POWERING A NEW TOMORROW



ELECTRIC COOPERATIVE, INC. 2020

ANNUAL REPORT

POWERING A NEW TOMORROW



ABOUT CENTRAL POWER

Central Power Electric Cooperative is a wholesale power supply and transmission cooperative organized in 1949 to generate power for its member rural electric distribution cooperatives.

Central Power today continues to supply the bulk power needs of its members through a backbone system of transmission and subtransmission facilities. The six member cooperatives that make up Central Power combine to serve over 67,607 farms, homes and businesses located in a service area of 25 counties across the central and southeastern third of North Dakota.

Central Power's facilities required to serve the members include 175 delivery points, 25 wholly owned and 6 jointly owned high-voltage transmission stations, and 1473 miles of transmission line interconnected with the Western Area Power Administration, Basin Electric Power Cooperative, and three investorowned utilities. In all, Central Power has a \$358.5 million investment in utility plant.



North Central Electric

Bottineau, ND

Wayne Martian - Manager Jesse Fahnestock - President Joel Brandvold Jean Brandt

Lori Kittleson David O'Connell Stuart Rothe David Tolstad

Jean Brandt assistant secretary/treasurer. kramer





Randy Hauck - Manager Blaine Bruner - President

McLean Electric

Northern

Plains

Shawn Kaylor Maxine Rognlien Kenneth Schild John Warner Robert Wolf

Darcy Klain

Robert Wolf vice president, MINOT

2020 **BOARD OF DIRECTORS**



Northern Plains Electric Carrington, ND

Seth Syverson - Manage Tracy Boe - President Mark Brehm Lori Carlson

Curtis Hanson Bruce Olsen Randall J. Simon David Teigen Curtis Wiesz

Mark Brehm PRESIDENT, CANDO

James Odermann Larry Gessele - President Clarence Behles Troy Presser Rodney Stockdill Troy Presser director, turtle lake

North Central

Capita

Verendrye

McLean

Garrison, ND

Mark Dovle - Manager



Capital Electric

Judy Geier

Bismarck, ND

Paul Fitterer - Manage Sheri Haugen-Hoffart - Presiden Dave Charles Kyle Hilken Rex Hollenbeck

David Straley Kyle Tschosik Deon Vilhauer

Sheri Haugen-Hoffart secretary/treasurer, bismarc



Dakota Valley Electric Milnor, ND

Mark Kinzler - Manager Arden Fuher - Pre Connie Bitz Trish Gehlhar

Blaine Lundgren David Paulson Neil Olerud Kim Rasmusser

Arden Fuher DIRECTOR, EDGLEY

Dakota Valley

MESSAGE FROM THE PRESIDENT



MARK BREHM PRESIDENT

As President of the Board of Directors at Central Power Electric Cooperative, it is indeed my honor and privilege to present the 2020 Annual Report to our membership, friends, and associates. The theme for this year's annual report is "Powering a New Tomorrow" in recognition of all of the significant changes and challenges our industry is facing and

undergoing combined with the major disruption to our economy and our lives as we continue to deal with the current pandemic.

Quoting Martin Luther King Jr. "Our very survival depends on our ability to stay awake, to adjust to new ideas, to remain vigilant and to face the challenge of change." This motivational statement could not possibly be more fitting for the situation we find ourselves in today.

As we close the books on the year 2020 at Central Power, it is indeed an appropriate time to reflect back on the past year and look forward to the year ahead. It is safe to say that 2020 was the most unsettling and difficult year for most everyone in a very long time or likely ever. The year started out strong with a roaring economy, the continued return of the oil industry and economic growth, and a general sense of optimism. This did not last long though as things started to take a turn for the worse as the first case of the novel coronavirus was discovered in the US on January 21st. Then on January 30th, the World Health Organization declared the coronavirus outbreak to be a "public health emergency of international concern." On January 31st, the Presidential Administration declared the coronavirus outbreak to be a public health emergency in the United States, placing guarantines on Americans who had recently been to certain parts of China. CDC officials said it was the first quarantine order issued by the federal government in over 50 years. On February 11th, the WHO announced a formal name for the coronavirus: COVID-19.

Most everyone was keeping a watchful eye on the pandemic developments but the reality of it didn't really sink in until organizations across the country began cancelling in-person venues. The gravity of the situation really hit home for Central Power during a conference call of the Board of Directors and senior management on March 16th, when the Board felt compelled to cancel the 2020 Annual Meeting. Thinking back to the beginning of 2020, who would have ever thought we would be cancelling the Central Power Annual Meeting planned to be held at the end of March? Unfortunately, there wasn't time to convert the meeting into a virtual format. As you may recall, Central Power and its members took care of the Annual Meeting requirements by mail with member approval of the reports of the officers, directors, and committees as set forth in the 2020 Annual Report; approval of the Notice of Annual Meeting of Members as issued by Central Power Electric Cooperative on March 2, 2020: approval of the 2019 Annual Meeting Minutes as presented; and approval of the Resolutions approved by the Central Power Membership at the 2019 Annual Meeting. Thank you all for your cooperation and willingness to make that happen.

Immediately following the cancelled 2020 Annual Meeting, in response to the uncertainty about the virus and out of an abundance of caution (defined: in an earnest attempt to ensure that any potential danger, risks, or problems are avoided), Central Power management informed all employees that they should not report to work beginning March 26th. This posture stayed in place for what turned out to be 17 workdays, with employees working from home as was possible and only responding to system emergencies. Given the critical nature of the work our employees perform. management deemed it absolutely imperative that we did not allow the pandemic to spread throughout our workforce so that they were available to respond to outages and emergencies. This measure also allowed management to plan for an orderly and safe return of its employees. As we sit today, about thirty percent of our 57 employees have had COVID-19, and fortunately none experienced serious symptoms. As of the time of this writing, no one is currently quarantined and vaccines are on their way.



MID YEAR CAPITAL CREDIT RETIREMENT

In April the Board approved the passing through of the entire patronage retirement from Basin Electric to the members when it was received to provide them assistance with financial challenges they were experiencing from pandemic driven load erosion and collections. The approximately \$941K retirement was received in early May and it represented the balance of Basin's 1993 allocation. This retirement covered the last year a portion of Basin's allocation went directly to the members because of the Wholesale Power Contract Assignment we were under at the time.

GREAT RIVER ENERGY COAL CREEK STATION

And the year kept getting more "interesting" when on May 7th Great River Energy announced that it was planning for the closure of the largest lignite plant in ND, the Coal Creek Station at 1,151MW, in the 2022/2023 time frame. This plant and its associated coal mine, the Falkirk Mine, sit inside our member McLean Electric's service territory and there are hundreds of good paying jobs at the plant and the mine and their closure represents a serious concern for the local economy.

BASIN ELECTRIC/DGC

We continued to closely follow and participate to the extent possible in the activities of our largest resource provider, Basin Electric. With the continued struggle with commodity prices and associated subsidiary losses, it had become readily apparent that a major change would need to take place at the Dakota Gasification Company. And of course the additional slump in commodities resulting from the pandemic stressed DGC even more. For possibly the first time ever, the Basin Electric Board of Directors

requested the presence of the Class A managers at their June 2020 board meeting at East River Electric Power Cooperative's headquarters in Madison, SD. The goal was to bring the managers up to speed on the planning for DGC and to solicit their input on the alternatives the board was considering.

With a plan with a certain amount of flexibility coming into view for DGC, it is really time to refocus our attention to Basin Electric's core mission of providing safe, reliable wholesale power supply to its member systems at as reasonably low a cost as practical. With a new Presidential Administration in place and with the majority of the House and Senate, we are seeing a dramatically quick shift in priorities that will have a dramatic effect on the electric utility industry. With a commitment to rejoin the Paris Climate Accord, establishing a goal of the power sector being carbon-free by 2035, and many industry support services like insurance and banking turning away from coal, our work will be cut out for us. While Basin Electric has done a very admirable job of transitioning towards renewables, we have a long way to go to hope to possibly overcome the enormous hurdles in front of us.

BSC LINEWORKERS SCHOOL BUILDING

In 2020, the Board approved pledging a total of \$50,000 over five years to the Statewide Lineworkers School Building Capital Drive. Central Power will make the contribution to Statewide's recently formed 501(c)3 North Dakota Rural Electric Cooperative Foundation and submit for matching funds from the CoBank Sharing Success Program, the first match of which has already been approved and conveyed.

