

STATE OF IOWA
DEPARTMENT OF COMMERCE
UTILITIES BOARD

IN RE: REHABILITATION CENTER OF ALLISON, IOWA, UNITYPOINT CLINIC FAMILY MEDICINE AT HUXLEY, f/k/a HUXLEY FAMILY PHYSICIANS, HANCOCK COUNTY HEALTH SYSTEMS, HELEN ADOLPHSON and CHARLOTTE SKALLERUP, CAROLYN FRAHM, DOUGLAS PALS, SUTHERLAND MERCY MEDICAL CLINIC, HORN MEMORIAL HOSPITAL	DOCKET NOS. FCU-2012-0019, FCU-2013-0004, FCU-2013-0005, FCU-2013-0006, FCU-2013-0007, FCU-2013-0009, FCU-2014-0007, and FCU-2014-0014
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PROPOSED DECISION AND ORDER MAKING RECOMMENDATION TO BOARD

(Issued July 28, 2016)

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I. THE COMPLAINT PROCEEDINGS

A. INFORMAL COMPLAINT PROCEEDINGS AND APPLICABLE IOWA LAW

Beginning in 2012, lowans began contacting the Utilities Board (Board) with complaints regarding telephone calls and, in some cases, facsimile (fax) messages that failed to complete to their intended destinations in rural areas of Iowa.

Consumers reported a variety of problems such as the inability to receive calls from certain telephone numbers, the inability to make calls to certain telephone numbers, the inability to successfully send and receive faxes, long call set-up times, poor call quality, false ringing,¹ dropped calls, and having to dial a telephone number as many as eight to ten times before the call would connect. In one case, the customer’s name and telephone number were not shown on the called party’s caller identification (caller ID) device, and a false name and number were shown instead. In some of the cases, initial investigation was slowed because the customer reporting the problem did not know the identity of the long distance service provider used by the person originating the call. In some cases call failures were difficult to detect because the

¹ "False ringing" describes a situation where a ring tone leads a caller to believe, incorrectly, that the telephone is ringing at the terminating end of the call. The Federal Communications Commission's (FCC) rule prohibiting this practice is found at 47 C.F.R. § 64.2201 and went into effect on January 31, 2014.

consumers did not know they were not receiving phone calls until the calling party told them about the failed attempts.

In most of the complaints filed with the Board, the customers' problems had gone on for months or years. Some of the cases involved failed calls and faxes between medical facilities and hospitals. Sometimes after the customers complained about the problems to their telephone carriers, the problems would be solved for a period of time, but would then recur. In one case, the problems were so persistent that the complaining customer, the Administrator of the Rehabilitation Center of Allison, testified "We lost confidence in the reliability of the telephone system."²

Iowa Code § 476.3(1) (2015) requires public utilities to provide reasonably adequate service at rates and charges in accordance with tariffs filed with the Board. Section 476.3(1) authorizes the Board to investigate the reasonableness of a utility's service or any action on the Board's own motion or in response to a written complaint. The Board's complaint procedures are specified in 199 Iowa Administrative Code (IAC) chapter 6.

Telephone utility service standards are found in 199 IAC 22. Board rule 22.5(1) provides:

Requirement for good engineering practice. The telephone plant of the utility shall be designed, constructed, installed, maintained and operated . . . in accordance with accepted good engineering practice in the communication industry to ensure, as far as reasonably possible,

² Docket No. FCU-2012-0019, *Rehabilitation Center of Allison, Iowa*, Direct Testimony of Ms. Kathy Miller at p. 2 (filed October 30, 2013.)

continuity of service, uniformity in the quality of service furnished, and the safety of persons and property.

Among other things, rule 22.5(2) requires each local exchange utility and alternative operator services company to employ prudent management and engineering practices to ensure that sufficient equipment and adequate personnel are available at all times, including average busy-hour of the busy-season. Rule 22.6(3) requires each telephone utility using its facilities to provide primary service to make all reasonable efforts to prevent interruptions to service and sets timeframes for clearing out-of-service trouble reports.³

The Board's Customer Service staff conducted informal investigations of the complaints. The investigations were conducted pursuant to the Board's authority in Iowa Code § 476.3(1) to investigate the reasonableness of the actions of the telephone service providers involved in the alleged call failures and the complaint procedures in chapter 6 of the Board's administrative rules.

The informal complaint investigations are summarized in the following Board staff memoranda to the undersigned administrative law judge: 1) "Summary of Call Termination Reports (FCU-2012-0019, FCU-2013-0004, FCU-2013-0005, FCU-2013-0006, and FCU-2013-0009) CenturyLink" (June 30, 2015) (CenturyLink 2015 Staff Memo); 2) "Summary of Call Termination Reports – Windstream FCU-2013-0007" (June 30, 2015) (Windstream 2015 Staff Memo); and 3) "Staff's Recommendation for

³ The undersigned notes the Board's chapter 22 rules are currently under review in Docket No. RMU-2015-0002. However, the chapter 22 rules are currently in effect, and at the time the complaints were filed in these cases, the rules were in effect.

Next Steps in Rural Call Completion Dockets” (May 26, 2016), (2016 Staff Memo).

These staff memoranda are being filed in these dockets in the Board’s Electronic Filing System on approximately the same date as the issuance of this proposed decision.

B. FORMAL COMPLAINT PROCEEDINGS

Eight of the complaints became the subject of formal proceedings for further investigation, either at the request of the Consumer Advocate Division of the Iowa Department of Justice (Consumer Advocate), or initiated by the Board on its own motion. The informal complaint files are included in the record of these formal complaint dockets pursuant to 199 IAC 6.7. In each formal complaint case, the Board found reasonable grounds for investigating unanswered questions regarding the precise circumstances of the call completion complaints. The Board was aware that the Federal Communications Commission (FCC) was investigating rural call completion complaints, but found that even as investigation and enforcement measures proceeded at the federal level, it was appropriate to take steps at the state level to respond to the problems that continued to disrupt intrastate long distance calls to rural consumers in Iowa.⁴

The Board assigned the eight formal complaint cases to the undersigned administrative law judge. Six of the cases involve CenturyLink Communications, LLC

⁴ One case, Docket No. FCU-2012-0009, *Complaint of Douglas Pals*, involves a telephone caller who lives in a city in Iowa.

(CenturyLink),⁵ as the originating carrier.⁶ One case involves Windstream Iowa Communications, LLC (Windstream),⁷ as the originating carrier, and one case involves Frontier Communications of America, Inc.⁸ (Frontier), as the originating carrier. The formal complaint proceedings with the originating carrier listed for each case are:

- 1) *In re: Rehabilitation Center of Allison, Iowa*, Docket No. FCU-2012-0019
(CenturyLink);
- 2) *In re: UnityPoint Clinic Family Medicine at Huxley, f/k/a Huxley Family Physicians*, Docket No. FCU-2013-0004 (CenturyLink);
- 3) *In re: Hancock County Health Systems*, Docket No. FCU-2013-0005
(CenturyLink);

⁵ During the pendency of these proceedings, Qwest Communications Company LLC d/b/a CenturyLink QCC underwent an internal reorganization approved by the Iowa Utilities Board in SPU-2014-0002 and received approval of a name change to CenturyLink Communications, LLC in SPU-2014-0008.

⁶ In these cases, CenturyLink, Windstream, and Frontier were the “originating carriers” because they were the calling customers’ long distance telephone voice service providers whose networks provided the initial link or long distance connection beyond the local service facilities that established the intrastate long distance calls using the public switched telephone network. Of relevance to these call completion cases, CenturyLink, Windstream, and Frontier were the carriers who made the initial long distance call path choice for their customers’ long distance telephone calls.

⁷ On February 8, 2016, in Docket No. SPU-2015-0033, the Board issued an “Order Approving Corporate Name Change and Issuing Amended Certificate,” in which the Board acknowledged the corporate name change from Windstream Iowa Communications, Inc., to Windstream Iowa Communications, LLC.

⁸ In a response filed on February 25, 2016, in Docket No. FCU-2014-0014, Frontier stated that “Frontier Communications of Iowa, Inc., is a local exchange carrier that operates only in Iowa. Frontier Communications of America, Inc., is an affiliate company and was the long distance provider for the complainant involved in this docket proceeding.” The Consumer Advocate’s November 4, 2014, request for formal proceeding in this docket referred to Frontier Communications of Iowa, Inc., and subsequent orders have referred to that company. These references should have been to the long distance company, Frontier Communications of America, Inc. See Docket No. FCU-2014-0014, *Complaint of Horn Memorial Hospital*, “Order Regarding Further Procedure,” f/n. 1 (March 17, 2016).

- 4) *In re: Complaints of Helen Adolphson and Charlotte Skallerup*, Docket No. FCU-2013-0006 (CenturyLink);
- 5) *In re: Complaint of Carolyn Frahm*, Docket No. FCU-2013-0007 (Windstream);
- 6) *In re: Complaint of Douglas Pals*, Docket No. FCU-2013-0009 (CenturyLink);
- 7) *In re: Complaint of Sutherland Mercy Medical Clinic*, Docket No. FCU-2014-0007 (CenturyLink); and
- 8) *In re: Complaint of Horn Memorial Hospital*, Docket No. FCU-2014-0014 (Frontier).

Summaries of each case are contained in the 2016 Staff Memo, the CenturyLink 2015 Staff Memo, and the Windstream 2015 Staff Memo.

In these cases, part of the solution for the customers' call completion problems involved the originating long distance carriers changing the intermediate providers used in routing the customers' calls. This was an after-the-fact solution and did nothing to prevent call completion problems from occurring in the first place.

Fairly early in the proceedings it became obvious that the cases needed to be managed differently from traditional formal complaint cases because the problem of rural call completion was a complex and national problem. It appeared that addressing the specifics of each case individually without addressing the larger systemic problems as well would not solve Iowa's call completion problems. These particular cases in Iowa involved complaints that were similar to complaints received

by the FCC and in other states. The focus and purpose of these cases before the Board needed to be on understanding what was causing the call completion problems, finding solutions to the problems, and preventing the problems' occurrence, within the larger context of solving the problems at the national level through the FCC and through industry processes. This was discussed in orders issued in each of the cases, as follows:

[r]ural call completion complaint cases are somewhat unique as compared to other types of complaint cases. The work to be done requires several telephone carriers, the Consumer Advocate, and the customer to work together to learn what caused the problems for the customer, how the problems can be corrected so they will not reoccur, and then taking appropriate actions to correct the problems. At this point, all the telephone carriers who will need to participate in the investigation and correction of the problems may not be known. In addition, as noted by the Federal Communications Commission (FCC) and the Board, rural call completion problems appear to be increasingly common, and finding solutions and preventing such problems in the first place is of particular interest to the FCC and the Board. Therefore, finding solutions in this particular case is considered in this larger context.

Finding solutions may involve appropriate actions by the telephone companies involved so that call completion problems are prevented in the first place. Useful sources of information for appropriate corrective and preventive actions may include telephone carriers whose customers have not experienced call completion problems, or those who have found and implemented effective corrective solutions. Correcting and preventing these problems will require cooperation and creativity. Being a party in this case does not necessarily mean the party did anything wrong.⁹

⁹ *In Re: Complaint of Carolyn Frahm*, "Order Regarding Verizon's Motion for Clarification," Docket No. FCU-2013-0007, issued August 6, 2013.

Because the customers' problems in these cases involved multiple carriers and complex situations, the parties requested, and were granted, relatively long time periods to pursue discovery before further procedural schedules were set. Periodic telephone prehearing conferences were held in each case, during which the parties were required to report on: 1) whether the complaining customers continued to experience call completion problems; 2) if problems continued, the work that was done to correct the problems; and 3) the progress of their investigations. The parties were required to file reports prior to the prehearing conferences that included information on these topics.

In the first case, Docket No. FCU-2012-0019, *Rehabilitation Center of Allison*, after a period of discovery, the parties agreed it would be best to have each party file direct prepared testimony and exhibits, and then to have another prehearing conference before reply testimony was filed.¹⁰ The Consumer Advocate filed public and confidential versions of the direct testimony and exhibits of ten witnesses on October 30, 2013. The Consumer Advocate filed a status report with its testimony. Summaries of the testimony are included in the CenturyLink 2015 Staff Memo. CenturyLink filed the direct testimony and exhibit of one witness on December 13, 2013. Airespring, Inc. (Airespring), filed the direct testimony of one witness on January 22, 2014, and stated it was also relying on the testimony of Ms. Kathy Miller

¹⁰ See Docket No. FCU-2012-0019, *Rehabilitation Center of Allison*, Order Setting Partial Procedural Schedule and Fourth Prehearing Conference, issued September 16, 2013.

that had been filed by the Consumer Advocate.¹¹ Dumont Telephone Company (Dumont) filed public and confidential versions of the direct testimony of one witness on January 23, 2014. Iowa Network Services, Inc., (INS), filed the direct testimony of one witness on January 22, 2014. Detailed summaries of these companies' testimony are included in the CenturyLink 2015 Staff Memo.

After this direct testimony was filed, another telephone prehearing conference was held on January 30, 2014. The parties reported that the Rehabilitation Center of Allison had had no new significant call completion problems and CenturyLink had given the Administrator of the Center a direct line to two CenturyLink employees to call if the Center experienced any problems. At the request of the parties, additional time for discovery was granted in an order issued on February 5, 2014.

In each case except Docket Nos. FCU-2014-0007 and FCU-2014-0014, the undersigned administrative law judge issued orders with procedural schedules requiring the Consumer Advocate to file a report providing the information learned through discovery about what caused the call completion problems, what was done to correct the problems, and what still needed to be done to provide long term solutions to the problems.

¹¹ On February 3, 2014, Airespring filed a motion to withdraw from the case, stating its testimony showed that the Rehabilitation Center of Allison had never been a customer of Airespring for local, long distance, or fax telecommunications services, the Shell Rock Clinic had never been a customer of Airespring for local, long distance, or fax services, and Airespring had never provided any voice services to the Waverly Health Center. The evidence showed Airespring had nothing to do with the problems in this case and had no useful information to provide and the other parties in the case had no objection to Airespring's withdrawal. Therefore, the motion to withdraw was granted in an order issued on February 5, 2014, in Docket No. FCU-2012-0019.

The carriers involved in the cases were required to file proposed effective, preventative, long term solutions to call completion problems experienced by Iowa consumers. The proposed solutions were to include specific actions each company had taken or would take in the future and a proposed timeline for when future actions would occur. The companies could base their proposed solutions on actions they had agreed to perform with the FCC, but they were required to include commitments to the Board as to what the companies would do in Iowa.

In addition, the undersigned administrative law judge recognized that even after proposed solutions to call completion problems have been implemented, an occasional call completion problem may occur. Therefore, the orders required that:

part of the solution that must be proposed and implemented in these cases is the establishment of better procedures, including providing information to customers on how to most effectively report call completion problems, so customers may report and have their call completion problems addressed much more quickly and effectively than has occurred in the past.¹²

The Consumer Advocate conducted extensive investigations of the circumstances involved in these formal complaint cases. Some of the telephone carriers involved in the cases conducted discovery of their own. The telephone carriers provided detailed information to the Consumer Advocate as a part of the investigations. The telephone carriers filed requests for confidential treatment of

¹² Docket No. FCU-2012-0019, *Rehabilitation Center of Allison, Iowa*, "Order Setting Additional Procedural Schedule and Discussing Seventh Prehearing Conference," issued September 22, 2014, Ordering Clause No. 4, pp. 8-9.

much of this information, and the Board granted most of these requests.¹³ Therefore, many of the details resulting from these investigations will not be discussed specifically in this proposed decision because they are confidential.

The Consumer Advocate filed public and confidential versions of reports in each of the first six formal complaint cases that provided extensive detail regarding the Consumer Advocate's investigations, what happened in these cases, to the extent the details could be discovered, and proposed solutions. The reports included confidential discovery responses as attachments. The dockets in which the reports were filed and the dates these reports were filed are: 1) FCU-2013-0007, *Complaint of Ms. Frahm* (filed November 13, 2014); 2) Docket No. FCU-2012-0019, *Rehabilitation Center of Allison* (filed December 19, 2014); 3) Docket No. FCU-2013-0004, *Unity Point Clinic* (filed January 9, 2015); 4) Docket No. FCU-2013-0005, *Hancock County Health Systems*, (filed January 16, 2015); 5) FCU-2013-0006, *Complaints of Ms. Adolphson and Ms. Skallerup* (filed January 20, 2015); and 6) FCU-2013-0009, *Complaint of Mr. Pals* (filed January 23, 2015). The reports include extensive detail about what happened in these cases and which carriers were involved. Detailed summaries of the Consumer Advocate's reports, including the Consumer Advocate's proposed solutions, are provided in the CenturyLink 2015 Staff

¹³ The Board orders were issued on July 1, 2016, in Docket Nos. FCU-2012-0019, FCU-2013-0004, FCU-2013-0005 (two orders), FCU-2013-0006, FCU-2013-0007 (three orders), and FCU-2013-0009. Multiple orders were issued in two dockets because more than one carrier filed requests for confidential treatment in those dockets. The orders provide explanations of which information was granted confidential treatment and which was not and the Board's reasoning for the grants and denials. As of the date of this decision, one order remains to be issued in Docket No. FCU-2013-0005.

Memo, the Windstream 2015 Staff Memo, and the 2016 Staff Memo. The Consumer Advocate's reports and proposed solutions are discussed later in this proposed decision.

The telephone carriers filed responses to the Consumer Advocate's reports in each of the first six dockets. They generally agreed that the Consumer Advocate had accurately portrayed the information they had provided in discovery. For example, CenturyLink stated the following in its response in the *Allison* case:

Essentially, CenturyLink believes that the OCA's Report does an adequate job of summarizing the complex set of data and vast amount of information provided by CenturyLink pertaining to the problems experienced by the Rehabilitation Center of Allison as well as the larger and more complex problem of call routing. CenturyLink does not see any obvious discrepancies between the information provided by CenturyLink and the OCA's factual statements made in its report.¹⁴

In their responses however, many, but not all, of the carriers stated they had significant concerns with the Consumer Advocate's proposed solutions.

The Consumer Advocate filed replies to the carriers' responses. CenturyLink, Windstream, Frontier, and several other carriers filed proposed solutions. The Consumer Advocate and some of the carriers filed responses to the proposed solutions. Detailed summaries of these responses, proposed solutions, and further responses are provided in the CenturyLink 2015 Staff Memo, the Windstream 2015

¹⁴ Docket No. FCU-2012-0019, *Rehabilitation Center of Allison*, "Qwest Communications Company d/b/a CenturyLink QCC's Response to the Office of Consumer Advocate's Report," p. 1, filed February 26, 2015.

Staff Memo, and the 2016 Staff Memo. These responses, proposed solutions, and further responses are discussed later in this proposed decision.

An in-person prehearing conference was held in all of the first six dockets on August 26, 2015. The purpose of the conference was to discuss whether an additional procedural schedule was needed in the dockets, and if so, what it should include.¹⁵ The parties were also ordered to report whether any of the complaining customers had experienced any recent call completion problems, and if they had, to discuss what happened and the remedial actions taken. Detailed notes of the prehearing conference are included in the 2016 Staff Memo.

After the in-person prehearing conference, the undersigned issued an “Order Setting Deadline for Proposed Settlements” on August 28, 2015, in Docket Nos. FCU-2012-0019, FCU-2013-0004, FCU-2013-0005, FCU-2013-0006, FCU-2013-0007, and FCU-2013-0009. The order summarized the discussion at the in-person prehearing conference as follows:

On August 26, 2015, an in-person prehearing conference was held, at which the parties in the dockets listed above were given the opportunity to give their opinions as to whether an additional procedural schedule is needed in these cases, and if so, what it should include. The parties provided a variety of ideas of what is still needed, although they generally agreed there is no need for further fact-finding in these dockets and a hearing is not needed. The Consumer Advocate and other parties reported that none of the complaining customers in these cases has experienced any recent call completion problems. The telephone carriers provided updates on the actions they and the industry have taken to address call completion issues and

¹⁵ See “Order Setting In-Person Prehearing Conference,” issued in each of the six dockets on July 8, 2015.

comply with the Federal Communications Commission (FCC) call completion rules, to the extent they are applicable to the various carriers. The parties expressed a variety of views on the question of whether the Utilities Board (Board) should initiate a proceeding of general applicability, such as a Notice of Inquiry proceeding, to consider whether the Board needs to take any action to address call completion issues in Iowa, and if so, what those actions should include.

