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**United States Court of Appeals
for the Eighth Circuit**

No. 17-2290

Charter Advanced Services (MN), LLC;
Charter Advanced Services VIII (MN), LLC

Plaintiffs-Appellees

v.

Nancy Lange, in her official capacity as Chair
of the Minnesota Public Utilities Commission;
Dan M. Lipschultz, in his official capacity as
Commissioner of the Minnesota Public Utilities
Commission; John Tuma, in his official capacity
as Commissioner of the Minnesota Public Utilities
Commission; Matthew Schuerger, in his official
capacity as Commissioner of the Minnesota
Public Utilities Commission; Katie Clark Sieben,
in her official capacity as Commissioner of the
Minnesota Public Utilities Commission

Defendants-Appellants

Mid-Minnesota Legal Aid; National Association
of Regulatory Utility Commissioners; National
Association of State Utility Consumer Advocates;
AARP; AARP Foundation; Barbara Ann Cherry

Amici on Behalf of Appellant(s)

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Federal Communications Commission; NCTA-The
Internet & Television Association; USTelecom;
Voice on the Net Coalition; AT&T; Verizon

Amici on Behalf of Appellee(s)

Appeal from United States District Court
for the District of Minnesota—Minneapolis

Submitted: June 12, 2018

Filed: September 7, 2018

Before LOKEN, ERICKSON, and GRASZ, Circuit Judges.

ERICKSON, Circuit Judge.

Charter Communications is a provider of video, internet, and voice communications services. This case arose when Charter underwent a corporate reorganization in order to segregate its Voice over Internet Protocol (“VoIP”) services from its regulated wholesale telecommunications services. As part of the reorganization, Charter moved its VoIP accounts from “Charter Fiberlink” to a newly created affiliate named “Charter Advanced.” This led the Minnesota Department of Commerce to lodge a complaint with the Minnesota Public Utilities Commission (“MPUC”) alleging that Charter had violated various state laws. Charter responded that state regulation was preempted by the

Telecommunications Act of 1996. The MPUC ruled against Charter.

Charter commenced an action in the United States District Court for the District of Minnesota seeking: 1) declaratory relief finding that state regulation is preempted, and 2) injunctive relief prohibiting Defendants from enforcing regulation of its VoIP services. The district court¹ denied defendants' motion to dismiss and allowed discovery to proceed. Following competing motions for summary judgment, the district court ruled that Charter's VoIP service is an "information service" under the Telecommunications Act and that state regulation of Charter's VoIP services was therefore preempted. Because we agree with the district court, we affirm.

I. Background

Spectrum Voice is a VoIP service operated by Charter Advanced. Spectrum Voice offers a voice calling feature that allows subscribers to exchange calls with traditional telephones, transmitting voice signals as Internet Protocol ("IP") data packets via a broadband internet connection. Spectrum Voice is an "interconnected" VoIP service because of its ability to interface with traditional or legacy telephone operations. It is also a "fixed" service because it is tethered to the user's home.

¹ The Honorable Susan Richard Nelson, United States District Judge for the District of Minnesota.

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Spectrum Voice subscribers receive an embedded Multimedia Terminal Adapter (“eMTA”) from Charter Advanced. The eMTA is combined with a modem (for broadband internet access service) into a single device. The eMTA transforms voice calls from analog electrical signals into IP “packets,” which are then carried on Charter’s network. Under FCC classifications for hardware, the eMTA is considered Customer Premises Equipment (“CPE”).

In order to facilitate Spectrum Voice’s interconnected VoIP service, Charter must interconnect with traditional providers. Traditional telephone networks (collectively known as the public switched telephone network or “PSTN”) utilize “circuit switching” technology, which establishes a dedicated pathway for the duration of a call. A technique called Time Division Multiplexing (“TDM”) allows multiple circuit-switched calls to share the same line.

As the district court stated, “[t]he eMTA alters the format of voice calls between an analog electrical signal—as transmitted by the customer’s handset—and the IP data packets transmitted over Charter Advanced’s cable network When a Charter Advanced customer calls or receives a call from a subscriber of a traditional telecommunications carrier, the call must be converted between IP and TDM.” Charter Advanced Servs. (MN), LLC v. Lange, 259 F.Supp.3d 980, 982 (D. Minn. 2017). This process is known as “protocol conversion.” Charter accomplishes the conversion by routing IP-TDM calls through a “Media Gateway” on Charter

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Advanced's side of its connection with a TDM-based network.

Spectrum Voice provides customers access to additional features. For example, the service offers: 1) a web portal to access voicemails as digital files, convert voicemails to text, and forward them via email; 2) the ability to display caller ID info on connected cable televisions; 3) a "softphone" feature to access Spectrum Voice via a tablet or smartphone app; and other features.

Charter moved its Spectrum Voice offerings from Charter Fiberlink to Charter Advanced for the purpose of decreasing its state regulatory burden. Under the Telecommunications Act of 1996, a "telecommunications service" is "the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used." 47 U.S.C. § 153(53). An "information service," by contrast, is "the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, . . . but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service." 47 U.S.C. § 153(24).

How a service is classified affects a state's ability to regulate the service. Telecommunications services are generally subject to "dual state and federal regulation." See Louisiana Pub. Serv. Comm'n v. FCC, 476

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U.S. 355, 375 (1986). By contrast, “any state regulation of an information service conflicts with the federal policy of nonregulation,” so that such regulation is preempted by federal law. See Minnesota Pub. Utilities Comm’n v. FCC, 483 F.3d 570, 580 (8th Cir. 2007); see also 47 C.F.R. § 64.702. The FCC has so far declined to classify VoIP services as either information or telecommunications services, despite repeated opportunities to do so.² See Clark v. Time Warner Cable, 523 F.3d 1110, 1113 (9th Cir. 2008) (footnotes omitted) (quoting In re IP-Enabled Services, 19 F.C.C.R. 4863, 4880-81 ¶¶ 26-27, 4886 ¶ 35 (2004)) (explaining that the FCC “solicited comment on whether VoIP services should be classified as ‘telecommunications services’ or ‘information services’ under the Act”).

The MPUC sought to regulate Charter Advanced by asserting that VoIP is a “telecommunications service” as defined by the Act. Charter responded by filing an action in the district court arguing that Spectrum Voice is an “information service” under the Act, requiring preemption of state regulation. In the absence of direct guidance from the FCC explicitly classifying VoIP services, the district court interpreted the Act with reference to prior FCC orders, and concluded that

² The FCC’s amicus brief in this case is illustrative. See Brief of the FCC as Amicus Curiae Supporting Appellees at 13-15 (“[T]he agency has not yet resolved the overarching classification issue . . . the agency has not needed to definitively resolve the overarching regulatory classification of . . . VoIP service at this time.”).

Spectrum Voice was an information service. The MPUC now appeals.

II. Discussion

We review the district court’s grant of summary judgment *de novo*, “viewing all evidence and drawing all reasonable inferences in the light most favorable to” the nonmovant. Riddle v. Riepe, 866 F.3d 943, 946 (8th Cir. 2017) (quoting Helmig v. Fowler, 828 F.3d 755, 760 (8th Cir. 2016)). Summary judgment is appropriate if “the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a).

As we have noted, “any state regulation of an information service conflicts with the federal policy of nonregulation.” Minnesota Pub. Utilities Comm’n v. FCC, 483 F.3d 570, 580 (8th Cir. 2007). We may therefore affirm the district court if Charter’s VoIP offerings are an information service under the Act.

We conclude that the VoIP technology used by Charter Spectrum is an “information service” under the Act.³ As the district court put it, “the touchstone of

³ We note that while the FCC would be able to announce a classification decision regarding VoIP, it has so far declined to do so. See, e.g., USF-ICC Transformation Order, 26 F.C.C.R. 17663, 18013-14 ¶ 954 (2011) (explaining that “the Commission has not classified interconnected VoIP services or similar one-way services as ‘telecommunications services’ or ‘information services’”) (footnote omitted). We sometimes stay our hand “while seeking the guidance of an administrative agency’s perceived expertise” when resolving a question concerning a statute ordinarily interpreted

the information services inquiry is whether Spectrum Voice acts on the consumer's information—here a phone call—in such a way as to ‘transform’ that information.” 259 F.Supp.3d at 987; see 47 U.S.C. § 153(24). IP-TDM calls involve just such a transformation. For those calls, because information enters Charter's network “in one format (either IP or TDM, depending on who originated the call) and leaves in another, its system offers ‘net’ protocol conversion, which the FCC has defined as occurring when ‘an end-user [can] send information into a network in one protocol and have it exit the network in a different protocol.’” See id. at 986 (quoting Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, As Amended, 11 F.C.C.R. 21905, 21956 ¶ 104 (1996) (“Non-Accounting Safeguards Order”)). While the Non-Accounting Safeguards Order did not specifically discuss VoIP technology, its rationale suggests that Spectrum Voice's protocol conversion is a “transformation” of the relevant communications.⁴

by the agency. See Owner-Operator Indep. Drivers Ass'n, Inc. v. New Prime, Inc., 192 F.3d 778, 785 (8th Cir. 1999) (discussing the doctrine of primary jurisdiction). Here the agency has “decline[d] to provide guidance” for well over a decade, so that we may, in our discretion, proceed “according to [our] own light.” Id. (quoting Atchison, Topeka & Santa Fe Ry. v. Aircoach Transp. Ass'n, 253 F.2d 877, 886 (D.C. Cir. 1958)).

⁴ The FCC took the position in this case that none of “the various FCC authorities invoked by the district court” should be read to “definitively resolve” the regulatory classification of Charter's VoIP services. See Brief of the FCC as Amicus Curiae Supporting Appellees at 26-29. To be clear, we do not resolve the statutory question solely on the basis of those authorities—though like the FCC, we believe they “continue to provide important

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See Non-Accounting Safeguards Order, 11 F.C.C.R. at 21956 ¶ 104 (1996) (explaining that “conversion and protocol processing services are information services under the 1996 Act”); see also Vonage Holdings Corp. v. Minnesota Pub. Utilities Comm’n, 290 F. Supp. 2d 993, 999 (D. Minn. 2003) (citing 47 C.F.R. § 64.702(a)) (explaining that the “process of transmitting customer calls over the Internet require[d]” a VoIP provider to “‘act on’ the format and protocol of the information” and finding that such providers use telecommunications services, rather than providing them). Spectrum Voice’s service is an information service because it “mak[es] available information via telecommunications” by providing the capability to transform that information through net protocol conversion. Cf. Nat’l Cable & Telecommunications Ass’n v. Brand X Internet Servs., 545 U.S. 967, 988 (2005) (explaining that “all information-service providers . . . use ‘telecommunications’ to provide consumers with [their] service”).

We briefly address the Act’s carve-out from the definition of “information service.” The definition of “information service” excludes services that comprise a “capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service.” 47 U.S.C. § 153(24). The FCC has further defined this exception to include “(1) services ‘involving communications between an end user and the network itself (e.g., for initiation, routing, and termination of calls) rather than between

guidance on how to interpret and apply the Communications Act.” Id. at 27.

