# WELCOME TO THE 2023 ANNUAL MEETING



# Kandiyohi Power Cooperative annual meeting

Jon Brekke

Vice president & chief power supply officer

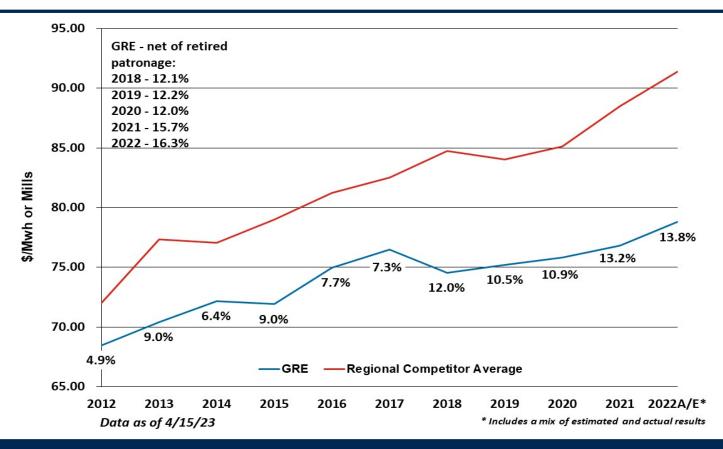


## **Great River Energy**

- ▶ 27 member-owner cooperatives
  - 1.7M people
  - \$3.8B total assets
  - \$1.1B revenue
- ▶ 547 employees
- ▶ 3,100 MW generation
  - 960 MW wind
- ▶ 4,300 + miles of transmission lines
- Governance
  - 22-member board of directors
  - 26 member CEOs

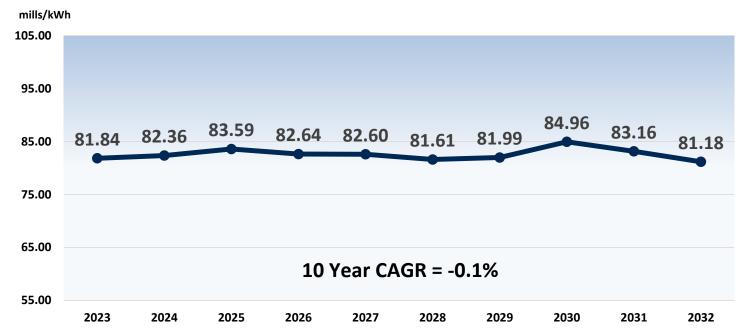


# **GRE** vs competitor average rates



### Stable financial forecast

#### GRE bundled rates 2023-2032



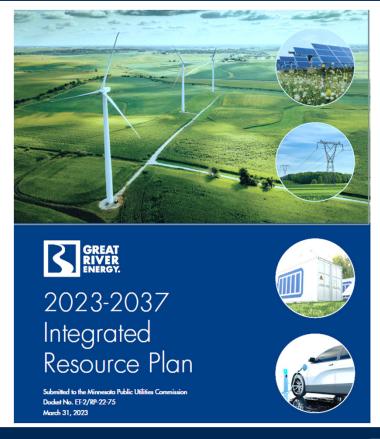
# 2022 highlights

- ▶ \$25M patronage capital
- ▶ \$38M bill credits
- Strong credit ratings affirmed
- Sold Coal Creek Station
- 866 MW wind under development
- Regional transmission investments
- Midwest AgEnergy sale

- Great Place to Work® Certified
- Corporate equality index perfect score (DEI)
- Healthiest 100Workplaces in AmericaHall of Fame
- Beyond the Yellow Ribbon company

