

**IOWA UTILITIES BOARD**

**TO:** Amy Christensen

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**DATE:** May 26, 2016 (non-substantive corrections made August 31, 2016)

**SUBJECT:** Staff's Recommendation for Next Steps in Rural Call Completion Dockets

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## **I. Introduction**

In this memo staff reviews the proceedings conducted by the Utilities Board (Board) to investigate telephone call completion problems experienced by Iowa customers in rural areas. The memo reviews efforts at the federal level to combat rural call failures; summarizes information gathered in the Board's informal and formal proceedings, including what has been learned about the causes of the call failures in these cases; analyzes the solutions proposed by the Consumer Advocate Division of the Department of Justice (Consumer Advocate or OCA) and the companies participating in the proceedings; and recommends next steps. This memo does not address the numerous requests for confidential treatment of information filed in these proceedings. General Counsel staff is preparing for the Board's consideration separate proposed orders responding to those requests.

### **A. Iowa Law**

Iowa Code § 476.3(1) requires a public utility 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) establishes standards for the design, construction, installation, maintenance and operation of telephone utility plant. Rule 22.5(2) requires each local exchange utility to employ prudent management and engineering practices to ensure that sufficient equipment and adequate personnel are available at all times. 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. Staff notes that the Board's chapter 22 rules are presently under review in Docket No. RMU-2015-0002.

### **B. Informal Complaint Proceedings**

Beginning in 2012, Iowans began contacting the Board with complaints regarding telephone calls and, in some cases, fax messages that failed to complete to their intended destination in rural areas of Iowa. Consumers reported problems including long call set-up times, false ringing,<sup>1</sup> and dropped calls. In some of the cases, initial investigation was slowed because the customer reporting the problem did not know the identity of the service provider used by the person originating the call. Another problem was that call failures can be difficult to

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<sup>1</sup> "False ringing" describes a situation where a ring tone leads a caller to believe, incorrectly, that the phone 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.

detect. Consumers may not know they are not receiving phone calls unless the calling party tells them about the failed attempts.

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.

Some of the complaints became the subject of formal proceedings for further investigation requested by Consumer Advocate or initiated by the Board on its own motion pursuant to Iowa Code § 476.3(1). The Board found reasonable grounds for investigating 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 determined it was appropriate to take steps at the state level to respond to problems that appeared to be disrupting intrastate long distance calls to rural consumers in Iowa.

### **C. Formal Complaint Proceedings in Iowa**

The Board assigned the proceedings to the Board's Administrative Law Judge (ALJ). Formal proceedings are ongoing in the following dockets, six which involve CenturyLink Communications, LLC (CenturyLink),<sup>2</sup> as the originating carrier, one which involves Windstream Iowa Communications, Inc. (Windstream),<sup>3</sup> as the originating carrier, and one which involves Frontier Communications of America, Inc.<sup>4</sup> (Frontier), as the originating carrier:

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<sup>2</sup> CenturyLink explains that 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.

<sup>3</sup> Windstream has since changed its name to Windstream Iowa Communications, LLC. See *In re: Windstream Iowa Communications, Inc.*, "Order Approving Corporate Name Change and Issuing Amended Certificate," Docket No. SPU-2015-0033, issued February 8, 2016.

<sup>4</sup> On January 28, 2016, in a filing responding to a report filed by Consumer Advocate, Frontier explained 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 in this proceeding. 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. Staff clarifies that these references should have been to the long distance company, Frontier Communications of America, Inc. See *In re: Complaint of Horn Memorial Hospital*, "Order Regarding Further Procedure," n. 1, Docket No. FCU-2014-0014, March 17, 2016.

*In re: Rehabilitation Center of Allison, Docket No. FCU-2012-0019*

*In re: UnityPoint Clinic Family Medicine at Huxley, f/k/a Huxley Family Physicians, Docket No. FCU-2013-0004*

*In re: Hancock County Health Systems, Docket No. FCU-2013-0005*

*In re: Helen Adolphson and Charlotte Skallerup, Docket No. FCU-2013-0006*

*In re: Carolyn Frahm, Docket No. FCU-2013-0007*

*In re: Douglas Pals, Docket No. FCU-2013-0009*

*In re: Complaint of Sutherland Mercy Medical Clinic, Docket No. FCU-2014-0007*

*In re: Complaint of Horn Memorial Hospital, Docket No. FCU-2014-0014*

A summary of the informal and formal proceedings in each case is included in Section III of this memo.

The ALJ has explained that the purpose of the proceedings is to find solutions to call completion problems in Iowa, observing that:

[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.<sup>5</sup>

In every case except Docket Nos. FCU-2014-0007 and FCU-2014-0014, the ALJ issued orders with procedural schedules requiring 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 needs to be done to provide a long-term solution to the problems. 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 has taken or will take and a proposed timeline for when future actions will occur. Consumer Advocate's reports and the companies' proposed solutions are discussed in Sections IV and V of this memo.

Testimony was filed in Docket No. FCU-2012-0019. Detailed summaries of the testimony filed in that docket, Consumer Advocate's reports and proposed company solutions are provided in staff's June 30, 2015, memo for Docket Nos. FCU-2012-0019, FCU-2013-0004, FCU-2013-0005, FCU-2013-0006, and FCU-2013-0009 (the CenturyLink cases) and staff's June 30, 2015, memo in Docket No. FCU-2013-0007 (the Windstream case).

Summaries of the procedures followed and the information filed in Docket Nos. FCU-2014-0007 and FCU-2014-0014 are provided in this memo starting on page 37.

#### **D. Related Board Proceedings**

While the call completion proceedings assigned to the Board's ALJ 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

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<sup>5</sup> *In Re: Complaint of Carolyn Frahm*, "Order Regarding Verizon's Motion for Clarification," Docket No. FCU-2013-0007, issued August 6, 2013.

current dockets."<sup>6</sup> 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.<sup>7</sup>

#### **E. Rural Call Completion Investigations in Other States**

Regulatory agencies in other states have taken steps to respond to call completion problems in rural areas. For example, the Minnesota Public Utilities Commission (MPUC) solicited comments from interested parties addressing questions relating to rural call completion problems in Minnesota, including whether intermediate providers involved in the transport or switching of intrastate calls are subject to the jurisdiction of the MPUC; whether 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.<sup>8</sup>

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

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<sup>6</sup> *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.

<sup>7</sup> *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.

<sup>8</sup> 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).

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;<sup>9</sup> 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.

In December 2012, the Oregon Public Utility Commission adopted rules intending to ensure that carriers fulfill their obligation to complete calls placed to customers in rural exchanges in Oregon. The agency amended its administrative rules specifying conditions for certification to add new conditions that prohibit blocking, choking, 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.<sup>10</sup>

## **II. Federal Initiatives to Combat Call Failures in Rural Areas**

### **A. FCC CAF Order**

In its November 2011 comprehensive order reforming the Universal Service Fund and intercarrier compensation system ("*CAF Order*"),<sup>11</sup> the FCC established a set

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<sup>9</sup> 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.

<sup>10</sup> 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.

<sup>11</sup> 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 (10<sup>th</sup> Cir. 2014), *cert. denied*, 135 S.Ct. 2072 (*Mem*) (May 4, 2015).

of reforms which, over time, will transition to a uniform national bill-and-keep regime<sup>12</sup> for all telecommunications traffic exchanged with a local exchange carrier (LEC). (*CAF Order*, ¶¶ 34, 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 has explained that it anticipates that the transition to bill-and-keep should eliminate some of the financial incentives that contribute to rural call completion problems. (See discussion of the *Rural Call Completion Order* on pages 10 and 11 of this memo.)

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

To date, the FCC has proposed and adopted rules requiring data collection and reporting; 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, Declaratory Ruling**

In 2011, the FCC created a Rural Call Completion Task Force to investigate and address the problem of calls to rural telephone customers which are delayed or fail to connect. In February 2012, the FCC issued a Declaratory Ruling ("*Declaratory Ruling*") responding to the issues.<sup>13</sup> In the *Declaratory Ruling*, the FCC:

- explained that the reforms adopted in the *CAF Order* that reduce most termination charges should eliminate the incentives for avoiding costs which undermine the reliability of telephone service;

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<sup>12</sup> "Bill-and-keep" refers to a pricing arrangement for connecting telecommunications networks under which the networks 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 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.

<sup>13</sup> *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); (*Declaratory Ruling*), 27 FCC Rcd. 1351.

- clarified that the prohibition against blocking, choking, reducing, or restricting telephone traffic extends to routing practices that have the effect of blocking, choking, etc.;
- clarified that such practices may constitute unjust and unreasonable practices in violation of section 201 of the Communications Act of 1934, as amended (the Act), and/or may violate a carrier's duty to refrain from unjust or unreasonable discrimination in practices, facilities, or services;
- 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 that 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; and
- emphasized that carriers are responsible for the actions of their agents or other persons acting for or employed by the carriers, i.e., underlying providers delivering traffic for the carrier.

The FCC explained 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 *Declaratory Ruling*.

## **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 completion of long distance calls to rural customers ("*Call Completion NPRM*").<sup>14</sup> The FCC mentioned evidence that retail long distance providers may not be adequately examining the rural call completion performance that results from use of wholesale call delivery services by intermediate providers employed by the long distance providers. 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 aid enforcement action." (*Call Completion NPRM*, ¶ 3.)

Noting that a lack of data impedes investigations (*Call Completion NPRM*, ¶ 17), the FCC 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

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<sup>14</sup> *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*).

basic information on call attempts and to periodically analyze and summarize call completion and report the results to the Commission. (*Call Completion NPRM*, ¶ 17.)

In the *Call Completion NPRM*, the FCC 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 by rural customers. (*Call Completion NPRM*, ¶ 11.) The FCC described its Web-based complaint intake process which allows rural customers and carriers to alert the Commission about call completion problems and instructs them on how to file complaints.<sup>15</sup>

**b. Rural Call Completion Order**

In the October 28, 2013, *Rural Call Completion Order*, the FCC adopted rules addressing concerns about completion of long distance calls to rural areas.<sup>16</sup> 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. These failures have significant and immediate public interest ramifications, causing rural businesses to lose customers, cutting families off from their relatives in rural areas, and creating potential for dangerous delays in public safety communications in rural areas.

In the *Rural Call Completion Order*, the FCC referred to its reforms of the intercarrier compensation system in the *CAF Order* as at least part of a solution to call completion problems. The FCC explained that 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. 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-

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<sup>15</sup> The complaint form can be accessed at <https://www.fcc.gov/general/rural-call-completion-problems-long-distance-or-wireless-calling-rural-areas>

<sup>16</sup> *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*).

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.<sup>17</sup>

The FCC adopted definitions, recordkeeping (call answer and completion data),<sup>18</sup> retention, and reporting rules at 47 C.F.R. Part 64 intended to improve the FCC's ability to monitor the delivery of long distance calls to rural areas, aiding enforcement action in connection with providers' call completion practices, as well as aiding consumers and the industry by adopting a rule prohibiting false ring signaling.<sup>19</sup>

The FCC rules require covered providers<sup>20</sup> to collect, retain and report specified data elements, with respect to interstate and intrastate calls, for each rural destination, identified by operating company number (OCN), and for non-rural

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<sup>17</sup> *Rural Call Completion Order*, ¶¶ 16, 17.

<sup>18</sup> 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).

<sup>19</sup> 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).

<sup>20</sup> The *Rural Call Completion Order* applies to "covered providers," 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 VoIP service providers. Intermediate providers are not included in the definition of "covered provider." "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."

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.* Intermediate providers are not included in the definition of “covered provider” and thus are not subject to the recordkeeping and reporting rules.

Four times a year, covered providers use FCC Form 480 to report the required data to the FCC. The form is a Microsoft Excel workbook which consists of (1) three monthly worksheets, one for each month in the quarterly reporting period, on which a covered provider reports the mandatory detail information on call attempts by terminating OCN; (2) three monthly worksheets, one for each month in the quarterly reporting period, on which a covered provider can voluntarily provide a subset of information for call attempts originating on autodialer facilities; and (3) one worksheet used to explain the techniques used to categorize call attempts.

A safe harbor provision found at 47 C.F.R. § 64.2107 establishes reduced data retention and reporting requirements for qualifying carriers. The FCC adopted the “Managing Intermediate Provider Safe Harbor” (“Safe Harbor”) pursuant to which a provider is given some relief from the reporting and data retention obligations by certifying that the provider either uses no intermediate providers or that its contracts with intermediate providers allow for a total of no more than two intermediate providers in the call path, among other requirements. The FCC also provided a way for providers that have already taken steps to ensure calls to rural areas are being completed to seek a waiver of the data reporting and retention requirements.

Under the Safe Harbor, a qualifying provider's data retention and reporting obligations are reduced. A qualifying covered provider must comply with the reporting requirements for one year and must retain the required call records for only three months. To qualify for the Safe Harbor, a provider must:

- (1) certify that it uses no intermediate providers or that its contracts with directly connected intermediate providers allow those providers to pass a call to no more than one additional intermediate provider;
- (2) certify that any nondisclosure agreement with an intermediate provider allows the covered provider to reveal the identity of the directly connected intermediate provider and any other intermediate provider to the FCC and to the rural carrier whose incoming calls have been affected by the performance of the intermediate carriers; and
- (3) certify that if it uses intermediate providers, it has a process to monitor the performance of those intermediate providers. The FCC did not require

qualifying providers to use any particular process, requiring instead that providers describe the process they use.

CenturyLink's use of the Safe Harbor is discussed in Section V.A of this memo.

The FCC received five petitions for reconsideration of the October 28, 2013, *Rural Call Completion Order*. In November 2014, the FCC denied four of the petitions and granted one to modify the rules to exempt a narrow set of calls from the data retention and reporting requirements.<sup>21</sup>

**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 contribute 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. (*Rural Call Completion Order* ¶¶ 101 – 106.)

**d. Further Notice of Proposed Rulemaking**

In the Further Notice of Proposed Rulemaking (*FNPRM*)<sup>22</sup> 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. Also, the FCC sought 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, intermediate providers, and other Safe Harbor options and reporting requirements.

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<sup>21</sup> See *In re: Rural Call Completion*, Order on Reconsideration, WC Docket No. 13-39, 29 FCC Rcd. 14026 (rel. Nov. 13, 2014).

<sup>22</sup> *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 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.<sup>23</sup>

### **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 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.
- File an initial compliance report in 90 days and annual reports for three years.

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<sup>23</sup> See Jan. 16, 2014, *Comments of the National Association of Regulatory Utility Commissioners*, filed in WC Docket No. 13-39.

Windstream's commitments in IUB Docket No. FCU-2013-0007 that are based on its consent decree with the FCC are discussed in Section V.D of this memo.

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 commitment in IUB Docket No. FCU-2013-0005 to comply with certain elements of the consent decree between the FCC and Matrix Telecom (Matrix is a subsidiary of Impact) is discussed in Section V.B of this memo.

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 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 workshops<sup>24</sup> and sponsor an academic study on the issue,<sup>25</sup> among other commitments.

On May 9, 2016, the FCC released an order announcing that the agency has 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, 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 will 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*. The bill, S.827,

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<sup>24</sup> 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.

<sup>25</sup> 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.

- 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 memo, no action has been taken on either the Senate or House bills.

