
IOWA UTILITIES BOARD
Customer Service Section

Docket No.: FCU-2014-0014 (C-2014-0072)

Utility: Frontier Communications of
Iowa, Inc., Impact Telecom,
Level 3 Communications

File Date/Due Date: June 6, 2014

Memo Date: December 3, 2014

TO: The Board
FROM: Tara Ganpat-Puffett
SUBJECT: Call Completion Issues

I. Background

On June 6, 2014, Michelle Weber filed a complaint on behalf of Horn Memorial Hospital in Ida Grove, Iowa. The informal complaint file is identified as Docket No. C-2014-0072 and was forwarded to Frontier Communications of Iowa, Inc. (Frontier), Long Lines Metro, Inc. (Long Lines), which is the terminating provider, and Iowa Network Services, Inc. (INS), which is the terminating tandem provider. The complaint was also sent to underlying carriers, Impact Telecom (Impact) and Level 3 Communications, LLC (Level 3).

The complaint cited failed attempts to reach Horn Physicians Clinic at telephone number 712-881-4676 in Mapleton, Iowa, from the Horn Memorial Hospital telephone number 712-364-2514, in Ida Grove.

The complaint stated that calls originating from Horn Memorial Hospital in Ida Grove were intended to reach Horn Physicians Clinic in Mapleton, Iowa, but do not complete due to suspected least cost routing issues. Ms. Weber stated that Horn Memorial Hospital is struggling to communicate with the surrounding clinics, hospitals, patients, and pharmacies. Ms. Weber stated that she has escalated these issues previously to Long Lines and they researched these examples and reported that the calls were consistently not reaching the INS network (on the terminating tandem). Ms. Weber stated that Long Lines has indicated these are suspected "least cost routing" issues since INS is not receiving these calls on the terminating tandem. Ms. Weber stated that the hospital has multiple telephone lines and she can't be sure which line is used when placing a call. Below is a table of the date, time, originating and terminating telephone numbers, and the outcome of attempted calls.

Date and Time	Possible Originating Number from Ida Grove, Iowa	Terminating Number Mapleton, Iowa	Outcome
June 3, 2014, at 9:15 a.m.	712-364-2514	712-881-4676	Failed
June 3, 2014, at 9:17 a.m.	712-364-2514	712-881-4676	Failed
June 3, 2014, at 9:20 a.m.	712-364-2514	712-881-4676	Failed
June 3, 2014, at 9:25 a.m.	712-364-2514	712-881-4676	Failed
June 5, 2014, about six times within 20 minutes	712-364-2514	712-881-4676	Failed
June 5, 2014, at 4:42 p.m.	712-364-2514	712-881-4676	Failed
June 6, 2014, at 9:06 a.m.	712-364-2514	712-881-4676	Failed

Ms. Weber also noted that she was unable to fax critical lab results that needed immediate attention between the offices, hospital, and the clinics.

Ms. Weber noted an example of the Community Health Director not being able to reach nurses who were in patient homes making their rounds. Ms. Weber stated that the calls connected when the Director called the nurses' cell phones. Ms. Weber also stated this has been a problem for well over 12 months and this is a big concern to all parties involved because patient safety is a top priority in her organization.

On June 17, 2014, and August 1, 2014, Frontier filed responses with the Board. Frontier stated it used underlying providers to route the calls and, in this case, the providers used at the time were Impact, Verizon, and AT&T. Board staff understands that, on the terminating end, the calls would route to INS (terminating tandem) to hand off to the terminating provider to complete the calls. Frontier stated the following:

- Frontier could not find a trouble ticket for 712-364-2514 concerning this issue.
- Telephone number 712-881-4676 belongs to Long Lines.
- Frontier's original route for 712-881 was Impact/Verizon/AT&T.
- Based on the call examples provided, Frontier suspected Impact was the issue. However, the calls were more than 24 hours past, so Frontier could not open a repair ticket with Impact.
- Frontier spoke with Ms. Weber on June 10, 2014, at 3:50 p.m. Eastern Daylight Time (EDT). Ms. Weber made some test calls and they all completed, some over Impact and some over Verizon.
- Frontier suspected Impact was the issue, so Impact was removed from the routing temporarily.
- Frontier added Ms. Weber's fax lines, 712-364-4430 and 712-364-2554, to premium route. (A premium route is a

special route designed for faxing. The route has Frontier's Tier 1 carriers to ensure high quality at a higher cost per minute).

