backup power (which many likely have not).\textsuperscript{123} Obviously, then, the backup power issue does not stem directly from the retirement of copper networks or the conversion from TDM to IP networks. That said, backup power issues become increasingly important as IP networks and related CPE replace legacy offerings.\textsuperscript{124}

There is a clear public benefit in promoting consumers’ awareness that their CPE might not work if they have not taken affirmative action to acquire and maintain backup power, and electric power sources fail. Service providers such as CenturyLink share the Commission’s concerns and are educating customers about this issue. Furthermore, self-regulatory best practices have been promulgated that not only address the CPE backup power issue, but also provide guidance to service providers, vendors and other stakeholders seeking to assist the consuming public. For the reasons below, promoting these best practices is preferable to federal regulatory mandates at this time.\textsuperscript{125}

A. The Commission Should Endorse CSRIC’s Recommended Best Practices.

As the NPRM notes, “[t]he Communications Security, Reliability and Interoperability Council (CSRIC) recently issued recommendations for advancing the state of the art in CPE

\textsuperscript{123} As the NPRM notes, as of December, 2013, almost 48 million VoIP connections existed in the marketplace which “comprised over a third of all wireline retail local telephone service connections”; and that “recent estimates suggest that 41 percent of American households rely exclusively on wireless services.” \textit{NPRM} ¶ 9. In addition, again as of December 2013, “more than [31 million] end users were receiving voice service over coaxial cable.” \textit{Id.} ¶ 13. \textit{See also id.} at 15038 (Statement of Commissioner Pai: “Indeed more residential consumers now subscribe to interconnected VoIP than plain old telephone service.”).

\textsuperscript{124} \textit{See id.} ¶ 31 (noting that the retirement of copper networks “highlights a broader challenge facing consumers of any service that depends upon access to a residential power supply.”); \textit{id.} at 15035 (Statement of Commissioner Clyburn: “[T]his is not just a copper retirement issue.”).

\textsuperscript{125} Given the current competitive marketplace for communications services and CPE, the notion that voice service providers should be compelled by the government to become significantly insinuated into the electricity/power business with respect to maintaining CPE functionality seems anachronistic.
The best practices identified and recommended in the CSRIC Report outline service-provider responsibilities in the context of CPE backup power. Accordingly, the Commission should forego formal rules at this time. Rather, it should endorse these best practices, monitor the industry’s response and progress, and then reassess whether further action is warranted.

The Commission-appointed CSRIC Advisory Committee has established Working Group 10, which is charged with addressing the fact that “[d]ifferent communications providers have different policies as it relates to powering these devices” and “recommend[ing] best practices for providing back-up power to VoIP customer premises equipment, including best practices for consumer notification.” The working group’s efforts culminated in recommendations that call for service provider disclosures, customer education, and collaborative efforts between providers and consumers regarding backup power to CPE. These recommended best practices incorporate the following baseline requirements associated with CPE backup power matters, all of which the NPRM recognizes as desirable objectives:

- **Service provider disclosures to consumers about the limitations of service-provider CPE.** The Best Practices recommend that voice service providers provide customer education on the need for backup power suited to the specific network configuration and customer use associated with the service, as well as potential sources of such backup power (whether the source is an IP service provider, manufacturer or a retail outlet).

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126 NPRM ¶ 36.


129 See, e.g., CSRIC Report at 13-14 & 20-21. In the future, CenturyLink intends to ask, in the first instance at the point-of-sale, whether customers want to secure backup power from CenturyLink. If they choose CenturyLink for their backup power needs, customers will be assessed a one-time, nonrecurring charge. CenturyLink does not intend to monitor the backup
• Information about where and how to secure backup power functionality for such CPE.\textsuperscript{130}

• Service providers making available affordable options for battery backup power to consumers. Such units should come with a battery backup power source, even if service providers will not be monitoring batteries or providing replacements over time.\textsuperscript{131}

Rather than promulgating regulations, the Commission should endorse these recommendations as the appropriate starting point to address the complex issue of CPE backup power. The CSRIC Report articulates several useful best practices that service providers can adopt now, and recognizes that service providers must have flexibility to adopt and implement these practices due to differences in their networks and business models.

There is no evidence that regulatory mandates are needed: Service providers are increasingly communicating with customers about the issue of backup power and are sometimes providing backup power equipment, including batteries. CenturyLink, for example, created a battery power as our past experience demonstrates that our customers do not respond to warnings or notices about their batteries coming to the end of their lives. Nor does CenturyLink intend to be a source of replacement batteries beyond the first provisioning.

