Exhibit No.:Application for Designation as an Eligible<br/>Telecommunications CarrierWitness:Roger BundridgeSponsoring Party:Northwest Missouri Cellular Limited<br/>PartnershipType of Exhibit:Direct Testimony<br/>Case No.:Date Testimony Prepared:February 13, 2006

#### NORTHWEST MISSOURI CELLULAR LIMITED PARTNERSHIP

#### **DIRECT TESTIMONY**

#### OF

#### **ROGER BUNDRIDGE**

#### **CASE NO. TO-2005-0466**

February 13, 2006

1		DIRECT TESTIMONY
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4		APPLICATION OF NORTHWEST MISSOURI CELLULAR
5		LIMITED PARTNERSHIP
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7		
8	Q.	Please state your name and business address.
9	A.	Roger Bundridge, 1114-a South Main Street, Maryville, Missouri 64468.
10	Q.	By whom are you employed and in what capacity?
11	A.	Since September 2001, I have been the General Manager of Northwest Missouri
12		Cellular Limited Partnership ("NWMC").
13	Q.	Please describe your education.
14	A.	I have a Bachelor of Science degree in Biopsychology from Northwest Missouri State
15		University, as well as an Associates degree in Mortuary Science from Kansas City,
16		Kansas Community College. I also attended DeVry Technical Institute in Kansas
17		City.
18	Q.	Prior to becoming General Manager of NWMC, for whom did you work and in
19		what capacity?
20	A.	I was the Account Manager and District Manager for Pepsi Cola General
21		Bottlers from 1994 to 2001.
22	Q.	What is the purpose of your testimony in this proceeding?

1	А.	I am testifying in support of NWMC's Application For Designation As An Eligible											
2		Telecommunications Carrier Pursuant To § 254 Of The Telecommunications Act Of											
3		1996 ("Application") in this docket. My testimony will address four aspects of the											
4		Application: (a) the NWMC service offerings; (b) rate and service plans offered by											
5		NWMC to subscribers; (c) the requirements imposed upon ETC by											
6		Section 54.201(d)(2) of the FCC's Rules to advertise, using media of general											
7		distribution, the availability of and charges for the core services that are supported by											
8		federal universal service mechanisms, as set forth in Section 54.101(a) of the FCC's											
9		Rules; and (d) public interest considerations.											
10	Q.	What type of telecommunications service does NWMC provide and where?											
11	A.	NWMC is licensed by the FCC to provide Commercial Mobile Radio Service											
12		("CMRS") to the public as a wireless cellular service provider in Missouri RSA No. 1											
13		under call signs KNKN816. Within the area proposed for ETC designation in its											
14		Application, NWMC operates 21 individual cellular base stations (cell sites) with 17											
15		of those sites providing service utilizing analog ("AMPS") and time division multiple											
16		access ("TDMA") digital technology. In addition, NWMC has overbuilt those 17 of											
17		its cell sites with Code Division Multiple Access ("CDMA") digital technology while											
18		adding four CDMA-only sites. The antenna towers associated with these base											
19		stations are either owned outright by NWMC or leased from third parties.											
20	Q.	Are you familiar with the Pre-filed Direct Testimony of Kathryn G. Zentgraf											

- 21 which was filed in this case?
- 22 A. Yes, I have reviewed that testimony.

- 1Q.Do you recall that Ms. Zentgraf testified as to the services that are supported by2Federal universal service support mechanisms under Section 54.101(a) of the3FCC's Rules?
- 4 A. Yes.
- Q. I am going to ask you to explain NWMC's service offerings as they relate to each
  of the requirements identified by Ms. Zentgraf. First, does NWMC offer <u>Voice-</u>
  Grade Access to the Public Switched Network?
- A. Yes. As an existing cellular service provider in Missouri, NWMC provides voice-grade
  access to the public switched network. Through interconnection with incumbent local
  exchange carriers, NWMC is able to originate and terminate telephone service for all of
  its subscribers. All customers of NWMC are able to make and receive calls on the
  public switched network within the specified bandwidth identified by Ms. Zentgraf.
- 13 Q. Does NWMC offer Local Usage?

14 A. NWMC's service includes local usage that allows customers to originate and terminate 15 calls within the local calling area without incurring toll charges. The service allows for 16 a bundle of local calling minutes for a flat-rated monthly charge. NWMC currently offers several service options that include varying amounts of local usage in monthly 17 18 service plans. As Ms. Zentgraf has testified, to date the FCC has not quantified any 19 minimum amount of local usage required to be included in a universal service offering. 20 NWMC will comply with any and all minimum local usage requirements adopted by 21 the FCC.

## Q. Does NWMC offer the <u>Functional Equivalent of Touch-Tone ("DTMF")</u> <u>Signaling?</u>

- A. NWMC currently uses out-of-band digital signaling and in-band multi-frequency
   signaling that is functionally equivalent to DTMF signaling.
- 3 Q. Does NWMC offer Single Party Service?
- 4 A. Yes, NWMC provides a dedicated message path for the length of all customer calls.
- 5 Q. Does NWMC offer <u>Access to Emergency Service</u>?