### **III. Summary of Board Proceedings**

#### **A. FCU-2012-0019 (C-2012-0129)**

##### ***In Re: Rehabilitation Center of Allison, Iowa***

“Order Granting Request for Formal Proceeding” issued March 15, 2013

“Order Canceling Hearing, Vacating Procedural Schedule, and Assigning to Administrative Law Judge” issued April 2, 2013

On September 24, 2012, the Rehabilitation Center of Allison, Iowa (the Allison facility) filed a complaint alleging that the facility was not receiving phone calls and faxes from the Shell Rock Clinic in Shell Rock, Iowa, and the Waverly Health Center in Waverly, Iowa.<sup>26</sup> The administrator of the Allison facility stated that persons calling the Allison facility reported that sometimes the facility's phone did not ring or would ring but no one would answer.

***Carriers involved:*** Dumont Telephone Company (the Allison facility's local telephone service provider); AireSpring, Inc.,<sup>27</sup> the long distance carrier for the

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<sup>26</sup> The facility had previously filed three complaints with the FCC in June and July 2011 regarding the facility's inability to receive faxes; problems with broken and inaudible incoming calls; complaints from area clinics and families regarding inability to get through on the facility's fax or phone lines; and worsening problems with phone and fax lines. The FCC responded to the complaints stating that it did not have jurisdiction over the complaints and suggested that the facility contact the Board. (OCA Report, Dec. 19, 2014, FCU-2012-0019, ¶¶ 9 – 10.)

<sup>27</sup> AireSpring's motion to withdraw from the proceeding was granted on February 5, 2014.

Shell Rock facility and a reseller of services provided by Qwest Corporation, d/b/a CenturyLink QC (CenturyLink); Iowa Network Services (INS), which provides a connection between interexchange carriers and the local service provider to deliver long distance calls.

**Informal investigation:** INS explained it tested the numbers involved and concluded that because its records showed there were no calls from the Waverly facility's number to the Allison facility's number, the call termination issues occurred before the calls reached the INS network. CenturyLink explained the process it follows to investigate these complaints, noting it can only investigate calls for which it has records. CenturyLink explained its records show the calls for the numbers at issue were routed using an underlying carrier and had duration with no report of any failure. CenturyLink explained it made a change to the routing for calls made to the numbers in question and test calls completed successfully. CenturyLink explained the reasons it uses underlying carriers and stated it imposes performance standards on those carriers.

**Proposed resolution:** In a proposed resolution issued on December 14, 2012, staff concluded AireSpring did not play a role either as a reseller of CenturyLink's long distance service or as an underlying carrier used by CenturyLink to deliver long distance calls. Staff also concluded Dumont and INS did not play a role in misrouting of calls, noting that INS stated the calls never reached its network and Dumont, the terminating local exchange carrier, would not have been responsible for misrouting the calls. Staff observed CenturyLink was working in good faith to address complaints brought to its attention.

**Board grants OCA's request for formal proceeding:** On December 27, 2012, the OCA filed a petition for further investigation. OCA alleged the problems experienced by the Allison facility were not unique and were occurring with sufficient frequency and affecting a sufficient number of rural customers to justify further investigation. OCA acknowledged the FCC plays a central role in resolving the problem but argued the Board has an interest in ensuring that calls are completed to rural destinations in Iowa and there is an appropriate role for the state in responding to the problem.

On March 15, 2013, the Board issued an order granting the request for formal proceeding, set a procedural schedule, and scheduled a hearing. The Board identified several unanswered questions, including the roles and responsibilities of the various providers in causing or correcting the problems, what tools are available to carriers to prevent and respond to call completion problems, CenturyLink's use of and standards for underlying carriers, and the extent to which use of underlying carriers and certain routing practices have contributed to call completion problems.

On April 2, 2013, the Board issued an order canceling the hearing, vacating the procedural schedule and assigning the matter to the Board's ALJ.

**Formal proceeding:** The ALJ and the parties held several telephone prehearing conferences to discuss the parties' progress on investigation and discovery. The parties were required to file periodic status reports regarding whether the Allison facility was continuing to experience problems with faxes and calls, and whether any of the Allison facility's liaisons had experienced difficulties when calling the facility using their cellular telephones.<sup>28</sup>

Testimony of Consumer Advocate witnesses was filed in this docket on October 30, 2013. Testimony of CenturyLink's witness was filed on December 13, 2013. Testimony of Airespring's witness was filed on January 22, 2014. Testimony of INS's witness was filed on January 22, 2014, and testimony of Dumont's witness was filed on January 23, 2014. Staff summarized the testimony in the June 30, 2015, memo.

The procedural schedule was modified several times at the request of the parties and ultimately required the parties to file sequential, rather than simultaneous, reports. The initial report to be filed by Consumer Advocate was to provide information about what the parties had learned regarding what happened in this case and to provide the information the parties had about what caused the call completion problems, what was done to correct the problems, why the corrections solved the problems, and what was done or still needs to be done to provide a long-term solution to the call completion problems. The Consumer Advocate's report was also to continue to update the ALJ about whether the Allison facility had experienced any call completion problems and, if so, what was done to correct those problems. The other parties were allowed to file responses to Consumer Advocate's initial report.

CenturyLink was directed to file proposed, effective, preventative long-term solutions to the call completion problems its customers experienced in Iowa. Solutions were to include specific actions CenturyLink has taken or will take and a proposed timeline for future action. The ALJ specified that CenturyLink could

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<sup>28</sup> See, *In re: Rehabilitation Center of Allison, Iowa*, "Order Setting Telephone Prehearing Conference," Docket No. FCU-2012-0019, issued April 8, 2013; "Order Regarding Prehearing Conference and Requiring Filing," issued April 10, 2013; "Order Setting Second Telephone Prehearing Conference," issued May 22, 2013; "Order Regarding Second Prehearing Conference and Requiring Filings," issued June 19, 2013; "Order Setting Third Telephone Prehearing Conference," issued August 20, 2013; "Order Setting Partial Procedural Schedule and Fourth Prehearing Conference," issued September 16, 2013; "Order Regarding Fourth Prehearing Conference, Requiring Filings, and Granting Motion to Withdraw," issued February 5, 2014; "Order Setting Fifth Prehearing Conference," issued March 6, 2014; "Order Setting Sixth Telephone Prehearing Conference," issued May 7, 2014; "Order Regarding Sixth Prehearing Conference and Requiring Filing," issued May 30, 2014; "Order Setting Seventh Telephone Prehearing Conference," issued September 2, 2014; and "Order Setting Additional Procedural Schedule and Discussing Seventh Prehearing Conference," issued September 22, 2014.

base its proposed solutions on solutions it has agreed to with the FCC, but must include commitments to the Board as to what the company will do in Iowa.

Also, in describing the scope of proposed solutions, the ALJ recognized that even after proposed solutions to call completion problems have been implemented, a call completion problem may occur. Thus, the ALJ explained 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.

*In re: 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.

Pursuant to further modifications to the procedural schedule, Consumer Advocate filed its initial report on December 19, 2014. CenturyLink, Dumont, and INS filed responses to Consumer Advocate’s report on February 26, 2015. Consumer Advocate filed a reply on March 19, 2015. CenturyLink filed a response to Consumer Advocate’s reply on April 2, 2015. Consumer Advocate’s reports and the company responses are discussed briefly in Section IV of this memo and in greater detail in staff’s June 30, 2015, memo.

CenturyLink filed its proposed solutions on April 27, 2015. On May 26, 2015, Consumer Advocate and Dumont filed responses to CenturyLink’s proposed solutions. CenturyLink’s proposed solutions and the responses are discussed briefly in Section V of this memo and in greater detail in staff’s June 30, 2015, memo.

See Section III.G for a discussion of an in-person prehearing conference held on August 26, 2015, and subsequent settlement discussions.

**B. FCU-2013-0004 (C-2012-0147)**

***In Re: Unity Point Clinic Family Medicine at Huxley, f/k/a Huxley Family Physicians***

“Order Granting Request for Formal Proceeding and Assigning to Administrative Law Judge” issued May 23, 2013

On November 28, 2012, Lynae Millette, Clinic Administrator of Huxley Family Physicians (HFP)<sup>29</sup> in Huxley, Iowa, filed a complaint with the Board alleging HFP had experienced static and problems with telephone calls cutting off for about

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<sup>29</sup> Staff notes that the name of complainant Huxley Family Physicians was changed during this proceeding to Unity Point Clinic Family Medicine at Huxley, f/k/a Huxley Family Physicians.

four years. The complaint also alleged that HFP was not receiving phone calls and faxes from Mary Greeley Hospital in Ames, Iowa. Ms. Millette stated that persons calling HFP from other hospitals, other clinics and patients have complained about the phone lines. Ms. Millette recounted an incident where Mary Greeley Hospital reported that it was unable to send urgent test results by fax to HFP because it could not get through on the phone or fax lines. Ms. Millette also complained about calls not getting to the after-hours answering service used by HFP.

**Carriers involved:** Huxley Communications Cooperative (Huxley Communications) (identified as the local exchange service provider for HFP); CenturyLink (identified as the local and long distance service provider for Mary Greeley Hospital); and Bluetone Communications, LLC (Bluetone), (identified as an underlying carrier for CenturyLink).

**Informal investigation:** Huxley Communications stated it researched the latest issues identified in Ms. Millette's complaint, but its system cannot tell when a call does not complete. CenturyLink detailed the steps its technician took to investigate the issues raised by the complaint and stated that the technician performed test calls and determined the problem was related to call routing. CenturyLink removed Bluetone, the underlying carrier used to route calls, from the routing table for the telephone number in question, and was working with Bluetone to address the issue.

Bluetone explained it is a wholesale provider of telecommunication services to CenturyLink and does not receive trouble reports directly from CenturyLink end-users. Bluetone investigated the complaint regarding the trouble HFP experienced on the dates specified in the complaint and found no trouble reports from CenturyLink regarding the telephone numbers in question. With respect to a trouble report it received from CenturyLink regarding a fax number, Bluetone was unable to determine a definitive cause for the fax failure, but proactively rerouted the destination number to another vendor in order to provide an alternate route for call completion.

**Proposed resolution:** Staff issued a proposed resolution on February 21, 2013. Staff determined that changing the underlying carrier resolved the matter and suggested that if Ms. Millette experiences further problems with phone calls and faxes to HFP not completing, she could ask the person originating the call or sending faxes to contact their telephone provider and to file a complaint with the Board.

**Board grants OCA's request for formal proceeding:** In granting OCA's petition for formal proceeding, the Board explained further investigation would enable the Board to gather more specific information about CenturyLink's use of and standards for underlying carriers and the extent to which use of certain

underlying carriers and routing practices have contributed to call completion problems.

**Formal proceeding:** The ALJ and the parties held several telephone prehearing conferences to discuss the parties' progress on investigation and discovery. The parties were required to file periodic status reports regarding whether the clinic was continuing to experience problems with faxes and calls.<sup>30</sup>

The procedural schedule was modified several times at the request of the parties and ultimately required the parties to file sequential, rather than simultaneous, reports. The initial report to be filed by Consumer Advocate was to provide information about what the parties had learned regarding what happened in this case and to provide information the parties had about what caused the call completion problems, what was done to correct the problems, why the corrections solved the problems, and what was done or still needs to be done to provide a long-term solution to the call completion problems. The Consumer Advocate's report was also to continue to update the ALJ about whether the clinic had experienced any call completion problems and, if so, what was done to correct those problems. The other parties were allowed to file responses to Consumer Advocate's initial report.

Pursuant to modifications to the procedural schedule, Consumer Advocate filed its initial report on January 9, 2015. CenturyLink filed a response to Consumer Advocate's report on February 26, 2015. Consumer Advocate filed a reply on March 19, 2015. CenturyLink filed a response to Consumer Advocate's reply on April 2, 2015. Consumer Advocate's reports and the company responses are discussed briefly in Section IV of this memo and in greater detail in staff's June 30, 2015, memo.

CenturyLink filed its proposed solutions on April 27, 2015. On May 26, 2015, Consumer Advocate filed a response to CenturyLink's proposed solutions.

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<sup>30</sup> See, *In re: Huxley Family Physicians*, "Order Setting Telephone Prehearing Conference," Docket No. FCU-2013-0004, issued June 4, 2013; "Order Regarding Prehearing Conference and Requiring Filing," issued June 13, 2013; "Order Setting Second Telephone Prehearing Conference," issued October 16, 2013; "Order Regarding Second Telephone Prehearing Conference and Requiring Filing," issued October 22, 2013; "Order Setting Third Telephone Prehearing Conference," issued January 7, 2014; "Order Regarding Third Telephone Prehearing Conference and Requiring Filing," issued January 28, 2014; *In re: UnityPoint Clinic Family Medicine at Huxley, f/k/a Huxley Family Physicians*, Docket No. FCU-2013-0004, "Order Setting Fourth Telephone Prehearing Conference," issued May 1, 2014; "Order Regarding Fourth Telephone Prehearing Conference and Requiring Filing," issued May 20, 2014; "Order Setting Fifth Telephone Prehearing Conference," issued August 19, 2014; "Order Regarding Fifth Telephone Prehearing Conference and Requiring Filing," issued September 22, 2014; "Order Setting Sixth Telephone Prehearing Conference," issued October 14, 2014; and "Order Setting Partial Procedural Schedule and Discussing Sixth Prehearing Conference," issued October 28, 2014.

CenturyLink's proposed solutions and the responses are discussed briefly in Section V of this memo and in greater detail in staff's June 30, 2015, memo.

See Section III.G for a discussion of an in-person prehearing conference held on August 26, 2015, and subsequent settlement discussions.

**C. FCU-2013-0005 (C-2013-0005)**

***In re: Hancock County Health Systems***

"Order Granting Request for Formal Proceeding and Assigning to Administrative Law Judge" issued June 10, 2013

On January 15, 2013, Mr. Curt Gast of Hancock County Health Systems (HCHS) filed a complaint with the Board alleging that HCHS had experienced problems completing telephone calls made from its main health clinic campus to outlying telephone numbers within the HCHS telephone service area. The complaint described problems completing calls, including calls that did not ring and calls that were not answered. Mr. Gast noted that the problems involved calls which originated from the main health clinic campus and were intended to terminate at outlying medical clinics, noting the problems occurred when calling from Britt to Kanawha, Iowa.

***Carriers involved:*** CenturyLink (identified as the local exchange service provider for HCHS); IntelPeer (identified as an underlying carrier used by CenturyLink, now known as Airus, Inc.); and Impact Telecom (identified as an underlying carrier used by IntelPeer).

***Informal investigation:*** CenturyLink stated test calls were attempted from the main location of the HCHS to two different numbers at one of the offsite clinics, and these calls did not complete. CenturyLink detailed the steps its technician took to investigate the long distance calling issues and call routing paths. CenturyLink stated its technician determined the problems identified in the complaint were related to call routing. CenturyLink removed IntelPeer, the underlying carrier used to route these calls, from the routing table for the telephone number in question, and worked with IntelPeer to address the issue. CenturyLink's technician contacted Mr. Gast to perform test calls after the routing changes were made, and the test calls were successful.

IntelPeer removed Impact, its underlying carrier, from the call route and conducted further test calls, which completed successfully.

Impact stated that IntelPeer requested that Impact block the relevant terminating telephone number pending investigation to allow rerouting to an alternate route. Impact's technician investigated the issue, researched call detail records, and evaluated the call paths. Impact's investigation showed that one of the calls tested was presented to its network and had duration until the call was terminated by the originating party in the route, in this case, IntelPeer. Impact

described this as a "ring no answer" or "origination cancel" occurrence. Impact attempted to send the call through using another carrier, InterMetro Communications. Impact's records showed Internet Protocol (IP) packets in both the inbound and outbound directions. With respect to the second call investigated, Impact's records show one second of post-dial delay, seven seconds of ring time, and indications that the call was answered and the clock was started for billing purposes. This call showed 15 seconds of duration and IP packets in both directions and was terminated to Broadvox Communications. Impact did not have any issues with call failures that were reported to Impact by IntelPeer and which were involved in the complaint filed with the Board.

