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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

VIA HAND DELIVERY

Ms. Magalie Roman Salas, Secretary
Federal Communications Commission
The Portals, 445 12th Street, S.W.
Room TW-B204
Washington, D.C. 20554

Re: Cost-Based Terminating Compensation for CMRS Providers
CC Docket Nos. 95-185, 96-98, and 97-207

Dear Ms. Salas:

Pursuant to section 1.1206(a)(1) of the Commission's rules, Sprint PCS is filing an original and six copies of the attached letter and legal memorandum concerning the above referenced proceedings. The letter is directed to Thomas J. Sugrue, Chief of the FCC's Wireless Telecommunications Bureau and Lawrence E. Strickling, Chief of the FCC's Common Carrier Bureau

The letter asks the Commission to confirm that under the Communications Act and its implementing rules, a CMRS provider is entitled to recover in reciprocal compensation all the additional costs it incurs in terminating local traffic originated on other networks — whether the additional cost is incurred in switching or delivering the call to the mobile customer. Sprint PCS' legal memorandum analyzes these issues in detail.

Please contact the undersigned with any questions.

Sincerely,

Jonathan M. Chambers
Sprint PCS
Vice President, Regulatory Affairs
401 9th Street, N.W., Suite 400
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(202) 585-1923

Cc. Robert C. Atkinson, Deputy Bureau Chief, Common Carrier Bureau
James D. Schlichting, Deputy Chief, Wireless Telecommunications Bureau

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Federal Communications Commission
445 Twelfth Street, S.W.
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Lawrence E. Strickling, Chief
Common Carrier Bureau
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20554

Re: Cost-Based Terminating Compensation for CMRS Providers
CC Docket Nos. 95-185, 96-98, and 97-207

Dear Messrs. Sugrue and Strickling:

Sprint Spectrum L.P., d/b/a Sprint PCS ("Sprint PCS"), asks the Commission to confirm that under the Communications Act and its implementing rules, a CMRS provider is entitled to recover in reciprocal compensation all the additional costs it incurs in terminating local traffic originated on other networks — whether the additional cost is incurred in switching or delivering the call to the mobile customer. Guidance is necessary because state commissions have encountered some difficulty in applying the Act and the Commission's rules and orders to mobile networks.

Sprint PCS attaches a legal memorandum that analyzes these issues in detail. As discussed therein, Section 252(d) of the Act specifies that "each carrier" may receive in reciprocal compensation "a reasonable approximation of the additional costs" it incurs in call termination.[1] The Commission has held that an additional compensable cost is one that is traffic sensitive,[2] and it has defined call termination in Rule 51.701(d) as "the switching of local telecommunications traffic at the terminating carrier's end office switch, or equivalent facility, and delivery of such traffic to the called party's premises."[3]

The Commission discussed at some length in its *Local Competition Order* the types of costs that *wireline* carriers may recover for terminating local traffic, adopting a two-step process for determining compensable costs. It first identified the network elements involved in call termination, noting that wireline carriers almost always utilize

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[1] 47 U.S.C. § 252(d)(A)(ii).

[2] *Local Competition Order,* 11 FCC Rcd 15499, 16025 ¶ 1057 (1996)("[N]on-traffic sensitive costs should not be considered 'additional costs.'").

[3] 47 C.F.R. § 51.701(d).

at least two core network elements: end office switching and a local loop.[4] Next, it identified the traffic-sensitive components of these network elements in order to determine which costs are compensable, holding that LECs may recover the traffic-sensitive component of end office switching, but not their loop costs because "[t]he costs of local loops and line ports associated with local switches do not vary in proportion to the number of calls terminated over these facilities":

> We conclude that such non-traffic sensitive costs should not be considered "additional costs" when a LEC terminates a call that originated on the network of a competing carrier. For purpose of setting rates under section 252(d)(2) only that portion of the forward-looking, economic cost of end-office switching that is recovered on a usage-sensitive basis constitutes an "additional cost" to be recovered through termination charges.[5]

The Commission further recognized that an incumbent LEC incurs additional costs when interconnecting carriers connect to its tandem switch and that it may therefore recover the traffic sensitive portion of its tandem switches and inter-office tandem-to-end office trunks in delivering these calls to its customers.[6] This federal guidance has enabled carriers and state commissions to identify without difficulty which specific wireline carrier call termination costs are compensable in reciprocal compensation.

