AGENDA SHAKOPEE PUBLIC UTILITIES COMMISSION REGULAR MEETING MARCH 3, 2025 at 5:00 PM

1. **Call to Order** at 5:00pm in the SPU Service Center, 255 Sarazin Street 1a) Roll Call

2. Communications

- 2a) Customer Communications Received Non-acceptance of Commission Decision for AMI Appeal Opt-Out Options (GD)
- 2b) Customer Communications Received SGAC Questions from 2/3/25 Commission Meeting (JA)

3. Consent Agenda

- C=> 3a) Approval of February 3, 2025 Minutes (GD)
- C=> 3b) Approval of March 3, 2025 Agenda (JK)
- C=> 3c) March 3, 2025 Warrant List (KW)
- C=> 3d) MMPA February 2025 Meeting Updates (GD)
- C=> 3e) Drive-Up Hour Change (GD)
- C=> 3f) Monthly Water Dashboard for January 2025 (BC)
- C=> 3g) AMI Opt-Out Policy Documentation (SW)
- C=> 3h) 2024 Preliminary Financial Reports (KW)
- C=> 3i) Res #2025-01 Resolution Setting the Amount of the Trunk Water Charges, Approving of its Collection and Authorizing Water Service to Certain Property Described as: Palomino Trail (JA)
- C=> 3j) Res #2025-02 Resolution Approving of the Estimated Cost of Pipe Oversizing on the Watermain Project: Palomino Trail (JA)
- C=> 3k) Res #2025-03 Resolution Approving of Payment for the Pipe Oversizing Costs on the Watermain Project: Arbor Bluff 1st Addition (JA)
- C=> 3l) Res #2025-04 Resolution Approving of Payment for the Pipe Oversizing Costs on the Watermain Project: Highview Park 2nd Addition (JA)
- C=> 3m) Res# 2025-05 Resolution Approving Shakopee Public Utilities Commission's Cogeneration and Small Power Production Tariff (JA)
- C=> 3n) AMI Customer Appeal and Resolution #2025-06 (SW)

4. **Public Comment Period.** Please step up to the table and state your name and address for the record.

^{***} Motion to approve the Consent Agenda***

5. Liaison Report (JD)

- 6. Reports: Water Items
 - 6a) Water System Operations Report Verbal (BC)
 - 6b) Anchor Glass Emergency Water Service Request (JA)
 - 6c) Water Tower #3 Design Updates (SW)
 - 6d) Res# 2025-07 Resolution of Appreciation to Lon Schemel (BC)
- 7. Reports: Electric Items
 - 7a) Electric System Operations Report Verbal (BC)
 - 7b) Solar Grid Access Charge (JA)
- 8. Reports: General
 - 8a) Marketing/Key Accounts Report Verbal (SW)
 - 8b) General Manager Report Verbal (GD)
- 9. **Items for Future Agendas**
- 10. Tentative Dates for Upcoming Meetings
 - March 17, 2025 Workshop
 - April 7, 2025
 - May 5, 2025
 - June 2, 2025
 - June 16, 2025 Workshop
 - July 7, 2025
 - August 4, 2025
- 11. Adjournment



PO Box 470 • 255 Sarazin Street Shakopee, Minnesota 55379 Main 952.445-1988 • Fax 952.445-7767 www.shakopeeutilities.com

February 19, 2025

TO:

Greg Drent, General Manager

FROM:

Sharon Walsh, Director of Marketing, Key Accounts and Special Projects

SUBJECT:

Customer Communications Received - Non-Acceptance of Commission Decision for AMI

Opt-Out Options

Overview

Attached is a recent letter received from the customer who presented at the January 6 commission meeting. Following the presentation, a list of options was presented to the Commission at the next meeting on February 3rd. During the February 3rd meeting the Commission unanimously agreed to adhere to existing policy regarding AMI meter installations and requested we share the options available to this customer; all within policy.

The memo from staff to this customer, following the February 3rd meeting, is also attached.

No response to the communications dated February 13th from this customer has been made. For privacy purposes, the medical letter referenced in the customer letter is not included in public records.

Action Requested

Staff is sharing this customer communication for Commission awareness and discussion as the Commission deems appropriate. No requested action by staff.

4th Avenue East Shakopee, MN 55379 SPU Accoun

February 13, 2025

Shakopee Public Utilities
Attention: Greg Drent, General Manager
P.O. Box 470
255 Sarazin Street
Shakopee, Minnesota 55379-1470

RE: Appeal Regarding SPU Meter Exchange Program

Dear Mr. Drent,

Thank you for your February 4, 2025 reply regarding the SPU staff recommendation and the commissioners' decisions following our January 6, 2025 presentation to the Commission.

We do not accept the Commission's decision to remain within SPU's existing AMI policy or the options presented to us.

During the presentation to the Commission on January 6th we were asked about mitigation solutions and expenses we would incur with smart meter installation. To clarify, we did not decline to answer (as indicated in your staff memo dated January 16, 2025). We offered range of potential mitigation costs, estimating "thousands of dollars" and "\$2,000-\$3,000, which would not be top-of-the-line". It was not feasible to give an exact solution at that time. Solutions are dependent on the actual effects of the installed AMI device, including its influence on a home's unique electrical system (causing "dirty electricity"). Mitigation steps and subsequent costs can only be determined using actual measurements, therefore it is irrelevant to identify these ahead of time. Our request remains the same, that we keep our existing analog meters, as it is nearly impossible to fully mitigate the effects of smart meters.

Since the January 6th Commission meeting, additional support for the need to keep our existing analog meters for medical reasons has been obtained (please refer to the attached letter from Alyse Hamilton, MD).

In trying to understand the origin of SPU's AMI implementation and policies, we have the following questions:

- 1. What customer input led to the decision to implement the AMI technology? Please provide data showing the information/options customers were presented, what customers were specifically asked, and a tabulation of customer responses.
- 2. What governing laws and/or policies, if any, require that SPU:
 - a. implement the AMI technology?
 - b. not allow customers to keep their existing analog meters?
 - c. charge additional fees to customers who, for medical or any safety or privacy reasons, want to keep their analog meters?

We are currently aware of governing laws that ensure, among other things, safety, and our rights to life, property and privacy (2024 MN Statutes 216B.029, 216B.04, 326B.35; The United States Constitution).

We look forward to your response.

Sincerely,

Shakopee, MN 55379 SPU Account

Attachment: Letter from Alyse M. Hamilton, MD (with attachment)

Copy: Mayor Matt Lehman, Council Member Jim DuLaney



PO Box 470 255 Sarazin Street Shakopee, Minnesota 55379 Main 952.445-1988 Fax 952.445-7767 www.shakopeeutilities.com

February 4, 2025

Shakopee, MN 55379

Staff presented the enclosed memo to the SPU commission at the regular commission meeting on February 3, 2025, following your presentation at the regular commission meeting on January 6, 2025.

Staff recommended four installation options within current policy. Alternative options would mean a change in policy by the commission. Commissioners unanimously agreed to adhere to existing policy. Note: I confirmed to the commission installing the meter and comm module on a pole away from the house (Option #4) would be within policy.

Therefore, this letter is to inform you SPU will need access to our meters and will proceed with the installation of AMI technology. Please contact Sharon Walsh by March 1st to communicate which of the four options presented in the attached memo you choose to proceed with. As indicated, any option other than our standard installation will require expenses that you, the homeowner, will be responsible for.

Sharon can be reached at 952-233-1531 or swalsh@shakopeeutilities.com.

Sincerely,

Greg Drent, General Manager

regay I Drent

Enclosure

cc: Sharon Walsh



PO Box 470 - 255 Sarazin Street Shakopee, Minnesota 55379 Main 952.445-1988 Fax 952.445-7767 www.shakopeeutilities.com

January 16, 2025

TO:

Greg Drent, General Manager

FROM:

Sharon Walsh, Director of Marketing, Key Accounts and Special Project

SUBJECT:

Response to Opt-Out Appeal from

<u>Overview</u>

SPU customers, attended the January 6 Commission meeting to appeal SPU's AMI policy for smart electric and water metering for their home. Their appeal focused on the safety of this technology. They did not oppose access to SPU equipment. The also indicated that if SPU proceeded with installation of this technology, they would incur mitigation expenses as a result. The Commission asked the to share these desired mitigation solutions and estimated costs, but the declined.

As a follow up to the presentation, staff has reviewed the informational links (which are outside of governmental regulatory sites, such as the EPA or FCC, or well-established nonprofits, such as the American Cancer Society) provided by the Gavins. In our review, staff was unable to find data that conclusively confirmed safety issues caused by AMI meters. Staff further researched options and costs associated with mitigation, as suggested by the but without specific mitigation requirements the range of options and costs is broad.

Based on this information, the following actions are potential options for proceeding with this appeal:

- 1. Proceed with standard installation of electric meter on the outside of the property and the water comm module on the inside of the house.
- 2. Utilize SPU's Opt Outside Policy, installing both the electric meter and the water meter comm module on the outside of the house. If electrical wiring is needed (i.e., 3-wire low voltage), this cost is the homeowner's responsibility.
- 3. Utilize a faraday cage on the smart meter to reduce what little RF is being transmitted. This equipment can be made and/or purchased in the range of \$20-\$100.
- 4. Allow special accommodations by mounting the electric meter and water comm module across the alley. This would require the homeowner to hire an electrician to underground the electric service and necessary 3-wire needed for the comm module. These costs, which can be significant, would be the responsibility of the homeowner.

Action Requested

Staff is recommending that the Commission direct staff to proceed with one of the options presented above. The Commission may also explore additional options, including any policy changes, if desired. Based on the Commission's direction, staff will prepare a resolution for consideration at a future Commission meeting.

Proposed As Consent Item





PO Box 470 • 255 Sarazin Street Shakopee, Minnesota 55379 Main 952.445-1988 • Fax 952.445-7767 www.shakopeeutilities.com

February 26, 2025

TO:

Greg Drent, General Manager

FROM:

Sharon Walsh, Director of Marketing, Key Accounts and Special Project

SUBJECT:

Customer Communications Received - SGAC Questions

Overview

At the February 3, 2025 commission meeting, an SPU solar customer spoke during the public comment period. This customer shared their concerns regarding the newly implemented Solar Grid Access Charge (SGAC), including how we arrived at \$4/kW above 5kW systems and why size of system impacts this charge, among other comments. Following the presentation this customer left staff with a printout of specific questions.

Attached is that list of questions (as provided) and staff's answers to these questions. It should be noted staff conferred with Dave Berg, of DBC, LLC, who recommended the SGAC as part of the rate study conducted in 2024. These responses reflect his expertise and professional input on how the SGAC amount was determined, as well as the rationale behind this charge and its correlation to size of system.

These responses will be shared with this customer following the March 3, 2025 commission meeting.

Action Requested

Staff is sharing this customer communication for Commission awareness and discussion as the Commission deems appropriate. No requested action by staff.

Questions Received from SPU Solar Customer - February 3, 2025

1.) How was the fee determined? It seems to be based on revenue and not fixed cost as the letter states.

Response: The SGAC is based on allocated fixed distribution costs for the Residential rate class, not revenue. These fixed distribution costs – or expenses - are covered in billable usage rates from this class.

The revenue you referred to in your address to the Commission on February 3rd, is actually a cost-factor generated from allocated 'revenue-related costs'. Items, such as margin and transfer to the city are revenue-related costs. All associated and applicable costs are factored in to ensure revenue-related costs are covered.

- 2.) Can you explain how the below equation reflex only fixed cost and why does it account for revenue?
- a. Allocated Residential Distribution Demand Cost* Residential Revenue
 Adjustment (1.36) = \$4 /kW
- b. Distribution Cost/Max Demand= \$2.86 /kW

Response: See explanation above. Residential usage revenue is used to cover fixed distribution costs. Revenue is not included in determining the calculation for the SGAC. Only revenue-related costs are included.

3.) Why is the fee variable based on size of solar system. Don't all residential customers have the same fixed costs.

Response: No, not all residential customers have the same fixed costs because they don't use the distribution system the same way. A larger customer using more energy utilizes more of the distribution system to deliver power to their home. Thus, the percent of fixed distribution costs is greater than someone with lower energy use. Now, factor in power generation from solar customers. This generated power also utilizes the distribution system, driving the fixed distribution costs up further. However, the revenue necessary to cover these additional fixed costs is actually reduced by this generation.

4.) Why are fixed cost not broken out like the 10.50 monthly fee?

Response: Because fixed distribution costs are directly correlated with usage (see above), the collection of fixed distribution costs are included in the energy charge, not a flat monthly fee. The energy charge is a rate that is collected based on actual usage. A flat, uniform fee for fixed distribution costs cannot be utilized because of variable usage of the distribution system by each customer.

5.) What is the monthly "Etectic Service Fee" intended to cover (admin expenses?) a. \$2.37 million= 18800 customers*\$10.50*12 months.

Response: The monthly service fee is intended to cover fixed customer costs, which are different from fixed distribution costs. The fixed customer costs include metering equipment costs, administrative costs to read meters, preparation of monthly billings, and customer support services, to name a few. The monthly fee SPU charges could be closer to \$20.00/month/customer to fully cover these costs, but the commission and leadership staff (to date) have opted to keep the charge lower to benefit all residential customers.

