

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)
)
Accelerating Wireline Broadband Deployment) WC Docket No. 17-84
By Removing Barriers to Infrastructure Investment)
)
To: The Commission

**COMMENTS OF
THE NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION**

The National Rural Electric Cooperative Association (“NRECA”) hereby submits its Comments in response to the Notice of Proposed Rulemaking, Notice of Inquiry and Request for Comment in which the Commission requests recommendations and comments on proposals to remove regulatory barriers to infrastructure investment; speed the transition from copper networks and legacy services to next-generation networks and services; and reform Commission regulations that increase costs and slow broadband deployment.¹

INTRODUCTION

NRECA is the national service organization for more than 900 not-for-profit rural electric cooperatives that provide electric energy to approximately 42 million people in 47 states or approximately 12 percent of electric customers. Rural electric cooperatives serve 88% of counties of the United States. NRECA’s members include approximately 65 Generation and Transmission (“G&T”) cooperatives and 840 Distribution cooperatives. Rural electric cooperatives were formed to provide safe, reliable electric service to their member-owners at the lowest reasonable

¹ *Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment*, WC Docket No. 17-84, Notice of Proposed Rulemaking, Notice of Inquiry and Request for Comments, FCC 17-37 (rel. April 21, 2017) (hereinafter referred to as the “2017 Wireline Infrastructure Notice” or the “Notice”).

cost. Rural electric cooperatives are dedicated to improving the communities in which they serve; management and staff of rural electric cooperatives are active in rural economic development efforts. Electric cooperatives are private, not-for-profit entities that are owned and governed by the members to whom they deliver electricity. Electric cooperatives are democratically governed and operate according to the seven Cooperative Principles.²

DISCUSSION

A. NRECA is Committed to Bridging the Digital Divide in Rural America

NRECA members support the Commission's efforts to promote broadband deployment, particularly in the rural areas of the Nation in which member cooperatives generate and distribute electric power for residential, institutional, small business and larger commercial and industrial end users. The challenge confronting NRECA members is that wireline broadband service that meets or exceeds the Commission's advanced telecommunications capability speed benchmark of 25 Mbps/3 Mbps³ is not available in many of their communities, prompting many NRECA members to conclude that, if they do not invest in and construct modern broadband networks in their communities, these communities will be isolated on the "wrong side" of the Digital Divide. In recent years, electric cooperatives have invested in and deployed high capacity broadband-networks, individually, in consortiums with other cooperatives, or in joint ventures with other services providers. In furtherance of its members' interests, NRECA has actively participated in

² The seven Cooperative Principles are: Voluntary and Open Membership, Democratic Member Control, Members' Economic Participation, Autonomy and Independence, Education, Training and Information, Cooperation Among Cooperatives, and Concern for Community.

³ *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, GN Docket NO. 15-191, 2016 Broadband Progress Report, 31 FCC Rcd at 699, para. 50 (2016) (2016 Broadband Progress Report).

Commission proceedings related to the Rural Broadband Experiments program⁴ and the Connect America Fund (“CAF II”) reverse auction,⁵ either individually or in coalitions with other groups and associations focused on rural broadband infrastructure deployment.

B. No Legal or Policy Rationale Supports FCC Regulation of Electric Cooperative Poles

NRECA’s members are not subject to the federal Pole Attachment Act, because 47 U.S.C. Section 224(a)(1) of the Act excludes “any railroad, any person who is cooperatively organized, or any person owned by the Federal Government or any State” from the definition of “utility.” Electric cooperatives are “cooperatively organized,” and there has never been any question that the poles owned by electric cooperatives are not subject to the Act.