**Proposed resolution:** Staff issued a proposed resolution on March 14, 2013, finding that once CenturyLink removed IntelPeer from the routing, calls completed without issue. Staff contacted Mr. Gast, who reported that since CenturyLink made changes to the routing he had not had any further problems with calls not completing. Mr. Gast indicated he would contact Board staff if problems recurred.

**Board grants OCA's request for formal proceeding:** In granting OCA's request for formal proceeding, the Board noted that the record in the informal proceeding did not allow the Board to fully understand the roles and responsibilities of the multiple providers in the call paths. Further investigation would enable the Board to gather more specific information about CenturyLink and IntelPeer's use of underlying carriers and extent to which use of certain underlying carriers contributed to call completion problems.

**Formal proceeding:** The ALJ and the parties held several telephone prehearing conferences to discuss the parties' progress on investigation and discovery. The parties were required to file periodic status reports regarding whether HCHS was continuing to experience problems with calls.<sup>31</sup>

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<sup>31</sup> See, *In re: Hancock County Health Systems*, "Order Setting Telephone Prehearing Conference," Docket No. FCU-2013-0005, issued June 18, 2013; "Order Regarding Prehearing Conference and Requiring Filings," issued July 3, 2013; "Order Denying Motion to Dismiss and Setting Second Telephone Prehearing Conference," issued September 13, 2013; "Order Regarding Second Telephone Prehearing Conference and Requiring Filing," issued September 25, 2013; "Order Setting Third Telephone Prehearing Conference," issued November 26, 2013; "Order Regarding Third Telephone Prehearing Conference and Requiring Filing," issued December 20, 2013; "Order Setting Fourth Telephone Prehearing Conference," issued March 31, 2014; "Order Regarding Fourth Prehearing Conference and Requiring Filings," issued April 9, 2014; "Order Setting Fifth Telephone Prehearing Conference," issued July 8, 2014; "Order Regarding Fifth Prehearing Conference and Requiring Filings," issued July 31, 2014; "Order Setting Sixth Telephone Prehearing Conference," issued October 30, 2014; and "Order Setting Partial Procedural Schedule and Discussing Sixth Prehearing Conference," issued November 14, 2014.

The procedural schedule was modified several times at the request of the parties and ultimately required the parties to file sequential, rather than simultaneous, reports. The initial report to be filed by Consumer Advocate was to provide information about what the parties had learned regarding what happened in this case and to provide information the parties had about what caused the call completion problems, what was done to correct the problems, why the corrections solved the problems, and what was done or still needs to be done to provide a long-term solution to the call completion problems. The Consumer Advocate's report was also to continue to update the ALJ about whether HCHS had experienced any call completion problems and, if so, what was done to correct those problems. The other parties were allowed to file responses to Consumer Advocate's initial report.

Pursuant to modifications to the procedural schedule, Consumer Advocate filed its initial report on January 16, 2015. CenturyLink filed a response to the report on February 26, 2015. Airus filed a response on February 26, 2015. Impact filed a response on February 26, 2015, and a revised response on March 12, 2015.

Consumer Advocate filed a reply on March 19, 2015. CenturyLink filed a response to Consumer Advocate's reply on April 2, 2015. Consumer Advocate's reports and the company responses are discussed briefly in Section IV of this memo and in greater detail in staff's June 30, 2015, memo.

CenturyLink, Impact and Airus filed their proposed solutions on April 27, 2015. On May 26, 2015, Consumer Advocate filed a response to the proposed solutions. The proposed solutions and the responses are discussed briefly in Section V of this memo and in greater detail in staff's June 30, 2015, memo. See Section III.G for a discussion of an in-person prehearing conference held on August 26, 2015, and subsequent settlement discussions.

**D. FCU-2013-0006 (C-2013-0006, C-2013-0011)**

***In re: Complaints of Helen Adolphson and Charlotte Skallerup***

"Order Docketing for Formal Proceeding and Assigning to Administrative Law Judge" issued June 24, 2013

On January 17, 2013, Ms. Helen Adolphson filed a complaint with the Board (C-2013-0006) stating that for several months she had experienced problems calling her mother, Ms. Faye Wookey, who resides in Emerson, Iowa. The problems Ms. Adolphson encountered when attempting to call her mother's telephone number included instances where the phone rang on Ms. Adolphson's end of the call, but Ms. Wookey later reported that her phone did not ring; after a call would ring once or twice, Ms. Adolphson would hear a busy tone; calls would be dropped; or calls would go through, but with a poor connection. Ms. Adolphson explained she was concerned about these problems because her mother is 97 years old and if she does not answer the phone, Ms. Adolphson must drive to her home to ensure her welfare. Ms. Adolphson explained that her mother's service provider,

Interstate, had been contacted several times about the problems, but was not able to find any problems with its systems.

On January 22, 2013, Ms. Charlotte Skallerup (Ms. Adolphson's sister and a resident of Glenwood, Iowa) filed a complaint with the Board stating she had experienced problems calling her mother, Ms. Wookey. Ms. Skallerup noted that Interstate, Ms. Wookey's service provider, had visited Ms. Wookey's home several times to investigate the calling problems. Ms. Skallerup noted that neither she nor her sister has problems with other long distance calls. Ms. Skallerup described the problems calling her mother's number as follows: sometimes the call would go through without difficulty; other times the call would ring once or twice and then go dead; other times the ring sounded fine initially but then sounded garbled and if her mother answered, they could not hear or understand each other. In some cases, Ms. Skallerup had to call as many as eight to ten times before the call would connect. Ms. Skallerup stated she was concerned about the reliability of her telephone service because if her mother does not answer the phone, Ms. Skallerup must drive 30 miles to check on her. Noting that her mother has a medical alert device from the Red Oak, Iowa, hospital, Ms. Skallerup questioned whether that service would work properly if Ms. Wookey's phone does not always work.

**Carriers involved:** CenturyLink (the local and long distance service provider for both Ms. Adolphson and Ms. Skallerup); Interstate Communications (Ms. Wookey's service provider); InterMetro Communications, Inc. (identified as an underlying carrier used by CenturyLink).

**Informal investigation:** CenturyLink stated that tests of its equipment (Ms. Adolphson's line, cable, and central office connections) revealed no problems and test calls completed successfully. CenturyLink followed its standard process for long distance call completion inquiries and opened a trouble report ticket for Ms. Adolphson's telephone number and for Ms. Skallerup's number. CenturyLink searched its call records for those telephone numbers for calls that corresponded to the information provided in the complaints. Not all of the calls were found, but testing was done on the calls that were located and CenturyLink's technician determined that routing caused the problem for calls for which records were found. CenturyLink's technician removed InterMetro, the underlying carrier CenturyLink used to route the calls, as an intrastate routing option for the numbers in question, and opened a trouble report ticket with InterMetro. CenturyLink's technician contacted Ms. Adolphson and Ms. Skallerup to verify that calls were completing to their mother's telephone number.

In a response dated March 21, 2013, CenturyLink described its standard investigation process as follows:

Where there is an issue with the performance of a CenturyLink customer's long distance service, and the customer contacts

CenturyLink, CenturyLink opens a trouble report ticket, the issue is identified and documented, and troubleshooting takes place.

If the issue is related to routing, the route path is reviewed and may be changed and tested for efficacy to allow the customer's traffic to properly flow.

If an underlying carrier is involved in the problem, it is removed from the path (NPA/NXX) and a trouble report ticket is opened with the underlying carrier. That carrier must conduct a root cause analysis, address the issue to resolution, take corrective action, test its fix, notify CenturyLink, and test with CenturyLink before CenturyLink will re-instate it to be used for processing calls and close the trouble report ticket.

The original customer issue is worked, its resolution tested and confirmed, and it is closed with the customer.

CenturyLink also described how telephone traffic is routed to rural telephone companies:

Long distance traffic is routed based on the dialed digits. The route is designated based on the Local Exchange Routing Guide (LERG) information related to the local exchange of the called TN (for ported numbers, the local routing number is used). Traffic that originates and terminates within a state has designated routing options. These are designated based on business and traffic needs. Traffic that goes between states has designated routing options as well, which are also based on business and traffic needs.

InterMetro stated that for the telephone numbers in question, it received a call from CenturyLink and, in turn, it passed the call to another provider to complete the call in Iowa. InterMetro noted that CenturyLink had identified an intermittent problem in this area and submitted two trouble tickets to InterMetro. InterMetro stated it researched the matter, identified the provider with the intermittent problem, stopped using that provider to deliver calls to Iowa, and worked with CenturyLink's technician to verify that the call completion problem was resolved.

Board staff asked InterMetro to provide the name of the underlying provider mentioned in InterMetro's response. InterMetro responded by noting that pursuant to a confidentiality clause in its contract with that vendor, it treats its vendor information as confidential and proprietary. InterMetro asked for assurances that the Board would treat the vendor's identity as confidential and inquired about the procedure for submitting confidential information.

**Proposed resolution:** On April 29, 2013, staff issued proposed resolutions in each case finding that after CenturyLink removed InterMetro from the routing and performed test calls, the calls completed successfully. Staff noted that InterMetro handed the calls off to another provider, but did not identify that provider. Staff recommended that the Board, on its own motion, initiate a formal proceeding to allow further investigation of the call completion issues involved in these complaints, including the roles and responsibilities the various carriers have with respect to the alleged call failures. Staff also noted that initiating a formal proceeding would establish a docket in which InterMetro could file a request for confidential treatment of the identity of its underlying carrier, thereby allowing the investigation to proceed.

**Board docket complaint for formal proceeding:** In this case involving two sisters who described difficulties completing telephone calls to their elderly mother, the Board found reasonable grounds for further investigation. The Board noted further investigation would be useful to learn more about the causes of call failures where the complainants are the persons who originated the calls that did not complete.

**Formal proceeding:** The ALJ and the parties held several telephone prehearing conferences to discuss the parties' progress on investigation and discovery. The parties were required to file periodic status reports regarding whether Ms.

Adolphson and Ms. Skallerup were continuing to experience problems with calls.<sup>32</sup>

The procedural schedule was modified several times at the request of the parties and ultimately required the parties to file sequential, rather than simultaneous, reports. The initial report to be filed by Consumer Advocate was to provide information about what the parties had learned regarding what happened in this case and to provide information the parties had about what caused the call completion problems, what was done to correct the problems, why the corrections solved the problems, and what was done or still needs to be done to

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<sup>32</sup> See, *In re: Complaints of Helen Adolphson and Charlotte Skallerup*, "Order Requiring Filings," Docket No. FCU-2013-0006, issued July 2, 2013; "Order Setting Telephone Prehearing Conference," issued August 22, 2013; "Order Regarding Prehearing Conference and Requiring Filings," issued September 13, 2013; "Order Setting Second Telephone Prehearing Conference and Granting Request for Additional Time," issued November 12, 2013; "Order Regarding Second Telephone Prehearing Conference," issued December 20, 2013; "Order Requiring Additional Filing," issued January 7, 2014; "Order Setting Third Telephone Prehearing Conference," issued February 6, 2014; "Order Regarding Third Telephone Prehearing Conference," issued February 25, 2014; "Order Setting Fourth Telephone Prehearing Conference," issued May 28, 2014; "Order Regarding Fourth Telephone Prehearing Conference," issued June 23, 2014; "Order Setting Fifth Telephone Prehearing Conference," issued September 22, 2014; and "Order Setting Partial Procedural Schedule and Discussing Fifth Prehearing Conference," issued October 14, 2014.

provide a long-term solution to the call completion problems. The Consumer Advocate's report was also to continue to update the ALJ about whether Ms. Adolphson and Ms. Skallerup had experienced any call completion problems and, if so, what was done to correct those problems. The other parties were allowed to file responses to Consumer Advocate's initial report.

Pursuant to modifications to the procedural schedule, Consumer Advocate filed its initial report on January 20, 2015, and a revised report on January 27, 2015. CenturyLink filed a response to Consumer Advocate's report on February 26, 2015. I-35 filed a response to the report on February 26, 2015.

Consumer Advocate filed a reply on March 19, 2015. CenturyLink filed a response to Consumer Advocate's reply on April 2, 2015. Consumer Advocate's report and the company responses are discussed briefly in Section IV of this memo and in greater detail in staff's June 30, 2015, memo.

CenturyLink filed its proposed solutions on April 27, 2015. On May 26, 2015, Consumer Advocate and I-35 filed responses to CenturyLink's proposed solutions. CenturyLink's proposed solutions and the responses are discussed briefly in Section V of this memo and in greater detail in staff's June 30, 2015, memo.

See Section III.G for a discussion of an in-person prehearing conference held on August 26, 2015, and subsequent settlement discussions.

**E. FCU-2013-0009 (C-2013-0026)**

***In re: Complaint of Douglas Pals***

"Order Docketing for Formal Proceeding and Assigning to Administrative Law Judge" issued July 1, 2013

On March 13, 2013, Mr. Douglas Pals filed a complaint with the Board stating that on February 12, 2013, at 2 p.m., he attempted to place a call from his home in Clive, Iowa, to a telephone number in West Liberty, Iowa. Mr. Pals stated that the called party did not answer because the caller identification device (caller ID) on the called party's telephone did not display his name or telephone number. Mr. Pals left a message on the called party's answering machine and when she returned his call, she explained that the caller ID showed the name "BIDAXIS" and a number which was not Mr. Pals' telephone number. Mr. Pals stated that he then performed some test calls and one call went through and others had connection problems. Mr. Pals reported the problem to CenturyLink. Mr. Pals reported that CenturyLink's technician was familiar with the name that displayed on the caller ID.

***Carriers involved:*** CenturyLink (identified as Mr. Pals' local and long distance service provider), Bluetone (an underlying carrier used by CenturyLink), and

West Liberty Telephone Company, d/b/a Liberty Communications (the local exchange carrier that terminated the call to the called party).

**Informal investigation:** CenturyLink 's technician created a trouble ticket to investigate the problems, worked to troubleshoot the issue, and determined that routing of the calls was the issue. CenturyLink's technician removed Bluetone, the underlying carrier involved in the routing path to the called number, and opened a trouble ticket with Bluetone. CenturyLink's technician called Mr. Pals to make a test call to the called number, but was not able to reach him. Based on its own testing, CenturyLink stated the issue was resolved.

Bluetone stated that the called number was blocked to allow CenturyLink to reroute the calls to another provider while Bluetone's technicians worked to troubleshoot the problem. Bluetone reviewed call records and confirmed that the correct calling party's number was received from CenturyLink and forwarded to Bluetone's downstream provider. Bluetone stated further that test calls were completed over Bluetone's network, but testing did not duplicate the problem with the caller ID showing the wrong number and name. As a precautionary measure, Bluetone removed its downstream provider from the routing and that adjustment remained in place to allow CenturyLink to route the calls to an alternate provider. Staff asked that Bluetone identify its downstream provider. Bluetone provided the name of the provider in an email and asked for confidential treatment of that information, asserting that it maintains confidentiality agreements with its customers and vendors.

