Issue:	Application for ETC Designation
Witness:	Glenn H. Brown
Sponsoring Party:	Spectra Communications Group,
	LLC d/b/a CenturyTel and CenturyTel of
	Missouri, LLC
Type of Exhibit:	Rebuttal Testimony
Case No:	TO-2005-0325
Date:	June 10, 2005

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of the Application of)	
Missouri RSA No. 7 Limited Partnership)	
d/b/a Mid-Missouri Cellular)	
for Designation as a Telecommunications)	Case No. TO-2005-0325
Company Carrier Eligible for Federal Universal)	
Service Support pursuant to § 254 of the)	
Telecommunications Act of 1996)	

Exhibit No.

REBUTTAL TESTIMONY OF GLENN H. BROWN

ON BEHALF OF SPECTRA COMMUNICATIONS GROUP, LLC, d/b/a CENTURYTEL AND CENTURYTEL OF MISSOURI, LLC

June 10, 2005

- 1 Q: Please state your name and business address.
- 2 A: My name is Glenn H. Brown, and my business address is 55 Cathedral Rock
- 3 Drive, Suite 32, Sedona, Arizona 86351.
- 4 Q: Please summarize your current employment and prior business experience.
- 5 A: I am President of McLean & Brown, a telecommunications consulting firm
- 6 specializing in universal service issues. Prior to joining McLean & Brown in 1998, I
- 7 worked for U S WEST for 28 years, during which time I held a number of senior
- 8 management positions in the regulatory and public policy area. I have testified before
- 9 numerous state regulatory commissions, the Federal Communications Commission
- 10 (FCC) and the United States Congress on a wide variety of telecommunications costing,
- pricing and regulatory issues. My last six years with U S WEST were spent in
- Washington, DC, where I was intimately involved in the implementation of the
- 13 Telecommunications Act of 1996, with particular emphasis on universal service issues.
- 14 Q: Please summarize your educational experience.
- 15 A: I have a Bachelor of Science in Industrial Engineering from Lehigh University,
- and an MBA from the University of Colorado. Both of my degree programs focused on
- 17 computer modeling technology and applications.
- 18 Q: Please describe your experience with universal service issues.
- 19 A: I have been active in almost every major universal service proceeding before the
- 20 Federal Communications Commission (FCC) since the passage of the 1996 Act. In 1998,
- 21 the FCC appointed the Rural Task Force (RTF) to develop policy recommendations for
- 22 rural telecommunications carriers. While not a member of the RTF, I attended almost all
- of its meetings, and assisted it in both analytical matters and in the preparation and

- drafting of several white papers. In my current position I provide advice and assistance
- 2 to small and mid-size telecommunications companies regarding universal service and
- 3 other regulatory and pricing issues before federal and state regulatory bodies.

4 Q: On whose behalf are you presenting testimony?

- 5 A: I am presenting testimony on behalf of Spectra Communications Group, LLC
- 6 d/b/a CenturyTel (Spectra) and CenturyTel of Missouri, LLC, (CenturyTel). Spectra is
- 7 comprised of one study area in Missouri. CenturyTel of Missouri, LLC is a legal entity
- 8 comprised of four distinct study areas: Central, Belle-Herman, Southern and Southwest.
- 9 Spectra is a rural telephone company under the terms of the Telecommunications Act of
- 10 1996 (1996 Act), while the two CenturyTel study areas at issue in this proceeding –
- 11 Central and Southwest are non-rural telephone companies.

12 **Q:** What are the purposes of your testimony?

13 A: The purposes of my testimony are:

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- 1. To discuss the important responsibilities of the Missouri Public Service

 Commission (Commission) under the 1996 Act in regards to implementation

 of the federal universal service program. Under the Act, and FCC rules, the

 Commission may approve additional Eligible Telecommunications Carriers

 ("ETCs") in areas served by rural telephone companies only if the

 Commission determines that such designation is in the public interest; and

 approve study area redefinitions only under certain specific situations.
 - To discuss the evolution of the FCC's guidelines regarding public interest standards for the designation of multiple ETCs in rural telephone company service areas.

- 3. To explain the public interest and ETC designation criteria articulated by the FCC in their March 17, 2005 Order, and explain why it is important that the Commission utilize these criteria in the instant proceeding. I will also discuss the relationship of these criteria to the draft ETC designation rules that have been prepared by the Commission Staff.
 - 4. To evaluate MMC's filing in this proceeding against the FCC's designation criteria and, based upon this review, offer my opinion on whether approval of MMC's application in this proceeding would be in the public interest.
 - 5. To reply to the statements made by MMC in its application for ETC status filed on March 25, 2005, the testimony of Kevin Dawson and Michael Kurtis, and statements made in response to subsequent Data Requests.

Q: Could you please summarize the conclusions of your testimony?

A:

- Based upon my examination of MMC' application, and supported by the facts and data that I will be presenting in the remainder of my testimony, I do not believe that the application of MMC to receive federal universal service support for all of its CMRS customers in portions of Spectra and CenturyTel's service areas for which it seeks ETC designation is in the public interest. Specifically:
 - MMC has failed in its application and testimony to prove that its application for ETC status is in the public interest.
 - 2. In order that finite high-cost universal service funds are used to ensure that consumers living in rural high-cost areas have access to services that are reasonably comparable to those in urban areas, it is critical that the Commission establish and enforce high standards for ETC designation.

3. MMC's application in this proceeding falls short of the standards articulated in the FCC's *ETC Designation Order* and the Commission's draft ETC designation rules in several key areas, and therefore the Commission has no choice but to deny MMC's application.

COMMISSION RESPONSIBILITIES UNDER THE 1996 ACT.

- 6 Q: What are the key sections of the Telecommunications Act of 1996 and the
- 7 FCC rules that deal with universal service and the public interest test for
- 8 designating a second ETC?

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- 9 A: Section 214(e) of the 1996 Act (47 U.S.C. § 214(e)) deals with the designation of
- multiple ETCs; 47 CFR 54.201 contains the FCC's corresponding regulations.
- 11 Q: Please summarize the key elements of Section 214(e) and FCC rule 54.201
- regarding the designation of multiple ETCs.
- A: 47 U.S.C. Section 214(e)(2) states that, to be eligible for ETC status, a carrier
- must offer the defined universal service elements (the FCC rules currently define nine
- elements) throughout the service area for which the designation is received, and advertise
- the availability of such services in media of general distribution. Section 214(e)(2) states
- that, consistent with the public interest, convenience and necessity, the Commission may,
- for rural telephone companies, and *shall*, for non-rural companies, designate more than
 - one ETC. It further states that, "before designating an additional [ETC] for an area
- served by a rural telephone company, the State commission shall find that the designation
- is in the public interest." FCC Rule 54.201 contains very similar language.
- 22 Q: You said that Section 214(e)(2) states that before approving an additional
- ETC in an area served by a rural telephone company, the state commission must

1	first find such designation to be in the public interest. Does the 1996 Act or the FCC
2	regulations say how this determination should be made?
3	A: While neither the 1996 Act nor the FCC rules provide specific guidance in
4	conducting the public interest test, over the past five years the FCC has issued a series of
5	decisions that have provided an evolving set of guidelines regarding how it believes that
6	the public interest determination should be made. In looking back over this time period
7	there have been three distinct phases in the evolution of the FCC's thinking. The specific
8	orders that defined these phases, and some of the key characteristics of the public interest
9	criteria utilized during each phase are as follows:
10	1. The Wyoming and Alabama Orders;
11	• December, 2000 through January, 2004
12	Competition defines the public interest
13 14	 Designation of multiple ETCs would advance competition in high-cost rural areas, and therefore is in the public interest
15 16	 Although not formally stated, burden was on the wireline incumbent to prove that the ETC designation was not in the public interest
17	2. The Virginia Cellular Order:
18	• January, 2004 through March, 2005;
19	• Competition, alone, was not sufficient to satisfy the public interest test
20 21	 A more stringent, public interest test was necessary due to rapid growth in support to competitive ETCs;
22 23 24	 A fact-specific analysis was required to demonstrate that the benefits of designating multiple ETCs outweighed the costs of supporting multiple networks;
25 26 27	 The competitive ETC must demonstrate its commitment and ability to provide the supported services throughout the designated service area within a reasonable time frame; and