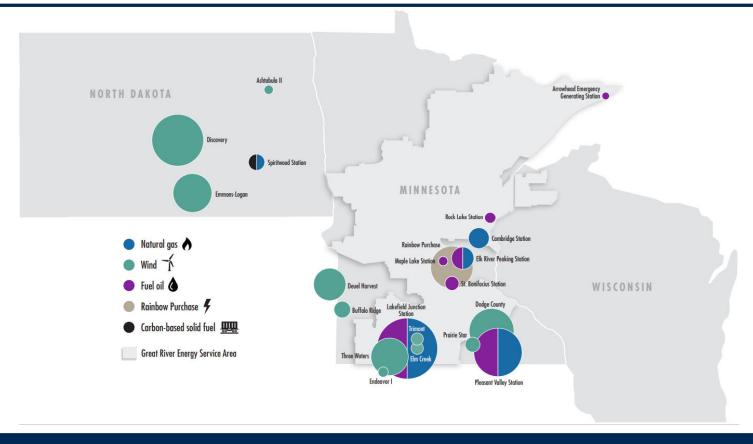


# **GRE** integrated resource plan

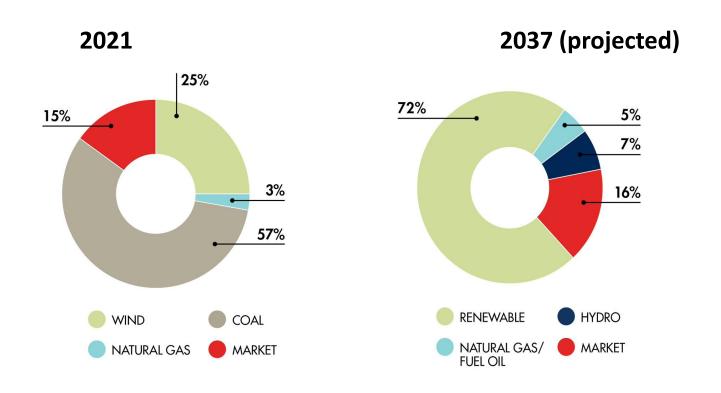




# Power supply resources



# Power supply energy transition



### Portfolio overview



### Strong capacity position

- 1,400 MW peaking resources
- Rainbow power purchase agreement
- 200 MW Manitoba Hydro



### **Energy supply**

- 1,800 MW wind resources by 2025
- 400 MW in N.D. delivered on the DC line
- 500 MW Rainbow energy purchase agreement
- Natural gas hedges



### Member resources

- Renewable member resource option
- Demand side management



Market as battery



# Carbon free by 2040 legislation

### Minnesota requirements

- ▶ 60% carbon free by 2030
- ▶ 90% carbon free by 2035
- ▶ 100% carbon free by 2040



- \* Allows use of RECs to offset carbon
- \* Credits for carbon free generation in the market

### Portfolio outlook 2040

### **Capacity**

- Natural gas / oil peaking plants
- Wind
- Demand side management
- Energy storage
- Biomass

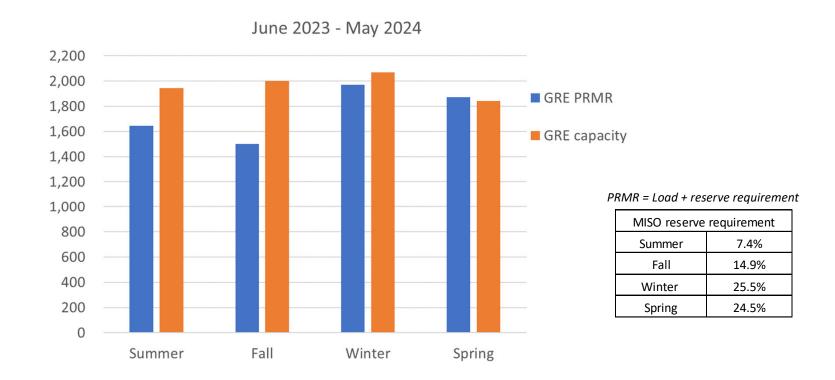
### Energy

- Wind
- Energy storage
- **Biomass**
- Natural gas hedges

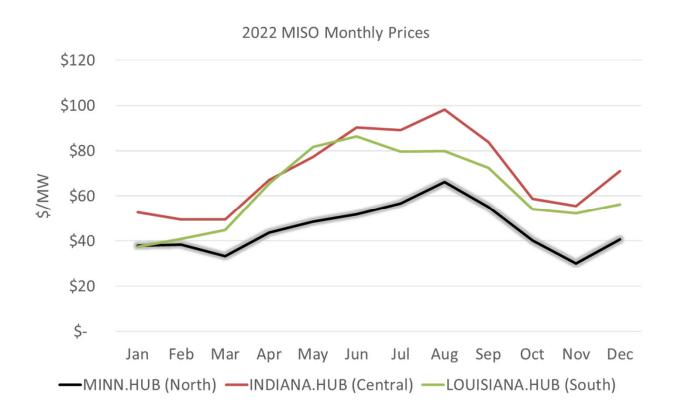
# Carbon-free compliance

- **60%** wind
- 10% market
- ▶ 10% renewable member resources
- 20%
  - Hydro
  - Biomass
  - Solar

# MISO capacity (GRE shared pool)



# MISO day-ahead prices - 2022



# Thank you





# KANDIYOHI POWER COOPERATIVE -

2022 Year in Review



# AFFORDABILITY & RELIABILITY CONCERNS

- Growing demand for electricity as other sectors of the economy are electrified.
- Decreasing electricity supply due to the retirement and insufficient replacement of existing generation.
- Supply chain challenges.
- Permitting delays that prevent new electric infrastructure from being built.