\textsuperscript{130} See, e.g., CSRIC Report at 21-22 (New Best Practice Number 18). CenturyLink intends to provide information regarding sample batteries that would work with our equipment as well as suppliers of such equipment for those customers wishing to provide their own backup power (essentially “opting out” of CenturyLink’s provisioning). Our business model reflects that we support customers’ choices as to who they wish to provide their backup CPE power needs. See NPRM ¶ 37 (asking whether consumers should be able to opt-out). See also ACA Ex Parte at 3 (noting that “Consumers make . . . decisions based on many factors, including the likelihood of outages in their area, availability of alternative means of contacting 911 during outages, and the level of connectivity during an outage that the consumer needs and desires.”). And like ACA, CenturyLink has received no complaints from subscribers regarding its current practices.

\textsuperscript{131} See, e.g., NPRM ¶ 38 (citing the CSRIC Report at 20-21). CenturyLink does not intend to maintain an inventory of batteries for replacement-battery purposes. Issues associated with limited shelf lives, as well as the general availability of batteries in the retail marketplace, factored into this decision.
brochure when it entered the Omaha market with FTTH and supplemented it with information on the company's website. Additionally, CenturyLink provided customers with backup power units and supplied information about the units and the ongoing need for backup power support.

By adopting CSRIC's best practices as the "baseline requirements" for service providers, vendors and customers, the Commission can achieve the objectives outlined in the NPRM with a light touch rather than a more severe interventionist approach. Should the Commission deem it necessary, it could "monitor whether the CSRIC best practices or any additional measures are being followed" before taking action to promulgate any future rules in this area. If these monitoring efforts indicate that self-regulation is failing to live up to the public interest objectives the Commission hopes to achieve, the Commission should revisit this issue at that time.

B. IP Service Providers Are Not CPE Suppliers But Offerors Of Services.

Another compelling reason to rely on self-regulation as the preferred approach to the matter of CPE backup battery power is that IP service providers are in the business of providing IP services, not in the business of providing CPE as a separate commodity. By recognizing that

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132 In so doing, CenturyLink advised customers of the importance of maintaining battery power (particularly with respect to 911 access), provided the names of the suppliers of the CenturyLink-provided batteries, cautioned that most batteries would last about three years, and noted that there was a visual indicator on the battery unit to indicate when it needed to be replaced. CenturyLink also provided information about other battery backup suppliers and their websites for replacement battery purposes.


134 During the Omaha trial, CenturyLink provided both an Optical Network Terminal ("ONT") as well as a battery backup unit for inside the home.

135 See NPRM ¶ 32.

136 Id. ¶ 46.
service providers have no advantage in the provision of backup power, and no unique obligation
to provision backup power, the Commission will facilitate competition among CPE providers,
carriers, and others and allow consumers to guide the development of the backup power
marketplace. As described above, consumer preferences are evolving as IP and mobile offerings
supplant legacy, line-powered ILEC services. Just as the Commission promoted CPE
competition in decades past, it should promote continued development of the distinct backup
power marketplace, recognizing that consumers are the best judges of the features they need and
the value of those features. By focusing on education and facilitating competition, the
Commission can ensure that consumers continue to receive the very best offerings that
technology permits.

V. CONCLUSION

For the reasons described above, the Commission should maintain a balanced approach
that protects the interests of consumers without inhibiting investment and deployment,
recognizes the state of the marketplace as it has evolved, and avoids impositions on carriers’
First Amendment rights.

Respectfully submitted,

CENTURYLINK

Craig Brown
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Washington, DC 20001
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February 5, 2015
From: Boudhaouia, Abdennaceur Jamal  
Sent: Monday, July 14, 2014 4:38 PM  
To: Fisher, Jennifer K  
Cc: Green, Matt O  
Subject: TEKSTAR Circuits affected by Copper Retirements

Jennifer:

Due to road construction, CenturyLink will be replacing the copper with fiber and therefore the following circuits will not be supported after October 19, 2014:

<table>
<thead>
<tr>
<th>Circuit ID</th>
<th>Service Type</th>
<th>Phone Nbr</th>
<th>Cable</th>
<th>Pair</th>
<th>Impact Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>/LXFU/232729</td>
<td>u23wx</td>
<td>(218) 723-5877</td>
<td>3</td>
<td>576</td>
<td>16482 LONGVIEW DR</td>
</tr>
<tr>
<td>/LXFU/232740</td>
<td>u23wx</td>
<td>(218) 723-5875</td>
<td>5</td>
<td>524</td>
<td>16482 LONGVIEW DR</td>
</tr>
</tbody>
</table>

Please make sure they are aware of this Copper Retirement and the fact we can no longer support copper loops after October 19, 2014.