The Commission never performed a similar "additional cost" analysis for mobile networks, which use mobile switching centers, cell sites and spectrum instead of tandem switches, end offices, and copper loops. State commissions, rather than examining the additional (*i.e.*, traffic sensitive) costs CMRS providers incur in terminating traffic, have instead focused on the "equivalent facility" language in Rule 51.701(d) and in some instances have limited CMRS cost recovery to those mobile network components they deem to be "equivalent" to network components utilized in wireline networks.[7] For example, one state commission has ruled that "[t]he FCC has made clear that any

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[4] *Local Competition Order,* 11 FCC Rcd at 16025 ¶ 1057.

[5] *Id.*

[6] *See id.* at 15908 ¶ 822, 16027 ¶ 1061, and 16042 ¶ 1090. *See also* 47 C.F.R. § 51.509(d) & (e).

[7] There is, moreover, a substantial question whether state commissions even have the statutory authority to determine the rates that CMRS providers may charge for interconnection. *See* 47 U.S.C. § 332(c)(3). *See also CMRS Interconnection Obligations,* 9 FCC Rcd 5408, 5463 ¶ 131 (1994) (This statute "clearly preempts state regulation of the rates of [CMRS] interconnection."); *Second CMRS Report,* 9 FCC Rcd 1411, 1500 ¶ 237 (1994)("We agree . . . that the statutory language is clear that . . . the statute preempts state regulation of interconnection rates of CMRS providers."). *Compare Louisiana CMRS Rate Regulation Petition,* 10 FCC Rcd 7898, 7908 ¶ 47 (1995)("Louisiana's regulation of the interconnection rates changed by [LECs] to CMRS providers appears to involve rate regulation only of [LECs], not the CMRS providers, and thus does not appear to be circumscribed in any way by Section 332(c)(3).").

reciprocal compensation should be limited to switching costs," and that CMRS providers may not recover other traffic sensitive costs incurred in call termination.[8]

The Commission has never ruled, much less "made clear," that mobile telephony providers are limited to recovering their switching costs and may not recover their other traffic sensitive costs of call termination. Indeed, such a ruling would be directly contrary to Section 252(d), which specifies that "each carrier" is entitled to recover its "additional costs" of call termination.

In the end, it is a futile exercise to attempt to compare "equivalent facilities" between particular network components utilized in landline and CMRS networks, given that fixed and mobile carriers use such different technologies with different engineering economics. More fundamentally, this exercise diverts attention from the real issue that must be addressed under Section 252(d): whether the costs a CMRS provider seeks to recover in reciprocal compensation (regardless of the particular network component involved) are traffic sensitive and, therefore, an "additional cost" under the Communications Act.

Confirmation that CMRS providers may recover all of their call termination costs is important to the future development of competition in local consumer markets. The Commission's vision for the CMRS industry — "a true competitive alternative to the local exchange services offered by ILECs, particularly for residential customers"[9] — will never become a reality if CMRS providers are precluded from recovering in reciprocal compensation all of their call termination costs and must instead recover these costs from their own customers.

Cost-based reciprocal compensation would make mobile services more price competitive to fixed services — because the CMRS providers would no longer be required to recover the direct economic cost of incoming traffic from charges to their customers.[10] As the Commission has observed, direct competition between fixed and mobile services providers will not occur until each carrier recovers its "actual costs of interconnection."[11] It will not be possible for CMRS and LEC providers to compete head-to-head so long as CMRS customers, unlike customers of fixed service, must pay

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[8] *AirTouch Paging/U S WEST Arbitration,* Docket No. UT-990300, *Arbitrator's Report and Decision,* at 24-25 (April 28, 1999), *Order Modifying Arbitrator's Report,* ¶ 30, 1999 Wash. UTC LEXIS 199 *17 (July 1, 1999).

[9] *Calling Party Pays Service Offering in the Commercial Mobile Radio Services,* CC Docket No. 97-207, *Notice of Proposed Rulemaking,* FCC 99-137, 14 FCC Rcd 10861, at ¶ 21 (July 7, 1999).