6.) I am in total agreement with you that fixed distribution cost are real. I have serious solar infrastructure costs that I will be paying for the next 15-20 years. Would it be possible to bill SPUC for my fixed generation costs?

Response: Like fixed distribution costs, fixed generation costs vary by customer. The more energy a customer uses (i.e., the more energy purchased) the higher the monthly cost. The less energy a customer uses/buys, the lower the cost. For this reason, fixed generation costs are also collected through usage energy charges.

SPU has a contractual agreement with MMPA to purchase wholesale power. Our energy rates are based on these wholesale purchases. When SPU purchases power generated from solar customers, SPU is required to pay average retail rates for this power. SPU is paying more for solar-generated energy, thus benefitting solar customers by offsetting their generation costs (to the detriment of other customers).

7.) Will there be some from of disclosure to new solar customers considering adding solar. This will destroy all future residential solar installs in Shakopee.

Response: Yes, notification of the SGAC was published on SPU's DER web page in January 2025 and will be included in all new solar applications for new solar customers. It has been included in the Rules Governing the Interconnection of Cogenerating and Small Power Production Facilities document since 2019, even though it was not implemented until 2025. A bill insert was provided to all SPU customers in January 2025 (mailed and on SmartHub). Additionally, existing solar customers were sent a letter in December 2024, including those that would not be impacted by the SGAC.

8.) My solar production is occurring at high demand times when power costs are the highest. Any thoughts of moving to "time of use" to help cover infrastructure costs?

Response: Time of Use (TOU) billing is something SPU is considering in the future with the implementation of AMI (i.e., smart meters). There is currently no specified date TOU will be available.

9.) Peak Demand Charges on top of Time of use might be a good option

Comment: Demand charges do not benefit solar customers, such as yourself. Your highest demand on the system will be in late afternoon and early evening when solar generation has diminished. Additionally, with billable demand charges the energy charges are lower and your reimbursement would be less.

10.) My solar production is used by my nearest neighbors at very low distribution cost and very little use of the distribution system.

Comment: When solar customers export power onto the distribution grid system they are: 1) using the distribution grid without additional cost, 2) receiving a derived benefit from the reduction of the energy delivered/used from SPU (because this delivered energy is offset by the credit created from the exported energy), and 3) are being paid at full average retail rate for this credit. Additionally, solar customers are not fully and fairly contributing to the fixed distribution costs due to the reduction in billable usage. For these reasons, SPU does not derive the same financial benefit from the energy you sold them.

11.) I would need to produce an extra 5700kWH to cover the solar grid access charge.

No comment.

- 12.} This type of fee has been implemented by other Public Utilities and they have taken a different approach by capping the monthly fee.
- a. Example: Peoples Energy Coop.Rochester (Cap \$37/month), Red River Valley, Western MN (Cap \$39/month)

Response: Yes, but as explained above, the larger the solar system, the more capacity required from the distribution facility for the exportation of generated power. A cap of the SGAC would be a concession made by the utility, not a financially substantiated decision. The same is true of the first 5kW that is conceded to all solar customers without a SGAC applied.

MINUTES OF THE SHAKOPEE PUBLIC UTILITIES COMMISSION February 3, 2025 Regular Meeting

- 1. <u>Call to Order.</u> President Krieg called the February 3, 2025 meeting of the Shakopee Public Utilities Commission to order at 5:00 P.M. President Krieg, Vice President Letourneau, Commissioner DuLaney, Commissioner Fox, and Commissioner Mocol were present.
- 2. <u>Communication</u>. Sharon Walsh, Director of Key Accounts/Marketing and Special Projects, explained four options in response to the Gavins' requested exemption from AMI water and electric meters. After discussion, Commissioner Mocol moved to follow SPU's existing Opt Outside Policy, and to direct staff to present the options of a faraday cage or mounting the electric meter and water comm module across the alley for the customers' consideration at their expense. Vice President Letourneau seconded the motion. Ayes: Krieg, Letourneau, DuLaney, Fox, and Mocol. Nays: None.
- 3. <u>Consent Agenda.</u> Commissioner Mocol moved to approve the consent agenda: (a) January 6, 2025 minutes; (b) February 3, 2025 agenda; (c) February 3, 2025 warrant list; (d) MMPA January 2025 meeting update; (e) Monthly Water Dashboard for December 2024; (f) Agreement with Current Compass; and (g) County Project No. 78-07 Construction Cooperative Agreement. Commissioner DuLaney seconded the motion. Ayes: Krieg, Letourneau, DuLaney, Fox, and Mocol. Nays: None.
- 4. <u>Public Comment Period.</u> Dave Burger, 2680 Maple Trail, addressed the solar grid access charge and the impact on the larger solar system that he had installed several years ago. Staff will review this information and prepare a response for a future meeting.
- 5. <u>Liaison Report.</u> Commissioner DuLaney reported that he was reappointed as City Council-Commission Liaison for two more years. He noted a customer question about the safety of AMI meters. He also noted the roundabouts installed along Marystown Road. Commissioner DuLaney thanked SPU for donating water for Hockey Day Minnesota.
- 6. <u>Water Report.</u> Brad Carlson, Director of Field Operations, gave an update on water projects, including Pumphouse #23 permanent power, AMI meter changeouts, chlorine maintenance, request regarding connection for tower cooling, responding to a water leak, and discussions with the Fire Department regarding emergency response plans for a chemical release.
- 7. <u>Combined Minnesota Department of Health/SPU PFAS Results for Environmental Protection Agency Method 533</u>. Greg Drent, General Manager, reported that the recent testing results show that all SPU wells meet requirements.
- 8. <u>Accept Bids and Award Contract for Tank #9.</u> Ryan Halverson, Engineering Supervisor Water, summarized the bid process for the elevated storage Tank 9 project, rejecting all bids

received in September 2024, and rebidding with revised plans. There was one response to the current RFP. Commissioner Fox moved to award the contract to Maguire Iron, Inc. in the amount of \$4,663,000 and to approve the total project budget of \$5,483,000. Commissioner Mocol seconded the motion. Ayes: Krieg, Letourneau, DuLaney, Fox, and Mocol. Nays: None.

- 9. <u>Water Town #3 Custom Design.</u> Ms. Walsh presented initial design options. Commissioners provided their thoughts and comments.
- 10. <u>Electric Report.</u> Mr. Carlson reported one outage since the last Commission meeting, a primary underground fault that affected approximately 29 customers for about 2 hours. He provided an update of projects, including joint trenching, Pumphouse #23, and installing 800 MHz radios in SPU vehicles. He also reported that relays at the West Shakopee Substation were swapped out due to a recall and sent in for repair.
- 11. <u>Marketing/Key Account Report</u>. Ms. Walsh reported that SPU has installed 19,856 electric AMI meters (approximately 1,000 remaining) and 9,800 water meters (approximately 2,700 remaining). She also noted that approximately 200 customers have received penalties for failing to schedule the meter changeout, with 26 letters indicating disconnection of service is next if they do not schedule the appointment. Ms. Walsh noted work on educational pieces for the website explain the solar grid access charge. She reported that SPU is adding electric yard tools to its residential conservation program.
- 12. <u>Goals 2025</u>. Mr. Drent presented the proposed 2025 SPU goals prepared by SPU's leadership team. The Commission discussed the goals and potential items for future development. Vice President Letourneau move to approve the 2025 Goals as presented. Commissioner DuLaney seconded the motion. Ayes: Krieg, Letourneau, DuLaney, Fox, and Mocol. Nays: None.
- 13. <u>General Manager Report.</u> Mr. Drent reported that he attended the MMUA legislative conference and met with state legislators to discuss issues such as the carbon free initiative, net metering reform, nuclear power, and PFAS funding challenges. He also explained that SPU filled two positions, its use of mPower software, and that most disconnects are now done remotely through the AMI system.
- 14. <u>Items for Future Agendas</u>. The solar grid access charge was suggested.
- 15. <u>Adjourn.</u> Motion by Commissioner Mocol, seconded by Commissioner Fox, to adjourn. Ayes: Krieg, Letourneau, DuLaney, Fox, and Mocol. Nays: None.

Greg Drent, Commission Secretary

Proposed As Consent Item

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SHAKOPEE PUBLIC UTILITIES COMMISSION

WARRANT LISTING

March 3, 2025

By direction of the Shakopee Public Utilities Commission, the Secretary does hereby authorize the following warrants drawn upon the Treasury of Shakopee Public Utilities Commission:

WEEK OF 01/31/2025

KATIE J ADAMS

LAIRA ALLERAI

APPLE FORD OF SHAKOPEE

BORDER STATES ELECTRIC SUPPLY

ANTHONY BREZINA

CHOICE ELECTRIC INC

CITY OF CHASKA

COMLINK SOLUTIONS, LLC

CROSS OF PEACE LUTHERAN CHURCH

DAILY PRINTING, INC.

E & M CONSULTING INC.

BRYTTA ERICKSON

ESRI, INC.

GRAINGER INC

JACKLYN HANSON

HENNEN'S AUTO SERVICE INC.

IIA LIFTING SERVICES, INC

INDELCO PLASTICS CORP

IRBY - STUART CIRBY CO

ITRON INC.

KLM ENGINEERING INC

MEDINA ELECTRIC LLC

MINN VALLEY TESTING LABS INC

NAPA AUTO PARTS

GERRY NEVILLE

NEW TECH ELECTRIC SYSTEMS INC.

RESCO

T & R ELECTRIC SUPPLY CO INC

THE IMAGINE GROUP, LLC

SHARON WALSH

WATER CONSERVATION SERVICE INC

WESCO RECEIVABLES CORP.

HEALTH EQUITY INC.

VERIZON WIRELESS SERVICES LLC

ZAYO GROUP, LLC

\$29.12 REIMBUSE JAN 2025 MILEAGE 41.60

\$75.00 ENERGY STAR REFRIGERATOR REBATE

\$254.13 LIFT AS 734843/734844(E)

\$7,934.65 FUSE LINKS

\$75,56 PER DIEM/REIMB MILEAGE

\$8,306.57 WO#2897 INSTALL BASEMNTS TRANSF BONNEVIT

\$3,700,00 REFUND/REIMB ELECT T OBRIEN TRAINING

\$70,017.00 WO#2950 EAGLE CREEK & MCCOLL FIBER

\$321.00 REBATE HVAC IMPROVMENTS

\$2,902.94 SPU JAN 2025 RATES INSERT

\$50,00 UPGRADE FULL PG ADV 2025 SHAKO CHAMB DIR

\$500.00 ENERGY STAR COOLING/HEATING REBATE

\$32,729.25 SOFTWARE MAINTENANCE AGREEMENT 1/21/25-1/20/26

\$197.08 CLEANING VINEGAR/PAIL(E)

\$26.00 PER DIEM 1/28/25 PROF OPERT PROGRAM

\$102,55 OIL CHANGE ELECT TRK#621

\$6,038.19 ANNUAL SAFETY INSPECTION UNITS

\$1,427.76 TUBING CONNECTORS(W)

\$1,178.98 SAFETY TESTING GLOVES(E)

\$7,778.29 SOFTWARE MAINT 11/1/23-12/31/24

\$2,600.00 REMOVE GS-12 MIXER/REPLACE(W)

\$21,945.00 WO#2712 RV BOOSTER STATION GEN PYMT#1

\$260.00 WATER TESTING COLIFORM

\$81.40 MICROF MAXIFUSE(E)

\$68.60 REIMBURSE 98 MILES

\$552,50 WIRED(1)MIXER MAINT @ 1415 WOODDUCK TRL

\$617.60 LUG COMP AL 2-HOLE 4/0-500

\$42.75 PCB SAMPLES

\$70,036.00 INTERIOR LIGHTING REBATE

\$75.00 ENERGY STAR REFRIGERATOR REBATE

\$391.00 LEAK LOCATE 1/7/25 @ 402 SARAZIN

\$2,078.70 CT 200/5 BAR MULTI-RANGE HIGH ACCURACY

\$4,979.00 JANUARY 2025 DCRA DEPENDENT PREFUNDING

\$396.89 MONTHLY SUMMARY PEPWAVE POTSOLVE

\$4,766.53 DEC 2024 T1 LINE, S SUB, PIKE LAKE

Total Week of 01/31/2025

\$252,535.04

WEEK OF 02/07/2025

AAR BUILDING SERVICE CO.

AMERICAN DREAM FINANCIAL LLC

ASTLEFORD INTL TRUCKS

BORDER STATES ELECTRIC SUPPLY

MIKE BURGESS

CARLSON-LAVINE INC

CLIFTONLARSONALLEN LLP

COMLINK SOLUTIONS, LLC

CORE & MAIN LP

CUSTOMER CONTACT SERVICES

DAILY PRINTING, INC.

DITCHWITCH OF MINNESOTA

GREG DRENT

DSI/LSI

FERGUSON US HOLDINGS, INC.

GENERAL SECURITY SERVICES CORP

HAWKINS INC

HENNEN'S AUTO SERVICE INC.

INNOVATIVE OFFICE SOLUTIONS

INT'L UNION OF OPER ENGINEERS LOCAL 49

IRBY - STUART CIRBY CO

JT SERVICES

KATAMA TECHNOLOGIES, INC.

CINDY MENKE

MIDWEST SAFETY COUNS, INC.

MINN VALLEY TESTING LABS INC

MMUA

NAPA AUTO PARTS

NCPERS GROUP LIFE INS.

GERRY NEVILLE

ONE TECH ENGINEERING INC.