1 2 3	• It was clearly stated that the burden is on the ETC applicant to prove that its designation as an ETC in the rural telephone company <u>is</u> in the public interest.		
4	3. The March 17, 2005 ETC Designation Order		
5 6 7	• This Order was issued in response to a Recommended Decision by the Federal-State Joint Board on Universal Service released February 27, 2004.		
8 9	• The Order provides that in satisfying its burden of proof, the ETC applicant must:		
10 11 12 13	➤ Provide a five-year plan demonstrating how high-cost universal service support will be used to improve its coverage, service quality or capacity in every wire center for which it seeks designation and expects to receive universal service support;		
14	Demonstrate its ability to remain functional in emergency situations;		
15 16	Demonstrate that it will satisfy consumer protection and service quality standards;		
17 18	Offer local usage plans comparable to those offered by the ILEC in the areas for which it seeks designation; and		
19 20	➤ Acknowledge that it may be required to provide equal access if all other ETCs in the designated service area relinquish their designation.		
21	Q. Could you generally describe the requirements established in the Wyoming		
22	and Alabama Orders, and the impact that these Orders had on the designation of		
23	competitive ETCs at the state and federal level?		
24	A. One of the first competitive ETC designations issued by the FCC was in the case		
25	of Western Wireless in the state of Wyoming. ¹ In approving this designation the FCC		
26	stated its expectation that:		
27 28	Wyoming consumers will benefit from the provision of competitive service and new technologies in high-cost and rural areas. An important goal of the Act is to		

¹ In the matter of Federal-State Joint Board on Universal Service, Western Wireless Petition for Designation as an Eligible Telecommunications Carrier in the State of Wyoming, CC Docket No. 96-45, DA 00-2896, released December 26, 2000. (Wyoming Order)I

1	open local telecommunications markets to competition. Designation of
2	competitive ETCs promotes competition and benefits consumers in rural and
3	high-cost areas by increasing customer choice, innovative services, and new
4	technologies.

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As I will discuss shortly, the actual experience in Wyoming has not worked out exactly as the FCC had initially expected.

Similar to the Wyoming Order, the Order in the application of RCC Holdings for 8 ETC status in Alabama² found that designating RCC as an ETC "serves the public 9 interest by promoting competition and the provision of new technologies to consumers in 10 high-cost and rural areas." The Order dismisses concerns raised by parties regarding the 11 impact of multiple ETC designations on the size of the fund by stating "we find that these 12 13 issues reach beyond the scope of this Order, which designates a particular carrier as an ETC." The Alabama and Wyoming Orders became the templates for many of the early 14 state ETC decisions. Since the public interest standards were very low, virtually all of 15 these designation requests were approved. 16

Q. How did the Virginia Cellular Order change the guidelines for the ETC designation process?

A: The *Virginia Cellular* Order⁵ makes clear that "competition, by itself, is not sufficient to satisfy the public interest test in rural areas".⁶ The FCC concluded that "the balancing of benefits and costs is a fact-specific exercise", and that "the burden of proof

² In the Matter of Federal-State Joint Board on Universal Service, RCC Holdings, Inc. Petition for Designation as an Eligible Telecommunications Carrier Throughout its Licensed Service Area in the State of Alabama, CC Docket No. 96-45, DA 02-3181, released November 27, 2002. (Alabama Order)

³ *Id* at paragraph 1.

⁴ *Id* at paragraph 3.

⁵ In the Matter of Federal-State Joint Board on Universal Service, Virginia Cellular, LLC Petition for Designation as an Eligible Telecommunications Carrier In the Commonwealth of Virginia CC Docket No. 96-45, FCC 03-338, released January 22, 2004. (Virginia Cellular Order)

⁶ *Id* at paragraph 4.

⁷ *Id.* at paragraph 28.

1	[is] upon the ETC applicant."8 The analysis must focus on "the benefits of increased
2	competitive choice [and] the impact of multiple designations on the universal service
3	fund."9 Further, the ETC applicant has an "obligation to serve the designated service
4	area within a reasonable time frame,"10 and the competitive ETC must "submit records
5	and documentation on an annual basis detailing its progress towards meeting its build-out
6	plans in the service areas it is designated as an ETC."11 Based upon these more rigorous
7	standards, a number of states began to reject applications where an ETC applicant did not

9 Q. How did the FCC's March 17, 2005 decision expand upon the public interest 10 criteria established in the Virginia Cellular Order?

meet the burden of establishing that its designation would be in the public interest.

A. In this Order¹², the FCC adopted mandatory minimum requirements for a telecommunications carrier to be designated as an ETC in proceedings where the FCC has jurisdiction to make this designation. The Order states that "these requirements create a more rigorous ETC designation process [and that] their application by [the FCC] and state commissions will improve the long term sustainability of the universal service fund." The FCC describes these standards as follows:

Specifically, in considering whether a common carrier has satisfied its burden of proof necessary to obtain ETC designation, we require that the applicant:

1. Provide a five-year plan demonstrating how high-cost universal service support will be used to improve its coverage, service quality or capacity in every wire center for which it seeks designation and expects to receive universal service support;

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⁸ *Id.* at paragraph 26.

⁹ *Id*, at paragraph 4 (emphasis added).

¹⁰ *Id.* at paragraph 28.

¹¹ *Id.* at paragraph 46.

¹² Report and Order, In the Matter of Federal-State Joint Board on Universal Service, CC Docket No. 96-45, FCC 05-46, released March 17, 2005. (ETC Designation Order)

¹³ Report and Order, CC Docket No. 96-45, FCC 05-46, released March 17, 2005, at paragraph 2 (emphasis added).

2 3	3. Demonstrate that it will satisfy consumer protection and service quality standards;		
	,		
4 5	4. Offer local usage plans comparable to those offered by the incumbent local exchange carrier (LEC) in the areas for which it seeks designation;		
6	and		
7	5. Acknowledge that it may be required to provide equal access if all other		
8	ETCs in the designated service area relinquish their designations pursuant		
9	to section 214(e)(4) of the Act.		
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11	Q: Does the ETC Designation Order address the applicability of these		
12	mandatory minimum requirements on state Commissions?		
13	A: While the 1996 Act explicitly grants to this Commission the responsibility for		
14	making the public interest finding, at several places in the Order the FCC provides		
15	specific encouragement for state commission's to adopt these same standards in their		
16	ETC designation proceedings		
17 18	We believe that application of these additional requirements by the [FCC] and state commissions will allow for a more predictable ETC designation process. ¹⁴		
19	TV		
20 21	We encourage state commissions to require all ETC applicants over which they have jurisdiction to meet the same conditions and to conduct the same public		
22	interest analysis outlined in this Report and Order. 15		
23 24			
25	separate statements in which they commented on the need for states to adopt similar ETC		
26	designation standards:		
27	Commissioner Kathleen Abernathy		
28	I am pleased that the Commission has endorsed the Joint Board's		
29	recommendations, and I hope that state commissions and the FCC heed this		
30	guidance in upcoming designation proceedings.		
31			
32	Commissioner Michael Copps		
33	This is long overdue, and I am pleased to support it. I especially am encouraged		
34	by the build-out plans, reporting requirements and annual certifications that we		

2. Demonstrate its ability to remain functional in emergency situations;

¹⁴ ETC Designation Order at paragraph 1 (emphasis .added). ¹⁵ *Id* at paragraph 58.

- require in this decision. Collectively, these will provide this Commission and our state counterparts with a way to monitor and ensure that ETC funding truly is being used to preserve and advance universal service.
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- 5 Q. Has MMC commented on the applicability of the FCC Order in this
- 6 proceeding?
- 7 A. Yes. On page 28 of its Application, MMC states "The Commission may choose
- 8 to evaluate the MMC application using the guidance recently announced in the FCC
- 9 Guidelines Order."
- 10 Q: Why did the FCC provide the specific requirements and guidance for ETC
- designation that it did in the March 17 Order?
- 12 A. I believe that there are several reasons that the FCC did this. The first is to
- address the rapid growth in the amount of funding that is going to competitive ETCs,
- particularly wireless ETCs. The language quoted earlier from paragraph 2 of the ETC
- Designation Order highlights the FCC's concern over the "sustainability of the universal
- service fund." The following chart illustrates the significant growth that has occurred
- 17 recently in funding going to competitive ETCs.

