures to ensure that wireless facilities are being constructed and operated in rural areas, and that rural telephone companies and other small businesses are being afforded fair opportunities to acquire and develop an equitable share of the auctioned spectrum.

Quality wireless services (especially digital wireless services) have not become widely available in major portions of rural America. With the exception of roaming corridors along rural stretches of interstate and other major highways, wireless has been primarily an urban and suburban service. To a large extent, this is due to the large geographical licensing areas (e.g., EAGs, Metropolitan Trading Areas (MTAs), etc.) that the Commission assigned in previous auctions. These large licensing areas have been dominated by one or more urban areas, and generally have had population, demographic, and economic characteristics beyond the scale that rural telephone companies could reasonably expect to successfully bid on and serve.

These licensing areas have been too expensive for rural telephone companies and consortia to acquire, and too costly and unwieldy for them to construct and operate thereafter. As a result, most wireless licenses have been acquired at auction or thereafter by large national and regional wireless carriers with the “deep pockets” necessary to bid and pay high prices. These large carriers then have focused their construction and service efforts in the most populous and lucrative urban and suburban portions of their licensing areas. In fact, these carriers normally have been able to satisfy their full build-out requirements without reaching the rural portions of the licensing areas.

The Commission recognized this problem when it adopted MSA/RSA licensing areas for the Lower 700 MHz Band C-block auction. Most of the rural telephone companies participating in these comments have attempted to obtain spectrum in the past, and/or did participate in the Lower 700 MHz auction. These carriers urge the Commission to continue to assign such small licensing areas to one or more spectrum blocks in all future auctions.

### **A. Use of RSA Licenses Is Effective While Avoiding Definitional Issues.**

Adopting an RSA-size licensing model will help the Task Force achieve its goal of spectral efficiency because it will ensure that wireless facilities actually will be constructed and operated in rural areas. By definition, an RSA is an area made up of rural territory, without any significant urban or suburban area within its boundaries. This fact would allow the Commission to avoid the definitional quandary discussed in the Report, since any construction within the RSA would be service to a rural area. When larger license sizes are used, the licensee can generally avoid service to rural areas by satisfying its buildout requirement with coverage to only the major population centers in the license territory.

RSA licenses will also ensure that these licenses will be acquired by the entities that place the highest value upon serving rural areas. Rural telephone companies have a long and proven record of high-quality service that has been responsive to the needs of rural customers. If license sizes are small enough for rural telephone companies to acquire them with their limited resources, wireless services will be readily deployed in rural America, consistent with the rural mandates of the Communications Act. At the same time, the Commission will be helping a group of bona fide and verifiable small businesses to participate in telecommunications, consistent with its statutory obligations.

### **B. The Commission Should Revise its Partitioning/ Disaggregation Rules as Another Measure to Foster Rural Access.**

Despite the Commission's good intentions, its partitioning and disaggregation rules have proven to be largely unsuccessful in assisting rural telephone companies and other small businesses to enter the wireless business. The problem is that the large national and regional carriers that control the licenses for most of the spectrum are not willing or able to devote the

time and resources necessary to negotiate and implement arrangements on the scale desired by rural telephone companies. Put simply, most national and regional carriers are not willing to negotiate partitioning and disaggregation arrangements for areas that have less than a few million “pops” (potential market population). Commissioner Copps recognized this problem in announcing the Rural Spectrum NOI<sup>4</sup> on whether the Commission’s auction rules were promoting service to rural areas. “While partitioning and disaggregation theoretically could accomplish this goal, there is no proof that they do so,” the Commissioner said. “Therefore, we should not rely on these tools to meet our statutory obligation until we gather far more information.”<sup>5</sup>