DARREN PETEK

POMP'S TIRE SERVICE INC

KJIRSTEN PROBST

JAMIE RAU

RONALD RIZZO

RW BECK GROUP, INC, LEIDOS ENG. LL

STAR ENERGY SERVICES

TOM KRAEMER, INC

UNITED SYSTEMS & SOFTWARE INC

VIVID IMAGE, INC.

XCEL ENERGY

VERIZON WIRELESS SERVICES LLC

ZAYO GROUP, LLC

MINNESOTA LIFE

PRINCIPAL LIFE INS. COMPANY

HEALTHPARTNERS

DELTA DENTAL PLAN OF MN

HEALTH EQUITY INC.

PAYROLL DIRECT DEPOSIT 02.07.25

BENEFITS & TAXES FOR 02.07.25

Total Week of 02/07/2025

\$4,338,46 FEB 2025 SPU BLDG CLEANING

\$6,327,09 WO2897 BONNEVISTA REBUILD SUB UG ELEC

\$13.02 RETAINER LAMP(E)

\$89,048.24 GROUND SLEEVE SWITCHGEAR NEW VFI-9

\$75,00 ENERGY STAR REFRIGERATOR REBATE

\$3,275,92 WO#2919 AFFINITY PLUS CR UNION UG ELECTR

\$1,023.75 AUDIT SERVICES FOR 12/31/24

\$35,208,40 WO# 2908 1015 SPENCER ST S FIBER WORK

\$5,525.00 OMNI PULSE CABLE WATER METERS

\$297.65 ANSWERING SVC 2/4-3/3 2025

\$925,00 SPU RATE TRIFOLDS ELEC/WATER

\$94.03 WATER SEPERATOR/FULE FILTER(E)

\$88,50 PER DIEM MIMUA CONFERENCE JAN 2025

\$445.11 FEB 2025 GARBAGE SERVICE

\$2,558.00 1-1/2 LF RPZ BFP ASSY

\$447.05 2/1/25-4/30/25 MAINT VIDEO SYSTEM

\$400,00 CHLORINE CYLINDERS DEMURRAGE

\$95.31 OIL CHANGE ENG TRK#629

\$282.87 OFFICE SUPPLIES

\$790.50 UNION DUES FOR JAN. 2025

\$1,980.84 FUEL BLOWER(E)

\$10,160,16 ANCHOR BASE POLES

\$468,75 AMI 2472 JAN. GENERAL CONSULTING

\$572.67 REIMB FOOD MANDAORTY EE MEETING

\$180,44 SAFETY GLOVES(E)

\$210.00 WATER TESTING COLIFORM

\$6,402.50 SUB SCHOOL 3/11/25 SEAVER/OBRIEN/GRIEBEL

\$78.35 GOLD OIL FILTERS(E)

\$176.00 JAN, PREMIUMS

\$79.80 REIMBURSE 114 MILES

\$6,825,00 HRS WORKED THRU 1,3,25

\$50,00 ENERGY STAR CLOTHES WASHER REBATE

\$3,928.10 REAR TIRES TRK#633(E)

\$500,00 ENERGY STAR COOLING/HEATING REBATE

\$793.28 REIMB SPU CUSTOMER SVC WIRE REPAIR

\$50,00 ENERGY STAR DISHWASHER REBATE

\$9,401.75 JAN 2025 SPU ARC FLASH STUDIES \$262.00 2025 POLE INSPECTIONS

\$476.86 AMI FEB MONTHLY RENTAL

\$2,854.77 AMI 2718 ITRON IMR RADIO 2 CABLE/CHARGER

\$650,00 2/1-2/28 2025 ESSENTIAL+PLAN

\$2,920,38 ELECT SVC VALLEY PARK 12/23/24-1/23/25

\$3,903.92 DEC 24-JAN 23 CELL PHONE BILL

\$50.00 BAL DUE ON INV 21207917

\$1,172.52 JAN, LIFE INS, PREMIUMS

\$4,969.35 LTD AND STD FOR JANUARY \$72,277.05 FEB, MEDICAL PREMIUMS

\$5,560.66 JANUARY DELTA DENTAL PREMIUMS

\$216.50 JAN, ADM, FEES

\$140,386.99

\$142,257.11

\$571,074.65

WEEK OF 02/14/2025

CREDIT REFUNDS

ABDO LLP

JOSEPH D ADAMS

ALTEC INDUSTRIES INC

AMARIL UNIFORM COMPANY

APPLE FORD OF SHAKOPEE

ARAMARK REFRESHMENT SERVICES INC.

B & B TRANSFORMER INC

BARNA GUZY & STEFFEN LTD

RON BARTUSEK

BORDER STATES ELECTRIC SUPPLY

ANTHONY BREZINA

CAL-TEX ELECTRIC INC.

CHOICE ELECTRIC INC

CITY OF SHAKOPEE

CITY OF SHAKOPEE

CITY OF SHAKOPEE

CONCRETE CUTTING & CORING INC

CORE & MAIN LP

D R HORTON

DLT SOLUTIONS LLC

FRONTIER ENERGY, INC.

GOPHER STATE ONE-CALL

GRAINGER INC

SHARON HANSEN

JACKLYN HANSON

HENNEN'S AUTO SERVICE INC.

IRBY - STUART C IRBY CO

LEAGUE OF MINN CITIES INS TRUST

LOCATORS & SUPPLIES INC

LOE'S OIL COMPANY

MINN VALLEY TESTING LABS INC

MINNESOTA SECURITY CONSORTIUM

MMUA

MN OCCUPATIONAL HEALTH - LOCKBOX 135054

MOBILE HEALTH SERVICES LLC

TONY MYERS

NAPA AUTO PARTS

GERRY NEVILLE

NISC

NORTHERN STATES POWER CO

RICE LAKE CONSTRUCTION GROUP

JUSTIN ROTERT

RW BECK GROUP, INC, LEIDOS ENG, LL

JACK SCHINTZ

SPENCER FANE LLP

SRF CONSULTING GROUP, INC.

STINSON LLP

U.S. POSTAL SERVICE

VERIZON

WESCO RECEIVABLES CORP.

KELLEY WILLEMSSEN

XCEL ENERGY

MUKO HERNANDEZ

ERIC KING

AMERICAN NATL BANK_MASTERCARD_ACH

CENTERPOINT ENERGY - ACH

FIRST DATA CORPORATION

HEALTH EQUITY INC.

MMPA C/O AVANT ENERGY

MN DEPT OF REVENUE ACH PAYMENTS

\$3,799.99 CREDIT REFUNDS

\$14,729.00 2024 ABDO FS GASB 96

\$598.97 REIMBURSE AIRFARE APPA E&O CONFERENCE

\$3,632,87 LIGHT MARKER/REPAIR KIT(E)

\$8,014.52 SPU CLOTHING ELLE SEAVER

\$23,333,40 4/1/25-3/31/26 UTILITY MEMBERSHIP

\$106,91 OIL CHANGE WATER TRK#652

\$278.91 COFFEE

\$28,407.00 8 - 15 PAD RM TRANSFORMERS

\$3,675,00 77283-002 EASEMENT FORMS

\$23,00 REIMBURSE MN CERTIFICATE

\$48,146.03 AMI 2718 WATER METERS

\$26.00 PER DIEM PROF, OPERATOR PROGRAM 2.11.25

\$6,449.28 WO#2961 SMSC BISON ENCLOSURE REFUND

\$572.29 CHG OUT CHLORINE RM EXHAUST FAN

\$73,345.22 WO#2868 SAND VENTURE WM

\$480,222.75 JAN 2025 SW\$366,855.07/SD\$113,367.68

\$351,483,00 JAN 2025 PILOT TRANSFER FEE

\$57.10 BAR SCABBARD 18"/25"(E)

\$16,152,00 OMNI WATER METERS/MTR WASHERS

\$25,827.45 WO#2873 HV PARK 2ND ADDN WM PLAN

\$5,422.31 CIVIL3D GOVT SINGLE USER SUBSCRIPTION

\$7,147.25 JAN 2025 C&I IMPLENTATION/MGMT

\$401,00 JANUARY TICKETS

\$92.63 CLEANER/DEGREASER(W)

\$325.00 ENERGY STAR CLOTHES WASHER REBATE

\$75.56 PER DIEM PROF OPER PROGRAM/REIMB MILEAGE

\$33,24 TIRE REPAIR ELECTTRIC TRK#617

\$525,910.90 500 MCM PRIMARY CABLE 15KV ALUM EPR

\$53,032.00 WORK COMP PREMIUM 1/1/25-1/1/26

\$824.90 8'X8'SQUARE TARP(E)

\$97.50 30 & 55 GALON DRUMS(E)

\$260.00 WATER TESTING COLIFORM

\$3,000.00 vCISO SVCS Q1 (Jan, Feb, Mar) 2025 \$41.25 DRUG/ALCOHOL TESTING(W)

\$356.00 DRUG TESTING

\$821,50 ANNUAL HEARING TEST

\$106.33 REIMBURSE FOR BYPASS VALVE AMI 2718

\$188.15 FUEL FILTER/VALVE(E)

\$200.90 REIMBURSE 287 MILES

\$34,388.88 JAN 2025 PRINT SERVICES \$2,960.47 JAN 2025 POWER BILL

\$125,591.21 WO#2581 P.H.23 PYMT #12

\$238,00 PER DIEM MARSHALL MN FEB 2025 \$238,00 PER DIEM MARSHALL MN FEB 2025

\$2,693,00 JAN 2025 ARC FLASH/COORDIATION STUDY

\$24,549.00 JANUARY LEGALS FEES

\$289,00 WO#2885 JAN PROF SVCS SHENANDOAH/CR101

\$1,595.00 JAN 2025 LABOR MATTER FILE#3522418.0002

\$436.00 LOCK BOX 470 RENEWAL 12 MOS

\$614.25 JAN 2025 TRUCK TRACKING

\$38,787.36 350 MCM SECONDARY CABLE UG TRIPLEX

\$140,00 REIMBURSE 2025 MN GOVT TRAINING

\$311.86 GAS USAGE AMBERGLEN 12/23/24-1/23/25

\$238,00 PER DIEM SCHOOL MARSHALL MN FEB 2025 \$238.00 PER DIEM SCHOOL MARSHALL MN FEB 2025

\$14,403.91 JANUARY 2025 CC STMT

\$5,817,39 GAS USAGE @ 255 SARAZIN 1/7-2/5 2025

\$9,393.11 JAN 2025 CC FEES

\$603.62 DAYCARE CLAIM REIMB C.S.

\$2,910,381.00 JANUARY POWER BILL

\$295,177.00 JAN 2025 SALES & USE TAX PAYABLE

WEEK OF 02/21/2025

AMARIL UNIFORM COMPANY

APPLE FORD OF SHAKOPEE

BORDER STATES ELECTRIC SUPPLY

ANTHONY BREZINA

CDW GOVERNMENT LLC

COMCAST CABLE COMM INC.

CORVAL CONSTRUCTORS, INC.

SUSAN DEJAGER

EO JOHNSON BUSINESS TECHNOLOGIES

DAVID GAKERE

GRAINGER INC

GRAYBAR ELECTRIC COMPANY INC

JACKLYN HANSON

HARRIS ST PAUL, INC

INDELCO PLASTICS CORP

INTEGRATED PROCESS SOLUTIONS, INC

IRBY - STUART C IRBY CO

JPMORGAN CHASE BANK NATL ASSOCIATION

KWIK TRIP INC & SUBSIDIARIES

LANO EQUIPMENT INC

LOFFLER COMPANIES - 131511

MIDWEST SAFETY COUNS, INC.

MINN VALLEY TESTING LABS INC

MINNESOTA RURAL WATER ASSOCIATION

MMUA

MN DEPT OF HEALTH

MOBILE HEALTH SERVICES LLC

NAPA AUTO PARTS

GERRY NEVILLE

NORTHWESTERN POWER EQUIPMENT CO. INC

OFFICE OF MNIT SERVICES

RAJAT RAJAN

RESCO

RW BECK GROUP, INC, LEIDOS ENG, LL

SCOTT COUNTY TREASURER

SCOTT COUNTY VSQG COLLECTION PROGRAM

SUNIL THILAKARATHNA

TWIN CITY GARAGE DOOR CO.

UNITED SYSTEMS & SOFTWARE INC

USABLUEBOOK

VESSCO, INC

VESTIS FIRST AID & SAFETY SUPPLIES LOCK

WESCO RECEIVABLES CORP.

HEALTH EQUITY INC.