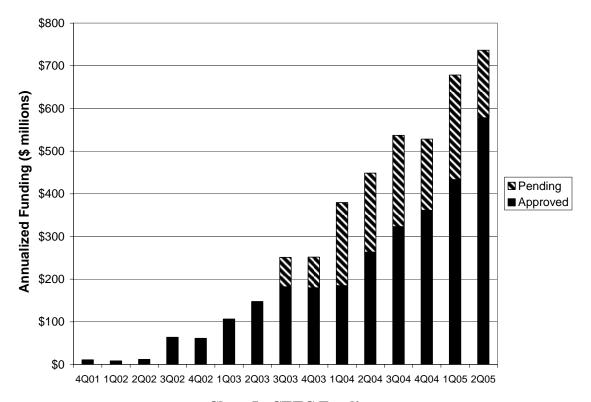


Chart I – CETC Funding

A second factor that could have influenced the adoption of more specific guidelines for the use of universal service funding is the need for greater assurance that funds are being used for their intended purpose. The purpose of universal service funding is to assure that consumers in "rural, insular and high-cost" areas have services comparable to those available in urban areas. It is only logical, then, that universal service funds provided to wireless carriers be used to improve coverage throughout the service area and build new towers to expand signal coverage into remote areas that lack sufficient coverage, or are not covered at all. In one of the earliest ETC decisions in the case of Western Wireless in Wyoming, the Order (cited previously) described the wonderful services and new technology that would come to rural Wyoming customers with this ETC designation. It is instructive to look back and see exactly what happened in Wyoming. USAC reports indicate that Western Wireless received \$6.2 million of

high-cost support in 2003, and \$8.2 million in 2004. While Western Wireless received

over \$14 million, it added no new towers to expand its service footprint into rural and

3 high-cost areas of Wyoming.¹⁷ Where did the money go? It is possible that it went to

upgrade services and facilities in the "urban" areas of Wyoming. It is also possible that it

5 was used to sweeten the balance sheet to make the company a more attractive acquisition

6 target. The point is, we just don't know where it went, but it is clear that it did not go to

7 improve signal quality in remote and rural areas of Wyoming. By requiring a prospective

applicant to clearly state where and how it intends to use high cost funding as a condition

of its ETC application, the Commission will be in a better position to, as Commissioner

Copps stated, "ensure that ETC funding truly is being used to preserve and advance

11 universal service." ¹⁸

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12 Q. On page 26 of its Application MMC states "While wireless ETC designations

have been increasing, over the last two years, the level of carrier contribution to the

USF (calculated as the percentage of revenues needed to support the fund) has

actually been decreasing."

16 A. No, the facts tell exactly the opposite story. Chart I shows the explosive trend in

the growth of support for competitive ETCs. From the second quarter of 2003 to the

second quarter of 2005, high cost universal service support to CETC's has increased from

¹⁶ USAC reports HC01 for 1Q03 through4Q04.

¹⁷ This conclusion was reached after a thorough review of records in the FCC tower registration and antenna licensing data bases.

¹⁸ Much of the problem related to the need for specific build-out plans stems from the requirement under the current rules that the competitive ETC receives the same per-line support as the incumbent wireline carrier, regardless of their actual costs. In my opinion, the public interest would be better served if the competitive ETC received support for its own costs of serving high-cost areas, in much the same way that wireline carriers only receive support after they have made the investment to serve high-cost areas. Since a change such as this is well beyond the scope of this proceeding, it is incumbent on this Commission to assure that whatever support that MMC might receive if designated as an ETC is spent for its intended purposes.

\$147 million to \$736 million. Over the same time period, high-cost universal service

support to incumbent carriers has remained essentially constant at approximately \$3.2

3 billion. 19 Over this the same two year time period the universal service contribution

4 factor has increased from 9.1% of interstate and international end-user revenues to

11.1%. It is growth such as this that has caused the FCC to develop more stringent

6 standards for ETC designation.

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Q. How do the mandatory minimum requirements in the FCC Order compare

with the draft ETC designation rules that have been prepared by the Commission?

A. I have reviewed the draft rule 4 CSR 240-3.570 recently proposed by the Commission Staff, and find it to be generally similar to the requirements contained in the FCC Order. In several areas it appears to go even farther than the FCC requirements in requesting more detail regarding the five year build-out plan, and providing more specific consumer protection provisions. Like the FCC guidelines, it includes a requirement that the ETC applicant "shall include a commitment to offer local usage plans comparable to those offered by the incumbent local exchange carrier," however it also includes a provision that supported services must include "a minimum of 500 minutes of local usage." Overall Spectra and CenturyTel supports the proposed rule, and believe that it offers a sound platform to evaluate the public interest impacts of ETC applications and to assure that finite universal service funds are being used to preserve and advance universal service. Section (11)(A)(1) of the proposed rule states that CMRS carriers must provide a "minimum" of 500 minutes of local usage. Spectra and

¹⁹ The actual numbers for ILEC support is \$3,151 million for 2Q03, and \$3,233 for 2Q05. This equates to a 2.6% growth in ILEC support over this two year period, versus a 401% growth in CETC support. The source for all data is USAC reports HC01.

²⁰ The only part of the proposed rule with which I have concern is the provision in (11)(D)(2) regarding steps that a carrier would take to provision service. As I will describe later in my testimony, I believe that stronger service provisions are necessary to assure that rural consumers receive supported services reasonably comparable to those available in urban areas to be consistent with the provisions of section 254(b)(3) of the 1996 Act.

- 1 CenturyTel assume that this minimum local usage requirements is to be read in context
- with Section (5) which states that "Each request for ETC designation shall include a
- 3 commitment to offer local usage plans comparable to those offered by the incumbent
- 4 local exchange carrier in the areas for which the carrier seeks designation," and that the
- 5 Commission has the authority to require local usage levels higher than the minimum,
- 6 where appropriate.

7 THE PUBLIC INTEREST ANALYSIS

- 8 Q: As the FCC's ETC designation standards have evolved, have the way in
- 9 which state commissions have been making ETC designation decisions changed as
- 10 **well?**
- 11 A: Yes. The early state ETC designations tended to follow the reasoning in the
- Wyoming and Alabama decisions that competition was the primary public interest factor,
- and that ETC applications should be approved. Beginning in late 2003, and then
- following the release of the FCC's Virginia Cellular Order, a number of states, like the
- FCC, began looking beyond the mere technical compliance with the requirements of
- Section 214(e) to determine how the ETC applicant intends to use high-cost support, and
- 17 how the grant of ETC status will sufficiently improve the services that the public receives
- to offset the public costs that it will create. For example, on December 1, 2003 (well
- 19 before the issuance of the Virginia Cellular Order) the Minnesota Corporation
- 20 Commission issued an order denying the application of Nextel for ETC status. In that
- order, the Minnesota Commission states:
- 22 The Company presented no plan for expanding its service capabilities and simply
- stated that receipt of the universal service funding would change (in unspecified
- 24 ways) the economic model that might (no guarantee or analysis to show
- reasonable likelihood) make expansion (of unspecified extent) into some

(unspecified) areas possible. The extent to which the economic model would change was not specified. No guarantee of expansion or analysis was provided to demonstrate the likelihood of expansion. No areas were identified for expansion. ...In these circumstances and based on this record, therefore, the Commission finds that Nextel has failed to demonstrate that it is willing and able to serve "throughout the service area for which the designation is received..." as required of an ETC by 47 U.S.C. § 214(e)(1). In August of 2004, Western Wireless was denied ETC status in the state of Nevada in the

In August of 2004, Western Wireless was denied ETC status in the state of Nevada in the rural telephone company study areas that it had requested. In its Order the Nevada

Commission stated:

[T]he primary question before the Commission is whether Western Wireless' designation as and ETC is in the public interest, regarding the rural telephone companies, and consistent with the public interest. The Commission finds that Western Wireless has not met its burden for showing that its request for designation as an ETC is in the public interest. The Commission must evaluate the facts presented in each application for designation as an ETC, weighing the costs and benefits of granting ETC status in the requested area. The FCC has indicated that the public interest analysis for designation as an ETC should be rigorous and stringent. (Virginia Cellular at ¶4; Highland Cellular at ¶21.) Western Wireless' evidence did not persuade the Commission that designating the Company as an ETC would be in the public interest.²²

Similarly, in an Order issued August 5, 2004, this Commission applied the fact-specific tests contained in the Virginia Cellular and Highland Cellular cases and concluded that the designation of Mid-Missouri Cellular as an ETC was not in the public interest.²³

27 interest.²³

Q: If the Commission were to conclude that there should only be one ETC in some study areas, would this mean that consumers in those areas would not have competitive choices for telecom providers?

²¹ In the matter of NPCR, Inc. d/b/a Nextel Partners for Designation as an Eligible Telecommunications Carrier Under 47 U.S.C. § 214(e)(2), Docket No. PT-6200/M-03-647, Issued December 1, 2003. ²² Application of WWC License L.L.C., d/b/a CellularOne, for redefinition of its service area as a designated Eligible Telecommunications Carrier, Docket No. 04-3030, August 4, 2004. at pages 12 - 13.