[10] *See id.* at ¶ 72 ("With the asymmetrical, or non-symmetrical, compensation approach, CMRS carriers would not need to recover their costs with a distinct 'airtime' charge for use of the CMRS carriers' network if all of the costs related to completing a call to a wireless phone are included in the 'asymmetrical' rate.").

[11] *Second Annual CMRS Competition Report,* 12 FCC Rcd 11266, 11325-26 (1997).

for the costs of receiving calls. So long as CMRS providers receive in reciprocal compensation something less than their actual costs of terminating calls, CMRS carriers and their customers will continue to effectively subsidize costs that Congress has determined are appropriately paid by originating carriers and their customers.

In order to facilitate head-to-head LEC/CMRS competition and to discharge the Congressional mandate set forth in Section 252(d), the Commission should promptly reaffirm that the Communications Act and its existing rules entitle CMRS providers to receive in terminating compensation *all* their additional costs (subject to the submission of an adequately supported cost study). The Commission should further identify the traffic-sensitive components utilized in delivering calls to mobile customers (*e.g.,* mobile switches, cell sites, and radio spectrum) so as to remove future uncertainty and controversy.

Respectfully submitted,

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Attachment: A Legal Framework for CMRS Call Termination Cost-Based Compensation

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A Legal Framework for CMRS Call Termination Cost-Based Compensation

The Communications Act and FCC rules permit a carrier to recover in reciprocal compensation all the additional costs it incurs in terminating local traffic originated on other networks. The Commission has already provided considerable guidance concerning the types of additional costs landline networks may recover in reciprocal compensation. In contrast, it has not provided similar guidance concerning the types of additional costs that providers of commercial mobile radio service ("CMRS") may recover.[1]

CMRS carriers provide local telecommunications services similar to those furnished by landline local exchange carriers ("LECs"), except that the services are mobile and are supported by radio spectrum rather than copper loops. As a result, CMRS networks are vastly different than landline networks: they use different technologies with different engineering economics, and accordingly, have fundamentally different cost structures.

State commissions have encountered difficulty in attempting to apply the requirements of the Act and FCC rules to CMRS networks. Sprint PCS therefore encourages the FCC to provide for CMRS networks the same type of guidance that it has already provided with regard to wireline networks. Sprint PCS demonstrates below that under governing law, a CMRS provider is entitled to recover in reciprocal compensation all the traffic-sensitive costs it incurs in terminating calls, just as landline carriers may recover (and are recovering) all of their call termination traffic-sensitive costs. Specifically, CMRS providers may recover all of their traffic-sensitive call termination costs

[1] Unless otherwise specifically noted, Sprint PCS uses CMRS in this paper to refer to "broadband" CMRS services that provide mobile telephony services.

whether or not a particular wireless network element used in call termination is deemed to be functionally equivalent to network elements in wireline networks.

This memorandum is divided into four sections. Part A discusses the Act and FCC rules as they pertain to reciprocal compensation generally, and Part B summarizes the Commission's application of these requirements to landline networks. Part C applies these principles and this precedent to CMRS networks. Part D highlights some of the state commission orders attempting to apply this law and precedent to CMRS networks, a discussion demonstrating that states and industry would benefit from additional Commission guidance in applying the Act and its rules to CMRS networks.[2]

A. Reciprocal Compensation Generally: the Act and FCC Rules

Congress has directed that LECs must enter into reciprocal compensation arrangements with interconnecting carriers for "the transport and termination of [LEC] telecommunications."[3] It also made explicit in Section 252(d) that for interconnection to

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[2] There remains a continuing ambiguity over the FCC's "asymmetrical rule," which provides that "a state commission may establish asymmetrical rates for transport and termination of local telecommunications traffic." 47 C.F.R. § Rule 51.711(b). In adopting this rule, the FCC did not discuss the mandate of 47 U.S.C. § 332(c)(3) or its prior precedent interpreting this statute. *See, e.g., CMRS Interconnection Obligations,* 9 FCC Rcd 5408, 5463 ¶ 131 (1994) (This statute "clearly preempts state regulation of the rates of [CMRS] interconnection."); *Second CMRS Report,* 9 FCC Rcd 1411, 1500 ¶ 237 (1994)("We agree . . . that the statutory language is clear that . . . the statute preempts state regulation of interconnection rates of CMRS providers."). *Compare Louisiana CMRS Rate Regulation Petition,* 10 FCC Rcd 7898, 7908 ¶ 47 (1995) ("Louisiana's regulation of the interconnection rates changed by [LECs] to CMRS providers appears to involve rate regulation only of [LECs], not the CMRS providers, and thus does not appear to be circumscribed in any way by Section 332(c)(3)."). The FCC presumably will clarify this ambiguity in one of its reconsideration orders in Dockets 95-185 and 96-98.