6 A. Yes. NWMC customers can reach an emergency dispatch, or public safety answering 7 point ("PSAP"), by dialing "911." MO 5 then routes the call to the appropriate PSAP. 8 Enhanced 911 ("E911"), which includes the capability of providing both automatic 9 numbering information ("ANI") and automatic location information ("ALI"), is 10 required only if a public emergency service provider makes arrangements with the local 11 provider for delivery of such information. In the wireless context, provision of location information is broken down into two phases; Phase I involves providing the PSAP with 12 13 the location of the cell from which the 911 call originated and Phase II provides the 14 location of the originating subscriber phone to within an FCC-specified accuracy. 15 NWMC's network is capable of providing Phase I E911 services and currently does sot 16 to the following PSAPs: Maryville Public Safety and Nodaway County Sheriff's 17 Department and is working with these same PSAPs with respect to implementation of 18 Phase II E911 services. NWMC's CDMA network is capable of providing E911 19 Phase II service to Phase II compatible PSAPs for handsets that are ALI-compatible.

- 20 (
  - Q. Does NWMC offer <u>Access to Operator Services</u>?

A. Yes. NWMC currently offers its subscribers access to operator services for the
 placement and billing of telephone calls, including collect calls, calling card calls,

- 1 credit card calls, person-to-person calls, and third party calls, as well as obtaining 2 related information, throughout its proposed ETC service area. Q. 3 **Does NWMC offer Access to Interexchange Service?** 4 NWMC has direct interconnection to multiple access tandems for delivering traffic to A. 5 all offices subtending those tandems as well as direct interconnection to local exchange 6 carrier end offices where traffic levels so justify. In addition, NWMC provides indirect 7 access to one or more interexchange carriers ("IXC"), for access to any other 8 exchanges. 9 Q. **Does NWMC offer Access to Directory Assistance?** 10 A. Yes. NWMC provides all of its customers with access to information contained in 11 directory listings by dialing "411" or "555-1212." 12 Q. **Does NWMC offer Toll Limitation for Qualifying Low-Income Customers?** 13 A. NWMC does not currently offer Lifeline or Link Up services. However, the NWMC 14 network is capable of providing Toll Blocking services. Currently, NWMC provides 15 Toll Blocking services for international calls. NWMC will utilize the same Toll 16 Blocking technology to provide toll limitation for qualifying low-income customers, at
- 17 no charge, as part of its universal service offerings for Lifeline and Link Up customers.
- 18 Q. How will NWMC advertise that it is offering the core services that are supported
- by federal universal service mechanisms as set forth in Section 54.101(a) of the
   FCC's Rules?
- A. Upon grant of its Application, NWMC will advertise to the public in its ETC
   designated area that it is offering the core universal support services and the charges
   for those services throughout its ETC service area. NWMC already advertises its

rates and services in media of general distribution within its FCC-licensed service
 area.

## Q. What revisions will NWMC make to its advertising if the Commission grants its Application?

5 A. If the Application is granted, NWMC will take whatever steps are necessary to 6 comply with FCC Rule 54.201(d)(2). This rule states that a common carrier 7 designated as an eligible telecommunications carrier shall advertise the availability of 8 such services and the charges therefore using media of general distribution 9 throughout the service area for which the designation is received. NWMC will 10 advertise the availability of the supported services and the availability of Lifeline and 11 Linkup services to qualifying customers. NWMC will also make available additional 12 consumer information regarding Lifeline and Linkup service in locations where 13 qualified, unserved consumers are likely to find such information useful, including 14 unemployment and welfare offices within its service area.

#### 15 Q. What rate and service plans are currently offered by NWMC?

16 A. The rate and service plans that NWMC currently offers are described in Appendix J 17 hereto. Upon grant of its Application, NWMC intends to continue offering a wide 18 selection of calling plans. In addition, however, NWMC will offer Lifeline services 19 in accordance with Section 54.401 of the FCC's Rules. Lifeline services would be 20 available to qualifying low-income consumers in NWMC's service area. Lifeline-21 eligible customers would be able to pick any existing NWMC service plan and deduct 22 the local exchange service discount of \$1.75 per month as well as the federal line 23 charge discount of \$6.50 per month from NWMC's standard monthly rates. NWMC

also intends to offer two additional Lifeline-only plans as well as an "ILEC equivalent" plan. The ILEC-equivalent plan would be available to any NWMC
 subscriber.

## 4 Q. Would you please describe the proposed Lifeline-only plans NWMC intends to 5 offer?

6 A. The first plan is intended to provide a low-cost service option comparable in price to 7 that offered by the incumbent local exchange carrier ("ILEC") but with the added 8 advantage of limited mobility. This Plan would offer unlimited local calling and 9 mobility in the area served by the subscriber's home cell site at a fixed monthly price of \$9.70 per month.<sup>1/</sup> The subscriber's outbound local calling area would correspond 10 11 to its traditional ILEC calling area for that subscriber's address. With the advantage 12 of limited mobility, calls could be originated by the NWMC Lifeline subscriber to 13 any numbers within that ILEC exchange from any location within the subscriber's 14 home cell site serving area, not just the subscriber's home. Similarly, the Lifeline 15 customer would receive inbound calls, wherever they originate from, throughout the 16 geographic area served by its home cell site. The area served by a home cell site or cells would be defined to include coverage from all NWMC cell sites necessary to 17 18 encompass the callers entire corresponding ILEC exchange area. This plan also 19 includes several vertical features in this price including call waiting, call forwarding, 20 3-way calling, caller ID and voicemail.

 $<sup>\</sup>frac{1}{2}$  The \$9.70 rate reflects the net monthly rate to a Lifeline customer after applying the local exchange service discount of \$1.75 and the federal line charge discount of \$6.50.

