Rural Electric Co-op Expands Access to Fiber Optic Network During the Pandemic

To provide more people with broadband, Blue Ridge Mountain Electric Membership Corporation quickly installed Wi-Fi hot spots and is launching a neighborhood program to gauge community interest in accessing its network.

By Alex King / *BRMEMC*

Blue Ridge Mountain Electric Membership Corporation (BRMEMC), a member-owned electric cooperative operating in western North Carolina and northeastern Georgia, has seen firsthand the significant changes that COVID-19 has caused in the daily lives of its members. Once COVID-19 began affecting the BRMEMC service area, most businesses, including BRMEMC, were forced to pause operations and send their employees home.

BRMEMC closed its office to the public for six weeks but continued to operate and maintain its electric power grid and fiber optic network through remote and socially distanced operations. With a five-county workforce at home, the demand and need for high-speed internet in BRMEMC's service area was urgent and a quick solution for the areas without access to BRMEMC's fiber optic network was necessary.

Within two days after the co-op closed its doors to the public, its broadband technicians installed nine public Wi-Fi hot spots in easily accessible areas, supplying efficient and reliable internet service that was desperately needed. Although this was not a fix for all, it was a quick solution for many. People were able to connect easily to the BRMEMC fiber optic network and complete necessary assignments for school and work. Such creative solutions are necessary to accommodate co-op members' needs during the pandemic.

The transition from traditional work and learning to remote work and virtual learning caused demand for BRMEMC to significantly increase fiber optic internet service – almost overnight. With its existing network, the co-op quickly saw a substantial rise in new sign-ups and in existing members' upgrading their speeds to accommodate the increase in bandwidth usage.

Fortunately, the BRMEMC broadband team consistently facilitates network upgrades and maintenance on its existing fiber optic network, which allows the network to handle large increases in demand, capacity and usage. A fiber optic system is built and designed to withstand the type of demand a pandemic or other disaster creates.

NEIGHBORS HELP NEIGHBORS GET BROADBAND

BRMEMC recognizes the critical need to provide more rural residents with broadband

by expanding its fiber optic network sooner rather than later. The co-op works hard to extend its network each year, hoping to cover as many members as possible with its allotted annual expansion budget.

To accommodate members in areas where reliable, efficient, high-speed internet is not available, the broadband team established a new crowdsourcing program, Neighborhood Networking, which will launch in fall 2020. The program helps members solicit interest from their "neighbors" and collect signed agreements from those interested in subscribing to fiber optic service. When BRMEMC receives the interest documents, the broadband staff will conduct a feasibility study for each area to see whether the number of signed agreements meets the needed return-on-investment goal. If the ROI goal is met, the area will be approved for expansion and be built out within the following year.

> The Neighborhood Networking program enables members to solicit "neighbors" to commit to receive BRMEMC's fiber optic service.

Through this crowdsourcing effort, members will be able to show that in areas with low meter saturation or low population density, installing fiber optics may still be cost-effective if the take rate is high enough.

In the past, BRMEMC learned that having a representative from a projected expansion area solicit interest is the most successful way of guaranteeing a feasible ROI. This crowdsourcing effort was successfully attempted in nine areas and resulted in an average take rate between 60 and 70 percent.

BRMEMC is hopeful that with the Neighborhood Networking program launching soon, the co-op will acquire enough interest from areas it normally would deem not feasible because of high construction costs. When a strong ROI is achieved, the co-op will be able to expand its network even to the most rural areas in its service territory. ❖

Alex King is the manager of broadband at BRMEMC. For more information on BRMEMC's fiber broadband internet service and expansion areas, and a list of current location availability, visit www.brmemc.com/fiber.