#### Energy Improvement in Rural and Remote Areas (IIJA)

- \$1 billion through 2026 (\$200m/year x 5 years)
- Topic area 1: community-scale demonstrations
  - Federal cost share of \$5-\$10m
  - 4-8 awards
- Topic area 2: large-scale demonstrations
  - Federal cost share of \$10-\$100m
  - 3-20 awards
- Nonprofit cost share: 20%
- FOA issued on March 1
- 40103 Grid Resilience R&D (state is the applicant)
  - Innovative transmission, distribution, or generation projects
  - Up to 40 awards anticipated
  - 50% cost share
  - Concept papers were due Jan. 13
- 40101(D) Formula Grants to States
  - Prevent outages and enhance resilience of electric grids
  - Minnesota: \$6m per year for 5 years
  - 30% cost share for small utilities (sell < 4 million MWhs/year)
  - Each state establishes its own process, priorities

#### Rural Energy for America Program (REAP)

- Increased funding for next 3-5 years
- Applications are on a continuous basis (April 1 cutoff)
- 40% grant / 60% match
- Grant awards: \$2,500 minimum / \$1 million maximum
- Renewable energy systems and energy efficiency improvements
- Can be combined with the ITC/PTC
- Like to see all costs justified with quotes and financial modeling

#### Cooperative Transition Fund (IRA Section 22004)

- \$9.7 billion in total funding to be distributed over the next 10 years
- Eligibility electric cooperatives that are or have been RUS borrowers, or serve a predominantly rural area, or wholly or jointly owned subsidiaries of such cooperatives
- Loan and grant program (renewables, CCUS, BESS, nuclear, transmission efficiency)
- 25% grant up to \$970 million for any one entity
- Stackable with the ITC/PTC
- In the comment period
- Hope to begin making awards during FY 2023 (before September 30)

#### Energy Improvement in Rural and Remote Areas

- Eligible uses:
  - · Overall cost-effectiveness of energy generation, transmission, or distribution systems;
  - Siting or upgrading transmission and distribution lines;
  - Reducing greenhouse gas emissions from energy generation by rural or remote areas;
  - Providing or modernizing electric generation facilities;
  - · Developing microgrids; and
  - Increasing energy efficiency.

#### Forgivable Loans for Clean Energy Projects (IRA Section 22001)

- \$1 billion in total funding
- Purposes: wind, solar, hydropower, biomass, geothermal, or BESS
- Up to 50% of the loan may be forgiven
- Loan interest rate = municipal rate (3-4% currently, depending on maturity date)
- In the comment period
- FOA issuance date TBD

## INFLATION REDUCTION ACT PROGRAMS

Home Insulation or Window Replacement

Air Source **Heat Pump** 

**Water Heating** 

**Energy Star Appliances** 

**Electric Vehicles** 

**Residential Solar** 

**Battery Storage** 

















30% Tax Credit on projects of \$1,200.00

Up Front discounts of up to \$1,600 for basic Weatherization (Income Qualified)

30% Tax Credit of project up to \$2,000

Up to \$8,000 towards **ASHP** installation (Income Qualified)

30% Tax Credit of Air **Source Heat Pump** install up to \$2,000

Up to \$1,750 towards **ASHP Water Heater** (Income Qualified)