1 The second NWMC Lifeline Plan would allow for local calling and mobility 2 throughout the entire service area for which NWMC is designated as an ETC, for a flat \$13.70 per month charge.<sup>2/</sup> Since the NWMC ETC designated service area would 3 4 be the NWMC's subscriber's local calling area, even toll restricted Lifeline 5 subscribers would enjoy service area wide mobility and local calling, assuming grant 6 of the NWMC ETC Application as filed. This would afford Lifeline customers a 7 local calling scope extending to a geographic area encompassing multiple telephone 8 exchanges served by all of the LEC wire centers for which ETC designation is being 9 sought. The same vertical features discussed with respect to the previous lifeline plan 10 are included in the cost of this plan, as well. While these Lifeline plans would not 11 allow roaming into other cellular networks to place and receive routine calls, both 12 plans would allow ubiquitous access to 911 for the NWMC Lifeline subscribers even 13 in a roaming situation. NWMC is unable to provide either of these Lifeline plans 14 without ETC support.

15

#### Q. Will NWMC participate in Link Up Services?

A. Yes. NWMC will offer discounts of 50% off of the \$35 activation fee to Link Up eligible subscribers. In addition, NWMC will offer Link Up eligible subscribers a deferred schedule for payment of the charges assessed for commencing service, for which the consumer will not pay interest. The interest charges not assessed to the consumer shall be for connection charges of up to \$200.00 that are deferred for a period not to exceed one year. This deferred payment plan would include the reduced activation fee as well as the cost of the subscriber handset.

 $<sup>\</sup>frac{2}{1}$  The \$13.70 rate reflects the net monthly rate to a Lifeline customer after applying the local exchange service discount of \$1.75 and the federal line charge discount of \$6.50.

1 Q. Can you describe the "ILEC-Equivalent" Plan?

A. The ILEC-Equivalent Plan would offer the same features and services as the first
 Lifeline Plan discussed above but would be available to all NWMC subscribers at the
 price of \$17.95 per month.<sup>3</sup>

## Q. Returning to the general NWMC service offerings, how will NWMC's provision of the FCC Rule 54.101(a) (USF-Qualifying) services differ from the provision of those services by ILECs operating in NWMC's proposed ETC area?

8 A. The local calling area that NWMC will offer to subscribers will equal or exceed in 9 size the calling area offered by the local LECs, which will reduce intra-LATA toll 10 charges associated with the service offered by these wireline carriers. Customers of 11 these LECs placing calls to destinations beyond their local calling areas incur toll 12 charges, while NWMC customers making similar calls within NWMC's service area 13 will avoid such charges. In addition, many of NWMC's calling plans include bundles 14 of minutes which can be used for placing calls, whether local or domestic toll, 15 without the caller incurring any additional per minute charges or toll charges. 16 NWMC's plans also offer mobility including, in most cases roaming in other markets. 17 Finally, NWMC will make available multiple local usage plans that prospective 18 customers can select from as part of its universal service offering.

## 19 Q. How would NWMC's Lifeline rates compare with the ILEC rates for basic 20 Lifeline service?

A. The proposed NWMC Lifeline rates would be below those offered by the ILECs. In
addition, the NWMC Lifeline rates include vertical features not included in the ILEC

 $<sup>^3</sup>$  It should be noted that the Application incorrectly stated that the price for this ILEC-Equivalent Plan would be \$16.50.

Lifeline rate. <u>Appendix K</u> hereto includes a table comparing several of the ILEC
 Lifeline rates (based upon their tariffs) to the proposed MO 5 Lifeline rates.

#### 3 Q. NWMC is already providing the services required for ETC designation and has 4 apparently done so for years without USF support. Why would it be in the 5 public interest to now afford USF support to NWMC?

6 A. NWMC has brought wireless service to many rural parts of its FCC-licensed service 7 area and offers a level of coverage better than its competitors in the market. The cost 8 of providing those services continues to rise. However, in the highly competitive 9 wireless service market of today, it is not enough for NWMC to offer better coverage 10 if its service offerings are not competitive with respect to features, functionality and 11 price. Unlike NWMC's wireless competitors that also have licenses in major urban areas, NWMC is only licensed to offer commercial mobile radio service ("CMRS") in 12 13 Missouri RSA 1. The higher-cost of providing service in this rural area must be 14 supported solely from revenues derived in this market. Yet, for competitive reasons, 15 NWMC has to match the pricing offered by the major nationwide carriers who 16 typically choose to offer quality services only along the major traffic arteries and 17 largest population centers in the rural markets.

18 NWMC is also incurring increased costs to meet its obligations to comply 19 with federal mandates such as E911 services. These services are critical to public 20 safety in general but their availability in the rural-most portions of the service area is 21 imperative.

