On November 25, 2014 the Federal Communications Commission ("Commission") released a Notice of Proposed Rulemaking ("NPRM") in the above referenced dockets\(^1\) seeking comment on ways to promote public safety, protect consumers and preserve competition in light of the TDM-to-IP transitions currently underway. Specifically, the Commission invites comment on proposed rules having three objectives: (1) ensuring reliable backup power for consumers of IP-based voice and data services, (2) ensuring consumers are informed of choices when legacy facilities (i.e., copper networks) are retired and legacy services discontinued and (3)
TCA Comments

February 5, 2015

protecting competition so that small and medium-sized businesses are not deprived of ability to choose.2

TCA agrees that it is in the public interest to safeguard consumers and competition as the telecommunications makes the transition from TDM to IP networks and services, but the NPRM fails to establish a compelling need for customer premises equipment (CPE) backup power rules and proposes copper retirement and service discontinuance rules that would discourage rather than facilitate the replacement of copper facilities with more advanced and more efficient IP-based facilities.

TCA is a national consulting firm that performs financial, regulatory and marketing services for over one-hundred rural local exchange carriers (LECs) and their affiliates. The vast majority of TCA clients are rate-of-return regulated in the interstate jurisdiction and offer voice and broadband services to their customers. Many of TCA’s clients are member-owned cooperatives formed by farmers and ranchers who have combined to provide themselves and their neighbors with reliable telecommunications services, and still other TCA clients are locally-owned businesses whose owners live and work in the same small towns and communities as their customers.

I. CPE Backup Power

The NPRM proposes providers should be responsible for provisioning CPE backup power during the first 8 hours of a commercial electrical outage3 but fails to establish a compelling case for expanding this burden on providers beyond this time frame. CPE backup batteries currently deployed in the telecommunications industry typically last 6-8 hours.4 This

3 Ibid., at ¶35
4 Cox California Telcom, LLC, “Performance Reliability Standards,” California Public Utilities Commission Technical Workshop Report, February 2009. See also NPRM at ¶35: “Eight hours appears to be consistent with certain VoIP deployment models already in practice …”
6-to-8 hour battery life is more than sufficient—as 95% of commercial power outages last less than 4 hours.\(^5\) For example, the average duration of an electrical power outage is 92 minutes in the Midwest and 214 minutes in the Northeast.\(^6\)

Rules rigidly stipulating CPE battery life would be poor policy. Several factors cause battery life to vary substantially, including the following:

1. Power consumption of the CPE,
2. Distance of the CPE from the battery,
3. Temperature and age of the battery,
4. Discharge and re-charge cycle of the battery and
5. Manufacturers’ variations.

In light of current practice—and the inherent variability of battery life—it would be better to rely upon competition among CPE vendors and battery manufacturers to improve backup power options than to mandate inflexible rules applicable to service providers. Rural LECs lack the economies of scale and scope necessary to lower CPE costs and improve battery performance possessed by equipment suppliers and battery manufacturers. Moreover, as the Commission suggests, facilitating standardization and furthering best practices may be preferable to adopting rules.\(^7\) To a certain extent, the Commission has already launched such a process with the formation of the Communications Security, Reliability and Interoperability Council (CSRIC),\(^8\) and the CSRIC has already issued a report describing best practices and recommending standardization.\(^9\) For example, the CSRIC reports that the most commonly deployed system for VoIP services employs uninterruptible power supply (UPS) units with lead acid batteries achieving 4-8 hours of backup time.\(^10\) The CSRIC also reports that typical Fiber-to-the-Home

\(^6\) Lawrence Berkeley National Laboratory, Tracking the Reliability of the U.S. Electric Power System (Oct. 2008), Table 4, p. 15.
\(^7\) NPRM, ¶46.
\(^8\) Ibid., ¶36
\(^10\) Ibid., pp. 8-9.
(FTTH) systems typically employ UPS units with lead acid batteries providing up to 8 hours of talk time.\textsuperscript{11}