[3] 47 U.S.C. § 251(b)(5). The FCC has determined that transport and termination are "two distinct functions." *See Local Competition Order,* 11 FCC Rcd at 16015 ¶ 1039. While this memorandum focuses on termination, CMRS providers are also entitled to compensation for any transport they may perform. FCC Rule 51.701(c) defines transport as "the transmission and any necessary tandem switching of local telecommunications traffic . . . from the interconnection point between the two carriers to the terminating carrier's end office switch that directly serves the called party, or equivalent facility provided by a carrier other than an incumbent LEC." Sprint PCS presumes that as applied to a CMRS provider, transport constitutes the transmission of local traffic from the interconnection point between it and another carrier to the "home" mobile switching center ("MSC") serving the called party (indicated by the mobile customer's telephone number). To the extent the CMRS provider thereafter "transports" the call to another MSC or to a base station, those costs would be recovered as part of the CMRS provider's rate for termination.

be "just and reasonable," "each carrier" is entitled to recover as part of its reciprocal compensation "a reasonable approximation of the additional costs of terminating such calls."[4]

In implementing these provisions, the Commission established a reciprocal compensation regime using "presumptive symmetrical rates based on the incumbent LEC's costs."[5] With symmetrical rates, an interconnecting carrier receives in reciprocal compensation the same per-minute rates that the LEC charges for terminating the interconnecting carrier's traffic. In essence, an interconnecting carrier uses the LEC's call termination costs and rates as a proxy for its own call termination costs and rates.

The Commission adopted a presumptive symmetrical rate regime over the objection of incumbent LECs because it was administratively efficient and because competitive carriers would be relieved of the burden of preparing supporting cost studies.[6] However, the Commission further recognized that interconnecting carriers like CMRS providers may have different additional costs than incumbent LECs and may want to recover these additional costs. Accordingly, the Commission established a procedure whereby CMRS providers could begin receiving "asymmetrical compensation" — compensation based on their own costs rather than on a LEC's costs as a proxy. To obtain asymmetrical rates, the competitive carrier must submit "a forward-looking economic cost study" demonstrating that "the costs of efficiently configured and operated systems are not symmetrical and justify a different compensation rate."[7]

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[4] 47 U.S.C. § 252(d)(2)(A)("[A] State commission shall not consider the terms and conditions for reciprocal compensation to be just and reasonable unless (i) such terms and conditions provide for the mutual and reciprocal recovery by each carrier of costs associated with the transport and termination on each carrier's network facilities of calls that originate on the network facilities of the other carrier; and (ii) such terms and conditions determine such costs on the basis of a reasonable approximation of the additional costs of terminating such calls.").

[5] *First Local Competition Order,* 11 FCC Rcd 15499, 16042 ¶ 1089 (1996), *aff'd in part, vacated in part on other grounds, Iowa Utilities Board* v. *FCC,* 120 F.3d 753 (8th Cir. 1997), *vacated in part on other grounds, AT&T Corp.* v. *Iowa Utilities Board,* 119 S. Ct. 721 (1999)("*Local Competition Order*").

[6] *See Local Competition Order,* 11 FCC Rcd at 16042 ¶ 1088.

[7] *Id.* at 16042 ¶ 1089. *See also* 47 C.F.R. § 51.711(b).