During the prehearing conference, the Consumer Advocate and some of the telephone carriers stated they had discussed possible settlement agreements. The parties expressed a variety of views on whether they thought they could reach a settlement with the Consumer Advocate. It was agreed that the parties would be given a one-month period of time to explore settlement.

The August 28, 2015, order required the parties involved in possible settlement discussions in each of the dockets to file, on or before September 30, 2015: (a) proposed settlement agreements; (b) statements they were not able to reach a settlement; or (c) requests for short delays to finalize settlement agreements.

On September 30, 2015, Airus and Windstream filed a statement in Docket Nos. FCU-2013-0005 and FCU-2013-0007 describing their efforts to reach a settlement with the Consumer Advocate and reporting that those efforts had failed.

Pursuant to an order issued on October 5, 2015, granting a request for a short extension of the September 30, 2015, deadline, the Consumer Advocate filed a "Supplemental Report" on October 9, 2015, in Docket Nos. FCU-2012-0019, FCU-2013-0004, FCU-2013-0005, FCU-2013-0006, FCU-2013-0007, and FCU-2013-0009. The report stated that the Consumer Advocate and Impact Telecom, Inc. (Impact), had not been able to reach a settlement. The Consumer Advocate urged

the undersigned administrative law judge to direct the companies to implement the Consumer Advocate's proposed solutions until such time as the Board determines those solutions are not necessary or conducts further proceedings and issues an order superseding any final order in these proceedings.

On October 12, 2015, in Docket Nos. FCU-2012-0019, FCU-2013-0004, FCU-2013-0005, FCU-2013-0006, and FCU-2013-0009, CenturyLink filed a response to the Consumer Advocate's supplemental report. CenturyLink concurred with the response filed by Airus, Inc., in Docket Nos. FCU-2013-0005 and FCU-2013-0007, in which Airus stated that no interim solution is necessary at this time based on the Board's intent to consider a proposed rule-making proceeding. CenturyLink stated that the Consumer Advocate's proposed steps are unwarranted and do not recognize the efforts individual carriers have made to address call completion problems in response to these dockets and pursuant to the FCC proceedings.

On October 12, 2015, Airus filed a response to the Consumer Advocate's supplemental report. Airus argued there was no determination that any set of proposals filed in these proceedings were superior to another set and that there was no basis for requiring the companies to implement the Consumer Advocate's proposals. Airus argued that the Consumer Advocate's proposed solutions are flawed and should not be adopted, even on an interim basis pending further Board action. According to Airus, rural call completion problems are an industry-wide problem and should be addressed with an inquiry and solutions that apply to the

entire industry. On October 13, 2015, Windstream filed a similar response to the Consumer Advocate's supplemental report.

Docket Nos. FCU-2014-0007, *In re: Complaint of Sutherland Mercy Medical Clinic*, and FCU-2014-0014, *In re: Complaint of Horn Memorial Hospital*, were handled separately from the first six dockets because the complaints in those cases were not filed until 2014 and the Board granted formal proceedings in the two cases much later than the earlier six cases. The customers in these cases had similar call completion problems as those in the previous cases. In Docket No. FCU-2014-0007, the Sutherland Mercy Medical Clinic's complaint stated clinic employees were not able to complete telephone calls from the clinic to a hospital in another town. The complaint provided specific information on three calls and stated they were only the most recent examples of calls not completing, and when calls did complete, they were dropped or had long pauses. In Docket No. FCU-2014-0014, the Horn Memorial Hospital filed a complaint citing failed attempts to call a medical clinic in another town from the hospital on various dates in June 2014. The hospital complained that for over 12 months it had experienced difficulties in being able to consistently communicate with surrounding clinics, hospitals, patients, visiting nurses, and pharmacies. The complaint also stated hospital staff was unable to fax critical lab results that needed immediate attention from the hospital to the clinics.

CenturyLink was the originating long distance carrier in Docket No. FCU-2014-0007. Frontier was the originating long distance carrier in Docket No. FCU-2014-

0014. The parties were given time for investigation and discovery and periodic telephone prehearing conferences were held. The parties filed a stipulation of facts in each case. They also filed proposed solutions in Docket No. FCU-2014-0007 and other information in both cases. Detailed summaries of the informal investigations and formal complaint proceedings for these two cases are provided in the 2016 Staff Memo. The stipulations of fact and the parties' proposed solutions and other information are discussed later in this proposed decision.

II. RELATED BOARD PROCEEDINGS

While these eight call completion complaint proceedings are not industry-wide proceedings, they have drawn the attention of the industry. In the Board's "Inquiry into the Appropriate Scope of Telecommunications Regulation," Docket No. NOI-2013-0001, a variety of telecommunications providers and associations acknowledged the call completion problems that were the subject of Board investigation.

More recently, call completion issues have been mentioned in preliminary comments in the Board's rule-making proceeding, Docket No. RMU-2015-0002, *In re: Amendments to Telecommunications Service Regulations [199 IAC 22]*, in which the Board is considering changes to chapter 22 to update the rules to eliminate outdated provisions and make the rules technology neutral. For example, the Iowa Communications Alliance noted "the public safety implications of the call blocking situations preventing rural customers from receiving calls" and urged the Board "to

enact appropriate 'solutions' that are being discussed in the current dockets."¹⁶ The Consumer Advocate specifically addressed the call completion cases in the context of discussing possible changes to the Board's service quality rules, explaining that:

Iowa Code § 476.3(1) (2015) requires utilities to furnish “reasonably adequate service” and the provisions of Board rules 22.5 and 22.6 set out the standards both for the network facilities and customer service to achieve “reasonably adequate service.” It would not be appropriate to simply abandon network and service standards altogether. The market has not yet reached the point where technological changes and evolving competition by themselves ensure that all customers receive adequate service, as demonstrated in recent proceedings before the Board addressing rural call completion and delays in service reconnection.¹⁷

III. CALL COMPLETION INVESTIGATIONS AND LEGISLATION IN OTHER STATES

Regulatory agencies in other states have taken steps to respond to call completion problems in rural areas. Minnesota recently enacted state legislation to address the issue.

The Minnesota Public Utilities Commission (MPUC) solicited comments from interested parties addressing questions relating to rural call completion problems in Minnesota, including whether intermediate providers¹⁸ involved in the transport or switching of intrastate calls are subject to the jurisdiction of the MPUC; whether

¹⁶ *In re: Amendments to Telecommunications Service Regulations [199 IAC 22]*, “Comments of the Iowa Communications Alliance,” p. 12, Docket No. RMU-2015-0002, November 13, 2015.

¹⁷ *In re: Amendments to Telecommunications Service Regulations [199 IAC 22]*, “Post-Workshop Comments filed by the Office of Consumer Advocate, a division of the Iowa Department of Justice,” p. 2, Docket No. RMU-2015-0002, November 13, 2015.

¹⁸ An “intermediate provider” is “any entity that carries or processes traffic that traverses or will traverse the PSTN at any point insofar as that entity neither originates nor terminates that traffic.” 47 C.F.R. § 64.1600(f). The PSTN is the public switched telephone network.

intermediate providers should be required to obtain a certificate of authority or be subject to a registration process; what processes are used to monitor call completion problems; what data has been collected to show calls are completing; and questions about the contracts between originating and intermediate carriers.¹⁹

On July 21, 2014, the MPUC issued an order explaining the Commission would (1) keep the docket open, track the FCC's initiatives, and investigate call completion complaints on a case-by-case basis; (2) require interexchange carriers (IXCs) to report on a quarterly basis for one year all call completion complaints received;²⁰ and (3) require rural incumbent carriers to make test lines available so that IXCs are able to test the effectiveness of their call routing systems.

On May 17, 2016, Minnesota's Governor Mark Dayton signed legislation amending a number of the state's telecommunications statutes and adding new sections.²¹ Part of the bill addresses rural call completion in the state. Among other things, telephone companies and telecommunications carriers may not "intentionally impair the speed, quality, or efficiency of services, products, or facilities offered to a consumer under a tariff, contract, or price list." Telecommunications service

¹⁹ See "Notice of Commission Investigation and Solicitation of Comments," *In the Matter of the Commission Investigation of the Completion of Long distance Calls to Rural Areas in Minnesota*, MPUC Docket No. P999/CI-12-1329 (January 16, 2014).

²⁰ The quarterly reports filed with the MPUC by originating IXCs must include: 1) a root cause analysis of any call completion complaint for any intrastate call completion problem regardless of who reports the incident to the carrier; 2) if an intermediate provider in the call path was responsible for call failure, the name of that intermediate provider and whether the provider was removed as a routing alternative; 3) any past performance or call failure problems the IXC has had with the intermediate provider; 4) an explanation of what steps the IXC has taken with the intermediate provider to ensure call completion problems do not occur in the future; and 5) whether test lines were made available by the ILEC in the exchange where the call failed and if so, the testing process used by the IXC.

²¹ Minnesota House File No. 1066.

providers, defined as “any provider of telecommunications service,” “shall not participate in intrastate call routing practices that result in failures of calls to be delivered to a local provider within Minnesota.”

A “wholesale transport provider” is defined as any company that “carries, delivers, routes, or transports any telecommunications service subject to the commission’s jurisdiction, directly or indirectly, but is not certified in Minnesota to provide retail telecommunications service to the public.” Wholesale transport providers must file a registration with the MPUC that includes the company’s name, address, a contact name, and a telephone number available to other carriers that will be answered within normal business hours, to address any failures of calls to complete within Minnesota.” The statute says the contacts provided should be knowledgeable about call routing and call completion. The MPUC must maintain a contact list of all registered wholesale transport providers on its Web site “to enable expeditious resolution of any call routing and call completion problems involving wholesale transport providers.” The statute requires wholesale transport providers to update their registration information when changes occur, but no less frequently than annually. The statute prohibits telecommunications service providers and registered wholesale transport providers from knowingly contracting with a wholesale transport provider who has not registered with the MPUC.

In December 2012, the Oregon Public Utilities Commission adopted rules intending to ensure that carriers fulfill their obligation to complete calls placed to

customers in rural exchanges in Oregon. The Commission amended its rules specifying conditions for certification to add new conditions that prohibit reducing or restricting intrastate traffic; require the certificate holder to take reasonable steps to ensure it does not use routing practices that result in lower quality service to an exchange with higher terminating access rates than like service to an exchange with lower terminating access rates; and providing that in certain situations the certificate holder is liable for the actions of an underlying carrier used to deliver traffic on behalf of the certificate holder.²²

IV. FEDERAL ACTIONS ADDRESSING RURAL CALL COMPLETION PROBLEMS

A. FCC CAF Order, a/k/a USF/ICC Transformation Order

In its November 2011 comprehensive order reforming the Universal Service Fund and intercarrier compensation system ("*CAF Order*," a/k/a "*USF/ICC Transformation Order*"),²³ the FCC established a set of reforms which, over time, will transition to a uniform national bill-and-keep regime²⁴ for all telecommunications

²² See *In re: Amendments to OAR 860-032-0007*, Public Utility Commission of Oregon, "Order," Order No. 12 478 AR 566, Rule Modifications Adopted, Dec. 17, 2012.

²³ See *Connect America Fund, et al.*, WC Docket No. 10-90, et al., Report and Order and Further Notice of Proposed Rulemaking, FCC 11-161 (rel. Nov. 18, 2011), 26 FCC Rcd. 17,663 ("*CAF Order*"), *aff'd In re: FCC No. 11-161*, 753 F.3d 1015 (10th Cir. 2014), *cert. denied*, 135 S.Ct. 2072 (Mem) (May 4, 2015).

²⁴ "Bill-and-keep" refers to a pricing arrangement for connecting telecommunications networks under which the carriers agree not to charge each other for terminating calls to the other's network. In the *CAF Order*, the FCC explained that under "bill-and-keep arrangements, a carrier generally looks to its end-users—which are the entities and individuals making the choice to subscribe to that network—rather than looking to other carriers and their customers to pay for the costs of its network." *CAF Order*, ¶ 737. A bill-and-keep methodology "brings market discipline to intercarrier compensation because it ensures that the customer who chooses a network pays the network for the services the

traffic exchanged between carriers (LECs). (*CAF Order*, ¶¶ 650, 736.) The FCC requires a series of annual downward adjustments to terminating access charges and various transport rates in the transition to bill-and-keep. The FCC explained that it anticipates the transition to bill-and-keep should eliminate some of the financial incentives that contribute to rural call completion problems. (See the discussion of the FCC *Declaratory Ruling* and the *Rural Call Completion Order* below.)

In the *CAF Order*, the FCC also reaffirmed the prohibition on call blocking.

B. FCC Rural Call Completion Declaratory Ruling, Rules and Enforcement Proceedings

In order to address the problem of rural call completion, the FCC has issued a declaratory ruling, proposed and adopted rules, conducted enforcement proceedings against individual carriers, and is considering adoption of additional proposed rules.

The federal effort has included the following actions.

1. FCC Rural Call Completion Task Force and Declaratory Ruling

In September 2011, the FCC created the Rural Call Completion Task Force to investigate and address the growing problem of calls to rural telephone customers which are delayed or fail to connect. In October 2011, the Task Force held a workshop to identify specific causes of the problem and to discuss potential solutions.

subscriber receives. Specifically, a bill-and-keep methodology requires carriers to recover the cost of their network through end-user charges, which are potentially subject to competition. Under the existing approach, carriers recover the cost of their network from competing carriers through intercarrier charges, which may not be subject to competitive discipline. Thus, bill-and-keep gives carriers appropriate incentives to serve their customers efficiently.” *Id.*, ¶ 742.

On February 6, 2012, the FCC issued a Declaratory Ruling ("*2012 Declaratory Ruling*") discussing the rural call completion problem and ruling on the issues.²⁵ The FCC stated there was evidence of a pattern of call completion and service quality problems on long distance calls to certain rural areas. It stated there had been a sharp increase in complaints that long distance calls and faxes were not reaching rural customers. Problems included poor call quality and calls that ring for a prolonged period for the caller, but do not ring, or ring on an extremely delayed basis, for the called party. The FCC stated these problems could have dire consequences, such as small businesses losing customers, urgent long distance calls from friends or family being missed, schools unable to reach parents with critical alerts, including school closings in extreme weather, and those in need of help being unable to reach public safety officials.

The FCC stated that in cases where calls to rural customers were delayed or failed to connect, rural carriers had reported that calls failed to route properly and instead looped between providers, routing back to a provider who had previously handed off the same call to another provider for completion. Carriers reported to the FCC that calling parties received false or misleading intercept messages that falsely indicated the call could not be completed as dialed. The FCC stated it took these reports very seriously given the longstanding obligations of telephone carriers and

²⁵ *In the Matter of Developing a Unified Intercarrier Compensation Regime*, CC Docket No. 01-92; *Establishing Just and Reasonable Rates for Local Exchange Carriers*, WC Docket No. 07-135 (rel. Feb. 6, 2012); (*2012 Declaratory Ruling*), 27 FCC Rcd. 1351.

the significant economic and public safety concerns the issues raised. The FCC stated it was particularly concerned about problems that may adversely affect the availability of reliable telephone service to consumers, businesses, and public health and safety officials in rural America. The FCC stated at paragraph 11:

Consistent with previous decisions, we make clear that practices resulting in the rural call completion problems identified above adversely affect the ubiquity and reliability of the nation's telecommunications network and threaten commerce, public safety, and the ability of consumers, businesses, and public health and safety officials in rural America to access and use a reliable network.

The FCC noted that call completion problems appeared to be occurring particularly in rural areas served by rate-of-return carriers²⁶ where the costs that long distance providers incur to complete calls are generally higher than in non-rural areas. The FCC stated that in order to minimize call termination charges, long distance providers often use third-party "least-cost routers," who attempt to connect calls to their destination at the lowest cost possible, usually within defined service parameters. The FCC noted that rural associations state call completion problems appear to arise from how originating carriers choose to set up the signaling and routing of their calls and that many of the call routing and termination problems could lie with the underlying routing providers selected by carriers who offer retail long distance services.

²⁶ Rate-of-return carriers are incumbent local exchange carriers not subject to price cap regulation. 47 C.F.R. § 54.5.

The FCC reminded carriers that they are prohibited from blocking, choking, reducing, or otherwise restricting telephone traffic in any way, including to avoid the payment of termination charges. The FCC clarified that this prohibition extended to routing practices that have the effect of blocking, choking, reducing, or otherwise restricting telephone traffic.

The FCC clarified that the practices described in the Declaratory Ruling which lead to call terminations and call quality problems may constitute unjust and unreasonable practices in violation of section 201 of the Communications Act of 1934, as amended (the Act). The FCC stated such practices may also violate a carrier's duty to refrain from unjust or unreasonable discrimination in practices, facilities, or services under section 202 of the Act. The FCC clarified that it is an unjust and unreasonable practice in violation of section 201 of the Act for a carrier that knows or should know it is providing degraded service to certain areas to fail to correct the problem or to fail to ensure that intermediate providers, least-cost routers, or other entities acting for or employed by the carrier are performing adequately. The FCC stated this is particularly the case when problems are brought to the carrier's attention and the carrier nevertheless fails to take corrective action that is in its power. The FCC noted carriers have tools to manage termination suppliers and it would be unreasonable for a carrier to not make appropriate use of those tools to ensure that calls its customers make to rural areas terminate reliably.

The FCC emphasized that under section 217 of the act, carriers are responsible for the actions of their agents or other persons acting for or employed by the carriers. 47 U.S.C. § 217 states that: “In construing and enforcing the provisions of this chapter, the act, omission, or failure of any officer, agent, or other person acting for or employed by any common carrier or user, acting within the scope of his employment, shall in every case be also deemed to be the act, omission, or failure of such carrier or user as well as that of the person.” The FCC clarified that: “a carrier remains responsible for the provision of service to its customers even when it contracts with another provider to carry the call to its destination.”²⁷

The FCC stated it had emphasized the importance of its longstanding prohibition on call blocking in the *CAF Order* and it had also clarified that carriers are directly bound by the general prohibition on call blocking with respect to VoIP-PSTN traffic, just as with other traffic. The FCC explained that the rules adopted in the *CAF Order* which will reduce most termination charges should eliminate the primary incentives for cost-saving practices that appear to be undermining the reliability of telephone service. The FCC stated it could take appropriate enforcement action pursuant to its statutory authority, including cease-and-desist orders, forfeitures, and license revocations against carriers engaging in the prohibited activities discussed in the *2012 Declaratory Ruling*.

²⁷ *2012 Declaratory Ruling*, ¶ 11.

2. FCC Rules

a. Call Completion NPRM

On February 7, 2013, the FCC released a Notice of Proposed Rulemaking seeking comment on rules to help address problems in the completion of long distance telephone calls to rural customers ("*Call Completion NPRM*").²⁸ The FCC stated the following:

Retail long distance providers, such as wireless providers, cable companies, interexchange carriers (IXCs), local exchange carriers (LECs), and providers of Voice over Internet Protocol (VoIP) services, often employ intermediate providers to carry long distance calls to their destination. Some of these intermediate providers offering wholesale call delivery services may be failing to deliver a significant number of calls to rural telephone company customers, and evidence indicates that the retail long distance providers may not be adequately examining the resultant rural call completion performance.

Completion rates of long distance calls to rural telephone company service areas are frequently poor, even where overall performance of the intermediate provider appears acceptable. The problems manifest themselves in lengthy periods of dead air on the calling party's end after dialing a number, audible ringing tones on the calling party's end when the called party's telephone never rings at all, false busy signals, inaccurate intercept messages, and the inability of one or both parties to hear the other when the call does go through. This causes rural businesses to lose customers, cuts families off from their relatives in rural areas, and creates potential for dangerous delays in public safety communications in rural areas.²⁹

The FCC explained it intended to "consider measures to improve the Commission's ability to monitor the delivery of long distance calls to rural areas and

²⁸ *In Re: Rural Call Completion*, Notice of Proposed Rulemaking, WC Docket No. 13-39, 28 FCC Rcd. 1569 (rel. Feb. 7, 2013) (*Call Completion NPRM*).