Up to \$840 for Electric Stove

Up to \$840 for Air **Source Heat Pump** Dryer

Up to \$7,500 for qualifying new EVs

Up to \$4,000 for used EVs

30% Federal Tax Credit

30% Federal Tax Credit

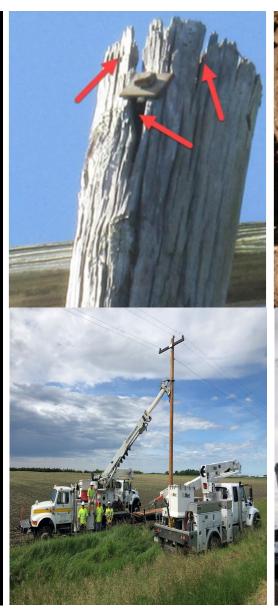
# **OPERATIONS HIGHLIGHTS**

**Total poles inspected - 1,114 (4.5%)** 

Total poles rejected and in need of replacing in 2023 – 79

**Rejection rate – 7.2%** 

System is now almost 64% underground







# OPERATIONS HIGHLIGHTS

New Services - 80

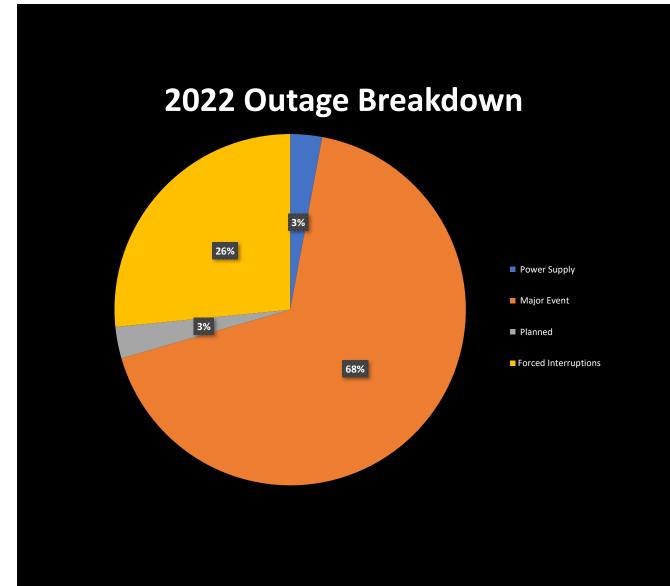
Retired & Removed Services - 14

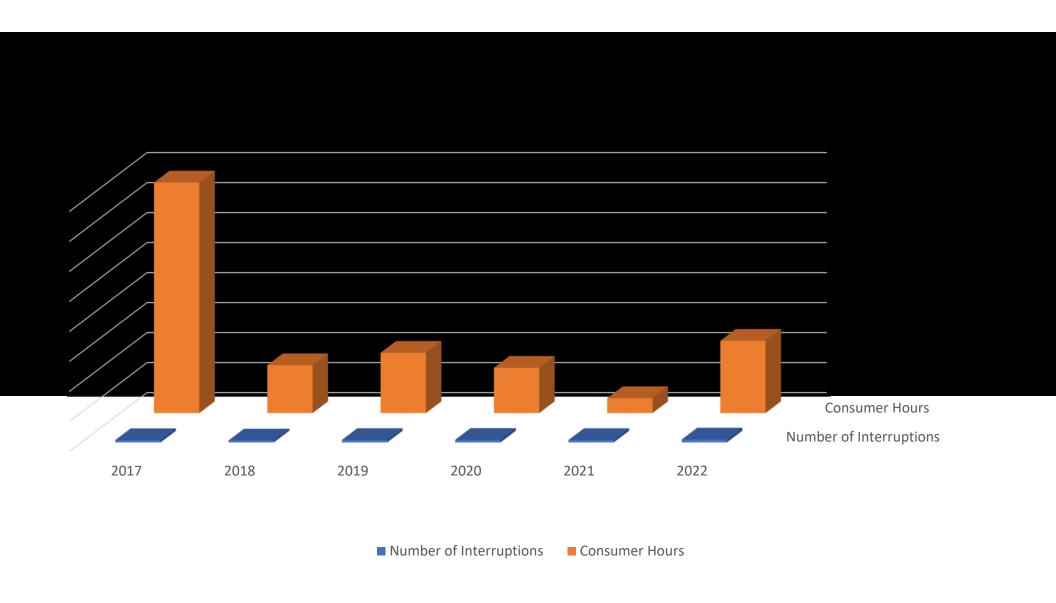
ASAI (Average Service Availability Index) – 99.992%

Dealing with many struggles in the supply chain we were still able to finish projects in a timely manner

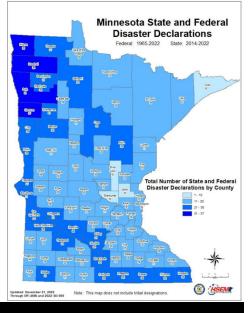
# CAUSES OF FORCED INTERRUPTIONS

POWER SUPPLY	19.45%
WEATHER	10.92%
CAUSE UNKNOWN	2.05%
MATERIAL/EQUIPMENT FAULT	1.87%
MOTOR VEHICLE	1.56%
SQUIRREL	1.24%

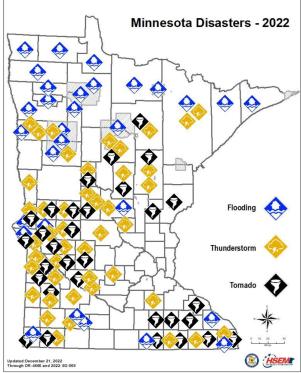


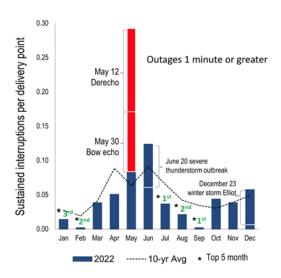


### **Disaster History in Minnesota**



- 16 Federal Disaster in the Past 12 years
- 69 state disaster since 2014





### Major outage event trends



- MOEs use statistical measures to identify events outside normal distribution
  - Bow echoes, derechos, and ice and windstorms are major risks
- ▶ MOE frequency increasing
  - Prior to 2011, 1.0 MOE every 2.5 years
  - Since 2011, 1.7 MOEs per year
- ▶ MOE duration increasing
  - Prior to 2011, MOE SAIDI was 3.8 minutes
  - Since 2011, MOE SAIDI increased to 9.0 minutes