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or among users;’ (2) protocol processing ‘in connection with the introduction of a new basic network technology (which requires protocol conversion to maintain compatibility with existing [CPE])’ and (3) services ‘involving internetworking (conversions taking place solely within the carrier’s network to facilitate provision of a basic network service, that result in no net conversion to the end user).’” 259 F.Supp.3d at 988-89 (quoting Non-Accounting Safeguards Order, 11 F.C.C.R. at 21957 ¶ 106).

None of the exceptions alter our conclusion that Spectrum Voice is an information service. The first exception is inapplicable because the service at issue is “between or among users.” The network protocol technology is an essential feature of Spectrum Voice’s offerings, as the ability to call users of legacy telephony services via Spectrum Voice is a vital selling point for consumers. The second exception is also inapplicable. Spectrum Voice’s service is not aimed at providing backwards compatibility for existing CPE. Instead, Spectrum Voice’s customers must receive new CPE (the eMTA) to utilize its services. Finally, the “internetworking” exception does not apply. The FCC defines CPE as falling outside a carrier’s network. See In re Federal-State Joint Board on Universal Service, 18 F.C.C.R. 10958, 10967 ¶ 18 (2003) (defining CPE as “equipment that falls on the customer side of the demarcation point between customer and network facilities”). As such, the eMTA is located outside of the carrier’s network by definition. Since any conversion back into the original form of the information takes

place outside of the network (in the eMTA), the “inter-networking” exception is inapplicable.

III. Conclusion

We agree with the district court that Spectrum Voice is an “information service” under the Act. Preemption of state regulation of Spectrum Voice is therefore warranted. Accordingly, we affirm the district court’s grant of summary judgment to Charter Advanced.

GRASZ, Circuit Judge, dissenting.

Because I do not believe net protocol conversions qualify as information services under the federal Communications Act, I would reverse the district court’s conclusion that federal law preempts state regulation of Charter’s Spectrum Voice service.

I. Background

The FCC and the telecommunications industry have long debated the question of how best to address protocol conversions when categorizing services. In its *Computer II* inquiry in 1980, the FCC created a “relatively clear-cut” distinction between “basic services” and “enhanced services.” *In the Matter of Amendment of Section 64.702 of the Commission’s Rules and Regulations (Second Computer Inquiry)*, 77 F.C.C.2d 384, 420-21 ¶ 97 (1980) (“*Computer II*”). Basic services were

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the typical telecommunications services, while any improvement on that service was an enhanced service, including protocol conversions. *Id.* at ¶ 97, 99. This conclusion was not unanimous because, as a dissenting commissioner argued, some type of protocol conversion may be necessary to provide any service. *Id.* at 511-12, 516 (Fogarty, Comm'r, dissenting in part). In 1983, the FCC clarified that some protocol conversion is necessary to basic services, but it narrowly construed which protocol conversions are necessary while indicating that it would consider waiver applications for basic service providers that wanted to add other protocol conversions. *See In the Matter of Communications Protocols under Section 64.702 of the Commission's Rules and Regulations*, 95 F.C.C.2d 584, 590-92 ¶¶ 14-16 (1983).

The Telecommunications Act of 1996, which amended the Communications Act, largely adopted the FCC's basic service and enhanced service categories in its definitions of telecommunications service and information service, respectively, with a very important change that is relevant here: it did not include protocol conversions in the definition of information service. *Compare* 47 U.S.C. § 153(24) *with Computer II* at ¶ 5. In a 1998 report to Congress, the FCC admitted that its prior discussion of protocol processing in its 1996 *Non-Accounting Safeguards Order* may be incorrect in light of that statutory definition, and it deferred the categorization of net protocol conversions to another day. *In the Matter of Fed.-State Joint Bd. on Universal Serv.*, 13 FCC Rcd. 11501, 1998 WL 166178, at

¶¶ 49-52 (1998) (the “*Stevens Report*”) (discussing *Non-Accounting Safeguards Order* at ¶¶ 104-07). It remained unclear whether protocol conversions amounted to *transforming* information, making the service an “information service,” or were simply part of *transmitting* information, making it a “telecommunications service.”

Twenty years later, the lack of clarity continues. This is at least in part because the entire telephone network is in the process of changing from time-division multiplex (“TDM”) to internet protocol (“IP”). The statute contemplates such transitions because it defines a telecommunications service as “offering [] telecommunications for a fee directly to the public . . . *regardless of the facilities used.*” 47 U.S.C. § 153(53) (emphasis added). If the converters used to pass calls between old and new network lines during a transition are the defining feature of an information service, then any telecommunications service would become a lightly regulated information service while using conversion and revert back to being a heavily regulated telecommunications service as soon as the transition from TDM to IP is complete. Such an understanding would create a functional end-run around the statutory language stating a telecommunications service remains such “regardless of the facilities used.”

While the FCC has not completely resolved the categorization of VoIP, it has issued some orders regarding IP lines, and Charter is avoiding that precedent based on a technicality regarding where conversion occurs. The FCC previously declared that AT&T’s service is a

telecommunications service, even though it uses IP lines in the middle of its network, because the call still enters and exits the network on traditional phone lines. See *In the Matter of Petition for Declaratory Ruling that AT&T's Phone-to-Phone IP Telephony Services Are Exempt from Access Charges*, 19 FCC Rcd. 7457 (2004) (“*IP-in-the-Middle Ruling*”). Here, Charter’s calls technically begin on IP lines and end on traditional phone lines—even though their customers use traditional phone lines to begin calls—because the converter box is inside the customer’s home. The only practical difference between Charter’s network and AT&T’s network is whether the first converter box is inside or outside customers’ homes.

If performing the conversion from TDM to IP inside a customer’s home is sufficient to convert a telecommunications service into an information service, then AT&T, or any similarly situated provider, could greatly reduce its regulatory burden simply by moving converter boxes inside customers’ homes. A simple change of physical location would transform what used to be telecommunications services to information services. This may explain why the FCC has yet to make categorical pronouncements on protocol conversions. An overarching category for all net protocol conversions would create a potential pathway for every company to escape the heavier telecommunications service regulations.

The FCC started a proceeding to address the categorization of interconnected VoIP in 2004. See *IP-Enabled Services*, 19 FCC Rcd. 4863 (2004). In its amicus

brief to this Court, the FCC confirmed that this proceeding is still pending, stating that none of its prior authorities “purport[] to decide (nor should be read to definitively resolve) the regulatory classification” at issue here.

II. Analysis

In my view, the net protocol conversion in Charter’s service makes it either a telecommunications service or something entirely outside the primary categories of services in the Communications Act. The one thing it cannot be is an information service.

Under its statutory definition, an information service includes “transforming . . . information via telecommunications.” 47 U.S.C. § 153(24). A telecommunications service is “the offering of telecommunications for a fee directly to the public.” *Id.* § 153(53). Both types of services involve “telecommunications,” which is defined as “the transmission, between or among points specified by the user, of information of the user’s choosing, without change in the form or content of the information as sent and received.” *Id.* § 153(50).

If we assume that interconnected VoIP services “provide” “telecommunications” as defined in statute,⁵ then we must presume that no “change” occurs

⁵ The Parties agreed on this point, but it appears that no circuit court has ever addressed whether interconnected VoIP is by definition “telecommunications.” *See, e.g., Vonage Holdings Corp. v. FCC*, 489 F.3d 1232, 1241 (D.C. Cir. 2007) (declining to reach the issue because it was not preserved for review).

between the two phone sets on either end of the interconnected VoIP line. *See id.* Charter argues that the telecommunications portion of its service is between the customer's premises and the media gateway that performs the protocol conversion, but this argument is incorrect since the receiving phone, not the media gateway, is the "point[] specified by the user." *Id.* As a result, when addressing the question of whether Charter's media gateway transforms information, in order to rule in favor of Charter, we would have to conclude that a device that does not change the form or content of information (because it is part of telecommunications) is also a device that transforms information (because it is an information service). *See id.* § 153(24), (50). The first conclusion forecloses the second one. In short, if Charter's service provides telecommunications (as defined in statute), then its net protocol conversion cannot be part of an information service, but instead must be part of a telecommunications service.

On the other hand, if a net protocol conversion does "change" the information sent and received by users, it is not telecommunications by definition and is thus neither a part of a telecommunications service nor an information service (which, again, is offered "*via telecommunications*"). *Id.* § 153(24) (emphasis added), (50), (53). To be clear, protocol conversions do not necessarily place a service outside telecommunications as defined in the Communications Act. As the FCC has observed, whether a protocol conversion changes the form or content is assessed "as sent and received" by end users, meaning that a conversion that makes no

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net change to the information can be part of a telecommunications service. See *Non-Accounting Safeguards Order* at ¶ 106; *IP-in-the-Middle Ruling* at ¶¶ 12-13. But for our purposes, we need not attempt to resolve the decades-long dispute of how to categorize various types of protocol conversions.⁶ It is sufficient that if Charter's net protocol conversion does not change the information (because it provides telecommunications), then its service cannot at the same time involve transforming the information (so as to make it an information service); and conversely, if Charter's net protocol conversion does change the information, then it is not telecommunications and thus not part of either category of service.

I also reach no conclusions about whether the Communications Act or the FCC could preempt MPUC's regulations on *other* grounds. For example, the Communications Act requires that state regulation of universal service be consistent with FCC regulations. 47 U.S.C. § 254(f). Furthermore, some portions of the Communications Act treat interconnected VoIP as distinct from other services, *see, for example*, 47 U.S.C.

⁶ I find no merit in the MPUC's arguments that net protocol conversions meet the current telecommunications management exception categories for reasons similar to the majority, but I also see nothing in the statute that prevents the FCC from recognizing additional categories should it find that approach to be the best way to resolve an issue.

§§ 222(g), 615a-1(g);⁷ *but see id.* § 620(a),⁸ which suggests that a regulatory solution is needed beyond the narrow issue in this case. If new technology has made federal law insufficient to adequately address interconnected VoIP and its relationship to state law, then the FCC should use its existing authority to solve the problem or Congress should make any necessary statutory fixes.

The question presented to us is rather narrow: whether the federal Communications Act categorizes net protocol conversions in interconnected VoIP as an information service. I conclude it does not. I also agree with the FCC that none of its prior orders purport to decide or should be read to definitively resolve the regulatory classification at issue here. Thus, I would reverse the district court's finding of preemption.

⁷ The term "IP-enabled voice service" in these statutes refers to interconnected VoIP. *See* 47 U.S.C. § 615b(8) (set out first).

⁸ The term "advanced communications" includes interconnected VoIP. *See* 47 U.S.C. § 153(1).

**UNITED STATES DISTRICT COURT
DISTRICT OF MINNESOTA**

Charter Advanced Services (MN),
LLC, and Charter Advanced
Services VIII (MN), LLC,
Plaintiffs,

v.