PAYROLL DIRECT DEPOSIT 02:21.25

BENEFITS & TAXES FOR 02.21.25

Total Week of 02/21/2025

Grand Total

\$2,767.35 SPU CLOTHING ORDER G.FRIENDSHUH

\$159.06 OIL CHG/REPLACE WIPERS TRK#634(W)

\$65,093,42 GALV GUY GRIP DEADEND/WIRE/FUSE SWITCHGEAR

\$75.56 PER DIEM 2/18/25/REIMB MILEAGE

\$29,025.13 MICROSOFT RENEWAL

\$2,29 CABLE FOR BREAKROOMS 2/17-3/16 2025

\$4,700,00 AMI 2718 CARTAUB TEED4" AMI WATER METER

\$500.00 RESIDENTIAL SOLAR REBATE

\$190,08 OIL FOR SHREDDER MACHINE MAILROOM

\$500.00 RESIDENTIAL SOLAR REBATE

\$236.12 CREDIT MEMO MECH TSTAT

\$1,177.11 2-ALUM RIGID CONDUIT

\$26,00 PER DIEM 2/18/25 OPER PROGRAM

\$1,444,00 BLDG AUTOMATION MAINT AGREEMENT

\$519.00 3/8"TUBE x 1/4"MPT CONNECTOR(W)

\$2,988.42 SUBMERSIBLE LEVEL TRANSDUCER(W)

\$360.20 TOOL REPAIR PARTS(E)

\$2,571,00 ENERGY CONSERVATION REBATE

\$6,390,00 APPLIANCES REBATE

\$13,608.16 WO 2973 MORITZ MT16GT-6+16 YR: 2024

\$204,51 METER RENTAL

\$1,391.54 FR FLEECE GROUND GLOVES(E)

\$354.00 WATER TESTING NITRATES

\$425.00 MEMBERSHIP RENEWAL 4/25-3/26

\$12,078.75 1ST QTR 2025 SAFE PROG/JOB TRAINING(E)

\$32.00 CLASS B CERTIFICATE EXAM JACKI HANSON

\$51.50 HEARING TEST

\$488,29 OZZY JUIC(E)

\$98.00 REIMBURSE 140 MILES

\$401,30 VALVE POSITION INDICATOR(W)

\$734.01 JANUARY 2025 WAN SERVICES

\$500,00 RESIDENTIAL SOLAR REBATE

\$3,405,00 FEEDTHRU STANDOFF 15KV 200A

\$11,445.00 JANUARY SPU LONG RANGE PLANNING STUDY \$2,100.00 FEBRUARY FIBER

\$2,436.66 VSQG WASTE COLLECTION SITE

\$500,00 RESIDENTIAL SOLAR REBATE

\$3,025.00 NEW LIFTMASTER N SIDE DOOR

\$742.50 AMI 2718 ITRON MOUNTING KIT FOR REMOTE

\$483,10 HACH SINGLEUSE PH BUFFER

\$3,261.72 WELL HOUSE REBUILD

\$294.13 REPLENISH FIRST AID KITS

\$11,492.25 HUSKIE REC-RL7750X

\$404.59 MEDICAL CLAIM REIMB C.S.

\$138,741.20

\$140,095.08

\$467,518.03

\$6,447,428.89

Kellay Willemosen	
Presented for approval by: Director of Finance & Administration	-
Approved by General Manager	
Approved by Commission President	_

Proposed As Consent Item





PO Box 470 • 255 Sarazin Street Shakopee, Minnesota 55379 Main 952.445-1988 • Fax 952.445-7767 www.shakopeeutilities.com

To:

SPU Commissioners

From:

Greg Drent, General Manager

Date:

February 21, 2022

Subject:

MMPA February 2025 Meeting Update

The Board of Directors of the Minnesota Municipal Power Agency (MMPA) met on February 18, 2025, at Chaska City Hall in Chaska, Minnesota and via videoconference.

Management reviewed 2024 performance. A summary of the presentation is attached.

The Board reviewed the Agency's financial and operating performance for January 2025.

Participation in the residential Clean Energy Choice program increased by 36 customers. Customer penetration for the program is 6.0%.

The Board discussed the status of renewable projects the Agency is pursuing.

The Board was informed that the amendment to MMPA's Agency Agreement regarding the calculation of weighted voting totals has been filed with the Minnesota Secretary of State's Office.



2024 Year in Review Summary

- Rates 8% Lower than Competitive Benchmark
- Generated Carbon Free Energy Equal to 48% of Energy Needs
- Began Development of Two Solar Projects
- Received \$4.2 Million Direct Pay of Investment Tax Credit for Hometown BioEnergy Renewable Natural Gas Project
- Net Income of \$23 Million
- Unrestricted Cash Increased by \$11 Million Because of Two Large Land Purchases for Solar Projects
- 2025 Budget Average Rate to Members Equal to 2024
- January and February 2025 Rates Equal than Budget

Proposed As Consent Item





PO Box 470 • 255 Sarazin Street Shakopee, Minnesota 55379 Main 952.445-1988 • Fax 952.445-7767 www.shakopeeutilities.com

DATE:

February 20, 2025

TO:

Commissioners

FROM:

Greg Drent, General Manager

Subject:

Drive-up hour change

SPU drive-up has been in service for several years and has been a great addition to our customer service. The current drive-up hours are Monday, Tuesday, and Thursday, from 7:00 am to 4:30 pm; Wednesday, 7:00 am to 6:00 pm; and Friday, 7:00 to 11:00 am.

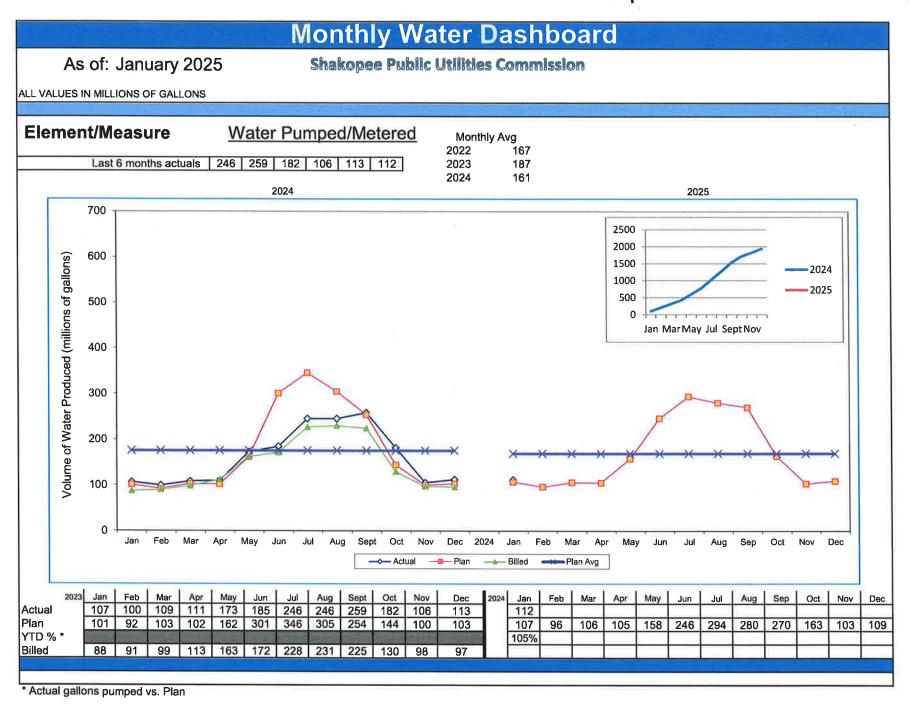
We have been monitoring the activity of the drive-up both in call volume and traffic at the window. Since implementing a new billing and customer portal system and AMI, the data shows that customer volume drops significantly after 4:30 pm. The average number of customers coming to the drive-up between 4:30 pm and 5:00p is 2 per Wednesday. We have only had a couple of customers that have come in SPU drive up after 5:00 pm in the last several months. Staff sees most of the traffic during disconnects. Disconnects are done on Wednesdays and Thursdays once a month.

After reviewing customer traffic patterns, operational efficiency, and staff workload, I recommend adjusting the drive-up window's closing time from 6 pm to 5 pm on Wednesday nights, except during disconnects. During disconnect days, the drive-up will remain open until 6 pm to ensure customers have the option to pay by cash or check.

We will clearly communicate the new closing time to customers and continue to monitor customer feedback and transaction data. If there are additional changes for operational efficiencies, we will bring that back to the commission for further review.

Action: Approve new drive-up hours

Monday: 7:00 am - 4:30 pm Tuesday: 7:00 am - 4:30 pm Wednesday: 7:00 am - 5:00 pm Thursday: 7:00 am-4:30 pm Friday: 7:00 am-11:00 am



Proposed As Consent Item





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February 18, 2025

TO:

Greg Drent, General Manager Ali

FROM:

Sharon Walsh, Director of Marketing, Key Accounts and Special Projects

SUBJECT:

AMI Opt-Outside Policy Documentation

Overview

The attached policy language was approved by the commission at the November 6, 2023 commission meeting. For clarity and ease of reference for customers, this language has been incorporated into policy format. This document has been added to our policies on the SPU website, in addition to the AMI web page, where this language has been included since approved.

Action Requested

No action is required.



AMI OPT-OUTSIDE POLICY

The following policy was approved by the SPU Commission on November 6, 2023.

All SPU electric customers will receive a smart meter as part of SPU's enhanced metering system upgrade, known as AMI (Advanced Metering Infrastructure). A non-communicating electric meter is not an option for reasons of overall system integrity and performance, customer benefits, billing and meter reading efficiencies, and administrative operational costs.

In Minnesota, water meters are required to be installed inside climate-controlled buildings due to external weather temperatures (i.e., freezing). The communication module (necessary for the water meter to communicate) can, however, be mounted outside.

Data from the water meter is sent to the electric meter through this communication module via radio frequency (RF) and then back to SPU. The communication module is a low-frequency RF device (that transmits significantly less radio frequency transmission waves than other indoor devices, such as baby monitors, microwaves, Wi-Fi or cellphones) and is installed near the water meter by SPU or SPU-approved installers. Water meters are typically installed in the basement, or in a ground level utility room if there is no basement, near the water service line entering the building.

Customers may request to have the communication module device installed outside the home/building on an exterior wall near the electric meter. This is SPU's Opt-Outside option. If the Opt-Outside option is selected, the homeowner/property owner is responsible for any professional electric or construction expenses that may be incurred to get the proper wiring from the meter to the outside of the home/building. SPU will only connect the communication module/ERT to the wiring once it has been brought to the exterior wall and meeting SPU criteria.

This Opt-Outside decision needs to be made prior to the standard water meter and ERT installation. If a change is required after the original installation, SPU truck and labor fees will apply, in addition to above costs.

Proposed As Consent Item





PO Box 470 • 255 Sarazin Street Shakopee, Minnesota 55379 Main 952.445-1988 • Fax 952.445-7767 www.shakopeeutilities.com

DATE: February 26, 2025

TO: Greg Drent, General Manager

FROM: Kelley Willemssen, Director of Finance & Administration

SUBJECT: 2024 – Preliminary Financial Reports

The finance team is working diligently to prepare for the 2024 audit. To ensure a smooth closing and audit we are conducting a final review of several areas including budgets, evaluation of existing construction in progress and asset additions, reconciliations, and verifying compliance with financial regulations and policies.

The attached financial statements as of December 31, 2024, are unaudited and do not represent all the yearend entries that are still in progress. They are presented as an overview of the utilities financial results and performance at the end of the year. The final audited financial report will be presented to the commission by CLA at the May meeting.

Electric

Electric retail revenue for 2024 was lower than budgeted primarily due to unseasonably milder temperatures reducing cooling demands. The weather anomaly led to reduced consumption compared to budget assumptions which were based on more typical seasonal weather patterns. Despite the reduction in revenue, the electric division had a higher than budgeted operating income for the year mainly due to lower than budgeted purchase power costs resulting from less consumption and other operational costs staying slightly lower than budget. Investment income was above budget, driven by favorable market conditions and positive performance in investments, and was a strong driver in the increase in net position for electric.

Water

Water retail revenue for 2024 was lower than budgeted primarily due to unseasonably milder temperatures reducing irrigation water sales. The weather anomaly led to reduced water consumption compared to budget assumptions which were based on more typical seasonal weather patterns. Operating expenses were lower than budgeted except for depreciation. The depreciation acceleration of water meters from the AMI implementation impacted the increased expense. The water division operating income reflects a loss due to declining revenues and higher depreciation expenses. However, despite this, the water division net position is better than budget primarily due to investment income being better than budgeted, driven by favorable market conditions and positive performance in investments and capital contributions from trunk and water capacity fees. Included in this report are the following statements:

- Combined Statement of Revenues, Expenses and Changes in Fund Net Position
- Electric Operating Revenue and Expense Budget to Actual (with analytics)
- Water Operating Revenue and Expense
 Budget to Actual (with analytics)