STRATEGIC PLANNING UPDATE

As the year came to a close, management went over the updates to the May, 2019 Strategic Planning Implementation Tracking Model with updated status progress on the three main goals as follows:

- 1. Move as many additional delivery points off OTP and MDU as practical.
- 2. Explore strategies for collective battery storage implementation if and when feasible.
- 3. Analyze and recommend the use of outposts to efficiently meet Central Power's member outage response and operating efficiency needs. The outpost considerations include 1). moving from a leased outpost facility in Wahpeton to a Central Power owned facility at our new Red River Valley substation when our current lease is up and 2). a new two-man outpost in Bismarck.

YEAR END CAPITAL CREDIT RETIREMENT

At the final board meeting of the year, the Board approved passing through the entire Basin Electric retirement of approximately \$1.6M in patronage capital which comprised the remaining balance of Central Power's member patronage from 1988 and most of 1989, to the members based on each members' total patronage during that time frame.

THANK YOU

In closing and speaking on behalf of the Board of Directors, we could not be more proud that our employees did not miss a beat meeting the members' needs and maintaining and expanding the system while dealing with the pandemic. The Board of Directors is very proud of them and we take our "hats off to them" for their dedication and hard work "Powering a New Tomorrow"!

We also wish to thank our members and all our partners and associates for their support and assistance in meeting the challenges we faced this past year.



REPORT FROM THE GENERAL MANAGER



TOM MELAND, P.E. GENERAL MANAGER

I am pleased to report on the year 2020 at Central Power Electric Cooperative. While I would very much like to present my report in person at our annual meeting, the Board decided it would be appropriate to hold a hybrid meeting consisting of only the

consisting of only the Business Session with one delegate and one

alternate from each of our member cooperatives present, out of an abundance of caution regarding the pandemic. I believe this was a very prudent decision and we are optimistic we will all be able to get together in person at next year's annual meeting.

"When we least expect it, life sets us a challenge to test our courage and willingness to change; at such a moment, there is no point in pretending that nothing has happened or in saying that we are not yet ready. The challenge will not wait. Life does not look back." - Paulo Coelho

Echoing the President's remarks, 2020 was truly a year filled with challenges like no other. It was quite frankly hard to image at the beginning of what appeared to be a normal year filled with optimism what we would be dealing with. The year 2020 could not have turned out more different from most people's expectations than it did. While it was a very difficult year, working through the challenges led to a fair amount of satisfaction.

"Look at a day when you are supremely satisfied at the end. It's not a day when you lounge around doing nothing; it's a day you've had everything to do and you've done it." - Margaret Thatcher

MEMBER RATES

One area that we pay particular attention to and do all we can to keep our members costs as low as practical is our member rates. We are thankful Basin and WAPA held their rates for 2021 and we are pleased to report that the Central Power Base Rate has been reduced. Our 2021 Base Rate reflects a 0.62% decrease in the demand charge going down from \$21.15/kW to \$21.02/kW, as well as a 0.31% decrease in the energy charge going down from 31.82 mills/kWh to 31.72 mills/kWh. Due to budget-to-budget changes from 2020 to 2021, our average member mill rate is forecast to decrease 1.12%, with individual member's decreases ranging from 0.65% to 2.32%. This is great news.

CFC LONG TERM DEBT RATE LOCK

In the August time frame, the Board took an additional step to remove variability from our finance costs by approving the conversion of \$11.4 million of long term debt at CFC which was on a variable rate that resets quarterly, to fixed rates on each of the 8 outstanding CFC notes we had. These loans locked in at interest rates that ranged from 2.63% to 2.74%, effective September 1, 2020. This was a very wise action to avoid future risk and uncertainty.



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WAPA CONTRACTS

The Board passed a resolution approving the Firm Electric Service Contract (FES) 15-UGPR-1015 with WAPA and authorized management to execute Letter Agreement 20-UGPR-62 extendingthe current interconnection, maintenance and replacement provisions of Central Power's existing contract 14-06-600-334A through June 1, 2021, while the replacement contracts 15-UGPR-2015 and 15-UGPR-3015 can be negotiated and put into effect. These two contracts were not able to be completed by the December 31, 2020 expiration date of the current contract.

Central Power also completed its part in the replacement of the Native American Bill Crediting Contracts with the Turtle Mountain Band of Chippewa, the Spirit Lake Sioux Tribe, and the Three Affiliated Tribes and our members that serve them along with Basin and WAPA.

SYSTEM IMPROVEMENTS

While our Manager of Operations & Engineering will outline the details of our system improvements this past year in his report, I want to point out that in spite of dealing with the pandemic, our engineers, right of way personnel, and craftsmen have been extremely effective at completing a tremendous amount of high quality work on our transmission system. In addition, our contractors were also highly productive and we wish to thank them for their efforts in enhancing our transmission system. Indeed our Total Utility Plant increased \$22.7 million from 2019 to 2020 bringing the total figure to \$358.5 million (\$388.8 million if you include all of the Contribution-In-Aid we have received over the years).

Our crews and contractors were able to complete four more of the eight Basin approved transmission service mitigation projects bringing our total to five competed and three left to complete in 2021. Basin has reimbursed us under this agreement for approximately \$6 million to date with an additional \$9 million left in the three remaining projects. This approximately \$15 million total contribution from Basin will certainly help by offsetting nearly half of the \$33 million in Central Power total project costs for these eight projects. Basin's benefit is avoiding paying for both SPP and MISO transmission service for certain loads that are on the SPP/MISO seam as we are moving these loads entirely out of the MISO system and exclusively into SPP. Indeed, Basin should realize a payback with a modest return for their investment in these projects in a 10 year time frame.





One particularly challenging productivity issue for us this past year was the certification requirements for operating a crane. We use two large digger/ derrick trucks for substation construction and while our journeymen linemen have an industry exemption for doing transmission line work, that exemption was deemed to be no longer applicable when our crews were erecting substation steel. We found ourselves heading into the pandemic without anyone certified and with no training companies. nor us for that matter, wanting to engage in a several day training and testing process. We were able to finally complete the training in June and fortunately many of our people were certified in time for the significant amount of substation construction work at Hay Creek in Bismarck the latter part of the year.

This past year, to facilitate work which we requested WAPA perform at their Jamestown 230x115/41.6kV substation to increase redundancy and reliability, we loaned out and installed our 115-12.5kVkV mobile substation to continue to provide service to our Jamestown distribution substation during WAPA's replacement of their two 115-43.8kV transformers with new larger units.

As the President pointed out, we continue to work on the strategic goal of looking to build as

many of our remaining substations off of the IOU's transmission systems. We have been busy working on system planning, system load-flow analysis, and rate impacts of building a significant amount of additional load off of the Otter Tail Power and MDU transmission lines. We have developed plans and alternatives along with cost estimates and associated rate impacts and have shared the results with the member managers and the Board of Directors. We will continue to discuss these potential projects and look for opportunities to possibly move forward with them in the coming years as the Board deems appropriate.

At the end of 2019, the Board approved the procurement of a 100' reach track mounted bucket truck along with a used semi-tractor and a power folding gooseneck trailer to transport the new unit. We took delivery of the track bucket in February of 2021. As we headed into 2021, we began the process of planning for a new Central Power owned outpost building at our Red River Valley substation site in Wahpeton to replace our leased outpost facility prior to our lease expiring in May 2023; and a new outpost/mobile substation storage facility at our Hay Creek substation site in Bismarck. The size and quantity of vehicles and equipment that we will house at these locations along with planning for future needs will necessitate that these be relatively large buildings.

While it occurred in February of 2021. I would be remiss if I did not comment on the rolling blackouts that were imposed by SPP. While we continue to benefit financially from our membership in SPP, we are extremely disappointed that they allowed their footprint to get to the point that it did – forced to impose rolling blackouts of load throughout their members' systems. Granted it was a very unusual weather event but we need the system to be planned for just those types of events. I have no doubt that there will be considerable analysis of the event and of the policies that got us there as we move forward. As my staff and I have dedicated ourselves to making our transmission system as robust as practical to avoid outages to the utmost extent possible, I have to admit having "no notice" rolling outages forced on us by WAPA responding to SPP's dictates was the most disappointing event in my 26 years at Central Power.

In closing, I would like to point out how truly blessed I am to have the best group of member distribution cooperative managers a G&T manager could ever hope for. They are intelligent, wise, dedicated, and concerned about their coops and their G&T's, but most of all for their consumer-owners who ultimately pay all the bills. I cannot say enough good things about these fine gentlemen.