Nancy Lange, in her official
capacity as Chair of the
Minnesota Public Utilities
Commission, et al.,
Defendants.

Case No. 15-cv-3935
(SRN/KMM).

**MEMORANDUM
OPINION AND
ORDER**

Adam G. Unikowsky, David A. Handzo, Leah J. Tulin,
Luke Platzer, Jenner & Block LLP, 1099 New York Av-
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Birrell Schupp, LLP, 333 South Seventh Street, Suite
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SUSAN RICHARD NELSON, United States District
Judge.

I. INTRODUCTION

Before the Court are the parties' cross-motions for summary judgment [Doc. Nos. 75, 81], and Plaintiffs' Motion to Exclude the Opinions of Defendants' Expert Robert Loubé [Doc. No. 91]. For the reasons stated herein, the Court grants Plaintiffs' summary judgment motion—Defendants' motion is correspondingly denied. Because the Court concludes that no issues of material fact exist so as to preclude summary judgment even if Defendants' expert's opinions are considered, the Court denies Plaintiffs' *Daubert* motion as moot.

II. BACKGROUND

A. Factual History

Plaintiffs Charter Advanced Services (MN), LLC and Charter Advanced Services VIII (MN), LLC (collectively, "Charter Advanced") are subsidiaries of Charter Communications, Inc. ("Charter"), a national communications company that provides services to residential and business customers—such as cable video, broadband internet access, and voice communications – through its affiliates. (*See* Compl. [Doc. No. 1] ¶¶ 9, 17; Pls.' Statement of Undisputed Material Facts [Doc. No. 84] ("SUF") ¶¶ 1, 2.) Defendant Nancy Lange¹

¹ Beverly Jones Heydinger, the original lead defendant in this case, retired from her position on January 2, 2017, and has been replaced as chair of the Minnesota Public Utilities Commission by Nancy Lange. (*See* Mar. 1, 2017 Notice of Substitution of Party [Doc. No. 133].) Pursuant to Federal Rule of Civil Procedure

is the Chair of the Minnesota Public Utilities Commission (“MPUC”), and is sued in her official capacity. (Defendants Dan Lipschultz, John Tuma, Matthew Schuerger, and Katie Sieben are Commissioners of the MPUC, and are also sued in their official capacities.² (See Compl. ¶¶ 10-14.)

One of the features Charter Advanced offers its customers is real-time, two-way voice calling, which it currently markets as “Spectrum Voice.”³ (See SUF ¶ 2.) Charter Advanced provides this feature using Voice over Internet Protocol (“VoIP”) technology, which transmits voice signals via a broadband internet connection as Internet Protocol (“IP”) data packets. (See *id.* ¶¶ 4-9.) In contrast, traditional telephone networks (commonly known as the “public switched telephone network” or “PSTN”) provide voice telephony services using “circuit switching” technology, in which a dedicated pathway is established over the line for the duration of a call. (*Id.* ¶ 15.) To route multiple calls over the same PSTN, traditional telephone providers use a technique known as Time Division Multiplexing (“TDM”). (*Id.* ¶ 16.)

To effect transmission of voice signals as IP data packets, Charter Advanced provides its Spectrum

25(d), Heydinger’s replacement as a commissioner—Katie Sieben—automatically substitutes as a defendant in this matter.

² Throughout this Order, Defendants will be referred to interchangeably as either “Defendants” or “MPUC.”

³ Previous orders of this Court have variously referred to what is now known as Spectrum Voice as “Charter Phone” or “VoIP service.”

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Voice subscribers with a device known as an embedded Multimedia Terminal Adapter (“eMTA”). (*Id.* ¶ 10.) The eMTA is housed in the same device as the cable modem that provides access generally to Charter’s broadband internet service. (*Id.* ¶ 11.) The eMTA alters the format of voice calls between an analog electrical signal—as transmitted by the customer’s handset—and the IP data packets transmitted over Charter Advanced’s cable network. (*Id.* ¶ 12-14.) When a Charter Advanced customer calls or receives a call from a subscriber of a traditional telecommunications carrier, the call must be converted between IP and TDM—a process commonly referred to as “protocol conversion.” (*See id.* ¶ 20; Compl. ¶ 21.) Because it offers this capability to interact seamlessly with PSTN networks, Spectrum Voice is an “interconnected” VoIP service. Although not all Spectrum Voice calls involve protocol conversion, the majority of Charter Advanced’s voice traffic in Minnesota currently does so. (SUF ¶ 23.)

In addition to providing voice transmission, Spectrum Voice has the capability to provide customers with several additional communications features. These include an online web portal (“Voice Online Manager”) that allows customers to access voicemails as digital audio files, convert voicemails to text, and forward them via email. (*Id.* ¶ 26.) Voice Online Manager also offers the ability to review and export call logs, maintain lists of contacts associated with call logs and voicemails, and direct numerous calling features, such as specifying a “backup phone” that will ring in

the event of an outage, “simultaneous ring” that will cause incoming calls to ring numerous phone numbers at once, call forwarding, selective call blocking, etc. (*Id.*) Spectrum Voice can also send caller ID information to cable set-top boxes, allowing subscribers with Charter cable video services to display call information on their televisions. (*Id.* ¶ 27.) Beyond these and other current features, Charter Advanced’s IP infrastructure makes it possible to add new features to Spectrum Voice through software and network equipment changes. (*Id.* ¶ 27.) Anticipated new features include a “softphone” feature—allowing Spectrum Voice subscribers to access calling features through a tablet or smartphone app—and a feature designed to identify and block unwanted “robo” calls by simultaneously routing incoming calls to a system that queries dynamic internet-connected databases of known robocalling numbers, terminating calls if it finds a match. (*Id.* ¶ 35.)

Charter Advanced provides every Spectrum Voice subscriber with access to all current additional communication features. (*Id.* ¶ 37.) Although subscribers can opt not to activate or utilized certain features, and may obtain the voice calling aspect of Spectrum Voice without its other features, Charter Advanced would need to have its personnel deactivate those features manually. (*Id.* ¶¶ 38, 39.) Very few customers request that Charter Advanced do so. (*Id.* ¶ 39.) Further, because Charter Advanced must activate a broadband connection to a residence or business in order to implement Spectrum Voice, it is not marketed as a

standalone offering, but as a service option for customers who subscribe to Charter’s broadband internet and cable television services. Although a customer could request Spectrum Voice without internet or cable, and Charter Advanced would supply it, such requests are “exceedingly rare.” (*Id.* ¶¶ 40-42.)

B. Procedural History

Prior to March 2013, Charter offered VoIP services in Minnesota through two affiliates—Charter Fiberlink CCO, LLC and Charter Fiberlink CC VIII, LLC (collectively, “Charter Fiberlink”). (Comp. ¶ 26.) In March 2013, Charter Fiberlink assigned its retail voice customers to the newly-established Charter Advanced. (*Id.* ¶ 27.) The frank purpose behind the assignment was to limit the reach of state regulation, thereby enhancing Charter’s market competitiveness. (*See* Tweeten Aff. [Doc. No. 78], Ex. 9 (“Moore Dep.”) at 25:3-6, 27:11-19.) Charter Fiberlink notified its subscribers in writing of the change a month ahead of time and advised them that they could accept the revised terms by continuing their service. (Compl. ¶ 27.)

The Minnesota Department of Commerce (“MDOC”) responded to Charter’s realignment on September 26, 2014, by filing a complaint with the MPUC. (*Id.* ¶ 28.) The complaint raised fifteen separate allegations, including that Charter Advanced was in violation of several Minnesota statutes. (*See* Tweeten Aff., Ex. 1 (“MDOC Compl.”) at 13-14.) Charter Advanced responded, in part, by arguing that state regulation of

Spectrum Voice is preempted by federal law. (*See* Tweeten Aff., Ex. 2 (“MPUC Order”) at 2.) The MPUC issued an order on July 28, 2015, finding that state regulation is not preempted. (*See generally id.*) It ordered Charter Advanced to submit within thirty days a proposed plan for compliance with applicable Minnesota rules and regulations. (*See id.* at 15.) A final order to that effect was issued on September 24, 2015. (Compl. ¶ 29.)

Charter Advanced responded to the MPUC’s decision by instituting the present action. Its Complaint seeks declaratory relief that state regulation of Spectrum Voice is preempted by federal law, and injunctive relief prohibiting Defendants from seeking to enforce that regulation of its service. (*See* Compl. ¶¶ 36-42.) Defendants moved to dismiss, arguing that Charter Advanced’s VoIP service is a “telecommunications service” for purposes of the Telecommunications Act of 1996, and therefore subject to dual state and federal regulation. *See Charter Advanced Servs. (MN), LLC v. Heydinger*, 15-cv-3935 (SRN/KMM), 2016 WL 3661136, at *2 (D. Minn. July 5, 2016).

On referral from this Court, United States Magistrate Judge Hildy Bowbeer issued a Report and Recommendation (“R & R”) recommending that Defendants’ motion be denied. (*See generally* R & R [Doc. No. 46].) The R & R concluded that Defendants had not established, as a matter of law, that Spectrum Voice was not an “information service” for which state regulation is preempted. (*See id.* at 44.) The MPUC timely objected, and on independent reconsideration this

Court overruled those objections and adopted the R & R. *See generally Charter Advanced*, 2016 WL 3661136. In addition to ruling on the legal relevance of several orders of the Federal Communications Commission (“FCC”) and federal courts, the importance of which will become relevant as Defendants’ current arguments are considered, the Court narrowly framed the issue for summary judgment: whether Spectrum Voice is a telecommunications service or an information service for purposes of the Telecommunications Act of 1996. *See id.* at *5. If the former, regulation by the MPUC is permissible, if the latter, it is preempted and impermissible. The parties having completed discovery and cross-moved under Federal Rule of Civil Procedure 56, that issue is now ripe for resolution.

III. DISCUSSION

A. Standard of Review

1. Summary Judgment Standard

Summary judgment is appropriate if “the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a). A fact is “material” only if it may affect the outcome of the lawsuit. *TCF Nat’l Bank v. Mkt. Intelligence, Inc.*, 812 F.3d 701, 707 (8th Cir. 2016). Likewise, an issue of material fact is “genuine” only if “the evidence is such that a reasonable jury could return a verdict for the nonmoving party.” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). The moving party bears the burden of

establishing a lack of genuine issue of fact, *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986), and the Court must view the evidence and any reasonable inferences in the light most favorable to the nonmoving party. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986). In responding to a motion for summary judgment, however, the nonmoving party may not rest on mere allegations or denials, but must “demonstrate on the record the existence of specific facts which create a genuine issue for trial.” *Krenik v. Cty. of Le Sueur*, 47 F.3d 953, 957 (8th Cir. 1995).