No Action - Informative

SHAKOPEE PUBLIC UTILITIES COMBINED STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET POSITION

		Year to Date Ac	tual - December	31, 2024	Year to Date Budget - December 31, 2024			Elec	rio	Water		T	
		Electric	Water	Total Utility	Electric	Water	Total Utility	YTD Actual v. I		YTD Actual v. B		YTD Actual v. Bu	
OPERATING REVENUES	\$	59,019,394	6,945,344	65,964,739	61,395,962	7,098,550	68,494,512	(2,376,568)	-3.9%	(153,206)	-2.2%	(2,529,773)	70
OPERATING EXPENSES									0.070	(100,200)	-2,270	(2,529,773)	-3.7%
Operation, Customer and Administrative Depreciation Total Operating Expenses		48,037,534 3,878,115	4,532,536 2,738,071	52,570,070 6,616,186	53,287,196 3,261,970	4,794,721 2,006,776	58,081,917 5.268.746	5,249,661 (616,145)	9.9% -18.9%	262,185 (731,295)	5.5% -36.4%	5,511,847	9.5%
Total Operating Expenses	-	51,915,650	7,270,606	59,186,256	56,549,166	6,801,497	63,350,663	4,633,516	8.2%	(469,109)	-6.9%	(1,347,440) 4,164,407	-25.6% 6.6%
Operating income	-	7,103,745	(325,262)	6,778,483	4,846,797	297,053	5,143,850	2,256,947	46.6%	(622,315)	209.5%	1,634,633	31.8%
NON-OPERATING REVENUE (EXPENSE) Rental and Miscallaneous		507.075											
Interdepartment Rent from Water Lease Interest Revenue		587,675 90,000	558,445 53.017	1,144,119 90,000	240,298 90,000	108,809	349,107 90,000	347,377	144.6% 0.0%	447,636	411.4% 0.0%	795,012	227.7% 0.0%
Investment Income Interest Expense		1,890,259 (85,997)	1,387,537 (4,670)	53,017 3,277,796	1,018,655	487,166	1,505,821	871,604	0.0% 65.6%	53,017 900,371	100.0% 184.8%	53,017 1,771,975	100.0%
Gain/(Loss) on the Disposition of Property Total Non-Operating Revenue (Expense)		15,956 2,497,893	(1,749) 1,990,580	(90,667) 14,208	(78,982)	(12,000)	(90,982)	(7,015) 15,956	-8.9% 0.0%	7,330 (1,749)	61.1%	315 14,208	0,3%
_ , ,		2,407,000	1,000,000	4,488,473	1,269,971	583,975	1,853,946	1,227,922	96.7%	1,406,605	240.9%	2.634.527	142.1%
Income Before Contributions and Transfers		9,601,638	1,665,318	11,266,956	6,116,768	881,028	6,997,796	3,484,870	57.0%	784,290	89.0%	4,269,160	61.0%
CAPITAL CONTRIBUTIONS MUNICIPAL CONTRIBUTION	,-	936,171 (3,587,635)	5,279,233 (370,254)	6,215,404 (3,957,889)	730,662 (3,634,890)	3,649,911 (425,913)	4,380,573 (4,060,803)	205,509 47,255	-28.1% 1.3%	1,629,322 55,659	44.6% 13.1%	1,834,831 102,914	41.9%
CHANGE IN NET POSITION	_\$	6,950,174	6,574,297	13,524,471	3,212,539	4,105,026	7,317,565	3,737,634	116.3%	2,469,271	60.2%	6,206,906	2.5% 84.8%

SHAKOPEE PUBLIC UTILITIES **ELECTRIC OPERATING REVENUE AND EXPENSE**

		YTD Actual	YTD Budget	YTD Actual v. Bu	ase)
OPERATING REVENUES	-	12/31/2024	12/31/2024	\$	%
Sales of Electricity					
Residential	•	0.4 = 0.0 = 0.0 =			
Commercial and Industrial	\$	21,700,887	23,316,224	(1,615,337)	93.1
		36,191,893	36,740,898	(549,005)	98.5
Uncollectible accounts	_	(130,692)		(130,692)	
Total Sales of Electricity	_	57,762,089	60,057,122	(2,295,033)	96.2
Forfeited Discounts		247,691	305,619	(57,928)	81.0
Free service to the City of Shakopee		147,542	132,364	15,178	111.5
Conservation program		862,072	900,857	(38,785)	95.7
Total Operating Revenues	_	59,019,394	61,395,962	(2,376,568)	96.1
- Postania Communication	-	00,010,004	01,555,502	(2,370,300)	90.1
OPERATING EXPENSES					
Operations and Maintenance					
Purchased power		39,555,806	43,755,789	(4,199,983)	90.4
Distribution operation expenses		595,222	892,229	(297,007)	66.7 (1)
Distribution system maintenance		1,204,337	1,238,325	(33,988)	97.3
Maintenance of general plant		505,803	387,721	118,081	130.5 (2)
Total Operation and Maintenance	-	41,861,168	46,274,065	(4,412,897)	90.5
Customer Accounts					
Meter Reading		118,770	150,747	(31,977)	78.8 (3)
Customer records and collection		519,929	852,178	(332,249)	61.0 (4)
Energy conservation		862,072	891,737	(29,665)	96.7
Total Customer Accounts		1,500,771	1,894,662	(393,891)	79.2
Administrative and General					
Administrative and general salaries		931,622	1,138,397	(206,775)	81.8
Office supplies and expense		491,829	556,146	(64,317)	88.4
Outside services employed		464,496	575,627	(111,131)	80.7
Insurance		171,829	175,000	(3,171)	98.2
Employee Benefits		2,066,491	1,992,868	73,623	103.7
Miscellaneous general		549,329	680,432	(131,103)	80.7
Total Administrative and General		4,675,596	5,118,469	(442,874)	91.3
Total Operation, Customer, & Admin Expenses		48,037,534	53,287,196	(5,249,661)	90.1
Depreciation		3,878,115	3,261,970	(616,145)	118.9
Total Operating Expenses	\$	51,915,650	56,549,166	(4,633,516)	91.8
Operating Income	\$	7,103,745	4,846,796	2,256,948	146.6

Explanation of Items Percentage Received/Expended Less than 80% or Greater than 120% and \$ Variance Greater than \$15,000. <u>ltem</u>

⁽¹⁾ YTD variance is due to lower than budgeted distribution operating expenses.

⁽²⁾ (3) YTD variance is due to more than budgeted maintenance of the general plant expenses than budgeted.

YTD variance is due to less meter labor than budgeted mainly from the progress of the AMI implementation.

YTD variance is due to less credit card fees than budgeted - new SmartHub credit card fee structure is less than previous structure.

SHAKOPEE PUBLIC UTILITIES WATER OPERATING REVENUE AND EXPENSE

OPERATING REVENUES		YTD Actual 12/31/2024	YTD Budget 12/31/2024	YTD Actual v. Increase (dec		
Sales of Water	\$	0.000.475	7.050.050	(100 1)		
Forfeited Discounts	Ф	6,930,475	7,058,652	(128,177)	98.2	
Uncollectible accounts		22,276	39,898	(17,622)	55.8	(1)
Total Operating Revenues		(7,406) 6,945,344	7,098,550	(7,406)	07.0	
, cam operating neorginate		0,945,544	7,096,550	(153,206)	97.8	-
OPERATING EXPENSES						
Operations and Maintenance						
Pumping and distribution operation		760,523	828,099	(67,576)	91.8	
Pumping and distribution maintenance		691,912	733,521	(41,609)	94.3	
Power for pumping		349,815	435,129	(85,314)	80.4	
Maintenance of general plant		59,740	69,907	(10,167)	85.5	
Total Operation and Maintenance	_	1,861,990	2,066,656	(204,666)	90.1	
Customer Accounts						
Meter Reading		68,850	71,302	(2,452)	96.6	
Customer records and collection		154,889	245,160	(90,271)	63.2	(2)
Energy conservation		4,922	- 12,100	12,564	100.0	(-)
Total Customer Accounts		228,662	316,462	(87,800)	72.3	
Administrative and General						
Administrative and general salaries		536,788	678,176	(141,388)	79.2	(3)
Office supplies and expense		164,750	137,407	27,343	119.9	(5)
Outside services employed		357,288	367,945	(10,657)	97.1	
Insurance		57,306	45,113	12,193	127.0	(4)
Employee Benefits		1,034,773	905,569	129,204	114.3	(-1)
Miscellaneous general		290,978	277,393	13,585	104.9	
Total Administrative and General		2,441,884	2,411,603	30,281	101.3	•
Total Operation, Customer, & Admin Expenses		4,532,536	4,794,721	(262, 185)	94.5	•
Depreciation		2,738,071	2,006,776	731,295	136.4	(5)
Total Operating Expenses	\$	7,270,606	6,801,497	469,109	106.9	(3)
	***	. 12. 01000	0,001,701	400,100	100.9	-
Operating Income	\$	(325,262)	297,053	(622,315)	(109.5)	

Item Explanation of Items Percentage Received/Expended Less than 80% or Greater than 120% and \$ Variance Greater than \$15,000.

⁽¹⁾ YTD variance is due to decreased water penalties than budgeted.

YTD variance is due to less credit card fees than budgeted - new SmartHub credit card fee structure is less than previous structure.
 YTD variance is due to unfilled budgeted positions in 2024.

⁽⁴⁾ YTD variance is due to higher than budgeted insurance increases for 2024.

⁽⁵⁾ YTD variance is due to higher than budgeted depreciation expenses for meters through the AMI implementation.

RESOLUTION SETTING THE AMOUNT OF THE TRUNK WATER CHARGE, APPROVING OF ITS COLLECTION AND AUTHORIZING WATER SERVICE TO CERTAIN PROPERTY DESCRIBED AS:

PALOMINO TRAIL - (NORCOR FARMS)

Block 1, Lots 1 – 7; Block 2, Lots 1 – 16; Block 3, Lots 1 - 11; Block 4, Lots 1 - 15; Block 5, Lots 1 - 9; Block 6, Lots 1 - 10; Block 7, Lots 1 - 6; Block 8, Lots 1 - 9;

WHEREAS, a request has been received for City water service to be made available to certain property, and

WHEREAS, the collection of the Trunk Water Charge is one of the standard requirements before City water service is newly made available to an area, and

WHEREAS, the standard rate to be applied for the Trunk Water Charge has been set by separate Resolution,

NOW THEREFORE, BE IT RESOLVED, that the amount of the Trunk Water Charge is determined to be \$129,940.60 based on 22.45 net acres, and that collection of the Trunk Water Charge is one of the requirements to be completed prior to City water service being made available to that certain property described as:

Block 1, Lots 1 – 7; Block 2, Lots 1 – 16; Block 3, Lots 1 - 11; Block 4, Lots 1 - 15; Block 5, Lots 1 - 9; Block 6, Lots 1 - 10; Block 7, Lots 1 - 6; Block 8, Lots 1 - 9;

BE IT FURTHER RESOLVED, that all things necessary to carry out the terms and purpose of this Resolution are hereby authorized and performed.

Passed in regular session of the Shakopee Public Utilities Commission, this 3rd day of March, 2025.

	Commission President: Justin Krieg
ATTEST:	
Commission Secretary: Greg Drent	

RESOLUTION APPROVING OF THE ESTIMATED COST OF PIPE OVERSIZING ON THE WATERMAIN PROJECT:

PALOMINO TRAIL

WHEREAS, the Shakopee Public Utilities Commission has been notified of a watermain project, and

WHEREAS, the pipe sizes require for that project have been approved as shown on the engineering drawing by WESTWOOD PROFESSIONAL SERVICES, INC., and

WHEREAS, a part, or all, of the project contains pipe sizes larger than would be required under the current Standard Watermain Design Criteria as adopted by the Shakopee Public Utilities Commission, and

WHEREAS, the policy of the Shakopee Public Utilities Commission calls for the payment of those costs to install oversize pipe above the standard size, and

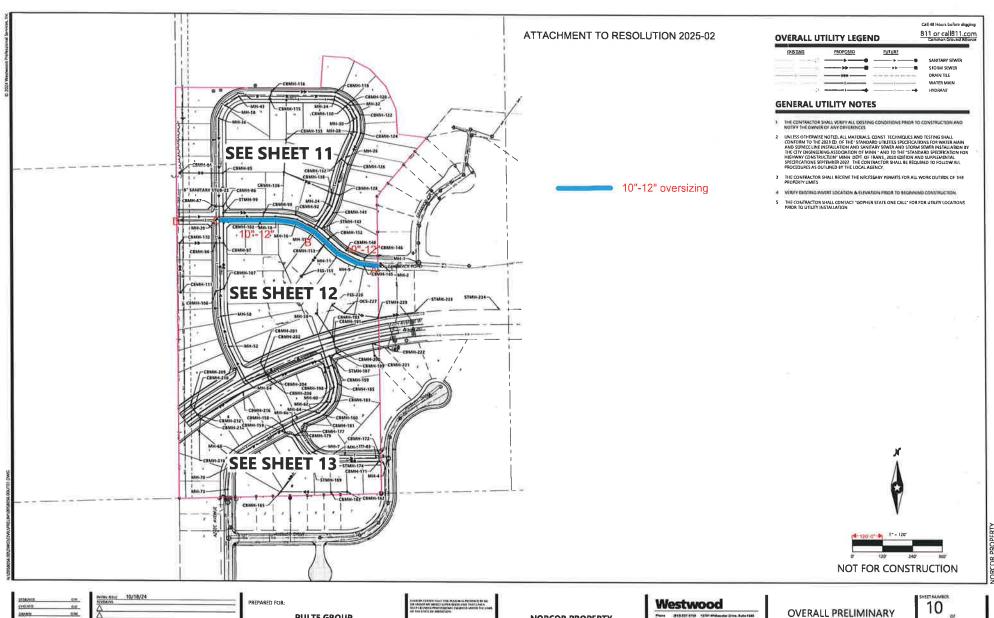
NOW THEREFORE, BE IT RESOLVED, that the total amount of the oversizing to be paid by the Shakopee Public Utilities Commission is approved in the amount of approximately \$30,822.30, and

BE IT FURTHER RESOLVED, the payment of the actual amount for said oversizing will be approved by the Utilities Commission when final costs for the watermain project are known, and

BE IT FURTHER RESOLVED, that all things necessary to carry out the terms and purpose of this Resolution are hereby authorized and performed.

Passed in regular session of the Shakopee Public Utilities Commission, this 3rd day of March, 2025.

