

The Cooperative's Promise – Delivered Right on the Nose

BEK Communications Cooperative responded to cable competition by adding fiber to the home. It smoothed the way with a flexible approach, a far-sighted building plan, and Calix technology.

By Steven S. Ross ■ *Editor-in-Chief*



BEK Communications Cooperative, founded in 1952, serves 6,000 customers scattered across

six counties in south central North Dakota from its base in the town of Steele.

In a cooperative, the customers are the owners, and BEK's member-owners elect representatives to the 9-person board of directors, which guides the progress of the company. By doing business with the company, members earn capital credits.

The capital credits are used by the company to fund facility investments and upgrades and to retire capital credits.

with 15 digital remote switches for TDM services as well as DWDM multimedia transport to deliver the broadband and IPTV services offered today.

Recently we talked to Derrick Bulawa, CEO and General Manager, about the coop's plans. BEK is in the middle of a multiyear upgrade to fiber to the home technology even in remote areas, in order to bring the functionality of digital services out to the last mile

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BEK's network consists of a 1,400-mile fiber optic backbone that supports a digital host switch in Steele,

to the home technology even in remote areas, in order to bring the functionality of digital services out to the last mile

of line, allowing all subscribers, even in the most rural areas, access to the most advanced technologies.

BBP: Tell us a little bit about BEK.

Bulawa: We're a 55-year-old cooperative that has grown over the years and now serves about 5,700 members. We have about 6,500 lines, in a territory that covers about 5,400 square miles.

BBP: How much of that is residential?

Bulawa: Most of it is residential. We do have 700 or 800 business lines.

BBP: Obviously you're going to have some retailers, some café owners doing free WiFi, probably a few office buildings. How many are actually work-at-home people?

The first cog in this wheel started about four years back, because the cooperative knew strategically it had to go fiber to the home. As it was upgrading and deploying fiber, especially to the rural homes where we had the longest hauls, we knew higher-speed services would be required and that future services would require even more bandwidth. That's a credit to the board. They said, "We know we need to be there, and we will be prepared."

Bulawa: This is a classic rural telephone business. You think of small towns and small brick storefronts. Very little retail. Each town probably has a post office, a

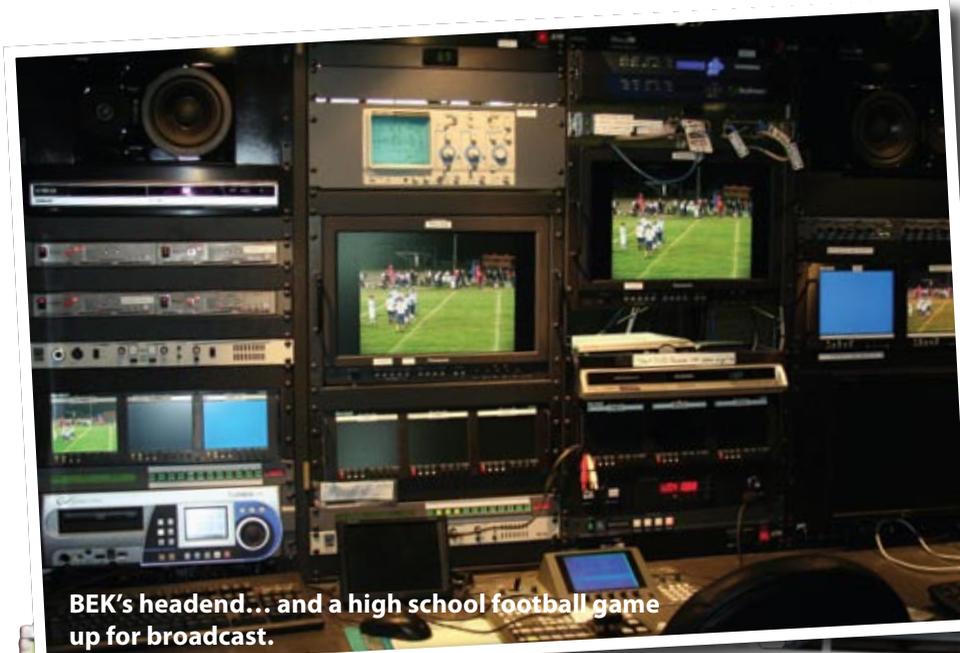
VFW hall, a café, maybe a gas station sometimes, a grain elevator and sometimes a grocery store – not always, but sometimes. We do have a couple larger, national businesses but typically it's the quintessential small-town feel. Our bigger towns are in the 700 to 1,000 range in population.

BBP: Tell me about your strategy.

Bulawa: We have six towns where we have a competitive environment, and those six represent 40 percent of our subscribers. If they were compromised we'd have a difficult time serving all the rurals. So we moved into those towns first with FTTH.

BBP: For most rural telcos, it seems their worst nightmare is satellite.