Best Regards,

Jamal Boudhaouia  
Regulatory Operations Director  
700 W. Mineral Ave., Littleton, CO, 80120  
Mailstop: 235106MN00-F19.16  
jamal.boudhaouia@centurylink.com  

CenturyLink®
Omaha Locate and Bury—POSTCARD (v8)

One version for customers and neighbors

Agency will add graphics, logo and other brand compliant elements.

High-Speed Internet and TV Services UPGRADE

Coming Soon to Your Neighborhood!!

ACTION REQUIRED: Access to Your Yard Is Needed!

To our CenturyLink Customers and Omaha Neighbors: Network upgrades are scheduled to take place in your neighborhood beginning in October 2012.

Please be aware that trained Service Representatives will be in your neighborhood between 10/1 and 10/13 to locate existing cables in the ground and replace them with new, upgraded network fibers. These upgrades will allow CenturyLink to provide you with High-Speed Internet (HSI) services with faster download speeds than our current cable-ready Internet access services. In addition, CenturyLink will be able to bring you advanced TV services in the very near future.

- **CenturyLink Customers:** Locate Service Representatives and CenturyLink Representatives will need access to the facilities in your yard.
- **Omaha Neighbors:** Locate Service Representatives and CenturyLink Representatives may need access to your yard in order to access our customers’ facilities.

Please watch carefully for a letter from CenturyLink with more details about the initial phase of this project, which includes identifying, marking and, where necessary, placing fiber equipment to prepare the upgraded network for your neighborhood.

**ACTION NEEDED:** If you have circumstances which might prevent the technician from gaining access to the CenturyLink facilities in your yard, such as a gate / fence or a dog, please contact us at (877) 299-0217 between the hours of 8am and 9pm (CT) Monday through Friday or 9am and 4pm (CT) on Saturday. One of our customer service representatives will help make special arrangements with you.
Exhibit C
Your CenturyLink Service is Being Upgraded
Interruption of Voice Service—Action May Be Required!

August 6, 2013

Dear CLEC

Our goal at CenturyLink is to offer products that meet your communications needs and to provide timely information regarding changes or events that will affect your service.

Over the past few months, CenturyLink has been upgrading its network to provide state-of-the-art High-Speed Internet (HSI) enabling the fastest download speeds in Omaha (speeds faster than 50 MB). As we continue preparations for the service upgrades, the next action will require a temporary interruption in your end user’s voice service. This work will occur beginning on the cut dates listed below and will interrupt your end user’s voice service until the network upgrade is complete. This could take up to 4 hours. (Your end user does not need to be home for this appointment.)

To minimize the out of service time your end user might experience, please make sure your end user has had all of the required appointments completed prior to their designated cut date listed below. This includes Locate & Bury and Inside Wiring appointments (described immediately below). If these appointments have not yet been completed, your end user could experience out of service times on the voice service of up to 24 hours. Therefore, please contact your service manager with your preference for the appointment day and time.

Locate & Bury visit

• During the first visit, the Locate Service Representative will locate the existing cable in the ground and mark the ground accordingly for the new, high-capacity fiber upgrade.
• A CenturyLink representative will return a few days later to place fiber equipment, if necessary. At this time, a new Network Interface box will be mounted on the outside of your end user’s home to accommodate the upgraded services.
• All of this work will be provided at no cost to you.

Inside Wiring appointment

• As part of the upgrade, a trained Service Representative must make changes to the outside Network Interface that provides voice to your end user.
• An adult, at least 18 years of age, will need to be home to let the Service Representative into your end user’s home.
• All of this work will be provided at no cost to you.

If the appointments above have been completed, there is no action required of you at this time. We just want you to be aware your end user’s voice service will be interrupted for up to four hours beginning on their designated cut date.
CUT DATE 9/23/2013

End User BTN/VTN: TN
End User Name: Name
End User Address: Address

Important: Please contact your Service Manager with any questions as soon as possible.

We work hard at CenturyLink to avoid such situations because they can create an inconvenience for our customers. I understand that you have a choice of communications providers and appreciate that you have chosen CenturyLink.

We value your business and thank you for being a CenturyLink customer.

Sincerely,
Ken Beck
Regional Vice President, Wholesale Markets
Exhibit D
We’re upgrading CenturyLink® High-Speed Internet in your neighborhood. Please read and save this notice for future reference.