The Commission understands that electric cooperative poles are not subject to the Act, but the *2017 Wireline Infrastructure Notice* nevertheless requests comments on what the Commission might do to speed deployment on electric cooperative poles and to facilitate access to information about electric cooperative pole attachment rates and make-ready costs:

Poles owned by cooperatives, munis and railroads are not subject to FCC pole attachment jurisdiction, but what can the FCC do to speed deployment of next generation networks on these facilities? How can the FCC encourage or facilitate access to information about co-op, muni and railroad pole attachment rates and make-ready costs?⁶

⁴ *Wireline Competition Bureau Seeks Comment on the Alliance of Rural Broadband Applicants’ petition for Limited Waiver of Certain Rural Broadband Experiment Letter of Credit Requirements; Also Seeks Comment More Generally on Letter of Credit Proposal for Connect America Phase II Competitive Bidding Process*, 30 FCC Rcd at 779, WC Docket No. 10-90 and WC Docket No. 14-259, Public Notice, DA 15-140, (rel. January 30, 2015), Comments of NRECA (filed on March 30, 2015) (recommending the National Rural Utilities Cooperative Finance Corporation (CFC) be eligible to issue Letters of Credit in support of provisionally selected Rural Broadband Experiment winners and prevailing bidders in the Connect American Phase II reverse auction).

⁵ Letter from C. Douglas Jarrett, Counsel to NRECA, to Marlene Dortch, Secretary, FCC, WC Docket No. 10-90 et.al. filed September 9, 2014) (proposing that electric cooperatives have the option of establishing their technical qualifications to participate in the CAF II auction based on their operation of electric transmission and distribution networks).

⁶ *2017 Wireline Infrastructure Notice*, para. 30.

NRECA does not understand this request for comments. Because the FCC lacks jurisdiction over attachments to poles owned by cooperatives, munis and railroads, the FCC lacks jurisdiction to “speed deployments” on these poles or to “encourage or facilitate access to information” about rates and make-ready costs associated with these poles. By any measure, government efforts to speed deployments on poles or gather information about poles is government regulation of those poles. The Pole Attachment Act bars such regulation.

Similarly, there is no policy justification for regulating electric cooperative poles. Electric cooperatives are member-owned and member-governed through their boards of directors. They are not-for-profit entities operating to benefit the people they serve, providing electricity to rural parts of the country that investor-owned electric utilities refused to serve because it was uneconomical to do so.

Congress recognized the unique circumstances of electric cooperatives when they excluded them from pole attachment regulations, stating: “[T]he pole attachment rates charged by municipally owned and cooperative utilities are already subject to a decision making process based upon constituent needs and interests.”⁷ Congress knew that electric cooperatives already had incentive to accommodate cable television company attachments because over-the-air reception of television signals was poor and many electric cooperative members already subscribed to cable television service: “Cooperatively owned utilities, by and large, are located in rural areas where often over-the-air television service is poor. Thus, the customers of these utilities have an added incentive to foster the growth of cable television in their areas.”⁸

⁷ S. Rep. No. 95-580, at 18 (1977), reprinted in 1978 U.S.C.C.A.N. 109, 126.

⁸ *Id.*

For these reasons, Congress allowed electric cooperatives to determine, among other things, the “equitable distribution of pole costs between utilities and cable television systems.”⁹

Today, where broadband service does not exist, electric cooperatives seek out and welcome providers and stand ready to negotiate reasonable rates terms and conditions for pole access. When traditional providers show no interest in serving our territories some NRECA members make the decision to build and operate broadband systems. No electric cooperative makes the decision to enter the broadband business lightly. The goal remains to close the digital divide, and this goal, as recognized by Congress in the Act, continues to elude many communities in rural America.

In short, there is no legal or policy rationale to support the Commission regulation over attachments to electric cooperative poles, including proposals to “speed deployments” on cooperative poles or to “encourage or facilitate access to information” about cooperative poles.

C. 180 Days-Notice to Business Customers of Planned Copper Retirements Is in the Public Interest

NRECA strongly recommends that the Commission retain the requirement that incumbent local exchange carriers (“ILECs”) provide one hundred and eighty (180) days advance written notice to business customers of planned copper retirements.¹⁰ This advance notice is critical for its members’ network planning and the important role of reliable and available telecommunications services in the day-to-day operation of G&T and Distribution cooperatives.