- On June 11, 2014, at 11:50 a.m. EDT, Ms. Weber called Frontier to perform more testing and Frontier put Impact back in route.
- Ms. Weber's test calls failed over Impact. Frontier opened a repair ticket with Impact and removed them from the route.
- Frontier received an update from Impact stating no trouble was found, so Frontier permanently removed them from the route.
- New route for 712-881 is Verizon/AT&T/Global.
- Frontier reviewed Ms. Weber's account and had not received any more reports of call failures.
- Frontier provided Ms. Weber a direct number to the long-distance repair department toll-free number 855-822-5962 to report any further long-distance issues.

In a response to Board staff's questions on August 1, 2014, Frontier stated based on the unsatisfactory response it received from Impact, Frontier 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 trouble was reported.

On June 26, 2014, INS responded stating it could not find records for any calls matching the description in the complaint. INS stated this would indicate that the calls were never presented by any long-distance carrier to the INS terminating tandem for call completion.

INS also researched long-distance calls terminating to the telephone number in question, 712-881-4676, for the dates June 3 through 6, 2014, and found that 147 long-distance calls were completed to that telephone number successfully from other points of origination. Of the 147 calls, INS found three calls from Horn Memorial Hospital that were completed to the number in question, but from another telephone number, 712-364-3311. Based on the information described, INS concluded that the problem was with the long-distance carrier.

In its June 27, 2014, response, Long Lines reiterated INS' response as stated above. Long Lines stated the following:

- Long Lines owns 712-881 NPA/NXX in conjunction with Mapleton Communications.
- Horn Memorial Hospital utilizes the 712-881-4676 for its clinic in Mapleton, Iowa, and is a Mapleton Communications customer.

- Long Lines does not block incoming calls (local or long-distance).
- Long Lines utilizes INS as a terminating tandem provider.
- Long Lines controls the outgoing call routing from 712-881-4676, but does not directly track the incoming calls (unless a call trace is initiated on a particular number).
- No call trace was in place on this number during the time period addressed in this complaint.

Impact responded on August 1, 2014, stating it found the following:

- On June 11, 2014, at 10:55 a.m., Impact received a trouble ticket from Frontier regarding this matter.
- At 1:16 p.m. on the same day, Impact reported to Frontier that it had tested the call path, but had been unable to replicate the issue at that time. However, Impact stated it did see the failure of the call and suspecting that the issue could be intermittent, Impact opened a repair ticket with Level 3.
- Impact stated that on June 12, 2014, at 5:35 p.m., Level 3 reported that it was indeed experiencing issues with its terminating route and changes had been made to correct the issue. Additional testing conducted by Impact verified that the issue was corrected.

Impact responded to Board staff's questions on August 18, 2014. Impact stated in this particular case, the call was routed to Level 3. Impact stated that Level 3 had a connection issue, apparently at its end office or tandem that prevented the calls from properly routing. Impact reported that Level 3 was removed from Impact's routing while Level 3 corrected the issue and Level 3 subsequently tested as clean. Impact stated it tested the route and verified that the Level 3 connection issue had been rectified, whereupon Level 3, a tier 1 provider, was placed back into route.

Impact stated a plan is being implemented to improve call completion issues, particularly in rural areas. Part of the plan includes reducing the number of intermediary providers while relying primarily on tier one carriers. In Iowa specifically, Impact stated it recently completed an interconnection agreement with INS directly to provide further quality control as well as redundancy to the public switched telephone network (PSTN) connections already in place. In addition, complaints to rural codes are prioritized; vendors suffering higher 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.

On August 22, 2014, Level 3 filed a response. Level 3 stated its investigation found no issues with calls terminating to this operating company number (OCN) or NPA NXX. According to Level 3, call records from June 1 through June 6, 2014, showed no calls originating from 712-364-2514 and terminating to 712-881-4676, but did find 94 calls from other numbers terminating to 712-881-4676 with a 100 percent Access Service Request (ASR) rate.

Level 3 stated that Impact referenced a trouble ticket that it opened with Level 3, but the Level 3 Network Operations Center (NOC) was not able to find a ticket related to this issue. Level 3 stated that it requested this information in an August 6, 2014, e-mail to Scott Klopach of Impact Telecom, but did not receive a response.

Level 3 stated that it had been unable to find the call records in question on its network, and without the detailed information that would have been part of the trouble ticket history, it was not possible for them to perform meaningful testing.

Level 3 summarized that it does not appear that the calls in question were sent to the Level 3 network and the information provided to Level 3 with the complaint did not include any definitive evidence that the calls in question were directed to or carried on the Level 3 network. Additionally, Level 3 was not able to find evidence of these calls in its own records. Level 3 asked that Impact provide the detailed ticket information that Impact referred to Level 3, along with recent call dates and times for which it could be substantiated that the calls were routed to Level 3.