²⁹ *Call Completion NPRM*, ¶¶ 1, 2 (footnotes in the original eliminated).

aid enforcement action in connection with providers' call completion practices as necessary."³⁰

The FCC stated there was evidence that rural call completion problems were widespread and serious. It said although the FCC had stated unequivocally that traffic may not be blocked, choked, reduced, or restricted, carriers often did not retain records that would allow the FCC to determine compliance with these prohibitions. Therefore, the FCC proposed rules to help it monitor originating carriers' call completion performance and ensure that telephone service to rural consumers is as reliable as service to the rest of the country. In essence, the FCC stated, the proposed rules would require facilities-based originating long distance voice service providers to collect and report data on call answer rates. For purposes of the notice, originating long distance voice service providers included LECs, IXC's, commercial mobile radio service (CMRS) providers, and interconnected VoIP service providers.³¹

Noting that a lack of data impeded the FCC's investigations,³² the FCC proposed and sought comment on reporting and data retention requirements that would give the Commission information about a long distance provider's performance to certain areas. The FCC proposed to adopt rules that would require originating long distance voice service providers to collect and retain basic information on call

³⁰ *Call Completion NPRM*, ¶ 3.

³¹ *Call Completion NPRM*, ¶ 13.

³² *Call Completion NPRM*, ¶¶ 13, 16, 17.

attempts and to periodically analyze and summarize call completion and report the results to the Commission.³³

The FCC also proposed two safe harbors providers could use to avoid or reduce their obligations under the proposed data reporting and retention obligations. The FCC stated the purpose of the safe harbors was to “minimize the burden of compliance without compromising the goals of these rules.”³⁴

The FCC discussed the problem of “false audible ringing” involved in some of the rural call completion complaints. This involves the situation where the long distance caller hears prolonged ringing before the called party’s telephone rings at all, so that the caller hangs up incorrectly thinking the called party is unavailable. The FCC proposed a rule to prohibit both originating providers and intermediate carriers from causing audible ringing to be sent to the caller before the terminating provider has signaled that the called party is being alerted. It also requires originating providers and intermediate carriers to convey audio tones and announcements sent by the terminating provider to the calling party.³⁵

The FCC also reviewed the steps it had taken so far in response to the call completion problem. The FCC stated it was conducting ongoing investigations of several long distance providers and addressing daily operational problems reported

³³ *Call Completion NPRM*, ¶¶ 17, 20.

³⁴ *Call Completion NPRM*, ¶¶ 32-36.

³⁵ *Call Completion NPRM*, ¶¶ 39-43.

by rural customers and carriers so that incoming long distance calling to rural telephone company customers was promptly restored.³⁶

The FCC established dedicated, web-based methods for customers and carriers to notify the commission of these problems. It described its complaint intake process, which allows rural customers and carriers to inform the Commission about call completion problems and instructs them how to file complaints.³⁷ The FCC also described a dedicated email intake that expedites the ability of rural telephone companies to alert the Commission of systemic problems receiving calls from a particular originating long distance provider and facilitates provider-to-provider resolution.

b. Rural Call Completion Order

In its October 28, 2013, *Rural Call Completion Order*, the FCC adopted rules addressing concerns about the completion of long distance calls to rural areas.³⁸ The FCC noted that the record in its proceeding leaves no doubt that completion rates for long distance calls to rural areas are frequently poor—whether the call is delayed, the called party’s phone never rings, the caller hears false busy signals, or there are other problems. The FCC stated these failures have significant and immediate public interest ramifications, causing rural businesses to lose customers,

³⁶ *Call Completion NPRM*, ¶ 11.

³⁷ The complaint form can be accessed at <https://www.fcc.gov/general/rural-call-completion-problems-long-distance-or-wireless-calling-rural-areas>.

³⁸ *In Re: Rural Call Completion*, WC Docket No. 13-39, Report and Order and Further Notice of Proposed Rulemaking, FCC 13-135 (rel. Nov. 8, 2013) (78 Federal Register 76218, December 17, 2013) (*Rural Call Completion Order*, *FNPRM*).

cutting families off from their relatives in rural areas, and creating potential for dangerous delays in public safety communications in rural areas.

The FCC stated its rules are a critical step to eliminating this significant problem by: 1) improving the Commission's ability to monitor the delivery of long distance calls to rural areas; 2) aiding enforcement action in connection with providers' call completion practices as necessary; and 3) aiding consumers and industry by adopting the rule prohibiting false ring signaling. The FCC also proposed additional rules seeking comment on additional measures intended to help the Commission ensure a reasonable and nondiscriminatory level of service to rural areas.³⁹

The FCC described the actions it had taken since 2007 to address call completion concerns. In spite of these actions, the FCC stated that: 1) call completion problems continued to be frequent and pervasive throughout rural America; 2) the problems threatened public safety and contravened the public interest; and 3) that additional Commission action and enforcement were necessary to address the problems.⁴⁰

In describing the causes of the problems, the FCC stated:

There appear to be multiple factors that cause rural call completion problems. Rural associations posit that the call completion problems may arise from the manner in which originating providers set up the signaling and routing of their calls, and that many of these call routing and termination problems can be attributed to intermediate providers.

³⁹ *Call Completion NPRM*, ¶ 2.

⁴⁰ *Rural Call Completion Order*, ¶¶ 3-15.

They argue that least cost routing carriers offer terminating services at low rates, and that some least cost routing carriers may provide inferior service for a low rate.

One key reason for the increased problems in rural areas is that a call to a rural area is often handled by numerous different providers in the call's path. Given the particularly high rates long distance providers incur to terminate long distance calls to rural rate-of-return carriers, long distance providers have additional incentives to reduce the per-minute cost of calls. For example, the disparity between interstate rates can be 5-6 cents per minute for rate-of-return areas and just over half a cent per minute for price cap areas. As a result, there is greater incentive for the long distance provider to hand off the call to an intermediate provider that is offering to deliver it cheaply -- and potentially less incentive to ensure that calls to rural areas are actually completed properly. The prevalence of these problems accords with providers' incentives to engage in blocking or degrading traffic, or similar behavior, in an effort to minimize their intercarrier compensation payments, which has been long recognized by the Commission. While the Commission's comprehensive reform of intercarrier compensation will alleviate some of these price differences in the long term, it likely will continue to be more costly to complete calls to rate-of-return carriers while the transition to bill-and-keep is implemented over the next several years.⁴¹

The FCC then stated:

The Commission has determined that call blocking is an unjust and unreasonable practice under section 201(b) of the Act, and the Wireline Competition Bureau has made clear that carriers' rural call routing practices that lead to call termination and quality problems may violate the prohibition against unjust and unreasonable practices in section 201(b) of the Act. In the *USF/ICC Transformation Order*, the Commission extended its longstanding prohibition on call blocking to providers of interconnected and one-way VoIP service. We emphasize that interconnected and one-way VoIP service providers may violate this prohibition if they block, choke, reduce, or restrict traffic on calls placed to customers of rural telephone companies.⁴²

⁴¹ *Rural Call Completion Order*, ¶¶ 16, 17 (footnotes in the original not included).

⁴² *Rural Call Completion Order*, ¶¶ 18 (footnotes in the original not included).

The FCC adopted definitions, recordkeeping (call answer and completion data),⁴³ retention, and reporting rules at 47 C.F.R. Part 64. It adopted a rule stating that long distance service providers cannot convey a ringing indication to the calling party until the terminating provider has signaled that the called party is being alerted to an incoming call, such as by ringing. 47 C.F.R. § 64.2201. The ring signaling rule does apply to intermediate providers. *Id.*

The rules are intended to improve the FCC's ability to monitor the delivery of long distance calls to rural areas and address problems associated with those calls. The FCC stated the rules will enhance its ability to enforce restrictions against blocking, choking, reducing, or restricting calls. It stated the rules will aid enforcement action in connection with providers' call completion practices and aid consumers and the industry by prohibiting false ring signaling.⁴⁴

The FCC rules require covered providers⁴⁵ to collect, retain and report specified data elements, with respect to interstate and intrastate calls, for each rural

⁴³ The rules adopted in the *Rural Call Completion Order* require covered providers to record, retain, and report data about whether calls are "answered," or signal as "busy," "ring no answer" or "unassigned number." The terms are defined in the *Rural Call Completion Order* and were clarified in the FCC's February 13, 2015, *Declaratory Ruling*. See *In re: Rural Call Completion*, Declaratory Ruling, WC Docket No. 13-39, DA 15-217 (Rel. Feb. 13, 2015).

⁴⁴ The rule specifying ringing indication requirements took effect on January 31, 2014. The effective date for other rules was delayed until further notice due to requirements of the Paperwork Reduction Act. On March 4, 2015, the FCC issued a Public Notice announcing that April 1, 2015, would be the date that long distance voice providers must begin to record and retain data required by the *Rural Call Completion Order*, with the first reports due on August 1, 2015. See *In re: Rural Call Completion*, Public Notice, WC Docket No. 13-39, DA 15-291 (Rel. Mar. 4, 2015).

⁴⁵ "Covered providers," are defined at 47 C.F.R. § 64.2101 as providers of long distance voice service that make the initial long distance call path choice for more than 100,000 domestic retail subscriber lines, including local exchange carriers, interexchange carriers (IXCs), commercial mobile radio services (CMRS) providers, i.e., wireless providers, and interconnected and one-way VoIP service providers.

destination, identified by operating company number (OCN), and for non-rural OCNs in the aggregate. 47 C.F.R. §§ 64.2101, 64.2103, 64.2105. These data elements include number of calls attempted, number of calls answered, and number of calls not answered (reported separately for call attempts signaled as busy, ring no answer or unassigned number). *Id.* Covered providers must retain call detail records in a readily retrievable form for at least six months. 47 C.F.R. § 64.2103. Covered providers must report the required data to the FCC four times a year, on February 1, May 1, August 1, and November 1. 47 C.F.R. § 64.2105. An officer or director of each covered provider must certify to the accuracy of each report. *Id.* Intermediate providers are not included in the definition of “covered provider” and thus are not subject to the recordkeeping and reporting rules.⁴⁶

The FCC adopted a safe harbor provision at 47 C.F.R. § 64.2107 that established reduced data retention and reporting requirements for qualifying providers. Qualifying covered providers must comply with the quarterly reporting requirements for one year and must retain the required call records for three months instead of six. Covered providers must file a certification signed by an officer or director that includes the information listed in the rule on any of the four quarterly filing dates and annually thereafter. The rule says that covered providers may reduce their reporting and data retention obligations under the call completion requirements

⁴⁶ “Intermediate providers” are defined at 47 C.F.R. ¶ 64.1600(f) as “any entity that carries or processes traffic that traverses or will traverse the PSTN at any point insofar as that entity neither originates nor terminates that traffic.”

by certifying that the covered provider either: 1) uses no intermediate providers; or 2) that its contracts with intermediate providers restrict the intermediate providers from permitting more than one additional intermediate provider in the call path before the call reaches the terminating provider or terminating tandem. The covered provider must also certify that any nondisclosure agreement with an intermediate provider permits the covered provider to reveal the identity of the intermediate provider and any additional intermediate provider to the FCC and to the rural incumbent LEC(s) whose incoming long distance calls are affected by the intermediate provider's performance. Covered providers who use intermediate carriers must describe the process they have in place to monitor the performance of their intermediate carriers in their annual filings certifying compliance with the safe harbor. The FCC does not require qualifying providers to use any particular monitoring process.

CenturyLink's use of the Safe Harbor is discussed later in this proposed decision.

The FCC received five petitions for reconsideration of the *Rural Call Completion Order*. In November 2014, the FCC denied four of the petitions and granted one, which modified the rules to exempt a narrow set of calls from the data retention and reporting requirements.⁴⁷

⁴⁷ See *In re: Rural Call Completion*, Order on Reconsideration, WC Docket No. 13-39, 29 FCC Rcd. 14026 (rel. Nov. 13, 2014).

c. Duration of FCC rules

The FCC did not adopt a sunset date for the rules. The agency explained that the transition to bill-and-keep should eliminate the financial incentives that contributed to rural call completion problems, but observed that terminating charges are not necessarily the sole cause of the problems. The FCC anticipates that the need for the rules will decrease as the transition continues. The FCC directed the Wireline Competition Bureau to prepare for public comment a report on the effectiveness of the rules; whether the reporting requirements should be reduced or eliminated; whether the agency should extend the data collection and reporting requirements to intermediate providers; and how the Commission can incorporate industry best practices. The report is to be published no more than 90 days after the last reports are due for the first two-year period the reporting requirement has been in effect. Also, the FCC indicated it will complete a proceeding in which it reevaluates whether to keep, eliminate, or modify the data collection and reporting rules three years after they went into effect.⁴⁸

d. Further Notice of Proposed Rulemaking

In the *Further Notice of Proposed Rulemaking (FNPRM)*,⁴⁹ which was issued with the *Rural Call Completion Order*, the FCC sought comments on additional measures that may help the Commission ensure a reasonable and nondiscriminatory level of service for completing long distance calls to rural areas. The FCC is seeking

⁴⁸ *Rural Call Completion Order* ¶¶ 101 – 106.

⁴⁹ *In Re: Rural Call Completion*, WC Docket No. 13-39, Report and Order and Further Notice of Proposed Rulemaking, FCC 13-135 (rel. Nov. 8, 2013) (*Rural Call Completion Order, FNPRM*).

to improve the Commission's ability to monitor problems with completing calls to rural areas and enhance its ability to enforce restrictions against blocking, choking, reducing, or restricting calls. The FCC sought comments on additional measures intended to further ensure reasonable and nondiscriminatory service to rural areas, including additional reforms pertaining to auto dialer traffic, whether to extend the rules to cover intermediate providers, and other Safe Harbor options and reporting requirements.

To date, comments and reply comments have been filed with the FCC, but the agency has not yet adopted additional rules.

Commenters included the National Association of Regulatory Utility Commissioners (NARUC). NARUC urged the FCC to establish a federal registry for intermediate providers that contains a designated point of contact for each geographical area where the carrier serves so that the FCC and state agencies can investigate call completion issues. NARUC also opposed the creation of additional safe harbors regarding data collection and retention and urged the FCC to make the data it collects available to the states.⁵⁰

3. FCC Enforcement Proceedings

Since 2013, the FCC has resolved five rural call completion investigations.

On March 12, 2013, the FCC announced it had reached a settlement with Level 3 Communications, LLC, resolving an investigation into the company's rural call

⁵⁰ See Jan. 16, 2014, *Comments of the National Association of Regulatory Utility Commissioners*, filed in WC Docket No. 13-39.

completion practices. The settlement established call completion standards and required a voluntary contribution to the U.S. Treasury in the amount of \$975,000.

On February 20, 2014, the FCC announced it reached a settlement with Windstream regarding Windstream's rural call completion practices. Windstream agreed to pay \$2.5 million to resolve an investigation by the FCC's Enforcement Bureau and to implement a three-year plan to ensure compliance with FCC requirements designed to combat the problem of long distance calls failing to complete in rural areas. Windstream agreed to:

- Designate a senior corporate officer to serve as a compliance officer focusing on rural call completion issues;
- Cooperate with the FCC and rural LECs to establish a testing program to evaluate rural call completion performance whenever complaints or data indicate problems;
- Notify intermediate providers (companies that Windstream uses to deliver calls) that may be causing call completion problems and analyze and resolve such problems as soon as practicable;
- Cease using intermediate providers that fail to improve their performance;
- Institute a comprehensive plan to ensure future compliance with FCC rules;
- Report to the FCC any noncompliance with rural call completion rules within 15 days; and
- File an initial compliance report in 90 days and annual reports for three years.

Windstream's commitments in Board Docket No. FCU-2013-0007 are based on its consent decree with the FCC, and they are discussed later in this decision.

On June 4, 2014, the FCC announced that Matrix Telecom, Inc., a company headquartered in Texas, would pay \$875,000 to resolve an FCC investigation into whether the company failed to complete long distance calls to rural areas on a just,

reasonable, and non-discriminatory basis. The consent decree between the FCC and Matrix is similar to the one described above between the Commission and Windstream. Impact Telecom's commitments in Board Docket No. FCU-2013-0005 include compliance with certain elements of the consent decree between the FCC and Matrix.⁵¹ They are discussed later in this decision.

On January 26, 2015, the FCC announced that Verizon agreed to a \$5 million settlement to resolve an FCC inquiry into Verizon's failure to investigate whether customers in rural areas could receive long distance or wireless calls to landline phones. The terms of Verizon's settlement require the company to, among other things:

- Pay a fine of \$2 million;
- Spend an additional \$3 million over the next three years to address the rural call completion problem;
- Appoint a Rural Call Completion Ombudsman;
- Develop a system to identify customer complaints that may be related to rural call completion problems;
- Limit its use of intermediate providers;
- Monitor call answer rates; and
- Host workshops⁵² and sponsor an academic study on the issue.⁵³

On May 9, 2016, the FCC released an order announcing that the agency had entered into a consent decree resolving its investigation of whether inContact, Inc. (inContact), a Utah-based long distance carrier and provider of call center services,

⁵¹ Matrix is a subsidiary of Impact.

⁵² Verizon held a rural call completion workshop on April 22, 2015, in Washington, D.C., and posted a recording of the workshop on its website.

⁵³ On April 22, 2015, Verizon issued a "Request for Proposals for Academic Study on Methods to Detect and Resolve Rural Call Completion Problems in Real Time." It appears the sponsored research is to be completed by the end of 2016.

failed to ensure that the providers it used were reliably delivering calls to a consumer in a rural area of Minnesota. Pursuant to the consent decree, the company admitted it failed to ensure that its intermediate providers were reliably delivering calls to the consumer; agreed to implement a compliance plan; and agreed to report data to the entity conducting the rural call completion academic study initiated under the consent decree between the FCC and Verizon. The company also agreed to pay a \$100,000 civil penalty.

C. Proposed Legislation

Legislation addressing rural call completion problems has been introduced in the United States Senate and House of Representatives. On March 19, 2015, Senators Amy Klobuchar (D-MN) and Jon Tester (D-MT) introduced the *Improving Rural Call Quality and Reliability Act of 2015*, S. 827. The bill:

- Amends the Communications Act of 1934 with the intent of ensuring the integrity of voice communications and preventing unjust or unreasonable discrimination among areas of the United States in the delivery of voice communications;
- Requires intermediate providers that transmit voice communications from one designation to another and charge any rate for such transmission to register with the FCC and comply with service quality standards for transmission to be established by the FCC;
- Prohibits covered providers from using intermediate carriers that have not registered with the FCC; and
- Prohibits the law from being construed to preempt the authority of a state agency or public utility commission to collect data or enforce state law and regulations regarding the completion of intrastate voice communications.

A similar version of the legislation was introduced in the House on May 21, 2015, by Representatives David Young (R-Iowa) and Peter Welch (D-Vt.). The House version of the bill is identified as H.R. 2566. As of the date of this proposed decision, no action has been taken on either the Senate or House bills.