I also wish to thank our dedicated and hardworking employees that operate and maintain and improve our transmission system, the Central Power Board of Directors for their steadfast leadership and oversight, the member systems for their unwavering support, the wonderful employees of Basin Electric that are working through the many challenges that Basin faces, and all of our other associated entities that were most helpful in our effort of "Powering a New Tomorrow".



YEAR IN REVIEW



MICK KOSSAN, C.P.A. MANAGER OF ACCOUNTING & FINANCE

The following report summarizes the highlights of Central Power's operations over the past year.

MEMBER ENERGY PURCHASES

Member energy purchases of 2,468.2 GWH in 2020 demonstrated a 4.0 % decrease from 2019, ending a trend of increasing member purchases for the previous three years. Mild winter temperatures, a pandemic, and a dryer than normal harvest season all contributed to the decrease in member sales. Central Power's peak demand for 2020 was set in January at 455.7 MW, well below the all-time peak of 483.3 MW realized in January of 2019.

RATES

In 2020, Central Power, on behalf of its members, spent \$136,989,262 on wholesale power purchases. This amounts to almost 84 percent of Central Power's annual operating expense in 2020. Adding in Central Power's cost of operation, including \$261,747 in MISO transmission tariff payments for the portion of Central Power's WAPA allocation delivered in Otter Tail Power's pricing zone in MISO, and Central Power's members paid an all-inclusive average of 61.90 mills per kWh in 2020. This represents a 0.9% decrease from 2019's all-inclusive average rate of 62.44 mills per kWh.

POWER SUPPLY

Central Power's two power supply resources, the Western Area Power Administration (WAPA) and Basin Electric Power Cooperative (Basin), comprise almost 84 percent of Central Power's operating expenses. Approximately 13 percent of Central Power's power supply is federal hydropower produced from the main-stem Missouri River system and marketed by WAPA. The balance, or 87 percent, of our power is supplied from Basin's coal-fired plants in North Dakota and Wyoming, along with a broad portfolio of natural gas peaking and cooperative owned and contracted renewable energy sources. Central Power's WAPA/Basin resource mix is 10/90 without the Minot Air Force Base's WAPA allocation and respective load.

In 2020, Central Power paid an average power supply cost of 54.54 mills per kWh, down from 55.44 mills per kWh in 2019, a decrease of 1.6%. 2020's average cost of purchased power is comprised of a 59.40 mill average rate from Basin Electric combined with a 22.73 mill average rate from WAPA.

WESTERN AREA POWER ADMINISTRATION

The 13 percent federal hydropower resource is secured through a firm Contract Rate of Delivery (CROD) contract with WAPA that is close to being extended through 2050. WAPA implemented a 5 mill decrease in the drought adder component in 2017, and totally eliminated the drought adder in 2018. This resulted in a decrease in WAPA power costs from 31.95 mills in 2016, to 27.21 mills in 2017, and to 22.86 mills in 2018. The elimination of the drought adder was netted against a small increase in the base rate component in 2018. The WAPA power rate components have remained unchanged since 2018.

BOARD OF DIRECTORS



President Northern Plains Electric Cooperative Carrington, ND



Robert Wolf, Sheri Haugen-Hoffart, Vice President Secretary/Treasurer **Capital Electric Cooperative** Velva . ND Bismarck, ND

Tom Meland, PE

25 yrs • General Manager



Arden Fuher, /Assistant Secretary/Treasurer Director North Central Electric Cooperative **Dakota Valley Electric Cooperative** Bottineau, ND Milnor, ND



Troy Presser, Director Mclean Electric Cooperative Garrison, ND



Mark Sherman, PE 23 yrs • Manager of Operations and Engineering



18 yrs • Manager of Accounting & Finance



Mick Kossan, CPA



40 yrs • Senior Accountant Employee Benefits Administrator



9 yrs • Info Mgmt. Specialist



Lindsay Lawson



Lance Haugen 42 yrs • Operations
Superintendent



Alex D'Ambrosio Todd Ahmann, CCNA 20 yrs • Network

Chris Fazardo

5 vrs • Assis. Net-



Ryan Callahan, PE **Eric Popinga** 14 yrs • Chief nsmission Enginee 8 yrs • Real Estate



18 yrs • Chief Substation Enginee

Wil Fogarty

6 yrs • Substation



Drew Saari

2 yr • Substation





Stephen Vilipski

Matt Enget

10 yrs • Lineman



Jeremy Fix

6 yrs • Lineman

Rick Koenig 13 yrs • Lineman Foreman



Brady Kjos 9 yrs • Lineman Foreman

Tanner Kavadas

6 yrs • Lineman



Kelly Bossert



Cody Bronson

4 yrs • Lineman



Leon Nieters 35 yrs • Lineman Foreman

Distribution Substation Crew



Cody Vrem 15 yrs • Electrician



Construction

Coordinator

Chuck McNicholas Josh Larson Sheldon Baglien 42 yrs • Lineman 14 yrs • Electrician



Joel Culbertson

4 yrs • Assis. Compliance Officer

Relay & Electronics

Crew

29 yrs • Electrician



Ethan Shoberg Doug Ferguson Kent Vollmer 6 yrs • Electrician 20 yrs • Electrician

Rolan Bye

10 yrs • Transmission

North Area Transmission

Substation Crew

Line Design Engineer



Matt Haugen

4 yrs • Design Engineer

5 yrs • Electrician



South Area

Substation Crew

Randy Brunner

15 yrs • Substation

Engineer

Randy Miranowski 12 yrs • Electrician



Support

Personnel

Evan Burckhard

2 yr • CAD

27 yrs • Mechanic Equipment Operator 41 yrs • Equipment Operator/Welder



Kandace

D'Ambrosio

21 yrs • Executive Assistant / HR &

Warehouse

13 yrs • Warehouse Foreman

Chad Brown 16 yrs Warehouseman



11 yrs Warehouseman



Kellen Longie 2 yr • Lineman



Robert Belle 2 yr • Lineman



Dan Tveito

2 yr • Lineman



4 yrs • Lineman

Ron Bartsch 10 yrs • Electrician



Briam Hamski 3 yrs • Electrician



6 yrs • Electrician

Jonas Sova 5 yrs • Electrician





Tom Magnuson 29 yrs • Electrician



Blake Wallstrum 3 yrs • Electrician



3 yrs • Electrician



Billy Grotluschen Wynn Woytassek 4 yrs • Electrician 3 yrs • Electrician



Shannon Cree 4 yrs • Mechanic Equipment Operator

Debra Hoffarth, Pringle and Herigstad, PC



Attornev

Guttormson



6 yrs • Procurement Manager

Transmission Line Crews



SHERI HAUGEN-HOFFART SECRETARY/TREASURER

The year 2020 operations resulted in a net margin of \$9,210,463. An operating margin of \$2,941,554 combined with interest income of \$16,571, patronage allocated from Basin Electric Power Cooperative, Inc. of \$5,949,180, and other patronage dividends of \$303,158 make up this net margin.

Central Power's member energy purchases were down 4.0% from the prior year, while twelve month total demand purchases were down 4.3%, or over 197 MW, from 2019 as well. Not one of Central Power's six members realized an increase in total demand or energy purchases in 2020 over the previous year. Member sales for the year totaled \$152,780,162 million, which was \$7,756,133 less than the previous year. Purchased power, which accounts for 84% of total expenses, totaled

\$136,989,262 million, which was \$8,176,309 less than the previous year.

Central Power's total cost of service for 2020 was \$163,296,830. Transmission operations and maintenance costs totaled \$5,771,946, which was \$395,091 more than 2019, and distribution operations & maintenance costs totaled \$3,223,293, which was \$255,368 more than last year as well. Administrative and general expenses were \$2,177,459, a decrease of \$79,455 from 2019. Depreciation expense in 2020 totaled \$8,419,745, an increase of \$664,523, while taxes were \$219,223, which was \$3,393 more than 2019. Interest expense was \$6,490,924 in 2020, an increase of \$269,133 over the previous year. Other deductions were \$4,978 in 2020. Total non-power expenses were \$1,419,801 more than last year.

The Board of Directors continues the practice of using a rotating Financial Review Committee each month to review the financial expenditures of the cooperative. This committee then reports to the full board.

The accounting system is kept in accordance with the uniform system of accounts prescribed by RUS and audited by a certified public accounting firm each year. Eide Bailly LLP completed an audit of the 2020 financial statements and found those documents accurate and in accordance with Generally Accepted Audit Principles and in compliance with Government Auditing Standards.



