

Rural Communities Turn to Electric Co-ops for Fiber

The FCC's upcoming RDOF auction, scheduled for October, will give rural communities a chance to bid on support for fiber-to-the-home networks.

By Masha Zager / *Broadband Communities*

A decade ago, “community broadband” was virtually synonymous with municipal broadband. But since that time, even as cities and counties continued building broadband networks, communities have found new ways to take control of their broadband destinies. First came the rise of public-private partnerships, which allowed public entities to share the ownership, control and risk of network building with private entities.

Next, community cooperative associations (in addition to telephone co-ops, which were among the earliest broadband providers) began to answer the call for better broadband. A few, such as RS Fiber in Minnesota, were formed specifically to build broadband networks. Most, however, are electric or other utility cooperatives that have broadened their scope of services to include broadband.

Electric co-ops, in particular, have become very active in building fiber networks. Though many co-ops have built networks without subsidies, their progress has been encouraged by FCC rule changes allowing nontraditional deployers to bid for Universal Service Fund (USF) high-cost support.

In 2018, 20 rural electric cooperatives joined broadband consultant Conexon to bid as the Rural Electric Cooperative Consortium (RECC), winning more than \$186 million in the CAF II auction to build symmetrical gigabit fiber networks. Electric co-ops were the largest winning bidders in the gigabit tier in

the CAF II auction. This year, the RECC was reestablished to participate in the first Rural Digital Opportunity Fund (RDOF) auction, which begins in October.

The RECC is a bidding consortium, rather than an operating consortium – each co-op builds its own network in its own service area. Bidding jointly is the only way for co-ops to share the same consultant – in this case Conexon – and thus benefit from Conexon's years of FCC auction experience. Conexon works solely with electric co-ops, helping them plan, build and operate fiber networks.

Conexon partner Jonathan Chambers, who, during his tenure at the FCC, was involved in the Rural Broadband Experiment and the CAF II auction design, explains that although these auctions, called descending clock auctions, are straightforward in their design, they still can be intimidating for small companies, such as many rural electric co-ops. “Even the terminology is off-putting to people,” he says. “And then you're expected to learn the rules, the procedures and the software, with tens of millions of dollars at stake – so for these types of bidders, a consortium is the easy way to do it.”

CO-OPS REPRESENT COMMUNITY WISHES

Chambers asserts that electric cooperatives, unlike shareholder-owned companies, truly represent the wishes of the communities they serve. They are member-owned and locally

managed, and their revenues stay in the communities. Their boards are democratically elected, and their executives are locally known. “These are local decisions, even if there’s federal financing,” he says.

It’s not surprising that electric co-ops choose to deploy fiber to the home. There are two reasons for this: First, fiber is what their customers (that is, member-owners) want – and they make this preference very clear. In comments that Chambers filed with the FCC in April, he noted that many of the cooperatives Conexon works with already have customer take rates greater than 30 percent for gigabit service, despite having only recently launched broadband service. Rural wireless service providers, however, do not typically have gigabit customers, even if their networks are theoretically capable of gigabit speeds. Chambers adds, “People, given the choice, choose fiber overwhelmingly. I have yet to hear a single instance of someone switching from fiber to fixed wireless.”

Second, co-ops believe fiber is a better investment than alternative technologies because it is future proof. As Chambers explained in the FCC comments, investing public funds in short-lived broadband technology is bad policy: “The federal government has already spent more money on rural broadband than would have been necessary to build fiber optic networks to every rural home and business in the country. Instead of a ‘spend once’ approach, the federal government’s incrementalistic approach has spent the public’s money repeatedly in the same places for services that are usually outmoded before the money is spent.” Because the electric co-ops are spending their own funds as well as USF subsidies, and don’t have pre-existing broadband infrastructure that they can extend incrementally, this argument applies as well to their return on investment.

CO-OPS BUILD FIBER FOR LESS

One reason electric co-ops won in the CAF II auction and appear poised for success in the RDOF auction is that they can build fiber networks for about

half the cost of other carriers. Chambers explains that fiber infrastructure has many synergies with the co-ops’ electric infrastructure. Because the co-ops own electric poles, they can minimize their make-ready costs and better control the pace and timing of their deployments. In addition, they own ducts, conduits, rights of way, bucket trucks, billing software and many other assets they can use for broadband. As financially stable utilities, they can borrow at low interest rates.

Finally, many co-ops use a distributed tap architecture, which reduces fiber counts and therefore reduces costs not just for fiber but also for splicing and repair. Even with enough fiber to account for any possible growth, distributed tap yields significant cost savings. “And if one place suddenly explodes in growth,” Chambers says, “you can always overlash with more fiber. You wouldn’t need to do it everywhere.”

To further bolster the bottom line, electric utilities have an additional use for their fiber: the smart electric grid, which requires fiber to the meter to support distributed generation; new sources of demand, such as electric vehicles; real-time usage reporting and other applications. “It’s not that fiber deployment is being undertaken as an electric cost and then you get broadband – it’s just the opposite,” says Chambers. “First you build broadband, and then you can use the fiber for electric purposes. We always design fiber networks for smart grid.”

Chambers and the electric co-ops Conexon is working with are enthusiastic about RDOF’s promise. However imperfect the FCC maps are, there is no doubt that the RDOF-eligible areas are poorly served, and electric co-ops may now have an opportunity to bring fiber broadband to large swaths of the rural United States. “Who should you invest in?” Chambers asks. “Local communities. Who else would you want to take care of local assets? ... We’ve got to fight for it. This is worth fighting for.” ❖

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