Absolutely not. As I will illustrate shortly using MMC' current network, wireless 1 A: 2 carriers have built their networks in cities and towns and along major highways. These are areas where customer density is high, and costs are low. Customers in these areas are 3 already subscribing to MMC' service. Indeed, MMC is asking for high-cost support for 4 5 these low-cost customers as soon as it gets ETC designation. The only customers really in question are those in the remote, high-cost portions of the study area where MMC' 6 network currently does not reach, or where existing signal coverage is poor. Many of 7 these customers likely have MMC service also, for use when they are on the road, or 8 when they are in town shopping, working or going to school. It is only when a new ETC 9 invests high-cost funds to build facilities into the more remote and higher-cost areas, 10 however, that consumers will begin to see benefits through larger areas to enjoy their 11 mobile service capabilities, and the ability to use their wireless services at home. Thus, 12 unless a prospective ETC applicant is willing to commit to formal plans to construct 13 facilities throughout the proposed service area, the benefits of their ETC designation will 14 be greatly diminished. Furthermore, to the extent that the ETC designation dilutes the 15 finite pool of high-cost funds to the point where no carrier can viably serve as carrier of 16 last resort, then consumers will be harmed, and the public costs will be greatly increased. 17 18 Q. On page 7 of his testimony, Mr. Kurtis expresses his opinion that "the Commission must designate more than one carrier as an ETC in an area served by a 19 20 non-rural telephone company if the requesting carrier meets the requirements of Section 214(e)(1) of the Act." (emphasis added) Do you agree with his conclusions? 21

²³ In the Matter of the Application of Missouri RSA NO. 7 Limited Partnership, d/b/a Mid-Missouri Cellular, for Designation as a Telecommunications Company Carrier Eligible for Federal Universal Service Support Pursuant to Section 254 of the Telecommunications Act of 1996. Case No. TO-2003-0531.

- 1 A. No. The FCC squarely addressed this issue in the Virginia Cellular Order. In
- 2 paragraph 27 of this Order the FCC states.
 - We note that the Bureau previously has found designation of additional ETCs in areas served by non-rural telephone companies to be *per se* in the public interest based upon a demonstration that the requesting carrier complies with the statutory eligibility obligations of section 214(e)(1) of the Act. We do not believe that designation of an additional ETC in a non-rural telephone company's study area based merely upon a showing that the requesting carrier complies with section 214(e)(1) of the act will necessarily be consistent with the public interest in every instance.

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- 12 Thus, the Commission must reach a public interest finding for the non-rural study areas
- in which MMC has requested ETC status as well as for the rural study areas.
 - Q: Could you summarize your recommendations on the factors the Commission
 - should consider as it conducts its public interest analysis?
- 16 A: The Commission must ensure that scarce public funds are spent wisely and for the 17 purposes for which they were intended. It has an obligation to ensure provider accountability. Thus, the Commission should approve additional ETCs in rural areas 18 only when the increased public benefits that will come from supporting multiple carriers 19 can be shown to clearly exceed the costs that are created by supporting multiple 20 21 networks. The criteria outlined by the FCC in its March 17, 2005 Order can and should be applied as the Commission determines if MMC's application for ETC status is in the 22 23 public interest.

COST/BENEFIT ANALYSIS

- 2 Q: What are some of the benefits that might be created by the designation of a
- 3 second ETC?

- 4 A: Benefits that might be created could include investments in new towers and
- 5 facilities to bring mobile communications services to currently unserved areas, wider
- 6 service areas over which consumers could use their mobile phones, new choices or
- 7 service upgrades for consumers, lower prices, higher quality and potential competitive
- 8 responses from other service providers.
- 9 **Q:** What are some of the costs that would be created?
- 10 A: The most easily identified cost would be the cost of providing support to the new
- 11 ETC. Where multiple competing wireless carriers serve the same market, there will be
- significantly increased cost, as these carriers, to ensure they remain on a competitive
- footing, will have no choice other than to request ETC status as well.
- In very sparsely populated areas there could also be increased public costs due to
- the loss in network efficiency caused by multiple providers serving in a less efficient
- manner than a single provider could serve. These higher costs could lead to significant
- harms to consumers if finite universal service support resources are spread so thinly that
- no carrier (wireline or wireless) can justify the investment to viably function as a carrier
- of last resort. Later in my testimony I will demonstrate how providing support to
- 20 multiple carriers wireless or wireline will increase the cost of providing universal
- 21 service in the most remote and sparsely populated areas
- 22 Q. How much will high-cost support increase if MMC is granted ETC status in
- 23 all of the study areas for which it has requested ETC designation?

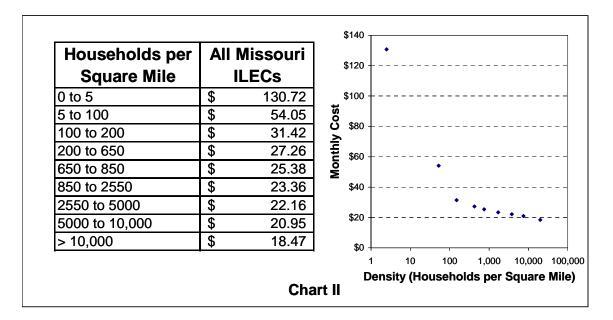
- 1 A. On page 18 of his testimony, Mr. Dawson estimates that MMC would expect to
- 2 receive approximately \$1.8 million per year in federal high-cost universal service support
- 3 for its subscribers within the Designated Areas.
- 4 Q If MMC is designated as an ETC in this proceeding, would \$1.8 million per
- 5 year be the total cost to the USF for additional support payments?
- 6 A. No. There are six other wireless carriers that provide service in the serving areas
- 7 where MMC seeks ETC designation.²⁴ If the Commission grants ETC status to MMC
- 8 based upon the limited showing that it has made in this case, it is likely that other
- 9 wireless carriers will also apply for and receive approval for ETC status as well. The
- most recent public data available from the FCC indicates that in the state of Missouri
- there were 3.52 million wireline loops, and 2.29 million wireless handsets at the end of
- 12 2002.²⁵ This yields a wireless handset to wireline loop ratio of 65%. Publicly available
- data from USAC indicates that as of the third quarter of 2005, ILECs in the state of
- Missouri were receiving universal service support at a rate of \$91.1 million per year. ²⁶
- 15 Thus, if all wireless carriers in the state of Missouri were to receive ETC status, the
- overall draw on the federal USF from Missouri wireless carriers could go up by as much
- as \$59.2 million per year ($$91.1 \times 0.65 = 59.2).
- 18 Q. You also mentioned that in sparsely populated rural areas supporting
- multiple carriers can also increase the cost of serving all customers. Could you
- 20 **explain why this is so?**

²⁴ In response to MPSC Data Request No. 36, MMC identifies Cingular, Verizon, Sprint, T-Mobile, US Cellular and Nextel as providing service in some or all of MMC's proposed service area.

²⁵ Data from *Trends in Telephone Service*, FCC, May, 2004, wireline Table 7.2. wireless Table 11.2. Since wireless lines have grown substantially since 2002, and wireline lines have not grown, and in fact in many areas are declining, these estimates are very conservative.

²⁶ USAC Report HC01, third quarter 2004.

- 1 A Proxy cost modeling work done at the FCC in the late 1990s established a strong
- 2 correlation between customer density and the cost of providing basic telephone service.
- 3 The following Chart II, relying on data from the Benchmark Cost Proxy Model 3.0 for all
- 4 ILECs in the state of Missouri, shows the relationship of subscriber density, measured in
- 5 households per square mile, to the monthly cost of providing basic telephone service.



- Notice that at household densities of 100 households per square mile and greater, the per-
- 8 line cost of basic telephone service is quite low. At densities of less than 100 households
- 9 per square mile, costs increase dramatically and exponentially, with areas with density of
- 5 households per square mile or less costing well in excess of \$100 per line per month.

Q. What does this have to do with MMC's cost of providing service?

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A. While the technologies of wireline and wireless networks are very different, they both experience high levels of fixed cost, or costs that do not necessarily vary with the number of customers served, which make the cost of providing service very sensitive to subscriber density. A good example of this type of fixed cost in a wireline network is a

trench for the placement of distribution cable. Assume for discussion purposes that a 1 trench costs \$2 per foot to dig, place and fill. In a densely populated area where a trench 2 might support 500 lines, the cost of this trench would be \$0.004 per line per foot. In a 3 sparsely populated area where the trench only supports 10 lines, the cost per line would 4 5 be \$0.20. In a very sparsely populated area with only 2 lines the per-line cost would be 6 \$1, and for the customer at the very end of the line, the cost of the length of trench 7 becomes \$2 per line per foot. While not a perfect analogy, this shows why the cost to 8 density curve shown above identifies costs increasing geometrically as population density decreases.