The Commission has also confirmed that a carrier — whether an incumbent LEC in establishing the symmetrical compensation rate or a competitive carrier in establishing its own, asymmetrical rate — may recover all of the additional costs it incurs in delivering a call to one of its customers. Although written in terms of landline technology, Rule 51.701(d) specifies that a carrier may recover its costs incurred at its "end office switch, or equivalent facility, and delivery of such traffic to the called party's premises."[8]

The Commission further made clear that a carrier may recover in reciprocal compensation only its "additional costs" of call termination, holding that a compensable "additional cost" should be established through the use of "the forward-looking, economic cost-based pricing standard."[9] More specifically, it ruled that terminating compensation rates should recover that portion of the forward-looking, economic cost of the network that is "usage-sensitive" — defined as costs that "vary in proportion to the number of calls terminated over these facilities."[10] Carriers may also recover a reasonable allocation of their common costs.[11]

B. Cost-Based Compensation for Landline Carriers

The Commission in its *Local Competition Order* discussed at some length the types of costs that wireline carriers may recover for terminating local traffic, adopting a two-step process for determining compensable costs. It first identified the network ele-

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[8] 47 C.F.R. § 51.701(d).

[9] *Local Competition Order,* 11 FCC Rcd at 16023 ¶ 1054. Because CMRS carriers incur the same cost in terminating a local call that they incur in terminating a long distance call, it would make sense for CMRS providers to charge the same rate for local termination and exchange access. Such an approach would be consistent with the FCC objective that a carrier's rates "for the transport and termination of local traffic and for the transport and termination of long distance traffic should converge." *Id.* at 16012-13 ¶ 1033. Sprint PCS therefore believes that CMRS providers should also use a forward-looking economic cost standard in establishing their terminating access charges.

[10] *See id.* at 16025 ¶ 1057. In ascertaining whether cost is usage sensitive, it is useful to examine whether the network element in question is shared among customers, as opposed to being dedicated to a single customer. *See, e.g.,* 47 C.F.R. § 51.507(c)("The costs of shared facilities shall be recovered in a manner that efficiently apportions costs among users. Costs of shared facilities may be apportioned either through usage-sensitive charges or capacity-based flat-rated charges, if a state commission finds that such rates reasonably reflect the costs imposed by the various users.").

[11] *See Local Competition Order* at 16025 ¶ 1058.

ments involved in call termination, noting that landline carriers generally utilize at least two core network elements:

> The network elements involved with the termination of traffic include the end-office switch and local loop.[12]

The Commission further noted that incumbent LECs often utilize a third network element — tandem switching and inter-office tandem-to-end office transport — in terminating traffic originated on other networks.[13]

Next, the Commission identified the traffic sensitive components of these network elements in order to determine which costs are compensable. It held that LECs may recover the traffic-sensitive component of end office switching, but not the costs of their loops because loop costs are not traffic-sensitive:

> The costs of local loops and line ports associated with local switches do not vary in proportion to the number of calls terminated over these facilities. We conclude that such non-traffic sensitive costs should not be considered "additional costs" when a LEC terminates a call that originated on the network of a competing carrier. For purpose of setting rates under section 252(d)(2) only that portion of the forward-looking, economic cost of end-office switching that is recovered on a usage-sensitive basis constitutes an "additional cost" to be recovered through termination charges.[14]

Similarly, the Commission held that a LEC may impose a higher compensation rate if an interconnecting carrier delivers its traffic to the LEC's tandem switch because the LEC incurs additional traffic-sensitive costs (tandem switching and inter-office transport) in delivering these calls to its customers.[15]

This federal guidance has enabled carriers and state commissions to identify which specific landline carrier call termination costs are compensable in reciprocal compensation.

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[12] *Local Competition Order,* 11 FCC Rcd at 16025 ¶ 1057.

[13] *See id.* at 16027 ¶ 1061.

[14] *Id.* at 16025 ¶ 1057. *See also Local Competition Reconsideration Order,* 11 FCC Rcd 13042, 13045 ¶ 6 (1996)(Clarifying that recoverable "usage-sensitive costs includ[e] the switching matrix and the trunk ports, but not the non-traffic sensitive costs of local loops and line ports.").

[15] *See Local Competition Order,* 11 FCC Rcd at 16042 ¶ 1090.

C. Cost-Based Compensation for CMRS Providers

The Commission did not perform a similar "additional cost" analysis with respect to CMRS networks, which use different technologies that have vastly different engineering economics and as a result, have fundamentally different cost structures. Nonetheless, CMRS providers like Sprint PCS perform the same call termination function that LECs perform, and the Commission should accordingly apply the same legal analysis to CMRS networks that it has applied to landline networks.