The Rural Commenters therefore applaud the recommendation of the Task Force that the Commission “should expand the ability of spectrum users to partition their geographic service areas, or space, so that portions of their service areas that would otherwise lay fallow could potentially be put to use.” Report at p. 19. In the related Rural NOI, the Commission is exploring whether partitioning and disaggregation are useful tools, whether there are ways to improve these tools, and whether there are additional and better tools that the Commission should adopt to promote wireless service to rural areas.<sup>6</sup>

The Commission should revise the partitioning and disaggregation rules to better facilitate such transactions, by providing large licensees with greater incentives to deal with rural

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<sup>4</sup> *Facilitating the Provision of Spectrum-Based Services to Rural Areas and Promoting Opportunities for Rural Telephone Companies to Provide Spectrum-Based Services*, WT Docket No. 02-381, released December 20, 2002.

<sup>5</sup> Statement of Commissioner Michael J. Copps, *In the Matter of Amendments to Parts 1, 2, 27, and 90 of the Commission’s Rules to License Services in the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz and 2385-2390 MHz Government Transfer Bands (Report and Order)*, WT Docket No. 02-08, statement released May 16, 2002.

carriers. Such incentives can include a larger reduction of a buildout requirement if a licensee partitions to a rural carrier; and/or a modified version of the cellular unserved area rule. These mechanisms would be an important improvement in the current situation; but they will not be effective as the only tool for rural entities to obtain spectrum, and smaller license areas in future auctions are still necessary. As Commissioner Copps correctly observed, “I will continue to push for RSAs to promote rural service, and will not rely on partitioning and disaggregation for this purpose.”<sup>7</sup>

### **C. The Commission Should Adopt Its Secondary Spectrum Market Proposal As A Further (Albeit Limited) Tool for Rural Access.**

As the Report notes, the Commission has a pending proceeding on *Secondary Markets* for spectrum (WT Docket No. 00-230), in which spectrum leasing is under consideration. The Rural Commenters applaud the Task Force’s recommendation that the Commission “[d]evelop mechanisms to improve efficiency of secondary markets in facilitating transition” to more flexible use of the spectrum. More specifically, the Task Force recommends that the Commission “[m]ove forward with the *Secondary Markets* proceeding.”<sup>8</sup> Spectrum leasing could provide rural telephone companies with a valuable tool for obtaining access to spectrum, but like partitioning and disaggregation, this should not be the only tool. The lack of license rights will inhibit many potential rural carriers from investing in expensive equipment and antenna sites on

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<sup>6</sup> *In the Matter of Facilitating the Provision of Spectrum-Based Services to Rural Areas and Promoting Opportunities for Rural Telephone Companies to Provide Spectrum-Based Services*, WT Docket No. 02-381, released December 20, 2002, at ¶20, p.13 (“Rural NOI”).

<sup>7</sup> Statement of Commissioner Michael J. Copps, *In the Matter of Amendments to Parts 1, 2, 27, and 90 of the Commission’s Rules to License Services in the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz and 2385-2390 MHz Government Transfer Bands (Report and Order)*, WT Docket No. 02-08, statement released May 16, 2002.

<sup>8</sup> *Report*, Policy Recommendation No. 31, at 66.

the basis of a spectrum lease. However, under certain circumstances (such as a cooperative effort among rural carriers, one of which is a license holder), the lease option could prove valuable.

The Rural Commenters urge the Commission to promptly move forward with the proposed changes to its rules on partitioning, disaggregation, and spectrum leasing as advocated by the rural industry in numerous proceedings; but also focus on the MSA/RSA licensing model as the more important tool to promote wireless service in rural areas.

#### **D. The Commission Should Adopt Rural Telephone Bid Credits.**

Additionally, the Commission should move forward with the proposal discussed in its Rural NOI to create rural telephone bid credits.<sup>9</sup> The Commission's "entrepreneur" and "designated entity" bid credit programs that were designed to assist bona fide small businesses in entering the wireless business have not proven to be an effective tool for rural carriers. Due in part to the assignment of large licensing areas, past entrepreneur and designated entity auctions have been dominated by start-ups designed on paper to meet the letter of the Commission's eligibility requirements and attribution rules. But these entities were able to access resources far in excess of those available to rural carriers and typical small businesses.