2. Preemption and the Telecommunications Act of 1996

“When the Federal Government acts within the authority it possesses under the Constitution, it is empowered to pre-empt state laws to the extent it is believed that such action is necessary to achieve its purposes.” *City of New York v. F.C.C.*, 486 U.S. 57, 63 (1988). Preemptive laws and regulations are given effect by the Supremacy Clause of the Constitution. *See id.* (citing U.S. Const. art. VI, cl. 2.). While the Supreme Court has delineated several instances in which preemption may arise, of particular relevance here is its conclusion that federal agencies acting pursuant to their congressionally delegated authority may preempt state regulation. *Louisiana Pub. Serv. Comm’n v. F.C.C.*, 476 U.S. 355, 369 (1986). As this Court recognized in its Motion to Dismiss Order, there “is simply no doubt” that the F.C.C. has this general authority.

See Charter Advanced, 2016 WL 3661136, at *3 (citing 47 U.S.C. § 201(b)).

The fount of regulatory authority, in this matter, is the Telecommunications Act of 1996. By its enactment, Congress “unquestionably” took “the regulation of local telecommunications competition away from the States” with respect to matters covered by the Act. *AT & T Corp. v. Iowa Util. Bd.*, 525 U.S. 366, 378 n.6 (1999). Of particular importance here, the Act broadly divides communication services into two main categories: “telecommunications services,” and “information services.” *See* 47 U.S.C. § 153; *see also Nat’l Cable & Telecomms. Ass’n v. Brand X Internet Servs.*, 545 U.S. 967, 975-78 (2005). Under the statutory structure, a telecommunications service is “the offering of telecommunications⁴ for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.” *Id.* § 153(53). An information service, by contrast, is “the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, . . . but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service.” *Id.* § 153(24). As this Court has

⁴ The term “telecommunications” is defined as “the transmission, between or among points specified by the user, of information of the user’s choosing, without change in the form or content of the information as sent and received.” 47 U.S.C. § 153(50).

previously recognized, telecommunications services are subject to state regulation, while information services are not. *See Charter Advanced*, 2016 WL 3661136, at *3; *Vonage Holdings Corp. v. Minn. Pub. Utils. Comm'n*, 290 F. Supp. 2d 993, 997 (D. Minn. 2003) (“*Vonage I*”); *see also Minn. Pub. Utils. Comm'n v. F.C.C.*, 483 F.3d 570, 580 (8th Cir. 2007) (“*Vonage III*”) (observing that “any regulation of an information service conflicts with the federal policy of nonregulation”).

B. Classifying Spectrum Voice

The Court now turns to address the central question of both parties’ summary judgment motions: is Spectrum Voice properly considered a telecommunications service, or an information service? In support of the latter option, Charter Advanced advances two primary arguments. First, it argues that—in keeping with this Court’s holding in *Vonage I*—because Spectrum Voice provides subscribers with the capability to convert calls between IP and TDM, it accomplishes a “net protocol conversion” that is independently sufficient to render Spectrum Voice an information service. (*See* Pls.’ Mem. in Supp. of Mot for Summ. J. [Doc. No. 83] (“Pls.’ Mem. in Supp.”) at 2.) Second, Charter Advanced contends that because Spectrum Voice’s advanced communications features (such as Voice Online Manager) are closely integrated with its telecommunications aspect, it is an “offering” of an information service with a telecommunications component, rather than an offering of telecommunications alone. (*Id.*)

For the reasons that follow, the Court agrees with Charter Advanced that Spectrum Voice engages in net protocol conversion, and that this feature renders it an “information service” under applicable legal and administrative precedent. Accordingly, the Court need not reach Charter Advanced’s second, “inextricably intertwined,” argument.

1. Net Protocol Conversion

As noted above, Spectrum Voice is able to interface with PSTN networks because it provides protocol conversion functionality—that is, Charter Advanced has the capability to convert voice transmission data between IP and TDM as needed to hand a call off to a PSTN network. At a technical level, Charter Advanced does so by routing calls that must be converted between protocols through a “Media Gateway,” which sits on Charter Advanced’s side of the interconnection point with a TDM-based network. (*See* SUF ¶ 21.) According to Charter Advanced, because information enters its network in one format (either IP or TDM, depending on who originated the call) and leaves in another, its system offers “net” protocol conversion, which the FCC has defined as occurring when “an end-user [can] send information into a network in one protocol and have it exit the network in a different protocol.” *See Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, As Amended*, 11 FCC Rcd. 21905, 21956, ¶ 104 (1996) (“*Non-Accounting Safeguards Order*”).

In support of its argument, Charter Advanced directs the Court’s attention to several district court opinions—including one from this district—which have concluded that VoIP services engaged in net protocol conversion are information services for purposes of telecommunications regulation. The seminal opinion in this regard is the *Vonage I* decision. *See* 290 F. Supp. 2d at 993. In that case, Vonage sought to enjoin the enforcement of an order of the MPUC requiring it to comply with Minnesota telephone regulations. *Id.* at 994. Vonage argued that its VoIP service, which permitted customers to make computer-to-computer and computer-to-phone (although not phone-to-phone) calls from any location where broadband internet was available was an information service because, among other things, it required net protocol conversion in order to interface with PSTN networks. *Id.* at 995, 999.

This Court agreed with Vonage, finding that the need to “act on” the format and protocol of the transferred information, inherent in the IP-TDM interface, rendered the Vonage system an information service for purposes of the Telecommunications Act. As Judge Davis observed:

Examining the statutory language of the Communications Act, the Court concludes that the VoIP service provided by Vonage constitutes an information service because it offers the ‘capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via

telecommunications.’ 47 U.S.C. § 153(20).⁵ The process of transmitting customer calls over the Internet requires Vonage to ‘act on’ the format and protocol of the information. 47 C.F.R. § 64.702(a). For calls originating with one of Vonage’s customers, calls in the VoIP format must be transformed into the format of the PSTN before a POTS [Plain Old Telephone Service] user can receive the call. For calls originating from a POTS user, the process of acting on the format and protocol is reversed. The Court concludes that Vonage’s activities fit within the definition of information services. Vonage’s services are closely tied to the provision of telecommunications services as defined by Congress, the courts and the FCC, but this Court finds that Vonage *uses* telecommunications services, rather than provides them.

Id. at 999 (emphasis original).

The *Vonage I* decision has since formed the basis of several other district court opinions which, having considered facts broadly similar to those presented here, have found that the provision of IP-TDM net protocol conversion is sufficient to render an interconnected VoIP service an information service. *See, e.g., Sw. Bell Tel., L.P. v. Mo. Pub. Serv. Comm’n*, 461 F. Supp. 2d 1055, 1082 (E.D. Mo. 2006), *aff’d*, 530 F.3d 676 (8th Cir. 2008) (“IP-PSTN traffic is an information service . . . because it involves a net protocol conversion from the digitized packets of the IP protocol to the

⁵ Now 47 U.S.C. § 153(24).

TDM technology used on the PSTN.”); *PAETEC Commc’ns, Inc. v. CommPartners, LLC*, No. 08-cv-397 (JR), 2010 WL 1767193, at *3 (D.D.C. Feb. 18, 2010) (adopting the reasoning of *Vonage I* and *Southwestern Bell* in concluding that “transmissions which include net format conversion from VoIP to TDM are information services. . . .”) Charter Advanced further notes that these district court opinions are consistent with the FCC’s *Non-Accounting Safeguards Order*, which determined that “protocol processing services constitute information services under the 1996 Act.” 11 FCC Rcd. at 21956, ¶ 104.

Having reviewed the decisions cited by Charter Advanced and the relevant orders of the FCC, the Court agrees that the logic espoused in *Vonage I* applies equally to the facts of this case.⁶ In this specific

⁶ Although the VoIP service in *Vonage I* offered only computer-to-computer and computer-to-phone calling—not phone-to-phone—this distinction does not materially affect the Court’s analysis here. As Judge Davis observed, while the FCC has tentatively concluded that phone-to-phone IP telephony “bear[s] the characteristics of ‘telecommunication services,’” it defined “phone-to-phone” IP telephony as a service meeting four conditions, including (2) “it does not require the customer to use CPE different from that CPE necessary to place an ordinary touch-tone call (or facsimile transmission) over the public switched telephone network,” and (4) “it transmits customer information without net change in form or content.” See *Vonage I*, 290 F. Supp. 2d at 999-1000 (quoting *In re Federal-State Joint Board on Universal Service*, 13 FCC Rcd. 11,501, 11,543-44, ¶ 88-89 (1998)). For reasons discussed *infra* in Part III.B.2 of this Opinion, Spectrum Voice meets neither condition. *Cf. Vonage I*, 290 F. Supp. 2d at 1000 (finding that Vonage’s VoIP service met neither condition (2) nor condition (4) of the FCC’s test).

factual context, the touchstone of the information services inquiry is whether Spectrum Voice acts on the customer’s information—here a phone call—in such a way as to “transform” that information. *See* 47 U.S.C. § 153(24). By altering the protocol in which that information is transmitted, Charter Advanced’s service clearly does so. This conclusion is in line with the FCC’s determination in the *Non-Accounting Safeguards Order*, which reasoned that “an end-to-end protocol conversion service that enables an end-user to send information into a network in one protocol and have it exit the network in a different protocol clearly ‘transforms’ user information.” 11 FCC Rcd. at 21956, ¶ 104. Moreover, the mere fact that Spectrum Voice calls do not always involve protocol transformation does not render the service any less of an “offering” of information services. At no point does the Telecommunications Act suggest or require that a customer use an information service’s transformative features all the time. Indeed, the very language of the definition of an “information service,”—which merely mandates that there be an “offering of a *capability*” to, *inter alia*, transform information—belies such a conclusion.⁷ *See, e.g., Merriam-Webster’s Collegiate Dictionary* 168 (10th ed. 1999) (defining “capability” in relevant part as “the facility or *potential* for an indicated use or deployment”) (emphasis added).

⁷ Furthermore, the undisputed record indicates that the majority of Minnesota Spectrum Voice traffic involves protocol conversion. *See* SUF ¶ 23.

2. The Telecommunications Exception

The MPUC raises several arguments for why Charter Advanced’s reasoning—as it applies to the net protocol conversion issue—is flawed. Two of these arguments have already been addressed by the Court, and may be briefly disposed of here. The first is that this Court’s decision in *Vonage I* has in some sense been repudiated—either by the Eighth Circuit or by the FCC. (Defs.’ Mem. in Opp’n to Mot. for Summ. J. [Doc. No. 106] (“Defs.’ Mem. in Opp’n”) at 4.) This Court previously rejected this argument at the motion to dismiss stage. *See Charter Advanced*, 2016 WL 3661136, at *1 n.3. While it is true that subsequent decisions in the *Vonage* line of cases chose to classify *Vonage* as an information service based on reasons different from those deployed by the Court in *Vonage I*, they did not in any sense overrule that decision. *See generally In the Matter of Vonage Holdings Corp.*, 19 FCC Rcd. 22404 (2004) (“*Vonage II*”); *Vonage III*, 483 F.3d at 570. Thus, while *Vonage I* does not control the outcome of this case, its vitality remains. On careful consideration, this Court finds its reasoning persuasive.