On one level, CMRS networks utilize a hierarchical network architecture similar to wireline networks. A mobile switching center ("MSC") is a switch that serves a geographic area and performs functions similar to LEC tandem switches (*e.g.,* it routes incoming calls to other MSCs or to the subtending base station serving the called party at the time).[16] Like LEC end-office switches, CMRS base transceiver stations maintain the connection between the called party and the public switched network, except that the connection is maintained only for the duration of the call. Finally, instead of a copper loop, CMRS providers use radio spectrum in order to connect a customer to its network.

This landline/CMRS network analogy is by no means exact. Indeed, as a Michigan arbitration panel recently determined, "the level of complexity, sophistication and functionality of the cellular network more than equals that of the old model of tandem and end office switches."[17] Nevertheless, landline and CMRS networks perform the same function: delivering a call attempt to the person being called.

This analogy, however, does little to answer the question posed by Section 252(d): what additional costs does a CMRS provider incur in terminating another car-

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[16] Indeed, MSCs often use the same core switching equipment that LECs use for their tandem switches (*e.g.,* Lucent 5ESS).

[17] *CenturyTel Wireless/Ameritech-Michigan Arbitration Order,* Case No. U-11989, 1999 Mich. PCS LEXIS 249, at *25 (Sept. 14, 1999). For example, LECs know precisely where a call must be delivered: to a line card on one of its end office switches. Because the location of the called party is fixed and known in advance, interconnecting carriers have the option of delivering their traffic at either a LEC's tandem switch or at the LEC end office directly serving the called party. In contrast, interconnecting carriers do not know at the time of the call the location of a mobile customer being called. Accordingly, they have no choice but to deliver their land-to-mobile calls to the "home" MSC of the mobile customer being called, at which time the CMRS provider ascertains the location of the mobile customer at the time so it can deliver the call to the customer.

rier's traffic so its reciprocal compensation rate can be established? Whether a particular wireless network component is similar to a particular wireline network component provides little or no guidance concerning what additional costs a CMRS provider incurs in terminating traffic. Accordingly, the better approach is to apply the same two-step analysis that the Commission utilized in identifying a LEC's compensable costs. As noted above, the Commission first identified the relevant network elements: for a landline carrier, a switch, loops and, sometimes, tandem switching/transport. The core network elements a CMRS provider utilizes in delivering incoming traffic to their customers are MSCs (including base station controllers), cell sites (or base transceiver stations) and transport to the cell sites, and radio spectrum.

The Commission next identified the traffic-sensitive portion of each network element involved in call termination. A CMRS MSC has traffic-sensitive components just like a LEC switch. In addition to the switch, and unlike LEC loops, the network elements that a CMRS provider uses in delivering calls to its mobile customers from the MSC also contain traffic-sensitive components. As the Commission stated, the reason that loop costs are not compensable is that "[t]he costs of local loops and line ports associated with local switches do not vary in proportion to the number of calls terminated over these facilities."[18] When a person receives a call on a wireline phone, the level of service provided is essentially unaffected by local demand — one's ability to talk on the phone is not diminished when others in the neighborhood are on their phones (so long as the LEC has installed sufficient switching capacity).

The wireless environment is markedly different. The capacity of a given amount of radio spectrum in a given geographic area is limited. When local demand exceeds capacity, CMRS customers experience blocked or dropped calls in the affected area (even when the CMRS carrier has sufficient switching capability available). To increase capacity, an operator must add radio carriers (if spectrum is available), add base stations, and/or acquire additional spectrum. In other words, these "delivery" network elements are all traffic-sensitive.

[18] *Local Competition Order,* 11 FCC Rcd at 16025 ¶ 1057.

Because Section 252(d) of the Act expressly provides that "each carrier" may receive in reciprocal compensation "a reasonable approximation of the additional costs of terminating such calls," the Commission should confirm that a CMRS provider is entitled to recover all of the additional, traffic-sensitive costs it incurs in terminating a call. In order to ensure consistent application by state commissions, the FCC should further identify the traffic-sensitive elements of a mobile network as the mobile switching center (including base station controllers), cell sites (or base transceiver stations) and transport to the cell sites, and radio spectrum.