In the most recent Broadband PCS auction (Auction No. 35), for example, entities claiming less than \$125 million in attributable annual gross revenues and less than \$500 million in attributable total assets bid billions of dollars to win the lion's share of the restricted entrepreneur licenses.

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<sup>9</sup> *Rural NOI*, ¶ 16-17, at 11.

A rural telephone bid credit would help to mitigate this unfortunate dynamic. This issue is best addressed in the Rural NOI proceeding; however, it is mentioned in these comments as yet another way to encourage spectrum access in rural areas.

### **III. The Commission Should Allow Use of Higher Transmission Powers in Rural Areas, With Appropriate Safeguards.**

The Rural Commenters support the concept of allowing increased power levels for rural telecommunications systems. See Report at p. 19. A major consideration in any rural system design is cost. A stumbling block has always been the exorbitant expense of deploying dozens of costly lower power transmitters to cover stretches of roadways connecting small rural towns. And it is even more costly to deploy transmitters covering the scattered ranches and farms beyond the highways, where the population density is even less.

The Rural Commenters recognize that there must be safeguards to ensure that high power operations in rural areas do not interfere with urban or suburban operations. However, given the remoteness of most rural areas from major markets, it should be feasible to create such safeguards. A key to this task will be the adoption of clear-cut interference definitions and protections, as recommended by the Task Force. Report at p. 17.

### **IV. The Commission Should Create Additional Spectrum for Unlicensed Operations, But Must Protect Incumbents From Interference and Undue Economic Impact in the Licensed Bands.**

The Rural Commenters support the Task Force's proposal to identify additional spectrum for unlicensed radio operations, such as "Wi-Fi" (wireless fidelity). See Report at p. 56. Low power unlicensed technologies are revolutionizing telecommunications, by allowing the inexpensive deployment of wireless broadband access.

In addition, the Rural Commenters agree that the Commission should explore whether there are circumstances in which such unlicensed operations can operate on spectrum already licensed to high-power users, in order to gain a more efficient use of the spectrum. However, as the Report observes (at p. 58), it is important to ensure that there are no adverse consequences for the incumbent licensees. In many cases, these entities paid substantial sums for their licenses at auction, and have expended even greater resources on equipment, engineering, site acquisition, and other construction costs. It would be inequitable and adverse to the public interest to compromise their operations in any way.

In recognition of this fact, the Report proposes (at p. 58) that “the FCC or a frequency coordinator would administer and resolve harmful interference issues.” However, it is often difficult to identify a source of interference, especially when the offender is not licensed. Consumers purchasing an unlicensed device at RadioShack or similar retail outlets are unlikely to read the “fine print” about operating on a non-interfering basis, and likely will not have the know-how or incentive to observe the restriction, even if they become aware of it. The Commission can take official notice that, even where the identity of the interference source is known, it often takes weeks or months to remedy the problem, even when the Commission becomes involved. Moreover, the Rural Commenters share the Task Force’s concern that unlicensed users may claim “squatter’s rights”. Report at p. 58. Therefore, it is important that the Commission study this proposal carefully, and thoroughly establish the interference “temperature” below which unlicensed devices could safely operate on licensed spectrum. The Commission should then set the ceiling far enough below this maximum temperature that incumbent licensees can be assured of no interference. In some instances, allowing unlicensed “underlay” operations may not be appropriate.

The Task Force also proposes that “opportunistic” unlicensed radios be allowed to operate on licensed spectrum at power levels *above* the interference temperature limit (Report at p. 56). The Rural Commenters believe that such opportunistic operations should only be allowed pursuant to a spectrum lease or other negotiation with the incumbent licensee. It is clear that such operations *will* create the potential for interference. As discussed above, even if there are clear cut incumbent protection rights on the books, enforcement can be difficult. Therefore, the incumbent licensee should be in a position to decide whether to risk such situation, and should be compensated for taking the risk. Higher powered unlicensed operations should not be imposed on incumbents by virtue of government-granted spectrum “easements”.