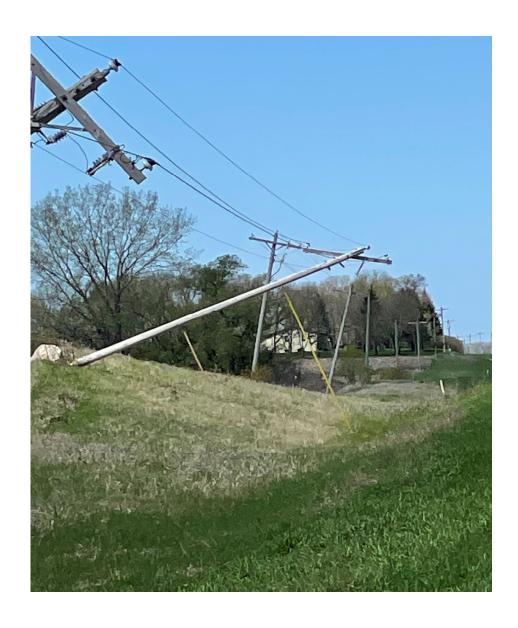
# MAY 12<sup>TH</sup> STORM

Total number of members affected with a power interruption 4480

**Total broken poles 12** 

Multiple conductors down system wide

Maximum outage duration 25 hours and 49 minutes



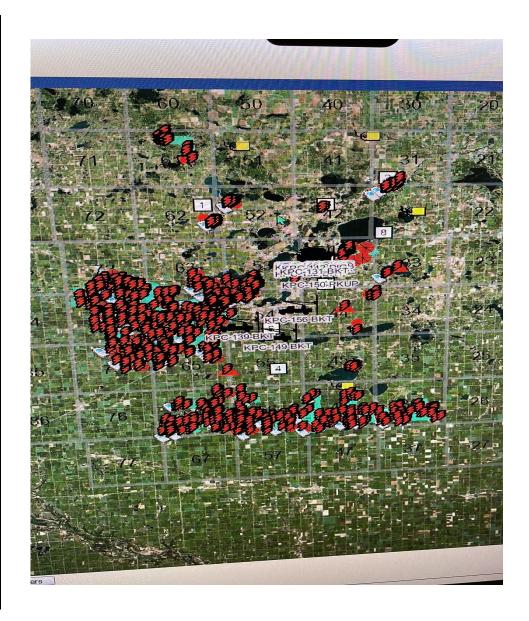
# MAY 30<sup>TH</sup> STORM

Total number of members affected with a power interruption 8878

**Total broken poles 13** 

Multiple conductors down system wide

Maximum outage duration 18 hours and 10 minutes



# **SAFETY TRAINING**

Pole top and bucket rescue

Multiple safety trainings yearly

**Attend Safety conferences** 

Staying up to date company wide on annual compliance trainings





# INFORMATION TECHNOLOGY

# SECURITY IMPROVEMENTS

- Multifactor Authentication implemented wherever possible
- Patch Management automation on workstations
- Routine patching of server and network devices

# HARDWARE UPGRADES

- Server/SAN upgrades per industry standards – goal of zero downtime
- Radio system upgrades to maintain a reliable communication platform

### **TELECOMMUTING**

- Telecommuting has continued to be a valuable tool when employees are unable to report to the office.
- All office employees can securely work when out of the office.

# INFORMATION TECHNOLOGY

# BACKUPS & RECOVERY

- Replication to a Disaster Recovery site
- Immutable Backups better protect backup data from cyber threats

### **SOFTWARE**

- Ongoing effort to better use our software
  - We have focused a lot of attention on our Meter Data Management System (MDMS) in the past year. MDMS aids in our billing process and gives us a lot of tools for analyzing our meter data.