YEAR IN REVIEW - OPERATIONS & ENGINEERING



MARK SHERMAN, P.E.
MANAGER OF OPERATIONS
& ENGINEERING

Central Power's Operations & Engineering Department employees worked on and completed many projects in 2020, despite the very difficult circumstances and unknowns imposed by the COVID pandemic. I would like to extend a sincere thank you and job well done to our dedicated and talented employees that completed many substation and transmission line projects along with expending considerable effort performing maintenance activities on our Member Cooperative's \$358.5M investment in Central Power's plant.

LONG TERM INVESTMENTS

Central Power made significant system additions and modifications in 2020, which include:

- Agate 115kV Substation "A" Frame Replacement Central Power employees replaced the substation's "A" frame deadend structures after crews discovered significant rust degradation near the bottom of the structures that were rusting from the inside out.
- Bergen Distribution Substation Fire Damage Rebuild Central's crews rebuilt much of the Bergen substation after a regulator fire caused significant damage to

the substation's regulator area and building.

- Bowdon Junction to Robinson 43.8kV Transmission Line Rebuild A 22 mile transmission line rebuild was completed on this line that was originally built in 1954. This project included replacing all structures, hardware, and conductor.
- Carrington to Pingree Junction 43.8kV Transmission Line Rebuild The six-mile transmission line rebuild included replacing all structures, hardware, and conductor.
- Gackle 43.8kV Transmission Line Construction Central Power's crews completed framing and setting the structures for the five mile "West Gackle Transmission Line" and a line contractor installed the conductor to complete the project.
- Hankinson Ethanol Substation North Bay Construction Central Power's crews completed a 10/14 MVA substation bay addition to accommodate the ethanol plant's incrementally increasing load. The new equipment also provides redundancy to allow substation maintenance activities without taking the ethanol plant off-line.
- Harvey 230kV Substation, Breaker 445
 replacement 43.8kV breaker 445 was replaced due to ongoing maintenance problems.
- Hay Creek 115-43.8kV Transmission Substation Construction Central Power crews completed a significant portion of the Hay Creek 115kV Substation's construction in 2020 with nearly all outdoor work being done by the end of the year. Central Power electricians built the control/protection panels in our Minot panel shop and they began installing the panels in early 2021. We will complete the final transmission line work in April/May 2021 and will complete Central Power made significant system additions and modifications in 2020, which include:

commissioning work shortly thereafter. The substation will be a major transmission system improvement in the Bismarck area and will consist of a 115kV ring bus, dual 115-43.8kV transformers, a 43.8kV low side consisting of a segregated main bus along with a transfer bus, and a 115-12.5kV transformer that will provide an alternate source to the Bismarck East distribution substation.

- Jamestown West Distribution Substation Construction – Central Power's crews completed the new 43.8-13.2kV, 14 MVA Jamestown West distribution substation.
- Max to Benedict 43.8kV Transmission Line Construction – A new ten-mile long 43.8kV transmission line was built to connect Central Power's Benedict and Crooked Lake distribution substations directly to Central Power's Max 115kV Transmission Substation in order to improve reliability.
- McClusky Substation Pad and Fence Expansion – We expanded the substation pad and installed a new larger fenced area to allow for safer access to substation components during maintenance and repair activities.
- Minot Trinity 43.8kV Transmission Line Construction — Central Power crews completed framing and setting the structures for the one and one half mile "Minot Trinity Transmission Line" and a line contractor installed the conductor to complete the project. This transmission line will serve the new Minot Trinity substation that is planned for construction in 2021.

- Towner Distribution Substation
 Replacement The replacement Towner
 Distribution Substation was built on the
 site of our former Towner 115kV Breaker
 Station after WAPA completed a new
 115kV breaker station nearby.
- WAPA Jamestown to Jamestown West to Pipestem 43.8kV Transmission Line Construction – This 10.3 mile transmission line provides a Central Power owned transmission path from WAPA's Jamestown substation to Central Power's new Jamestown West Distribution Substation, Pipestem Substation, Buchanan Substation and eventually to other Central Power substations located further north.
- Wyndmere 43.8kV Breaker Station –
 Control/Protection System Replacement
 and Breaker Addition Central Power
 employees designed, built, programmed,
 and replaced the control system at the
 Wyndmere Breaker Station along with
 adding a new breaker on the line to the west
 of the station to improve system reliability.



MAINTENANCE SUMMARY

Central Power performed the following activities as part of our ongoing maintenance program:

- Battery Bank Testing and Maintenance Battery bank testing and maintenance was performed at Agate 115kV, Barlow 115kV, Benno Corner, Berthold 115kV, Bismarck 71st Ave. Bismarck North 115kV, Bismarck East, Bottineau Southeast 115kV, Central's headquarters, Circle K, Denbigh, Dickey Breaker Station, Douglas Creek 115kV, Dunning 115kV, Esmond 115kV, Fullerton, Gackle Breaker Station, Grand View Pines, Haram, Harvey 230kV, Hoving 115kV, Josephine, Long Lake Breaker Station, Ludden, Max 115kV, MinnDak, Minot South, Minot Southwest 115kV. Neal 115kV. Penn. Pleasant Lake, ProGold, Raub, Red River. Renville Breaker Station, Rolette 115kV, Roseglen, Round Lake, Rolla 115kV, Rugby 115kV, Ruthville 115kV, Ruthville East 115kV, Thorne 115kV, Underwood 230kV, Wolf Creek Breaker Station, and Wyndmere Breaker Station.
- Protective Relay Testing Central Power tested the protective relays at Bottineau SE 115kV, Hankinson 230kV, Raub 115kV, Thorne 115kV, and the Wyndmere Breaker Station.
- Seven Year Distribution Substation
 Maintenance Central Power crews
 performed seven year distribution
 substation maintenance at Amoco, Bergen,
 Cando Center Bay, Coleharbor, Dickey,
 Forman, Jud, LaMoure, McClusky, Mercer,
 Milnor, Milnor North, Minot South North Bay,
 Pipestem, Willow City, and Wolf Creek.

- Transmission Line Patrol **Maintenance** – Line patrol was completed throughout the entire Central Power system in 2020. Central Power's line crews performed line patrol activities on all Central Power 115kV lines, the Wilton 230kV line, and all transmission lines in Capital's service territory. All remaining Central Power transmission lines were patrolled by the local member distribution cooperative (Dakota Valley, McLean, North Central, Northern Plains, or Verendrye) and a maintenance/repair list was created from the line patrol reports.
- Transmission Substation Maintenance - Central Power performed transmission substation maintenance at the Agate 115kV. Barlow 115kV, Berthold 115kV, Bottineau 115kV, Bottineau SE 115kV, Dickey OCB, Douglas Creek 115kV, Dunning 115kV, Elliott 115kV, Esmond 115kV, Fullerton OCB, Gackle OCB, Hankinson 230kV, Harvey 230kV, Hoving 115kV, Long Lake OCB, Mallard 115kV, Max 115kV, Minot SW 115kV, Neal 115kV, North Bismarck 115kV, Rangeley OCB, Renville Corner, Rolette 115kV, Rolla 115kV, Rugby 115kV, Rugby 230kV, Ruthville 115kV, Ruthville East 115kV, Thorne 115kV, Underwood 230kV, Wahpeton 230kV, Ward 230kV, and Wyndmere OCB substations.

WHAT'S AHEAD?

Central Power has a very aggressive construction schedule in 2021, which includes the following projects:

 Bottineau 115-12.5kV Distribution Substation South Bay Addition – Central Power is developing plans for a 115-12.5kV, 14 MVA Distribution Substation Bay within

the Bottineau SE 115kV transmission substation. This substation bay will provide redundancy for the existing Bottineau distribution substation.