**Proposed resolution:** Staff found that once CenturyLink removed Bluetone from the call routing, test calls completed without issue. Bluetone's response indicated that its test calls did not duplicate the information reported by Mr. Pals. Customer reports of calls not reflecting the calling party's name and number on caller ID devices was one variation in the growing number of call completion problems being reported to the Board. Staff also noted that some rural carriers believe that call completion problems may relate to the use of least cost routers as intermediate or underlying carriers in the call path. Bluetone's request that the Board treat the identity of Bluetone's underlying carrier as confidential did not comply with the Board's requirements in its rules at 199 IAC 1.9. Staff recommended that the Board initiate a formal proceeding, in part to establish a docket in which Bluetone could file a proper request for confidential treatment of the identity of its vendor, allowing the investigation to proceed. (At the time staff prepared its proposed resolution, staff had not distributed the email from Bluetone containing the name of its vendor. Staff subsequently forwarded that email to Consumer Advocate pursuant to Iowa Code § 475A.4, which provides that Consumer Advocate has access to all Board files, records, and documents, with certain exceptions.)

**Board dockets complaint for formal proceeding:** The Board found reasonable grounds for further investigation in this case where the complainant

was the person who originated the call from an Iowa telephone number and a number with a New York City area code displayed on the called party's caller ID. The Board observed that further investigation would be useful to determine the roles and responsibilities of the various carriers, including Bluetone's underlying carrier, in causing the call to display on a caller ID with an incorrect number and name.

**Formal proceeding:** The ALJ and the parties held several telephone prehearing conferences to discuss the parties' progress on investigation and discovery. The parties were required to file periodic status reports regarding whether Mr. Pals was continuing to experience problems with calls.<sup>33</sup>

The procedural schedule was modified several times at the request of the parties and ultimately required the parties to file sequential, rather than simultaneous, reports. The initial report to be filed by Consumer Advocate was to provide information about what the parties had learned regarding what happened in this case and to provide information the parties had about what caused the call completion problems, what was done to correct the problems, why the corrections solved the problems, and what was done or still needs to be done to provide a long-term solution to the call completion problems. The Consumer Advocate's report was also to continue to update the ALJ about whether Mr. Pals had experienced any call completion problems and, if so, what was done to correct those problems. The other parties were allowed to file responses to Consumer Advocate's initial report.

Pursuant to modifications to the procedural schedule, Consumer Advocate filed its initial report on January 23, 2015. CenturyLink filed a response to Consumer Advocate's report on February 26, 2015. Consumer Advocate filed a reply on March 19, 2015. CenturyLink filed a response to Consumer Advocate's reply on April 2, 2015. Consumer Advocate's report and CenturyLink's response are discussed briefly in Section IV of this memo and in greater detail in staff's June 30, 2015, memo.

CenturyLink filed its proposed solutions on April 27, 2015. On May 26, 2015, Consumer Advocate filed a response to CenturyLink's proposed solutions.

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<sup>33</sup> See, *In re: Complaint of Douglas Pals*, "Order Setting Telephone Prehearing Conference," Docket No. FCU-2013-0009, issued September 16, 2013; "Order Regarding Prehearing Conference and Requiring Filings," issued October 1, 2013; "Order Setting Second Telephone Prehearing Conference," issued November 26, 2013; "Order Regarding Second Telephone Prehearing Conference and Requiring Filings," issued January 15, 2014; "Order Setting Third Telephone Prehearing Conference," issued April 14, 2014; "Order Regarding Third Telephone Prehearing Conference and Requiring Filings," issued May 1, 2014; "Order Setting Fourth Telephone Prehearing Conference," issued July 24, 2014; "Order Regarding Fourth Telephone Prehearing Conference and Requiring Filing," issued August 27, 2014; "Order Setting Fifth Telephone Prehearing Conference," issued September 25, 2014; and "Order Setting Partial Procedural Schedule and Discussing Fifth Prehearing Conference," issued October 14, 2014.

CenturyLink's proposed solutions and Consumer Advocate's response are discussed briefly in Section V of this memo and in greater detail in staff's June 30, 2015, memo.

See Section III.G for a discussion of an in-person prehearing conference held on August 26, 2015, and subsequent settlement discussions.

On April 12, 2016, the ALJ received an email from Mr. Pals, a party in this proceeding who is not represented by counsel. Mr. Pals stated he sent the email to demonstrate that call completion problems persist. The email message includes a forwarded message from another person describing calls that did not complete from a consumer in Minnesota to a consumer in Iowa. It appears the Iowa consumer is a customer of Marne and Elk Horn Telephone Company. The forwarded message details the steps the companies involved in the calls took to investigate and resolve the problem. The forwarded message stated that the Minnesota customer uses POPP Networks, a reseller of CenturyLink service. The forwarded message also stated that Mary Retka of CenturyLink was contacted and she "confirmed customer ported to POPP in 2008, local and LD, thus she can't help."

Mr. Pals urged the ALJ and Consumer Advocate to "take appropriate next steps to make originating carriers track, identify and fix this problem from their end." Mr. Pals also stated there should be financial penalties for originating carriers that are involved in these situations.

Mr. Pals sent the email message to Consumer Advocate as well as the ALJ but did not copy other parties in this case.

On April 12, 2016, the ALJ issued an "Order Regarding Ex Parte Communication" explaining that Iowa Code § 17A.17(2) provides that in a contested case parties shall not communicate with the presiding officer about any issue of fact or law in the case, except with notice and opportunity for all other parties to participate. The ALJ explained that Iowa Code § 17A.17(4) requires that the ex parte communication be placed in the record of this case, and that any party wishing to rebut the prohibited ex parte communication may request the opportunity for rebuttal within ten days after notice of the communication. The order gave each party until April 25, 2016, to file notice with the Board that included its response to the email or stated how much time it would need to file a response.

On April 25, 2016, CenturyLink filed a "Clarification of Ex Parte Communication." CenturyLink states that Ms. Retka, the company's primary contact for call completion issues, reviewed numbering records for the telephone number in question and informed the representative of Marne Telephone Company that he needed to call POPP, which holds the telephone number, to identify the long

distance provider. Since the number in question was not a CenturyLink number or customer, Ms. Retka could not identify the long distance provider.

**F. FCU-2013-0007 (C-2013-0025)**

***In re: Complaint of Carolyn Frahm***

“Order Granting Request for Formal Proceeding and Assigning to Administrative Law Judge” issued July 15, 2013

On March 1, 2013, Ms. Carolyn Frahm of Mount Pleasant, Iowa, filed a complaint with the Board stating that on February 6, 2013, she changed her telephone service provider from MCC Telephony of Iowa, LLC, to Windstream of the Midwest, Inc. Ms. Frahm explained that starting in August of 2012 she had problems completing telephone calls from her home number to the number of her friend who lives in Mediapolis, Iowa. Ms. Frahm stated that the problems occurred when her service was provided by Mediacom and continued after she changed to Windstream's service. Ms. Frahm stated that she and her friend are both widows and they try to talk on a daily basis to check on one another. Ms. Frahm explained that her friend is able to complete calls to Ms. Frahm's telephone number. The complaint also noted that on March 1, 2013, Ms. Frahm attempted to call MTC Technologies (MTC), the local telephone service provider for her friend, and the call did not complete. Ms. Frahm stated she had reported the problems to Windstream, but the problems were not resolved. Ms. Frahm stated her next step was to ask Windstream to reroute her calls, as she believed that her calls were being routed using a cheaper service which was not working.

***Carriers involved:*** Windstream of the Midwest, Inc. (Windstream); Verizon (identified as the underlying carrier for the customer's out-of-territory (OOT) account); Airus, Inc. (f/k/a IntelePeer), the intermediate carrier Windstream used before switching the customer to Verizon's network; and One Communications Corp. (later acquired by Earthlink and identified as the second-tier downstream carrier on the failed call).

***Informal investigation:*** Windstream stated that Ms. Frahm established long distance service with Windstream on February 6, 2013. Ms. Frahm contacted Windstream's repair department on February 27, 2013, to report problems completing calls to the Mediapolis number. Windstream created a trouble ticket, checked the customer's line, and was able to complete calls from the switch. Windstream's tester called Ms. Frahm to ask her to try dialing the number again and she confirmed she was able to complete the call. Ms. Frahm called Windstream's repair department again on March 1, 2013, to report continuing problems completing calls to the Mediapolis number. Windstream created a second trouble ticket, tested the line, the call completed successfully, and Ms. Frahm was asked to make a test call, which also was successful.

Ms. Frahm contacted the repair department again on March 7, 2013, to report continuing problems. Windstream created a trouble ticket and contacted

Verizon, the underlying carrier for Ms. Frahm's out-of-territory (OOT) account, to ensure there were no problems on Verizon's end. As of the date of Windstream's response, Ms. Frahm had not reported further problems calling the Mediapolis number.

Windstream explained that when Ms. Frahm had trouble completing calls to the Mediapolis number, it moved Ms. Frahm to Windstream's OOT account, for which Verizon is the underlying carrier. That change enabled Ms. Frahm to complete calls to the Mediapolis number.

MTC stated that on March 1, 2013, Ms. Frahm spoke with its office manager about the trouble she was having completing a call to the Mediapolis number from her home. MTC made a test call to the Mediapolis number from its landline telephone and that call (a local call) completed properly. MTC informed Ms. Frahm that long distance carriers can make route changes which could alleviate the call completion problem. MTC explained that as a reseller of long distance service, it can make such changes for its customers which, in most cases, correct the problem. MTC noted that since it was able to complete a call to the Mediapolis number locally, the problem was more than likely on the originating end of the call. MTC encouraged Ms. Frahm to contact her long distance telephone provider, Windstream, informed Ms. Frahm about the Board's complaint procedure, and provided a link to the Board's Web site. MTC also stated that Ms. Frahm informed MTC that she talked with Windstream's technician, got the service rerouted, and was able to talk with the end user at the Mediapolis number. MTC had not heard from Ms. Frahm with further issues. MTC observed that the issues its customers are having appear to involve calls from outside its exchanges and that "least-cost routing" may be part of the problem.

Verizon explained that it provides an underlying long distance network for Windstream and that it appears that Windstream uses more than one wholesaler to provide long distance service to its customers. On February 8, 2013, Verizon received an electronic order from Windstream to add Ms. Frahm's telephone number to the Verizon reseller account. Verizon also received another order from Windstream duplicating this action on March 3, 2013, suggesting there may have been an issue with the original switch to Verizon's network.

***Proposed resolution:*** Board staff issued a proposed resolution on April 26, 2013, recounting that Ms. Frahm reported to Windstream three occasions when her calls to the Mediapolis number were not completing. Staff also reviewed Windstream's accounts of testing of Ms. Frahm's telephone line for each of the repair tickets and noted that the test calls to the number in question completed each time. Staff also reviewed the responses of MTC and Verizon and noted that, according to Ms. Frahm's comments dated March 25, 2013, her service was working properly.

**Board grants OCA's request for formal proceeding:** The Board agreed with OCA that further investigation was necessary. The responses from the companies in the informal proceeding did not fully explain what caused the calls to fail to complete, what the call path was before and after Ms. Frahm's number was moved to OOT status, whether there was an underlying carrier in the call path before the change, how changes to the call path worked to prevent further call failures, and what standards Windstream imposes on underlying carriers to prevent call failures.

**Formal proceeding:** The ALJ and the parties held several telephone prehearing conferences to discuss the parties' progress on investigation and discovery. The parties were required to file periodic status reports regarding whether Ms. Frahm was continuing to experience problems with calls.<sup>34</sup>

Windstream filed a motion to dismiss on June 27, 2014. Windstream's motion was based on the fact that the company had entered into a Consent Decree with the FCC governing Windstream's obligations regarding Windstream's rural call completion, including completion of calls in Iowa. The motion was resisted by Consumer Advocate. On August 15, 2014, the ALJ denied the motion, concluding it would be premature and harmful to the investigation to dismiss Windstream before the company had made any commitments in this proceeding regarding what it would do to prevent call completion problems for Iowa customers.<sup>35</sup>

The procedural schedule was modified several times at the request of the parties and ultimately required the parties to file sequential, rather than simultaneous, reports. The initial report to be filed by Consumer Advocate was to provide information about what the parties had learned regarding what happened in this case and to provide information the parties had about what caused the call completion problems, what was done to correct the problems, why the corrections solved the problems, and what was done or still needs to be done to provide a long-term solution to the call completion problems. The Consumer Advocate's report was also to continue to update the ALJ about whether Ms. Frahm had experienced any call completion problems and, if so, what was done

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<sup>34</sup> See, *In re: Complaint of Carolyn Frahm*, "Order Setting Telephone Prehearing Conference," Docket No. FCU-2013-0007, issued July 30, 2013; "Order Regarding Prehearing Conference and Requiring Filing," issued August 1, 2013; "Order Setting Second Telephone Prehearing Conference," issued October 2, 2013; "Order Regarding Second Telephone Prehearing Conference and Requiring Filing," issued October 17, 2013; "Order Setting Third Telephone Prehearing Conference," issued December 17, 2013; "Order Regarding Third Telephone Prehearing Conference and Requiring Filing," issued January 16, 2014; "Order Setting Fourth Telephone Prehearing Conference," issued April 17, 2014; "Order Regarding Fourth Telephone Prehearing Conference and Requiring Filing," issued May 8, 2014; "Order Setting Fifth Telephone Prehearing Conference," issued July 15, 2014; and "Order Regarding Fifth Prehearing Conference and Procedural Schedule," issued August 15, 2014.

<sup>35</sup> See *In re: Complaint of Carolyn Frahm*, "Order Regarding Fifth Prehearing Conference and Procedural Schedule," Docket No. FCU-2013-0007, issued August 15, 2014.

to correct those problems. The other parties were allowed to file responses to Consumer Advocate's initial report.

Pursuant to modifications to the procedural schedule, Consumer Advocate filed its initial report on November 13, 2014. Airus filed a response to the report on December 15, 2014. Windstream filed a response to the report on December 16, 2014. Consumer Advocate filed a reply to the responses on February 16, 2015, and an update to the reply on March 9, 2015. Airus filed a surreply on March 16, 2015.

On March 26, 2015, Airus and Consumer Advocate filed a joint motion to dismiss Airus from the case, suggesting that because Airus was also participating in Docket No. FCU-2013-0005, *Complaint of Hancock County Health Systems*, it would be more efficient to allow Airus to participate in just one proceeding. The ALJ issued an order denying the motion on March 31, 2015, explaining that because different solutions might be appropriate in the different cases, it was premature to dismiss Airus from Docket No. FCU-2013-0007.

Windstream and Airus filed their proposed solutions on April 27, 2015. Consumer Advocate filed a response to the proposed solutions on May 26, 2015.

Consumer Advocate's report and the company responses are discussed briefly in Section IV of this memo and in greater detail in staff's June 30, 2015, memo, in Docket No. FCU-2013-0007. The companies' proposed solutions are also discussed in Section V of this memo and in greater detail in the June 30, 2015, staff memo.

See Section III.G for a discussion of an in-person prehearing conference held on August 26, 2015, and subsequent settlement discussions.

**G. In-Person Prehearing Conference, August 26, 2015, and Settlement Discussions in Docket No. FCU-2012-0019, FCU-2013-0005, FCU-2013-0005, FCU-2013-0006, FCU-2013-0009, and FCU-2013-0007**

Pursuant to an order issued on July 8, 2015, in Docket Nos. FCU-2012-0019, FCU-2013-0004, FCU-2013-0005, FCU-2013-0006, FCU-2013-0007, and FCU-2013-0009, an in-person prehearing conference was scheduled for August 26, 2015, for the purpose of discussing whether any additional procedural schedule was necessary and, if so, what it should include. The order also required the parties to be prepared 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. Staff's notes from the in-person prehearing conference are included in Section VI of this memo.