As extensive as NWMC's coverage is in this market, there are still significant portions of its FCC-licensed service area that would greatly benefit from enhanced

1 CDMA coverage. These represent some of the most rural portions of its licensed 2 market. Highly Confidential Application Appendix E identified the construction 3 timeline for each cell site as specified by NWMC. Appended hereto is a revised 4 Appendix E which has been revised to correlate with Application F (Revised) which 5 NWMC's technical consultant, Jonathan D. Reeves, introduces in his Direct 6 Testimony. This Appendix E (Revised) is intended to replace the original 7 Appendix E in the Application, and contains information deemed to be Highly 8 Confidential by NWMC. Mr. Reeves has testified that Appendix F (Revised) corrects 9 the coverage depicted from these proposed cell sites. The proposed cell sites and their construction timeline, which are the portions of Appendix E (Revised) which I 10 11 am introducing into testimony, are unchanged from those set forth in the original 12 Application. A minority of the cell sites are identified in Appendix E (Revised) as 13 cell sites that NWMC would most likely implement during the five year plan even 14 without ETC designation. USF support could allow NWMC to accelerate the 15 deployment of those cell sites. The construction timeline for each cell site included in 16 that plan was prepared under my direct supervision. Mr. Reeves has provided 17 testimony including an engineering analysis of the proposed coverage from each new 18 cell site, on a wireline-by-wireline basis, as well as Application Appendices F 19 (Revised) and G (Revised), which are maps depicting the general area where NWMC 20 would look to deploy additional cell sites over the next five years, based upon my 21 direction, as well as the coverage associated with those new sites. Mr. Reeves has 22 also prepared an appendix to his Direct Testimony, Appendix H, depicting the 23 proposed coverage from the proposed network enhancement plan in conjunction with

1 the existing NWMC cell sites. Since NWMC would not receive USF support based 2 upon its own cost but would be limited to support based upon the various underlying 3 LEC levels of support, NWMC would have to time the construction of its facilities to 4 the amount of support actually received and the order of construction between the 5 proposed sites, which are based upon our current projection of customer demand, 6 could be altered if actual customer demand varies from those projections. It should 7 be noted that the customer demand would only affect the order of construction of new 8 cell sites and not amount of USF support that would be spent on network 9 enhancement.

10 Perhaps even more important than the general availability of enhanced 11 wireless services, the expansion of NWMC's service into these most rural areas 12 would bring wireless E911 services to those areas. While the ILECs have done an 13 outstanding job of bringing 911 and E911 to many rural communities, access to those 14 lifesaving services is limited to the ability of the person in need to reach a wired 15 telephone. In sharp contrast, wireless communication brings the emergency access to 16 the individual. The farmer with a CMRS phone who is injured in the field no longer 17 needs to be able to reach a wired telephone to summon help. Wireless access to emergency services can help to mitigate the unique risks of geographic isolation 18 19 associated with living in rural communities. Where the local PSAP is capable of 20 processing the data, the NWMC network is capable of providing locational 21 information for CDMA automatic location identification ("ALI")-capable handsets 22 for all calls placed to 911. However, only the CDMA handsets are capable of providing this critical locational information and then, only when operating in a
 CDMA coverage area.

3 Significantly, wireless E911 service would not be limited to NWMC 4 subscribers. NWMC's wireless E911 service is available to any compatible handset 5 in NWMC's coverage area, whether or not the user is a NWMC customer, the 6 customer of a competitor or not even a customer of any service provider. The 7 NWMC network routes all 911 calls regardless of the status of the caller. If the 8 caller's handset is not ALI-capable, NWMC still routes the call to the emergency 9 personnel and provides information with respect to the cell site location from where 10 the call originated and, except with respect to a non-activated cell phone, such a 11 phone that is sold for placing 911 calls only, a call back number.

12 Q. Why doesn't NWMC provide a call-back number for a non-activated phone?

- A. In order for a cell phone to receive calls, it must be activated with a CMRS carrier.
  The unactivated phone, by definition, simply does not have a phone number assigned
  to it by any carrier so there is no phone number for NWMC to provide to the PSAP.
- 16Q.If NWMC receives USF support, how will this Commission know that the funds17are properly being used for provision of qualified services in the ETC designated
- 18 service area?
- A. Unlike regional or national carriers, NWMC is licensed to provide service only in
   Missouri RSA 1. NWMC holds no FCC licenses in any urban areas or in any areas
   outside of the state of Missouri. Accordingly, NWMC can only use USF support
   received from its ETC-designated service area within the proposed ETC designated
   area within the state of Missouri.

1 In addition, NWMC has committed in its Application to follow the annual 2 reporting obligations specified by the FCC in the Virginia Cellular Order to ensure 3 that NWMC satisfies its obligations under Section 214 of the Act. Specifically, 4 NWMC has committed that upon grant of ETC status, it will: (1) annually submit 5 information to the Commission regarding its progress toward meeting its build-out 6 plans in areas where it is designated as an ETC; (2) annually provide information to 7 the Commission with respect to the number of consumer complaints it receives per 8 1,000 mobile handsets; and (3) annually submit information regarding how many 9 requests for service from potential customers in its designated area were unfulfilled 10 for the past year. NWMC would provide this information as a separate schedule as 11 part of the annual report it submits as a certificated carrier.

### 12 Q. How will NWMC utilize USF support to help make its service offering available 13 to individuals seeking wireless service throughout its designated service area?

14 A. NWMC will use available federal high-cost support to finance construction, 15 maintenance and upgrading of facilities serving rural areas for which that support is 16 intended. As I previously testified, high cost support is necessary if NWMC is to 17 establish the infrastructure required to bring its wireless service to many remote and 18 difficult-to-reach locales within its FCC-licensed service area. NWMC anticipates 19 that infrastructure investment will be required if NWMC is to be able to provide 20 wireless services throughout the most rural portions of its proposed ETC area. 21 Provision of high-cost support to NWMC will make wireless services, with their 22 inherent public interest benefits previously discussed, available in areas where such 23 service has not been reliably available in the past. In addition, this would allow

NWMC to compete in providing primary telephone service in remote areas of
 Missouri.