- Buchanan to Pingree 43.8kV Transmission Line Construction – This 15 mile transmission line is part of a larger group of Jamestown area projects to provide a looped source to Central Power distribution substations between the WAPA Jamestown 230kV substation and the WAPA Carrington 115kV substation. The substations that will be served from this transmission loop include Buchanan, Jamestown West, Pingree, and Pipestem with the ability to also serve toward Pettibone. Robinson, and Woodworth.
- Esmond 115kV Substation Control System
 Replacement The Esmond control system
 will be replaced as part of a planned equipment
 replacement rotation. The project will involve
 designing, building, programming, and replacing
 the existing control and protection system
 with modern microprocessor based relays and
 control equipment.
- Gackle Distribution Substation Replacement

 The Gackle distribution substation was built in
 1961 and the structures are a compact design with very tight clearances between substation components. Central Power plans to build a modern replacement for the Gackle distribution substation.
- Garrison Distribution Substation Voltage
 Conversion & Transmission Line
 Construction McLean requested that the
 Garrison distribution substation be converted
 to 115kV so that it is in phase with the Douglas
 Creek substation to simplify distribution system
 load transfers. Load transfers between the two
 substations must currently be completed by deenergizing the loads to be transferred before reenergizing them from the alternate source. The
 project will involve construction of approximately
 three miles of new transmission line along with

- construction of a modern substation on the north side of Garrison.
- Harvey 230kV to Harvey Distribution Substation 43.8kV Transmission Line Rebuild – We plan to rebuild the two and one half mile long 43.8kV transmission line between the Harvey 230kV substation and the Harvey distribution substation. The line was originally built in 1953.
- Harvey Distribution Substation Replacement

 The Harvey distribution substation was built in
 1971 and the structures are a compact design with very tight clearances between substation components. Central Power plans to build a modern replacement for the Harvey distribution substation.
- Mercer Distribution Substation Tap Line Rebuild – Central Power's Mercer substation is served from Otter Tail Power Company's Underwood to Bowdon Junction 43.8kV transmission line. Otter Tail notified Central Power that they will rebuild the Turtle Lake to Mercer section of this 43.8kV transmission line in 2021. Central Power plans to replace our 1952 tap switches and rebuild our five-structure tap line into the substation during Otter Tail's construction process.
- Minot SW 115kV Substation to Radar to Velva 43.8kV Transmission Line Rebuild – Plans are being made to rebuild the 10.5 mile long Minot SW to Radar 43.8kV transmission line that was originally built in 1960 and the 8 mile long Radar to Velva line that was originally built in 1956.
- Minot Trinity Distribution Substation
 Construction The Minot Trinity Distribution
 Substation will be built next to the new Trinity
 Hospital. This substation will serve the new
 hospital and other growing loads in the area,
 will help to offload the existing Minot South
 Distribution Substation, and will provide
 additional system redundancy

- Mohall Foundation & Regulator Pad Replacement – Several foundations and the regulator pad are frost jacking and will be replaced.
- Pingree Junction to Pingree 43.8kV transmission line rebuild – We will rebuild the 21-mile long 43.8kV transmission line between the Pingree Junction and the Pingree distribution substation that was originally constructed in 1965.





- ProGold Distribution Substation Control System Replacement – The ProGold substation control system will be replaced as part of a planned equipment replacement rotation. The project will involve replacing the existing control and protection system with modern microprocessor based relays and control equipment.
- Ryder Distribution Substation
 Replacement The Ryder distribution
 substation was built in 1971 and the
 structures are a compact design with
 very tight clearances between substation
 components and a very small fenced area.
 Central Power plans to build a modern
 replacement for the Ryder distribution
 substation.
- Ward 230kV to Horizon 43.8kV
 Transmission Line Rebuild We will rebuild
 the two-mile long 43.8kV transmission line
 between the Ward 230kV substation and
 the Horizon distribution substation due to
 contingency loading limitations.
- Wing 43.8kV Tap 3 Way Switch Replacement and Motor Operator Installation – Central Power will replace the existing Wing Tap switches as part of a motor operator installation project that will allow Capital to restore power more quickly during contingencies.
 - Planning For Future Improvement Projects Our staff will continue planning and coordinating for our very significant 2021 system improvement projects and will expend significant effort to plan for our 2022 construction schedule.

STATISTICS

| Member Power Cost Statistics | 2020 | 2019 | | 2017 | 2016 | 2015 | 2014 |
|---|-------------|-------------|--------------|--------------|-------------|-------------|------------|
| ENERGY PURCHASES (GWH) | | | | | | | |
| Capital Electric Cooperative | 386.7 | 387.1 | 386.1 | 366.1 | 353.0 | 344.0 | 339.7 |
| Dakota Valley Electric Cooperative | 650.6 | 684.1 | 688.8 | 674.4 | 648.5 | 631.8 | 624.0 |
| McLean Electric Cooperative | 137.6 | 140.6 | 138.4 | 135.5 | 131.7 | 132.9 | 142. |
| North Central Electric Cooperative | 234.0 | 266.8 | 258.6 | 247.1 | 232.1 | 261.5 | 288. |
| Northern Plains Electric Cooperative | 468.8 | 473.9 | 480.6 | 466.1 | 457.9 | 459.9 | 482. |
| Verendrye Electric Cooperative | 522.7 | 549.4 | 544.2 | 532.5 | 519.1 | 518.0 | 543. |
| VEC - Minot Air Force Base | 67.8 | 69.3 | 69.7 | 69.2 | 68.9 | 70.8 | 72. |
| TOTAL PURCHASES (GWH) | 2,468.2 | 2,571.2 | 2,566.3 | 2,490.8 | 2,411.1 | 2,418.9 | 2,492. |
| TOTAL REVENUE FROM MEMBERS | \$152.8 | \$160.5 | \$156.2 | \$157.7 | \$150.7 | \$139.8 | \$141. |
| COST TO MEMBERS (Avg Mills/kWh) | | 62.4 | 60.9 | 63.3 | 62.5 | 57.8 | |
| (Average Mills Before Power Bill Credits) | 61.9 | 62.4 | 61.7 | 63.3 | 58.4 | 56.7 | 55. |
| Central Power Statistics | | | | | | | |
| PURCHASED POWER COSTS | \$137.0 | \$145.2 | \$146.7 | \$138.2 | \$125.9 | \$127.4 | \$106. |
| Average mills/kWh total cost | 54.5 | 55.4 | 55.1 | 57.8 | 56.2 | 50.5 | 49. |
| WAPA - Cost (mills/kWh) | 22.8 | 22.8 | 22.9 | 27.2 | 32.0 | 31.8 | 32. |
| Basin - Cost (mills/kWh) | 59.4 | 60.2 | 59.7 | 62.4 | 60.0 | 53.3 | 52. |
| Percentage power cost of member revenue | 89.7% | 90.4% | 93.9% | 87.6% | 83.5% | 91.2% | 75.19 |
| DEBT | | | | | | | |
| Long-term debt | \$249.2 | \$219.1 | \$215.5 | \$183.8 | \$150.9 | \$123.2 | \$98. |
| Interest expense | \$6.5 | \$6.2 | \$5.2 | \$3.9 | \$3.4 | \$2.8 | \$2. |
| TOTAL MARGINS | \$9,210,463 | \$8,283,383 | \$14,431,126 | \$14,431,126 | \$5,342,551 | \$6,492,374 | \$5,173,32 |
| MEMBER EQUITY | 32.3% | 31.8% | 28.8% | 27.5% | 25.6% | 25.8% | 27.79 |

CAPITAL CREDIT RETIREMENTS

| Years | Amount | | | | |
|-------------------------------|-------------|--|--|--|--|
| 1958-1994 | \$3,956,164 | | | | |
| 1995-1997 | 0 | | | | |
| 1998 | 800,000 | | | | |
| 1999 | 460,000 | | | | |
| 2000 | 321,000 | | | | |
| 2002 | 981,066 | | | | |
| 2003 | 976,446 | | | | |
| 2004 | 1,046,885 | | | | |
| 2005 | 1,300,103 | | | | |
| 2006 | 1,330,330 | | | | |
| 2007 | 1,365,562 | | | | |
| 2008 | 1,086,708 | | | | |
| 2009 | 114,355 | | | | |
| 2010-2013 | 0 | | | | |
| 2014 | 34,101 | | | | |
| 2015-2016 | 0 | | | | |
| 2017 | 161,215 | | | | |
| 2018 | 142,094 | | | | |
| 2019 | 205,397 | | | | |
| 2020 | 2,552,934 | | | | |
| Refunds to Date: \$16,834,361 | | | | | |