NRECA supports the Commission’s efforts to take reasonable steps to reduce the regulatory burdens on telecommunications carriers as they transition from copper-based

⁹ *Id.*

¹⁰ *Technology Transitions et al.*, Report and Order, Order on Reconsideration and Further Notice of Proposed Rulemaking, 30 FCC Rcd 9372, 9396-97 para. 39 (2015) (*2015 Technology Transitions Order*).

networks to fiber or alternative technologies from legacy TDM/circuit-switched networks to IP-based networks. NRECA's members are and will remain customers of telecommunications carriers during and after the IP Transition, particularly the G&T cooperatives that maintain and operate expansive electric transmission networks that supply electricity to multiple Distribution cooperatives. While IP-based services can be provided over copper loops, the notice from local exchanges carrier(s) that retirement of copper loops is imminent provides a clear signal to an NRECA member that its local exchange carrier(s) is (are) transitioning to IP services, confirming that the due date for deploying and testing IP-compatible customer premises equipment is fast approaching. As NRECA observed in its Comments submitted in 2015 in the Technology Transition proceeding:

NRECA agrees with the Commission that a successful IP-transition is dependent on the availability of compatible CPE and other end user devices. Adequate notice to deploy compatible CPE and other end user devices is equally important. For NRECA members, cooperative-wide replacement of CPE will entail a significant expenditure of funds and resources to acquire, install and test.¹¹

The prior advance written notice to NRECA members is more than warranted as there is no timetable, window or end date for local exchange carriers to initiate or complete copper retirements or to deploy or implement IP services or networks.

Several factors point to an extended IP transition in many rural communities in which NRECA members generate, transmit and distribute electricity. Based on the ILECs' deployment of advanced broadband infrastructure in rural areas,¹² deployment of IP networks and services by the ILECs in rural areas will occur well after IP networks are deployed in major urban areas and medium-sized cities. The price cap carriers that accepted the statewide offers for CAF II support

¹¹ *2015 Technology Transitions Order*, NRECA Comments, at 7-8, filed on October 26, 2015. *2016 Broadband Progress Report*, 31 FCC Rcd 731-2, para. 79 (39% of Americans living in rural areas lack access to advanced telecommunications capability as compared to 4% of Americans living in urban areas (23.4 Million Americans in rural areas v. 10.5 million Americans in urban areas)).

are obligated to offer broadband at 10 Mbps downstream and 1 Mbps second upstream (10/1Mbps).¹³ This broadband speed can be achieved with the addition of newer electronics to existing copper loops and does not require a major uplift to fiber-based or high capacity fixed wireless; thus, copper loops likely will remain in place in many rural areas for at least several years. Because of the uncertainty over when and where ILECs will deploy IP-based networks and services in rural areas, 180-days advance written notice by ILECs to business customers is in the public interest. End-users depend on their telecommunications carriers to communicate changes in their service offerings. Written notice to business customers is important because few, if any, end-users (wherever located) monitor the FCC's web site to review the Daily Digest for ILEC notices of copper retirements. The ILECs possess customer billing addresses. It should not be unduly burdensome for ILECs to send a separate notice to customers, perhaps even by e-mail. The 180-day advance written notice is particularly important for G&T cooperatives as these members typically obtain service from multiple ILECs.

D. Grandfathering (and Discontinuance of Grandfathered Services) Should Be Premised on Minimum Disruption to Customers

The Notice proposes that ILEC applications to grandfather low speed services (below 1.544Mbps (DS-1)) be automatically granted on the 25th day after public notice, unless the Commission notifies the applicant that the grant will not be automatically effective,¹⁴ but inquires whether the threshold be set for any legacy copper-based service or other TDM services below 10 Mbps or 25 Mbps or higher would be appropriate.¹⁵ NRECA believes DS-1 service (including the ISDN-based Primary Rate Interface (PRI)) is an appropriate minimum speed

¹³ *Connect America Fund, et.al*, WC Docket No. 10-90. WC Docket No. 14-58 and WC Docket No. 14-192, 29 FCC Rcd 15644, 15656-57 (2014) (setting 10/1 Mbps as a the minimum downstream/upstream broadband speeds for price cap carriers accepting Phase II state-wide support).

¹⁴ Notice, para. 76.

¹⁵ *Id.*, at para. 79.

threshold. DS-1s are the most widely deployed special access service among NRECA members and there are facilities-based competitive local exchange carriers in NRECA's member service areas.