V. INDUSTRY ACTIVITIES ADDRESSING RURAL CALL COMPLETION PROBLEMS

The Alliance for Telecommunications Industry Solutions (ATIS) is an organization with nearly 200 member companies, including telecommunications service providers and equipment manufacturers, that develops technical and operational standards for the information and communications industry. Through committee work, the organization develops standards on topics including network reliability, technological interoperability, and the transition to IP networks. In March 2013, the organization released an “Intercarrier Call Completion/Call Termination Handbook.” The handbook provides detailed descriptions of call completion problems, applicable industry standards, and best practices involved in ensuring that calls complete as they are supposed to. The handbook includes both mandatory requirements and recommendations. ATIS released an updated version of the handbook in October 2015. In describing the handbook, ATIS states:

This handbook describes some of the problems being encountered by rural telephone company customers in receiving long distance calls. It discusses some of the industry standards and practices relevant to ensuring call completion, particularly signaling, routing, and trouble handling. This handbook attempts to relate these standards and practices to the call completion problems reported, and offers some

best practices for ensuring call completion. This handbook provides a resource to carriers to address issues as they are encountered related to long distance call completion/call termination.⁵⁴

The handbook is a living document and will be updated over time to reflect further learnings and any changes to applicable standards and regulations. It includes sections on many different standards and guidelines for root causes related to call completion, including the responsibilities of carriers handling calls, call signaling, transmission quality, routing, network congestion, best practices for management of intermediate providers, trouble reporting, end-to-end intercarrier testing, call set-up time trouble reporting and sectionalization, industry-accessible contact directories, and applicable regulatory requirements, including handling customer proprietary network information (CPNI).

ATIS is accredited by the American National Standards Institute (ANSI). The ATIS Handbook is an American National Standard developed by the ATIS Next Generation Interconnection Interoperability Forum (NGIIF). The ATIS NGIIF has developed and maintains two contact directories which are available at no charge to the telecommunications industry.⁵⁵ The Service Provider Contact Directory (SPCD) provides contact numbers to the telecommunications industry for requesting interconnecting company assistance on service-related situations. The SPCD identifies intercompany contact points. Information of particular relevance to resolving rural call completion issues in the SPCD is inclusion of IXC carrier-to-carrier

⁵⁴ ATIS Handbook, p. i.

⁵⁵ ATIS Handbook, pp. 46-47.

information so that service providers have a readily available source for appropriate contacts at other service providers. Some service providers have established dedicated toll-free numbers and/or email addresses related to rural call completion and have provided them in the SPCD. The second contact directory is the National Local Number Portability (LNP) Contact Directory. The purpose of this directory is to provide contact numbers to the telecommunications industry for requesting interconnecting company assistance on service-related situations relating to LNP. The NGIIF recommends that all service providers list and update their contacts in both directories on a regular basis, and ATIS sends an annual invitation requesting new or updated contact information. The ATIS Handbook provides a webpage address for access to the contact directories, although a password must be requested from ATIS. The directories are available to State Commission/Board staff and local exchange carriers with a password for the purpose of call issue mitigation.

VI. THE CONSUMER ADVOCATE'S REPORTS

A. The Consumer Advocate's Report in Docket No. FCU-2012-0019 (*Rehabilitation Center of Allison*) (Includes Nine Proposed Concrete Steps)

The Consumer Advocate filed public and confidential versions of its report in Docket No. FCU-2012-0019 on December 19, 2014. The Consumer Advocate's report includes as exhibits data request responses received from CenturyLink, Mediacom, and Iowa Network Services (INS). The report provides detailed information of what the Consumer Advocate has learned about the CenturyLink

networks; the history of trouble reports for the Allison facility and Waverly Health Center and what was done to address them; CenturyLink's use of intermediate carriers; and CenturyLink's call routing practices. Detailed summaries of the report and the responses from CenturyLink, Dumont Telephone Company (Dumont), and Iowa Network Services, Inc. (INS), are included in the CenturyLink 2015 Staff Memo. Much of this information is being held confidential by the Board and will therefore not be discussed specifically in this decision.

In the report, the Consumer Advocate explains that while none of the parties has been able to point to a certain answer about what caused the call failures, the evidence and the restoration of reliable service after removing intermediate carriers suggests with a high degree of probability that the problems were caused by intermediate carriers.⁵⁶

The Consumer Advocate noted there are potentially thousands of interconnecting service providers using a variety of evolving technologies and thousands of points of interconnection across the United States.⁵⁷ The Consumer Advocate observed that Iowa intrastate calls might be routed anywhere. The Consumer Advocate stated that the “sheer complexity of the network, absent adequate accountability and safeguards, all but ensures that difficulties will occur with unacceptable frequency, particularly in rural areas.”⁵⁸

⁵⁶ Consumer Advocate Dec. 19, 2014, Report, p. 14, ¶ 30.

⁵⁷ Citing the direct testimony of CenturyLink witness Ms. Mary Retka, pp. 2-3, filed December 13, 2013.

⁵⁸ Consumer Advocate Dec. 19, 2014, Report, p. 14, ¶ 31.

The Consumer Advocate also notes that investigations in other Board proceedings have identified two recurring explanations for the call failures: (1) capacity limitations in the physical infrastructure of intermediate carriers, including limited bandwidth that will not support transmission of packets with sufficient speed for effective voice communication, particularly at peak times, and (2) intermediate carrier outages, including so-called "sunny day" outages, often caused by software malfunctions, especially with Internet-protocol infrastructures.⁵⁹

The Consumer Advocate summarized its conclusions about the causes of the call failures by stating that:

[B]ased on the learning here and elsewhere, it appears the proliferation of intermediate carriers, not always financially sound, coupled with inadequate monitoring of their performance, inadequate coordination between and among the carriers, and inadequate record-keeping, lie at the core of the problem. The failed calls were probably due in part to inadequate intermediate carrier physical facilities reaching the rural destination. Other, more deliberate, causes cannot be ruled out, but no direct evidence of such causes was uncovered.⁶⁰

In the report, the Consumer Advocate proposed nine concrete steps toward a long term solution. According to the Consumer Advocate, the nine steps complement the FCC's work and would also be appropriate for consideration in a Board rule-making proceeding involving the entire industry. The Consumer Advocate also included the nine proposed steps in its reports filed in the other call completion

⁵⁹ Consumer Advocate Dec. 19, 2014, Report, pp. 14, 15, ¶¶ 32-34.

⁶⁰ Consumer Advocate Dec. 19, 2014, Report, pp. 14-15, ¶¶ 32 – 35.

dockets and combined steps 1 and 6 in its reply filed on March 19, 2015, in the
dockets.

The Consumer Advocate's nine steps are as follows:

Step 1: Originating and upstream intermediate carriers must acknowledge responsibility for the performance of downstream intermediate carriers they use to complete calls.

The Consumer Advocate noted the FCC had recently emphasized in an order regarding the vulnerability of the 911 system that there is a need for "end-to-end" carrier responsibility and accountability from the time a call is placed until it is completed. The Consumer Advocate argues such end-to-end responsibility is a prerequisite to solving the rural call completion problem. The Consumer Advocate stated the first step in a long term solution to the problem is for originating and upstream intermediate carriers to acknowledge responsibility for the performance of the downstream intermediate carriers they engage to complete the calls.

Step 2: Carriers must file with the Board a list of downstream carriers they use to carry Iowa traffic.

The Consumer Advocate stated a simple filing of this character, with contact information for the downstream carriers, updated as changes occur, will keep the Board informed of the identities of carriers who carry Iowa traffic.

Step 3: Reduce the number of intermediate providers in the call paths.

The Consumer Advocate contends that one key reason for increased call failures in rural areas is that a call can be handled by numerous providers, leaving call routes that are difficult to trace. Limiting the number of intermediate providers

allows providers to better manage performance to rural destinations and also limits potential for lengthy setup delay and looping. If a carrier can implement the FCC's Safe Harbor provisions by limiting the number of intermediate providers on a call path to two or fewer, it will help remediate the call failures. The Consumer Advocate notes that even if a carrier cannot implement the Safe Harbor or is not subject to the federal reporting requirements, the carrier may be able to limit the number of intermediate carriers it uses by negotiating new interconnection agreements or constructing new infrastructure.

Step 4: Promote transparency in the use of downstream carriers.

The Consumer Advocate contends that a lack of transparency in the use of downstream carriers lessens accountability and restricts the Board's ability to understand call completion problems. The Consumer Advocate points to the FCC's rule at 47 CFR § 64.2107, which requires as a condition of using the Safe Harbor, that a covered provider certify that any nondisclosure agreements with intermediate providers allow disclosure of the identity of the intermediate provider and any additional intermediate providers to the FCC and to the affected rural local exchange carrier. The Consumer Advocate's position is that regardless of whether a carrier uses the Safe Harbor provisions or is subject to the federal reporting requirements, a commitment from a carrier to certify that any nondisclosure agreement allows disclosure to the Board of the identity of intermediate providers and the contract would increase transparency.

Step 5: Actively participate in the standard-setting work of the Alliance for Telecommunications Industry Solutions (ATIS).

The Consumer Advocate credits CenturyLink for participating in work with ATIS. The Consumer Advocate argues that industry-wide participation with ATIS in its efforts to diagnose problems in call routing, cooperate on finding solutions, and adopting best practices will help solve the call completion problem because all carriers interconnect with the same public telephone network, which requires interoperability and coordination. The Consumer Advocate proposes that when new ATIS standards are developed, companies should report them to the Board so the Board can ensure they adequately protect consumers and are followed. The Consumer Advocate argues that in time, once the standards are more fully developed for all technologies, the Board should consider whether they should be adopted as Board rules.

Step 6: Exercise responsibility over the use of downstream intermediate carriers.

The Consumer Advocate proposes that each originating and intermediate carrier that uses downstream intermediate carriers should have policies in place addressing the following 13 elements on an ongoing basis:

1. Establish and conduct standardized testing routines.
2. Investigate whether downstream carriers have properly designed and functioning equipment (including software).
3. Investigate whether downstream carriers have sufficient capacity in their switches and call paths to carry calls to their intended destinations.
4. Require each downstream carrier to provide specific information regarding its system and the limitations of its system, including any difficulties the system may have interoperating with other systems which use different technology.

5. Require each downstream carrier to provide specific information regarding bandwidth or capacity constraints that would prevent the system from completing calls to particular destinations at busy times.
6. Require each downstream carrier to have properly designed and functioning alarms to ensure immediate notice of outages on its system.
7. Require each downstream carrier to have mechanisms in place to ensure that the downstream carrier, if unable to complete a call, timely releases the call back to the upstream carrier.
8. Require each downstream carrier to have functioning mechanisms in place to ensure that the downstream carrier, if making successive attempts to route the call through different lower-tiered downstream carriers, timely passes the call to a subsequent lower-tiered downstream carrier if a first or subsequent carrier cannot complete it.
9. Require each downstream carrier to have properly designed and functioning mechanisms in place to detect and control looping (including use of hop counters or their equivalent that alert a carrier to the presence of a loop).
10. Establish quality measures and require downstream carriers to meet them.
11. Implement appropriate sanctions for intermediate carriers that fail to meet standards.
12. Require downstream carriers to manage lower-tiered downstream carriers and to hold lower-tiered carriers to the same standards to which they are held.
13. Define the responsibilities of downstream carriers in an agreement.

In subsequent filings,⁶¹ in response to carrier objections that proposed Step 1 (originating and upstream intermediate carriers must acknowledge responsibility for the performance of downstream intermediate carriers they use to complete calls) was not concrete, the Consumer Advocate combined Steps 1 and 6.

Step 7: Provide copies of the Iowa portion of the federal data and the FCC's analysis of the Iowa data to the Board and the Consumer Advocate.

For the Board to effectively evaluate and solve the problems, and to allow the Consumer Advocate to discharge its responsibilities to consumers, the Consumer

⁶¹ For example, in the March 19, 2015, Reply, filed in Docket Nos. FCU-2012-0019, FCU-2013-0004, FCU-2013-0005, FCU-2013-0006, and FCU-2013-0009. A summary of the Consumer Advocate's Reply is included in the CenturyLink 2015 Staff Memo.

Advocate contends the Board will need access to relevant information. The Consumer Advocate proposes that on an ongoing basis, a company reporting to the FCC provide copies of the Iowa data and the FCC's analysis of the Iowa data to the Board and the Consumer Advocate.

Step 8: Keep routing tables up-to-date.

According to the Consumer Advocate, accurate routing tables are essential to successful call completion. The Consumer Advocate contends the tables are changing constantly due to consumers changing carriers and porting numbers and that if the tables are not updated properly, a call could fall into a loop and never be set up. The Consumer Advocate contends that the updating should be done through the Local Exchange Routing Guide (LERG) of the Traffic Routing Administration.

Step 9: Provide periodic progress reports to the Board.

The Consumer Advocate proposes that each company periodically report to the Board on the progress it is making fulfilling any commitments it makes.

**B. The Consumer Advocate's Report in Docket No. FCU-2013-0004
(*UnityPoint Clinic at Huxley*)**

The Consumer Advocate filed public and confidential versions of its report in Docket No. FCU-2013-0004 on January 9, 2015. The Consumer Advocate's report includes as exhibits data request responses received from CenturyLink, Bluetone Communications, LLC (Bluetone), and Huxley Communications Cooperative.

Detailed summaries of the report and the responses from CenturyLink are included in the CenturyLink 2015 Staff Memo.

The Consumer Advocate noted in the report that it concentrates on the information specific to this docket and does not repeat the general information provided in the earlier reports filed in Docket Nos. FCU-2013-0007, *Complaint of Frahm*, filed November 14, 2014, and FCU-2012-0019, *Rehabilitation Center of Allison*, filed December 19, 2014. The Consumer Advocate stated this report should be read in conjunction with the two earlier reports. The Consumer Advocate provided detailed information regarding its investigation in the report.

The Consumer Advocate included the proposed nine steps it previously suggested and recommended that CenturyLink and Bluetone take these steps to restore the reliability of the network and, therefore, to achieve a long term solution to the rural call completion problem. The Consumer Advocate stated the nine steps are intended to complement the work of the FCC, including the data collection and reporting to be implemented pursuant to the FCC rules. It also stated the suggested actions are appropriate for consideration by the Board in a rulemaking proceeding, which could provide long term solutions industry-wide.

**C. The Consumer Advocate's Report in Docket No. FCU-2013-0005
(Hancock County Health Systems)**

The Consumer Advocate filed public and confidential versions of its report in Docket No. FCU-2013-0005 on January 16, 2015. The Consumer Advocate's report includes as exhibits data request responses received from CenturyLink, the former

IntelePeer, Inc. (IntelePeer)⁶², Airus, Inc. (Airus), which acquired IntelePeer while these proceedings were pending, and Impact Telecom, Inc. (Impact). Detailed summaries of the report and the responses from CenturyLink, Airus, and Impact are included in the CenturyLink 2015 Staff Memo.

As in the report filed in FCU-2013-0004, the Consumer Advocate noted in this report that it concentrates on the information specific to this docket and does not repeat the general information provided in the earlier reports filed in Docket Nos. FCU-2013-0007, *Complaint of Frahm*, filed November 14, 2014, and FCU-2012-0019, *Rehabilitation Center of Allison*, filed December 19, 2014. The Consumer Advocate stated this report should be read in conjunction with the two earlier reports. The Consumer Advocate provided detailed information regarding its investigation in the report and included the proposed nine steps it previously suggested. The Consumer Advocate recommended that CenturyLink, Airus, and Impact take these steps as elements of a long term solution to the call completion problems and stated they would be appropriate for Board consideration in a rule-making proceeding.

**D. The Consumer Advocate's Report in Docket No. FCU-2013-0006
(*Complaints of Ms. Adolphson and Ms. Skallerup*)**

The Consumer Advocate filed public and confidential versions of its report in Docket No. FCU-2013-0006 on January 20, 2015. The Consumer Advocate's report includes as exhibits data request responses received from CenturyLink and

⁶² Peerless Network, Inc. (Peerless), acquired all the common stock of IntelePeer, and then Peerless was renamed Airus, Inc. (November 13, 2014, cover letter filed by the Consumer Advocate in FCU-2013-0007.

InterMetro Communications, Inc. (InterMetro). Detailed summaries of the report and the responses received from CenturyLink and InterMetro are included in the CenturyLink 2015 Staff Memo.

As in the reports filed in FCU-2013-0004 and FCU-2013-0005, the Consumer Advocate noted in this report that it concentrates on the information specific to this docket and does not repeat the general information provided in the earlier reports filed in Docket Nos. FCU-2013-0007, *Complaint of Frahm*, filed November 14, 2014, and FCU-2012-0019, *Rehabilitation Center of Allison*, filed December 19, 2014. The Consumer Advocate stated this report should be read in conjunction with the two earlier reports. The Consumer Advocate provided detailed information regarding its investigation in the report and included the proposed nine steps it previously suggested. The Consumer Advocate recommended that CenturyLink and InterMetro take these steps as elements of a long term solution to the call completion problems and stated they would be appropriate for Board consideration in a rule-making proceeding.

**E. The Consumer Advocate's Report in Docket No. FCU-2013-0009
(*Complaint of Mr. Pals*)**

The Consumer Advocate filed public and confidential versions of its report in Docket No. FCU-2013-0009 on January 23, 2015. The Consumer Advocate's report includes as exhibits data request responses received from CenturyLink, Bluetone, West Liberty Telephone Company d/b/a Liberty Communications (Liberty), and TouchTone Communications, Inc. (TouchTone). Detailed summaries of the report

and the responses received from CenturyLink, Bluetone, Liberty, and TouchTone are included in the CenturyLink 2015 Staff Memo.

As in the reports filed in FCU-2013-0004, FCU-2013-0005, and FCU-2013-0006, the Consumer Advocate noted in this report that it concentrates on the information specific to this docket and does not repeat the general information provided in the earlier reports filed in Docket Nos. FCU-2013-0007, *Complaint of Frahm*, filed November 14, 2014, and FCU-2012-0019, *Rehabilitation Center of Allison*, filed December 19, 2014. The Consumer Advocate stated this report should be read in conjunction with the two earlier reports. The Consumer Advocate provided detailed information regarding its investigation in the report and included the proposed nine steps it previously suggested. The Consumer Advocate recommended that CenturyLink and Bluetone take these steps as elements of a long term solution to the call completion problems and stated the suggested actions would also be appropriate for Board consideration in a rule-making proceeding.

F. The Consumer Advocate's Report filed in Docket No. FCU-2013-0007 (Complaint of Ms. Frahm)

The Consumer Advocate filed public and confidential versions of its report in Docket No. FCU-2013-0007 on November 13, 2014. The report includes as exhibits data request responses received from Windstream, MCI Communications Services, Inc., d/b/a Verizon Business Services (Verizon), IntelPeer, Airus, and Earthlink, Inc. (Earthlink). Detailed summaries of the Consumer Advocate's report and the

responses received from Windstream and Airus are included in the Windstream 2015 Staff Memo.

The Consumer Advocate provided detailed information regarding the call completion difficulties experienced by Ms. Frahm, the causes of the problems, Windstream's use of intermediate providers, and what was done to address Ms. Frahm's problems, including the routing changes made.

The Consumer Advocate stated the proliferation of rural call completion problems in recent years has coincided with the proliferation of intermediate providers. The Consumer Advocate noted that according to Verizon, hundreds of carriers are involved in carrying calls in Iowa.⁶³ The Consumer Advocate stated:

It appears the proliferation of intermediate carriers, not always financially sound, coupled with inadequate monitoring of their performance, inadequate coordination between and among the carriers, and inadequate record-keeping, lie at the core of the problem. The failed calls were probably due in part to inadequate physical facilities reaching the rural destination. Other, more deliberate, causes cannot be ruled out, but no direct evidence of such causes was uncovered.⁶⁴

The Consumer Advocate included the nine concrete steps toward a long term solution discussed above in its report. The Consumer Advocate recommended that Windstream and Airus take these steps as elements of a long term solution to the call completion problem. It stated these suggested actions would also be appropriate for

⁶³ Consumer Advocate Report, p. 3, ¶ 6.

⁶⁴ Consumer Advocate Nov. 13, 2014, Report, p. 8, ¶ 24.