2020 TOTAL COST OF SERVICE



CENTRAL POWER 2020 DELIVERY POINT DATA

| Substation | KVA | KWH | Annual | Annual |
|---|------------------|--------------------------|-------------------|----------------|
| | Capacity | Purchased | Maximum Demand | Load Factor |
| DAKOTA VALLEY AREA | | | | |
| Cogswell | 7,000 | 9,280,666 | 2,681 | 39.5 |
| Dickey | 7,000 | 6,340,715 | 1,681 | 43.1 |
| Dome Lisbon | 4,200 | 6,632,698 | 1,914 | 39.6 |
| Dwight | 7,000 | 1,826,473 | 588 | 35.4 |
| Edgeley | 7,000 | 19,109,713 | 4,614 | 47.3 |
| Ellendale | 7,000 | 10,523,340 | 2,658 | 45.2 |
| Forbes | 3,500 | 3,726,681 | 977 | 43.6 |
| Forman | 6,250 | 7,437,428 | 2,049 | 41.4 |
| Fredonia | 3,500 | 5,777,335 | 1,527 | 43.2 |
| Fullerton Gackle | 7,000 3,500 | 4,880,133 6,908,998 | 1,503 1,786 | 37.1 44.2 |
| Geneseo | 3,500 | 9,442,512 | 2,508 | 43.0 |
| Hankinson | 7,000 | 10,967,053 | 2,969 | 42.2 |
| Hankinson Ethanol - South | 14,000 | 69,101,639 | 10,891 | 72.4 |
| Hankinson Ethanol - North (New) | 14,000 | 3480236 | 9,302 | 4.3 |
| Jud | 1,000 | 2,358,525 | 643 | 41.9 |
| Kulm | 7,000 | 11,294 | 20 | 6.5 |
| LaMoure | 7,000 | 8,145,320 | 2,039 | 45.6 |
| Ludden | 28,000 | 88,026,455 | 15,468 | 65.0 |
| Millarton | 7,000 | 13,466,949 | 3,470 | 44.3 |
| Milnor | 7,000 | 14,762,254 | 4,084 | 41.3 |
| Milnor, North | 5,250 | 13,830,006 | 3,082 | 51.2 |
| MinnDak #1-North Bay MinnDak #2-South Bay | 22,400 22,400 | 45,772,909 60,654,321 | 7,426 11,695 | 70.4 59.2 |
| Mooreton | 4,200 | 8,653,496 | 2,333 | 42.3 |
| Oakes North | 7,000 | 5,319,605 | 1,422 | 42.7 |
| Oakes 24.9, West | 11,200 | 10,059,687 | 2,546 | 45.1 |
| Omega | 7,000 | 13,670,150 | 2,504 | 62.3 |
| Pomona, FPLE | | 493,982 | 540 | 10.4 |
| Pro Gold #1 - West | 69,400 | 524,655 | 19,275 | 0.3 |
| Pro Gold #2 - East | 69,400 | 154,615,502 | 20,394 | 86.5 |
| Red River | 14,000 | 10,556,951 | 3,417 | 35.3 |
| Tyler | 3,500 | 10,873,653 | 2,826 | 43.9 |
| Wyndmere, North | 2,800 | 5,927,498 | 1,674 | 40.4 |
| Wyndmere, South | 3,500 | 7,438,791 | 1,925 | 44.1 |
| NORTH CENTRAL AREA | 14.000 | 46 400 200 | 2.440 | E4.0 |
| Antler Barton | 14,000 2,500 | 16,182,382 4,536,963 | 3,419 1,318 | 54.0 39.3 |
| Bottineau SE | 14,000 | 18,819,336 | 5,414 | 39.3 |
| Dome Maxbass | 4,200 | 7,532,917 | 1,950 | 44.1 |
| Dunseith | 7,000 | 15,173,716 | 4,157 | 41.7 |
| Forfar | 7,000 | 10,025,873 | 2,027 | 56.5 |
| Haram | 14,000 | 5,976,991 | 1,527 | 44.7 |
| Kelvin | 7,000 | 9,775,999 | 2,784 | 40.1 |
| Kramer | 5,250 | 10,771,842 | 2,607 | 47.2 |
| Lansford | 5,250 | 6,041,745 | 1,658 | 41.6 |
| Long Lake | 14,000 | 8,628,230 | 2,488 | 39.6 |
| Metigoshe | 14,000 | 15,997,574 | 5,295 | 34.5 |
| Mohall | 7,000 | 10,395,534 | 2,457 | 48.3 |
| Newburg Renville Corner | 5,250 14,000 | 14,541,103 2,301,298 | 3,154 929 | 52.6 28.3 |
| Rolette | 7,000 | 7,695,423 | 2,097 | 41.9 |
| Sherwood | 7,000 | 10,523,362 | 2,773 | 43.3 |
| Souris | 14,000 | 10,093,112 | 2,092 | 55.1 |
| Turtle Mountain | 10,500 | 24,322,867 | 6,314 | 44.0 |
| Westhope | 7,000 | 7,041,221 | 1,652 | 48.6 |
| Wiley | 7,000 | 5,279,640 | 1,238 | 48.7 |
| Willow City | 2,800 | 5,655,827 | 1,628 | 39.7 |
| Wolf Creek | 14,000 | 23,326,649 | 5,988 | 44.5 |

| McLEAN AREA Benedict Blue Flint Butte (OTP Balfour) | 3,500 14,000 4,200 3,500 | 7,389,597 42,939,232 141,290 | 1,954 5,856 | 43.2 |
|---|-----------------------------------|------------------------------------|----------------|--------------|
| Benedict Blue Flint Butte (OTP Balfour) | 14,000 4,200 | 42,939,232 | | 43.2 |
| Blue Flint Butte (OTP Balfour) | 14,000 4,200 | 42,939,232 | | |
| Butte (OTP Balfour) | 4,200 | | | 83.7 |
| | | 141,290 | 40 | 40.4 |
| Coal Creek | 3.500 | 7,796,962 | 1,341 | 66.4 |
| Coleharbor | | 7,380,227 | 2,081 | 40.5 |
| Crooked Lake | 3,500 | 6,121,913 | 1,609 | 43.4 |
| Douglas Creek | 14,000 | 9,307,734 | 2,191 | 48.5 |
| Garrison | 7,000 | 13,520,825 | 3,621 | 42.6 |
| Lewis & Clark 12.5 | 5,250 | 7,729,353 | 1,611 | 54.8 |
| Mercer | 2,800 | 3,252,596 | 1,532 | 24.2 |
| Raub | 14,000 | 10,831,234 | 2,250 | 55.0 |
| Roseglen | 14,000 | 13,586,691 | 3,000 | 51.7 |
| Turtle Lake | 3,500 | 4,455,027 | 1,805 | 28.2 |
| Washburn | 2,100 | 3,157,854 | 732 | 49.2 |
| NORTHERN PLAINS AREA | | | | |
| Amoco | 2,100 | 1,026,684 | 750 | 15.6 |
| Balta | 14,000 | 7,068,009 | 2,113 | 38.2 |
| Barlow Buffalo 12.5 | 7,000 | 4,956,124 | 1,447 | 127.4 |
| Belcourt | 14,000 | 27,757,084 | 6,952 | 45.6 |
| Bisbee | 5,000 | 7,913,128 | 2,164 | 41.8 |
| Bowdon | 5,250 | 11,569,517 | 2,786 | 47.4 |
| Brantford | 4,200 | 10,262,239 | 2,657 | 44.1 |
| Buchanan | 7,000 | 6,631,880 | 2,273 | 33.3 |
| Cando - Center Bay | 7,000 | 10,156,240 | 3,660 | 31.7 |
| Cando - South Bay | 7,000 | 13,202,016 | 3,633 | 41.5 |
| Cando Industrial - N. Bay | 7,000 | 12,394,015 | 2,608 | 54.3 |
| Carrington 12.5 | 14,000 | 23,617,879 | 5,829 | 46.3 |
| Carrington Industrial | 14,000 | 44,962,933 | 7,367 | 69.7 |
| Churches Ferry | 7,000 | 5,108,600 | 1,790 | 32.6 |
| Dome Cathay | 4,200 | 5,902,786 | 2,095 | 32.2 |
| Dome Orrin Esmond | 4,200 4,200 | 4,891,321 5,532,983 | 2,182 1,340 | 25.6 47.1 |
| Fessenden | 7,000 | 9,816,503 | 2,707 | 41.4 |
| Fort Totten | 5,250 | 8,190,047 | 1,875 | 49.9 |
| Glenfield | 5,250 | 8,272,664 | 2,316 | 40.8 |
| Jamestown | 14,000 | 32,120,143 | 6,775 | 54.1 |
| Josephine | 10,500 | 12,045,153 | 4,477 | 30.7 |
| Kensal | 5,250 | 11,090,405 | 2,790 | 45.4 |
| Lallie | 7,000 | 5,820,167 | 1,457 | 45.6 |
| Leeds 12.5 | 5,250 | 10,800,679 | 2,818 | 43.8 |
| Maddock | 14,000 | 10,857,140 | 4,787 | 25.9 |
| Medina | 3,500 | 6,932,495 | 1,898 | 41.7 |
| New Rockford | 5,250 | 7,693,852 | 1,986 | 44.2 |
| Penn | 7,000 | 13,435,524 | 2,277 | 67.4 |
| Pettibone | 7,000 | 4,697,759 | 2,415 | 22.2 |
| Pingree | 3,500 | 8,791,268 | 2,483 | 40.4 |
| Pipestem | 14,000 | 19,739,811 | 6,145 | 36.7 |
| Pleasant Lake | 7,000 | 15,771,073 | 2,887 | 62.4 |
| Robinson | 3,500 | 4,042,114 | 957 | 48.2 |
| Rock Lake | 3,180 | 4,667,784 | 1,069 | 49.8 |
| Rolla | 5,250 | 10,482,885 | 2,740 | 43.7 |
| Round Lake | 10,500 | 11,834,810 | 4,345 | 31.1 |
| Rugby | 14,000 | 11,070,483 | 3,185 | 39.7 |
| Tuttle | 5,250 | 2,575,830 | 673 | 43.7 |
| Wolford | 7,000 | 5,160,218 | 1,588 | 37.1 |
| Woodworth | 7,000 | 7,367,807 | 2,456 | 34.2 |