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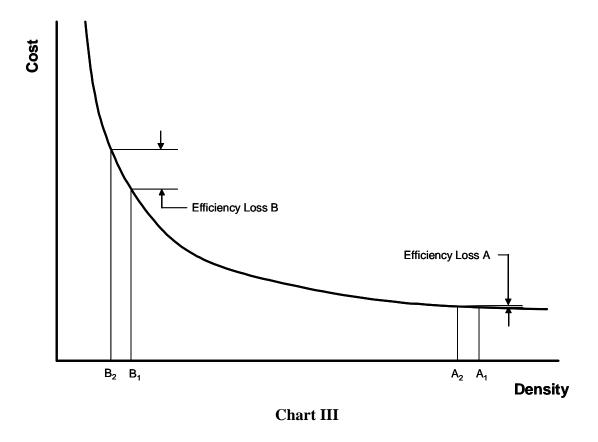
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In a wireless network, a major fixed cost is the tower and associated radio equipment. A tower and associated equipment cover a given "footprint", or area where acceptable wireless coverage can be received from that tower. The per-customer cost of providing service from that tower is very sensitive to the number of customers within that footprint. In a densely populated or heavily traveled area where thousands of customers may be within that footprint, the cost per-customer is low. In sparsely populated areas, the cost per customer becomes increasingly high, and would follow the same exponential relationship of increasing cost to decreasing density. As a result of this, wireless providers have tended to build their networks and provide conventional cellular service in towns and along major highways where subscriber density is high and relative percustomer costs are low.

21 O. How can costs go up for all customers when multiple carriers serve sparsely populated areas? 22

A. As I described previously, both wireline and wireless networks are comprised of many fixed cost investments, and therefore the cost of providing service is highly dependent on the density of customers in a particular area. The following Chart III illustrates how when multiple providers serve the same sparsely populated area, the cost for both providers increases. As I mentioned earlier, this relationship is equally valid if two wireless providers are serving the same sparsely populated area.



When a second carrier enters a service area and captures customers from the incumbent, the physical area of the service territory is unchanged, but the number of customers served is less. This will have the impact of reducing the average density in terms of households per square mile and increasing the cost per customer for both carriers. The impact that this reduction in density will have on the average cost of serving customers is highly dependent on the density of the serving area. This graph shows the cost impact

for two hypothetical scenarios. Company A, shown on the right side of the chart, serves 1 a densely populated area with relatively low costs. If the entry of an additional carrier 2 results in a reduction in subscriber density from A_1 to A_2 , the resulting efficiency loss is 3 4 negligible. On the other hand, Company B, shown on the left side of the chart, serves a 5 relatively sparsely populated area. Notice that an equivalent reduction in density from B₁ 6 to B₂ results in a significant and much larger loss of efficiency due to the nature of the 7 density/cost relationship. Given the exponential increase in cost with decreasing density, 8 the lower the initial density level, the higher will be the efficiency loss with the 9 introduction of a second carrier. Thus, as population density decreases below 100 households per square mile, the level of public benefit necessary to justify the 10 corresponding increase in public costs becomes larger than would be the case in a more 11 densely populated area. In the most extremely sparse areas, very significant additional 12 public benefit would be necessary to justify the substantial increase in public costs that 13 would be created by providing public support to multiple carriers. 14

Q: Has the phenomenon of increasing costs when multiple ETCs serve sparsely populated rural areas been recognized as a problem?

A: Yes. In May of 2001, the FCC released its MAG Order that eliminated the
Carrier Common Line charge for rate-of-return carriers and replaced it with an explicit
and portable Interstate Common Line Support (ICLS) mechanism. In his separate
statement issued with this Order, FCC Chairman (then Commissioner) Kevin Martin
said:

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"I also note that I have some concerns with the Commission's policy – adopted long before this Order – of using universal service support as a means of creating "competition" in high cost areas. I am hesitant to subsidize multiple competitors to serve areas in which costs are prohibitively expensive for even one carrier.

This policy may make it difficult for any one carrier to achieve the economies of scale necessary to serve all of the customers in a rural area, leading to inefficient and/or stranded investment and a ballooning universal service fund."²⁷

4 **BENEFITS**

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- 5 Q. What benefits has MMC identified that would result from its designation as
- 6 an ETC for the receipt of high-cost universal service?
- 7 A. Throughout its Application and testimony, MMC offers its assessment of the
- 8 benefits that this designation will bring. Among these benefits are:
- Increased competition
- Increased consumer choice and service quality.
- Larger local calling area
- The benefits of mobility.
- Competitive response from affected ILECs.

15 Q. What is your reaction to the purported benefits that MMC describes?

A. First of all, these purported benefits consist totally of generalized statements regarding the generic benefits of competition, and as I have stated previously, MMC is already competing in these areas today. The real question before this Commission is what *additional* competition and *increased* benefits will come from designating MMC as an ETC in the Spectra and CenturyTel study areas. Second, to read MMC' statements you would think that MMC currently does not compete in these markets, and only if they are granted ETC designation will there be competition in rural areas in the state of Missouri. Nothing could be further from the truth. Wireless carriers, including MMC, have built facilities throughout rural America, including rural areas in Missouri. Wireless

²⁷ 2nd R&O and FNPRM in CC Docket No. 00-256, 15th R&O in CC Docket No. 96-45, and R&O in CC Docket Nos. 98-77 and 98-166, Released November 8, 2001, *Separate Statement of Commissioner Kevin J. Martin*. Commissioner Martin reaffirms this statement in his separate statement concerning the Joint Board Recommended Decision..

- carriers have built their networks in cities and towns and along major highways where
- 2 customer concentration is high and costs are low.
- 3 Q. Can you provide an illustration of MMC' network in the state of Missouri?
- 4 A. Exhibit GHB 1 is a map of the state of Missouri indicating the location of
- 5 MMC' towers as best can be determined using publicly available data. The map also
- 6 shows population density statistics, which I will use to illustrate the cost of serving
- 7 various areas.
- 8 Q. How did you obtain the data shown on this map?
- 9 A. The locations of the MMC cellular towers were obtained from the FCC's publicly
- available Universal Licensing System (ULS) data base. The legend in the upper right
- hand corner of the map indicates the color coding used to show the population density.
- 12 This density data was obtained from the 2000 Census, and indicates housing density at
- the Census Block level. Also shown on GHB-1 are the major highways and cities in this
- area for geographic reference, and the boundary of the RSA 7 area.
- 15 Q. Have you been able to compare these tower locations from this publicly
- available data base with the confidential information regarding tower locations that
- 17 MMC provided in response to Intervenors' data requests?
- 18 A. Yes. MMC classified its tower location information as Highly Confidential in
- response to a Spectra and CenturyTel data request, although based on my review of both
- 20 MMC's response and the publicly available ULS data base I find the data compares quite
- 21 favorably. In any event, I've used publicly available information for purposes of my
- 22 Exhibit GHB-1 and nothing provided in MMC's Highly Confidential response changes
- 23 my analysis or conclusions.

Q. Can you show the boundaries of the Spectra and CenturyTel wire centers for

2 which MMC has requested ETC status?

- 3 A. Exhibit GHB-2 shows the exchange boundaries for the Spectra and CenturyTel
- 4 wire centers. These boundaries were obtained from a map produced by the Missouri
- 5 Telephone Industry Association, and I verified these boundaries against Spectra and
- 6 CenturyTel's actual engineering records for a sample of exchanges. In the Spectra study
- area MMC has requested ETC status only in the Concordia wire center. In CenturyTel
- 8 (Central) study area MMC has requested ETC status in the Columbia and Rocheport wire
- 9 centers. In CenturyTel (Southwest) study area MMC has requested ETC status in the
- 10 Wooldridge and Prairie Home wire centers.

11 Q. How can the coverage area and signal quality of MMC' network be

12 **determined?**

- 13 A. The best way to determine network coverage is through what is called a
- 14 "propagation analysis". In this type of analysis, numerous factors such as the
- transmission characteristics of the cellular tower and the end user's handset or receiver,
- the nature of the radio spectrum used, as well as the topographical contour of the area in
- question all have an impact on the area over which consumers can receive varying levels
- of performance from the wireless network.