	Commission President: Justin Krieg
ATTEST:	
Commission Secretary: Greg Drent	



NORCOR PROPERTY

SHAKOPEE, MN

PULTE GROUP

1650 WEST 82ND STREET, SUITE 300 BLOOMINGTON, MN 55431

THURSDAY TESTUAT

GANT 10/18/24 WINNING 56208

DANNE

WINDOW SCHIE

PROJECT NUMBER: 0052840 DATE 10/18/24

UTILITY PLAN

RESOLUTION APPROVING PAYMENT FOR THE PIPE OVERSIZING COSTS ON THE WATERMAIN PROJECT:

ARBOR BLUFF 1ST ADDITION

WHEREAS, the Shakopee Public Utilities Commission had previously approved of an estimated amount of \$70,139.64 with Resolution #2024-09 for oversizing on the above described watermain project, and

WHEREAS, the pipe sizes required for that project have been installed as shown on the engineering drawing by Pioneer Engineering, and

WHEREAS, a part, or all, of the project contains pipe sizes larger than would be required under the current Standard Watermain Design Criteria as adopted by the Shakopee Public Utilities Commission, and

WHEREAS, the policy of the Shakopee Public Utilities Commission calls for the payment of these costs to install oversize pipe above the standard size.

NOW THEREFORE, BE IT RESOLVED, that the payment by the Shakopee Public Utilities Commission for the oversizing on this project is approved in the amount of \$84,926.43, and

BE IT FURTHER RESOLVED, that all things necessary to carry out the terms and purpose of this Resolution are hereby authorized and performed.

Passed in regular session of the Shakopee Public Utilities Commission, this 3rd day of March, 2025.

	President: Justin Krieg	
ATTEST:		
Commission Secretary: Greg Drent		

RESOLUTION APPROVING PAYMENT FOR THE PIPE OVERSIZING COSTS ON THE WATERMAIN PROJECT:

HIGHVIEW PARK 2ND ADDITION

WHEREAS, the Shakopee Public Utilities Commission had previously approved of an estimated amount of \$52,264.86 with Resolution #2024-17 for oversizing on the above described watermain project, and

WHEREAS, the pipe sizes required for that project have been installed as shown on the engineering drawing by Westwood Professional Services, and

WHEREAS, a part, or all, of the project contains pipe sizes larger than would be required under the current Standard Watermain Design Criteria as adopted by the Shakopee Public Utilities Commission, and

WHEREAS, the policy of the Shakopee Public Utilities Commission calls for the payment of these costs to install oversize pipe above the standard size.

NOW THEREFORE, BE IT RESOLVED, that the payment by the Shakopee Public Utilities Commission for the oversizing on this project is approved in the amount of \$39,844.31, and

BE IT FURTHER RESOLVED, that all things necessary to carry out the terms and purpose of this Resolution are hereby authorized and performed.

Passed in regular session of the Shakopee Public Utilities Commission, this 3rd day of March, 2025.

		President: Justin Krieg	
ATTEST:			
Commission Secretar	y: Greg Drent		

Proposed As Consent Item

RESOLUTION APPROVING SHAKOPEE PUBLIC UTILITIES COMMISSION'S COGENERATION AND SMALL POWER PRODUCTION TARIFF

WHEREAS, the Rules Governing the Interconnection of Cogeneration and Small Power Production Facilities with Shakopee Public Utilities Commission and Minnesota Statutes Section 216B.164 require the utility to annually adopt schedule 1 and schedule 2 of its Cogeneration and Small Power Production Tariff.

WHEREAS, the cogeneration and small power production tariff shall include a calculation of Shakopee Public Utilities' average retail utility energy rates, the rates at which Shakopee Public Utilities' purchases energy and capacity, and Shakopee Public Utilities' adopted interconnection process.

WHEREAS, the statute and rules cited above require the information contained in schedules 1, 2, and 3 described within.

WHEREAS, Schedule 1 shall contain the calculation of average retail utility energy rates for each Shakopee Public Utilities' customer class.

WHEREAS, Schedule 2 shall contain the rates at which Shakopee Public Utilities purchases energy and capacity from the wholesale supplier from which purchases may first be avoided.

WHEREAS, Schedule 3 shall indicate by reference Shakopee Public Utilities Commission's adopted interconnection process, or "distributed generation tariff" adopted in compliance with Minnesota Statutes Section 216B.1611, subd. 3(2), including standard contract forms to be used with customers interconnecting qualifying facilities as well as general technical interconnection and interoperability requirements.

WHEREAS, these filings shall be maintained at the Shakopee Public Utilities Commission office and shall be made available for public inspection during normal business hours.

NOW THEREFORE BE IT RESOLVED, that the Shakopee Public Utilities Commission approves the following Cogeneration and Small Power Production Tariff effective beginning April 1, 2025 or the nearest regular meter reading date following, and apply to usage/output after that date and to subsequent billing periods.

Passed in the regular session of the Shakopee Public Utilities Commission, this 3rd day of March 2025.

ATTEST:	Commission President: Justin Krieg
Commission Secretary: Greg Drent	



Shakopee Public Utilities Commission COGENERATION AND SMALL POWER PRODUCTION TARIFF 2025

SCHEDULE 1 – AVERAGE RETAIL ENERGY RATES

Average Retail Utility Energy Rates: Available to any Qualifying Facility of less than or equal to 40 kW AC aggregated nameplate capacity that does not select either Roll Over Credits, Simultaneous Purchase and Sale Billing, or Time of Day rates.

Shakopee Public Utilities shall bill Qualifying Facilities for any excess of energy supplied by Shakopee Public Utilities above energy supplied by the Qualifying Facility during each billing period according to Shakopee Public Utilities applicable rate schedule. Shakopee Public Utilities shall pay the customer for the energy generated by the Qualifying Facility that exceeds that supplied by Shakopee Public Utilities during a billing period at the "average retail utility energy rate". The term "average retail utility energy rate" means, for any class of utility customer, the quotient of the total annual class revenue from sales of electricity minus the annual revenue resulting from fixed charges, divided by the annual class kilowatt-hour sales. Data from the most recent 12-month period available shall be used in the computation.

"Average retail utility energy rates" are as follows:

RESIDENTIAL	2024
TOTAL REVENUES	\$ 21,614,561.69
LESS UNDERGROUND RELOCATION FEES	\$ 39,391.03
LESS FIXED REVENUES (CUSTOMER CHARGE)	\$ 2,291,336.90
NET REVENUES	\$ 19,283,833.76
TOTAL KWH SALES	\$ 138,811,440
AVERAGE RETAIL ENERGY RATE	\$ 0.1389
COMMERCIAL	
TOTAL REVENUES	\$ 2,463,548.81
LESS UNDERGROUND RELOCATION FEES	\$ 4,207.87
LESS WATER DIVISION ELECTRIC FOR PUMPING	\$ 303,496.00
LESS FIXED REVENUES (CUSTOMER CHARGE)	\$ 255,466.15
NET REVENUES	\$ 1,900,378.79
TOTAL KWH SALES	14,027,797
AVERAGE RETAIL ENERGY RATE	\$ 0.1355
INDUSTRIAL	
TOTAL REVENUES	\$ 33,814,669.83
LESS UNDERGROUND RELOCATION FEES	\$ 82,117.58
LESS FIXED REVENUES (CUSTOMER CHARGE)	\$ 486,669.09
LESS DEMAND CHARGES	\$ 7,647,419.09
NET REVENUES	\$ 25,598,464.07
TOTAL KWH SALES	273,774,080
AVERAGE RETAIL ENERGY RATE	\$ 0.0935

SCHEDULE 2 – WHOLESALE SUPPLY RATES

Wholesale Supply Rates: A "non-generating utility" must list the rates at which it purchases energy and capacity. If the utility has more than one wholesale supplier, the rates listed are of that supplier from which purchases may first be avoided.

Shakopee Public Utilities purchases energy and capacity from Minnesota Municipal Power Agency (MMPA).

In 2024, the <u>average energy rate</u> paid by Shakopee Public Utilities was \$0.06464 per kilowatt-hour.

In 2024, the <u>average capacity rate</u> paid by Shakopee Public Utilities was \$0.02036 per kilowatt-hour.

These rates are used to calculate Shakopee Public Utilities "avoided costs" for purposes of calculating compensation to customers whose Qualifying Facilities are not eligible for compensation at Shakopee Public Utilities average retail utility energy rate or who elect compensation at another rate.

[&]quot;Avoided Costs for Shakopee Public Utilities" are as follows:

	Energy (\$/kWh)	Capacity (\$/kWh)	REC (\$/kWh)
Summer Months (June-Sept)			
On Peak	0.0586	0	0
Off Peak	0.0342	0	0
All Hours	0.0455	0	0
Winter Months (Oct-May)			
On Peak	0.0502	0	0
Off Peak	0.0378	0	0
All Hours	0.0436	0	0
Annual (January-December)	0.0442	o	0

SCHEDULE 3 – INTERCONNECTION PROCESS

Interconnection Process: In order to provide for coordinated interconnection of customer-owned distributed energy resources and comply with Minnesota Statutes Section 216B.1611, subd. 3(2), Shakopee Public Utilities has adopted the

"Minnesota Municipal Interconnection Process (M-MIP) 2022"

as recognized by the Minnesota Municipal Utilities Association Board of Directors at its February 9, 2022, meeting and made publicly available at mmua.org.

General technical requirements may be found in the

"Minnesota Technical Interconnection and Interoperability Requirements (TIIR)" as adopted by the Minnesota Public Utilities Commission on April 11th, 2023 as part of DOCKET NO. E-999/CI-16-521.

For Shakopee Public Utilities' specific safety standards, required operating procedures for interconnected operations, and the functions to be performed by any control and protective apparatus, please contact Shakopee Public Utilities.

Proposed As Consent Item





PO Box 470 • 255 Sarazin Street Shakopee, Minnesota 55379 Main 952.445-1988 • Fax 952.445-7767 • www.shakopeeutilities.com

February 25, 2025

TO:

Greg Drent, General Manager

FROM:

Sharon Walsh, Director of Marketing, Key Accounts and Special Project

SUBJECT:

AMI Customer Appeal and Resolution #2025-06

<u>Overview</u>

At the February 3, 2025 meeting, the Commission directed staff to prepare a resolution adhering to SPU's current policy as to advanced metering infrastructure (AMI) in response to the appeal by Jeanne and David Gavin. A draft resolution is included for Commission consideration.

Itron, the manufacturer of the advanced meters and equipment being installed, has confirmed that its facilities comply with the federal FCC standards. Itron stated that continuous transmission is prohibited by the FCC, and that its equipment transmits less than one minute per day. Each transmission is a millisecond, or one one-thousandth of a second in length. Itron stated that its equipment operates at 0.04% of the FCC permitted radio frequency limit per day.

The resolution includes references to detailed information gathered by federal agencies as well as international authorities. For additional context, shorter information is included with this memorandum. The resolution contains links to lengthy pages of information, and for convenience, the links are listed below:

- 1. FCC radio frequency information: https://www.fcc.gov/general/radio-frequency-safety-0
- 2. Federal regulation as to human exposure to radio frequency (attached): 47 CFR § 1.1310
- FCC OET Bulletin 65 (edition 97-01):

https://transition.fcc.gov/Bureaus/Engineering Technology/Documents/bulletins/oet65/oet65.pdf

- 4. Itron White Paper on Radio Frequency (attached).
- 5. Itron specifications (attached).
- 6. Federal Energy Information Administration information:

https://www.eia.gov/tools/faqs/faq.php?id=108&t=3#:~:text

7. World Health Organization information:

https://www.who.int/data/gho/data/themes/topics/topic-details/GHO/electromagnetic-fields

Action Requested

Staff recommends approval of Resolution #2025-06 as presented.



Radio Frequency

Radio Frequency (RF) energy is all around us. It plays a critical role in the communications systems that we depend on every day, such as police and fire radio systems and pagers, radio and television broadcasts, and cellular telephones. Many of the conveniences we've grown accustomed to in our homes, such as cordless phones and wireless internet (WiFi), utilize radio frequency.

Since 1996, the Federal Communications Commission (FCC) has required all wireless communications devices sold in the United States meet minimum guidelines for safe human exposure to radio frequency energy. In addition, federal health and safety agencies including the Environmental Protection Agency (EPA), Food and Drug Administration (FDA), National Institute for Occupational Safety and Health (NIOSH), and the Occupational Safety and Health Administration

(OSHA) consistently monitor and regulate RF safety.

Itron's products are stringently evaluated for RF safety and meet all Federal Communication Commission (FCC), Industry Canada (IC), and Institute of Electrical and Electronic Engineers (IEEE) standards. We consistently evaluate key factors for exposure risk including the frequency of the transmission, the power output, and the distance from the public.

- » Limited time on the air: Our endpoint devices transmit for very short intervals spread throughout the day and thus have a very small duty cycle. This results in RF exposure levels that are a fraction of the limits specified by regulatory agencies, including the FCC and Industry Canada.
- » Low power: Our devices are low power: one watt or less. These low levels of RF exposure are well below the regulatory limits and less RF energy than a typical cellular network.