# NETWORK IMPROVEMENTS

- Network segmentation adds a layer of security to network traffic
- Redundant ISP failover during a service interruption

# 2022 BY THE NUMBERS



\$70,262.50 Saved by members using rebates



8,632
Members assisted over the phone by Member Services



32
Water heaters sold



3,263
Households on a load management program

# SMARTHUB AND AUTO PAY

2,859 member-owners have signed up for SmartHub

5,254 member-owners are on auto pay



# DISTRIBUTED ENERGY RESOURCES

### **APPLICATIONS**

- 11 renewable applications were filed in 2022.
- Proposed 251.42 kW in generation.
- 9 of these applications were for solar and 2 were for wind.

### **COMPLETED**

- 6 of the renewable applications were completed in 2022.
- Resulting in 132.8 kW of connected generation.

### **COMMUNITY SOLAR**

- Member-owners can purchase panel output from KPC's Community Solar Array.
- 68,428 kWh were produced on our Community Solar in 2022.

# COMMUNITY

From hanging flags to driving in parades. From classroom education to Toys for Tots collection. We do it all for our local community because we are your neighbors.









# COMMUNITY ENGAGEMENT

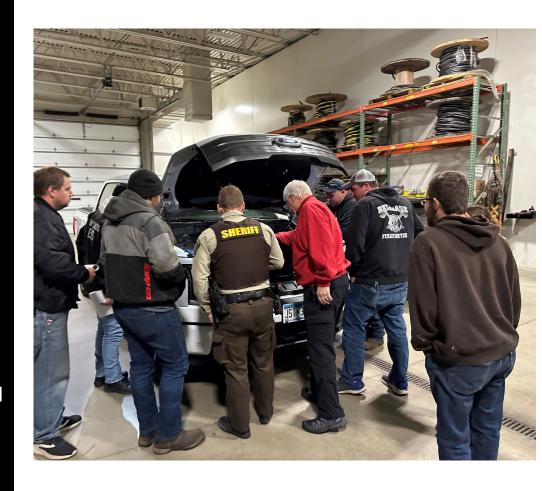
Hosted EV safety training for local first responders

44 attendees from 14 agencies

**Visit to NLS Ag Program** 

Help set up for Celebrate the Light of the World

Visit to GRACE Homeschooling Co-op





# MEMBER EVENTS



### **Heating and Cooling Rebates**

Rebate program is subject to change or cancellation without notice. Completed rebate form and a copy of the original sales receipt within 90 days of purchase date required.

### **Limited Time ASHP Promotion**

Promotional rebate program is subject to change or cancellation without notice. Completed rebate form and a copy of the original sales receipt within 90 days of purchase date required.

A/C & ASHP Tune UP	\$25.00
<ul> <li>ASHP - Ductless ≥ 14.5 SEER/SEER2; ≥ 8         Primary Heat is Delivered Fuels \$300.0         Primary Heat is Electric     </li> </ul>	0
ASHP - QI (Quality Installation Required)     ≥ HSPF 8.2 / HSPF <sub>2</sub> 7     ≥ HSPF 9 / HSPF <sub>2</sub> 7.7	
Electronically Commutated Motor (ECM)     Replacement Only (Energy Star)	\$50.00
GSHP - per ton (Energy Star)	\$400.00
Smart Thermostat	\$25.00
ETS Space Heating - per Kw     (Load Management Required)	\$25.00

- ASHP Ductless ≥ 14.5 SEER/SEER2; ≥ 8.2 HSPF/7.9 HSPF2
  Primary Heat is Delivered Fuels \$450.00
  Primary Heat is Electric \$750.00
- ASHP QI (Quality Installation Required)
   ≥ HSPF 8.2 / HSPF<sub>2</sub> 7.
   ≥ HSPF 9 / HSPF<sub>2</sub> 7.7
   \$1,250.00
- Promotion runs May through August must be purchased and installed no later than August 31, 2023.



# FINANCIAL REVIEW 2022

Patrick Krueger
Chief Financial Officer

### **BALANCE SHEET**

2022 Highlights

Total Assets = \$73,609,034

Kandiyohi Power Cooperative experienced year-over-year growth in total utility plant assets of 2.03%.

\$1,219,350 in capital credits were retired back to our members during the year.

Electric Plant (Net of Depreciation)

\$52.7 Million

Extension & Replacement of Electric Plant

\$2.5 Million

**Great River Energy:**Capital Credits *Allocated\** 

\$252,757

Great River Energy: Capital Credits Retired\*

\$488,148

Kandiyohi Power: Capital Credits Retired\*

\$731,202

Equity Ratio:
As a % of Total Assets

46.8%

As of December 31, 2022, KPC has retired \$21,194,404 back to our members.

#### **OPERATING STATEMENT**

2022 Highlights

**Total Margins = \$1,097,998** 

Kandiyohi Power Cooperative provided Sales of Electric Energy totaling \$21,429,337 in revenue.