Relatedly, Defendants contend that the *Non-Accounting Safeguards Order* has been “repudiated.” (Defs.’ Mem. in Supp. of Mot. for Summ. J. [Doc. No. 83] (“Defs.’ Mem. in Supp.”) at 19.) The Court concluded otherwise in its Motion to Dismiss Order, and it sees no reason to reconsider that determination now. *See Charter Advanced*, 2016 WL 3661136, at *9. 16. While the reasoning of that order, as well as the analytical framework it proposed, may well have been

supplemented in the years since its promulgation, there is no reason to conclude it has been rejected by the FCC. Like *Vonage I*, it remains relevant to decision of this matter.

Defendants' other arguments require more careful consideration, but the Court likewise concludes that they do not suffice to render Spectrum Voice a telecommunications service. First among these is the contention that Charter Advanced's service is not an information service because it falls within the "telecommunications system management exception." The Telecommunications Act's definition of "information services" excludes the use of any "capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service." 47 U.S.C. § 153(24). This exception "covers services that may fit within the literal reading of the information services definition, but that are used to facilitate the provision of a basic telecommunications service, without altering the character of that service." *Non-Accounting Safeguards Order*, 11 FCC Rcd. at 21965, ¶ 123.

In the *Non-Accounting Safeguards Order*, the FCC identified three categories of protocol processing services that fall within the telecommunications system management exception: (1) services "involving communications between an end user and the network itself (e.g., for initiation, routing, and termination of calls) rather than between or among users;" (2) protocol processing "in connection with the introduction of a new basic network technology (which requires protocol

conversion to maintain compatibility with existing [Customer Premises Equipment (“CPE”)];” and (3) services “involving internetworking (conversions taking place solely within the carrier’s network to facilitate provision of a basic network service, that result in no net conversion to the end user).” *Id.* at 21957, ¶ 106. Here, Defendants argue that all three categories apply to render Spectrum Voice subject to the telecommunications system management exception.

On review of the record, the Court cannot agree. The first exception fairly plainly does not apply here—the purpose of IP-TDM protocol conversion, at least as applied by Spectrum Voice, is to facilitate communication between users of VoIP and legacy telephony services, not simply to facilitate connection between the user and the network. As to the second exception, Spectrum Voice does not engage in protocol conversion simply to maintain backwards compatibility with old CPE. Indeed, it has no need to do so, as the relevant CPE—the eMTA—is *new* CPE provided to the customer for the express purpose of facilitating transmission in Charter Advanced’s chosen protocol, IP. The net protocol conversion that occurs comes much later in the process, when the Media Gateway acts to provide a bridge to the PSTN. Thus, maintaining compatibility with CPE is not a concern here.

Finally, the “internetworking” exception is equally inapplicable. As this Court explained in its Motion to Dismiss Order, that exception applies where there is no net protocol conversion, such that the only conversion occurs on the carrier’s network, for the carrier’s

convenience. *See Charter Advanced*, 2016 WL 3661136, at *11. Thus, where a call originates in TDM format, is converted by the provider to IP format for transmission across its network, and is converted a final time to TDM before being handed off to another provider, the internetworking exception would apply. *See Petition for Declaratory Ruling that AT & T's Phone-to-Phone IP Telephony Services Are Exempt from Access Charges*, 19 FCC Rcd. 7457, 7457-58, 7465, ¶¶ 1, 12 (2004) (“AT&T Order”).

Defendants argue that Spectrum Voice provides protocol conversion solely on Charter Advanced’s own network, and therefore is subject to the internetworking exception. (*See* Defs.’ Mem. in Opp’n at 16-17.) In their view, phone calls involving Spectrum Voice originate in analog, when the customer places a call, and are then converted by the eMTA—which Defendants characterize as part of Charter Advanced’s network—to IP for transmission across the network. (*Id.*) Because the phone call ultimately ends in analog when it is received by the call recipient, Defendants contend that there is no net protocol conversion to the end user, and thus the only protocol conversion occurs within Charter Advanced’s network (*Id.*)

This argument is flawed for the simple reason that it mischaracterizes the demarcation point of Charter Advanced’s network. Under FCC precedent, CPE is, by definition, outside the carrier’s network. *See, e.g., In re Federal-State Joint Board on Universal Service*, 18 FCC Rcd. 10,958, 10,067, ¶ 18 (2003) (“*Tribal Recon. Order*”) (defining CPE as “equipment that falls on the

customer side of the demarcation point between customer and network facilities”). There is no dispute that the eMTA is CPE. *See Vonage II*, 19 FCC Rcd. at 22,407, ¶ 6 (describing Vonage’s MTA as “specialized CPE”). Because it is at the eMTA that the customer’s voice signal is converted from analog to IP, as a matter of law the customer’s data must *enter* the network in that format.⁸ (*See* SUF ¶ 12.) Thus, any protocol conversion occurring as data leaves Charter Advanced’s network is net protocol conversion, and not subject to the third *Non-Accounting Safeguards Order* exception.

The MPUC also contends that Spectrum Voice falls under the telecommunications system management exception pursuant to the so-called “functional approach” to classification. (Defs.’ Mem. in Supp. at 20.) As described in *In re Federal-State Joint Board on Universal Service*, 13 FCC Rcd. 11,501 (1998) (“*Universal Service Report*”), the functional approach classifies a communications service based on what is functionally offered to the end user. 13 FCC Rcd. 11,501, ¶ 86. At the Motion to Dismiss stage, this Court declined to determine whether the functional approach was a more appropriate framework for analyzing Spectrum Voice than that propounded by the *Non-Accounting Safeguards Order*, instead determining that dismissal

⁸ On this point, the Court notes that although the MPUC characterizes determination of the demarcation point for Charter Advanced’s network as a factual inquiry, it is actually a legal one. (*See* Defs.’ Mem. in Opp’n at 16-17, 17 n.3.) Thus, even taking into consideration the opinions of Defendants’ experts on the subject, there is no factual dispute that would preclude entry of summary judgment here.

was unwarranted under either. *See Charter Advanced*, 2016 WL 3661136, at *9.

For similar reasons, the Court now finds that, even if the functional approach is applied instead of (or in addition to) that set forth above, Spectrum Voice qualifies as an information service. As an initial matter, it is important to recognize that the vast majority of Spectrum Voice customers do not purchase the service as a stand-alone offering. (*See* SUF ¶¶ 40-42.) Rather, for most customers, Spectrum Voice is an add-on feature on top of Charter Advanced’s broadband internet and cable offerings—each of which is routed through the eMTA. (*Id.* at ¶ 11.) To these customers with broadband internet who wish to use their internet connection for voice communication, protocol conversion is a necessity—without it, they would be unable to interface with the PSTN. Thus, what Charter Advanced provides these individuals is the functionality necessary to utilize their internet connection for voice service.⁹ When combined with the provisioning of enhanced functionality (e.g., Voice Online Manager), what is “functionally offered” to the consumer is an information service.

At a more granular level, the MPUC contends that the FCC’s recent finding that various features

⁹ The fact that Charter Advanced may not specifically market Spectrum Voice’s protocol conversion functionality does not, in this Court’s view, affect the functional analysis. Rather, it is sufficient that Charter Advanced makes clear that its offering gives customers the ability to use their internet connection to talk to anyone with a phone connection.

provided in tandem with broadband internet service, including domain name service (“DNS”) and caching, “fit squarely within the telecommunications systems management exception to the definition of an ‘information service,’” mandates a similar result here. See *Protecting and Promoting the Open Internet*, 30 FCC Rcd. 5601, 5758, ¶ 356 (2015) (“*Open Internet Order*”). The Court initially rebuffed this argument at the motion to dismiss stage, concluding that “there has been no determination that Charter’s additional capabilities are analogous to DNS and caching.” *Charter Advanced*, 2016 WL 3661136, at *12.

On this more developed record, the Court finds that the *Open Internet Order* does not mandate the applicability of the telecommunications system management exception to Spectrum Voice. At bottom, the FCC determined that caching and DNS were subject to the exception because they were “simply used to facilitate the transmission of information so that users can access other services.” *Open Internet Order*, 30 FCC Rcd. at 5770, ¶ 372. The main benefit of those particular functions was enhanced network efficiency. See *id.* at 5767, ¶ 368. By contrast, the purpose of IP-TDM protocol conversion is not to enhance the efficient operation of Charter Advanced’s network, but rather to allow consumers to bridge *different* networks. That function is critical to Spectrum Voice’s operation, and the difference it entails is sufficient to vitiate any relevant similarities between the factual considerations in the *Open Internet Order* and the matter before the Court today.

IV. CONCLUSION

For the above reasons, the Court concludes that Charter Advanced's Spectrum Voice offering in an "information service," because inherent in its operation is the ability to engage in protocol conversion—thereby "transforming" the customer's information for purposes of the Telecommunications Act of 1996. *See* 47 U.S.C. § 153(24). Accordingly, state regulation of Spectrum Voice is preempted and impermissible. *See Vonage I*, 290 F. Supp. 2d at 997. Because the Court's conclusion that summary judgment is warranted does not rest upon matters testified to by Defendants' expert, Dr. Robert Loube, Charter Advanced's *Daubert* motion need not be addressed, and is accordingly denied as moot.

THEREFORE, IT IS HEREBY ORDERED THAT:

1. Defendants' Motion for Summary Judgment [Doc. No. 75] is **DENIED**;
2. Plaintiffs' Motion for Summary Judgment [Doc. No. 81] is **GRANTED**; and
3. Plaintiffs' Motion to Exclude Opinions of Defendants' Expert Robert Loube [Doc. No. 91] is **DENIED** as moot.

LET JUDGMENT BE ENTERED ACCORDINGLY.

Dated: May 8, 2017

s/Susan Richard Nelson
SUSAN RICHARD NELSON
United States District Judge

BEFORE THE MINNESOTA
PUBLIC UTILITIES COMMISSION

Beverly Jones Heydinger	Chair
Nancy Lange	Commissioner
Dan Lipschultz	Commissioner
John A. Tuma	Commissioner
Betsy Wergin	Commissioner

In the Matter of the	ISSUE DATE:
Complaint of the Minnesota	July 28, 2015
Department of Commerce	DOCKET NO.
Against the Charter	P-6716,5615/C-14-383
Affiliates Regarding	ORDER FINDING
Transfer of Customers	JURISDICTION AND
	REQUIRING
	COMPLIANCE FILING

PROCEDURAL HISTORY

I. The Department's Complaint

On September 26, 2014, the Minnesota Department of Commerce (the Department) filed a complaint against four affiliated telecommunications companies referred to herein as "Charter" or "the Company." Those companies are Charter Fiberlink CCO, LLC; Charter Fiberlink CC VIII, LLC; Charter Advanced Services (MN), LLC; and Charter Advanced Services VIII (MN), LLC.

