That old cliché that “history repeats itself” is definitely true when it comes to the demand for electricity. Verendrye Electric Cooperative and its generation and transmission cooperatives (G&Ts) are continually planning for future growth just like they had to in the early days.

For $3.50 a month, the first members of Verendrye Electric Cooperative received 40 kilowatt-hours of power, and some people thought they would never use that much. Over the years, population growth, combined with all of the conveniences of today’s modern home and high-tech gadgets, has created a need for more sources of electricity and a push for energy conservation.

A similar trend happened six decades ago. When farmers discovered the convenience of receiving electricity from a cooperative, they bought more appliances and used more power. Those that didn’t have power wanted to get it as soon as they could. By 1951, Verendrye Electric had nearly 4,000 members averaging 206 kwh a month, up from 232 members using an average of 89 kwh a month in 1941.

Cooperative leaders from around the state knew they had to do something about the increasing need for electricity, and that the solution should include generating their own power, rather than relying on investor-owned utilities. Power from the Garrison Dam was on its way, but cooperatives were growing quickly and could not wait. Cooperative managers from around the state began talking about building...
their own generating plants around 1945.  

“Cooperatives started out buying power from the investor-owned utilities and they were getting ripped off,” said former Verendrye Electric board member Ralph Birdsall. Birdsall remembers his uncle Leon, also a former board member, and other Verendrye supporters, pushing for cooperative-owned generation. “To say they were enthusiastic about building their own power plant was not a strong enough word.”

In 1949, North Dakota cooperatives formed Central Power Electric Cooperative, a G&T. Rural electric systems across the country were joining together to form G&T cooperatives, in what was dubbed “Giant Power.” The concept involved cooperatives joining together to develop large, regional G&Ts to take advantage of economies of scale to provide low-cost electricity. The concept was

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also a demonstration of a core cooperative principle: cooperation among cooperatives.²

The formation of Central Power was significant to Verendrye Electric, not only because Verendrye leaders pushed for its creation, but also because it led to the construction of a significant source of electricity in Verendrye’s backyard.


The William J. Neal Station was completed in 1952 near Voltaire, just a few miles east of Velva. At the time, it was the largest lignite coal power plant in the United States. On June 4, 1952, a celebration was held to commemorate the opening of the plant. The plant was named after an REA deputy administrator who helped get the project moving.³

North Dakota Sen. Milton R. Young spoke at a ceremony for the William J. Neal Station, near Voltaire, in 1952. The power plant, fueled by lignite coal, was a significant development for electric cooperatives seeking to end their dependence on investor-owned utilities for power.

The ownership of the plant was eventually transferred from Central Power to Basin Electric Power Cooperative in 1973.

“The Neal Plant was significant because it gave cooperatives a critical new supply of electricity and it paved the way for larger and more efficient generating stations,” said Daryl Hill, former manager of media and communications relations for Basin Electric. Basin Electric is a G&T formed in 1961 by Verendrye and other distribution cooperatives. Today, Basin serves 137 cooperatives in nine states.

The Neal plant provided 45 megawatts of power, which the Minot Daily News described as “mammoth,” because it raised the total generating capacity in North Dakota by one-third. Compared to newer plants, it produced a paltry amount of power. In comparison, Basin Electric’s Leland Olds Station near Stanton, had a capacity of 222 megawatts when the first unit went online in 1966, and another 447 megawatts with a second unit there in 1975. Antelope Valley Station, a Basin Electric coal-fired plant, has a capacity of 900 megawatts combined with its two units.

The Neal Plant was closed in 1985 in favor of newer, larger and more efficient plants. It was eventually dismantled, but to honor the early achievement, Verendrye Electric has a special memorial display outside of the Velva office to recognize the pioneering achievement of electricity generation by North Dakota electric cooperatives.

“It’s amazing how the cooperatives got things done in those days,” Birdsall said. “It took a group of strong-minded cooperative supporters to realize we needed our own power generation and to get it done.”

A train brings a 70-ton load of lignite coal into the William J. Neal Station. The plant was the first in North America to use lignite coal. The coal would be dropped into a hopper below and then sent onto a conveyor to be crushed. Once crushed, the coal would ride another conveyor 300 feet to the top of the plant.
A giant transformer overshadows a man in this 1950s photo. This transformer was used to reduce the voltage from 115,000 volts to 41,600 volts to be carried over power lines owned by Verendrye Electric and Otter Tail Power Co.
Verendrye used to encourage members to use lots of electricity.

It was a luxury for the first members of Verendrye Electric to have a few electrical outlets for lights, a refrigerator and a radio. Fast forward 75 years and homes have outlets on nearly every wall to plug in all kinds of appliances and gadgets.

Because of the proliferation of electrical devices, rising energy costs and a nationwide movement to save energy, Verendrye Electric promotes conservation. However, in the early days of the cooperative, the opposite was true. “When Verendrye was new, the members were encouraged to use as much energy as possible because it brought in money that helped the cooperative get on its feet,” said Verendrye Assistant Manager Randy Hauck.

