



IP Transitions Issue Brief

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SUMMARY

Electric, gas and water utilities are challenged by the impact of the IP-transition, as telecommunications carriers migrate away from their legacy, circuit-switched, analog communications networks and services. This transition has not been sought by utilities, who have their own telecommunications networks to enable greater reliability and recovery from natural disasters as well as to enable greater efficiencies within their service territories, among other uses. These networks, called “private networks” in telecommunications parlance, have a different use than the networks run by telecommunications carriers – reliability is primary. Therefore, the IP transition could lead to increased cost and reliability issues for utilities if poorly managed. Replacement services may not provide the same level of reliability as the legacy services, particularly with regard to back up power and latency. In some cases, these replacement IP services may be significantly more expensive than the legacy services used by utilities. Telecommunications carriers may also discontinue services altogether, particularly in rural and remote areas, which would threaten to cut off communications to critical assets, such as electric substations

BACKGROUND

With the release of its [Notice of Proposed Rulemaking and Declaratory Ruling](#), the Federal Communications Commission (FCC/Commission) initiated its IP transition proceeding in November 2014, based on two service-based experiments with AT&T (in Carbon Hill, Alabama and Delray Beach, Florida) to examine potential impacts on

the network core values of “protecting essential communications services for safety of life and national security” and “maintaining wholesale access.” In comments to the FCC, the Utilities Technology Council (UTC) and other utility industry stakeholders urged the FCC to require carriers to provide more time for utilities to transition from legacy services. In addition, UTC created a white paper on IP Transitions examining the applications affected, technology issues surrounding the transitions, and the impact of private line discontinuance. UTC has also educated the National Association of Regulatory Utility Commissioners (NARUC) on this issue.

The FCC released a [Report and Order, Order on Reconsideration, and Further Notice of Proposed Rulemaking](#) in August, 2015. The 2015 Report and Order requires telecommunications carriers to provide six-months advance notice of any copper retirement, but no approval is needed from the FCC. The FCC defines copper retirement to include any “removal or disabling of copper loops, subloops, or the feeder portion of such loops or subloops, or the replacement of such loops with fiber-to-the-home loops or fiber-to-the-curb loops.” The FCC extended this notice requirement to also apply to *de facto* copper retirement, when carriers fail to maintain copper loops, subloops, or the feeder portion of such loops or subloops that is the functional equivalent of removal or disabling. In addition, the FCC invited comment on proposed criteria that the FCC should use when evaluating a carrier's application to discontinue service, specifically concerning adequacy of replacement services

for the service that is being discontinued. UTC filed comments supporting the FCC's proposed criteria and suggested additional criteria that the FCC should adopt.

In July 2016, the FCC adopted a three-part streamlined process and adopted its proposed criteria for evaluating a carrier's request to discontinue services in accordance with Section 214 of the Communications Act. The FCC's [Declaratory Ruling, Second Report and Order and Order on Reconsideration incorporated some suggestions from utilities and rejected others on the issue of requirements for carriers as they seek to discontinue services as part of the IP transition](#). The FCC rules provide the carriers with a streamlined three-step process, but each of these steps requires carriers to actually show that the replacement service will provide substantially similar performance, availability, and coverage; will meet requirements for 9-1-1, security and accessibility; and will provide interoperability and compatibility with certain key applications and functionalities. Note that because the streamlined process only applies to voice, not data services, carriers will still be subject to a five-part test when they seek to discontinue a data service. Finally, although UTC, utilities and other associations asked for more advance notice than the six months provided in the 2015 Report & Order, the FCC declined to require advance notice of a planned discontinuance or to lengthen the discontinuance process by changing the existing timeline for filing objections and/or allowing automatic grant. The FCC explained that utilities had not shown actual harm resulting from the discontinuance of a service, and that it would consider evidence of actual harm in future cases.

UTC POSITION

UTC believes that telecommunications carriers should provide utilities with more advance notice prior to a copper replacement or prior to discontinuing service as part of the IP transition. Utilities may have hundreds, if not thousands, of

leased line circuits from the carriers, and transitioning those circuits is a highly complex process that may involve multiple carriers across multiple states. Further, the replacement services offered by the carriers may not provide the same performance quality as the legacy TDM service in terms of reliability, security and resiliency. The IP transition also imposes significant costs on utilities, which in turn requires advance notice and planning.

The IP transition should not threaten the safety, reliability and security of essential electric, gas and water services, nor should it impose escalating costs on utilities. Thus, utilities require more advance notice, more coordination of the process by which different carriers transition their legacy circuits and restrictions on the escalating costs that are imposed by the carriers.

ABOUT UTC

The Utilities Technology Council (UTC) is a global trade association dedicated to serving critical infrastructure providers. Through advocacy, education and collaboration, UTC creates a favorable business, regulatory and technological environment for companies that own, manage or provide critical telecommunications systems in support of their core business.

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