Total # of Services Provided: 8,937

Total # of kWh Sold: 167,291,844

**Operating Expenses** 

\$21,207,498

Operating Margin before Capital Credits

\$221,839

**Capital Credits Allocated** from Associated Organizations

\$383,780

**Operating Margins** 

\$605,619

Non-Operating Margins

\$492,379

Net Margins **\$1,097,998** 

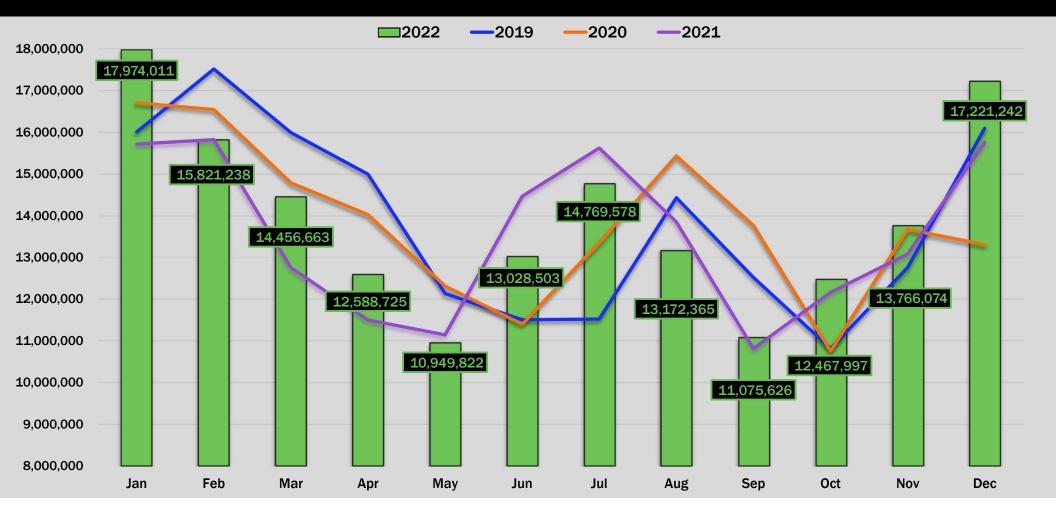
Patronage Allocated \$1,012,775

All while keeping our competitive electric rates unchanged in 2020, 2021, and 2022.