After the in-person prehearing conference, the ALJ 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 ALJ 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 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 that the parties involved in possible settlement discussions in each of the dockets specified above 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 Consumer Advocate and reporting that those efforts failed.

Pursuant to an order issued on October 5, 2015, granting a request for a short extension of the September 30, 2015, deadline, 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 stating that Consumer Advocate and Impact had not been able to reach a settlement. Consumer Advocate urged the ALJ to direct the companies to implement 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 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 states that no interim solution is necessary at this time based on the Board's intent to consider a proposed rule-making proceeding. According to CenturyLink, Consumer Advocate's proposed steps are unwarranted and do not recognize the efforts of individual carriers made in response to these dockets or pursuant to the FCC's proceedings.

On October 12, 2015, Airus filed a response to Consumer Advocate's supplemental report. Airus argued that 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 Consumer Advocate's proposals. Airus argued that 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 Consumer Advocate's supplemental report.

#### **H. FCU-2014-0007 (C-2014-0005)**

##### ***In re: Complaint of Sutherland Mercy Medical Clinic***

"Order Granting Request for Formal Proceeding and Assigning to Administrative Law Judge" issued August 6, 2014

On January 28, 2014, Mr. Jason Wilbur filed with the Board a complaint on behalf of Sutherland Mercy Medical Clinic in Sutherland, Iowa (Sutherland Clinic), stating that clinic employees were not able to complete telephone calls made from the clinic to Baum Harmon Mercy Hospital in Primghar, Iowa. Mr. Wilbur noted that on January 28, 2014, at 10:05 a.m. and 10:15 a.m. three calls were placed from Sutherland Clinic and each call attempt failed. Mr. Wilbur explained these incidents were only the most recent examples of calls not completing and that when calls did complete, they were dropped or had long pauses.

**Carriers involved:** West Iowa Telephone Company, d/b/a WesTel Systems (WesTel) (Sutherland Clinic's local telephone service provider); CenturyLink (Sutherland Clinic's long distance telephone service provider); Comcast Phone of Iowa, LLC (Comcast) (identified as an underlying carrier used by CenturyLink);

and Iowa Network Services, Inc. (INS) (which provided both originating and terminating access tandem switching functions with respect to the calls in question).

***Informal investigation:*** CenturyLink stated it followed its standard process to investigate the complaint. CenturyLink's technician searched the call records for the calls in question and determined that the routing of the calls was the problem. The technician removed Comcast from the call routing table. CenturyLink referred the matter to Comcast to conduct an assessment and to advise CenturyLink as to the cause of the problem. CenturyLink stated its technician contacted an employee at Sutherland Clinic to make a test call, the test call completed without issue, and the clinic employee indicated there had not been any issues since the complaint was filed.

A technician for WesTel, the clinic's local telephone service provider, ran a call records report for the time period and date the customer noted in the complaint, looking for records about calls attempted to the Baum Harmon Mercy Hospital using the number specified by Mr. Wilbur and two other telephone numbers. WesTel reviewed records for five attempted calls; the records showed three calls were answered, with voice path for both sides of the calls, meaning that WesTel's signaling determined there was a route for the calls to complete.

WesTel also stated that on February 24, 2014, its technician placed calls to two of the numbers identified in the complaint and both calls completed properly. According to WesTel, the problem appeared to have been with the long distance provider and had been resolved.

INS stated it is in a unique position to provide insight into call termination issues because in this case it provided both the originating and terminating access tandem switching functions. INS submitted a summary of trace data derived from the Signaling System No. 7 for both unsuccessful and successful call attempts. INS concluded that the problem was with the long distance carrier, pointing out that for the failed calls, the long distance provider did not signal to the destination telephone company through the INS terminating access tandem to complete the connection. INS explained that its originating tandem received answer supervision on several calls, but this could not be valid because a terminating call attempt was not received by INS. According to INS, an indication of an answered call should come only from the terminating carrier's end office.

Comcast (identified as an underlying long distance carrier) stated that CenturyLink informed Comcast about the call failures. Comcast stated it researched the matter and did not find any call records indicating that Comcast carried the calls in question, but did find records showing Comcast successfully carried other calls between the same calling party and called party over a period of several months.

**Proposed resolution:** Board staff issued a proposed resolution on March 26, 2014, stating that it understood the term "answer supervision" used by INS to refer to a function in telephony signaling between the local exchange carrier and the called party to indicate a connected call has been answered or is being disconnected. The primary reason for answer and disconnect supervision is for billing. According to this understanding, no intermediate carrier, such as a long distance provider, should initiate a signal indicating a call has been answered.

Board staff explained that in this case, where INS provided both originating and terminating tandem switching services, a long distance call would begin with the local telephone provider (WesTel), which would route the call to INS at its originating tandem. INS would then route the call to the long distance telephone carrier (CenturyLink), which would then route the call to the underlying carrier (Comcast). At that point, the call would be routed back to INS at its terminating tandem to deliver the call to the local telephone provider for the called party, Baum Harmon Mercy Hospital. In this case, INS received the calls from WesTel and routed them to CenturyLink, and CenturyLink routed the calls to an underlying carrier. According to CenturyLink's routing tables, Comcast was the assigned vendor on January 28, 2014, at 10:05 and 10:15 a.m., the time of the call attempts noted by Mr. Wilbur.

Comcast claimed it never received these calls and the record also shows the calls were not presented to the INS terminating tandem by the long distance carrier. Board staff explained it was not clear what happened to the calls since INS did not receive the calls from the long distance carrier, but a signal was sent to bill the calls. In this case, where the calls were not handed off to INS at its terminating tandem, staff found it would be improper for a long distance carrier to send a signal (answer supervision) without first receiving the signal from the terminating local exchange carrier. With respect to WesTel's conclusion that some of the calls it tested had completed and had conversation time, staff observed that the signal WesTel received should only have come from the called customer's equipment.

Staff concluded the record showed that the calls Mr. Wilbur identified in his complaint were delivered to INS to route to the long distance provider. Once the calls were routed to CenturyLink and its underlying carrier, they did not signal the destination telephone company through the INS terminating access tandem to complete the connections. Staff concluded CenturyLink (and its underlying carrier) failed to deliver or complete the calls.

**Board grants OCA's request for formal proceeding:** The Board found there were unanswered questions creating reasonable grounds for further investigation. CenturyLink stated it routed the calls to its underlying carrier, Comcast, but Comcast claimed it never received the calls. The calls did not complete, but signals were sent to the originating provider to bill the calls. Neither CenturyLink nor Comcast provided an answer or a rationale for what happened

to the calls or why or how a signal that the calls were billable was sent if the calls never reached the terminating tandem. At the time the Board granted the request for formal proceeding, the Board found that the responses from CenturyLink and Comcast had not fully explained either the causes of the call failures in this case or the steps that solved the problem.

**Formal proceeding:** The first of three telephone prehearing conferences in this proceeding was held on September 22, 2014. Consumer Advocate, CenturyLink, WesTel, Comcast, and Board staff participated in the conference. The parties agreed with Consumer Advocate's suggestion to allow a period of 45 to 60 days for discovery and investigation. On September 23, 2014, the ALJ issued an order setting a 60-day period for discovery and investigation and requiring the parties to file a status report on November 24, 2014, informing the Board of the status of the investigation and indicating whether they were ready to establish a procedural schedule. The order also required the status report to indicate whether Sutherland Clinic had experienced any further call completion problems and, if so, what was done to investigate and solve the problems.

A second telephone prehearing conference was held on January 13, 2015. Consumer Advocate, CenturyLink, WesTel, Comcast, and Board staff participated. Counsel for Consumer Advocate reported that she would provide additional information about whether Sutherland Clinic was experiencing further problems once that information was available. The parties indicated they were continuing to work on discovery, hoped to reach a resolution of the case, and asked that a procedural schedule not be set until June of 2015. The parties agreed that a report with updated information would be filed on June 1, 2015. On January 14, 2015, the ALJ issued an order granting the request for additional time to work on discovery and requiring an updated status report on or before June 1, 2015. (That deadline was later changed to June 15, 2015, by an order issued on May 21, 2015.)

On June 15, 2015, Consumer Advocate filed an updated report indicating that the Sutherland Clinic had not experienced further call completion problems. The report stated that the parties requested an additional 90 days to continue discovery and discussion about possible resolution.

On June 17, 2015, the ALJ issued an order granting the request for the extension and scheduling a third prehearing telephone conference for July 7, 2015. Consumer Advocate, CenturyLink, WesTel, Comcast and Board staff participated in the call. Again, Consumer Advocate reported that Sutherland Clinic had not experienced further call completion problems. Consumer Advocate stated that the parties requested an additional 90 days to continue discovery. Consumer Advocate proposed, and the parties agreed, that by mid-October 2015, the parties either settle the case or propose a procedural schedule at that time. The ALJ issued an order on July 8, 2015, requiring that the parties file, by October 14,

2015, either a proposed settlement agreement or a proposed procedural schedule for the case.

On October 14, 2015, Consumer Advocate filed a response indicating that to the best of Consumer Advocate's knowledge, Sutherland Clinic had not experienced additional call completion problems. Consumer Advocate reported that the parties were not able to reach a settlement. Consumer Advocate recommended that a briefing schedule be established.

On January 6, 2016, the parties participated in the fourth telephone prehearing conference discussing appropriate next steps in the case. Consumer Advocate stated that Sutherland Clinic had not experienced further call completion problems. Most parties agreed the case is similar to the other call completion cases involving CenturyLink and solutions in this case would be similar to the solutions proposed in the other cases. Comcast stated it did not have enough information to make that conclusion because it is not a party to the other CenturyLink cases. Because evidence had not yet been filed in this case, the parties agreed to file a stipulation of facts or a stipulation that it would be reasonable to base decisions in the case on the information filed in the informal complaint stage.

The ALJ issued an order on January 7, 2016, discussing the next steps for the case and setting deadlines for required filings. On February 8, 2016, Consumer Advocate filed a request to extend those deadlines to allow more time to develop the stipulation of facts. In an order issued on February 9, 2016, the ALJ granted the request for an extension and set new deadlines for the stipulation of facts; CenturyLink's proposed solutions; an update as to whether Sutherland Clinic had experienced further problems; statements from Consumer Advocate and Comcast about their respective positions regarding whether Comcast should be required to file limited proposed solutions; and comments from WesTel about CenturyLink's proposed solutions.

**Stipulation of Facts:** On February 19, 2016, Consumer Advocate filed public and confidential versions of a stipulation of facts on behalf of itself, WesTel, CenturyLink, and Comcast. The public version redacts telephone numbers. The stipulation of facts states general facts about the complaint Mr. Wilbur filed on behalf of Sutherland Clinic about long distance calls that failed to complete. The stipulation identifies the telephone companies involved in handling the calls and the roles of those companies. The stipulation identifies additional facts about the investigations undertaken by WesTel, INS, CenturyLink, and Comcast. The stipulation closes with the following two conclusions:

12. After Comcast handed the calls to another intermediate carrier, the call routing beyond {*telephone number redacted*} is lost. It is unknown who handled the calls after that point. It is also unknown who sent the answering signal to INS indicating that the calls had

reached their destination. Given the complexity of call routing and the timeframes for which carriers maintained records at the time of this complaint, these facts are not able to be determined in this investigation.

13. CenturyLink is complying with FCC regulations regarding call completion. The FCC excluded intermediate carriers, such as Comcast, from requirements of its call completion regulations. Local exchange carriers, such as WestTel, and equal access providers, such as INS, were not included in the FCC's consideration of call completion problems as the main source identified for the problems was long distance routing.

*In re: Complaint of Sutherland Mercy Medical Clinic, "Stipulation of Facts," ¶¶ 12-13, Docket No. FCU-2014-0007, February 19, 2016.*

**CenturyLink Proposed Solution:** Also on February 19, 2016, CenturyLink filed its proposed solution to rural call completion issues. CenturyLink adopted the proposed solution 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. According to CenturyLink, the issues in this case are virtually the same as those in the other five cases involving CenturyLink, and the solution it filed in those dockets is appropriate in this case.

CenturyLink asserts that adoption of the FCC's Safe Harbor requirements is the best long-term solution to the call completion problems in the cases before the Board. CenturyLink argues it deserves recognition for its work in adopting and complying with the Safe Harbor requirements when considering an Iowa-specific solution to be imposed on the company.

CenturyLink asserts that the Form 480 filings with the FCC show the positive results of adopting the Safe Harbor. CenturyLink contends that adopting the one-hop protocol<sup>36</sup> has resulted in sharp declines in call completion complaints to the company's long distance repair center. Also, implementing a new process for real-time proactive review of daily call completion results has allowed the company to monitor long distance call completion performance of its underlying carriers. CenturyLink observes that the unanswered call rate most often shows that the unanswered calls are those to unassigned or disconnected numbers, suggesting these are most likely robo calls.

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<sup>36</sup> A "one-hop" protocol refers to a routing practice that requires "long distance carriers receiving CenturyLink calls to directly connect to the terminating OCN in order to achieve CenturyLink's goal of a "one-hop" completion exceeding the FCC's Safe Harbor requirement of no more than two Intermediate Carriers in any call routing of long distance calls." *In re: Rehabilitation Center of Allison, Iowa, "Qwest Communications Company d/b/a CenturyLink QCC's Proposed Solution to Rural Call Completion Issues," Docket No. FCU-2012-0019, April 27, 2015.*

CenturyLink states it updates its website on an ongoing basis to provide customers with information on the call completion issue. CenturyLink states it has continued its participation in the ATIS forum focusing on the issue of long distance call completion. CenturyLink commits to maintaining its leadership role at ATIS and adopting those industry best practices relevant to CenturyLink's network.

**Consumer Advocate Statement, Proposed Solutions:** On February 26, 2016, Consumer Advocate filed a statement regarding Comcast's participation in this proceeding and Consumer Advocate's proposed solutions. Consumer Advocate does not believe Comcast needs to file its own proposed solutions, but suggests Comcast should participate in the solutions. Consumer Advocate's position is that because all carriers must interconnect with the same public telephone network, interoperability and coordination are needed for all components of the network and industry-wide participation (including participation by intermediate carriers) is needed for a comprehensive solution.

As in the other call completion cases before the Board, Consumer Advocate proposes a seven-part solution:

- (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.

Consumer Advocate states 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.

**Comcast Statement:** On February 26, 2016, Comcast filed its statement regarding whether it should file proposed solutions. Comcast refers to the stipulation of facts which notes the limits of the Board's jurisdiction over intermediate carriers. Comcast asserts it has cooperated with the investigation of this case by providing information to Board staff and Consumer Advocate, which was incorporated into the stipulation of facts. Comcast states that

information shows that it successfully accepted and handed off the calls in question. Comcast identified for Board staff the carrier to whom Comcast handed the calls. Comcast explained the signaling received from those carriers. Comcast contends 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 states that it will cooperate with investigations by the Board or Consumer Advocate on any future issues, but does not believe it needs to file additional material in this case.

**Order Requiring Filing:** On March 17, 2016, the ALJ issued an “Order Requiring Filing” reviewing the statements of position filed by Consumer Advocate and Comcast and the stipulation of facts. The ALJ agreed with Consumer Advocate that Comcast needs to participate in the solutions to call completion problems. The ALJ 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 ALJ 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 ALJ disagreed, suggesting that if that argument were accepted as valid, then no carrier would accept responsibility and the problem would not be solved. The ALJ observed that these proceedings have shown that call completion is an industry-wide problem that needs industry-wide solutions. The ALJ observed further that:

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.