Impact additional reply:

On September 2, 2014, Level 3 responded stating the records showed that trouble ticket 8011188 was opened to address an unrelated issue.

Impact further reply:

On September 12, 2014, Impact replied stating “[w]hen Frontier originally contacted Impact about this matter, Impact opened trouble ticket T409823 and researched the problem. It was determined that Level 3 was the underlying carrier, which was reported to Level 3 on June 11, 2014, at 2:06 p.m. Central Standard Time. Level 3 opened trouble ticket number 8011188.” Impact went on to state that, “[T]he following afternoon, Impact sent an e-mail to Level 3 in regards to a batch of trouble tickets that remained unresolved, including Impact Ticket number T409823” and provided the initial e-mail it had sent to Level 3.

Level 3 additional reply:

On September 15, 2014, Board staff forwarded Impact's correspondence to Level 3 to address this matter. Level 3 responded on September 23, 2014, stating that:

As we responded on August 22, 2014, in order to investigate further, Level 3 needs the detailed ticket information to which Impact Telecom referred, and recent call dates and times for which it can be substantiated that the calls were routed to Level 3. To date we have not received anything like this.

The only Level 3 ticket number that Impact has provided, 8011188, was opened to address an unrelated issue, as we responded on September 2, 2014. Ticket 8011188 related to telemetry equipment on the Level 3 network in New Jersey, and we have found nothing that relates this ticket to Impact.

The "additional information" that Impact provided on September 12 consisted of the same unrelated Level 3 ticket number, 8011188, Impact's internal trouble ticket number, and selected portions of an email from Impact to Level 3 and Level 3's response.

A search of Level 3 records did not find any references to Impact's internal ticket number, T409823, and since Mr. Klopach edited the emails to remove the ticket numbers and jurisdictional information, and the only jurisdiction mentioned was Denver, the emails were not useful for researching this issue. In fact, considering that the technical information was deliberately removed, there was no constructive reason for including them.

We stand ready to continue our investigation, but we need the technical details from Impact, i.e. detailed ticket information and recent call dates and times, in order to verify that the problem existed and/or to determine what changes, if any, could be made.

Board staff received no further response from Impact on this matter.

II. Proposed Resolution

Board staff understands multiple Horn Memorial Hospital phone lines were used and it was not definitive which telephone line was used to make the calls. Staff observed 147 long-distance calls terminated to the telephone number in question (712-881-4676) for the dates June 3 through 6, 2014, and three of those calls were completed from 712-364-3311, which belongs to Horn Memorial Hospital.

Staff finds Frontier was not notified that Ms. Weber was experiencing trouble completing calls until Board staff forwarded the complaint on June 10, 2014. Staff understands that Long Lines suspected the problem involved routing issues, but it did not suggest that Ms. Weber call Frontier, which is her local and long-distance telephone service provider. Staff noted the importance of the involvement of the originating local and long-distance telephone service providers, if the originating carrier is not notified of the difficulties, the call completion issue would go unresolved.

According to staff's review, Frontier routed the calls to Impact and Impact stated it sent the calls to Level 3, but there is no indication that the calls were sent to the terminating tandem to complete.

Staff observes there is conflicting information from Impact and Level 3 in that Impact indicated the calls were sent to Level 3 and it understood that Level 3 had a connection issue that prevented the calls to route properly. Additionally, Impact and Level 3 are at odds, allegedly providing incomplete information and deliberately editing and removing information from the trouble ticket e-mail. Staff was not able to resolve this issue between Impact and Level 3.

However, to resolve the call completion issue Ms. Weber experienced, Frontier removed Impact from the route and added Verizon, AT&T, and Global to the new route. Once the route was changed, the test calls completed. Additionally, staff understands that Ms. Weber has not had any further call completion issues.

Although Impact is no longer on the entire route for area code/prefix, 712-881, Impact indicated it has completed an interconnection agreement with INS to provide quality control as well as redundancy to the PSTN connections already in place. Impact stated its strategy going forward is to reduce call connection issues and improve quality of service.

III. Request for Formal Proceeding

On November 4, 2014, the Office of Consumer Advocate (OCA) filed a Request for Formal Proceeding. OCA stated the informal investigation did not resolve the conflicting claims of Impact and Level 3. Nor did it determine what caused the difficulties. OCA stated there is reasonable ground for investigating this complaint.

OCA stated investigation is needed to:

- Obtain the relevant documents, including the trouble ticket.
- Any substantiation Impact may have of its claim that the calls were routed to Level 3.
- The full e-mails that Level 3 has accused Impact of editing inappropriately to ascertain whether Impact routed the calls to Level 3

and if so whether Level 3 routed them to another downstream carrier or carriers.