All four companies provide fixed, interconnected VoIP (Voice over Internet Protocol) service, which – at least as provided by these companies – is essentially indistinguishable from conventional telephone service. The major difference is that, with VoIP, the voice signal is

transmitted using packet switching with Internet protocols rather than circuit switching.

The Department alleged that the two Charter Fiberlink companies, which hold Minnesota certificates of authority to provide intrastate telephone services, had transferred all their residential customers to the two Charter Advanced Services companies, which do not hold Minnesota certificates of authority, and had done so without Commission authorization or notice to customers.

The Department claimed that these transfers – and the service arrangements resulting from them – violated numerous provisions of Minnesota’s telecommunications statute and rules. The alleged violations include, among others, (1) slamming and loading, (2) operating without a certificate of authority, (3) acquiring another company’s property without permission, (4) withdrawing from a service territory without notice to the Commission or customers, and (5) failure to collect and remit surcharges to fund assistance programs for communication-impaired and low-income Minnesotans.¹

The Department requested that the Commission find that Charter had knowingly and intentionally violated the statutes and rules cited in the complaint and require the Company to bring its service into compliance with the applicable statutes, rules, and Commission orders.

¹ Telecommunications Access Minnesota (TAM) and Telephone Assistance Program (TAP).

II. Charter's Initial Response

On October 22, 2014, Charter filed a response to the complaint. Charter argued that the Commission had no subject-matter jurisdiction over the complaint because the Federal Communications Commission (FCC) has preempted state regulation of VoIP services, the service category into which all Charter's services fall. Similarly, Charter argued that it had committed none of the statutory or rule violations alleged in the complaint, because none of the statutes or rules at issue applied to Charter.

III. The Commission's Order Requiring Answer to Complaint and Setting Timelines

On November 18, 2014, the Commission issued its Order Requiring Answer to Complaint and Setting Timelines. The Commission took jurisdiction over the complaint, found that there were reasonable grounds to investigate the Department's claims, and directed Charter to file an answer within 30 days. The Commission also established timelines for parties to comment on the answer.

With regard to the jurisdictional issue raised by Charter, the Commission concluded that neither the FCC nor the Eighth Circuit Court of Appeals had found state regulation of fixed VoIP service to be preempted. However, the Commission acknowledged that the issue had not been fully briefed and took jurisdiction "until such time as it has been demonstrated that jurisdiction over the matter is lacking."

IV. Charter's Answer

In its answer, filed December 18, 2014, Charter continued to assert that state regulation of interconnected VoIP service is preempted by federal law and FCC decisions. In addition, Charter argued that, federal preemption aside, Minnesota law does not grant this Commission authority over VoIP because VoIP is not “telephone service.”

Charter responded to the factual allegations in the Department's complaint, asserted several affirmative defenses, and requested that the Commission refer the case to the Office of Administrative Hearings for a contested-case proceeding to resolve the factual issues raised by the Department's complaint.

V. Subsequent Filings and Proceedings

From January 16 to February 2, 2015, the following parties filed comments or reply comments:

- Office of the Attorney General – Residential Utilities and Antitrust Division (the OAG),
- The Department,
- Charter,
- The Commission of Deaf, DeafBlind and Hard of Hearing Minnesotans,²

² This governor-appointed commission advocates on behalf of the 20 percent of Minnesotans who are deaf, deafblind, or hard of hearing.

- The Legal Services Advocacy Project,³ and
- The Minnesota Community Action Partnership.⁴

With the exception of Charter, these parties all urged the Commission to exercise regulatory authority over Charter's VoIP service.

On May 6, 2015, the Commission heard oral argument from the parties and, on May 8, met to consider the matter.

FINDINGS AND CONCLUSIONS

I. Summary of Commission Action

For the reasons set forth below, the Commission finds that Charter's VoIP service constitutes local telephone service subject to the Commission's authority under Minn. Stat. ch. 237 and related rules. Moreover, the Commission finds that the FCC has not preempted state regulation of the fixed, interconnected VoIP service provided by Charter.

Accordingly, the Commission orders Charter to make a compliance filing (1) explaining how it intends to comply with this order and (2) providing a draft notice to

³ The Legal Services Advocacy Project, a statewide division of Mid-Minnesota Legal Aid, represents the interests of low-income Minnesotans through legislative and administrative advocacy.

⁴ Minnesota Community Action Partnership is a statewide advocacy organization whose member agencies provide a range of services to families in need.

its customers informing them that Charter provides a regulated telephone service and outlining the customer protections provided by law.

II. Factual Background

A. Traditional Telephone Service

Traditional telephone networks – historically referred to as the “public switched telephone network” or “PSTN” – rely on two key technologies to complete voice calls. The first of these, circuit switching, establishes a dedicated pathway between the caller and the recipient for the duration of a call. The second technology, time-division multiplexing (TDM), allows multiple circuit-switched calls to be routed over the same network simultaneously.

B. Voice over Internet Protocol (VoIP)

Recent years have seen increasing use of packet-switching rather than circuit-switching technology to deliver a voice calling service similar to that offered by traditional telephone companies. This newer voice service is known as “Voice over Internet Protocol” (VoIP).

In a VoIP transmission, the analog signal from the caller’s handset is “packetized” – converted into small packets containing both digitized voice data and “header” information, including the sender, the destination, and the packet’s relationship to the other packets that make up the transmission. Rather than traveling to the recipient through a dedicated path as

in a circuit-switched network, the individual packets of a VoIP call are independently routed according to the recipient address in the packet header. This packetized transmission of voice calls generally allows for more efficient network usage than the more traditional circuit-switched transmission.

C. Charter's VoIP Service

Charter's VoIP service is "fixed," meaning that customers only receive service in one location, typically their home. The "fixed" label distinguishes Charter's offering from the nomadic VoIP services offered by other companies, which allow customers to use a computer to place and receive phone calls at any location with broadband Internet access.

Charter's service is also an "interconnected" VoIP service, which means that its customers can engage in two-way voice calling not only with other Charter VoIP users but also with all telephone-service customers over the public switched telephone network. When a Charter customer places a call to a recipient on the public switched telephone network, Charter performs a "protocol conversion," changing VoIP traffic to TDM format before passing it on to a circuit-switched carrier. The reverse conversion (TDM to IP) occurs with transmissions passing from the PSTN to Charter's

network.⁵ This protocol conversion is invisible to the end user.

To a customer, the VoIP service offered by Charter is essentially indistinguishable from traditional phone service. The service allows customers to place calls from their home using a traditional touch-tone phone to recipients anywhere on the public switched telephone network.⁶ As acknowledged by Charter, calls using Charter's VoIP service are placed using traditional phone numbers assigned by the North American Numbering Plan. The service uses a customer's "existing phone wires, phones, and wall jacks."⁷ Moreover, Charter's VoIP service "does not require an Internet connection."⁸ The service "uses Internet protocol for transporting calls," but those "calls never touch the public Internet."⁹ According to Charter, "[t]he difference between Charter Phone [Charter's VoIP service] and the phone companies' traditional wire line service is that Charter takes advantage of the latest technology, which allows [Charter] to deliver crystal-clear calls and advanced calling features."¹⁰

⁵ Charter clarified at hearing that some calls between Charter customers do not require this protocol conversion.

⁶ See Department's Complaint, Attachment E at 4 ("Customers with touch-tone phones will not need to purchase new equipment to use Charter Phone service.").

⁷ *Id.*

⁸ *Id.* at 6.

⁹ *Id.*

¹⁰ *Id.*

III. Charter’s VoIP service is local telephone service, over which the Commission has jurisdiction under state law.

A. Introduction

Telecommunications services in Minnesota are governed by Minnesota Statutes chapter 237, referred to herein as Minnesota’s telecommunications statute. This statute gives the Commission exclusive authority over the provision of local telephone service: “[T]he commission has the exclusive authority . . . to . . . authorize any person to construct telephone lines or exchanges or to otherwise furnish local service to subscribers in any municipality of this state, and to prescribe the terms and conditions upon which construction or service delivery may be carried on.”¹¹

“Local service” is defined by rules promulgated under this statute as “dial tone, access to the public switched network, and any related services provided in conjunction with dial tone and access.”¹²

B. Positions of the Parties

1. Charter

Charter asserted that its interconnected VoIP service is not telephone service regulated by Minnesota law. The Company stated that the term “telephone service” is not defined in the statute and argued that the Legislature did not intend the phrase to encompass VoIP,

¹¹ Minn. Stat. § 237.16, subd. 1(a).

¹² Minn. R. § 7812.0100, subp. 33.

a technology that was unknown in 1915, when the telecommunications statute was enacted.

Charter pointed to two occasions when the Minnesota Legislature amended other statutes to specifically refer to “packet-based” or “voice over Internet protocol” service and argued that these actions suggest that the Minnesota Legislature did not intend “telephone service” to encompass interconnected VoIP.

In 2005, the Legislature amended a statute requiring telecommunications service providers to offer toll-free 911 service, and to assess fees to support that service, by specifying that these requirements applied to both “switched” and “packet-based” providers.¹³ And in 2008, it amended a statute listing the transactions subject to sales tax, which include “the furnishing for a consideration of telecommunications services.”¹⁴ The Legislature expanded the definition of “telecommunications services” to include

transmission, conveyance, or routing in which computer processing applications are used to act on the form, code, or protocol of the content for purposes of transmission, conveyance, or routing, without regard to whether the service is referred to as *voice over Internet protocol* services or is classified by the Federal

¹³ 2005 Minn. Laws ch. 136, art. 10, §§ 7, 12 (amending Minn. Stat. §§ 403.025, subd. 3 and 403.11, subd. 1).

¹⁴ Minn. Stat. § 297A.61, subd. 3(i).

Communications Commission as enhanced or value added.¹⁵

Charter asserted that these actions would not have been necessary if VoIP were already regulated as a telephone service.

Finally, Charter argued that the Commission must consider the “substantive evils” that the Legislature sought to remedy through the telecommunications statute in deciding whether to classify fixed VoIP as a telephone service.

In support of its argument, Charter cited *Minnesota Microwave, Inc. v. Public Service Commission*, a Minnesota Supreme Court decision from 1971.¹⁶ In that case, this Commission’s predecessor agency asserted jurisdiction over a unidirectional transmission system intended to transmit educational television materials from the Minneapolis campus of the University of Minnesota to terminals in Rochester.

The Supreme Court held that the system did not provide “telephone service” because it did not permit two-way communication. The Court further observed that the system did not threaten the “usual monopolistic evils” that the Legislature sought to alleviate through the telecommunications statute, such as discriminatory and excessive rates, undercapitalization, and in-different service.

¹⁵ 2008 Minn. Laws ch. 154, art. 12, § 9 (amending Minn. Stat. § 297A.61, subd. 24(b)) (emphasis added).

¹⁶ 190 N.W.2d 661.

Charter argued that no monopolistic evils exist in this case, since the Company competes with traditional wireline telephone service, mobile phones, nomadic VoIP, and many other Internet-based services.