SERVICE AREA TRANSMISSION SUBSTATIONS

29,792,514

18,910,140

32,719,796

14.337.297

12,279,837

2,748,485

13.663.032

4,215,488

5,793,126

10,966,193

6 905 099

16,496,102

5,972,764

14.090.488

39.811.589

37,800,899

23,764,974

13.845.779

35,137,460

34,408,746

13.773.759

11,597,246

11,855,206

45,273,993

12,185,083

595.728

8,172,543

8.947.947

16.925.815

10,032,078

1,666,088

11,420,964

10.320.381

24,820,566

8,956,300

46.853.156

48.506.019

9,781,313

4.302.059

39,048,539

2,436,251

2,362,195

44.581.329

27,052,536

24,898,360

33,967,211

1.830.220

11,301,442

3,405,850

4,947,271

20.242.563

1,772,582

20,526,066

4,224,596

247.665

238,464

317,760

41.596

5.653

3.473

2,232

2.861

2,320

2 069

3.472

6.755

5.670

3,571

3.420

2,574

6,719

2,647

2,390

4.436

1865.8

3,159

2.413

2,526

10.934

10.948

1,328

10.595

7,614

7,544

1,745

6.117

636

1,523

206

37.0

45.8

32.3

42.4

48.0

40.6

51.4

32.8

42.3

34.2

32.4

37.8

31.8

31.7

23.6

21.6

17.6

30.8

16,800

14.000

7.000

14,000

14,000

7.000

7.000

5,250

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3.500

5,250

3,500

7.000

3,500

14,000

5,250

10 500

14,000

2,800

37.300

20.000

22,400

3.500

20,000

1,680

7,000

20.000

14,000

14,000

1,000

5,000

1,500

5,250

14.000

7,000

14,000

2,500

Air Base South - North Bay

Air Base South - South Bay

Berthold - South Bay

Berthold - North Bay

Des Lacs

Slenburn Granville

incoln Valley

linot, East - North Bay

Ainot, North - South Bay Minot, North - North Bay

Minot, South - North Bay

Minot, West - North Bay

Prairie Winds ND 1

Neal 12.5

Rangeley

Surrey

/elva

Voltaire Apple Creek

Towner (new)

ismarck East

ismarck North

Circle K

rickson

Goodrich

Horizon I

McClusky

Menoken

iverview South Washington

Sterling

Ecklund, FPLE

Wilton Wind II

Baldwin Wind

Polarware/(OTP McClusky)

1offit

incoln

Grandview Pines

smarck 71st Avenue

Minot, Southeast -North Bay

Minot, Southeast -South Bay Minot, West - South Bay

onetree Minot, NDSU

| | Substation | Transformer Owner | KV | Total KVA Capacity |
|--------|--------------------------------|-------------------|----------------------|--------------------|
| | Agate | CPEC | 115/69 | 46,700 |
| | Barlow | CPEC | 115/41.6 | 46,700 |
| Annual | Bottineau, OTP | OTP | (2)115/41.6 | 42,400 |
| Load | Bottineau, Southeast | CPEC | 115/69 | 56,000 |
| Factor | Carrington, WAPA | CPEC | 115/41.6 | 46,700 |
| | Devils Lake, OTP | OTP | 115/41.6 | 56,900 |
| 39.5 | Devils Lake, WAPA | WAPA | 115/41.6 | 20,000 |
| 51.9 | Dunning | CPEC | 115/41.6 | 46,700 |
| | Dunning | CPEC | 115/60 | 74,667 |
| 66.1 | Dunning | CPEC | 115/60 | 74,000 |
| 47.1 | Edgeley, WAPA | WAPA | 115/69 | 20,000 |
| 50.1 | Edgeley, WAPA | WAPA | 115/41.6 | 15,000 |
| 14.1 | Ellendale, MDU | MDU | 230/115 | 112,000 |
| 54.5 | Ellendale, MDU | MDU | 115/41.6 | 46,700 |
| 42.0 | Elliott | CPEC | 115/41.6 | 28,000 |
| 44.3 | Esmond | CPEC | 115/69 | 25,000 |
| 36.4 | Forman, OTP | OTP | 230/115/41.6 | 140,000 |
| 54.0 | Forman, WAPA | WAPA | 115/69 | 30,000 |
| 38.1 | Forman, WAPA | WAPA | 69/41.6 | 12,500 |
| | Hankinson, OTP #1 | CPEC | 230/41.6 | 56,000 |
| 47.7 | Hankinson, OTP #2 | CPEC | 230/41.6 | 41,600 |
| 40.2 | Harvey | CPEC | 230/115/41.6 | 140,000 |
| 34.0 | Hoving | CPEC | 115/41.6 | 28,000 |
| 46.3 | Jamestown, OTP | OTP | (2) 345/115/41.6 | 224,000 |
| 67.3 | Jamestown, WAPA | WAPA | (2) 230/115 | 400,000 |
| 39.0 | Jamestown, WAPA | WAPA | (2) 115/41.6 | 29,400 |
| 47.8 | Kenmare, MDU | MDU | 115/57 | 30,000 |
| 44.3 | Leeds, WAPA | WAPA | 115/69 | 40,000 |
| 49.4 | Logan, BEPC | BEPC | 230/115 | 200,000 |
| 50.1 | Mallard, Xcel | CPEC | (2) 115/41.6 | 93,400 |
| 48.0 | | CPEC | | |
| 46.0 | Max Neal | CPEC | 115/41.6 115/41.6 | 46,700 |
| | | | | 46,700 |
| 51.4 | Oakes, OTP | OTP | 230/41.6 | 33,600 |
| 37.3 | Rolette | CPEC | 115/69/41.6 | 56,000 |
| 76.9 | Rolla | CPEC | 69/41.6 | 7,000 |
| | Rolla | CPEC | 115/69 | 70,000 |
| 52.5 | Rugby, WAPA Rugby, East OTP | WAPA OTP | 115/41.6 230/115 | 20,000 125,000 |
| | Rugby, East OTP Ruthville | CPEC | 115/41.6 | 56,000 |
| 27.4 | Ruthville East | CPEC | | · · |
| 42.7 | | | 115/41.6 | 74,000 |
| 43.6 | SW Minot | CPEC | 115/41.6 | 93,000 |
| 33.7 | SW Minot | CPEC | 115/41.6 | 93,000 |
| | Thorne | CPEC | 115/69 | 70,000 |
| 10.2 | Underwood | CPEC | 230/41.6 | 44,800 |
| 41.3 | Wahpeton, OTP | OTP | (2) 230/115/41.6 | 280,000 |
| 48.8 | Washburn, WAPA | WAPA | 230/41.6 | 41,667 |
| | Wishek, MDU | MDU | 230/115 | 112,000 |
| 36.6 | Wishek, MDU | MDU | 115/41.6 | 30,000 |
| 40.5 | Ward Transmission | CPEC | 230/115 | 125,000 |
| 48.9 | Ward Transmission | CPEC | 115/41.6 | 50,000 |
| 50.6 | Ward Transmission | CPEC | 230/115/41.6 | 140,000 |
| 27.7 | SERVICE A | REA CIRCU | IT RDEAL | FP STATIC |
| 27.7 | SERVICE A | MEA CIRCU | TI DILLAR | CER STATE |

| CEDVICE | Λ DE Λ | CIDCILIT | | CTATIONS |
|---------|------------------------|----------|---------|----------|
| SERVICE | AKEA | CIRCUIT | DREAKER | STATIONS |

| Substation | KV | CIRCUIT BREAKERS |
|---|------|------------------|
| Benedict | 41.6 | 1 |
| Dickey | 69 | 1 |
| Carrington, OTP | 41.6 | 3 |
| Fullerton | 69 | 1 |
| Gackle | 41.6 | 1 |
| Jamestown NW, OTP | 41.6 | 1 |
| Long Lake | 69 | 1 |
| Rangely | 41.6 | 1 |
| Renville Corner | 60 | 1 |
| Rugby | 115 | 1 |
| Sykeston, OTP | 41.6 | 1 |
| Washburn, OTP | 41.6 | 3 |
| Wolf Creek | 69 | 1 |
| Wyndmere | 41.6 | 3 |
| Wyndmere | 41.6 | 3 |
| CPEC Circuit Breakers in FOREIGN STATIONS | | |
| Edgeley, WAPA | 115 | 1 |
| 101 SCADA OPERATED LINE SWITCHES | | |
| Transmission Substations Canacity | | 2 200 424 |