In this regard, the Commission must recognize not only the potential for interference from unlicensed operations, but also the potential economic impact on incumbents. This is especially true in rural areas. It is now clear that licensed providers of third-generation (3G) wireless services must incorporate Wi-Fi-type unlicensed access into their service offering, in order to compete. *See* Andrew M. Seybold, *Will 2003 Be The Year of the Hotspot?*, *Forbes/Andrew Seybold’s Wireless Outlook*, January 1, 2003; Jim Krane, *IBM, AT&T and Intel Form New Company to Provide High-Speed Wireless Internet Access*, Associated Press, December 5, 2002. Therefore, it may be counterproductive to create the possibility that unlicensed users can “set up shop” on a new licensee’s spectrum, at the same time when the licensee is trying to establish its nascent business.

## **V. Transition Issues.**

In order to facilitate the transition to new spectrum use schemes, the Task Force recommends that the Commission “time limit spectrum rights and subject them to periodic

review.” Report at p. 64. While the Task Force appears to offer some reassurance to incumbent licensees by indicating that they “would still have [a] strong renewal expectancy”, *id.*, these words are not entirely comforting. A renewal expectancy protects an incumbent against an applicant that files against the licensee’s renewal application. However, the threat posed by the Task Force recommendation is not one of competing renewal applications, but instead the possibility that the Commission may reallocate the licensee’s spectrum to an altogether different use, or make it unlicensed. The Commission must keep in mind that licensees invest a great deal of time and resources in constructing a wireless system and marketing the service to the public. Even cellular operations, long hailed as a wireless success story, took years to become profitable. Licensees cannot make the necessary investment in future wireless services if there is a real risk that they will have their spectrum use compromised after just five or ten years. This is especially true for rural licensees.

## **Conclusion**

It is respectfully requested that the Commission take the above concerns into consideration in fashioning any rule proposal on the basis of the Task Force Report.

Respectfully Submitted,

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Dated: January 27, 2003

## **Attachment A**

Cameron Telephone Company, LLC (and its subsidiary Cameron Communications, LLC)

Chibardun Telephone Cooperative, Inc. (and its subsidiary CTC Telecom, Inc.)

Dickey Rural Telephone Cooperative (and its subsidiary Dickey Rural Services, Inc.)

Elizabeth Telephone Company, LLC

Golden West Telecommunications Cooperative, Inc. (and its subsidiary GW Wireless, Inc.)

Interstate Telecommunications Cooperative, Inc. (and its subsidiaries Stateline Telecommunications, Inc. and Interstate Satellite Services, Inc.)

James Valley Cooperative Telephone Company (and its subsidiary Northern Valley Wireless, Inc.)

Kennebec Telephone Company, Inc.

McCook Cooperative Telephone Company (and its subsidiaries Hanson County Telephone Company and Hanson Communications, Inc.)

Midstate Communications, Inc. (and its subsidiary Midstate Wireless, Inc.)

Mon-Cre Telephone Cooperative, Inc.

Penasco Valley Telephone Cooperative, Inc. (and its subsidiary PVT Networks, Inc.)

Polar Communications

Santel Communications Cooperative

SRT Communications, Inc. (and its subsidiary North Dakota Network Co.)

South Slope Cooperative Telephone Company, Inc.

Splitrock Telecom Cooperative, Inc. (and its affiliate Baltic Telecom Cooperative)

Sully Buttes Telephone Cooperative, Inc. (and its subsidiary Venture Wireless, Inc.)

Valley Telecommunications Cooperative Association, Inc. (and its subsidiary Valley Cable & Satellite Communications, Inc.)

Webster-Calhoun Cooperative Telephone Association

West River Cooperative Telephone Company