2. The Department

The Department maintained that Charter offers “local service” under Minn. Stat. § 237.035. The agency stated that Minnesota law is agnostic as to the technology used to furnish ordinary local telephone service and argued that the Legislature’s failure to expressly grant the Commission jurisdiction over “interconnected VoIP” does not mean that no such jurisdiction exists.

The Department further argued that the Legislature’s decision to specifically address VoIP service in other contexts did not require an inference that it intended not to regulate VoIP in the telecommunications context. The agency pointed out that the Minnesota Department of Revenue already considered VoIP service a telecommunications service before the 2008 amendment expressly identified it as such, and suggested that the amendment had not substantively changed the statute.¹⁷

Finally, the Department argued that, even though Charter is not a monopoly, there are nonetheless important policy reasons to enforce Minnesota’s telecommunications statute against the Company. Failure to

¹⁷ See April 13, 2009 modified revenue notice #05-03, filed in this docket as a Department hearing exhibit on May 7, 2015.

enforce the statute would harm both Charter's customers, who would be deprived of numerous consumer protections, and other telecommunications carriers, who would be deprived of the ability to compete with Charter on a level playing field.

The Department concluded that, so long as Charter chooses to sell what is, essentially, a voice transmission service functionally indistinguishable from other ordinary wireline phone service, using Minnesota's public telecommunications network, Charter should abide by the same rules of the road as other carriers and subscribers who provide and pay for that network.

3. The Commission of Deaf, DeafBlind, and Hard of Hearing Minnesotans

The Commission of Deaf, DeafBlind, and Hard of Hearing Minnesotans expressed concern that Charter's failure to pay into the Telecommunications Access Minnesota (TAM) fund would impair the state's ability to provide universal service to its constituents. It argued that a telephone is a telephone regardless of the technology used to transmit the data, and urged this Commission to regulate VoIP providers.

C. Commission Action

The Commission concurs with the Department that Charter provides "local service" subject to the Commission's jurisdiction under Minnesota law. At hearing, Charter confirmed that its VoIP service provides

subscribers with dial tone and access to the public switched telephone network. Charter's service thus falls squarely within the definition of "local service" set forth in the Commission's rules implementing Minnesota's telecommunications statute.¹⁸

Charter asserts that packet-switched services such as VoIP were not within the Legislature's contemplation. This assertion is simply wrong. The Legislature has amended Minnesota's telecommunications statute numerous times since its enactment, and in particular, since the passage of the federal Telecommunications Act of 1996. Moreover, the Commission's rules adopted under this statute were promulgated after passage of the Act. Thus, Minnesota's telecommunications regulations are neither antiquated nor irrelevant to the post-Telecom Act environment in which this Commission operates.

Tellingly, no laws have been enacted, nor any rules promulgated, that establish different levels of Commission authority based on the technology or protocol used to deliver a service. To the contrary, the statute directs the Commission to exercise its authority consistent with goals that include "encouraging fair and reasonable competition for local exchange telephone service in a competitively neutral regulatory manner."¹⁹

¹⁸ Minn. R. 7812.0100, subp. 33.

¹⁹ Minn. Stat. § 237.011(4).

Charter, in essence, takes the position that the Legislature intended to exempt its wireline local service from the regulations that apply to its fixed wireline competitors based on the technology Charter uses to deliver its service. That position cannot be reconciled with the legislative mandate to regulate consistent with the principle of competitive neutrality. Charter's VoIP service, by Charter's own account, provides dial tone and access to the public switched network. As such, it falls expressly within the definition of local telephone service under Minnesota law and there are no statutory or rule provisions suggesting otherwise.

For the foregoing reasons, the Commission finds that Charter provides "local service" under Minn. Stat. § 237.16.

IV. Federal law does not preempt the Commission's exercise of authority over Charter's VoIP service.

A. Introduction

The federal Communications Act, as amended by the Telecommunications Act of 1996, establishes two categories of service relevant to this case: telecommunications services and information services. The Act subjects telecommunications services to mandatory common-carrier regulation but leaves information services largely unregulated.

The Act defines "telecommunications" as "the transmission, between or among points specified by the user,

of information of the user's choosing, without change in the form or content of the information."²⁰ The Act defines "telecommunications service," in turn, as "the offering of telecommunications for a fee directly to the public."²¹

"Information service" means "the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications."²² However, when such a capability is used "for the management, control, or operation of a telecommunications system or the management of a telecommunications service," it is not considered an information service.²³

The FCC has not addressed whether the service provided by Charter – fixed, interconnected VoIP – is a telecommunications service or an information service. Instead, the FCC has only preempted state regulation of *nomadic* VoIP service to the extent it is impossible or impractical to separate the intrastate and interstate components of that type of VoIP service. This rationale is recognized as the "impossibility exception," and it was the basis upon which the FCC found, and the Eighth Circuit affirmed, preemption of this Commission's

²⁰ 47 U.S.C. § 153(50) (2014).

²¹ *Id.* § 153(53).

²² *Id.* § 153(24).

²³ *Id.* The latter provision is commonly referred to as the "telecommunications management exception."

regulatory authority over Vonage Holdings Corporation's nomadic VoIP service.²⁴

The *Vonage* decision involved a 2003 Commission Order in which the Commission asserted jurisdiction over Vonage's nomadic VoIP service. Like Charter's service here, Vonage's service allowed users to place calls to the public switched telephone network using IP-to-TDM protocol conversion. However, unlike Charter's service, Vonage's service required that subscribers have broadband Internet access (so-called "over-the-top" VoIP). Moreover, unlike Charter's service, Vonage's service was fully portable, which meant that Vonage did not know where its users were when using its service.

Initially, the Minnesota Federal District Court concluded that Vonage's service was an information service, in part because it offered the capability to transform information through protocol conversion.²⁵ The FCC, however, declined to reach the classification issue. Instead, it preempted state regulation of nomadic VoIP based on the impossibility of determining which calls were intrastate and which were interstate.²⁶ The Eighth Circuit Court of Appeals affirmed the FCC on

²⁴ See *In re Vonage Holdings Corp. Petition for Declaratory Ruling Concerning an Order of the Minnesota Public Utilities Commission*, Memorandum Opinion and Order, 19 FCC Rcd 22,404 (2004).

²⁵ *Vonage Holdings Corp. v. Minn. Pub. Utils. Comm'n*, 290 F. Supp. 2d 993, 999 (2003) (hereinafter "Vonage I").

²⁶ 19 FCC Rcd at 22,405 ¶ 14.

the same basis, also expressly declining to reach the classification issue.²⁷

Since these *Vonage* decisions more than ten years ago, the FCC has further clarified its view of telecommunications using Internet protocol in its recent *Open Internet Order*, released on March 12 of this year. In that order, the FCC did not rule specifically on the classification of VoIP services. However, the FCC found that broadband Internet access service is a telecommunications service within the meaning of the Act. In so finding, the FCC observed that “the critical distinction between a telecommunications and an information service turns on what the provider is ‘offering.’”²⁸ With respect to the offering of Internet access service, the FCC observed:

Broadband Internet access service may use a variety of protocols to deliver content from one point to another. However, the packet payload (*i.e.*, the content requested or sent by the user) is not altered by the variety of headers that a provider may use to route a given packet. . . . Broadband providers thus move packets from sender to recipient without any change in format or content.²⁹

²⁷ *Minn. Pub. Utils. Comm’n v. FCC*, 483 F.3d 570, 579 (2007) (hereinafter “*Vonage II*”).

²⁸ *In re Protecting and Promoting the Open Internet*, Report and Order on Remand, Declaratory Ruling, and Order, FCC 15-24 ¶ 355 (2015) (hereinafter “*Open Internet Order*”).

²⁹ *Id.* ¶ 362.

Moreover, the FCC found that, “[t]o the extent that broadband Internet access service is offered along with some capabilities that would otherwise fall within the information service definition, they do not turn broadband Internet access service into a functionally integrated information service.”³⁰ The FCC found specifically that “domain name service (DNS) and caching, when provided with broadband Internet access services, fit squarely within the telecommunications systems management exception to the definition of ‘information service.’”³¹

B. The Positions of the Parties

1. Charter

Charter argued that interconnected VoIP is an information service that the Commission is preempted from regulating, for three reasons.

First, Charter argued that interconnected VoIP is an information service because it offers the capability to perform a protocol conversion between IP and TDM. Charter argued that the FCC’s interpretation of the term “information service” supported this reasoning,³²

³⁰ *Id.* ¶ 365.

³¹ *Id.* ¶ 356.

³² See *In re Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as amended*, First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 21,905 at ¶ 104 (1996) (hereinafter “Non-Accounting Safeguards Order”) (concluding that protocol-processing services generally are information services).

and cited several federal district court cases, including *Vonage I*, concluding that interconnected VoIP is an information service on this basis.³³

Second, Charter argued that interconnected VoIP is an information service because its calling features are inextricably intertwined with other, data-processing capabilities. In support of its argument, Charter cited the FCC's 2002 *Internet Over Cable Order*, which found that cable-modem service was an information service because it combined the transmission of data with computer processing, information provision, and computer interactivity.³⁴ Charter stated that it provides numerous information services in conjunction with VoIP, including an online voice-management and voicemail-to-email functionality that converts voicemails to text and provides them to users both as electronic audio files and as text. The Company argued that these

³³ *Sw. Bell Tel., L.P. v. Mo. Pub. Serv. Comm'n*, 461 F. Supp. 2d 1055, 1081–82 (E.D. Mo. 2006); *Vonage I*, 290 F. Supp. 2d at 999; *Paetec Commc'ns, Inc. v. CommPartners, LLC*, No. 08-Civ.-0397 (JR), 2010 WL 1767193, at *2–3 (D.D.C. Feb. 18, 2010); *Vonage Holdings Corp. v. N.Y. State Pub. Serv. Comm'n*, No. 04-Civ.-4306 (DFE), 2004 WL 3398572, at *1 (S.D.N.Y. July 16, 2004).

³⁴ *In re Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities*, Declaratory Ruling and Notice of Proposed Rulemaking, 17 FCC Rcd 4798 (2002). However, the FCC recently reversed course, finding that broadband Internet service is a telecommunications service. *See In re Protecting and Promoting the Open Internet*, Report and Order on Remand, Declaratory Ruling, and Order, FCC 15-24 (2015) (hereinafter "Open Internet Order").

services, in combination with its VoIP service, constitute a single, integrated information service.

Finally, Charter argued that interconnected VoIP is an information service based on its use of stored databases and lookup capabilities to access its users' IP addresses, which constitutes "retrieving" and "utilizing" information via telecommunications under the Act.³⁵

Charter relied on the FCC's conclusion in the *Internet Over Cable Order* that cable internet service was an information service based in part on its use of domain name service (DNS), which links a website's IP address to its human-readable domain name.³⁶ Charter stated that its interconnected VoIP service includes an analogous feature that routes traffic using a database linking IP addresses to ten-digit telephone numbers.