19 Q. How do topographical features influence network performance?

- 20 A. Radio waves can't "see through" hills or mountains. Most of us have had the
- 21 experience of talking on a mobile phone and losing the connection as we went down into
- 22 a valley or went behind a hill, building or some other obstruction. Propagation studies

- take terrain data from the U.S. Geological Survey to predict areas where coverage will be
- 2 good, marginal or non-existent.
- 3 Q. How do the characteristics of the cellular tower influence network
- 4 performance?
- 5 A. Factors such as the height of the tower and the electromagnetic power of the radio
- 6 transmitter and antenna have a significant impact on the area that a tower can cover.
- 7 Generally, the higher the tower and the more powerful the transmitter, the larger the
- 8 radius will be that can be theoretically covered.
- 9 O. Are there other factors that influence the level of service that a customer
- 10 **might experience?**
- 11 A. Yes. Another important component is the receiving and transmitting equipment
- that the customer uses. Unlike a broadcast application such as commercial radio, a
- telecommunications network requires a two-way communication between the tower and
- the mobile equipment. Not only must the customer's receiver be able to detect and
- receive the signal from the tower, but it must send a signal back to the tower that the
- tower is capable of detecting and receiving. Thus the characteristics of the customer's
- 17 equipment play a critical role in determining the coverage that a customer will
- experience. The same laws of physics that apply to the tower dictate that the transmitting
- 19 power and antenna height of the customer's equipment will play a significant role in
- 20 determining the coverage that will be experienced.
- 21 Q. What types of equipment do customers generally use?
- 22 A. By far, the most commonly used equipment is the cellular handset that most of us
- carry strapped to our belts or in our purses. These handsets generally operate at a power

- level of from 0.2 to 0.6 watts. The other type of equipment that is used, although less
- 2 frequently than in the earlier days of cellular service, is the "bag phone", "car phone" or
- 3 Telular-type wireless local loop units that operate at a power level of 3 watts. The higher
- 4 power level of this equipment makes it heavier and bulkier, and not as mobile or
- 5 convenient as the conventional cellular handset. The higher power level of such
- 6 equipment does give it a significantly larger operating radius than the 0.2 to 0.6 watt
- 7 handset. In more remote locations, service can also be achieved or improved by working
- 8 on the "height" variable in the coverage equation. Many of us have had personal
- 9 experiences with going to a higher floor, or climbing a hill to improve cellular reception.
- In wireless local loop applications it is often possible to mount an external antenna to the
- roof of the building to gain additional height and therefore coverage.
- 12 Q. Why should the Commission care about the quality of the signal coverage
 - that consumers experience, and the different coverage characteristics of different
- 14 types of equipment?

- 15 A. The actual wireless coverage that consumers experience should be a key factor in
- the cost/benefit analysis that lies at the heart of the public interest evaluation process.
- 17 The original high-cost fund had its genesis in the public goal of making wireline
- telephone service available and affordable in remote and high-cost areas where, absent
- support, it would not otherwise be offered. Similarly, an equally valid public goal could
- 20 be to make wireless service more widely available and affordable in remote areas where
- 21 it would not otherwise be available, absent support. The key factor thus becomes what
- benefit will consumers experience in terms of expanded ability to use their mobile
- 23 service over wider areas in return for the increased universal service fund assessments

- that this will cost? If a wireless carrier merely offers to provide higher powered customer
- 2 premise equipment and external antennas to a few customers in remote locations so that
- 3 they can qualify for funding, that might not be worth the cost of providing "high-cost"
- 4 support for all of that carrier's existing low-cost customer base. It is for this reason that
- 5 it is critical that the Commission understand the benefits that consumers will receive
- 6 before it decides to spend their money.

7 MMC's COVERAGE AREA

- 8 Q: Has MMC provided a propagation analysis as a part of its testimony?
- 9 A: Yes. Appendices E H of MMC's application and testimony provide propagation
- studies for various aspects of MMC's existing and propose network.
- 11 Q: Have you been able to perform an independent analysis of MMC' signal
- coverage in the affected Missouri rural telephone company areas?
- 13 A: Yes. Exhibit GHB-3 is a map that was constructed using publicly available data
- from the FCC's ULS data base. From this data base I am able to obtain information
- regarding:
- Tower location (latitude and longitude)
- 17 Antenna Height
- Effective Radiated Power
- 19 I have also used topographic data obtained from the US Geological Survey.
- 20 Q: Could you please describe what is shown on Schedule GHB-3?
- 21 A: The area shown in gray represents the outer limits of signal coverage using high
- 22 power, 3 watt customer premises equipment. I have computed this level at -100 dBm,
- 23 which is listed as the minimal operating signal strength in the Technical Manual for the

1	Telular wireless local loop unit. The area shown in gold represents a reasonable
2	approximation of the area where a customer would experience a more "urban quality" of
3	service, with a reasonable probability of good "5-bars" signal quality using a 0.2 to 0.6
4	watt handheld unit, and a relatively low incidence of dropped calls. I computed this level
5	at -75 dBm, although there is no fixed standard for what constitutes "urban quality"
6	service. If a higher signal quality were desired, the coverage area would get smaller, if a
7	lower quality were acceptable, the coverage area would get larger. The quality of service
8	that a customer would experience is also affected by a number of environmental factors
9	such as where the phone is located (pocket, purse, car, building, etc.), as well as natural
10	obstacles such as foliage and terrain, man-made obstacles such as buildings, and channel
11	loading on the wireless system. In the grey areas the signal quality would not be as good,
12	and there would be a higher probability of dropped calls or poor reception. I have also
13	shown on the boundaries for CenturyTel's Concordia, Columbia, Rocheport, Wooldridge
14	and Prairie Home wire centers.

Q. Why should a wireless carrier's signal quality be an important element of the public interest analysis?

A. 47 U.S.C. Section 254(b)(3) describes the purpose of universal service funding as follows:

ACCESS IN RURAL AND HIGH COST AREAS. – Consumers in all regions of the Nation, including low-income consumers and those in rural, insular, and high-cost areas, should have access to telecommunications and information services, including interexchange services and advanced telecommunications and information services, that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas.

²⁸ This equipment is manufactured by the Tellular Corp., and documentation may be found at www.tellular.com.

As the Commission seeks to define the public interest, the quality of the signal coverage provided by a prospective ETC applicant should play an important part in assessing the public benefits that consumers would experience. Throughout its Application and testimony, MMC stresses mobility as a key benefit of its service. In rural areas with weak signal strength where consumers receive service through high-powered equipment and roof-mounted antennas, mobility is not the same as in the more urban areas. Likewise, urban consumers traveling through such areas would not have the convenience of using their wireless handsets, nor would they experience the health and safety benefits that MMC claims are important public interest benefits. The 1996 Act clearly states that the purpose of universal service is to provide consumers in high-cost rural areas with services that are "reasonably comparable" to those services provided in urban areas". I believe that it is reasonable for the Commission to conclude that this means something more than giving the rural consumer the opportunity to purchase a high-power customer premise equipment or a roof-mounted antenna. Where a wireless ETC accepts federal universal service funds, the quality of the signal coverage provided to rural consumers should be an essential part of the Commission's public interest analysis. The prospective ETC must stand ready to assume Carrier of Last Resort responsibilities if necessary. If a wireless carrier is to accept federal universal service funding for serving high-cost, rural areas, then it should be required to invest that money in a network that provides signal quality reasonably comparable to that experienced in urban areas. If it is not willing to make that level of commitment, then it should not be receiving universal service support.

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- 1 Q. On page 16 of his testimony, Mr Dawson describes a six-step process that
- 2 MMC proposes to use to demonstrate service throughout the ETC designated areas.
- 3 Do you believe that this process is consistent with Section 254(b)(3) of the Act?
- 4 A. No. The six-step process that Mr. Dawson describes allows a carrier to claim that
- 5 an area is covered, even if high-powered customer premises equipment and/or a roof-
- 6 mounted antenna is required for a customer to receive signal coverage. While this
- 7 provides a benefit to the individual consumer receiving this service, it is of no benefit to
- 8 the vast majority of customers utilizing conventional handsets. It also is inconsistent
- 9 with the intent of Section 254(b)(3), since the coverage provided is not comparable to
- that available in urban areas.

11 Q: What conclusions do you draw from this propagation analysis?

- 12 A. First, by taking a two-tiered view of signal quality, it is possible to see that in
- many of the rural areas for which MMC seeks ETC status, coverage is provided at levels
- that are below those experienced in urban areas. Second, based upon this it would appear
- that MMC will need to make significant improvements in its signal coverage. Finally,
- 16 MMC's coverage appears to be particularly weak in the Columbia wire center, with very
- 17 few areas experiencing urban quality service, and large portions of this wire center
- 18 having no coverage at all.
- 19 Q. What conclusions do you draw from the poor signal coverage of the
- 20 Columbia wire center?
- 21 A. Should the Commission ultimately decides to grant MMC ETC status, I do not
- believe that ETC status for the Columbia wire center can be justified. The signal
- 23 coverage is marginal, at best, and since the wire center lies almost entirely outside of

- 1 MMC's licensed serving area, it would be difficult, if not impossible, to improve signal
- 2 coverage to deliver urban quality service throughout this wire center.