*In re: Complaint of Sutherland Mercy Medical Clinic, “Order Requiring Filing,”* p. 7, Docket No. FCU-2014-0007, issued March 17, 2016.

The ALJ concluded that 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 this proceeding, i.e., to update the Board on the actions the carrier has taken to address call completion issues, to indicate whether the carrier is participating in standard-setting work of ATIS, and whether the carrier is committed to following ATIS standards as they are developed and applicable.

**Comcast’s Response to Order:** Comcast filed its response to the March 17, 2016, order on April 1, 2016. Comcast states that its practice involves transmitting calls placed by its retail customers to third-party carriers; 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 states that to ensure call completion and service quality, it contracts only with interexchange carriers that meet Comcast's performance goals and standards. Comcast explains that it monitors the performance of and meets with its vendors. Comcast responds to poor performance on a particular route or customer complaints or complaints from other carriers. Based on a carrier's resolution of the problem, Comcast will either temporarily re-route traffic on a route or permanently reroute the traffic.

Comcast states that its call completion metrics for rural calls meets the company's call completion standards for terminating routes, whether rural or non-rural.

Comcast states that its representatives actively participate in a number of ATIS projects, and that the company meets or exceeds ATIS Next Generation Interconnection Interoperability Forum standards.

**I. FCU-2014-0014 (C-2014-0072)**  
***In re: Complaint of Horn Memorial Hospital***

“Order Granting Request for Formal Proceeding and Assigning to Administrative Law Judge” issued January 16, 2015

On June 6, 2014, Michelle Weber filed a complaint on behalf of Horn Memorial Hospital in Ida Grove, Iowa, citing failed attempts to call Horn Physicians Clinic in Mapleton, Iowa, from the hospital on various dates in June 2014. Ms. Weber stated that for over 12 months the hospital had experienced difficulties in being able to consistently communicate with surrounding clinics, hospitals, patients, and pharmacies. Ms. Weber had notified Long Lines Metro, Inc. (Long Lines), the terminating local exchange carrier in Mapleton, Iowa, about the call failures. According to Ms. Weber, Long Lines indicated they researched the problem and reported that the attempted calls were not reaching the network of the terminating tandem provider, Iowa Network Services (INS). Ms. Weber stated that Long Lines suspected the call failures related to "least cost routing" because INS was not receiving these calls on the terminating tandem for completion.

Ms. Weber also noted she was unable to fax lab results from the hospital to the clinics and that the results needed immediate attention. Ms. Weber noted another example where the Community Health Director was not able to reach nurses while the nurses were making rounds in patient homes. Ms. Weber stated that the calls connected when the Director called the nurses' cell phones.

***Carriers involved:*** Frontier Communications of America, Inc. (Frontier) (the originating long distance carrier in Ida Grove, Iowa), Long Lines (Horn Physicians

Clinic's service provider in Mapleton); INS (the terminating tandem provider); Impact Telecom (an underlying carrier); and Level 3 Communications, LLC (an underlying carrier).

**Informal investigation:** Frontier stated the underlying providers used to route the calls were Impact, Verizon, and AT&T. Frontier investigated the call failures and suspected Impact was causing the calls not to complete but because the calls occurred more than 24 hours before Frontier's investigation, Frontier could not open a repair ticket with Impact. Frontier removed Impact from the call route and established a premium route for the fax lines. Test calls failed when Impact was used in the call route. Frontier then opened a repair ticket with Impact; when Impact reported that no trouble was found, Frontier permanently removed Impact from the route. Frontier reviewed the hospital's account and had not received any more reports of call failures. Frontier provided Ms. Weber with a direct number and a toll-free number to reach the long distance repair department to report any further problems. Frontier stated that based on Impact's unsatisfactory response to an inquiry from Frontier, it blocked Impact from the routes so the calls would go to Verizon and AT&T. Frontier also stated the trouble was isolated to Impact, the calls routed to Verizon and AT&T completed without trouble, and no further problems were reported.

INS could not find records for any calls matching the description of the calls in the complaint. According to INS, the absence of call records would indicate that the calls were never offered by any long distance carrier to the INS terminating tandem for completion. INS researched long distance calls terminating to the number of the clinic in Mapleton for the dates June 3 to 6, 2014, and found that 147 long distance calls were completed to that telephone number successfully from points of origination other than the hospital. Based on this information, INS concluded the problem was with the long distance carrier.

Long Lines stated it does not block incoming calls (local or long distance). Long Lines uses INS as a terminating tandem provider. Long Lines controls outgoing call routing from one of the numbers in question but does not track incoming calls unless a call trace is initiated; no call trace was in place for the number in question during the time relevant to this complaint.

Impact received a trouble ticket from Frontier on June 11, 2014, and tested the call path later that day but was not able to replicate the issue in its test calls. Impact suspected the call failures could be intermittent, so it opened a repair ticket with Level 3. Level 3 reported it was experiencing issues with the terminating route and changes were being made to correct the problem. According to Impact, Level 3 had a connection issue that prevented the calls from properly routing. Level 3 was removed from Impact's routing while Level 3 corrected the issue. Impact tested the route and verified that the Level 3 connection problem had been solved, after which Level 3 was placed back into the call route. Impact explained a plan was being implemented to resolve call

completion problems, particularly in rural areas, and that the plan, in part, includes reducing the number of intermediary providers and relying instead primarily on "tier one" carriers. Impact recently entered into an interconnection agreement with INS to provide further quality control and redundancy to the public switched telephone network connections already in place. In addition, complaints involving rural codes are prioritized and vendors experiencing more connection issues are being dropped from routing altogether. Impact stated this is part of a long-term strategy for reducing call connection issues while improving quality of service.

Level 3 stated its investigation found no issues with calls terminating to the number in question. According to Level 3, call records from June 1 through June 6, 2014, showed no calls originating from the hospital and terminating to the clinic in Mapleton but did show 94 calls from other numbers terminating to the clinic. Level 3 stated it was not able to find the trouble ticket Impact claims to have opened with Level 3. Level 3 stated that because it was not able to find the call records in question on its network, it did not have the detailed information that would have allowed it to conduct meaningful testing. According to Level 3, it did not appear that the calls in question were sent to the Level 3 network and the record did not include any definitive evidence that the calls in question were directed to or carried on the Level 3 network.

Level 3 and Impact disputed details about the repair ticket Impact claimed to have sent to Level 3 about the call failures in this case. Level 3 stated that the information provided by Impact (Impact's internal ticket number and edited email messages) did not help Level 3 investigate the issue. Level 3 continued to assert that Impact needed to provide more detailed information about the ticket relating to this case.

**Proposed resolution:** Board staff issued a proposed resolution on October 24, 2014, finding that Frontier had not been notified that the hospital was experiencing problems completing calls until staff forwarded the complaint on June 10, 2014. While Long Lines suspected the call failures involved call routing issues, Long Lines did not suggest that Ms. Weber call Frontier, the hospital's local and long distance provider. Staff discussed the importance of involving the originating local and long distance service providers in resolving these complaints. According to Board staff, Frontier routed the calls to Impact. Impact stated it sent the calls to Level 3, but there was no indication that the calls were sent to the terminating tandem to complete. There was conflicting information from Impact and Level 3 and Board staff was not able to resolve the dispute between Impact and Level 3 regarding the trouble ticket. Staff observed that the hospital had no further call completion problems after Frontier removed Impact from the call route and added new underlying carriers.

**Board grants request for formal proceeding:** The Board found numerous unanswered questions about what caused calls to fail to complete from the

hospital to their intended destination, creating reasonable grounds for further investigation. One of those questions is what happened to the calls from the hospital once they were routed by the originating long distance service provider to the underlying carriers on the call route. The record developed in the informal proceeding did not contain a satisfactory explanation of what caused the calls to fail to reach the terminating tandem. The Board stated it needed more specific information to better understand what caused the failures in the first instance and the steps taken by the various providers to prevent recurrence of the alleged completion problems. Docketing the complaint for further investigation would also allow the Board to gather more specific information about Frontier's use of and standards for underlying carriers and to the extent to which use of certain underlying carriers and routing practices have contributed to call completion problems.

**Formal proceeding:** Consumer Advocate, Frontier, Impact, Level 3, INS, and Michelle Weber, the director of the Horn Physicians Clinic, participated in a telephone prehearing conference on March 10, 2015. Ms. Weber reported that the hospital had not had any recent call completion problems and that she knew who to contact in the event the hospital had problems in the future.

On March 12, 2015, the ALJ issued an order explaining that parties agreed to a schedule that would allow six months for discovery, investigation, and efforts to reach a resolution of the case, after which the parties would file a joint status report describing their activities and informing the Board whether the hospital had experienced any call completion problems. That order set a deadline of September 21, 2015, for the status report.

On September 15, 2015, Consumer Advocate requested an extension of 30 days until October 15, 2015, to file the status report. Consumer Advocate indicated it had been involved in settlement discussions in this and the other call completion cases. Consumer Advocate explained it had participated in the August 26, 2015, in-person prehearing conference for the other call completion cases at which time the ALJ gave the parties in those cases until September 30, 2015, to file proposed settlement agreements. Consumer Advocate asked for the extension in this case to allow time for the parties to explore the possibility of settlement. The ALJ issued an order granting the request on September 21, 2015.

On October 15, 2015, Impact filed a "Status Report and Motion to Consolidate and/or Stay." Impact provided information regarding the hospital's June 6, 2014, complaint and the subsequent investigation. Impact noted that the calls at issue occurred before the FCC rules were in place and that since those rules went into effect, Impact has implemented the applicable requirements. According to Impact, the hospital had not experienced additional call completion problems. Impact asked the ALJ to consolidate this case with Docket No. FCU-2013-0005, *In re: Hancock County Health Systems*, and stay the matter until the Board determines whether it will conduct a "Notice of Inquiry" proceeding.

Consumer Advocate filed its response to the September 21, 2015, order on October 15, 2015. Consumer Advocate indicated that to the best of its knowledge, the hospital had not experienced further call completion problems. Consumer Advocate indicated the parties had not been able to reach a settlement. Consumer Advocate proposed a briefing schedule.

On October 16, 2015, the ALJ issued an order scheduling a telephone prehearing conference to discuss the appropriate procedure for the case going forward. The parties participated in a telephone prehearing conference on January 6, 2016, discussing appropriate next steps in the case. Consumer Advocate counsel stated that to her knowledge, the hospital had not experienced further call completion problems. Long Lines, however, stated it understood that the hospital had experienced additional call completion problems. With respect to appropriate procedures for the case, most parties agreed that because evidence had not yet been filed in the case other than what was filed in the informal complaint process, it would be appropriate to file a stipulation of facts or a stipulation that it is reasonable to base decisions in the case on the information filed in the informal complaint stage.

In the "Corrected Order Regarding Second Prehearing Conference and Requiring Filing," issued on January 7, 2016, the ALJ denied Impact's October 15, 2015, motion to consolidate and/or stay; directed Consumer Advocate to investigate whether the hospital had experienced further call completion problems and to report on that investigation on or before January 20, 2016; and directed Frontier to file a report on or before February 3, 2016, stating what it has done to correct any problems revealed in Consumer Advocate's investigation and report. The parties were also directed to file a stipulation of facts on or before February 25, 2016, and Frontier was directed to file a report on the same date explaining the reports it is filing with the FCC and the actions it is taking to prevent call completion problems in Iowa. The order stated that decisions about appropriate procedure for the case would be made after the stipulation and reports had been filed.

On January 20, 2016, Consumer Advocate reported that Michelle Weber indicated that the hospital continues to have problems with call completion with respect to incoming calls. Ms. Weber expressed satisfaction with the resolution of problems with outgoing calls.

On January 28, 2016, Frontier responded to the report of Consumer Advocate's investigation. Frontier explained that because the outgoing call completion problems, which were the basis of the hospital's complaint, have been resolved, Frontier has not needed to take any corrective action. With respect to the incoming call problems noted by the hospital, Frontier stated that because the hospital does not know the dates and times of such calls, there is not enough information to take any specific remedial action.

On February 25, 2016, Consumer Advocate filed a request for an extension of time in which to finalize the statement of facts. The ALJ granted the request on February 26, 2016, setting March 3, 2016, as the deadline for the stipulation of facts.

On February 25, 2016, Frontier filed its response to the ALJ's January 7, 2016, order that required Frontier to file a report explaining the steps it is taking to prevent call completion problems in Iowa. 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 data, pursuant to 47 CFR 64.2105.

With respect to the steps it has taken to address and prevent call completion problems, Frontier details some of the requirements it imposes before using a downstream carrier, including investigating the design and function of a potential downstream carrier's equipment; whether the carrier has sufficient capacity in its switches and call paths; and whether there are capacity constraints in the carrier's system that could prevent calls completing during busy times. Frontier explains that it conducts a number of tests before using a downstream carrier, including placing test calls to evaluate the performance of the carrier's network. Frontier also explains that it monitors the performance of an underlying carrier on an ongoing basis. This step includes reviewing trouble ticket history on a weekly basis to identify routing concerns, monitoring its capacity with the carrier and asking for augmentation as necessary. If testing reveals failures, a carrier would be excluded from handling calls to a particular exchange or entirely.

Frontier also states that it provides information to its customers about service concerns, including how to report service problems, using bill messages and information included in telephone directories. According to Frontier, if a customer reports a call completion issue, the company communicates with the customer to identify the cause of the problem and to resolve it. Frontier states that its timely response and success in resolving call completion problems are evident in this proceeding, where the customer was given a direct telephone number to call and the toll-free number to report any further problems with long distance service. Frontier stresses that it is the subject of only one complaint in Iowa. Frontier states it will be committed to adopting industry best practices that apply to its network.

On March 3, 2016, Level 3 filed a request for an extension of time until March 10, 2016, to file the stipulation of facts. The ALJ granted the request on March 7, 2016.

On March 10, 2016, on behalf of itself, Long Lines, Frontier, Impact, and Level 3, Consumer Advocate filed public and confidential versions of a stipulation of facts. The public version redacts telephone numbers. The stipulation of facts states general facts about the complaint filed by the hospital in this case regarding calls

that failed to complete during the days of June 3 – 4, 2014, and additional facts about the investigations undertaken by Long Lines, INS, Frontier, Level 3, and Impact. The stipulation closes with the following two conclusions:

29. Complainant was uncertain which of Horn Memorial's telephone numbers was the originating call number. Therefore, it is unknown who handled the calls after Frontier handed the calls to an intermediate carrier. Given the confusion surrounding the origination number, the underlying facts are not able to be determined in this investigation.

30. Frontier is complying with FCC regulations regarding call completion. The FCC excluded intermediate carriers, such as Impact and Level 3, from requirements of its call completion regulations. 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 as the main source identified for the problems was long distance routing.

*(In re: Complaint of Horn Memorial Hospital, "Stipulation of Facts," ¶¶ 29-30, Docket No. FCU-2014-0014, March 10, 2016.)*

On March 17, 2016, the ALJ issued an "Order Regarding Further Procedure" reviewing the stipulation of facts and concluding that no further separate procedures were necessary in the case. The ALJ observed that 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 in the other cases. Referring to the "Order Requiring Filing" issued in Docket No. FCU-2014-0007 on March 17, 2016, the ALJ explained that the focus of these proceedings has been on understanding the causes of the problems to the extent possible; finding effective, preventative, long-term solutions for Iowa customers; monitoring whether the customers who filed complaints have continued to experience problems; and understanding the actions the carriers have taken to solve the problems on a nationwide basis in response to FCC requirements and by participating in industry initiatives. An understanding of the actions the carriers have already taken and whether those efforts have been successful will inform a decision about whether the Board needs to take action. The ALJ indicated that this case will be considered with the other call completion cases before the Board.