Board consideration in a rule-making proceeding, which could afford long term solutions on an industry-wide basis.⁶⁵

VII. FCU-2014-0007 STIPULATION OF FACTS AND PROPOSED SOLUTIONS

On February 19, 2016, in Docket No. FCU-2014-0007, *Complaint of Sutherland Mercy Medical Clinic*, the Consumer Advocate filed public and confidential versions of a stipulation of facts on behalf of itself, West Iowa Telephone Company d/b/a WesTel Systems (WesTel), CenturyLink, and Comcast Phone of Iowa, LLC (Comcast). The public version redacted telephone numbers and the names of two underlying carriers. The Consumer Advocate filed a cover letter with the stipulation stating that the confidential version contains telephone numbers, which are deemed confidential by the Board, and information that was provided to the Consumer Advocate under a claim of confidentiality. The Consumer Advocate requested that the Board keep the confidentially-marked information confidential for ten days to give the affected parties the opportunity to seek and obtain a protective order from the Board pursuant to Board rule 1.9. No one filed a request to keep the information confidential. Therefore, the complete telephone numbers will be kept confidential, but the names of the intermediate carriers will be public.

Among other things, the parties stipulated that on January 28, 2014, Mr. Jason Wilbur filed a complaint with the Board on behalf of the Sutherland Clinic regarding long distance calls that were failing to complete. The parties stipulated that WesTel

⁶⁵ Consumer Advocate Nov. 13, 2014, Report, pp. 29-36, ¶¶ 85-94.

was the clinic's local exchange carrier, CenturyLink was the long distance carrier for the Sutherland Clinic, and Comcast was an intermediate long distance carrier. They stipulated that Iowa Network Services (INS) is the provider of centralized equal access service throughout the state and operated the originating and terminating tandem on the calls at issue. The parties investigated five calls that failed to complete on January 28, 2014. With regard to the calls in question, the parties stipulated that CenturyLink received the calls from INS and routed them to Comcast, Comcast routed the calls to additional underlying carriers, and ultimately the calls did not complete. The two underlying carriers for different calls were IntelePeer and Level 3. The parties stipulated that after Comcast handed the calls to another intermediate carrier, the call routing beyond IntelePeer or Level 3 is lost and it is unknown who handled the calls after that point. The parties also stipulated it is unknown who sent the answering signal to INS indicating three of the calls had reached their destination when this was not true. The parties stipulated that given the complexity of call routing and the timeframes for which carriers maintained records at the time of the complaint, these facts are not able to be determined. The parties further stipulated that CenturyLink is complying with FCC regulations regarding call completion. They stipulated that the FCC excluded intermediate carriers such as Comcast from requirements of the FCC call completion regulations. They also stipulated that local exchange carriers and equal access providers such as

INS were not included in the FCC's consideration of call completion problems because the main source identified for the problems was long distance routing.

CenturyLink filed "Qwest Communications Company, LLC d/b/a CenturyLink QCC's Proposed Solution to Rural Call Completion Issues" on February 19, 2016. CenturyLink states that because the underlying issues in this case are virtually identical to the underlying issues in the other five CenturyLink call completion cases, the proposed solutions it offered in the other cases are appropriate for this case.⁶⁶ CenturyLink provided information about what it has done and is doing to solve call completion issues, both in Iowa and in all states in which it provides long distance services. CenturyLink also stated the most recent check of its long distance repair database shows no recurrence of the problems at the Sutherland Clinic.

CenturyLink stated it believes its adoption of the FCC's Safe Harbor Requirements and going beyond what is required to provide a one-hop routing requirement is the best solution to solving call completion concerns in Iowa. It stated implementing the Safe Harbor has been difficult and expensive and its work deserves serious recognition in crafting any Iowa-specific solution imposed on CenturyLink.

CenturyLink states its adoption of the one-hop protocol has resulted in steep declines in complaints to its long distance repair center involving call completion issues. CenturyLink stated it has filed three quarterly Form 480 reports with the FCC as required and each report has shown results indicating the benefits of

⁶⁶ CenturyLink referred to the proposed solutions it filed in Docket Nos. FCU-2012-0019, FCU-2013-0004, FCU-2013-0005, FCU-2013-0006, and FCU-2013-0009 on April 27, 2015.

CenturyLink's adoption of the Safe Harbor handling for long distance calls.

CenturyLink states its implementation of the near real-time proactive review of daily call completion results has allowed CenturyLink to ensure its ongoing watchfulness on long distance call completion with its underlying carriers.

CenturyLink stated it has updated its Web site to provide customers with clear information on the issue and continued its leadership in the ATIS forum on long distance call completion. CenturyLink states its actions will prevent call completion issues in many instances and will ensure they are timely addressed in other instances. CenturyLink commits to maintaining its leadership role at ATIS and to adopting best practices in the industry as they are relevant to CenturyLink's network.

On February 26, 2016, the Consumer Advocate filed a "Response to Order and Proposed Solutions," and Comcast filed "Comcast Phone's Statement Regarding Filing of Proposed Solutions." In its filing, the Consumer Advocate stated it did not think that Comcast necessarily needed to file its own proposed solutions, but Comcast needs to participate in the solutions. The Consumer Advocate stated that all carriers must interconnect with the same public telephone network, and interoperability and coordination are needed across all components of the network. The Consumer Advocate further stated that industry-wide participation, including the participation of intermediate carriers such as Comcast, is necessary for a comprehensive solution to call completion problems.

Similarly to the other call completion cases before the Board, the Consumer Advocate proposed the following steps it argued Comcast should take as elements of a long term solution to the problem of call completion:

- 1) Acknowledge responsibility for performance of downstream carriers and exercise responsibility over use of downstream carriers.
- 2) Maintain on file with the Board a list of downstream carriers used to carry Iowa traffic.
- 3) Reduce the number of intermediate carriers in the call path.
- 4) Promote transparency in the use of downstream carriers.
- 5) Actively participate in ATIS standard-setting work.
- 6) Keep routing tables up-to-date.
- 7) Provide periodic reports to the Board on implementation.

The Consumer Advocate stated these steps would complement the work of the FCC and are appropriate for consideration by the Board in a rule-making proceeding to develop long term solutions that would apply industry-wide.

On February 26, 2016, Comcast filed its statement regarding whether it should file proposed solutions. Comcast noted the parties' stipulation of facts, which included that the FCC excluded intermediate carriers such as Comcast, from the requirements of its call completion regulations. Comcast asserted it has cooperated with the investigation of this case by providing information to Board staff and the Consumer Advocate, which was incorporated into the stipulation of facts. Comcast stated that information shows it successfully accepted and handed off the calls in

question. Comcast stated it identified for Board staff the carrier to whom Comcast handed the calls and explained the signaling received from those carriers. Comcast contended that because there was no failure on its system and because there is no assertion that Comcast caused the call failure, there is nothing for Comcast to solve. Comcast stated it will cooperate with investigations by the Board or the Consumer Advocate on any future issues, but does not believe it needs to file additional material in this case.

On March 17, 2016, the undersigned administrative law judge issued an “Order Requiring Filing” reviewing the statements of position filed by the Consumer Advocate and Comcast and the stipulation of facts. The order found that it appeared from the stipulation of facts and the other information filed that this case is similar to the other Iowa call completion cases involving CenturyLink and that the solutions to the call completion issues in this case should be similar to the solutions involved in the other CenturyLink call completion cases. Therefore, the order stated, the undersigned administrative law judge would be considering this case along with the other CenturyLink call completion cases.

The order stated the Consumer Advocate was correct that Comcast needed to participate in the solutions to call completion problems for the following reasons:

As the Consumer Advocate stated in its response, ‘All carriers must interconnect with the same public telephone network, and interoperability and coordination are needed across all components of the network. Industry-wide participation, including participation of intermediate carriers such as Comcast, is necessary for a comprehensive solution to call completion problems.’ In its Intercarrier

Call Completion/Call Termination Handbook, the Alliance for Telecommunications Industry Solutions (ATIS) states: 'Call completion/call termination in today's Public Switched Telephone Network (PSTN) depends on coordination between different service provider (SP) entities, each playing their part in setting up a workable connection between calling and called parties.'⁶⁷

The order observed that in this case, long distance calls from the Sutherland Clinic did not complete. Comcast was one of the carriers in the call path. The order responded to Comcast's assertion that because it successfully handed off the calls to other intermediate carriers, it does not have any responsibility for either the call failure or for finding solutions. The order stated this argument was not valid and missed the point of these proceedings. The order noted CenturyLink could make a similar argument, and stated if the argument were accepted as valid, then no carrier would accept responsibility for its share in the problem and the problem would not be solved. The order stated that these Iowa proceedings have shown that call completion/call termination is an industry-wide problem that needs industry-wide solutions. The order stated:

Furthermore, an important part of these proceedings is to understand what the carriers themselves are already doing to correct call completion problems and whether those actions have been successful. Knowing this information is essential to deciding whether additional Board action needs to be taken, and if Board action is needed, to be able to understand exactly what is needed and to narrowly tailor any requirements considering the effective actions already taken by the carriers.⁶⁸

⁶⁷ FCU-2014-0007, "Order Requiring Filing," p. 6, issued March 17, 2016 (footnote omitted).

⁶⁸ "Order Requiring Filing," p. 7.

The order concluded that since it was so late in the proceedings, Comcast would not be required to file its own proposed solutions, but would be required to file answers to the questions asked of other participants in these cases, *i.e.*, to state the specific actions Comcast has taken to address its call completion issues, including whether the company has assigned a particular staff person or team to handle call completion issues if they arise, and whether those actions have been effective; to state whether the carrier is participating in the standard-setting work of ATIS; and to state whether Comcast is committed to following the ATIS standards as they are developed and applicable to Comcast.

Comcast filed its "Response to March 17, 2016, Order" on April 1, 2016. Comcast stated that its practice, as it relates to the current proceeding, involves transmitting calls placed by its retail customers to third-party carriers. It stated those carriers either terminate the call to the called party's local exchange carrier or hand off the call to an interexchange carrier for routing to the local exchange carrier. Comcast stated that to ensure call completion and service quality, it contracts only with interexchange carriers that Comcast believes meet Comcast's performance goals and standards, including call completion standards. Comcast explained that it monitors the performance and regularly meets with its vendors to discuss performance. If Comcast becomes aware of poor performance on a particular route due to recognized performance reduction, customer complaints, or complaints from other carriers, Comcast will not route traffic over that route and will temporarily

reroute the traffic over an alternate path until the carrier has fixed the problem. If a carrier cannot or does not resolve the issue, Comcast may permanently reroute the traffic to another carrier.

Comcast stated that its operations are aware of rural call completion issues and the above use of and review of its call completion metrics, and management of vendor performance based on those metrics, have resulted in completion metrics for rural calls that meet the company's call completion standards for terminating routes, whether rural or non-rural.

Comcast stated its representatives actively participate in a number of on-going ATIS projects and that Comcast meets or exceeds the ATIS Next Generation Interconnection Interoperability Forum (NGIIF) standards.

VIII. FCU-2014-0014 REPORT, STIPULATION OF FACTS, AND PROPOSED SOLUTIONS

On January 7, 2016, in Docket No. FCU-2014-0014, *Complaint of Horn Memorial Hospital*, an order was issued requiring the Consumer Advocate to file a report of its investigation into whether Horn Memorial Hospital had continued to experience additional call completion problems, and if it had, requiring Frontier to file a report stating what it did to correct the problems. The order also required the parties to file a stipulation of facts and required Frontier to file a report explaining the call completion reports it was filing with the FCC and the actions it is taking to address and prevent call completion issues that would also cover call completion

issues in Iowa. The order stated additional decisions regarding procedure would be made after the stipulation and reports were filed with the Board.

On January 20, 2016, the Consumer Advocate filed a response to the order stating that Ms. Weber of Horn Memorial Hospital (the hospital) reported the hospital continues to have call completion problems with respect to incoming calls. Ms. Weber also reported the hospital had not had any problems with outgoing calls since filing the initial complaint and the hospital was satisfied with the resolution of the previous problems with outgoing calls.

On January 28, 2016, Frontier filed a response to the Consumer Advocate's report. Frontier noted the hospital had not had any call completion problems with outgoing calls since the original complaint and was satisfied with the resolution of the previous problems. Since outgoing call completion issues were the basis of the hospital's original complaint and had not recurred since June of 2014, Frontier stated it had not needed to take any corrective action as all outgoing call completion issues have been resolved. With regard to the hospital's continuing call completion problems with incoming calls, Frontier stated that further communication between the Consumer Advocate and the hospital revealed the hospital does not have any information regarding the dates and times of such incoming call completion issues. Frontier stated the hospital understands that incoming call completion problems are the responsibility of the originating carrier of the persons initiating the calls to the hospital, not Frontier. Frontier further stated there is insufficient information about the

problematic incoming calls to be able to investigate the calls or take any specific remedial actions.

On February 25, 2016, Frontier filed a report explaining the call completion reports it is filing with the FCC and the actions it is taking to address and prevent call completion issues. Frontier noted the FCC implemented reporting requirements in August of 2015 for covered providers regarding call completion.⁶⁹ Frontier stated it is a covered provider within the meaning of the rule and it has complied with all reporting requirements since the rule took effect. Frontier filed quarterly certified reports with the FCC on August 1, 2015, November 1, 2015, and February 1, 2016, which reported the monthly data required by the rules. Frontier committed to complying with all future applicable FCC requirements for call completion reporting.

In its February 25 report filed with the Board, Frontier also discussed the actions it has taken to address and prevent call completion issues. Frontier stated it carefully selects wholesale providers used to complete its originating long distance calls and has a number of requirements prospective carriers must satisfy before Frontier will include them in its call completion network. Frontier provided details of these requirements in its report. Among other things, Frontier investigates potential carrier's equipment and systems to ensure there is sufficient capacity to carry traffic and that the equipment is properly designed and functioning correctly. Frontier performs a number of tests before placing a downstream carrier in service and

⁶⁹ 47 C.F.R. § 64.2105.

monitors the ongoing performance of its downstream carriers to ensure continued quality of service. If there are problems, Frontier follows up with the carrier and may remove a carrier from routing to a specific local exchange carrier, area, or to Frontier's entire network if needed. Frontier stated it provides information to its customers regarding service concerns, including call completion issues, through bill messages and information in telephone directories. The information tells customers how to report service problems. If a customer reports a call completion issue, Frontier promptly communicates with the customer to identify the cause and resolve the problem. Frontier noted its actions to promptly resolve the customer's call completion problem in this case, including providing the customer with a direct telephone number to call and a long distance repair toll-free number to report any further long distance issues. Frontier further noted that the hospital has not had any further outgoing call completion problems since its original complaint and that this case is the only call completion complaint case regarding Frontier in the State of Iowa. Frontier stated it takes service quality very seriously and has always been and will continue to be committed to adopting best practices in the industry that are applicable to its network.

On March 10, 2016, the Consumer Advocate filed a "Stipulation of Facts" on behalf of itself, Long Lines, Metro, Inc. (Long Lines), Frontier, Impact, and Level 3. Among other things, the parties stipulated that on June 6, 2014, Ms. Michele Weber filed a complaint on behalf of the hospital regarding long distance calls from the

hospital to Horn Physicians Clinic that were failing to complete during the days of June 3-6, 2014. The parties stipulated it is not known with certainty which hospital telephone lines were used to make the calls in question, and therefore, the parties are not able to determine the underlying facts in this complaint. The parties stipulated the following telecommunications companies were presumed to be involved in the handling of the calls and have participated in the investigation: a) Long Lines, the local exchange carrier for the hospital and for Horn Physicians Clinic; b) Frontier, the hospital's long distance carrier; c) Impact, an intermediate long distance carrier; d) Level 3, an intermediate long distance carrier; and e) Iowa Network Services (INS), the provider of centralized equal access service throughout Iowa.

The parties stipulated to details of their investigation, and what they could and could not learn. In the course of Frontier's investigation of the hospital's complaint, Frontier made test calls on June 10 and 11, 2014. The test calls on June 10 routed through Impact and Verizon completed, but the test calls routed through Impact on June 11 failed to complete. During the investigation, Frontier temporarily, and then permanently, removed Impact from the call route for the hospital. The parties also stipulated that Impact routed the test calls to Level 3, and on June 12, Impact received an email from Level 3 reporting that Level 3 was experiencing problems with its underlying carrier and that routing changes were made to correct the issue. However, the parties stipulated, since the hospital was uncertain which of its

telephone numbers was the originating call number for the calls that led to the original complaint, it is unknown who handled the calls after Frontier handed the calls to an intermediate carrier. The parties stipulated that given the confusion surrounding the originating number, the underlying facts are not able to be determined in this investigation.

The parties further stipulated that Frontier is complying with the FCC regulations regarding call completion. They stipulated that the FCC excluded intermediate carriers such as Impact and Level 3 from the requirements of the regulations. They also stipulated that local exchange carriers, such as Long Lines, and equal access providers, such as INS, were not included in the FCC's consideration of call completion problems because the main source identified for the problems was long distance routing.

An "Order Regarding Further Procedure" was issued on March 17, 2016. The order stated that after considering the filings of the parties, it appeared no further separate procedures were necessary. The order stated it appeared this case is similar to the other call completion cases being considered by the Board and that the solutions to the call completion issues in this case should be similar to the solutions involved in the other cases. Therefore, the order stated the undersigned administrative law judge would be considering this case along with the other call completion cases in determining the necessary and appropriate order to be issued.

The order reiterated that the focus of these call completion proceedings has been on understanding the causes of the call completion problems as much as that is possible, and then on finding effective, preventative, long term solutions to the call completions problems customers in Iowa have experienced. The order noted the cases have also monitored whether the complaining customers have continued to experience call completion problems. The order stated that understanding the specifics of the actions the long distance and intermediate carriers have taken to solve these problems on a nationwide basis in their interactions with the FCC and in industry proceedings has been important as well. As stated in the order, understanding the actions these carriers are already taking to correct call completion problems, and whether those actions have been successful, is essential to deciding whether additional Board action needs to be taken. If Board action is needed, the order stated, the information provided by the parties in these cases will help gain an understanding of exactly what is needed, and will allow any requirements to be narrowly tailored so they consider and fit with the effective actions the carriers are already taking.

IX. CARRIER PROPOSED SOLUTIONS

A. CenturyLink's Proposed Solutions

CenturyLink filed its proposed solutions in Docket Nos. FCU-2012-0019, FCU-2013-0004, FCU-2013-0005, FCU-2013-0006, and FCU-2013-0009 on April 27, 2015. CenturyLink stated that “because the underlying issues in each case relate

essentially to the performance of an underlying carrier, CenturyLink believes that this same proposal is appropriate in each case.” On February 19, 2016, in Docket No. FCU-2014-0007, CenturyLink adopted the proposed solutions previously filed in Docket Nos. FCU-2012-0019, *et al.*, stating that the issues in that case were virtually the same as those in the other five cases involving CenturyLink.

CenturyLink explained that as of April 15, 2015, it had put into place contracting, routing, systems, processes, and tracking necessary to meet the rigorous Safe Harbor requirements adopted by the FCC. CenturyLink stated it was currently in compliance with these requirements. CenturyLink explained it goes beyond the FCC's requirements for the Safe Harbor by using no more than one hop⁷⁰ in each call, rather than the two hops allowed under the Safe Harbor regulations. CenturyLink stated its use of the one-hop results in even better long distance call performance for its customers.

CenturyLink stated the FCC Safe Harbor requirements are designed to provide the highest possible quality in long distance call routing by minimizing the hand-off of calls between carriers. It stated that CenturyLink's one-hop implementation for call processing provides a higher quality and a controlled process in completing long distance calls. CenturyLink stated this minimizes the potential for call completion problems and allows CenturyLink reduced data storage and reporting obligations.

⁷⁰ A “one-hop” solution refers to using only one intermediate carrier in routing a call from origination to completion.

CenturyLink stated it realizes that rural call completion has been a major concern in Iowa with its large number of rural independent local exchange carriers. It stated that the industry's use of intermediate carriers to reduce calling costs has led to actual and perceived quality problems in the industry's completion of calls to rural areas. CenturyLink states its call completion statistics do not show a significant difference between rural and urban call completion percentages in Iowa,⁷¹ its proposed solutions do not differentiate between delivery of calls to rural and urban areas, and they will benefit all CenturyLink customers in Iowa.