## 3 Q. Specifically, how will NWMC provide service to a potential customer requesting 4 service?

5 NWMC will provide service to any requesting customer in the service area where it is A. 6 designated as an ETC. When a potential customer requests service within an area 7 presently served by NWMC's existing network, NWMC will immediately provide 8 service using its existing network. If a potential customer requests service within the 9 area in which NWMC is designated as an ETC, but where the existing service area 10 does not immediately allow NWMC to provide service, NWMC will take the 11 following steps to provide service: (1) modify or replace the requesting customer's 12 equipment to provide service; (2) install a roof-mounted antenna or other equipment 13 to provide service; (3) adjust the nearest cell site to provide service; (4) identify and 14 make any other adjustments that can reasonably be made to the network or customer 15 facilities to provide service; and (5) determine the feasibility of installing an additional cell site, cell extender, or repeater to provide service where all other 16 17 options fail. If, after following these steps, NWMC still cannot provide the requested 18 service, it will notify the requesting party and include that information in an annual 19 report filed with the Commission detailing how many requests for service were 20 unfulfilled for the past year.

## Q. What impact would ETC designation have on NWMC's ability to expand and improve its network to enable NWMC to serve a greater population and increase competitive choice for customers within the ETC designated service area?

A. Since its commercial launch, NWMC has continuously expanded its coverage
footprint to enable it to provide quality service to an increasing geographic area and
population. Expansions are planned in response to customer requests and comments,
potential subscriber growth and NWMC's desire to fully develop network coverage
throughout its FCC-licensed service area. As with all wireless carriers, the initial
NWMC system was launched with a minimum number of cell sites designed to
provide coverage to areas of greatest traffic and population density.

8 As NWMC has expanded its service area, each additional cell site was 9 designed to provide service to an area of lower population density and traffic; areas 10 that are higher in cost to serve. Accordingly, the expected return on investment on 11 any such cell sites is longer with each additional expansion cell. As a result, the rate 12 of construction has slowed. As I previously testified, there are areas within the 13 proposed ETC service area where NWMC cannot expect to be able to recover the cost 14 of construction and operation of an additional cell sites without USF support. 15 Potential cell sites that could be constructed only if USF support is made available to NWMC, are identified in Appendix E (Revised), and graphically depicted in 16 17 Appendix G (Revised).

#### 18 Q. What is the level of USF support that NWMC would expect to receive?

A. As Ms. Zentgraf has testified, under the current USF funding mechanism, NWMC
 would expect to receive approximately \$1,468,614 in support annually. The FCC is
 currently reviewing the mechanism for determining the level of USF support to be
 provided for competitive ETCs and there is no guaranty that this level of support
 would continue into the future. Assuming that the level of support remained at this

1 level, based upon current traffic and revenue projections, NWMC would plan to be 2 able to deploy all of the cell sites listed in Appendix E (Revised) hereto. 3 **Q**. If NWMC is designated as an ETC, would NWMC be willing to undertake 4 carrier of last resort obligations? 5 Yes. In the event that an existing LEC in NWMC's designated ETC service area was A. 6 to seek to drop its designation upon grant of the designation to NWMC, NWMC 7 stands ready to undertake carrier of last resort obligations in such areas, using the 8 processes set forth above. 9 Q. Would NWMC offer equal access if all other ETCs in NWMC's designated service 10 area relinquished their ETC designations? 11 A. Unlike LEC service, wireless calling plans include varying levels of toll calls at no 12 additional charge where the customer allows the carrier, such as NWMC, to select the 13 toll provider. Accordingly, there has been no incentive for a NWMC subscriber to 14 select its own IXC where it means that the customer would be paying toll charges 15 instead of receiving toll minutes bundled in its calling plan at no additional charge. 16 Nevertheless, NWMC would commit to offer any customer the option to pre-select and 17 pay its toll carrier of choice for any and all toll calls placed by the customer on the 18 NWMC network in any area where the underlying LEC relinquishes its ETC 19 designation. 20 Q. What steps has NWMC taken to address quality of service concerns? 21 A. NWMC has already adopted the CTIA Consumer Code for Wireless Service. Under 22 the CTIA Consumer Code, wireless carriers agree to: (1) disclose rates and terms of 23 service to customers; (2) make available maps showing where service is generally

1 available: (3) provide contract terms to customers and confirm changes in service; (4) 2 allow a trial period for new service; (5) provide specific disclosures in advertising; (6) 3 separately identify carrier charges from taxes on billing statements; (7) provide 4 customers the right to terminate service for changes to contract terms; (8) provide 5 ready access to customer service; (9) promptly respond to consumer inquiries and 6 complaints received from government agencies; and (10) abide by policies for 7 protection of consumer privacy. A copy of the CTIA Consumer Code is appended 8 hereto as Appendix L.

## 9 Q. Is NWMC subject to the same quality of service standards that this Commission 10 has established for traditional LECs?

11 A. No. NWMC is not. Those standards were developed to address quality of service 12 issues related to the provision of traditional LEC service. For example, in a "wired" 13 environment, dropped calls are not expected to occur since the connection between 14 the subscriber's telephone and the LEC central office is a physical piece of wire. The 15 subscriber remains in a stationary fixed location for the entire duration of the 16 telephone call. In sharp contrast, wireless services are designed to offer mobility to 17 the subscriber even during a telephone call and even when they are traveling at 50-60 18 miles an hour along an interstate highway during the call. To accomplish this, rather 19 than using fixed wires to make the phone call, the wireless call is accomplished by 20 use of radio waves propagating through the environment. Changes in environmental 21 conditions effect radio wave propagation. The same quality of service standards 22 related to a service offering where dropped calls are not expected to occur cannot be 23 applied to a wireless environment.