CenturyLink® will be upgrading our High-Speed Internet (HSI) network in your neighborhood on 12/27/11 between 8 a.m. and 5 p.m. Once the upgrade is done, faster Internet speeds may become available to you.

This upgrade does not require you to take any action or make changes to your High-Speed Internet service.

IMPORTANT TO KNOW:

- On the day of the upgrade, you might experience an interruption of your High-Speed Internet and phone services lasting up to 30 minutes. If the interruption lasts longer than 30 minutes, please call our Service Support Center at 1 888-777-9569 for assistance.

- If you also have CenturyLink phone service, or use your High-Speed Internet service for Voice over IP (VoIP) Internet-based calling, please be aware that you will not be able to receive or place calls, including calls to 911, during the interruption period. Your calling services will be restored immediately upon completion of the upgrade.

- Once your High-Speed Internet upgrade is complete, your next CenturyLink bill will show that a service change took place, at no cost to you. Your current high-speed Internet monthly rate will remain unchanged, unless of course, you have requested another change to your high-speed Internet service or its speed that would affect your monthly rate.

If you have any questions about this service upgrade, or if you would like to find out about the new CenturyLink High-Speed Internet speed options that will be available in your area, please contact us at 1 800-764-9504, between 8 a.m. to 5 p.m. PST Monday through Friday.

Thank you for choosing CenturyLink. We appreciate your business.
Exhibit E
ACTION REQUIRED BY 01/03/12

We’re upgrading CenturyLink® High-Speed Internet in your area.
Please read this notice immediately and save it for future reference.

Good news! We will be upgrading the CenturyLink High-Speed Internet service in your neighborhood on 01/10/12 between 8 a.m. and 5 p.m. You may qualify for faster speeds; contact our representative for more information.

ACTION REQUIRED: Your current modem will not be compatible with this upgrade. CenturyLink will provide a replacement modem at no cost to you. You have two options:

1. Self-Installation: If you want to install the new modem yourself, you do not need to respond to this notice. CenturyLink will ship a new modem via UPS to your service address before 01/10/12. If you want it delivered to a different address, or if you want to be present for the delivery, contact us before 01/03/12.

   To install your modem, just follow the installation guide included in the modem kit. To avoid any interruption in service, please be sure your new modem is installed before 01/10/12. For assistance, please call our Service Support Center at 1-888-777-9569.

2. Complimentary Technician Installation: If you would rather have a CenturyLink technician install your modem, please call us at 1-800-764-9504 before 01/03/12 to set up a time that you can be present for the installation. The technician will bring your modem and install it, at no cost to you.

   To set up your technician installation, please call our Service Support Center at 1-800-764-9504 between 8 a.m. and 5 p.m. PST Monday – Friday.

IMPORTANT TO KNOW:

- On the day of the upgrade, you might experience an interruption of your high-speed Internet and phone services lasting up to 30 minutes. If the interruption lasts longer than 30 minutes, please call our Service Support Center at 1-888-777-9569 for assistance.

- If you also have CenturyLink phone service, or use your High-Speed Internet service for Voice over IP (VoIP) Internet-based calling, please be aware that you will not be able to receive or place calls, including calls to 911, during the interruption period. Your calling services will be restored immediately as soon as the upgrade is complete.

- If your account is on Seasonal Service when this upgrade takes place, your high-speed Internet service will be upgraded, and the replacement modem will be shipped to you when Seasonal Service is removed and you reinstate your service.

- Once your high-speed Internet upgrade is complete, your next CenturyLink bill will show that a service change took place. Your current high-speed Internet monthly rate will not change, unless of course, you have requested another change to your high-speed Internet service that would affect your monthly rate.

If you have any questions about this service upgrade, or if you would like to find out about the new CenturyLink High-Speed Internet speeds that will be available in your area, please contact us at 1-800-764-9504, between 8 a.m. to 5 p.m. PST Monday through Friday.

We appreciate your business and value you as a CenturyLink customer.
Exhibit F
Omaha Customers and Neighbors

Frequently Asked Questions Related to Locate and Bury Phase
of High-Speed Internet and TV Services Upgrade

Q: Will my service be interrupted during the locate and bury process?
A: No, you will not experience any interruption of service during the locate and bury portion of this network upgrade.

Q: When in 2013 will the new High-Speed Internet and expanded TV services be available to me?
A: In early 2013 we will start a phased deployment in Omaha. You will receive more information in the mail specific to your address closer to the installation timeframe.