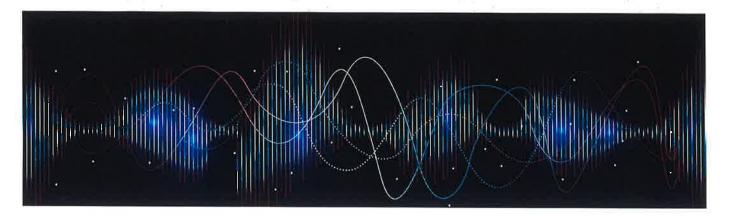
» Limited proximity to humans: Our devices are typically installed outside the home. Since RF energy falls off very quickly with distance, this typically represents much lower exposure than other RF devices located within the home.

According to several reputable organizations, including the Electric Power Research Institute and Utilities Telecom Council, there is no demonstrated cause and effect relationship between low levels of RF exposure and adverse human health effects. Itron recognizes that concerns about RF emissions exist. As such, we continue to monitor the regulations and perform extensive RF testing to actively minimize RF emission levels by all means possible.

WIRED SOLUTIONS

Currently, no wired metering solutions are available for residential smart grid applications. Itron's meters are designed to be communications technology agnostic, which theoretically means they are capable of supporting a variety of communication options. However, no wired options have been developed for two main reasons:

- 1. Customer and marketplace needs ultimately determine what other communications capabilities a smart meter platform must support. Thus far, the marketplace clearly and overwhelmingly stated that wireless technology represents the best solution approach for a variety of reasons. Without market demand, large R&D costs of a wired solution cannot be justified.
- 2. Existing telecommunications (PSTN/POTS) or cable infrastructure in jurisdictions around the world are not robust or secure enough to support an end-to-end metering solution. Further, these infrastructure services are delivered by third parties outside of utility control, exposing both the electricity grid and consumer information to unauthorized access.



RF FREQUENTLY ASKED QUESTIONS (FAQS)

Q: What is radio frequency? How is it measured?

A: Electromagnetic fields, radio waves, microwaves and wireless signals are collectively referred to as radio frequency (RF) energy. RF energy is all around us. It's used in various electronics and appliances, including radio and television broadcasting, cellular telephones, satellite communications, microwave ovens, radars, and industrial heaters and sealers, to name a few.

Electromagnetic waves are measured by wavelength and frequency. Wavelength is the distance covered by one complete cycle of the electromagnetic wave. Frequency is the number of electromagnetic waves in one second, also known as hertz or Hz. One Hz equals one cycle per second. One megahertz (MHz) equals one million cycles per second. Generally, microwaves are radio frequencies measuring more than one GHz.

Q: Is there a health hazard associated with radio frequency?

A: According to several reputable organizations, including the World Health Organization (WHO) and Utilities Telecom Council, there is no demonstrated cause and effect relationship between low levels of RF exposure and adverse human health effects. Itron recognizes that concerns about RF emissions exist. As such, we continue to monitor the regulations and perform extensive RF testing to actively minimize RF emission levels by all means possible.

The WHO notes in their backgrounder on base stations and wireless technologies that:

"To date, the only health effect from RF fields identified in scientific reviews has been related to an increase in body temperature (> 1°C) from exposure at very high field intensity found only in certain industrial facilities, such as RF heaters. The levels of RF exposure from base stations and wireless networks are so low that the temperature increases are insignificant and do not affect human health."

Q: How is it regulated? Are there any safety limits on human exposure to wireless and RF fields?

A: Since 1996, the FCC has required all wireless communications devices sold in the United States meet minimum guidelines for safe human exposure to radio frequency energy. The limits established in the guidelines are designed to protect public health with a very large margin of safety. In addition, federal health and safety agencies including the EPA, FDA, NIOSH and OSHA consistently monitor and regulate RF safety.

The FCC has established exposure guidelines for RF devices operating in the 300 kilohertz (kHz) – 100 GHz range. These safety guidelines are outlined in the publication, OET Bulletin 65 Edition 97-01, Evaluating Compliance with FCC guidelines for Human Exposure to Radiofrequency Electromagnetic Fields.

The general population exposure limits set by the FCC for the frequency range utilized by Itron smart meters and other devices – like cordless phones and baby monitors – is frequency in MHz/1500 mW/ cm2 for devices operating below 1500 Mhz and 1 mW/ cm2 for those operating above 1500 Mhz. This gives the maximum values (provided in the following table) for an uncontrolled environment.

Cellular Low Bands	0.45 mW/ cm2	
915 ISM Band	.60 mW/ cm2	
Cellular Mid Bands	1.0 mW/ cm2	

When an Itron battery powered smart meter is transmitting, the exposure to radio frequency energy at 20 centimeters (8 inches) from the meter is at least 10 times lower than the exposure limit set by the FCC. This calculation is for radio frequency energy radiated outward from the front of the meter. The power transmitted toward the rear of the meter is typically a further five- to ten-times lower. The following table lists the calculated values for the Itron battery powered cellular products.

Cellular Low Bands	0.04 mW/ cm2
915 ISM Band	.01 mW/ cm2
Cellular Mid Bands	0.04 mW/ cm2



Q: Where can I learn more about regulatory compliance?

A: The FCC's document *OET Bulletin 65 Edition 97-01, Evaluating Compliance with FCC guidelines for Human Exposure* to Radiofrequency Electromagnetic Fields details how to measure or calculate levels of RF radiation and to determine compliance of RF facilities with exposure limits.

Additionally, FCC OET Bulletin 65 supplement C Edition 01-01 (known as OET-65C) provides further guidance on determining compliance for portable and mobile devices.

These documents may be found at www.fcc.gov/oet/rfsafety.

Q: What is a smart meter?

A: Itron defines smart meters as devices that are like minicomputers on houses and businesses. They communicate back and forth with the utility to automatically transmit meter information, such as energy consumption, spikes in power usage, and power outage and restoration messages to support various applications beyond monthly billings. Our smart metering solutions have substantially more features and functions than our advanced metering systems and technology. Smart meters can collect and store interval data, perform remote service connect/disconnect, send detailed information, receive commands, and interface with other devices, such as in-home displays, smart thermostats and appliances, home area networks, advanced control systems, and more.

Alternately, advanced metering involves one-way communication of meter data. Advanced metering uses a communication module embedded in the meter to collect and store detailed meter data, which is transmitted to handheld computers, mobile units, and/or fixed networks, allowing utilities to collect the data for billing systems and analyze the meter data for more efficient resource management and operations. Itron's advanced meters and RF-based technologies include non-OpenWay CENTRON meters; SENTINEL meters; METRIS meters; and electric, gas and water ERT communication modules.

Q: Are Itron's smart meters certified by the FCC?

A: Itron's products are stringently evaluated for RF safety and meet all Federal Communication Commission (FCC), Industry Canada (IC), and Institute of Electrical and Electronic Engineers (IEEE) standards.

Q: How is Itron addressing the issue of RF safety?

A: Itron consistently evaluates key factors for exposure risk including the frequency of the emission, the power output, and the distance from the public. Specifically, our devices have limited airtime, low power, and limited human exposure.

- » Limited time on the air: Our endpoint devices transmit for very short intervals spread throughout the day and thus have a very small duty cycle. This results in RF energy levels that are a fraction of the exposure limits specified by regulatory bodies, including the FCC and Industry Canada.
- » Low power: Our endpoint devices are extremely low power; less than one watt. These low levels of RF exposure are insignificant, generating far less RF energy than a cellular network.
- » Limited proximity to humans: Our devices are typically installed outside the home. Compare that to a cell phone, which is held directly to the side of the head.

Q: Will a smart meter interfere with a security system, pacemaker, cell phone, or other RF devices?

A: Itron's meters operate in compliance with FCC regulations that require coexistence with other RF devices operating in the 902-928 MHz band. The low-power design and frequency hopping techniques of Itron's meters help reduce the probability of interference with other wireless devices. Itron's cellular based smart meters are based on the same technology and comply with the same FCC regulations as cellular phones. Based on standards and regulations from the FCC and FDA, Itron believes that the likelihood of interference between our meters and other RF devices is extremely low.

The US Food and Drug Administration (FDA) requires pacemaker manufacturers to test their devices for susceptibility to electromagnetic interference (EMI) over a wide range of frequencies and to submit the results as a prerequisite for market approval. Electromagnetic shielding has been incorporated into the design of modern pacemakers to prevent RF signals from interfering with the electronic circuitry in the pacemaker¹.

FOC Office of Engineering & Technology Bulletin 56" (Cuestions and Answers About Biological Effects and Potential Fezze ds of Radiofrequency Electromagnetic Fe/us" (Fourth Edition, August 1999).







Specifications

The following table lists the technical specifications.

Table 40 Technical specifications

Туре	Item	Details	Details		
Electrical	Voltage Rating	120V, 240V	120V, 240V		
	Operating Voltage	± 20% (60Hz)			
	Frequency	60 Hz			
	Operating Range	±3 Hz			
	Battery Type	1/2 AA 1.2Ah			
	Battery Operating Range	3.6 V nominal; 3.4 V - 3.8 V			
	Memory Options	 Standard: 256MB RAM & 512MB Flash Enhanced: 256MB RAM + 512MB Flash & additional Flash 			
Burden Data	Meter Form	2 S	12S/25S	15	
	Operating Voltage (V)	240	120	120	
	Watt Loss (W)	3.8	3.5	3.5	
	VA Loss (VA)	8.8	5.6	5.6	
		Technical Suppor	t at 1-877-487-66	of the meters while in service.	

Table 40 Technical specifications (continued)

Туре	Item	Details		
Communications	IPv6 Mesh Network Radio	RF	IEEE 802.15.4g/e	
	RF Band	900MHz ISM		
	RF Internal Antenna	2.5 dBi (900MI	Hz)	
<i>=</i>	RF Operational Bands	Frequency Range	902 to 928MHz	
		Radio Output Power	Up to 1W	
	RF Standard Modulations	802.15.4g FSK	100Kbps Peak Data Rate	
		802.15.4g OFDM option 3	300Kbps Peak Data Rate	
	1	802.15.4g OFDM option 3	600Kbps Peak Data Rate	
	RF Optional Modulations	802.15.4x OFDM option 1	1200Kbps Peak Data Rate	
		802.15.4x OFDM option 1	2400Kbps Peak Data Rate	
	Wi-Fi	802.11 b/g/n throughput 6 to 54Mbit/s	2.4GHz	
Physical Dimensions	Singlephase Meters	176.0 mm H x 153.2 mm W x 133.9 mm D (6.93 H x 6.03 W : 5.27 D inches)		
Operating Conditions	Temperature	-40°C to +85°	C (-40°F to +185°F)	
	Humidity	0% to 95% non-condensing		
2	Accuracy	± 0.5% @ unit	ty power factor	
	Transient/Surge Suppression`	ANSI C62.45 - 2002; IEC 61000-4-4		

Table 40 Technical specifications (continued)

Туре	Item	Details		
Storage Conditions	Temperature	-40°C to +85°C (-40°F to +185°F) Avoid prolonged storage (more than one year) at temperatures above +85°C (+185°F). Store the meter in the original packing material		
	Relative Humidity	< 50% store in a clean dry environment		
Shipping Weight	4 Meters and Carton	4.958Kgs, (11.0Lbs.)		
(Singlephase Meters)	120 Meter Pallets	149.685Kgs, (330.0Lb.)		
Agency Approvals	ANSI C12.10 - 2014 Physical Aspects of watt hour Meters			
	ANSI C12.1 - 2014 Co	de for Electricity Meters		
	ANSI C12.20 - 2015 0	.2 and 0.5 Accuracy Classes		
	ANSI C12.30 TR - 2013 Testing Requirements for Metering Devices Equipped with Service Switches			
¥	ANSI MH 10.8 - 2005 Specification for Bar Code			
	UL 2735 - UL Standard for Safety for Electricity Utilities Meters, First Edition 2013, Updated 2014			
	FCC Part 15 Class B			
	NEMA SG-AMI 1 - 2009 Requirements for AMI Meter Upgradeability			

This content is from the eCFR and is authoritative but unofficial.

Title 47 —Telecommunication

Chapter I —Federal Communications Commission

Subchapter A —General

Part 1 — Practice and Procedure

Subpart I - Procedures Implementing the National Environmental Policy Act of 1969

Source: 51 FR 15000, Apr. 22, 1986, unless otherwise noted.

Authority: 47 U.S.C. chs. 2, 5, 9, 13; 28 U.S.C. 2461 note; 47 U.S.C. 1754, unless otherwise noted.

Editorial Note: Nomenclature changes to part 1 appear at 63 FR 54077, Oct. 8, 1998.

§ 1.1310 Radiofrequency radiation exposure limits.

- (a) Specific absorption rate (SAR) shall be used to evaluate the environmental impact of human exposure to radiofrequency (RF) radiation as specified in § 1.1307(b) of this part within the frequency range of 100 kHz to 6 GHz (inclusive).
- (b) The SAR limits for occupational/controlled exposure are 0.4 W/kg, as averaged over the whole body, and a peak spatial-average SAR of 8 W/kg, averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the parts of the human body treated as extremities, such as hands, wrists, feet, ankles, and pinnae, where the peak spatial-average SAR limit for occupational/controlled exposure is 20 W/kg, averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube). Exposure may be averaged over a time period not to exceed 6 minutes to determine compliance with occupational/controlled SAR limits.
- (c) The SAR limits for general population/uncontrolled exposure are 0.08 W/kg, as averaged over the whole body, and a peak spatial-average SAR of 1.6 W/kg, averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the parts of the human body treated as extremities, such as hands, wrists, feet, ankles, and pinnae, where the peak spatial-average SAR limit is 4 W/kg, averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube). Exposure may be averaged over a time period not to exceed 30 minutes to determine compliance with general population/uncontrolled SAR limits.