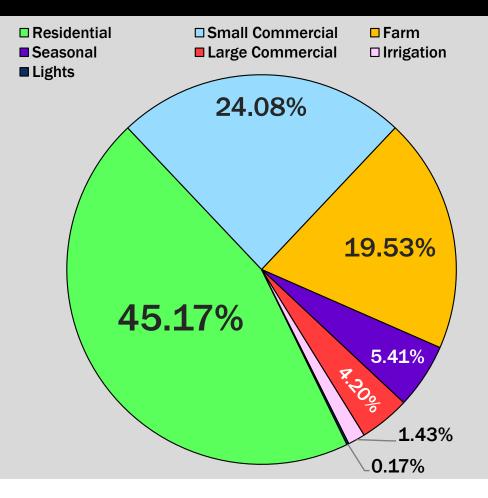
### **KWH SALES**

kWh Sold: 167,291,844

**Electric Revenue: \$21,429,337** 

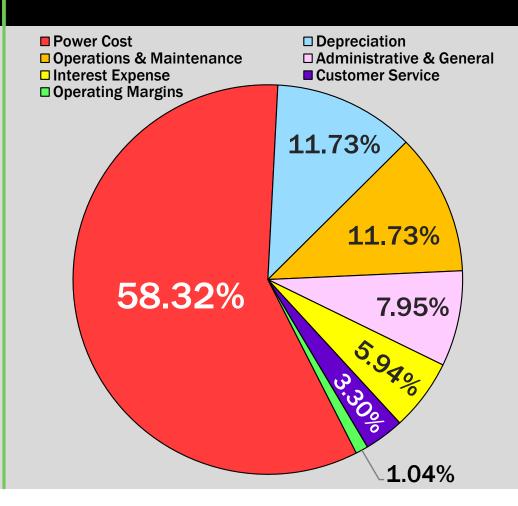


## Where the dollars came from... ENERGY SALES BY RATE CLASS

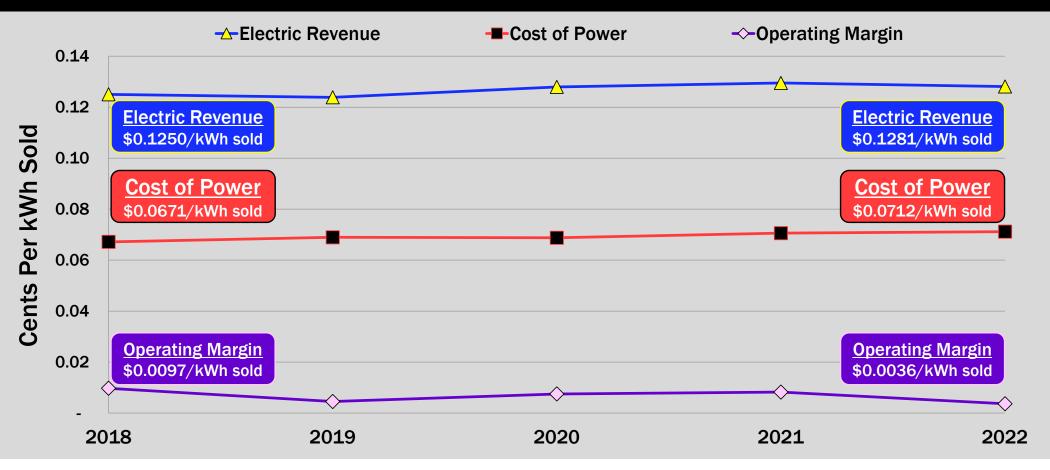


#### **COST OF ELECTRIC SERVICE**

Where the dollars went...

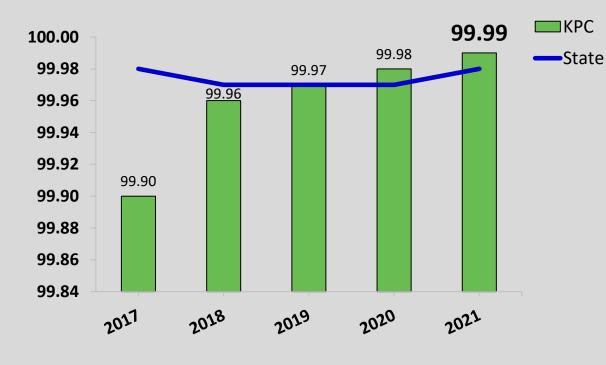


## OPERATING MARGIN PER KWH SOLD



## SERVICE RELIABILITY

RATIO 145 --- AVG. SERVICE AVAILABILITY INDEX (ASAI) - TOTAL (%)



KPC continues to provide reliable service to all those we serve, achieving a 99.99% availability rate in 2021.

This commitment to service will always remain at the forefront of our mission.

### ...especially when times are tough!

5/12/2022 Storm

\$68,761 Total Damages











\$82,934
Total Damages

### Thanks to folks like this...







- 4,480 outages were restored in under 26 hours (May 12<sup>th</sup> storm)
- 8,878 outages were restored in under 19 hours (May 30<sup>th</sup> storm)
- \$128,546 in damages were recovered through FEMA grants

## COMMUNITY

**IMPACT** 

KPC Donations \$ 25,216 Sharing Success 10,000 Unclaimed CC 25,729 Local Impact: \$ 60,945

> Unclaimed Capital Credits

CoBank Sharing Success

> 4-H \$1,200

YMCA \$8,300







### This concludes the 2022 Financial Review.

If you would like additional information related to today's presentation, a full copy of the 2022 financial statements and an article explaining the details of the 2022 patronage allocation can be found in the April edition of *The Kilowatt*.



Thank you for being a Kandiyohi Power Cooperative member-owner.

# OPERATION ROUND UP



#### Operation RoundUp

For the Year Ended December 31, 2022

Cash Balance at 01/01/2022 \$ 17.871.83

Contributions Received 71,446.14

Interest Earned 14.64

**Donations Made:** 

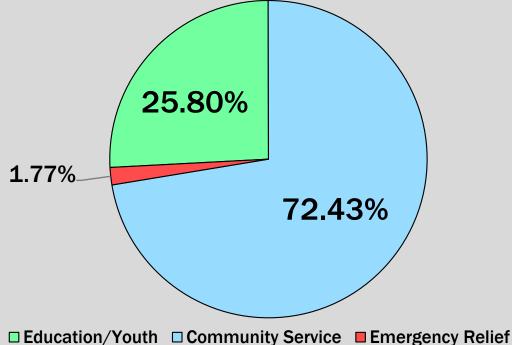
Education / Youth (10,775.00)
Community Service (30,250.00)
Emergency Relief (740.00)

**Total Donations** (41,765.00)

Miscellaneous Expense (101.87)

Cash Balance at 12/31/2022 \$ 47,465.74

Over \$41,000 in donations to 45 local organizations!







## KANDIYOHI POWER —— COOPERATIVE ——

2023 Annual Meeting