In addition, unlike traditional wired networks that provide service only to dedicated subscriber lines that are tied to a dedicated local loop, the wireless network not only provides service to its subscribers from wherever they may be at the time of any particular call, but are also designed to provide service to non-subscribers as they "roam" through the wireless service area. As a result, mobility creates different conditions and different customer care needs.

7 Traditional telephone quality of service requirements were required to protect 8 the consumer in an environment where the service provider has traditionally been a 9 monopoly. A customer receiving inadequate service, especially in rural areas, has 10 traditionally had no alternative service provider. The lack of competition creates an 11 environment where quality of service is appropriately regulated. In contrast, the 12 wireless service environment is not licensed as a monopoly. If one service provider 13 offers inferior service, the customer often has the ability to switch their service 14 provider. As I previously testified, NWMC affords its customers a trial period in 15 which they can effectively "test drive" the NWMC network. If a customer is not 16 satisfied with the service they actually receive from NWMC during this test drive, 17 they can cancel their contract, without penalty, during the trial period. The advent of 18 local number portability allows the customer to even keep their telephone number as 19 they move from one provider to another, even if the contract is cancelled during the 20 trial period, subject of course to the availability of wireline to wireless local number 21 portability.

Finally, it is significant to note that LEC service providers receive USF support based upon their cost of service. To the extent that a LEC is required to make

network upgrades to meet certain quality of service requirements, the LEC cost can
be recovered. Unfortunately, a wireless ETC is limited in its USF support to the perline level of support received by an underlying LEC. Accordingly, imposing LEClike quality of service requirements on the wireless carrier without the wireless carrier
being able recover costs associated with meeting those requirements would be to
place further unfunded mandates on the wireless carrier.

## 7 Q. Can you identify some of the customer care programs NWMC has 8 implemented?

9 A. Yes. Since the NWMC customers carry their handset with them and place and
10 receive calls throughout the NWMC network, a customer can experience trouble with
11 his or her handset at any given location. Collectively, NWMC and its authorized
12 agents, have more than eight points of presence throughout the area served by the
13 consolidated network. An NWMC customer can go to any one of these locations and
14 receive assistance if they are encountering problems.

When the problem is with the customer's handset, NWMC provides the customer with a free loaner phone that the customer may use until their handset can be repaired or replaced. An NWMC customer can drop their phone off for service and pick up the free loaner at any of these eight locations, including those operated by NWMC's agents.

Issues relating to customer handsets provide an interesting contrast with traditional LEC service providers. Just as with wireless subscribers, most LEC subscribers today own their own telephones. However, I am not aware of any LECs in the NWMC service area that even provide service for their customer owned telephones, let alone a free loaner while the customer owned telephone is being
repaired. When the customer needs to visit the LEC, they usually have a single
location and in some cases, no office at all, where they have to go to.

NWMC staffs its trouble lines with live service operators to give the customer
"someone to talk to" during normal business hours. The NWMC retail outlet, as well
as the NWMC agent locations, offer extended service hours including evenings and
weekends. In addition to being able to deal with customer activations during these
extended hours, the "free loaner" phone program that I previously discussed is
available during all business hours, even the evening and weekend hours.

#### 10 Q. What steps has NWMC taken to enhance its network reliability?

11 A. The NWMC network consists of a mobile switching office, identical in most respects 12 to a traditional LEC end office, and cell sites which can be thought of as somewhat 13 analogous to traditional LEC remote switching offices. NWMC obtains switching 14 services for its network under contract from nearby network operators. The NWMC 15 analog and TDMA networks are switched out of Kansas City, Missouri under 16 contract with Cingular Wireless, while the CDMA network is switched under contract 17 with Hawkeye Cellular, an entity in which NWMC holds a 33.33% equity interest. 18 The switches that serve the NWMC network are fully redundant, have their own 19 battery back-up plant and are further backed-up with an emergency generator.

The NWMC cell sites are also redundant and equipped with battery back-up plants capable of operating the cell site under full load for more than 6 hours. NWMC has three portable generators which are kept in-place at three of the NWMC cell sites (Maryville, Oregon and Rock Port). These generators can be moved to any

1 of the remaining cell sites, which are all equipped with receptacles and manual 2 transfer switches. This enables NWMC to take a portable generator to any cell site 3 that experiences an extended power failure and literally "plug-in" a backup generator 4 to recharge the battery plants.

5 The entire consolidated NWMC network is monitored to check for proper 6 operations at all times. The redundant network design allows the system to avoid 7 most customer-affecting service outages since, in the event of a failure, the redundant 8 facilities are designed to automatically take over primary operation and an alarm is 9 sounded at the mobile switching office. During after-hours, the alarm system 10 automatically notifies a remote monitoring center of the outage and the service 11 technicians (which are on call 24 hours per day and 7 days a week) are advised of the 12 outage and the nature and criticality of the failure. The service technician can then 13 remotely access the network and learn of the precise nature and physical location of 14 the outage, thereby enabling the NWMC technician to proceed to the proper location 15 with the proper replacement parts to correct the fault. NWMC stocks a full complement of spare parts. There are no network components for which NWMC 16 17 does not maintain spare parts. These spare parts are in addition to the redundant 18 hardware that I previously discussed. The redundant hardware is fully installed and 19 in a "hot standby" mode that enables it to take over the handling of traffic 20 automatically in the event of a failure of the primary components and NWMC's 21 spares are sufficient to enable NWMC to restore full system functionality.