D. Additional Clarification Will Assist State Commissions and Will Help Ensure That the Congressional Intent of Full Cost Recovery Is Realized

Relatively few state commissions have been asked to date to address the question of what additional costs CMRS providers may recover in reciprocal compensation.[19] Nevertheless, each of the state commissions addressing the issue has had some difficulty in applying the FCC's rules — a situation that the FCC could rectify by providing the same type of guidance for CMRS networks that it has provided for wireline networks.

The California and Washington Commissions recently faced the question of the types of costs that a paging carrier may recover in terminating compensation.[20] Both Commissions held that the paging carrier may recover the traffic-sensitive portion of its paging terminals, ruling that this equipment was the functional equivalent of LEC end office switches. However, both Commissions further rejected the paging carrier arguments that under FCC Rule 51.701(d), they were also entitled to recover the traffic-

[19] This situation can be explained in part because the legal status of the FCC's "asymmetrical rule," Rule 51.711(b), was unclear until recently. The Eighth Circuit vacated the rule shortly after its adoption, and the rule did not take effect until June 1999, when the Eighth Circuit issued its mandate following the Supreme Court decision. *See Iowa Utilities Board* v. *FCC,* No. 96-3321, *Order* (8th Cir., June 10, 1999).

[20] Although the FCC adopted presumptive symmetrical rates for most carriers, it did not extend this rule to paging carriers, determining that their networks are sufficiently different from telephony carriers that they should be required to prove their call termination costs as a condition to receiving reciprocal compensation. *See Local Competition Order,* 11 FCC Rcd at 16043-44 ¶¶ 1092-93.

sensitive portions of their delivery networks.[21] For example, the California Commission based its decision on its interpretation of paragraph 1057 of the *Local Competition Order* (quoted on page 5 above), where the FCC ruled that LECs may not recover their loop costs because they are not traffic sensitive:

> It is clear from this statement [in paragraph 1057] that the FCC did not intend, when referring to the "delivery" of calls in its definition, to have the costs of facilities beyond the end-office switch included in the termination rate. Therefore, since we have found a paging terminal to be a facility equivalent to an end-office switch in providing a call termination function, thus permitting Cook to seek compensation under Section 251(b)(5), it is just and reasonable to limit the costs considered for termination compensation to the paging terminal.[22]

Similarly, the Washington Commission based its decision on the ground that "[t]he FCC has made clear that any reciprocal compensation should be limited to switching costs":

> Notably, the FCC did not include [in paragraph 1057 of the *Local Competition Order*] the costs of "delivery" of a call in this provision. . . . The AirTouch network side of the paging terminal is the functional equivalent of a wireless loop, with different components serving as feeder, distribution, and drop.[23]

There are, of course, considerable differences between paging networks and the networks of broadband CMRS carriers that provide voice telephony services,[24] and it is unclear whether these states would have permitted a broadband CMRS provider to recover the traffic sensitive costs it incurs in delivering a call from its MSC to its cus-

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[21] *See* 47 C.F.R. § 51.701(d)("For purposes of this subpart, termination is the switching of local telecommunications traffic at the terminating carrier's end office switch, or equivalent facility, and delivery of such traffic to the called party's premises.").

[22] *Cook Telecom/Pacific Bell Arbitration,* Application No. 97-02-003, *Order Denying Rehearing,* Decision No. 97-09-123, 1997 Cal. PUC LEXIS 993, *17-18 (Sept. 24, 1997), *aff'g, Interim Opinion,* Decision No. 97-05-095, 1997 Cal. PUC LEXIS 242, *8 (May 21, 1997). PacBell appealed the ruling, but the federal courts affirmed Cook's right to terminating compensation. *See Pacific Bell* v. *Cook Telecom,* No. C-97-03990 SW, 1998 U.S. Dist. LEXIS 14430 (N.D. Cal. 1998), *aff'd,* No. 99-15324, 1999 U.S. App. LEXIS 33815 (9th Cir., Dec. 27, 1999). It appears that Cook did not appeal that portion of the PUC decision rejecting compensation for the delivery function.

[23] *AirTouch Paging/U S WEST Arbitration,* Docket No. UT-990300, *Arbitrator's Report and Decision,* at 24-25 (April 28, 1999), *Order Modifying Arbitrator's Report,* ¶ 30, 1999 Wash. UTC LEXIS 199 *17 (July 1, 1999).