#### **IV. Consumer Advocate Reports**

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

December 19, 2014

Consumer Advocate filed public and confidential versions of its report in Docket No. FCU-2012-0019 on December 19, 2014. The report details what Consumer Advocate has learned about the CenturyLink networks; the history of trouble reports for the Allison facility and Waverly Health Center; CenturyLink's use of intermediate carriers; and CenturyLink's call routing practices. Staff summaries of the report and responses from CenturyLink, Dumont, and INS are included in staff's June 30, 2015, memo.

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 the problems were caused by intermediate carriers. (Consumer Advocate Dec. 19, 2014, Report, p. 14, ¶ 30.) Consumer Advocate also notes that investigation in other Board proceedings has identified two recurring explanations for the call failures: (1) limited capacity of the physical infrastructure of intermediate carriers and (2) "sunny day" outages for intermediate carriers caused by software malfunctions, especially with Internet-protocol infrastructure. Consumer Advocate refers to its report filed in *In re Complaint of Frahm*, Docket No. FCU-2013-0007, on November 13, 2014, in support of these explanations.

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

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.

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

### **Consumer Advocate's Nine Proposed Concrete Steps**

In its December 19, 2014, Report, Consumer Advocate proposed nine concrete steps toward a long-term solution. According to 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. (Consumer Advocate later included the nine proposed steps in its reports filed in Docket Nos. FCU-2012-0019, FCU-2013-0004, FCU-2013-0005, FCU-2013-0006, FCU-2013-0007, and FCU-2013-0009, and combined steps 1 and 6 in its report filed May 26, 2015.)

The 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.

Step 2: Carriers must file with the Board a list of downstream carriers they use to carry Iowa traffic. The list must provide contact information for the downstream carriers and be updated as changes occur.

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

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. Consumer Advocate notes that even if a carrier cannot implement the FCC's Safe Harbor provisions (which require two or fewer intermediate providers on a call path) 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.

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. 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. 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).<sup>37</sup>

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<sup>37</sup> ATIS is an organization with 150 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 guidelines on topics including network reliability, technological interoperability, and the transition to IP networks. In March 2013, the organization released an "Intercarrier Call Completion/Call

Consumer Advocate credits CenturyLink for participating in work with ATIS. 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. Consumer Advocate proposes that when new ATIS standards are developed, companies should report them to the Board so the Board can review them and determine if they adequately protect consumers and whether they should be adopted as Board rules.

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

Consumer Advocate proposes that each originating and intermediate carrier that uses downstream intermediate carriers should have policies in place address 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

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Termination Handbook” describing call completion problems, discussing industry standards, and best practices involved in ensuring call completion. ATIS released an updated version of the handbook in October 2015.

- 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 its May 26, 2015, Response to Proposed Solutions, filed in Docket Nos. FCU-2012-0019, Consumer Advocate combined Steps 1 and 6 in response to objections that a requirement that carriers acknowledge responsibility for the performance of downstream carriers is not concrete.)

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 OCA.

For the Board to effectively evaluate and solve the problems, and to allow Consumer Advocate to discharge its responsibilities to consumers, Consumer Advocate contends the Board will need access to relevant information. 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 Consumer Advocate.

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

According to Consumer Advocate, accurate routing tables are essential to successful call completion. 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. 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.

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

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

Consumer Advocate filed public and confidential versions of its report in Docket No. FCU-2013-0004 on January 9, 2015. Consumer Advocate's report includes as exhibits data request responses from CenturyLink, Bluetone, and Huxley Communications Cooperative. Staff summaries of the report and the response from CenturyLink are included in staff's June 30, 2015, memo.

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

OCA filed public and confidential versions of its report in Docket No. FCU-2013-0005 on January 16, 2015. OCA's report includes as exhibits data request responses from CenturyLink, IntelePeer, Airus, and Impact. Staff's summary of the report and responses from CenturyLink, Airus, and Impact are included in the June 30, 2015, memo.

**D. OCA's Report in Docket No. FCU-2013-0006 (Adolphson/Skallerup)**

OCA filed public and confidential versions of its report in Docket No. FCU-2013-0006 on January 20, 2015. OCA's report includes as exhibits data request responses from CenturyLink and InterMetro. Staff summaries of the report and responses from CenturyLink and I35 Telephone Company are included in the June 30, 2015, memo.

**E. OCA's Report in Docket No. FCU-2013-0009 (Douglas Pals)**

OCA filed public and confidential versions of its report in Docket No. FCU-2013-0009 on January 23, 2015. OCA's report includes as exhibits data request responses from CenturyLink and Bluetone. Staff's summary of the report and responses from CenturyLink and I35 Telephone Company are included in the June 30 memo.

**F. OCA's Report in Docket No. FCU-2013-0007 (Carolyn Frahm)**

OCA 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 from Windstream, Verizon, Intelepeer, Airus, and Earthlink. Staff's summaries of the report and responses from Airus and Windstream are included in the June 30, 2015, memo in Docket No. FCU-2013-0007.

**V. Company 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. 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 Docket No. FCU-2014-0007 are virtually the same as those in the other five cases involving CenturyLink.

CenturyLink explains that as of April 15, 2015, it had put into place contracting, routing, systems, process and tracking necessary to meet the Safe Harbor requirements. CenturyLink explains it goes beyond the FCC's requirements by using no more than one hop<sup>38</sup> in each call.

CenturyLink explains the steps it took 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 adjustments were needed, 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 contractually agreed that CenturyLink can disclose their identity.
- Augmented its routes with compliant intermediate carriers; tested the routing to ensure adequate capacity; and revised routing tables. Before putting an intermediate carrier on a route, CenturyLink does preliminary testing for long distance 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. CenturyLink identifies its approach to testing and analyzing this data as a key component of preventing call completion issues.

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<sup>38</sup> A "one-hop" solution refers to using only one intermediate carrier in routing a call from origination to completion.

- Upgraded its trouble ticketing process to more robustly analyze issues and routing.
- Developed data gathering necessary to complete and submit the FCC Form 480 report (the first of which was due in August of 2015). CenturyLink states it is willing to provide the Board with Iowa-specific data included in the quarterly reports to the FCC 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.
- Updated the process used for its meeting with intermediate carriers so that the performance of each intermediate carrier is discussed on a monthly basis. CenturyLink states its contracts with intermediate carriers have rigorous criteria for meeting metrics for completing calls and specific methods for addressing any network outages.

CenturyLink describes 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 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. CenturyLink also notes its commitment to maintaining its leadership role at ATIS and adopting relevant best practices.

## **B. Impact's Proposed Solutions**

Impact filed its proposed solutions in Docket No. FCU-2013-0005 on April 27, 2015. Impact states 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 explains it has voluntarily chosen to comply with the processes and procedures in the consent decree between its subsidiary Matrix Telecom, Inc. (Matrix, and the FCC (but not the noncompliance reports, the quarterly compliance reports, and the financial penalty). Impact explains those processes and procedures are intended to improve call completion and assist in complying with the FCC's 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 states it provides long distance services to customers in Iowa and in those circumstances would be a covered provider under the FCC's rules. Impact summarizes its proposed solutions as follows:

- Appointing a compliance officer responsible for developing and implementing a compliance plan.

- Adopting a compliance plan and manual designed to ensure compliance with federal law and FCC rules.
- Implementing annual compliance training and training newly hired employees.
- Cooperating 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.
- Notifying other intermediate carriers that are causing call completion problems. If performance of an intermediate carrier remains inadequate, Impact will not use that carrier if other commercially reasonable options are available for routing.
- Using more Tier 1 providers with records of successful routing and handling of calls and giving Tier 1 providers priority in routes.
- Reducing the number of intermediate providers in call paths. (Impact does not endorse adopting a hard limit on the number of intermediate providers, however.)
- Prioritizing complaints involving rural codes and dropping intermediate carriers with higher numbers of connection problems.
- Regularly keeping routing tables up to date.
- Working to ensure transparency in vendor contracts by resisting restrictive confidentiality provisions.
- Voluntarily participating 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 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 observes 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. Airus also points out that the call failures were not caused by IntelePeer or its network. 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 eliminating the use of intermediate carriers but having the industry develop a quality, redundant network and encouraging inter-company communications to prevent network failures.

Airus offers the following proposed solutions grouped by three categories:

Communications and Reporting:

- Using procedures to resolve and quickly address rural call completion problems, including providing contact information in contracts; 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 website to streamline reporting of rural call completion problems.
- Airus commits to providing the Board and 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 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;
- 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 LERG.

Airus will continue to seek direct end office interconnections with rural LECs so that the number of intermediate carriers can be limited.

### Downstream Carrier Management

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

- Continue to use interoperability testing at turn-up, i.e., starting to use a particular carrier;
- Continue to use internal "report cards" for vendors to identify downstream carriers that need to improve performance;
- To temporarily remove downstream carriers from the call route for poor performance until the problem is resolved;
- Within 90 days of a final order, to develop an addendum to vendor contracts defining commitments to standards, including commitments from carriers to release calls back on a timely basis; and to
- 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 on the condition that Consumer Advocate will not seek, nor will the Board impose, financial penalties on Airus for call

completion problems involved in these proceedings or which may occur in the future while Airus is abiding by its commitments.

#### **D. Windstream's Proposed Solutions**

On January 6, 2015, the ALJ 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 reported that as of April 27, 2015, Ms. Frahm had reported no further call completion problems, and that she remained on the Verizon OOT network.

With respect to how it provides information to customers, Windstream explains that it has systems in place for customers to report problems, including by calling a customer service number on bills, by email, calling corporate headquarters, and 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 identify the cause of the failure by testing systems and, when necessary, will remove a downstream carrier from routing until that carrier demonstrates reliability.

In responding to OCA's proposed nine steps, Windstream identifies the steps it is willing to take. With respect to OCA's Step 1 (Managing Downstream Carriers), Windstream position is that each company, not the Board, should exercise due diligence in overseeing its downstream carriers and determine for itself the extent of oversight that is necessary. Windstream refers to the best practices for management of underlying carriers found in Section 5 of the ATIS Handbook<sup>39</sup> and describes these as useful tools. Windstream's position is that each company should be

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<sup>39</sup> Section 6 in the October 2015 updated version of the ATIS Handbook.

encouraged, but not required, to use the guidelines, and should decide for itself which procedures to adopt in order to provide reliable service.

Windstream objects to OCA's proposed Step 2 (maintain a list of downstream carriers 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; and that the requirement would impose an administrative burden on companies and would not prevent call failures.

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 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. According to Windstream, that procedure requires checking the Local Exchange Routing Guide (LERG), not a list that might be filed with the Board.

OCA'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,<sup>40</sup> which states that use of multiple downstream carriers creates potential for lengthier call setup delay and may make troubleshooting more difficult. Windstream faults OCA's proposal for not being concrete, but agrees it is a good idea to limit the number of downstream carriers. Windstream commits to limit 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.

OCA's proposed Step 4 calls for transparency in downstream carriers. OCA would have the Board require that in call completion investigations, carriers must disclose to the OCA 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 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. If contractual provisions are an impediment, Windstream suggests the Board could adopt a requirement that would apply prospectively to require disclosure to the Board of the identity of downstream carriers. Windstream commits to attempt to negotiate confidentiality provisions out of contracts as they renew.

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<sup>40</sup> Section 6.2 in the October 2015 updated version of the ATIS Handbook.

With respect to OCA's proposed Step 5 (participate in ATIS) Windstream explains it has not participated in ATIS' work to date but acknowledges ATIS has done good work in setting standards. 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 review any ATIS recommendations and consider implementing them, but such participation should not be mandated by the Board.

[Windstream discusses OCA's proposed step 6 in conjunction with proposed step 1.]

OCA's proposed Step 7 is for carriers to provide Iowa-specific data to the Board. Windstream had resisted this step, but in its April 27, 2015, filing indicates it has developed a system to extract Iowa-specific data from reports the company makes to the FCC. According to Windstream, 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 explains these performance metrics for intermediate carriers were approved by the FCC as a way to track Windstream's compliance with the Consent Decree.

## **E. Frontier's Proposed Solutions**

On February 25, 2016, Frontier filed its response to the ALJ's January 7, 2016, order in Docket No. FCU-2014-0014, *In re: Complaint of Horn Memorial Hospital*, that required Frontier to file a report explaining the steps it is taking to 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 data, pursuant to 47 CFR 64.2105. Frontier also detailed the steps it has taken to respond to 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 also explained how it educates its consumers about potential call completion problems and how they can report service problems. Frontier indicates a commitment to adopt industry best practices that apply to its network.

## **VI. Notes from In-Person Prehearing Conference, August 26, 2015**

On July 8, 2015, the Board's ALJ issued an order in Docket Nos. FCU-2012-0019, FCU-2013-0004, FCU-2013-0005, FCU-2013-0006, FCU-2013-0007, and FCU-2013-0009 scheduling a prehearing conference to discuss whether an additional procedural schedule is needed in the cases, and, if necessary, what that schedule would include. The order also required the parties to be prepared 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. The ALJ scheduled just one conference for the cases because the questions about any necessary further procedure involve the same considerations in the cases in which CenturyLink is the originating long distance carrier and the case in which Windstream is the originating long distance carrier.

The conference was held at the Board's offices on August 26, 2015. At the conference, the OCA suggested that further briefing would be useful, the companies largely agreed no further procedural schedule was necessary and that the appropriate next step would be for the Board to conduct a proceeding that would involve the entire industry, not just individual companies.

OCA was asked to report whether the consumers had experienced any recent call completion problems. OCA reported that the Allison facility had not reported further problems; the Unity Point facility reported that the frequency of problems had decreased; the Hancock facility had not reported further problems; Ms. Adolphson and Skallerup had not reported further difficulties; and Ms. Frahm had changed carriers and had not reported further problems. Mr. Pals attended the conference in person and reported he had no call completion issues.

Mary Retka, CenturyLink, Director, Public Policy – Network, discussed CenturyLink's decision to choose a one-hop solution even though the FCC's Safe Harbor allows two hops. Ms. Retka explained the company studied its network and needs for reliability, redundancy, and capacity; negotiated new contract language with underlying carriers; and notified the carriers it would not use. Ms. Retka also explained the work the company has done to review routes and network capacity and, where necessary, augmented capacity and updated routing tables. The company has also developed systems for ongoing monitoring and testing and negotiated with providers to do blind testing to be able to see both ends of a call. CenturyLink explained that it revised its trouble ticket form so it could identify a rural OCN and revised its processes to be able to complete the FCC Form 480, on which the data required by the FCC is reported. Ms. Retka explained that the one exception to the company's commitment to be a one-hop carrier relates to those areas where Verizon cannot serve as a one-hop carrier, requiring CenturyLink to use both AT&T and Verizon as underlying carriers for purposes of reliability and redundancy. Ms. Retka noted that CenturyLink will not use Verizon for routing in Iowa after September 2015.

Ms. Retka also stated that CenturyLink intends to commit to abide by the standards included in the ATIS handbook.

Administrative Law Judge Christensen asked Ms. Retka what CenturyLink has done to let customers know what they need to do if they have a call completion problem. Ms. Retka explained that the company has developed scripting information for repair staff to educate customers what to do in case of call completion problems and has published Ms. Retka's contact information.