3 THE FCC'S MARCH 17, 2005 ETC DESIGNATION CRITERIA

- 4 Q. Earlier you described the public interest test that the FCC has outlined in its
- 5 March 17, 2005 Order. Could you please analyze MMC' submissions in this
- 6 proceeding against these evaluation criteria?
- 7 A. The FCC's Order provided five specific criteria that must be met for a prospective
- 8 applicant to be designated as an ETC. Following is an evaluation of MMC's filing in this
- 9 proceeding against these five criteria:
 - 1. Provide a five-year plan demonstrating how high-cost universal service support will be used to improve its coverage, service quality or capacity in every wire center for which it seeks designation and expects to receive universal service support.

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- The FCC describes its expectations for this five year plan as follows:
- This showing must include:
 - 1. How signal quality, coverage, or capacity will improve due to the receipt of high-cost support throughout the area for which the ETC seeks designation;
 - 2. The projected start date and completion date for each improvement and the estimated amount of investment for each project that is funded by high-cost support.
 - 3. The specific geographic areas where the improvements will be made; and
 - 4. The estimated population that will be served as a result of the improvements.²⁹

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While MMC does describe a build-out plan involving CDMA overbuilds in certain areas, and identifies ten potential locations where "additional cell sites would be needed" it falls short of the FCC guidelines in several respects. While MMC provides a laundry list of projects that it could undertake, it does not provide projected start and completion dates. The FCC included this requirement to assure that the ETC applicant

²⁹ ETC Designation Order at paragraph 23.

remained committed to serving throughout the service area, and to have concrete milestones to evaluate progress toward meeting the build-out plan during the annual review process. The FCC also required data regarding the estimated population that would be served as a result of each improvement. This is critical data necessary to conduct the cost/benefit analysis of whether the projected expenditure will provide increased public benefits commensurate with the increased public costs. MMC provides none of this population data

2. Demonstrate its ability to remain functional in emergency situations.

The FCC states that "an applicant must demonstrate it has a reasonable amount of back-up power to ensure functionality without an external power source, is able to reroute traffic around damaged facilities, and it capable of managing traffic spikes resulting from emergency situations." Mr. Dawson describes steps that MMC has taken to ensure network reliability on page 22 of his testimony. In paragraph 25 of the ETC Designation Order, the FCC states:

Because most emergency situations are local in nature, we anticipate that state commissions that choose to adopt an emergency functionality requirement may also identify other geography-specific factors that are relevant for consideration.

The Commission will need to determine if the network reliability measures taken by

- 21 MMC are sufficient to provide emergency functionality to Missouri consumers for a
- 22 company receiving public high-cost support.
 - 3. Demonstrate that it will satisfy consumer protection and service quality standards.

The FCC has stated that "a carrier seeking ETC designation [must] demonstrate its commitment to meeting consumer protection and service quality standards," and that

1 "a commitment to comply with the CTIA Consumer Code for Wireless Service will satisfy this requirement."³¹ MMC has indicated that it supports the CTIA Code, and that 2 it will modify the one area of its business practices that differs from the Code if granted 3 ETC status. 4 5 4. Offer local usage plans comparable to those offered by the ILEC in the areas for which it seeks designation. 6 7 The ETC Designation Order adopts the Joint Board's recommendation that a local 8 usage requirement be established as a condition for receiving ETC designation. In 9 establishing this requirement they state: 10 Specifically, we require an ETC applicant to demonstrate that it offers a local 11 usage plan comparable to the one offered by the incumbent LEC in the service 12 areas for which the applicant seeks ETC designation.³² 13 14 15 We encourage state commissions to consider whether an ETC offers a local usage plan comparable to those offered by the incumbent in examining whether the ETC 16 applicant provides adequate local usage to receive designation as an ETC.³³ 17 18 The provision of local usage is perhaps the most significant shortcoming of 19 MMC's application. Spectra and CenturyTel offer basic local service plans that provide 20 an unlimited amount of local calling over a defined local calling area. In order to meet 21 the "comparability" standard in Spectra and CenturyTel's service areas, any offering for 22 which MMC seeks to receive high-cost universal service support must likewise offer 23 unlimited local calling. 24 MMC attempts to meet this requirement by proposing what it calls the "ILEC 25 Equivalent Plan." In response to MPSC Data Request No. 24, MMC describes this 26

offering as follows:

³⁰ *Id* at paragraph 25

³¹ *Id* at paragraph 28.

As Mr. Dawson testified, that the plan is intended to provide a low-cost service option comparable in price to that offered by the ILEC but with the added advantage of mobility. This plan would offer unlimited local calling and mobility in the area served by the subscriber's home cell site at a fixed monthly pirce of \$14.50 per month.

While on the surface it would appear that this service offers local usage that is "comparable" to that offered by Spectra and CenturyTel, it leaves open for question the local usage component of all of the other services listed on Appendix J to Mr. Dawson's testimony for which MMC is also seeking universal service support. In response to MPSC Data Request No. 25, asking why services like the ILEC Equivalent Plan are not currently offered, MMC states:

MMC does not currently offer this plan because USF support is needed to enable MMC to offer this plan at a rate that is competitive with the LEC service offering (which is subsidized by USF).

Thus one possible resolution to this case would be to grant MMC ETC status, but only for the ILEC Equivalent Plan offering that contains unlimited local usage. Other service offerings that lack "comparable" local usage to the Spectra and CenturyTel offerings would not be eligible for support.

There are, however, issues related to the ILEC Equivalent Plan service offering that the Commission should consider before approving this service plan as eligible for ETC designation and universal service support. While the plan offers unlimited local usage from the customer's home cell site, it is not clearly stated what rates would apply to local usage when the customer exercises the mobility option and uses the service away from the home cell site. Appendix J lists MMC's current wireless service offerings, most of which have an "overage" rate of from 25 to 40 cents per minute when the local usage

³² *Id* at paragraph 32.

1	allowance is exceeded. Assuming that the ILEC Equivalent Plan includes no
2	"allowance" for minutes used when away from the home cell site, that could translate
3	into potential charges of from \$15 to \$24 per hour that a consumer may be unaware of
4	when they subscribe to this "low cost" service.
5	Paragraph 34 of the FCC's ETC Designation Order makes the following
6	statement:
7 8 9 10 11	In addition, although the [FCC] has not set a minimum local usage requirement, there is nothing in the Act, Commission's rules, or orders that would limit state commissions from prescribing some amount of local usage as a condition of ETC status.
12	My reading of the FCC's local usage comparability language is that unlimited local usage
13	must be provided for a service to be eligible for support in Spectra and CenturyTel's
14	service areas. The Commission's draft rules state that there must be "a minimum of 500
15	minutes of local usage for supported services." Either way, MMC's Application fails to
16	meet the local usage requirements, and therefore cannot be approved.
17 18 19 20	5. Acknowledge that it may be required to provide equal access if all other ETCs in the designated service area relinquish their designation. In addressing the provision of equal access to long distance carriers the FCC
21	states
22 23 24 25 26	Although we do not impose a general equal access requirement on ETC applicants at this time, ETC applicants should acknowledge that we may require them to provide equal access to long distance carriers in their designated service area in the event that no other ETC is providing equal access within the service area. ³⁴
27 28	MMC has committed to offer equal access should the incumbent relinquish ETC
29	designation.

³³ *Id* at paragraph 34.

1 Q. Will designating MMC as an ETC in the requested areas increase the

2 competitive choices that Missouri customers experience?

3 A. No. Designating MMC as an ETC will not increase the competitive choices that

4 Missouri consumers currently have, and they have provided no facts or data to prove

5 otherwise. MMC already provides wireless service in the areas where it has requested

6 ETC status. MMC has neither identified nor quantified any consumers who cannot

currently get basic universal service that will be able to do so as a result of its ETC

designation. MMC has not indicated that any prices will be reduced if ETC status is

9 granted. There are already six other wireless carriers providing competitive wireless

service in the requested areas without universal service support today. Therefore, MMC

has not quantified any specific benefits, and it is doubtful that significant additional

competitive choices will result from designation of MMC as a competitive ETC.

13 A. On page 25 of his testimony, Mr. Kurtis cites the FCC's Nextel order as an

example that the FCC has encouraged ETC designations even in areas where

multiple wireless carriers compete. What impact should the Nextel Decision have

on this case?