The Notice also proposes that previously grandfathered legacy data services be discontinued on no less than 180 days-notice,¹⁶ provided the carrier reasonably demonstrates it has received Commission approval to grandfather the legacy services. Subject to concerns regarding the discontinuance of legacy data services used to support priority NRECA member applications, such as teleprotection discussed below, this notice period should prove to be reasonable. In addition to the notice period, NRECA requests the Commission clarify that three other criteria apply as DS-1 and DS-3 services, including PRI trunks, and local business services are discontinued in favor of comparable IP-based services: (1) the carrier provides written notice to the customer of the planned discontinuance date, (2) the carrier installs and tests the IP-based replacement service prior to disconnection of the TDM service, providing at least several business days for the customer to accept the replacement service; and, (3) as to pricing, non-recurring charges for either the installation of the replacement services or the disconnection of TDM services are waived and the recurring charge for the replacement service is reasonably comparable to the rates for the discontinued service, regardless of whether the TDM service is acquired under a term commitment plan or on a month-to-month basis.

NRECA requests the Commission consider a limited exception to the discontinuance procedures for those DS-1 or DS-3 services used by NRECA members to support protective relaying, similar to exceptions that may be made for Federal government applications.¹⁷

NRECA initially set out this request in its Comments submitted in response to the 2015

¹⁶ *Id.*, at para. 85.

¹⁷ Notice, at paras 82-24.

*Technology Transitions Order*¹⁸ in which the Commission recognized the unique reliability considerations of associated electric utility operations:

Reliable wireline data telecommunications services are essential for the day-to-day operation of the electric grid including protective relaying which encompasses the ongoing monitoring of grid performance by intelligent monitoring devices, referred to as protective relays. These devices assess whether grid components are operating within specified values and, as necessary, send a trip signal to circuit breakers to disconnect a non-compliant component. Protective relaying isolates faults and prevents the cascading of faults throughout a utility electric grid. TDM-based dedicated services such as DS-1 private line service (including access and inter-office components) are used extensively by utilities in connection with protective relaying because the service metrics are sufficiently aggressive and highly deterministic. As a rule, the communications reliability and performance needed for protective relaying are more stringent than those generally required for telecommunications services. Packet-based IP services have variable transmission times and the delivery order of packets is non-deterministic and, therefore, may not be capable of consistently meeting the 40 milliseconds round-trip delay performance level that is critical to protective relaying.¹⁹

This reliability consideration remains as important as ever. Accordingly, NRECA requests that the transition to IP-based services be deferred for DS-1 and DS-3 services supporting this critical application until the ILECs demonstrate this latency measure is achievable on replacement IP-based services.

CONCLUSION

NRECA supports the Commission's efforts to advance broadband deployment, particularly in the Nation's rural communities served by electric cooperatives. In view of the absence of investment by the incumbent services providers, electric cooperatives have taken the lead in many communities in deploying advanced infrastructure capable of supporting broadband service in their rural communities that is comparable to service offerings in urban areas.

NRECA urges the Commission to forego inquiries related to pole attachments to cooperatives'

¹⁸ *2015 Technology Transitions Order*, 30 FCC Rcd 9483-4, para. 217, n. 670 (the Commission acknowledged the requirements of electric utilities for highly reliable dedicated services).

¹⁹ *2015 Technology Transitions Order*, NRECA Comments, at. 3-4, n.5, filed on October 26, 2015.

distribution poles that Congress has expressly excluded from the Commission's jurisdiction under the Pole Attachment Act. As to the ILECs' transition to IP-based networks and services, the Commission should retain the 180-day advance written notice to business customers generally and to NRECA members as there is no nationwide window or timetable for the ILECs to implement or complete their respective IP-transitions and rural areas will likely be transitioned well-after urban areas and mid-sized communities. As to the transition from TDM special access services to IP-based services, the replacement services should meet the unique latency requirements of electric cooperatives' applications, the nonrecurring charges for transitioning to IP-based services should be borne by the ILECs and the cost of replacement services should remain comparable to the TDM-based services. Accordingly, the Commission is respectfully requested to act consistent with the views expressed herein.

Respectfully submitted,

**NATIONAL RURAL ELECTRIC
COOPERATIVE ASSOCIATION**

/s/

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