

**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**

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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 Loube [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 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

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 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."

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 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

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

“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 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

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).

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 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*

⁵ Now 47 U.S.C. § 153(24).

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 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

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).

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).

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 IF*”); *Vonage III*, 483 F.3d at 570. Thus, while *Vonage I* does not control the outcome of this case, its vitality

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

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 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

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.

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 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

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.

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