CenturyLink explained the steps it has taken to come into compliance with the FCC Safe Harbor requirements:

- Assessed the capacities of its network, looking at where it uses its own national network, where it makes sense to make any needed augmentations or adjustments to its own network, and where it would be more efficient to use other carriers to supplement its network. Where possible, CenturyLink will use its own network to complete long distance calls.
- Augmented capacity to reduce reliance on multiple carriers.
- Revised its contracts so it can send its calls only to intermediate carriers that have confirmed they meet Safe Harbor and CenturyLink's own criteria (including that there be no more than one handoff between CenturyLink's network and providers involved in carrying and terminating a call).
- Canceled contracts with intermediate carriers that cannot meet the criteria and removed them from CenturyLink's routing.
- Ensured that carriers that will be used in routing have all complied with CenturyLink's criteria and contractually agreed that CenturyLink can disclose their identity.
- Ensured that remaining intermediate carriers will be closely monitored and tracked for their call completion performance in at least monthly meetings and

⁷¹ In support, CenturyLink cited the Consumer Advocate's report filed in *Rehabilitation Center of Allison* on December 19, 2014, ¶ 54 and footnote 31 (confidential version).

by processes CenturyLink has put in place to monitor its network on a near real-time basis.

- Augmented its routes with compliant intermediate carriers; tested the routing to ensure ample capacity; augmented routes using its own facilities wherever possible; augmented its routing systems and revised its routing tables for thousands of routes nationwide. Before putting an intermediate carrier on routes, CenturyLink does preliminary testing for long distance voice calls and faxes.
- Created an ongoing monitoring and testing program, which involves monitoring and testing of near real-time data from the prior day to determine rural OCNs with ASR (Answer-Seizure Ratio) and NER (Network Effectiveness Ratio) issues and negative spikes, for further analysis and testing. CenturyLink identified its approach to testing and analyzing this data as a key component of preventing call completion issues such as those that are involved in these cases before the Board.
- Upgraded its trouble ticketing process to more robustly analyze issues and routing and correct problems. CenturyLink states its upgraded process means it will be much better able to resolve any call completion problems that arise.
- Developed a detailed process for gathering the data necessary to complete and submit the quarterly FCC Form 480 reports (the first of which was due in August of 2015). CenturyLink stated through the quarterly reports, the FCC will be able to confirm calls are completing properly to rural numbers. CenturyLink stated it is willing to provide the Board with the Iowa-specific data included in these quarterly reports on the condition that the Board would pre-designate the filing as confidential because it will contain proprietary data belonging to the company or the customer.⁷²
- Updated the process used for its meeting with intermediate carriers so that the performance of each intermediate carrier is discussed on an at least monthly basis. CenturyLink stated these meetings will be used to ensure intermediate carriers are meeting performance requirements and that they take appropriate actions to remedy CenturyLink concerns. CenturyLink stated its contracts with intermediate carriers have rigorous criteria for meeting metrics established by

⁷² This condition was discussed at the August 26, 2015, in-person prehearing conference. The undersigned explained to CenturyLink and the other participants that pre-designation of confidential information must be done through a rulemaking proceeding, and that the Board routinely grants requests for confidential treatment of this kind of information through its rule 1.9 process.

the contract for completing calls and contain specific methods for addressing any network outages in prioritizing and restoring network facilities.

CenturyLink described its adoption of the Safe Harbor as a long term solution to the problems that occurred in the complaints before the Board. CenturyLink contends that the Consumer Advocate's blanket nine-step solution fails to recognize CenturyLink's commitment to addressing the problems and the time and expense it invested to implement the Safe Harbor. CenturyLink's position is that its adoption of the Safe Harbor (and its decision to go further than required by the FCC by providing a one-hop routing commitment) is the best solution to solving call completion problems in Iowa. It stated that with its rigorous requirements, single-hop delivery of calls, and real-time monitoring of long distance calls on its networks to detect negative trends, the issues that have arisen in these cases will be prevented in many instances and will certainly be addressed in a very timely manner in other instances. CenturyLink also committed to maintaining its leadership role at ATIS and adopting relevant best practices in the industry.

B. Impact's Proposed Solutions

Impact filed its proposed solutions in Docket No. FCU-2013-0005 on April 27, 2015. Impact stated that while no definitive cause of the call completion issues experienced by Hancock County Health Systems has been identified, Impact is committed to improving call completion in rural areas. Impact explained it has voluntarily chosen to comply with the processes and procedures in the consent decree between its subsidiary Matrix and the FCC (but not the noncompliance

reports, the quarterly compliance reports, and the financial penalty). Impact explained the processes and procedures are intended to improve rural call completion issues and to assist in complying with the FCC's call completion rules.

Impact's role in Docket No. FCU-2013-0005 was as an intermediate carrier, so it would not be covered by the FCC's rules. However, Impact stated it provides long distance services to end user customers in Iowa, and in those circumstances would be a covered provider under the FCC's rules. Impact believes its proposed long term solutions will be effective in addressing rural call completion issues and improving the quality of services. Impact stated its proposed solutions are largely based on the consent decree and have already been implemented, or are in the process of being implemented.

Impact's proposed solutions are as follows:

- Appointment of a compliance officer with knowledge of call completion problems and applicable law who is responsible for developing and implementing a compliance plan.
- Adoption of a compliance plan and manual designed to ensure compliance with federal law as interpreted in the FCC *Declaratory Ruling* and FCC rules. Details of this are confidential.
- Implement annual compliance training and training for newly hired employees.
- Cooperate with state commissions, the FCC, and rural LECs to take commercially reasonable steps for establishment of test points and testing criteria to evaluate complaints or data showing rural call completion problems.
- Notify other intermediate carriers that are causing call completion problems to analyze and resolve problems as soon as practical. If performance of an intermediate carrier remains inadequate, Impact will not use that carrier if other commercially reasonable options are available for routing.

- Use more Tier 1 providers with records of successful routing and handling of calls and give Tier 1 providers priority in routes.
- Reduce the number of intermediate providers in call paths. (Impact does not endorse adopting a hard limit on the number of intermediate providers, however, because it says this could affect the ability of carriers to perform their obligations.)
- Prioritize complaints involving rural codes and dropping intermediate carriers with higher numbers of connection problems.
- Keep routing tables up to date as a regular part of its business practices.
- Work to ensure transparency in vendor contracts by resisting restrictive confidentiality provisions.
- Voluntarily participate in the National Call Testing Project sponsored by the National Exchange Carrier Association and ATIS.

Impact does not believe that maintaining a list of all downstream carriers used to carry Iowa traffic would solve rural call completion problems. Nor does Impact believe that requiring carriers to provide copies of the Iowa portion of federal data would be fruitful. Instead, Impact suggests it would be less burdensome to require the Consumer Advocate or the Board to request information from the FCC if a specific problem with a specific carrier is identified through the Board's complaint process.

C. Airus' Proposed Solutions

Airus filed its proposed solutions in Docket Nos. FCU-2013-0005 and FCU-2013-0007 on April 27, 2015. Airus observed that the calls that are the subject of these complaints occurred before Peerless Network, Inc. (Airus' previous name), acquired IntelePeer on November 30, 2013. Airus states it is not aware of any call completion problems involving Airus in the call path since the acquisition. It states

the complainants in the two cases have not experienced call completion problems in over two years: Hancock has experienced no problems since February 2013 and Ms. Frahm has experienced no problems since March 2013.

Airus also asserts that the call failures were not caused by IntelePeer or its network. In FCU-2013-0005 (Hancock), Airus states that IntelePeer passed the calls to Impact. In FCU-2013-0007 (Frahm), Airus states that IntelePeer passed the calls to One Communications/Earthlink (Earthlink). In both cases, Airus states, the calls failed at some point after IntelePeer handed off the calls to the downstream carrier. In both cases IntelePeer was informed of the problems, took measures to correct the problems, and the problems were solved. Airus asserts the fact the problems were solved demonstrates there is not a systemic problem with Airus or with Airus' routing of calls.

Airus states it has made a good faith effort to cooperate in these proceedings and develop solutions that will address rural call completion issues both reactively and proactively. It notes it has: 1) responded to discovery requests with as much information as it could reasonably provide given the passage of time and the change in control of IntelePeer; 2) diligently investigated and considered the Consumer Advocate's nine steps; 3) proposed specific guidelines for evaluating solutions and commitments;⁷³ 4) initiated meetings with the Consumer Advocate to attempt to

⁷³ See "Airus, Inc.'s Response to OCA Report," filed on December 15, 2014, in Docket No. FCU-2013-0007, and on February 26, 2015, in Docket No. FCU-2013-0005. Airus' suggested guidelines for evaluating proposed steps for long term solutions include: 1) steps should reasonably contribute to the long term solution; 2) concrete steps should be concrete, clear and precise; 3) steps should

agree on solutions and commitments; and 5) attended the recent Washington, DC workshop on rural call completion problems sponsored by Verizon on April 22, 2015, to understand the industry's latest thinking on causes and solutions to these problems.

Airus notes that the high cost of terminating calls in rural areas has led to a proliferation of intermediate carriers and has provided incentives for rural LECs to not establish direct interconnections for exchanging toll traffic with companies like Airus, limiting the ability of carriers to reduce the number of intermediate carriers in the call path. Airus explains its proposals are specific to itself because it cannot control industry-wide issues including intercarrier compensation and the refusal by rural LECs to establish direct interconnection. Airus also highlights the benefits of using intermediate carriers, including responding to overflow or capacity issues, providing for network redundancy, and filling in gaps in coverage. Airus emphasizes that the goal should not be to eliminate the use of intermediate carriers, but to help the industry work together to develop a quality, redundant network and foster better inter-company communications to prevent network failures.

Airus believes the solutions and commitments it offers will proactively and reactively address rural call completion issues for calls carried by Airus in Iowa. It states they are precise and verifiable, produce real benefits, and control the costs of

produce benefits that outweigh the cost of compliance; 4) steps should take into account rural call completion work performed in other jurisdictions; 5) steps should take into account all root causes of the rural call completion problem; 6) steps should comprehensively and efficiently address rural call completion problems; and 7) steps should provide appropriate incentives rather than engage in micro-managing.

compliance. Airus offers the following proposed solutions/commitments grouped by three categories:

Communications and Reporting:

- Using procedures to resolve and quickly address rural call completion problems, including providing contact information in contracts and on its Web site; responding to the Consumer Advocate and the Board on a timely basis when information is requested; and removing downstream carriers from routing when a problem arises.
- Within 30 days of a final order in these proceedings, Airus commits to developing and implementing a call completion action plan, including a rural call completion response team to investigate and resolve reported problems, a compliance officer responsible for directing the response team and responding to a complainant, specific deadlines for action, specific guidelines on how to respond to a problem (such as removing a downstream carrier or notifying regulators), a record retention policy, and upgrades to the Airus Web site to streamline reporting of rural call completion problems.
- Airus commits to providing the Board and the Consumer Advocate with copies of the Iowa portion of federal data and the FCC's analysis of the Iowa data in the event the FCC's reporting requirements are applied to Airus in the future.
- Airus commits to providing the Board, for a one-year period, with quarterly progress reports on a confidential basis containing a description of the progress Airus is making on meeting its commitments, details on any problems reported to Airus, and steps the company has taken to resolve any problems.
- Cooperating with and providing information to the Board and the Consumer Advocate when investigating a call completion complaint, including assisting in analyzing the root cause and identifying carriers in the call path.

Network Management

To ensure a properly-functioning network and to minimize the chance that Airus' network causes dropped calls, Airus commits to the following:

- Having a properly-designed and properly-functioning network in place to ensure calls are timely completed or released back to the upstream carrier;

- Having properly-designed and functioning mechanisms in place to detect and control looping (see ATIS § 5.2⁷⁴);
- Conducting standardized testing;
- Holding vendor performance meetings;
- Monitoring ATIS standards and implementing those standards when consistent with Airus' network policies; and
- Keeping routing tables up to date through the Local Exchange Routing Guide (LERG).

Airus will continue to seek direct end office interconnections with rural LECs in Iowa for the purpose of limiting the number of intermediate carriers in call paths. Airus states its attempts to do this have largely been unsuccessful in Iowa, but Airus will continue its efforts to establish these types of agreements with Iowa rural LECs.

Downstream Carrier Management

To manage the performance of downstream carriers used to route calls in Iowa, Airus commits to the following:

- Continuing to use interoperability testing at turn-up, i.e., starting to use a particular carrier, to minimize system limitations and interoperability issues;
- Continuing to use internal "report cards" for vendors to identify downstream carriers that need to improve performance;
- Continuing to take quick action to temporarily remove downstream carriers from the call route for poor performance until the problem is resolved if taking the carrier out of the route would enhance performance;
- Within 90 days of a final order in these proceedings, develop an addendum to vendor contracts defining commitments to standards, including commitments from downstream carriers that they will release calls back on a timely basis as envisioned by ATIS § 5.3; and
- Include in confidentiality agreements with vendors provisions allowing Airus to identify the vendor to the Board in response to a Board inquiry in a call completion complaint investigation.

Airus makes these commitments based on the premise that the Consumer

Advocate will not seek, nor will the Board impose, financial penalties on Airus for call

⁷⁴ References are to ATIS Standard ATIS-0300106.

completion problems involved in these proceedings or which may occur in the future while Airus is abiding by these commitments. Airus states while these commitments should go a long way to minimize call completion problems and quickly resolve those that arise, it is impossible to guarantee that calls will complete 100 percent of the time.⁷⁵

D. Windstream's Proposed Solutions

On January 6, 2015, the undersigned administrative law judge issued an order modifying the procedural schedule for Docket No. FCU-2013-0007 to explain that Windstream's proposed solutions:

may be based on the solutions it has agreed to with the FCC, but the proposal must include commitments to the Board as to what Windstream will do in Iowa. . . In addition, the Board recognizes that even after Windstream's solutions have been implemented, an occasional call completion problem may occur. Therefore, part of the solution that must be proposed and implemented in this case is the establishment of better procedures, including providing information to customers on how to most effectively report call completion problems, so customers may report and have their call completion problems addressed much more quickly and effectively than has occurred in the past.

Windstream filed its proposed solutions in Docket No. FCU-2013-0007 on April 27, 2015. Windstream stated that as of April 27, 2015, Ms. Frahm had reported no further call completion problems and she remained on the Verizon network.

With respect to how it provides information to customers on how to most effectively report call completion problems, Windstream explains that it has systems

⁷⁵ Airus cites to the ATIS Handbook at p. 44 in support of this statement.

in place for customers to report problems by calling the customer service number on their bills, by email, by calling corporate headquarters, and by emailing Windstream personnel. Windstream posts dispute resolution procedures online in Windstream's statement of terms and conditions of service and in applicable tariffs. Windstream states it works with a customer identifying a call failure to promptly identify the cause of the failure by testing systems that may be linked to the failure, and when necessary, will remove a downstream carrier from routing until that carrier demonstrates its ability to reliably complete calls.

Windstream notes that entered into a Consent Decree with the FCC Enforcement Bureau on February 20, 2014. It filed a copy with the Board in Docket No. FCU-2013-0007 on December 22, 2014, with Windstream's Report.

Windstream urges that solutions adopted by the Board be uniformly applicable to all carriers, not just to the participants in these eight call completion cases. Windstream argues that to maintain oversight of the industry, it would be difficult or impossible, and definitely inequitable, to have different required standards applicable to different carriers that are parties to these proceedings and no standards at all applicable to carriers that are not parties to these proceedings. Windstream states it did not drop the call, but handed it to IntelePeer, now known as Airus, and IntelePeer handed the call to One Communications Corp., now known as Earthlink. To the best of Windstream's knowledge, the record does not show whether One Communications failed to complete the call or handed it to another carrier.

Similarly, Windstream argues, Ms. Frahm's call completion problems began when Mediacom was her local exchange carrier. Several months before she filed her complaint, Ms. Frahm changed her carrier from Mediacom to Windstream.

Windstream notes that Mediacom and Earthlink have not been made parties to this case. It argues the record would be more complete with their participation. If performance standards are adopted as a result of these call completion proceedings, Windstream urges that those standards should be applicable to Mediacom and Earthlink, as well as to all other carriers. Windstream argues that rural call completion problems are an industry-wide problem and should have an industry-wide solution uniformly applicable to all carriers. To achieve the industry-wide solution, Windstream urges the Board to initiate a rulemaking proceeding in which all interested companies can participate and the rules adopted would be applicable to the entire industry.

Windstream states the Consumer Advocate deserves credit for initiating a proposal to find solutions, but argues the proposed nine concrete steps suffer from many flaws. In responding to the Consumer Advocate's proposed nine steps, Windstream identifies the steps it is willing to take.

With respect to the Consumer Advocate's Steps 1 and 6 (Managing Downstream Carriers), Windstream's position is that each company, not the Board, should exercise its own due diligence in overseeing its downstream carriers and determine for itself the extent of oversight that is necessary. Windstream referred to

the best practices for management of underlying carriers found in Section 5 of the ATIS Handbook⁷⁶ and described this as a very useful tool and guideline for managing downstream carriers without imposing mandatory requirements. Windstream's position is that each company should be encouraged, but not required, to use the guidelines to define the responsibilities of downstream carriers in their contracts, and should decide for itself which procedures to adopt in order to provide reliable service.

Windstream objects to the Consumer Advocate's proposed Step 2 (maintain a list of downstream carriers with which they contract with the Board), noting that unless the requirement is applied to all carriers, the Board would not have a complete list of downstream carriers. Companies should not be compelled to disclose this information, which Windstream contends has proprietary value. Windstream also argues the requirement would impose an administrative burden on companies and would do nothing to prevent call failures. It argues having a list of downstream carriers on file will not help to identify the company responsible for a call completion failure. Windstream argues if the Board wants to have a list of all downstream carriers doing business in Iowa, the most effective way to accomplish this would be to require each downstream carrier to register with the Board.

Windstream states that pursuant to its consent decree with the FCC, it has a plan for quickly identifying the source of any call failure and for taking remedial action. Windstream encourages the Board to implement a procedure, working with

⁷⁶ Section 6 in the October 2015 updated version of the ATIS Handbook.

all companies, to quickly identify when a call failure occurs and to identify the downstream carrier responsible for the failure. According to Windstream, that procedure requires checking the Local Exchange Routing Guide (LERG), not a list that might be filed with the Board.

The Consumer Advocate's proposed Step 3 is to reduce the number of downstream carriers in a call path. Windstream refers to Section 5.1 of the ATIS Handbook,⁷⁷ which states that use of multiple downstream carriers creates potential for lengthier call setup delay and may make troubleshooting more difficult. Windstream faults the Consumer Advocate's proposal to reduce the number of intermediate carriers in a responsible way for not being concrete, but agrees it is a good idea to limit the number of downstream carriers. Windstream commits to limiting the number of downstream carriers where it can be done in a responsible way, but notes that not all calls can be completed by one or two downstream carriers. Windstream argues having backup carriers available may actually help, rather than hinder, the completion of calls.

The Consumer Advocate's proposed Step 4 calls for transparency in downstream carriers. The Consumer Advocate suggests that in call completion investigations, the Board require carriers to disclose to the Consumer Advocate and the Board the identity of downstream carriers and produce the contracts used with the carriers. Windstream explains that the FCC adopted a rule that requires

⁷⁷ Section 6.2 in the October 2015 updated version of the ATIS Handbook.

identification of downstream carriers, but not the contracts. According to Windstream, some contracts have confidentiality provisions that do not allow a carrier to disclose the identity of a downstream carrier or contract terms. Windstream agrees that isolating the root cause of a call failure will require identifying the downstream carriers involved in the call, and to the extent the contracts prevent disclosure, they are an impediment to investigation. If the Board wishes to remove that impediment, Windstream suggests the Board could adopt a rule that would apply prospectively to require disclosure to the Board of the identity of downstream carriers. Windstream commits to review its contracts with downstream carriers and attempt to negotiate confidentiality provisions out of contracts as they renew.

With respect to the Consumer Advocate's proposed Step 5 (participate in the work of ATIS), Windstream explains it has not directly participated in ATIS' work, but is aware of it and follows the work closely. Windstream recognizes that ATIS has done good work in setting industry standards in its handbook. However, Windstream's position is that whether a company decides to participate and spend resources on any industry effort should be left to the company's discretion, not ordered by the Board. Windstream commits to follow the work of ATIS, review any ATIS recommendations carefully, and consider implementing them in its operations. Windstream will decide whether participation in ATIS work is necessary and appropriate, but states such participation should not be mandated by the Board.