- To determine if possible what caused the difficulties, and to address what each of the carriers is doing to address the call completion failures.

OCA noted a number of formal proceedings are already pending on rural call completion complaints. In those proceedings, companies are being asked to provide commitments to the Board regarding what they will do to prevent call completion failures in Iowa. OCA stated while Impact is currently a party to one such proceeding, see *In re Complaint of Hancock County Health Systems*, No. FCU-2013-0005, neither Frontier nor Level 3 is a party to any such proceeding. OCA contends docketing this complaint will enable the Board to secure appropriate commitments from these additional parties, thus furthering the goal of reducing and eliminating the problem in Iowa.

According to OCA, Frontier addressed the problem but not until Horn Memorial Hospital experienced a year of difficulties. OCA stated that is not an adequate solution. Also, OCA maintains it is not enough for Frontier merely to pull Impact on the routing for someone who complained, while Frontier, Impact, and Level 3 continue to engage in systemic routing practices that put Iowans, including Iowa hospitals, at risk for call completion failures. OCA further stated there must be a concerted effort to address the systemic problem proactively and not just isolated reactive corrections after problems have already been experienced.

IV. Legal Standards

In 2011, the Federal Communication Commission (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. The Task Force held a workshop on this issue in October 2011, and in February 2012, the FCC issued a Declaratory Ruling responding to the issues.¹ The FCC explained it was issuing the ruling in response to requests for action and in response to evidence showing "a pattern of call completion and service quality problems on long distance calls to certain rural areas." The FCC intended "to clarify the scope of the Commission's prohibition on blocking, choking, reducing or restricting telephone traffic." The FCC clarified that its prohibition against blocking, choking, reducing, or restricting telephone traffic extends to routing practices that have the effect of blocking, choking, etc. (Declaratory Ruling, ¶ 3.) The FCC also 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

¹ *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.

in practices, facilities, or services. (Declaratory Ruling, ¶ 4.) Finally, the FCC 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. (Declaratory Ruling, ¶¶ 4, 15.)

The FCC explained that 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.

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.²

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 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 the 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.

On October 28, 2013, the FCC adopted rules addressing concerns about completion of long-distance calls to rural areas.³ 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

² *In Re: Rural Call Completion*, Notice of Proposed Rulemaking, WC Docket No. 13-39, 28 FCC Rcd (rel. Feb. 7, 2013) (*Call Completion NPRM*).

³ *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).

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. The FCC also adopted rules that would 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 necessary, as well as aiding consumers and industry by adopting a rule prohibiting false ring signaling. The FCC sought comment on additional measures that may help the FCC ensure a reasonable and nondiscriminatory level of service to rural areas.

In the Further Notice of Proposed Rulemaking, 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 the FCC ability to enforce restrictions against blocking, choking, reducing, or restricting calls. The FCC in the FNPR sought comments on additional measures intended to further ensure reasonable and nondiscriminatory service to rural areas, including additional reforms pertaining to autodialer traffic, intermediate providers, and other Safe Harbor options and reporting requirements.

Since 2013, the FCC has resolved three rural call completion investigations. On March 12, 2013, the FCC announced that 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 that it reached a settlement with Windstream Corp. (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 Windstream agreed to implement a three-year plan to ensure compliance with FCC requirements designed to combat the serious 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.

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.

V. Analysis

Iowa Code § 476.3(1) provides that a public utility shall furnish "reasonably adequate service" in accordance with tariffs filed with the Board. That section also provides, in relevant part, that when the OCA files a petition for formal proceeding with the Board, the Board shall grant the petition if the Board determines that "there is any reasonable ground for investigating the complaint." Reasonable grounds for further investigation exist when there are numerous unanswered questions regarding the precise circumstances of a complaint.

Staff agrees with the OCA that the responses from Impact and Level 3 have not answered all of the questions that this case presents. Board staff made several attempts to obtain information from Level 3 and Impact regarding the trouble ticket and the reason the calls were not sent to the terminating tandem to complete, but the responses from Impact and Level 3 were not productive.

Staff does not believe that this case record, to date, provides enough specific information for staff and the Board to fully 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. Staff anticipates that further investigation will allow the Board to better understand whether the underlying carriers in this particular case have adequately responded to the call completion problems at issue.

Docketing the complaint for further investigation would enable 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.

VI. Recommendation

Staff recommends that the Board grant the OCA's petition for formal proceeding and assign the case to the Administrative Law Judge.

RECOMMENDATION APPROVED

IOWA UTILITIES BOARD

/tgp

/s/ Elizabeth S. Jacobs 12-17-14
Date

/s/ Nick Wagner 12/18/14
Date

/s/ Sheila K. Tipton 12-18-2014
Date