Bulawa: In fact, we were one of the larger and more successful satellite television resellers and installers, and we sold that off five or six years back. We have a



BEK's headend... and a high school football game up for broadcast.



One great way to promote the local sports channel. The RV-based video remote unit is hard to miss at games and local news events.



ONT installs were usually straightforward, but inside networking used existing wiring where possible.

large cable provider selling in our area that is capable of offering triple play and getting into phone service. It was really one of the factors in the forefront of our minds. We have to offer these services to maintain the long-term viability of this cooperative.

BBP: Around the country, we've seen the smaller ILECs being more innovative than the larger telcos, even the RBOCs. You're overbuilding yourself. You know you're going to have a good take rate. You worry about the town itself drying up. How did you get to the point you got to? What led you to do what you're doing?

Bulawa: The first cog in this wheel started about four years back, because the cooperative knew strategically it had to go fiber to the home. As it was upgrading and deploying fiber, especially to the rural homes where we had the longest hauls, we knew higher-speed services would be required and that the future would require even more bandwidth. That's a credit to the board. They said, "We know we need to be there, and we will be prepared."



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They started the decision process in 2003, and by late 2005 they realized they had to do fiber to deliver next-generation services including IPTV. With an incumbent cable guy capable of offering broadband going head-to-head with you, and able to offer telephone service in the future, you just have no choice. You have to deliver competitive high-speed broadband to the home.

BBP: When did you arrive at the company?

Bulawa: It was in January 2006 that I showed up. At that point the board was predisposed to doing a large fiber build-out in our competitive towns. By then, we believed we had to be there first for

customers, with fiber. That was our core principle when we executed the build, and that's a big reason why we selected Calix. We had somebody from Calix who stood up and said: "I'll get you there, I guarantee it, and if it's messy I'll be there to fix it."

BBP: That was Calix's promise?

Bulawa: They said that to us, and they said it to our board, and we all said okay. And they checked that box with a level of professionalism that I don't think I have seen in a very long time.

BBP: Nice to hear that from a customer.

Bulawa: They did a good job. We went up against the competitor in one town with copper. We threw off the old system we had built and replaced it with the Calix system on short notice and they delivered like you wouldn't believe. In just a few weeks we were pushing out to hundreds of customers that had been on copper, delivering 20 Mbps to each home – and it was just unbelievable.

STEALTH MARKETING

BBP: How did you market it?

Bulawa: We didn't actually market FTTH but rather bundles of telephone, broadband and IPTV services.

It was a trial-and-error strategy. We took some of the traditional approaches to begin with. We did direct marketing. We did some telemarketing. We did some e-mails. We didn't do a lot of high-end visible promotions because we wanted to get the customers acquired under the radar. What we found was that the ones who were waiting for the product responded quickly. But that dries up rather quickly.

We came up with the idea that we're going to do direct point-of-sale. We tried door knocking and quickly realized that the customers really did want to be sold one at a time. But we realized we couldn't do it fast enough. So our marketing department created these neat little events.

In some of the towns we did hot dog and bratwurst lunches where we would show the service, feed our members, and sell them on the spot. Members came out in droves and we were signing them up and selling as fast as we could. They would see the product, talk to one of the staff and the installation would be scheduled on the spot. Someone would be sure that it was done properly. We presold the IPTV bundles to over the half the market in 30 days.

BBP: Before you even had it wired?

Bulawa: The FTTH was in the ground and ready, but the customers had not yet seen the new IPTV service nor had they experienced the 12 Mbps broadband service.

BBP: Did that give you some money up front to play with?

Bulawa: Nope. No cash. It was presold and then the customer signed the agreement if they wanted the service.

BBP: And then how long to set up the market and deliver?

Bulawa: Are you sitting down?

BBP: I'm sitting down.

850 INSTALLS IN 59 DAYS – WE WERE CRANKING!

Bulawa: We delivered on that promise in 59 days.

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BBP: So much for fiber – and broadband generally – being tough to build.

Bulawa: While the fiber was already up to the home, we still had to cut over to the FTTH equipment, as well as install and turn up the new services. However, we delivered to over 50 percent of the market in 59 days.

BBP: How many households did you actually turn on in those six competitive towns?

Bulawa: Roughly 850.

BBP: Wow!

Bulawa: We were cranking.

BBP: How much did you have to do inside the homes to get them ready for that type of bandwidth?

Bulawa: It was a mix of everything because every house is different. Most

of the homes had some form of multi-channel television setup – satellite or cable. We used a combination of different products. We sometimes wired Cat 5, sometimes used their existing coax using multistream boxes. Sometimes we ran a single Cat 5, sometimes we had single-stream set-tops, and then multiple Cat 5s, multiple drops.

BBP: The big RBOCs don't want to do it that way because, first of all, they don't trust their personnel. And second, they want to be able to go into any home and see the same install. It's a lot easier to maintain over the years. But how did you do it all so quickly, period?