Q: What makes these services better than CenturyLink’s existing High-Speed Internet and cable-based TV services?
A: The upgrade from cable to a fiber-optics network will provide state-of-the-art High-Speed Internet (HSI) services with the fastest speeds in Omaha (speeds faster than 50 MB), as well as a technologically advanced TV service to your neighborhood.

Q: What more can you tell me about the new, upgraded/expanded services?
A: The upgraded network, bringing fiber optics into your neighborhood, will dramatically increase the capacity of your existing connection. CenturyLink’s technologically advanced TV services will offer a state-of-the-art way for you to experience home entertainment, including television, games, interactive dashboards, personal media sharing and on demand content.

The emerging technology will allow you to enjoy more products and services that will enhance your entire Internet and video experience.

Q: Can I keep my existing services? Choice TV and Online?
A: Yes, but for a short timeframe only as we will be migrating all existing customers to our state-of-the-art network, allowing them to experience the best in data and video services. In early 2014, Choice TV and Online will be phased out.
Q: Where will you be placing the new small box on my home and how will you attach it to my house? What if it is brick or sided?
A: The new small outside enclosure will be placed adjacent to the existing box on your home for CenturyLink services. The CTL representatives will utilize the appropriate hardware to attach this to the side of your home, regardless of whether it is brick or sided. At the time of the placement, if you are at home, the installation tech will review the process prior to starting any work.

Q: Can you add me to a reservation list to notify me when the new services become available in my neighborhood?
A: Yes. Call (402) 691-1600 between the hours of 8 am and 9 pm (CT) Monday through Friday or 9am and 4pm (CT) on Saturday. One of our customer service representatives will make arrangements for you to be contacted in advance of the new services becoming available to you.
SECTION II: GENERAL QUESTIONS OR CONCERNS

Q: How invasive is the burying of the conduit or fiber? How quickly will the ground be covered?
A: Using equipment about the size of a lawnmower, a CenturyLink representative will cut a narrow (<1" wide by 6" deep) slit in the ground to bury a new fiber and then cover it immediately.

Before... After...

Q: How long will the locate service technicians need access to my yard?
A: There will be multiple utility technicians visiting your property to locate the facilities serving your home.

Q: How long will the CTL service techs need access to my yard?
A: The typical timeframe to complete the placement of new facilities* is 2 hours.

*Facilities = pedestal where cables are located

Q: Will I incur any expenses related to the potential work being done in my yard?
A: CenturyLink will absorb all costs related to the work described below:

The Representative will identify the existing cable in the ground and mark it accordingly. Within a few days, a CenturyLink representative will return to cut a narrow (<1" wide by 6" deep) slit in the ground, using equipment about the size of a lawnmower, to bury a new fiber and then cover the ground immediately.

Q: What if a customer/non customer calls to check on status of contractor arrival?
A: The migration database does not track this level of detail. The two week window identified in the post card/letter is valid. If the customer has arrangements to make for access (gate, fence, dog, etc) they can call Center Partners at (402) 691-1600 and make the arrangements. The exact locate date will not be known. The migration database will have a flag for the locate being completed which will trigger the ability for us to specifically know the bury date.
Q: How much room is there to move or adjust the trenching line? In other words, what if the trenching is in my flower bed?
A: Every effort will be made to minimize impact to your landscaping. The goal is to leave your property in the same condition as it was when we arrived.

Q: What if special arrangements were made and a CenturyLink representative did not show up—what is the escalation path to check status?
A: If the schedule has to be changed due to unforeseen circumstances or weather, every effort will be made to proactively contact you before your appointment to reschedule using your Can Be Reached (CBR) number. In the unlikely event that we miss your appointment, please call (402) 691-1600 between the hours of 8am and 9pm (CT) Monday through Friday or 9am and 4pm (CT) on Saturday. One of our customer service representatives will work with you to reschedule.

Q: What if I have an invisible dog fence, sprinklers or other property buried less than 6 inches deep? How can I be sure my property will not be damaged during the locate and bury work?
A: Please be sure to mark or identify your property accordingly where any of these items might exist so the representatives will be aware and try to avoid that area.

Q: What if the weather interferes with the communicated locate and bury schedule?
A: The customer should not be impacted by a freeze. A team will determine the frost date 2 weeks in advance of initial project completion date.

*************

GENERAL INFORMATION

Please call (402) 691-1600

Hours of operation: 8am – 9am (CT) Monday through Friday or 9am – 4pm (CT) on Saturday