Windstream discusses the Consumer Advocate's proposed step 6 in conjunction with proposed Step 1.

The Consumer Advocate's proposed Step 7 is for carriers to provide copies of their Iowa-specific data to the Board. Windstream states it previously resisted this step, but now believes it has developed a system to extract the Iowa-specific data from its FCC reports and can provide it to the Board on a confidential basis.

Windstream states the three principal performance metrics it reports to the FCC pursuant to the Consent Decree are the Network Effectiveness Ratio (NER), the Call Answer Rate (CAR), and Trouble Tickets per Million Minutes of Use (TT/MM).

Windstream states the NER expresses the ability of networks to deliver calls to the far-end terminal and the relationship between the number of seizures and the sum of the number of seizures resulting in either an answer message, a user busy, a ring no answer, or in the case of ISDN, a terminal rejection/unavailability.

Windstream compiles the data and uses it to gain a better understanding as to why calls are not answered or do not reach their destination. Windstream has established a performance metric of 90 percent for NER and uses this metric to manage its intermediate providers.

Windstream states the CAR is determined by dividing the number of calls answered by the number of calls attempted and is used to measure network quality and call success rates. The CAR does not take into account customer behavior. Windstream has established a performance metric of 60 percent for CAR.

Windstream explains that intermediate providers are measured according to the industry standard metric of trouble tickets (TT)/million minutes of use (MM). It states if an intermediate carrier's trouble ticket count exceeds acceptable limits of 2 TT/MM in any 30-day period, the carrier may be removed from routing for the affected area until testing and re-certification have been completed. Windstream states although this metric is not formally required by the Consent Decree, it is a management tool used by Windstream to provide additional insight into quality issues that should be addressed more frequently than through a monthly review process.

In compliance with the Consent Decree, Windstream states a standardized report is provided to Windstream's Compliance Officer monthly, and a quarterly report is filed with the FCC containing detailed information on call attempts for each rural OCN and for non-rural OCNs in the aggregate.

Windstream states since it entered into the Consent Decree, it has sent one remedial notice to an intermediate carrier but has not had to remove an intermediate carrier from routing in Iowa. Windstream states this indicates its system of data compilation, monitoring, and reporting is working well as planned.

Windstream explains these performance metrics for intermediate carriers were approved by the FCC as a way to track Windstream's compliance with the Consent Decree. Windstream argues the Board has no need to monitor Windstream's compliance with the FCC Consent Decree because the FCC will do that itself. Windstream commits to extracting the Iowa-specific data from the reports it files with

the FCC and providing it to the Board on a confidential basis. Windstream states the Iowa-specific data will track Windstream's performance in Iowa over time and will serve as a useful guide.

With regard to the Consumer Advocate's Step 8, keep routing tables up-to-date, Windstream agrees keeping routing tables up-to-date is integral to providing quality telecommunications service. Windstream states it does this on a regular basis and will continue doing so.

The Consumer Advocate's proposed Step 9 recommends that each company provide periodic reports to the Board regarding its progress in fulfilling any commitments it makes. Windstream states the Iowa-specific data extracted from Windstream's FCC reports will provide the Board with sufficient data to show Windstream's progress in resolving any Iowa call completion difficulties. Windstream proposes to file such reports with the Board on a quarterly basis for one year from the date this matter is concluded by a final non-appealable order.

E. Frontier's Proposed Solutions

On February 25, 2016, Frontier filed its response to the January 7, 2016, order issued in Docket No. FCU-2014-0014, *Complaint of Horn Memorial Hospital*, that required Frontier to file a report explaining the call completion reports it is filing with the FCC and the actions it is taking to address and prevent call completion problems in Iowa. As noted above in the summary of the formal proceeding in Docket No. FCU-2014-0014, Frontier explained it is a "covered provider" as defined in the FCC

rules and has complied with the reporting requirements in those rules. Frontier states it has filed certified reports with the FCC on a quarterly basis reflecting monthly call attempt data for each rural OCN and for nonrural OCNs in the aggregate, pursuant to 47 CFR § 64.2105. Frontier filed certified quarterly reports as mandated by the FCC on August 1, 2015, November 1, 2015, and February 1, 2016, and commits to complying with all future applicable FCC requirements for call completion reporting.

Frontier also detailed the actions it has taken to address and prevent call completion problems, including imposing requirements on downstream carriers, investigating the capacity of a downstream carrier's call paths, testing a carrier's network before putting that carrier into service to route calls, and monitoring the performance of downstream carriers, removing them from routes if necessary. Frontier states it takes great care in: 1) initially selecting wholesale providers used to complete its originating long distance calls, and 2) ensuring quality performance after a downstream carrier has been placed into service.

Frontier states it has a number of requirements that prospective carriers must satisfy before Frontier includes them in its call completion network. Frontier investigates whether the carrier's equipment is properly designed and functioning correctly, including whether it has sufficient capacity in its switches and call paths to carry the traffic to its intended destinations. Frontier states carriers are required to provide information regarding their systems and any possible limitations, including

capacity constraints that could cause problems completing calls to particular destinations during busy times.

Frontier states it performs a number of tests before placing a downstream carrier in service. Frontier personnel make domestic and international test calls to evaluate the carrier's network performance. Frontier asks the carrier to manually "busy out" a trunk group (simulating a network outage) to ensure the carrier's network will provide appropriate notification to Frontier's network so calls can be directed to a working path.

Frontier states it monitors the ongoing performance of downstream carriers to ensure continued quality of service. Frontier reviews trouble ticket histories on a weekly basis to uncover any potential routing concerns. Frontier monitors its capacity with carriers and requests augmentation as needed. Whenever a ticket or trouble is reported, Frontier states it does extensive testing with the carrier to ensure successful routing. If the testing shows the failures are limited to calls terminating to a particular local exchange or area, Frontier excludes the carrier from handling calls to that exchange or area. If the testing shows more widespread failures, then Frontier may cease using the carrier entirely.

Frontier explains it sets a standard of only one trouble ticket per one million minutes of use. If a carrier violates that standard, Frontier meets with the carrier to discuss the reported cases to ensure prompt correction and requires on-going efforts by the carrier to maintain quality of service. Frontier states it allows carriers 24 hours

to make the necessary routing changes. If the carrier fails to meet Frontier's expectation, it is removed from routing. Frontier states the removal can be specific to a local exchange carrier or area, or if the carrier has more than three occurrences, it can be a general removal from Frontier's entire network.

Frontier also meets with its downstream carriers on a periodic basis, generally bi-weekly, to discuss the carrier's performance and pending changes in either the carrier's or Frontier's network.

Frontier explains it educates its customers through bill messages and material included in telephone directories about service concerns, including call completion issues. This information includes how to report all service problems. Frontier states that on the rare occasion a call completion issue is reported, Frontier promptly communicates with its customer to timely identify the cause of the call completion problem and to resolve it. Frontier notes its timely response and successful efforts in resolving call completion problems are evidenced by the facts involved in this case, where its customer was given a direct telephone number to call, as well as the long distance repair toll free number to report any further long distance issues.

Frontier states it timely addressed the June, 2014, rural call completion problems at issue in this case and is pleased that no additional call completion problems of the type complained of have been reported by the Horn Memorial Hospital since that time.

Frontier states it is notable that it is the subject of only a single complaint of rural call completion problems in Iowa, the one at issue in this case. Frontier states it takes its service quality very seriously and is committed to adopting industry best practices that apply to its network.

F. Dumont Telephone Company's Proposed Solutions

On February 26, 2015, Dumont filed public and confidential versions of a response to the Consumer Advocate's Report in Docket No. FCU-2012-0019, *Rehabilitation Center of Allison*. Dumont included some proposed solutions in its response.

Dumont stated it is in general agreement with the Consumer Advocate's proposed nine steps, based on the information currently available. Dumont agrees that limiting the number of intermediate providers would be a positive step toward minimizing some call completion problems such as call looping, but states that it will not necessarily fix other call completion problems such as post-dial delay, echo, voice distortion, and cross talk. If ATIS creates a list of industry standards that will resolve call completion issues, Dumont agrees the Board should adopt the standards as rules and/or the FCC should adopt them nationally. Dumont points out the ATIS standards are voluntary as they currently exist.

Dumont agrees with the Consumer Advocate's thirteen identified bullet points in Step 6 regarding exercising responsibility over downstream carriers. In addition, Dumont suggests contracts between originating and downstream carriers should

include specific prohibitions on VoIP, post-dial delay, call alterations, routing outside the United States, echo, cross talk and distortion, and should require fax delivery and a network that is 99.999 percent free of errors. Dumont also advocates for enforcement mechanisms for originating carriers who do not enforce their contracts with downstream carriers.

Dumont supports a rulemaking proceeding by the Board to address call completion issues in Iowa and the adoption of appropriate regulations with the force and effect of law.

In addition to its responses to the Consumer Advocate's nine steps, Dumont suggests two additional solutions. First, Dumont states this investigation shows that call completion problems stem in great part from economic-based decisions made by originating and intermediate carriers attempting to decrease costs. Therefore, Dumont proposes that the Board impose financial penalties on repeat offenders of call completion problems. Dumont argues the FCC's monetary penalties imposed on Verizon, Windstream, Level 3, and Matrix are indicative of the persuasive force financial penalties can have in the call completion arena. Dumont argues a monetary penalty would provide a financial incentive to ensure calls complete properly and encourage providers to adopt practices and processes that will prevent rural call completion problems from occurring.

Second, Dumont proposes that all originating interexchange carriers doing business in Iowa be required to report each call completion complaint they receive to

the Board on a quarterly basis for a set period of time, perhaps for one year or until the Board determines the data is no longer needed. Dumont provides specific information it states should be included in the reports. Dumont notes this suggestion is substantially similar to action ordered by the Minnesota Public Utilities Commission in an order issued July 21, 2014.

G. Interstate 35 Telephone Company's Proposed Solutions

On February 26, 2015, Interstate 35 Telephone Company (Interstate 35) filed a response to the Consumer Advocate's Report in Docket No. FCU-2013-0006, *Complaints of Adolphson and Skallerup*. Interstate 35 included several proposed solutions in its response.

Interstate 35 stated it is in general agreement with the Consumer Advocate's proposed nine steps, based on the information currently available. Interstate 35 specifically agrees with the Consumer Advocate's conclusion that the core of the call completion problem lies with the proliferation of intermediate carriers, some of them not financially sound, and inadequate monitoring of their performance by originating carriers, inadequate coordination among the carriers, and inadequate recordkeeping.

Interstate 35 agrees that limiting the number of intermediate providers is a positive step to minimize problems like call looping, and appreciates CenturyLink's willingness to limit its use of intermediate providers to one entity in a call path, but states this does not necessarily address the call completion problems of post-dial delay, dead air, echo, hearing, and distortion.

Interstate 35 agrees the Board should have on file a list of all downstream carriers that carry Iowa traffic, including contact information for a point person at each carrier who can respond to call completion issues. In addition, Interstate 35 states, each downstream carrier that is contacted should be required to respond to call completion issues within a reasonable period of time, not to exceed two business days from when the downstream carrier initially receives information regarding a call completion issue.

Interstate 35 agrees with the Consumer Advocate's thirteen identified bullet points in Step 6 regarding exercising responsibility over downstream carriers. In addition, Interstate 35 suggests contracts between originating and downstream carriers should include specific prohibitions on VoIP, post-dial delay, call alterations, routing outside the United States, echo, cross talk and distortion, and should require fax delivery and a network that is 99.999 percent free of errors, with financial penalties for violations. Interstate 35 also advocates for enforcement mechanisms for downstream carriers who violate contractual terms and originating carriers who do not enforce their contracts with downstream carriers.

Interstate 35 supports a rule-making proceeding by the Board to address call completion issues in Iowa and the adoption of appropriate regulations with the force and effect of law.

In addition to its responses to the Consumer Advocate's nine steps, Interstate 35 suggests two additional solutions. First, Interstate 35 states this investigation

shows that call completion problems stem in great part from economic-based decisions made by originating and intermediate carriers attempting to decrease costs. Interstate 35 argues since financial implications drive the proliferation of intermediate providers in a call path, financial penalties may help curb problems arising from their use. Interstate 35 proposes that the Board impose a financial penalty on carriers who first receive a written warning but continue to cause call completion problems, with progressively increasing penalties if repeat violations occur. Interstate 35 argues the FCC's monetary penalties imposed on Verizon, Windstream, Level 3, and Matrix are indicative of the persuasive force financial penalties can have in the call completion arena. Interstate 35 argues a monetary penalty would provide a financial incentive to ensure calls complete properly and encourage providers to adopt practices and processes that will prevent rural call completion problems from occurring.

Second, Interstate 35 proposes that all originating interexchange carriers doing business in Iowa be required to report each call completion complaint they receive to the Board on a quarterly basis for a set period of time, perhaps for one year or until the Board determines the data is no longer needed. Interstate 35 proposes that such information be reported to the Board within two business days from the time the complaint was received by the originating interexchange carrier. Interstate 35 provides specific information it states should be included in the reports

and notes this suggestion is substantially similar to action ordered by the Minnesota Public Utilities Commission in an order issued July 21, 2014.

Interstate 35 acknowledges and appreciates the Consumer Advocate's work to gather information to assist the Board's investigation into the call completion issues in this case. Interstate 35 states it remains willing to cooperatively work with others to achieve resolution of call completion problems in Iowa.

H. InterMetro's Proposed Solutions

On February 12, 2015, in Docket No. FCU-2013-0006, *Complaints of Adolphson and Skallerup*, an "Order Granting Motion for Extension and Modifying Remaining Procedural Schedule" was issued. Among other things, the order required InterMetro to file proposed effective, preventative long term solutions to the call completion problems its customers have experienced in Iowa. InterMetro's solutions were required to include specific actions it has taken or will take, and a proposed timeline for when future actions will occur. The order required InterMetro's proposal to include commitments to the Board as to what InterMetro will do in Iowa. As of the date of this proposed decision, InterMetro has not filed its proposed solutions. InterMetro did provide discovery responses to the Consumer Advocate during the investigation.

I. Bluetone's Proposed Solutions

On February 12, 2015, in Docket No. FCU-2013-0009, *Complaint of Douglas Pals*, an "Order Granting Motion for Extension and Modifying Remaining Procedural

Schedule” was issued. Among other things, the order required Bluetone to file proposed effective, preventative long term solutions to the call completion problems its customers have experienced in Iowa. Bluetone’s solutions were required to include specific actions it has taken or will take, and a proposed timeline for when future actions will occur. As of the date of this proposed decision, Bluetone has not filed its proposed solutions. Bluetone did provide discovery responses to the Consumer Advocate during the investigation.

X. CONSUMER ADVOCATE’S RESPONSE TO CARRIER PROPOSED SOLUTIONS

On May 26, 2015, the Consumer Advocate filed public and confidential versions of a response to the proposed solutions filed by CenturyLink, Windstream, Airus, and Impact in Docket Nos. FCU-2012-0019, FCU-2013-0004, FCU-2013-0005, FCU-2013-0006, FCU-2013-0007, and FCU-2013-0009. The Consumer Advocate stated that two companies, Bluetone and InterMetro, did not file proposed solutions and do not resist the Consumer Advocate’s proposed solutions.

The Consumer Advocate argues its proposed solutions are fully justified by the information included in its reports and replies. It states the solutions focus directly on the need to correct the poor management of downstream carriers that resulted in the call failures in these cases. The Consumer Advocate states the companies’ filings dated April 27, 2015, show considerable agreement that solutions are needed and on what the solutions must be. The Consumer Advocate states that commitments from

the companies should not be delayed pending a possible rulemaking proceeding by the Board. The Consumer Advocate argues each company (or its predecessor) has failed to provide service of adequate quality as required by Iowa Code § 476.3 and 199 IAC 22.5(1). It argues the public interest requires appropriate corrective action at this time and the fact that other companies not before the Board in these cases may also have failed to provide service of adequate quality is no reason for delay. The Consumer Advocate supports a Board rulemaking proceeding.

In its response, the Consumer Advocate compares the proposed solutions filed by the companies with the Consumer Advocate's proposed solutions. The Consumer Advocate evaluates the extent to which the companies have stated their willingness to implement the Consumer Advocate's proposed solutions and provides a detailed discussion of this in the response. The Consumer Advocate also discusses progress that has been made to date in improving call completion performance in Iowa. The Consumer Advocate provided confidential Attachment A with its response. Attachment A lists the areas of agreement between the Consumer Advocate and CenturyLink, Windstream, Airus, and Impact regarding solutions to call completion problems in Iowa.

Detailed summaries of the Consumer Advocate's response are included in the CenturyLink 2015 Staff Memo and the Windstream 2015 Staff Memo.

XI. FINDINGS AND RECOMMENDATION

The undersigned administrative law judge has reviewed the information included in the informal complaint proceedings, the testimony filed in Docket No. FCU-2012-0019, *Rehabilitation Center of Allison*, the reports and responses from the Consumer Advocate, including the Consumer Advocate's proposed solutions and the exhibits with discovery information provided by the carriers, the carrier responses to the Consumer Advocate's reports, the proposed solutions filed by the companies, and the responses to those proposals. The undersigned has considered the positions of the parties expressed at the in-person prehearing conference on August 26, 2015. The undersigned has also considered the stipulations of fact filed by the parties in Docket Nos. FCU-2014-0007 and FCU-2014-0014. Based on this review, it is clear that further individual procedural schedules are not necessary in Docket Nos. FCU-2012-0019, FCU-2013-0004, FCU-2013-0005, FCU-2013-0006, FCU-2013-0007, FCU-2013-0009, FCU-2014-0007, and FCU-2014-0014.

Based on this review and the information provided, it is clear that the use of multiple intermediate carriers without adequate care regarding service quality and completion of calls, and inadequate facilities and capacity constraints in some locations, were the primary causes of the call completion problems that occurred in these cases. The information shows the customers in these cases did not receive reasonably adequate service, in most cases for months or even years. The information shows that removal of particular intermediate carriers in these customers'

call paths often solved the particular problems for the customers. However, the information also shows that the after-the-fact removal of particular intermediate carriers in these individual cases without other preventative actions did little or nothing to prevent future call completion problems from occurring and was an insufficient response to the customers' problems.

It is also clear that carriers have made significant progress in correcting these issues during the course of these proceedings in Iowa. Progress has been due to the new FCC requirements, CenturyLink's use of the Safe Harbor provisions, the Windstream Consent Decree, the Matrix Consent Decree, and to a lesser extent, the other FCC enforcement proceedings. Progress has also been due to the industry call completion work done through ATIS, most particularly, as shown in the ATIS Handbook. Progress has also been due to the pendency of these cases in Iowa and the actions the carriers have taken in response to the customers' call completion problems.

The Board's case-by-case approach to the rural call completion cases and the Consumer Advocate's investigations, coupled with the companies' efforts to comply with the new FCC requirements and industry-wide efforts through ATIS to develop standards, have helped to reduce the incidence of call failures affecting Iowa consumers. The Board's on-going focus on monitoring whether the complaining customers in these cases were experiencing further call completion problems and

requiring appropriate responses by the responsible carriers was an effective part of stimulating this improvement.

The last call completion complaint received by the Board's Customer Service staff was the complaint filed on June 6, 2014, from Michelle Weber on behalf of Horn Memorial Hospital in Docket No. FCU-2014-0014. Although this was the last call completion complaint received by the Board's Customer Service staff, the Consumer Advocate provided information regarding limited call completion problems experienced by some of the complaining customers in these proceedings during January through March of 2015 in the Consumer Advocate's reply filed on March 19, 2015, in Docket Nos. FCU-2012-0019, FCU-2013-0004, FCU-2013-0005, FCU-2013-0006, and FCU-2013-0009. In January 2016, in Docket No. FCU-2014-0014, the Consumer Advocate stated that Horn Memorial Hospital reported it continues to have call completion problems with incoming calls, although not outgoing calls.