22 Q. Is NWMC capable of supporting local number portability?

1 Yes. NWMC's network is presently capable of porting numbers to and from other A. 2 wireless and ILEC carriers. NWMC's ability to complete number ports with any 3 given carrier is a function of that carrier's capabilities and not NWMC's. For 4 example, it is my understanding that the Commission has delayed the effective date of 5 the requirement for an ILEC to port numbers to a wireless carrier. Accordingly, 6 while NWMC's network is fully capable of porting in the number and fully 7 supporting that number as a wireless subscriber, a consumer would not be able to 8 actually port that number to MO 5 at this time because the current ILEC hosting that 9 number may not be LNP capable.

## 10Q.Once LNP between wireless and wireline carriers becomes effective, would the11grant or denial of ETC designation have any impact on NWMC's ability to port12numbers?

13 A. From a technical standpoint, it would not. As I said, the NWMC network is already 14 fully capable of supporting LNP. However, as I previously explained, if NWMC is 15 not granted ETC status, NWMC will not be in a position to provide Lifeline service. 16 Therefore, once the Commission implements LNP, while an existing LEC Lifeline 17 customer could physically have his or her number ported to NWMC, they would not 18 be eligible for Lifeline support as a wireless subscriber. The loss of Lifeline support 19 would, effectively, bar the Lifeline eligible LEC customer from being able to port a 20 number to a wireless service provider.

21 However, if NWMC were designated as an ETC, then the Lifeline plans I 22 discussed previously would be available at rates comparable with those paid for

- 1 current LEC-based service. The result would be a greatly expanded service offering
- 2 for Lifeline customers.

#### 3 Q. Does that conclude your testimony?

4 A. Yes it does.

**APPENDIX E** 

# CONTAINS HIGHLY CONFIDENTIAL INFORMATION

### **APPENDIX J**

## Will

Be

## Supplemented

#### Rate Comparison for Lifeline Customers

<b>Basic Cost</b> Basic Local Service Relay Missouri Surcharge FCC Line Charge E911 Service Tax <sup>(2)</sup> Total Single Line Monthly Charges	\$ \$ \$ \$	Alltel Rate Group I 7.35 0.13 6.50 1.10 \$15.08		Alltel Rate roup II 7.85 0.13 6.50 1.18 15.66	FI	SBC at Rate roup A 7.15 0.13 6.50 1.07 14.85	Fla	SBC at Rate roup B 8.79 0.13 6.50 1.32 16.74		Grand River Rate Aroup I 7.22 0.13 6.50 1.08 14.93		Grand River Rate iroup II 7.64 0.13 6.50 1.15 15.42		Grand River Rate roup III 8.06 0.13 6.50 1.21 15.90		Grand River Rate roup IV 8.89 0.13 6.50 1.33 16.85	\$ \$ \$	0.13 6.50
Included Features Local Calling Area in NWMC Service Area Mobility within Calling Area Voice Mail <sup>(1)</sup> Call Waiting <sup>(1)</sup> Call Forwarding <sup>(1)</sup> Three Way Calling <sup>(1)</sup> Caller ID <sup>(1)</sup>	No No No No No No No No No No No No No No		No No No No No		No No No No No		No No No No No		No No No No No		No No No No No		No No No No No		No No No No No			
<b>Basic Cost</b> Basic Local Service Relay Missouri Surcharge FCC Line Charge E911 Service Tax <sup>(2)</sup> Total Single Line Monthly Charges	\$ \$ \$	IAMO Rate 8.00 0.13 6.50 14.63	Τe	lowa elecom Rate roup 1 13.10 0.13 6.50 19.73	Te	lowa elecom Rate iroup 2 13.60 0.13 6.50 20.23	Τe	lowa elecom Rate roup 3 14.10 0.13 6.50 20.73		lowa elecom Rate iroup 4 14.35 0.13 6.50 20.98	Ν	Dregon Mutual Rate 8.00 0.13 6.50 14.63		ockport Rate 5.40 0.13 6.50 12.03		WMC option 1 9.70   9.70		
Included Features Local Calling Area in NWMC Service Area Mobility within Calling Area Voice Mail <sup>(1)</sup> Call Waiting <sup>(1)</sup> Call Forwarding <sup>(1)</sup> Three Way Calling <sup>(1)</sup> Caller ID <sup>(1)</sup>		No No No No No No		No No No No No No		No No No No No No		No No No No No No		No No No No No No		No No No No No No		No No No No No No		Yes Yes Yes Yes Yes Yes Yes		Yes Yes Yes Yes Yes Yes Yes

(1) These features are offered by each LEC for Additional charges.

(2) E911 Service Taxes vary by County. In some counties the tax applies only to local service. In other counties, the tax rate is applied to the entire amount for services provided. The lowest rate is shown for each ILEC.

## CTTA Consumer Code *for* Wireless Service

To provide consumers with information to help them make informed choices when selecting wireless service, to help ensure that consumers understand their wireless service and rate plans, and to continue to provide wireless service that meets consumers' needs, the CTIA and the wireless carriers that are signatories below have developed the following Consumer Code. The carriers that are signatories to this Code have voluntarily adopted the principles, disclosures, and practices here for wireless service provided to individual consumers.