[24] *See, e.g., Local Competition Order,* 11 FCC Rcd at 16043 ¶ 1092.

tomer.[25] Nevertheless, the FCC has never ruled, much less "made clear," that mobile telephony providers are limited to recovering their switching costs and may not recover their other traffic sensitive costs of call termination. Indeed, such a ruling would be directly contrary to Section 252(d), which specifies that "each carrier" is entitled to recover its "additional costs" in call termination.

The Florida Commission also had an opportunity to interpret the "equivalent facility" language in FCC Rule 51.701(d). A cellular carrier argued that it was entitled to assess the LEC's tandem rate as its own rate for terminating compensation, contending that its MSC was equivalent to a LEC tandem switch while its cell sites were equivalent to LEC end office switches. The LEC responded that cell sites were not equivalent to end offices and were rather more functionally equivalent to landline subscriber line carrier systems, and that therefore the cellular carrier should use the LEC's end-office termination rate as a proxy for its termination rate.

The Florida Commission recognized at the outset that there are "a number differences between the landline and mobile network technologies," and it declined the parties' invitation to examine and compare each cellular network component with LEC network components for purposes of determining whether they are "equivalent facilities" within the ambit of FCC Rule 51.701(d).[26] The Commission instead found it "appropriate to construe the term 'equivalent facilities' more broadly":

> Sprint and Wireless One both transport, switch, and terminate telecommunications traffic; therefore, the two systems are functionally equivalent, although they use different technologies. We also agree that the cell sites do provide essential functions associated with transport and "delivery of a call to the called party's premises," as set forth in FCC Rule 47 C.F.R. § 51.701(d). Wireless One's network facilities are, therefore, equivalent facilities for purposes of reciprocal compensation.[27]

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[25] For example, the Colorado PUC also rejected a paging carrier's recovery of its delivery costs, but it did so under a different rationale: "a paging call consists of two completely separate processes." *AirTouch Paging/U S WEST Arbitration,* Docket No. 99A-001T, *Order,* Decision No. C99-419, at ¶ 4(b)(April 28, 1999). This "two call" rationale obviously does not apply to broadband CMRS carriers providing mobile telephony services, so it is unclear whether the Colorado PUC would preclude broadband CMRS providers from recovering their delivery costs.

[26] *Wireless One Network, d/b/a Cellular One/Sprint-Florida Arbitration Order,* Docket No. 971194-TP, Order No. PCS-98-0140-FOF-TP, 1998 Fla. PUC LEXIS 144, at *16 (Jan. 26, 1998).

[27] *Id.* at *17.

As the Florida Commission later explained, Rule 51.701(d) should be interpreted "to mean that these [switching and delivery] functions may be provided by equivalent facilities and not necessarily in the identical manner as that provided by the ILEC."[28]

In the end, it is a futile exercise to attempt to compare "equivalent facilities" between particular network components utilized in wireline and wireless networks, given that fixed and mobile carriers use such different technologies. More fundamentally, this exercise diverts attention from the real issue that must be addressed: whether the costs a CMRS provider seeks to recover in reciprocal compensation (regardless of the particular network component involved) are fixed or traffic sensitive — and, therefore, an "additional cost" under the Communications Act. Sprint PCS submits that the Commission could eliminate considerable confusion by reaffirming that under the Act and its existing rules, a CMRS provider may (subject to the submission of an adequately supported cost study) recover *all* of its traffic sensitive costs incurred in terminating traffic, including traffic sensitive portion of its network used in delivering calls from its MSC to its mobile customer.

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[28] *Wireless One Network Reconsideration Order,* Docket No. 971194-TP, Order No. PCS-98-0594-FOF-TP, 1998 Fla. PUC LEXIS 917, at *18 (April 27, 1998). Other PUCs have reached a similar conclusion. *See, e.g., CenturyTel Wireless/Ameritech-Michigan Arbitration Order,* Case No. U-11989, 1999 Mich. PCS LEXIS 249, at *30 (Sept. 14, 1999)("Carrier's [mobile] networks perform functions similar to Ameritech Michigan's tandem and end office switches."); *Aerial/U S WEST Arbitration Order,* Docket No. P-421/EM-97-1337, 1997 Minn. PUC LEXIS 229, at *10 (Dec. 31, 1997).