The information filed in these cases also shows that the proposed solutions and commitments filed by the companies appear to appropriately respond to the problems identified by the Iowa consumers in these proceedings. The proposed solutions and commitments, if actually implemented and followed, should aid in preventing future call completion problems and in any investigation necessary in the event of future problems. The companies' commitments (either through the Safe Harbor, the FCC consent decrees, or to comply with the new FCC rules) to reduce the number of intermediate carriers used in routing calls, to augment facilities where

needed, and to more closely monitor and manage the performance of intermediate carriers should be effective at minimizing future call completion problems, particularly when they are combined with what is expected to be the mitigating effect of reducing terminating access charges.

The information filed in these cases shows it is clear that customers and local exchange carriers not knowing what to do and/or who to contact when there was a call completion problem significantly delayed and sometimes prevented identification of, and contact with, the carriers who could investigate and correct the problem. Inadequate recordkeeping by carriers contributed to these delays and inability to identify responsible carriers. Although the FCC, ATIS, and some carriers have taken action to address this problem, additional work to educate Iowa customers and local exchange carriers and to provide easily accessible information is needed. For this reason, this decision requires carriers involved in these cases to file contact information identifying knowledgeable personnel who can promptly address call completion and call routing issues when contacted by the Board. This decision also requires CenturyLink, Windstream, and Frontier to file updated information about what they do to inform their Iowa customers and Iowa local exchange carriers about how to recognize and report call completion problems. In addition, Board staff will be developing call completion content to be posted on the Board's Web site with explanation of what consumers can do if they experience call failures or other call completion problems.

The Consumer Advocate is commended for identifying the initial round of thoughtful proposed solutions to the call completion problems in Iowa. Many of the identified proposed actions are in line with the new FCC requirements, the standards identified in the ATIS Handbook, CenturyLink's use of the Safe Harbor, Windstream's Consent Decree, the Matrix Consent Decree, and the Verizon settlement. Some elements of the companies' proposed solutions are consistent with certain recommendations of Consumer Advocate, such as the actions some carriers are taking to: 1) limit the number of intermediate carriers in a call path; 2) exercise supervision over intermediate carriers they do use; and 3) require disclosure of the identities of intermediate carriers in contracts under certain circumstances. In addition, several carriers have stated they are willing to provide the Iowa-specific data they report to the FCC as part of their national reports and that they keep routing tables up-to-date. To the extent the companies' proposed solutions and commitments are consistent with the Consumer Advocate's proposed solutions, they should be implemented as part of the solutions to the Iowa call completion problems identified in these cases, at least for the defined period of time required by this proposed decision.

However, it would be premature to impose requirements on the carriers involved in these cases based on all of Consumer Advocate's proposed solutions. Some of the Consumer Advocate's proposed solutions would be more appropriate for consideration in an industry-wide proceeding, such as whether the Board should: 1)

maintain a list of all intermediate carriers that carry Iowa traffic; 2) require some of the specific actions proposed in Step 6; 3) require all carriers to limit the number of intermediate carriers they use; 4) require a commitment from all carriers to certify their contracts with downstream carriers permit disclosure of their identity to the Board and the Consumer Advocate; and 5) require all carriers to participate in the call completion work of ATIS. An industry-wide proceeding would allow all carriers who chose to participate the opportunity to provide information and recommendations to the Board regarding the best ways to address and prevent call completion problems in Iowa across the industry, not by the carriers involved in these cases.

As discussed earlier in this decision, Dumont and Interstate 35 proposed solutions in addition to those proposed by the Consumer Advocate. In its proposed solutions, Windstream urges the Board to implement a procedure, working with all companies, to quickly identify when a call failure occurs and to identify the downstream carrier responsible for the failure. It would be useful to consider these proposals in an industry-wide proceeding as well.

Many of the carriers involved in these proceedings expressed the opinion that it would not be fair for the Board to impose requirements on some of the carriers involved in these proceedings and to not impose requirements on an industry-wide basis. The participants in these cases generally supported the Board opening a Notice of Inquiry (NOI) proceeding as opposed to a rulemaking proceeding to

consider whether industry-wide actions should be required, and if so, what should be required and which carriers should be covered.

The undersigned agrees that it would be premature to open a rulemaking at this time. Although much has been learned in these proceedings, it is not yet clear whether the Board needs to take any action other than monitoring the carriers' call completion activities at the FCC level and in the industry, and it is not yet clear what Board rules should include if rules are needed. However, enough has been learned through these proceedings to show that doing nothing would be inappropriate. The actions the carriers are taking pursuant to their commitments with the FCC are still fairly new and the transition to bill-and-keep is not yet complete. The information filed in these cases does not support the conclusion that the Iowa call completion problem is completely solved.

Therefore, the undersigned administrative law judge recommends that the Board open an NOI proceeding for industry-wide participation seeking comments on whether the Board should: 1) do nothing other than continue to monitor federal and industry call completion initiatives; 2) adopt rules designed to address and prevent rural call completion problems in Iowa, and if so, to consider what those rules should require and which carriers should be subject to the rules; or 3) take other appropriate actions. Other appropriate actions the Board should consider in the NOI proceeding include, but are not limited to:

- Whether the Board should adopt the proposed solutions recommended by the Consumer Advocate as Board rules.
- Whether the Board should adopt the additional proposed solutions suggested by Dumont and Interstate 35.
- Whether each carrier with customers in Iowa should be required to include information regarding call completion on the company's Web site and provide the location to the Board on an annual basis, perhaps in the company's annual report, along with a summary of the information on the webpage. This discussion should include whether it would be appropriate to require information specific for residential customers, business customers, and local exchange carriers.
- Whether each carrier with customers in Iowa should be required to file contact information with the Board for knowledgeable personnel who can promptly address call completion and call routing issues when contacted and keep the information current.
- Whether originating long distance carriers using intermediate providers to complete calls in Iowa should be required to file contact information for knowledgeable personnel who can address these issues for each of their intermediate carriers operating in Iowa.
- Whether the Board has jurisdiction over intermediate providers who operate in Iowa, and if so, the extent of the jurisdiction. If it is determined the Board has sufficient jurisdiction, consider whether intermediate providers operating in Iowa should be required to file contact information with the Board for knowledgeable personnel who can promptly address call completion and call routing issues when contacted and keep the information current.
- Whether the Board should require all telephone service providers doing business in Iowa to provide their contact information and test numbers to the ATIS directories and the LERG Routing Guide as recommended in the ATIS Handbook at pages 46-47.
- If a carrier receives a call completion complaint, whether the carrier must report the complaint to the Board with the actions the carrier took to resolve the problem, on a per-complaint basis or in quarterly or annual reports.
- Whether carriers who receive call completion complaints should be required to take any particular actions, and if so, what actions they should be required to take.
- Whether all carriers operating in Iowa should be required to file annual reports with the Board regarding their call completion activities, and whether this should be required for only a limited period of time such as for two years.

- Consider whether to adopt a rule in 199 IAC 1.9(5) providing confidential treatment by rule for the Iowa data reported to the FCC with analysis and explanation of the data that some carriers in these cases are required to file with the Board pursuant to this decision.
- Investigate whether the problem Airus identified of Iowa rural local exchange carriers refusing to directly interconnect with Airus is widespread and needs to be addressed by the Board.
- Other actions proposed by a participant in the NOI.

The undersigned recommends that the Board use the information learned in these call completion cases as part of the basis for evaluating what needs to be done in the NOI.

XII. ORDERING CLAUSES

IT IS THEREFORE ORDERED:

1. No further discovery, procedural schedules, hearings, or briefing will be established or conducted in these individual dockets.
2. Within 30 days of the issuance of this order, CenturyLink Communications, LLC, Windstream Iowa Communications, LLC, and Frontier Communications of America, Inc., the originating carriers involved in these cases, must file with the Board current contact information identifying knowledgeable personnel who can promptly address call completion and call routing issues when contacted by the Board. These carriers must update the contact information as necessary and in the annual progress report that is required by this proposed decision and order.

3. Within 30 days of the issuance of this order, InterMetro Communications, Inc., Bluetone Communications, LLC, Comcast Phone of Iowa, LLC, and Level 3 Communications, LLC, intermediate carriers in these cases, must provide current contact information identifying knowledgeable personnel who can promptly address call completion and call routing issues when contacted by the Board. These carriers must update the Board when this contact information changes until otherwise ordered by the Board. As discussed in the body of this decision and in ordering clause numbers 10 and 11 below, intermediate carriers Impact Telecom, Inc., and Airus, Inc., have agreed to provide such contact information in their proposed solutions and will provide updates if necessary in their annual progress reports.

4. Prior orders in these cases have explained the importance of providing information to customers on how to effectively report call completion problems.⁷⁸ Pursuant to this need, within 30 days of the issuance of this order, CenturyLink, Windstream, and Frontier must file updated information about how the companies inform their customers and Iowa local exchange carriers about how to recognize and report call completion problems. The carriers must provide a copy of any informational materials they have prepared. The carriers must provide contact

⁷⁸ See, for example, the February 12, 2015, "Order Granting Motion for Extension and Modifying Remaining Procedural Schedule," Docket No. FCU-2012-0019, *Rehabilitation Center of Allison*, stating that "part of the solution that must be proposed and implemented in this case is the establishment of better procedures, including providing information to customers on how to most effectively report call completion problems, so customers may report and have their call completion problems addressed much more quickly and effectively than has occurred in the past."

information for knowledgeable personnel who can promptly address call completion and call routing issues when contacted by customers and local exchange carriers if call completion problems occur. The personnel may be the same as, or different from, those required in ordering clause number two. Carriers must make this information easily accessible to all customers, including both residential and business customers, and local exchange carriers. The location of call completion information on CenturyLink's Web site is not clearly identified. CenturyLink must demonstrate and explain how the information it says it provides its customers on its Web site is transparent to customers and is easily accessible.

5. Within 45 days of the issuance of this decision, the Board's Customer Service staff will develop content to be posted on the Board's Web site about the rural call completion issue with an explanation about what consumers can do in the event they experience call failures or other call completion problems.

6. CenturyLink, Windstream, and Frontier (the carriers involved in these proceedings who are "covered providers" subject to the reporting requirements under the FCC rules) must file with the Board copies of the Iowa data reported to the FCC on a quarterly basis with analysis and explanation of that data. If a carrier believes the information is confidential, the carrier must file a request for confidential treatment of the information pursuant to Board rule 1.9. This requirement will remain in place as long as the FCC continues to require reporting of the data, or until otherwise ordered by the Board.

The undersigned notes that some proposals suggested that the Board should pre-designate this information as confidential. As discussed at the August 2015 in-person prehearing conference and earlier in this decision, pre-designation can only be done by rule. Therefore, until the Board adopts such a rule, carriers providing such information must do so with requests for confidential treatment pursuant to Board rule 1.9. As discussed above, if the Board decides to conduct an industry-wide proceeding, consideration could be given to whether certain call completion information would be appropriate for inclusion on the list in rule 1.9(5)(c) of items for which requests for confidential treatment are deemed granted.

7. As discussed earlier in this decision, CenturyLink filed its proposed solutions and commitments in Docket Nos. FCU-2012-0019, *Rehabilitation Center of Allison*, FCU-2013-0004, *Unity Point Clinic at Huxley*, FCU-2013-0005, *Hancock County Health Systems*, FCU-2013-0006, *Complaints of Ms. Adolphson and Ms. Skallerup*, and FCU-2013-0009, *Complaint of Mr. Pals*, on April 27, 2015. CenturyLink adopted those solutions in Docket No. FCU-2014-0007, *Complaint of Sutherland Mercy Medical Clinic*, on February 19, 2016. CenturyLink's proposed solutions and commitments are largely based on its compliance with the FCC's Safe Harbor requirements and the FCC call completion rules. CenturyLink must comply with its proposed solutions and commitments and must file a report one year from the date of the issuance of this decision: 1) certifying that it continues to comply with the proposed solutions and commitments it filed in these proceedings, to the extent the

proposed solutions and commitments have been implemented, including that it continues to comply with the Safe Harbor requirements; 2) reporting on its progress in addressing and preventing call completion problems; and 3) explaining whether it received any reports of call completion problems in Iowa and what steps it took to resolve these problems. In addition, CenturyLink must file an annual progress report with the same information for the following two years or until otherwise ordered by the Board.

8. As discussed earlier in this decision, Windstream filed its proposed solutions and commitments in Docket No. FCU-2013-0007, *Complaint of Ms. Frahm*, on April 27, 2015. Windstream's proposed solutions and commitments are largely based on its Consent Decree with the FCC and compliance with the FCC call completion rules. Windstream must comply with its proposed solutions and commitments and must file a report one year from the date of the issuance of this decision: 1) certifying that it continues to comply with the proposed solutions and commitments it filed in these proceedings, to the extent the proposed solutions and commitments have been implemented, including that it continues to comply with its FCC Consent Decree; 2) reporting on its progress in addressing and preventing call completion problems; and 3) explaining whether it received any reports of call completion problems in Iowa and what steps it took to resolve these problems. In addition, Windstream must file an annual progress report with the same information for the following two years or until otherwise ordered by the Board.

9. As discussed earlier in this decision, Frontier filed a report explaining the call completion reports it is filing with the FCC and the actions it is taking to address and prevent call completion issues in Docket No. FCU-2014-0014, *Complaint of Horn Memorial Hospital*, on February 25, 2016. Frontier is a covered provider within the meaning of the FCC call completion rules and has complied with all reporting requirements since the rules took effect. Frontier must comply with the commitments it made in its report and must file a report one year from the date of the issuance of this decision: 1) certifying that it continues to abide by the commitments it made in this case, including that it continues to comply with the FCC call completion rules; 2) reporting on its progress in addressing and preventing call completion problems; and 3) explaining whether it received any reports of call completion problems in Iowa and what steps it took to resolve these problems. In addition, Frontier must file an annual progress report with the same information for the following two years or until otherwise ordered by the Board.

10. As discussed earlier in this decision, Impact filed its proposed solutions and commitments in Docket No. FCU-2013-0005, *Hancock County Health Systems*, on April 27, 2015. Impact's proposed solutions and commitments are largely based on parts of the Matrix Consent Decree with the FCC. Impact must comply with its proposed solutions and commitments and must file a report one year from the date of the issuance of this decision: 1) certifying that it continues to abide by the commitments it made in these proceedings, including that it continues to comply with

the parts of the Matrix FCC Consent Decree it agreed to; 2) reporting on its progress in addressing and preventing call completion problems; and 3) explaining whether it received any reports of call completion problems in Iowa and what steps it took to resolve these problems. In addition, Impact must file an annual progress report with the same information for the following two years or until otherwise ordered by the Board.

11. As discussed earlier in this decision, Airus filed its proposed solutions and commitments in Docket Nos. FCU-2013-0005, *Hancock County Health Systems*, and FCU-2013-0007, *Complaint of Ms. Frahm*, on April 27, 2015. As Airus notes, the calls that are the subject of these complaints occurred before Peerless Network, Inc. (Airus' previous name), acquired IntelPeer on November 30, 2013, and Airus is not aware of any call completion problems involving Airus on the call path since this acquisition. Airus must comply with its proposed solutions and commitments and must file a report one year from the date of the issuance of this decision: 1) certifying that it continues to abide by the commitments it made in these proceedings; 2) reporting on its progress in addressing and preventing call completion problems; and 3) explaining whether it received any reports of call completion problems in Iowa and what steps it took to resolve these problems. In addition, Airus must file an annual progress report with the same information for the following two years or until otherwise ordered by the Board.

12. As discussed earlier in this decision, Comcast filed its response in Docket No. FCU-2014-0007, *Complaint of Ms. Frahm*, on April 1, 2016. Comcast stated the actions it was taking regarding call completion issues. Comcast must file a report one year from the date of the issuance of this decision: 1) summarizing the actions it has taken to address and prevent call completion issues; and 2) explaining whether it received any reports of call completion problems in Iowa and what steps it took to resolve these problems. In addition, Comcast must file an annual progress report with the Board providing the same information for the following two years, or until otherwise ordered by the Board.

13. As discussed earlier in this decision, despite being ordered to do so in Docket No. FCU-2013-0006, *Complaints of Ms. Adolphson and Ms. Skallerup*, InterMetro did not file proposed solutions or commitments regarding call completion problems in Iowa. InterMetro must file a report one year from the date of the issuance of this decision: 1) summarizing the actions it has taken to address and prevent call completion problems; and 2) explaining whether it received any reports of call completion problems in Iowa and what steps it took to resolve these problems. In addition, InterMetro must file an annual progress report with the Board providing the same information for the following two years, or until otherwise ordered by the Board.

14. As discussed earlier in this decision, despite being ordered to do so in Docket No. FCU-2013-0009, *Complaint of Mr. Pals*, Bluetone did not file proposed

solutions or commitments regarding call completion problems in Iowa. Bluetone must file a report one year from the date of the issuance of this decision: 1) summarizing the actions it has taken to address and prevent call completion problems; and 2) explaining whether it received any reports of call completion problems in Iowa and what steps it took to resolve these problems. In addition, Bluetone must file an annual progress report with the Board providing the same information for the following two years, or until otherwise ordered by the Board.

15. In Docket No. FCU-2013-0007, *Complaint of Ms. Frahm*, Verizon was part of the solution for Ms. Frahm's call completion problems as the intermediate provider that served her after the routing was changed to use Verizon's network. In addition, Verizon is subject to the terms of its settlement with the FCC. Pursuant to the settlement, Verizon has contributed to solving call completion problems by hosting the April 22, 2015, rural call completion workshop in Washington, D.C., and posting a recording of the workshop on its Web site. Also pursuant to the settlement agreement, Verizon will sponsor an academic study of call completion issues. Therefore, Verizon will not be subject to any additional requirements pursuant to this proposed decision.

16. It would not be appropriate to impose civil penalties in these cases because the parties have participated in good faith: 1) in correcting the call completion problems experienced by the customers in these cases, once they were made aware of the problems; 2) in the investigations of the call completion problems

in these cases, which have led to a significant understanding of the causes of call completion problems in Iowa; and 3) in the development of effective, preventative, long term solutions that address the call completion problems experienced by the customers in these cases as well as customers in other areas of the country. The undersigned notes that some of the parties in these cases argued that reasonable financial penalties should be imposed on carriers responsible for call completion problems when they are repeat offenders. However, there is no basis for imposing civil penalties on the participants in these cases at this time. Civil penalties may be appropriate in the future if significant call completion problems continue to occur. Whether call completion problems warrant civil penalties, and under what circumstances, is a topic that would be appropriate for consideration in an industry-wide proceeding.

17. As discussed in the body of this decision, the undersigned administrative law judge recommends that the Board open a Notice of Inquiry proceeding to solicit comments from a broad range of participants regarding whether the Board should: 1) do nothing with respect to call completion problems in Iowa, other than continue to monitor federal and industry call completion work; 2) adopt rules designed to address and prevent rural call completion problems in Iowa, and if so, to consider what those rules should require and which carriers should be subject to the rules; or 3) take other appropriate actions as identified in the body of this decision and by the participants in the inquiry proceeding.

18. Because the Board's service lists are unique to each of the eight call completion dockets, Docket Nos. FCU-2012-0019, FCU-2013-0004, FCU-2013-0005, FCU-2013-0006, FCU-2013-0007, FCU-2013-0009, FCU-2014-0007, and FCU-2014-0014 will remain open solely for the purpose of receiving the information and reports required by this proposed decision until the Board issues a further order stating that the reports are no longer required to be filed.

19. This proposed decision and recommendation will become the final order of the Board unless the Board moves to review it or a party files written notice of appeal with the Board within 15 days of its issuance. 199 IAC 7.26(2). This rule means that the Board must receive the notice of appeal within 15 days of the issuance of this proposed decision.

UTILITIES BOARD

/s/ Amy L. Christensen
Amy L. Christensen
Administrative Law Judge

ATTEST:

/s/ Trisha M. Quijano
Executive Secretary, Designee

Dated at Des Moines, Iowa, this 28th day of July 2016.