\section*{II. Copper Retirement}

The Commission proposes to require all incumbent LECs to notify all affected retail customers in writing of impending copper retirements through electronic or postal mail.\textsuperscript{12} The proposed rules further specify the timing, content and retention of such notices.\textsuperscript{13} To the extent applicable to rural LECs, these proposals are both onerous and unnecessary. Customers of locally-owned, rural LECs are typically very knowledgeable—well in advance—of planned upgrades of copper facilities to fiber. In the case of cooperatives, capital budgets are typically approved by a board of directors comprised of members.\textsuperscript{14} Privately-owned rural LECs typically keep their customers informed of capital projects through newsletters, press releases, mailings and postings on their websites. Indeed, all rural LECs strongly desire that their customers understand the greater reliability and superior service fiber offers.

The Commission’s concern for \textit{de facto} retirement due to inadequate maintenance is misplaced insofar as the concern relates to rural LECs.\textsuperscript{15} Inadequate maintenance leading to \textit{de facto} retirements presupposes rural LECs may debase the quality of their services with little or no fear of incurring the enmity of their member customers and neighbors, violating state commission quality of service rules or seeing their customers defect to competitors. While this may be a concern, with large national price cap LECs, there is no evidence that this has occurred with rural LECs. This can be easily verified by state regulators, responsible for resolving consumer complaints.

\begin{footnotesize}
\begin{enumerate}
\item \textit{Ibid.}, pp. 10-11.
\item NPRM, ¶61.
\item NPRM, ¶¶64, 65 and 68.
\item It is also recommended practice for board of directors and/or the managers of cooperatives to present an annual budget projection for the current fiscal year and a 3-to-5 year projection during annual membership meetings. See USDA, \textit{Organizing and Conducting Cooperatives’ Annual Meetings}, Cooperative Information Report 21 (revised June 1992), p. 14.
\item \textit{Ibid.}, ¶53.
\end{enumerate}
\end{footnotesize}
The Commission is also concerned that consumer complaints about copper retirements causing a change in services may have stemmed from “aggressive or confusing upselling.”

Fearing rural LECs would upsell their customers—that is, misinform customers of the need to purchase higher revenue-producing services following a fiber installation—mistakenly presupposes rural LECs are able to manipulate their customers’ needs and preferences with impunity. Again, the Commission offers no evidence that rural LECs have ever acted in this manner.

III. Section 214 Discontinuance

The Commission also asks whether its rules should be updated to define what should constitute an adequate substitute for retail services discontinued, reduced or impaired in connection with the TDM-to-IP transition. This proposal too is misplaced. Very few rural LECs have competitive providers accessing their networks to provide service—which renders this costly, onerous requirement unnecessary. Attempting to define adequate substitutability in particular cases is an open invitation to protracted and costly proceedings that could delay, or even prevent, the IP transition. At a minimum, the FCC should clarify that rural LECs offering voice service over an IP network instead of TDM network qualifies as at “adequate substitution.” Failure to do so will be to discourage the replacement of copper facilities with more advanced and efficient IP-based facilities.

IV. Conclusion

The Commission fails to establish a compelling need to promulgate either new rules specifying CPE backup power requirements or updated rules regarding copper retirement and Section 214 discontinuance. As noted above, 95% of commercial power outages last less than 4 hours while CPE backup batteries currently in use typically have a life of 6-8 hours. Moreover, battery life is variable depending open several factors and not easily susceptible to rigid

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16 Ibid., ¶71.
17 Ibid., ¶93.
specification. As applied to rural LECs, the Commission’s proposed copper retirement and service discontinuance rules are not only unnecessary but also likely to discourage fiber deployment while depriving many rural subscribers of advanced services. Should the Commission continue pursuing strict rules governing copper retirements and service discontinuance, it would be better to exempt rural LECs who lack the power to exploit their customers.

Respectfully submitted,

[electronically filed]
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