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17 A. The Nextel decision has been largely overshadowed by the ETC Designation

Order. The Nextel Order was issued by the Acting Chief of the Wireline Competition

Bureau, and granted blanket ETC designation in seven states. In its application Nextel

presented none of the build-out plans and other fact-specific data that the FCC now states

are "mandatory minimum requirements" for ETC designation. ³⁵ The ETC Designation

³⁴ ETC Designation Order at paragraph 35.

³⁵ Indeed, as cited previously, in December of 2003 the Minnesota Public Service Commission denied an application by Nextel for ETC designation in the state of Minnesota precisely because Nextel had presented no intentions or plans to serve throughout the requested service area.

- Order was subsequently issued by the full Commission, and included a "more rigorous
- 2 ETC designation process" which Nextel's original blanket application could not possibly
- 3 pass.
- 4 Q. On page 26 of its Application, MMC states that "there is no reasonable basis
- on which to conclude that designation of MMC as and ETC will have any adverse
- 6 impact on the USF fund." Do you agree with this conclusion?
- 7 No. The impact of designating MMC as an ETC in the state of Missouri on the USF will
- 8 be significant. I have already indicated that the direct impact of MMC' designation will
- 9 be approximately \$1.7 million, and that if all other wireless carriers in the state of
- 10 Missouri request and receive ETC status, the total annual impact will be over \$59
- million. It has been estimated that if all wireless carriers nationwide were to be granted
- 12 ETC status, then the universal service fund would grow by between \$2 billion and \$3
- billion per year³⁶ No one ETC designation, by itself, is going to break the bank, however
- 14 it is the collective decisions of Commissions across the nation, including the Missouri
- 15 Public service Commission, that will determine the USF assessments that all consumers,
- including Missouri consumers, must pay. It is for this reason that the FCC and the Joint
- Board have called for comprehensive and "more stringent"³⁷ public interest standards for
- 18 ETC designations.

³⁶ See *Universal Service – Rural Infrastructure at Risk*, March, 2005 published by McLean & Brown at page 28. This paper may be obtained at www.mcleanbrown.com.

³⁷ Virginia Cellular Order at paragraph 4.

HARMS TO CONSUMERS

- 2 Q. If MMC is to be granted ETC status, what potential harms could occur to
- 3 Missouri consumers?

- 4 A. Harms to consumers from an improper ETC designation can come in several
- 5 forms. First, and most easily identified, is the cost imposed upon consumers, particularly
- 6 if they do not receive equal or greater benefits in return. As I mentioned previously, if in
- 7 return for ETC designation the applicant expands its network to areas that were
- 8 previously unserved, and expands the area over which consumers can utilize mobile
- 9 communications, then perhaps this could be a reasonable use of public funds. If, on the
- other hand, the applicant merely offers to serve outlying customers with high-powered
- customer premise equipment and roof-top antennas as a means of meeting minimum
- 12 funding qualifications, and if the large body of its existing customers experience no
- tangible improvement in their service, then such funding would not be in the public
- interest, and the cost of the increased funding assessments would represent a harm to
- 15 consumers. Another harm could occur if multiple ETCs are designated in areas that
- 16 could not economically support multiple carriers.
- 17 Q. How would designating multiple carriers in areas in sparsely populated rural
- areas cause harm to consumers?
- 19 A. Earlier in my testimony I presented several charts and graphs that showed the
- 20 relationship of cost to subscriber density. In very sparsely populated rural areas, the
- 21 largely fixed nature of network costs (both wireline and wireless) causes costs to increase
- 22 geometrically as population density decreases. This is the phenomenon identified by
- FCC Chairman Martin that supporting multiple carriers in an area that is prohibitively

- expensive for one provider could cause "stranded investment and a ballooning universal
- 2 service fund"...
- 3 Q: Does the prospect of multiple competitive ETCs impact the ability of these
- 4 carriers to function as carriers of last resort?
- 5 A: Yes. It certainly raises the question of whether multiple carriers could each
- 6 economically build a network that provided service throughout the study area and be
- 7 prepared to function as carriers of last resort, particularly in sparsely populated, high-cost
- 8 portions of Missouri. As I described earlier, wireless networks exhibit the same
- 9 characteristics of increasing cost with decreasing density as wireline networks. Thus, if
- multiple ETCs are placed in a high-cost area with a fixed amount of support, it becomes
- increasingly difficult for any of them to effectively serve throughout the entire study area
- and function as a carrier of last resort. This would carry the prospect of significant harm
- to consumers in the most rural parts of Missouri.
- 14 Q: How should the Commission assure that consumers in the most rural parts of
- 15 Missouri are not harmed?
- 16 A: In addition to carefully assessing the potential harms that could occur to
- customers of the wireline incumbent currently functioning as carrier of last resort, the
- 18 Commission must also assure itself that the new ETC actually will build sufficient
- 19 facilities in a reasonable period of time to serve throughout the entire study area. The
- 20 Joint Board made very clear that ETC applicants must be able to serve throughout the
- study area, and if they did not do so at the time of application, that they provide formal
- build-out plans subject to annual review. The FCC formalized this requirement in the
- 23 ETC Designation Order. Their reason for this recommendation is that otherwise there

- would be no guarantee that they would be able to function as carrier of last resort if the
- 2 incumbent was unable to continue to do so. Indeed, if carriers can obtain ETC status and
- 3 "high-cost" funding without some form of enforceable commitment to actually expand
- 4 their network into high-cost areas then the Commission may have created unintended
- 5 consequences and negative incentives.
- 6 Q: Why do you say that the lack of an enforceable commitment to invest
- 7 universal service fund proceeds to expand service throughout the ETC service area
- **8** would create negative incentives?

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A. If a carrier can gain access to high-cost funds for serving its current predominantly low-cost customer base without making any enforceable commitment to serve the entire area, then there is a significant risk that the remote facilities will never be built, and the most rural customers will remain unserved by the wireless ETC. The reason is simple, once the carrier has the funding in hand, it faces a very different set of business incentives regarding investments in remote areas. Construction of these facilities will generate substantial cost, yet yield relatively little incremental revenue. In essence, the carrier is back where it started, with no incentive to make investments that make no business sense. Unless the Commission either requires the prospective ETC applicant to serve throughout the area prior to granting ETC status, or requires specific build-out plans and firm and enforceable commitments for such investment as a precondition to granting ETC status, then it is highly likely that the carrier will not build facilities to serve the remote customers, and that scarce high-cost funds will provide a windfall to carries serving predominantly low-cost markets. The losers in this scenario would be rural consumers who could face the prospect of having no carrier willing or

- able to make the necessary investments necessary to function as carrier of last resort. It
- 2 would also be difficult, if not impossible, for carries to invest to bring rural consumers
- 3 access to advanced services, including broadband services.

4 **CONCLUSIONS**

- 5 Q: Please summarize your testimony.
- 6 A:. MMC has failed to prove that its application for ETC status in the Spectra and
- 7 CenturyTel study areas is in the public interest. The designation of MMC will create
- 8 significant new public costs and deliver relatively few incremental public benefits. As a
- 9 result, this designation does not pass the cost/benefit test outlined in the Virginia Cellular
- Order, and thus cannot reasonably be found to be in the public interest. Furthermore,
- 11 MMC's Application falls short of several of the ETC designation criteria contained in the
- FCC's March 17, 2005 ETC Designation Order and the Commission Staff's proposed
- 13 rules to prove that the requested designation is in the public interest. For the foregoing
- reasons, MMC' application cannot be found to be in the public interest. Thus, the
- 15 Commission should deny this application.
- 16 **Q:** Does this conclude your testimony?
- 17 A: Yes

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of the Application of Missouri RSA No. 7 Limited Partnership d/b/a Mid-Missouri Cellular for Designation as a Telecommunications Company Carrier Eligible for Federal Universal Service Support pursuant to § 254 of the Telecommunications Act of 1996)) Case No. TO-2005-0325)	
AFFIDAVIT OF GLENN BROWN		
State of Arizona) ss. County of Yavapai) ss. Glenn Brown, being of lawful age, on his the preparation of the foregoing Rebuttal Testim consisting of 43 pages to be presented in the a foregoing Rebuttal Testimony were given by his set forth in such answers; and that such matters a knowledge, information and belief.	above case; that the answers in the m; that he has knowledge of the matters	
Subscribed and sworn to before me this /O day of June, 2005.		
ELYSE L. OTTO Notary Public - Arizona Yavapai County My Commission Expires July 20, 2006 (seal)	Elyse L. Otto Notary Public	
(Scar)		