Ms. Retka reported that since the company implemented the Safe Harbor provisions, the number of trouble tickets has decreased.

Windstream counsel reported that since Windstream entered into a settlement with the FCC, the company has improved facilities, upgraded systems to curb call completion problems, and reports nationally aggregated data periodically to the FCC.

Counsel for Verizon noted that no one has made any allegations of call failures against Verizon in these dockets. Verizon views its role in these cases as being part of the solution, referring to the fact that Windstream brought Verizon into the call route to solve problems experienced by a Windstream customer. Verizon's consent decree with the FCC related to a low answer rate in rural areas, where the FCC believed Verizon did not investigate the low answer rate with sufficient speed. Counsel for Verizon explained its consent decree has provisions requiring the company to educate employees, submit reports, conduct workshops, fund research into rural call completion problems, and change agreements with providers.

Counsel for Airus (previously known as IntelePeer) stated that it was not IntelePeer that dropped the calls at issue in Docket No. FCU-2013-0007.

Counsel and a representative for Impact noted the company participated in Verizon's workshop; is working on owning and operating its own network so it can ensure calls are completing; is developing guidelines to ensure call completion in the event it does have to use another carrier; is segmenting parts of its network to be able to make quick decisions about routing; is developing reports, alerts, and triggers on a daily-weekly-monthly basis; and is changing contracts to develop ways to identify and fix problems. Impact noted that in its customer welcome letter, it gives customers information about how to get immediate attention in the event of a problem. The company also posts information on its website.

Counsel for Bluetone stated the company was working on thinning out its intermediate carriers and working on a product that complies with the Safe Harbor.

Counsel for InterMetro stated the company was working on rewriting contracts.

With respect to whether any further procedural schedule was necessary and what are the appropriate next steps for these proceedings, CenturyLink stated its Safe Harbor compliance should resolve concerns. CenturyLink stated that an "NOI" proceeding involving a larger group of participants might offer the best resolution of the issues. CenturyLink stated it would not object to an NOI.

Counsel for Windstream and Airus indicated it was not necessary to establish an additional procedural schedule. If the Board takes up an NOI, all companies should be included.

With respect to next steps, OCA stated that a settlement would be ideal. OCA stated that a great deal of information is known about what caused the problems. OCA explained that the record shows a history of poor management by upstream carriers of downstream carriers. Regulatory pressure has resulted in reworking of contracts and in removing certain intermediate carriers. OCA explained it developed its nine steps (eventually consolidated into what OCA describes as four steps) to complement what the FCC is doing. OCA described those steps as follows: (1) companies should certify to the Board annually whether they are meeting their commitments to the Board; (2) the Board should know which intermediate carriers the originating carriers are using; (3) companies should commit to giving the lowa portion of data submitted to the FCC at the same time they give the data to the FCC; and (4) there should be progress reports on other issues, including reductions in the number of intermediate carriers, changes to contracts, participation in industry efforts, and keeping routing tables up-to-date. OCA stated that if the Board has further questions, additional briefing should be conducted. OCA did not favor an NOI, stating that a rule-making proceeding would be a better way to develop standards for call completion.

To preface the group's discussion of appropriate next steps, the ALJ explained that an NOI could be used as a vehicle for the Board to consider whether to adopt rules. An NOI could be used to study the issues prior to a rule-making proceeding.

Counsel for Verizon stated that the FCC is leading the way in this context, trying to deal with the issue for the entire country. Verizon does not support a dual reporting requirement where the FCC has laid out a process for the states to get the information filed with the FCC.

Counsel for Impact stated it is not opposed to an NOI if the pending cases are dismissed or stayed while the Board conducts its inquiry.

The companies largely agreed that these proceedings have served their purpose of conducting discovery and gathering information.

Some concern was voiced that an NOI would be redundant of much of what these proceedings have already done. The Board should try to avoid taking steps that duplicate what has already been done in these proceedings.

Counsel for INS noted that these cases have already been conducted like an NOI or an INU proceeding. There would be some benefit in bringing other industry players into a proceeding.

Counsel for Dumont and I-35 noted that customers have been confused and are not sure who to talk to. Counsel stated it is discouraging to hear the companies say they have not yet done what the ALJ ordered them to do, which was to inform consumers how to complain and what to do if they experience call completion problems. Dumont and I35 support an industry-wide proceeding.

The parties largely agreed there would be no benefit to a further procedural schedule.

The ALJ stated there is a need to educate both consumers and LECs and to give a calling customer a single point of contact to report.

Huxley Communications does not believe it is necessary for the Board to conduct an NOI. Huxley stated many of its customers still call the company and don't know what to do in the event of call failures.

The ALJ stated she did not anticipate going to hearing and also that she would not dismiss the cases without requiring something.

There was some discussion about the possible chilling effect on settlement efforts if the parties know there is another proceeding coming up.

The ALJ stated there may be a need for an order requiring some assurances from the parties involved in these cases and recommending that the Board consider whether to open a larger proceeding examining whether Board rules are necessary or whether monitoring the FCC's effort is sufficient.

## **VII. Staff's Recommended Next Steps**

Staff has reviewed the reports from Consumer Advocate, the responses to those reports, the proposed solutions filed by the companies, and responses to those proposals. Staff does not believe further procedural schedules are 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.

Staff concludes the Board's case-by-case approach to the rural call completion cases, coupled with the companies' efforts to comply with the new FCC

requirements and industry-wide efforts through ATIS to develop standards, has helped to reduce the incidence of call failures affecting Iowa consumers. Notably, the Board's focus on monitoring whether the complaining customers in these cases were experiencing further call completion problems was an effective piece of the response to the call failures. 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, which has been docketed for formal proceeding and identified as Docket No. FCU-2014-0014.

Staff concludes that the proposed solutions filed by the companies appear to respond to the problems identified by Iowa consumers in these proceedings. The proposed solutions should aid in preventing future call failures and in any investigation necessary in the event of future problems. Staff anticipates that the companies' commitments (either through the Safe Harbor or FCC consent decrees) to reduce the number of intermediate carriers used in routing calls and to revise contracts to more closely monitor performance of intermediate carriers should be effective at minimizing future call failures, combined with what is expected to be the mitigating effect of reducing terminating access charges.

Staff concludes that it would be premature to recommend that the ALJ impose requirements based on all of Consumer Advocate's proposed solutions. Staff observes that several elements of the companies' proposed solutions are consistent with certain recommendations of Consumer Advocate. Some of the Consumer Advocate's proposed steps, however, would be more appropriate for consideration in an industry-wide proceeding, including Step 2 (whether the Board should have a list of all intermediate carriers that carry Iowa traffic) and Step 4 (promote transparency in the use of downstream carriers).

Based on a review of the record to date, staff recommends that the ALJ issue an order 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 addressing the following topics:

1. **Status of procedural schedules:** The order should explain that no further discovery, procedural schedules, hearings, or briefing will be established or conducted.
2. **Status of dockets:** The order should explain whether the dockets will remain open or be closed according to the ALJ's selection of one of the following suggested options:
  - a. The eight dockets will remain open solely for purposes of receiving the information and reports required by the ALJ's order until the Board orders otherwise;

OR

b. One CenturyLink docket will remain open (FCU-2012-0019) solely for purposes of receiving the information and reports to be filed by CenturyLink as required by the ALJ's order until the Board orders otherwise. All other dockets involving CenturyLink (FCU-2013-0004, FCU-2013-0004, FCU-2013-0006, FCU-2013-0009, FCU-2014-0007) will be closed.

Docket No. FCU-2013-0007 will remain open solely for purposes of receiving the information and reports to be filed by Windstream as required by the ALJ's order until the Board orders otherwise.

Docket No. FCU-2014-0014 will remain open solely for purposes of receiving the information and reports to be filed by Frontier as required by the ALJ's order until the Board orders otherwise;

OR

c. All dockets will be closed, except for Docket No. FCU-2012-0019, which will remain open for purposes of receiving the information required by the ALJ's order;

OR

d. All eight dockets will be closed and the parties will be directed to file the information and reports required by the ALJ's order in a new docket, identified as Docket No. NOI-XXXX-XXXX, created for purposes of receiving the information and reports and in anticipation of a possible industry-wide proceeding that may be initiated by the Board;

OR

e. All eight dockets will be closed and the parties will be directed to file the information and reports required by the ALJ's order using an "R" docket type and the appropriate company number. For example, CenturyLink would file the information required by the ALJ's order using Docket No. R-0272.

3. **Contact information required from originating carriers:** The order should require CenturyLink, Frontier, and Windstream (the originating carriers involved in these cases) to file with the Board, within 30 days of the order, current contact information identifying personnel who can promptly address call completion and call routing issues when contacted by the Board. The order should also direct these carriers to update the contact information as necessary

and in the annual progress report that will be required by the order. (See Recommendation No. 4.)

4. **Contact information required from intermediate carriers:** The order should require Bluetone, Comcast, InterMetro and Level 3 (intermediate carriers), within 30 days of the date of the order, to provide current contact information identifying personnel who can promptly address call completion and call routing issues when contacted by the Board and to update the Board when contact information changes. (Impact and Airus have already agreed to provide contact information in their proposed solutions and will provide updates if necessary in their annual progress reports discussed in Recommendation No. 7.)

5. **Customer and LEC education procedures:** Based on the ALJ's prior orders explaining the importance of providing information to customers on how to effectively report call completion problems,<sup>41</sup> staff recommends that the ALJ's order require CenturyLink, Frontier, and Windstream to file with the Board, within 30 days of the order, 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 should provide copies of any actual informational materials they have prepared. The carriers should identify a single point of contact for customers and local exchange carriers to reach if call completion problems occur. The ALJ's order should stress that this information must be easily accessible to all customers, including both residential and business customers, and other carriers. In particular, CenturyLink should be required to demonstrate how the information it says it provides its customers through a customer service blog on its website is transparent to customers and easily accessible.

Staff also recommends that the ALJ explain that the Board's customer service staff will develop content to be posted on the Board's website within 45 days of the ALJ's order about the rural call completion issue with an explanation about what consumers can do in the event they experience call failures.

6. **Copies of Iowa data provided to FCC filed with the Board:** The order should require CenturyLink, Frontier, and Windstream (the carriers involved in these proceedings that are "covered providers" subject to reporting requirements under the FCC rules) to 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 should file a request for confidential treatment of the information. This requirement will remain in place as

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<sup>41</sup> See, for example, the ALJ's statement in the February 12, 2015, "Order Granting Motion for Extension and Modifying Remaining Procedural Schedule," Docket No. FCU-2012-0019, 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."

long as the FCC continues to require reporting of the data, or until ordered otherwise by the Board.

Staff notes that some proposals suggested that the Board should pre-designate as confidential any call completion data and other information such as annual progress reports provided to the Board. Staff recommends that the ALJ explain that the parties providing such information do so with requests for confidential treatment pursuant to Board rule 1.9, until such time as the Board orders otherwise. 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. ***Compliance with proposed solutions, annual progress reports:*** The order should require each carrier in these proceedings that filed proposed solutions (CenturyLink, Windstream, Frontier, Airus, Impact) to comply with its proposed solutions and to file a report one year from the date of the ALJ's order (1) certifying the carrier continues to abide by the commitments it made in these proceedings, (2) reporting on the carrier's progress toward implementing its proposed solutions, (3) explaining whether the carrier received any reports of call failures in Iowa and what steps the carrier took to resolve the problems, and (4) to file an annual progress report with the same information for the following two years or until further Board order.

As an aid in precisely identifying the commitments made by the carriers in their proposed solutions, staff refers the ALJ to the document attached to Consumer Advocate's May 26, 2015, filing in Docket Nos. FCU-2012-0019, FCU-2013-0004, FCU-2013-0005, FCU-2013-0006, FCU-2013-0007, FCU-2013-0009. That document, identified as "Attachment A," is a list of the areas of agreement between Consumer Advocate and the companies filing proposed solutions.

Also, the solutions proposed by the companies are summarized in staff's June 30, 2015, memos (except for information provided by Frontier in Docket No. FCU-2014-0014), and are found in the record in the following filings:

**CenturyLink** – Proposed solutions filed in Docket Nos. FCU-2012-0019, FCU-2013-0004, FCU-2013-0004, FCU-2013-0005, FCU-2013-0006, and FCU-2013-0009 on April 27, 2015. CenturyLink adopted those solutions in Docket No. FCU-2014-0007 on February 19, 2016. (See pp. 57-58 of this memo; See also June 30, 2015, staff memo in Docket Nos. FCU-2012-0019, *et al.*, memo pp. 90-93.)

**Windstream** – Proposed solutions filed in Docket No. FCU-2013-0007 on April 27, 2015. (See pp. 62-64 of this memo; See June 30, 2015, staff memo in Docket No. FCU-2013-0007 p. 26, pp. 32-37.)

**Frontier** – Frontier filed a statement of the steps it has taken to address and prevent call completion problems in Docket No. FCU-2014-0014 on February 25, 2016. Staff regards this filing as a statement of Frontier’s proposed solutions. (See pp. 64-65 of this memo.)

**Impact** – Impact filed its proposed solutions in Docket No. FCU-2013-0005 on April 27, 2015. (See pp. 58-59 of this memo; See also June 30, 2015, staff memo in Docket Nos. FCU-2012-0019, et al., pp. 96-99.)

**Airus** – Airus filed its proposed solutions in Docket No. FCU-2013-0005 on February 26, 2015. (See pp. 60-62 of this memo; See also June 30, 2015, staff memo in Docket Nos. FCU-2012-0019, et al., pp. 86-89.)

8. **Statement about Verizon’s participation:** Staff recommends that the ALJ explain in the order that Verizon will not be subject to any requirements in the order. As the provider that served the customer after the routing was changed to use Verizon’s OOT network, Verizon was part of the solution responding to the call failures in Docket No. FCU-2013-0007. Also, Verizon is subject to the requirements in the FCC consent decree and has contributed to the solution of call completion problems by presenting the instructional webinar.

9. **Civil penalties:** Staff recommends that the ALJ explain in the order that civil penalties are not appropriate in this proceeding because the parties have participated in good faith toward the development of long-term solutions to the problems that resulted in call failures in these cases. Imposing reasonable financial penalties on carriers involved in call failures was identified as a possible solution to call completion problems. However, civil penalties may be appropriate in future proceedings investigating future call failures. Whether call failures warrant civil penalties is a topic that is appropriate for consideration in an industry-wide proceeding considering what steps the Board should take to respond to and prevent call completion problems.

10. **Options for recommendations for further Board action:** Staff identifies the following three options for the ALJ’s consideration:

A. The ALJ **recommends that the Board not open any proceedings of general applicability at this time** but continue to monitor these proceedings and review the quarterly filings, the annual progress reports, and the FCC’s activities, including the FNPRM. After staff’s review of the annual progress reports to be filed within one year of the date of the order, staff will recommend appropriate next steps for the Board’s consideration;

OR

B. The ALJ **recommends that the Board open a Notice of Inquiry (NOI) proceeding for industry-wide participation** seeking comments on whether the

Board should (a) do nothing other than continue to monitor federal and industry call completion initiatives; (b) adopt rules designed to curb rural call completion problems, what those rules should require, and which carriers should be subject to the rules; or (c) take some other appropriate action;

OR

C. The ALJ **recommends that the Board initiate a rule-making proceeding** for the purpose of gathering stakeholder input on the development of rules intended to prevent call failures that would apply industry-wide.