In the early 1950s, Verendrye published a newsletter that proudly listed the members who used the most power. Those who used at least 1,000 kilowatt-hours (kwh) were part of the “1,000 Club.” For the month of February 1950, there were 28 of 2,627 members in the club. The average electricity usage of a member then was 239 kwh. Today the average farm household on Verendrye’s service uses around 1,500 kwh, and several thousand of the 15,000 Verendrye meters record more than 1,000 kwh of monthly usage.

Member Services Representative Rob Orts inspects a member’s high-efficiency water heater and ground source heat pump system. Verendrye encourages energy conservation and offers rebates and special rates for those who install qualifying equipment.
The early newsletters would also publish the “Dog House,” a list of members who didn’t pay their bills on time, and a list of “Early Birds” who were the first 10 to pay their bills. More than 100 members were in the “Dog House” in April 1950.

**ENCOURAGING THE USE OF APPLIANCES**

Today, Verendrye encourages members to purchase specific types of appliances, lighting and heating and cooling systems that are energy efficient. A good example is the water heater program. It provides members with rebates and reduced rates if they purchase water heaters that can be remotely turned off by the cooperative when there is high demand across Verendrye’s system. Peak usage occurs during extremely hot or cold days. Verendrye is able to lower its power bill because it gets a discounted rate from Basin Electric Power Cooperative by participating in the program. The water heaters are large and well insulated, which helps the water stay hot even when the units are turned off for an extended period of time.

“The water heater program has been very popular with our members because it saves them money, but it is also a great tool for
Verendrye Electric used to offer rebates for certain appliances, regardless of their efficiency, as a way to encourage more energy usage.

Verendrye to manage its overall energy load,” Hauck said.

Early members were encouraged to buy appliances, but the motive was to encourage more energy consumption. Verendrye once offered rebates for ranges, refrigerators, dishwashers, freezers, water systems and washers and dryers. In 1963, the cooperative’s rebate for those appliances was $10 to $15 each, depending on the appliance. Advertisements in cooperative publications often encouraged members to purchase electric appliances for Christmas gifts. In 1955, Verendrye had a demonstrator clothes dryer it would lend to members who wanted to see how it worked. They were allowed to have it for up to three days in their home. “You too will agree that the old style clothes line is for the birds,” an advertisement said.

A major milestone in electricity usage came in 1957 when the first electrically heated home in Verendrye’s service was built north of Velva by Lawrence Linrud. The cooperative used the home as a demonstration project before offering an electric heating rate that was lower than the standard rate. By 1964, there were 39 electric heat systems on Verendrye’s service. Today, thousands of Verendrye members, including Wal-Mart, use electric heat.

INCREASING USAGE = DECLINING RATES

From 1951 to 1968 power costs steadily declined. Members paid an average of around 4 cents a kwh in 1950 and less than 2 cents a kwh in 1968. Today, the average residential rate is around 8.5 cents a kwh. Nationwide, the average price of electricity has only increased about two times what it was in 1937.

“Electricity is a great value today, but decades ago, it was so cheap that some people thought we would get to a point where we could charge a flat monthly rate without metering it,” Hauck said.

In 1961, Business Manager Ruben Haga explained why the board was able to approve a significant rate reduction. He wrote that rates increased 15 percent in 1945 because costs for materials had risen when the war ended. However, because sales were strong – increasing from an average of 150 kwh monthly per account in 1945 to 730 kwh in 1961 – rates could be eased.

“With this increase of kwh usage and therefore an increase in revenue, your cooperative has been able to compensate for the lean years and now has established a desirable gain,” Haga wrote.

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Advertisements in the North Dakota REC/RTC Magazine often encouraged cooperative members to purchase more appliances. This ad, appearing in a 1960 issue, was a call to men to buy appliances for their wives for Christmas.
As sales continued to climb, the cooperative had such favorable conditions that in some years in the 1960s capital credit checks totaled more than 20 percent of a member’s bill for the year.

By the 1970s and 80s prices began to climb as cooperatives had to pay for new power plants to meet rising demand for power. Pressure on prices is expected to continue as new environmental rules are placed on power plants and as demand for energy continues to grow nationwide. But because member-owners, not shareholders, are the focus of the cooperative, Verendrye’s leaders will continue to work hard to keep rates as low as possible.

“Electricity sales are necessary for the cooperative to operate, but because we don’t have to worry about making a profit for shareholders, we can focus on striking a balance between maintaining our system and keeping rates as low as possible,” Hauck said.

**WHAT IS A KILOWATT-HOUR?**

Electricity is measured in units of power called watts. It would require nearly 750 watts to equal one horsepower. A kilowatt is the same as 1,000 watts. Electricity use over time is measured in kilowatt-hours (kwh). A kwh is equal to the energy of 1,000 watts working for one hour. Verendrye uses kwh to determine how much electricity a home or business uses. If you use a 100-watt light bulb for 10 hours, you have used one kwh of electricity, or if you run 10 light bulbs at 100 watts each for one hour, you have also used one kwh.