2. The Department and the OAG

The Department and the OAG urged the Commission not to relinquish its authority over fixed VoIP when neither the FCC nor the Eighth Circuit Court of Appeals has found state regulation of fixed VoIP to be preempted. Both parties argued that the Commission should not exempt Charter from complying with important consumer protections and contributing to the state TAM and TAP funds. They maintained that doing

³⁵ 47 U.S.C. § 153(24).

³⁶ 17 FCC Rcd at 4822 ¶ 38. *But see Open Internet Order* ¶ 371 (concluding that DNS falls within the telecommunications management exception to the definition of "information service").

so would give Charter a competitive advantage over other telephone service providers and could prompt other companies to seek a similar exemption.

3. Legal Services Advocacy Project and Minnesota Community Action Partnership

The Legal Services Advocacy Project and the Minnesota Community Action Partnership stated that the TAP and TAM programs enable their clients to fully participate in society and the economy, and to access emergency and other services. They maintained that the responsibility for supporting these programs should be shared among Minnesota telecommunications providers and concurred with the Department and the OAG that the Commission is not preempted from regulating fixed VoIP service.

C. Commission Action

The Commission concurs with the Department, the OAG, and other commenters that federal law does not preempt state regulation of Charter's fixed, interconnected VoIP.

As a preliminary matter, neither the FCC nor any court with jurisdiction in Minnesota has preempted the Commission's authority over the fixed VoIP service that Charter provides in this state. Charter relies heavily on the District Court's *Vonage I* decision to

support its preemption argument. However, that reliance is misplaced for at least two reasons.

First, as the FCC made clear and the Eighth Circuit affirmed, the Commission’s authority over Vonage’s service was preempted based on the nomadic nature of the service, not on its use of protocol conversion. Unlike Vonage’s nomadic service, which could be accessed from anywhere in the world, Charter’s service is a fixed interconnected VoIP offering that is accessed from the customer’s home or business “through regular phone jacks and phones” including “access to 911 emergency services and directory listings.”³⁷ As such, unlike Vonage’s nomadic service, the intrastate and interstate jurisdictional components of Charter’s fixed offering can be identified. Therefore, Charter’s service is not subject to the impossibility exception that caused the FCC to preempt the Commission’s authority over Vonage’s service.

Second, unlike Vonage’s service, Charter’s fixed VoIP offering at issue here does not rely on the Internet as its backbone.³⁸ As the District Court observed in *Vonage I*, “[i]f the end user is connected to the PSTN, the information *transmitted over the Internet* is converted from IP into a format compatible with the PSTN.”³⁹ And as the Court further observed, “[w]hen Vonage’s

³⁷ Department’s Complaint, Attachment E at 6.

³⁸ In describing Vonage’s nomadic VoIP service, the Court in *Vonage I* stated as follows: “At the outset, the Court must note that the backbone of Vonage’s service is the Internet.” *Vonage I* at 997.

³⁹ *Vonage I* at 1000 (emphasis added).

users communicate with other customers in computer-to-computer IP telephony, the two customers are *again using the Internet* to transmit data packets.”⁴⁰ Therefore, the District Court’s decision turned significantly on the fact that Vonage relied upon the public Internet as part of its service offering. In contrast, Charter’s service does not rely on the Internet. In fact, in describing its VoIP service, Charter emphasizes that “Charter Phone is not an Internet phone service” and that, when a customer uses its VoIP service, “calls never touch the public Internet.”⁴¹

Applying the federal Act’s definitions of “telecommunications service” and “information service,” the Commission finds that Charter’s interconnected VoIP service is a telecommunications service over which this Commission has jurisdiction.

An information service constitutes the “offering” of a “capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications.” As the record demonstrates, that is not what Charter is offering to its subscribers. Instead, Charter is offering a transmission service – that is, a telecommunications service – and using protocol conversion to facilitate the provision of that service.

The service offered by Charter has the core characteristics of a telecommunications service. First, there is

⁴⁰ *Id.* (emphasis added).

⁴¹ Department’s Complaint, Attachment E at 4 and 6.

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no dispute that Charter's phone service is a transmission service. Nor is there any dispute that this transmission service offered by Charter allows its customers to use a traditional touchtone phone, dial a traditional phone number, and communicate by voice over the public switched telephone network with a recipient using a traditional phone. Second, there is no dispute that the service transmits information of the user's choosing between points specified by the user. Finally, there is no dispute that the service is framed by sound waves going into a phone on one end and sounds waves coming out on a phone on the other end of the call. Moreover, what one party says on one end of the call is heard precisely as stated on the other end. Accordingly, there is no net change in form or content from the user's standpoint.

For all the foregoing reasons, the Commission concludes that Charter's VoIP service is a telecommunications service.

To the extent Charter uses IP-to-TDM conversion as part of its VoIP service, that protocol conversion does not transform Charter's VoIP service into an information service. Charter uses protocol conversion for the management, control, or operation of its telecommunications system or the management of its telecommunications service, placing it within the telecommunications management exception to the definition of an information service.⁴²

⁴² See 47 U.S.C. § 153(24).

The FCC described that exception in its *Non-Accounting Safeguards Order* as applying to a service that “fall[s] within the literal reading” of the information-service definition but that is used to “facilitate establishment of a basic transmission path over which a telephone call may be completed, without altering the fundamental character of the telephone service.”⁴³ This is precisely what Charter’s protocol conversion does. It facilitates establishment of a transmission path for a voice phone call, without altering VoIP’s fundamental character as a service that offers the ability to place and receive phone-to-phone voice calls over the PSTN.

As Charter itself emphasizes on its website, its VoIP service “uses Internet protocol for transporting calls.”⁴⁴ Charter elaborates that “[t]he difference between Charter Phone and the phone companies’ traditional wire line service is that Charter takes advantage of the latest technology, which *allows [Charter] to deliver crystal-clear calls and advanced calling features.*”⁴⁵

As such, Charter describes the Internet protocol technology associated with its VoIP service not as the service offered to its customers but as the “latest technology” used to “deliver” or “transport” its customers’ calls. Therefore, by its own account, Charter’s packet switching and protocol conversion are not the services offered to customers, but are instead technologies or mechanisms

⁴³ *Non-Accounting Safeguards Order* ¶ 107. See also *id.* ¶ 123.

⁴⁴ Department’s Complaint, Attachment E at 6.

⁴⁵ *Id.* (emphasis added).

used to facilitate the calling or transmission service Charter actually offers to the public.

Moreover, the ancillary services or “advanced calling features,” such as voicemail, that Charter packages with its transmission service do not transform that service from a telecommunications service into an information service. As the U.S. Supreme Court recognized in its *Brand X* decision, a local telephone company cannot escape regulation as a telecommunications carrier simply by packaging its calling service with voicemail or other similar services.⁴⁶ This is because a telephone company that packages voicemail with telephone service offers a “transparent transmission path – telephone service – that transmits information independent of the information-storage capabilities provided by voice mail.”⁴⁷

Finally, the fundamental policy grounds for exempting protocol-processing services from common-carrier regulation do not apply here. The regulatory exemption for protocol-processing services was intended to avoid overburdening small Internet service providers and thereby stifling their ability to offer new, innovative services.⁴⁸ The exemption was not intended to protect

⁴⁶ *Nat’l Cable & Telecomm. Ass’n v. Brand X Internet Servs.*, 545 U.S. 967, 997–98 (2005).

⁴⁷ *Id.* at 998.

⁴⁸ See *Non-Accounting Safeguards Order* ¶ 105 (“Because the market for protocol processing services is highly competitive, such regulation is unnecessary to promote competition, and would likely result in a significant burden to small independent ISPs that provide protocol processing services. Thus, policy considerations

the interests of large cable companies that choose to offer fixed voice transmission services over their extensive networks using the most efficient technology available.

In this case, Charter began offering its fixed VoIP service before it began treating that service as outside the Commission's regulatory authority. So clearly, the Commission's regulatory authority did not stifle Charter's deployment of its service. Moreover, there is no evidence that the Commission's regulatory oversight has stifled, or would stifle, the continuation or expansion of that service.⁴⁹

V. Conclusion

For the foregoing reasons, the Commission finds that Charter's interconnected VoIP service is a telecommunication service and "local service" subject to the Commission's authority under Minn. Stat. ch. 237 and related Commission rules.

support our conclusion that end-to-end protocol processing services are information services.").

⁴⁹ Charter has not filed any complaint or offered any argument alleging that it is adversely affected or unduly burdened by any specific Commission rule. Charter is free to petition the Commission for a variance of any of its rules. And the Commission has authority to vary or waive the application of its rules to the extent that enforcement of any such rules are shown to impose an excessive burden and granting the variance would not adversely affect the public interest or conflict with standards imposed by law. See Minn. R. 7829.3200.

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Charter has to this point maintained that its service falls outside the Commission's authority and has largely declined to participate in any discovery or discussions regarding its compliance with Minnesota telecommunication regulations. Thus, the record does not reflect the extent to which the Company is in compliance with Minnesota law or demonstrate any commitment to future compliance.

To help ensure compliance going forward, the Commission will order Charter to file within 30 days a description of how it will comply with this order. The Commission will also direct the Company to file a draft notice to its customers informing them that Charter provides a regulated telephone service and outlining the customer protections provided by law. The Commission will establish comment periods as set forth in the ordering paragraphs.

ORDER

1. The Commission finds that Charter's interconnected VoIP service is a telecommunication service subject to the Commission's authority under Minn. Stat. ch. 237 and related Commission rules.
2. Charter shall file within 30 days a description of how Charter will comply with this order and a draft notice to its customers informing them that Charter provides a regulated telephone service and outlining the customer protections provided by law.

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3. The parties shall have 30 days to comment on Charter's compliance filing. The Commission authorizes the Executive Secretary to alter the comment periods for good cause.
4. This order shall become effective immediately.

BY ORDER OF
THE COMMISSION

/s/ Janet F. Gonzalez for
Daniel P. Wolf
Executive Secretary

[SEAL]

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**UNITED STATES COURT OF APPEALS
FOR THE EIGHTH CIRCUIT**

No: 17-2290

Charter Advanced Services (MN), LLC and
Charter Advanced Services VIII (MN), LLC
Appellees

v.

Nancy Lange, in her official capacity as Chair of
the Minnesota Public Utilities Commission, et al.
Appellants

Mid-Minnesota Legal Aid, et al.

Amici on Behalf of Appellant(s)

Federal Communications Commission, et al.

Amici on Behalf of Appellee(s)

Appeal from U.S. District Court for the
District of Minnesota – Minneapolis
(0:15-cv-03935-SRN)

ORDER

The petition for rehearing en banc is denied. The petition for rehearing by the panel is also denied.

Chief Judge Smith would grant the petition for rehearing en banc. Judge Benton and Judge Kelly did not

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participate in the consideration or decision of this matter.

December 04, 2018

Order Entered at the Direction of the Court:
Clerk, U.S. Court of Appeals, Eighth Circuit.

/s/ Michael E. Gans