Bulawa: We basically doubled the size of our field crews and paired them up – one of our own guys with one of the part-time guys. We went looking for installers all over the region, recruiting in cities such as Minneapolis, Sioux Falls, and Billings to find people who had done this before. For two months these guys ran from 6 am to 10 pm. Each crew would get three or four homes a day done and it was wild. During the first 30-day sales period we cut over to fiber and prewired about 600 homes. So installation meant connecting the set-top box, troubleshooting, and teaching customers how to use the set-top.

BBP: What exactly did you do in the prewire phase?

Bulawa: We put in the ONT [optical network terminal], the UPS [uninterruptible power supply], and the network switch, and connected existing inside cable. Sometimes we cut their voice and broadband over and left the home as it



Invite prospective customers to a cookout, show them the product... and sign them up.

If any of your readers are having trouble figuring out what they're going to do with the bandwidth from fiber, have them give me a call and I'll tell 'em. There are places in our community where customers have three HD televisions, 12 Mbps broadband, and will soon have DVR. That's over 40 Mbps in a household today.

was with the television. Then when the IPTV service was ready to launch, we cut in the television, dropped the cable or satellite feed, and had them on all three services.

BBP: Was there anything special about the overall network design because of the low population density?

Bulawa: I think our architecture is pretty much what you'd see elsewhere. Maybe not. We've got a robust optical Ethernet fiber ring that basically encircles the entire territory, giving us the capacity to move the signal in either direction if there's a break.

BBP: Is everything home run back to the central office or local point of presence?

Bulawa: Yes. That's been the strategy of this company since we started with fiber.

BBP: That is common. Why pay for poorly populated splitter cabinets in the field? Fiber is cheap.

Bulawa: It's definitely cheaper than copper.

BBP: So where are you now? Of the 5,500 customers in the region, how many are cut over to fiber?

Bulawa: We are about 40 percent fiber now. The rest of it is copper, some of it is digital loop, some isn't.

BBP: Do you feel you have to move them all over to fiber because you want to deliver the video?

Bulawa: Yes.

BBP: When?

Bulawa: The pressures are different now. The pressure of last year was to get

to market as fast as we could, to retain customers we were in danger of losing. The question now is how we handle the noncompetitive communities and the farm families who want the same service. They say, "Why can't I have what you gave those other towns?"

BBP: Just to be clear, these are stockholders in the cooperative. They're stakeholders and they want theirs.

Bulawa: Yes. And to crystallize the difference, the response to competition really came from the management team – how to deal with it and how aggressively. But the rest of the buildout is pushed by pressure brought to bear on the board of directors, and they bring that pressure to the table. It's a role reversal.

BBP: Are most of your directors local?

Bulawa: Correct. And most are saying "We've got to get my area built out... do it now."

BBP: So how did you finance the build, and how will you in the future?

Bulawa: We have a normal buildout strategy. As stuff gets old it is retired. We use the [USDA Rural Utilities Service Program] as our main funding source when we can't fund a project out of cash flow. Before I got here the cooperative put together a plan to rebuild the plant. That was about seven or eight years ago. We knew that we were going to come into a rebuild cycle. So we got a loan approved to rebuild, in the late '90s. We actually designed the rebuild around fiber. That was the strategy.

BBP: Even in the late '90s?

Bulawa: The original design was Digital Loop Carrier, but the cooperative

submitted a change in 2002 or 2003 before fiber went into the ground.

BBP: What had happened to the video business?

Bulawa: We had cable in a couple of towns, but it was problematic. We shut it off, replacing it by reselling DIRECTV, and then sold that off.

BBP: Many of our readers have had some video experience but it's usually satellite HITS head end from Comcast or a DIRECTV or DISH Network deal. But by the time you get into fiber you can do so much more – video on demand, video games. So what's happening to your staffing?

Bulawa: I think we've got 19 staff in the field. That should be a steady-state answer. They support the service, the repairs and the outside plant building we do during the summer, that kind of stuff.

BBP: What do you see when you look down the road?

Bulawa: If any of your readers are having trouble figuring out what they're going to do with the bandwidth from fiber, have them give me a call and I'll tell 'em. There are places in our community where customers have three HD televisions, 12 Mbps broadband, and will soon have DVR. That's over 40 Mbps household demand today.

BBP: What about businesses?

Bulawa: We have a fair number of people working at home for medical firms, insurance businesses and a company here that does real-time orders for a national fast-food restaurant.

BBP: They service the restaurant's drive-through windows all over the region?

Bulawa: All over the country. You drive up in Los Angeles for instance and you hear "May I take your order?" and it's coming from North Dakota. A computer pops a screen here and it's the entire menu from that part of LA. **BBP**

For More Information

You can reach Derrick Bulawa at Derrick@bektel.com, BEK's website is at www.bektel.com; call 701-475-2361.