#### The wireless carriers that are signatories to this Code will:

#### <u>o n e</u>

#### DISCLOSE RATES AND TERMS OF SERVICE TO CONSUMERS

For each rate plan offered to new consumers, wireless carriers will make available to consumers in collateral or other disclosures at point of sale and on their web sites, at least the following information, as applicable: (a) the calling area for the plan; (b) the monthly access fee or base charge; (c) the number of airtime minutes included in the plan; (d) any nights and weekend minutes included in the plan or other differing charges for different time periods and the time periods when nights and weekend minutes or other charges apply; (e) the charges for excess or additional minutes; (f) per-minute long distance charges or whether long distance is included in other rates; (g) per-minute roaming or off-network charges; (h) whether any additional taxes, fees or surcharges apply; (i) the amount or range of any such fees or surcharges that are collected and retained by the carrier; (j) whether a fixed-term contract is required and its duration; (k) any activation or initiation fee; and (l) any early termination fee that applies and the trial period during which no early termination fee will apply.

#### <u>T W O</u>

#### Make available maps showing where service is generally available

Wireless carriers will make available at point of sale and on their web sites maps depicting approximate voice service coverage applicable to each of their rate plans currently offered to consumers. To enable consumers to make comparisons among carriers, these maps will be generated using generally accepted methodologies and standards to depict the carrier's outdoor coverage. All such maps will contain an appropriate legend concerning limitations and/or variations in wireless coverage and map usage, including any geographic limitations on the availability of any services included in the rate plan. Wireless carriers will periodically update such maps as necessary to keep them reasonably current. If necessary to show the extent of service coverage available to customers from carriers' roaming partners, carriers will request and incorporate coverage maps from roaming partners that are generated using similar industry-accepted criteria, or if such information is not available, incorporate publicly available information regarding roaming partners' coverage areas.

#### 

#### PROVIDE CONTRACT TERMS TO CUSTOMERS AND CONFIRM CHANGES IN SERVICE

When a customer initiates service with a wireless carrier or agrees to a change in service whereby the customer is bound to a contract extension, the carrier will provide or confirm the material terms and conditions of service with the subscriber.

#### <u>F O U R</u>

#### ALLOW A TRIAL PERIOD FOR NEW SERVICE

When a customer initiates service with a wireless carrier, the customer will be informed of and given a period of not less than 14 days to try out the service. The carrier will not impose an early termination fee if the customer cancels service within this period, provided that the customer complies with applicable return and/or exchange policies. Other charges, including airtime usage, may still apply.

#### <u>F I V E</u>

#### PROVIDE SPECIFIC DISCLOSURES IN ADVERTISING

In advertising of prices for wireless service or devices, wireless carriers will disclose material charges and conditions related to the advertised prices, including if applicable and to the extent the advertising medium reasonably allows: (a) activation or initiation fees; (b) monthly access fees or base charges; (c) any required contract term; (d) early termination fees; (e) the terms and conditions related to receiving a product or service for "free;" (f) the times of any peak and off-peak calling periods; (g) whether different or additional charges apply for calls outside of the carrier's network or outside of designated calling areas; (h) for any rate plan advertised as "nationwide," (or using similar terms), the carrier will have available substantiation for this claim; (i) whether prices or benefits apply only for a limited time or promotional period and, if so, any different fees or charges to be paid for the remainder of the contract term; (j) whether any additional taxes, fees or surcharges apply; and (k) the amount or range of any such fees or surcharges collected and retained by the carrier.

#### <u>S I X</u>

#### SEPARATELY IDENTIFY CARRIER CHARGES FROM TAXES ON BILLING STATEMENTS

On customers' bills, carriers will distinguish (a) monthly charges for service and features, and other charges collected and retained by the carrier, from (b) taxes, fees and other charges collected by the carrier and remitted to federal state or local governments. Carriers will not label cost recovery fees or charges as taxes.

#### <u>S E V E N</u>

#### PROVIDE CUSTOMERS THE RIGHT TO TERMINATE SERVICE

#### FOR CHANGES TO CONTRACT TERMS

Carriers will not modify the material terms of their subscribers' contracts in a manner that is materially deverse to subscribers without providing a reasonable advance notice of a proposed modification and allowing subscribers a time period of not less than 14 days to cancel their contracts with no early termination fee.

#### <u>E I G H T</u>

#### PROVIDE READY ACCESS TO CUSTOMER SERVICE

Customers will be provided a toll-free telephone number to access a carrier's customer service during normal business hours. Customer service contact information will be provided to customers online and on billing statements. Each wireless carrier will provide information about how customers can contact the carrier in writing, by toll-free telephone number, via the Internet or otherwise with any inquiries or complaints, and this information will be included, at a minimum, on all billing statements, in written responses to customer inquiries and on carriers' web sites. Each carrier will also make such contact information available, upon request, to any customer calling the carrier's customer service departments.

#### <u>N I N E</u>

#### PROMPTLY RESPOND TO CONSUMER INQUIRIES AND COMPLAINTS

#### RECEIVED FROM GOVERNMENT AGENCIES

Wireless carriers will respond in writing to state or federal administrative agencies within 30 days of receiving written consumer complaints from any such agency.

#### <u>T E N</u>

#### ABIDE BY POLICIES FOR PROTECTION OF CUSTOMER PRIVACY

Each wireless carrier will abide by a policy regarding the privacy of customer information in accordance with applicable federal and state laws, and will make available to the public its privacy policy concerning information collected online.