POWERING A NEW TOMORROW

| | Capital | Dakota Valley | McLean | North Central | Northern Plains | Verendrye | Total or Av |
|--|------------------------|--------------------|--------------------|----------------------|-----------------------|-----------------------|------------------------|
| | Сарітаі | Dakota valley | IVICLEAN | Notur Central | Northern Flams | verendrye | erage |
| | | | | | | | |
| Statement of Operations | | | | | | | |
| Operating Revenue | \$39,364,028 | \$53,137,204 | \$15,064,196 | \$23,722,619 | \$42,982,811 | \$51,313,071 | \$225,583,929 |
| Operating Expenses | 33,464,624 | 45,960,121 | 12,271,851 | 18,417,833 | 34,627,285 | 44,214,861 | 188,956,575 |
| Depreciation, Taxes, Interest & Other | 5,711,721 | 5,477,537 | 2,291,341 | 4,507,990 | 7,029,280 | 6,118,049 | 31,135,918 |
| Total Cost of Electric Service | \$39,176,345 | \$51,437,658 | \$14,563,192 | \$22,925,823 | \$41,656,565 | \$50,332,910 | \$220,092,493 |
| Operating Margins | 187,683 | 1,699,546 | 501,004 | 796,796 | 1,326,246 | 980,161 | 5,491,436 |
| Non - Operating Margins | 4,135,543 | 3,079,697 | 604,250 | 934,387 | 2,556,360 | 3,378,965 | 14,689,202 |
| Total margins | \$4,323,226 | \$4,779,243 | \$1,105,254 | \$1,731,183 | \$3,882,606 | \$4,359,126 | \$20,180,638 |
| Balance Sheet (Assets) | | | | | | | |
| Utility Plant | \$137,148,462 | \$115,797,477 | \$46,187,244 | \$96,302,052 | \$144,063,954 | \$132,446,070 | \$671,945,259 |
| Reserve for Depreciation | 42,612,509 | 31,134,645 | 12,238,904 | 36,122,516 | 60,611,112 | 37,127,047 | 219,846,733 |
| Net Utility Plant | \$94,535,953 | \$84,662,832 | \$33,948,340 | \$60,179,536 | \$83,452,842 | \$95,319,023 | \$452,098,526 |
| Other Property and Investments | 24,795,190 | 44,011,811 | 8,476,983 | 16,875,393 | 33,318,766 | 37,711,998 | 165,190,14 |
| Current and Accrued Assets | 9,230,691 | 19,722,412 | 5,900,834 | 11,162,124 | 21,067,275 | 17,989,122 | 85,072,458 |
| Deferred Debits | 378,241 | 624,332 | 717,656 | 179.522 | 725,700 | 655,847 | 3,281,298 |
| Total Assets | \$128.940.075 | \$149,021,387 | \$49,043,813 | \$88,396,575 | \$138,564,583 | \$151,675,990 | \$705,642,423 |
| | | | | | | | |
| Liabilities | | | | | | | |
| Margins and Equities | \$53,948,520 | \$67,256,599 | \$16,631,329 | \$29,670,926 | \$52,701,203 | \$54,751,690 | \$274,960,267 |
| Long - Term Debt | 65,886,531 | 67,161,487 | 29,213,855 | 50,136,653 | 70,543,935 | 71,562,330 | 354,504,79 |
| Current and Accrued Liabilities | 7,037,364 | 8,917,277 | 3,134,081 | 5,890,151 | 8,626,197 | 10,308,981 | 43,914,05 |
| Deferred Credits (operating reserves) | 2,067,660 | 5,686,024 | 64,548 | 2,698,845 | 6,693,248 | 15,052,989 | 32,263,314 |
| | \$128,940,075 | \$149,021,387 | \$49,043,813 | \$88,396,575 | \$138,564,583 | \$151,675,990 | \$705,642,423 |
| Other Statistics Average number served: All Residential (Any Irrigation) All Commercial All Other (For Resale) | 19,075 1,899 130 | 5,925 672 83 | 3,653 398 36 | 5,990 1,584 31 | 10,269 1,409 21 | 14,140 2,246 46 | 59,052 8,208 347 |
| Total | 21,104 | 6,680 | 4,087 | 7,605 | 11,699 | 16,432 | 67,607 |
| | | | | | | | |
| kWh Sales | | | | | | | |
| All Residential (Any Irrigation) | 233,261,687 | 133,442,355 | 56,338,146 | 137,473,048 | 243,909,587 | 221,371,412 | 1,025,796,23 |
| All Commercial | 134,304,266 | 504,318,985 | 69,377,416 | 79,220,279 | 196,689,436 | 268,352,084 | 1,252,262,466 |
| All Other (For Resale) | 2,377,229 | 773,679 | 5,988,135 | 4,271,033 | 5,835,249 | 82,603,320 | 101,848,64 |
| Total | 369,943,182 | 638,535,019 | 131,703,697 | 220,964,360 | 446,434,272 | 572,326,816 | 2,379,907,346 |
| Revenues | | | | | | | |
| All Residential (Any Irrigation) | \$24,828,431 | \$14,901,611 | \$7,502,171 | \$13,326,629 | \$24,821,873 | \$23,231,519 | \$108,612,234 |
| All Commercial | 13.825.728 | 38.031.107 | 6,716,263 | 9,870,412 | 17,487,393 | 24,467,826 | 110,398,729 |
| All Other (For Resale) | 281,671 | 106,460 | 735,007 | 477,258 | 437,443 | 3,480,602 | 5,518,44 |
| Total | \$38,935,830 | \$53,039,178 | \$14,953,441 | \$23,674,299 | \$42,746,709 | \$51,179,947 | \$224,529,404 |
| | | | | | | | |
| Other Statistics | | | | | | | |
| Miles of Transmission Line | | | | | | | |
| Central's Transmission Line | | | | | | | 1,473 |
| Miles of Distribution Line | 2,754 | 4,665 | 1,798 | 3,287 | 6,721 | 4,604 | 23,828 |
| Consumers Served per Distribution Mile | 7.66 | 1.43 | 2.27 | 2.31 | 1.74 | 3.57 | 2.84 |
| Peak MW & month purchased from Central Power | 81.3/June | 99.7/January | 24.8/December | 55.0/February | 88.4/January | 115.6/January | 455.7/Januar |
| Revenue per kWh Sold | \$0.1052 | \$0.0831 | \$0.1135 | \$0.1071 | \$0.0958 | \$0.0894 | \$0.0943 |
| kWH Sold per Consumer | 17,530 | 95,589 | 32,225 | 29,055 | 38,160 | 34,830 | 35,202 |
| Annual Revenue per Consumer | \$1,845 | \$7,940 | \$3,659 | \$3,113 | \$3,654 | \$3,115 | \$3,32 |
| Annual Revenue per Distribution Line Mile | \$14,139 | \$11,370 | \$8,317 | \$7,203 | \$6,360 | \$11,116 | \$9,42 |















Touchstone Energy[®] is an alliance of local, consumer owned utilities around the country, committed to providing superior service at affordable rates to all customers, large and small.



OUR MISSION

Central Power Electric Cooperative, Inc. exists to assist its member-systems.

To carry out our mission, we will:

- Provide safe, reliable, and economical electric power supply
- Serve as a unifying force among our membership
- Perform those functions that can most efficiently be provided as a united effort as requested by our member-systems

In carrying out its mission, Central Power will adhere to the ideals of consumer ownership and cooperative principles, where the member-consumer and our employees are placed first in determining policies, procedures and practices.