(d)

- (1) Evaluation with respect to the SAR limits in this section must demonstrate compliance with both the whole-body and peak spatial-average limits using technically supported measurement or computational methods and exposure conditions in advance of authorization (licensing or equipment certification) and in a manner that facilitates independent assessment and, if appropriate, enforcement. Numerical computation of SAR must be supported by adequate documentation showing that the numerical method as implemented in the computational software has been fully validated; in addition, the equipment under test and exposure conditions must be modeled according to protocols established by FCC-accepted numerical computation standards or available FCC procedures for the specific computational method.
- (2) For operations within the frequency range of 300 kHz and 6 GHz (inclusive), the limits for maximum permissible exposure (MPE), derived from whole-body SAR limits and listed in Table 1 in paragraph (e)(1) of this section, may be used instead of whole-body SAR limits as set forth in paragraphs (a)

- through (c) of this section to evaluate the environmental impact of human exposure to RF radiation as specified in § 1.1307(b) of this part, except for portable devices as defined in § 2.1093 of this chapter as these evaluations shall be performed according to the SAR provisions in § 2.1093.
- (3) At operating frequencies above 6 GHz, the MPE limits listed in Table 1 in paragraph (e)(1) of this section shall be used in all cases to evaluate the environmental impact of human exposure to RF radiation as specified in § 1.1307(b) of this part.
- (4) Both the MPE limits listed in Table 1 in paragraph (e)(1) of this section and the SAR limits as set forth in paragraphs (a) through (c) of this section are for continuous exposure, that is, for indefinite time periods. Exposure levels higher than the limits are permitted for shorter exposure times, as long as the average exposure over a period not more than the specified averaging time in Table 1 in paragraph (e)(1) is less than (or equal to) the exposure limits. Detailed information on our policies regarding procedures for evaluating compliance with all of these exposure limits can be found in the most recent edition of FCC's OET Bulletin 65, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields," and its supplements, all available at the FCC's internet website: https://www.fcc.gov/general/oet-bulletins-line, and in the Office of Engineering and Technology (OET) Laboratory Division Knowledge Database (KDB) (https://www.fcc.gov/kdb).

Note to paragraphs (a) through (d): SAR is a measure of the rate of energy absorption due to exposure to RF electromagnetic energy. These SAR limits to be used for evaluation are based generally on criteria published by the American National Standards Institute (ANSI) for localized SAR in Section 4.2 of "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," ANSI/IEEE Std C95.1-1992, copyright 1992 by the Institute of Electrical and Electronics Engineers, Inc., New York, New York 10017. These criteria for SAR evaluation are similar to those recommended by the National Council on Radiation Protection and Measurements (NCRP) in "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," NCRP Report No. 86, Section 17.4.5, copyright 1986 by NCRP, Bethesda, Maryland 20814. Limits for whole body SAR and peak spatial-average SAR are based on recommendations made in both of these documents. The MPE limits in Table 1 are based generally on criteria published by the NCRP in "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," NCRP Report No. 86, Sections 17.4.1, 17.4.1.1, 17.4.2 and 17.4.3, copyright 1986 by NCRP, Bethesda, Maryland 20814. In the frequency range from 100 MHz to 1500 MHz, these MPE exposure limits for field strength and power density are also generally based on criteria recommended by the ANSI in Section 4.1 of "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," ANSI/IEEE Std C95.1-1992, copyright 1992 by the Institute of Electrical and Electronics Engineers, Inc., New York, New York 10017.

(e)

(1) Table 1 to § 1.1310(e)(1) sets forth limits for Maximum Permissible Exposure (MPE) to radiofrequency electromagnetic fields.

TABLE 1 TO § 1.1310(E)(1)—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
	(I) LIMITS FOR OCC	CUPATIONAL/CONTROLLED EXPO	SURE	
0.3-3.0	614	1.63	*(100)	≤6
3.0-30	1842/f	4.89/f	*(900/f ²)	<6
30-300	61.4	0.163	1.0	<6
300-1,500			f/300	<6
1,500-100,000			5	<6
	(II) LIMITS FOR GENERA	L POPULATION/UNCONTROLLED	EXPOSURE	
0.3-1.34	614	1.63	*(100)	<30
1.34-30	824/f	2.19/f	*(180/f ²)	<30
30-300	27.5	0.073	0.2	<30
300-1,500			f/1500	<30
1,500-100,000		-	1.0	<30

f = frequency in MHz. * = Plane-wave equivalent power density.

(2) Occupational/controlled exposure limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. The phrase fully aware in the context of applying these exposure limits means that an exposed person has received written and/or verbal information fully explaining the potential for RF exposure resulting from his or her employment. With the exception of transient persons, this phrase also means that an exposed person has received appropriate training regarding work practices relating to controlling or mitigating his or her exposure. In situations when an untrained person is transient through a location where occupational/controlled limits apply, he or she must be made aware of the potential for exposure and be supervised by trained personnel pursuant to § 1.1307(b)(2) of this part where use of time averaging is required to ensure compliance with the general population exposure limit. The phrase exercise control means that an exposed person is allowed and also knows how to reduce or avoid exposure by administrative or engineering work practices, such as use of personal protective equipment or time averaging of exposure.

(3) General population/uncontrolled exposure limits apply in situations in which the general public may be exposed, or in which persons who are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure. For example, RF sources intended for consumer use shall be subject to the limits for general population/ uncontrolled exposure in this section.

[85 FR 18145, Apr. 1, 2020]

RESOLUTION #2025-06

RESOLUTION MAKING FINDINGS OF FACT AND DETERMNING THE APPEAL SUBMITTED BY JEANNE AND DAVID GAVIN

WHEREAS, Shakopee Public Utilities (SPU) has received by correspondence dated December 13, 2024, an appeal to the Shakopee Public Utilities Commission (the "Commission"), appealing a determination by the SPU General Manager denying the request of Jeanne and David Gavin (the "Customers") not to have SPU install advanced electric and water meters at their home.

WHEREAS, in 2019, SPU determined to install an integrated network of advanced meters, communications networks, and data management systems (often called advanced meter infrastructure, or AMI) throughout its utility service system. SPU proceeded with this technology in response to customers' expectations and requests for additional data, managing increased costs and safety concerns to the utility related to manual meter reading, and improved customer service. As part of this major undertaking, SPU engaged consultants, issued a request for proposals in 2020, and ultimately entered agreements with Itron and Northern States Borders to procure and install the AMI system.

WHEREAS, throughout this process, the Commission considered various options for its customers as to AMI, including potential options to retain an analog meter with an additional fee, but determined that the system-wide benefits of a uniform program outweighed the alternatives. On November 6, 2023, the Commission approved an opt-outside policy in which a customer may request that the communication module/ERT (Encoder/Receiver/Transmitter) component be installed outside the building near the electric meter, with the customer responsible for the costs of wiring the water meter to the exterior wall of the building.

WHEREAS, the Customers declined to schedule a changeout of analog meters, and in a letter dated November 18, 2024, raised concerns about AMI. Greg Drent, SPU General Manager, responded in a letter dated December 4, 2024. The Customers requested an appeal to the Commission and appeared at the January 6, 2025 Commission meeting.

WHEREAS, the Customers submitted documents to SPU consisting of:

- 1. The Customers' letter to Mr. Drent dated November 18, 2024 raising concerns about AMI.
- 2. The Customers' letter to Mr. Drent dated December 13, 2024 requesting to appear before the Commission.
- 3. The Customers' PowerPoint presented at the January 6, 2025 Commission meeting.
- 4. The Customers' letter to Mr. Drent dated February 13, 2025, enclosing a letter from a health provider and a publication.

WHEREAS, SPU staff submitted information to the Commission consisting of:

- 1. A letter from Mr. Drent to the Customers dated December 4, 2024 responding to their concerns.
- 2. SPU Staff memo dated January 16, 2025, included in the February 3, 2025 meeting packet.
- 3. A letter from Mr. Drent to the Customers dated February 4, 2025 concerning Commission action at the February 3, 2025 meeting.
- 4. Federal authorities:
 - a. FCC radiofrequency information https://www.fcc.gov/general/radio-frequency-safety-0
 - b. 47 CFR § 1.1310
 - FCC OET Bulletin 65 (edition 97-01): https://transition.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins/oet65/oet65.pdf
 - d. Federal Energy Information Administration: https://www.eia.gov/tools/faqs/faq.php?id=108&t=3#:~:text=
- 5. World Health Organization information:

https://www.who.int/data/gho/data/themes/topics/topic-details/GHO/electromagnetic-fields

- 6. SPU's Opt-Outside AMI policy.
- 7. Itron White Paper on Radio Frequency.
- 8. Itron specifications.

NOW THEREFORE BASED UPON THE RECORD BEFORE THE COMMISSION AND ALL OF THE FILES, RECORDS, AND PROCEEDINGS HEREIN, THE COMMISSION MAKES THE FOLLOWING:

FINDINGS OF FACT

- 1. The Commission has determined that a system-wide installation of AMI water and electric advanced meters is in the best interests of SPU and its customers. The system is designed to offer customers additional information about their account. It also mitigates SPU's costs and safety concerns from manual meter reading and disconnection/reconnection service. SPU has expended significant funds and staff oversight in this multiple-year project to achieve the benefits of this integrated AMI system.
- 2. The Commission requires every customer to change the analog meters to a water and electric advanced meter. To maximize the overarching system benefits of this technology,

- such as avoiding manual meter reading and manual disconnection/reconnection, requires across-the-system participation.
- 3. The Commission approved the Opt-Outside Policy on November 6, 2023 to permit the installation of communication module/ERT outside the home/building near the electric meter, with the customer responsible for the costs of wiring the water meter to the exterior wall of the home/building.
- 4. In their correspondence and at the January 6, 2025 Commission meeting, the Customers clarified that they do not oppose access to SPU equipment, but voiced health concerns with radio frequency exposure through the AMI meters. In their letter dated February 13, 2025, the Customers clarified that they seek to retain their analog electric and water meters, noting health concerns with radio frequency exposure.
- 5. At the January 6, 2025 meeting, the Commission asked the Customers to provide more information about mitigation measures that they referenced in the presentation, and the costs. The Customers declined to provide this information.
- 6. SPU staff researched and in a memorandum dated January 16, 2025, recommended four options within SPU's current policy for Commission consideration:
 - (1) Proceed with SPU's standard installation of the electric meter on the outside and the water communication module on the inside of the house.
 - (2) Apply SPU's Opt Outside Policy, which permits customers to request installing both the electric meter and the water communication module on the outside of the house, with the customer responsible for the costs to connect the water meter to the communication module, including electrical wiring such as 3-wire low voltage.
 - (3) Install a faraday cage on the smart meter to reduce the low levels of radio frequency transmitted, at the customer's expense. The estimated cost of this equipment is \$20 \$100.
 - (4) Allow a special accommodation by mounting the electric meter and water communication module across the alley. The customer would need to hire an electrician to underground the electric service and necessary 3-wire for the communication module. These costs, which can be significant, would be the responsibility of the customer.
- 7. At the February 3, 2025 meeting, the Commission directed staff to proceed with SPU's existing policy and to inform the Customers of these options. Staff provided this information to the Customers in a letter dated February 4, 2025.
- 8. The Commission notes that federal governmental agencies have researched and since 1996 established standards for human exposure to radiofrequency. 47 CFR § 1.1310(d)(2),(e)(1). The FCC has issued federal regulations concerning these issues and

has promulgated significant guidance. *Id.*; https://www.fcc.gov/general/radio-frequency-safety-0

- 9. The FCC, with access to scientific, medical, and research from other federal agencies, has direct and primary jurisdiction over radio frequency health and safety, and is the appropriate authority to determine these issues, and SPU relies upon these standards. Federal statutes prohibit local units of government such as SPU from regulating certain facilities "on the basis of the environmental effects of radio frequency emissions" if the facilities comply with FCC regulations. 47 U.S.C. § 332(c)(7)(B)(iv) (2022); 47 CFR § 1.1307(b)(5)(e).
- 10. AMI is a commonly used technology. The federal Energy Information Administration notes that in 2022, approximately 119,000,000 AMI meters were installed in the United representing about 72% of all electric meter installations. https://www.eia.gov/tools/faqs/ It is noteworthy that federal law requires federal agencies to use "to the maximum extent practicable" advanced meters to achieve energy and cost efficiency benefits. 42 U.S.C. § 8253(e)(1) (2021). Moreover, the World Health Organization has gathered significant data concerning radiofrequency exposure, specifically the lack of causal connection between radio frequency and adverse health effects: "research does not suggest any consistent evidence of adverse health effects from exposure to radiofrequency fields at levels below those that cause tissue heating [such as cell phones]." https://www.who.int/india/health-topics/electromagnetic-field
- 11. Itron, the manufacturer of the AMI equipment being installed for SPU, has confirmed that this equipment satisfies the FCC requirements for human exposure to radiofrequency. Itron states that when its smart meters are transmitting, the exposure to radiofrequency at the front of the meter at 20 centimeters (8 inches) "is at least ten times lower than the exposure limit set by the FCC." From the back of the meter, it is "typically a further five- to tentimes lower" level of exposure.
- 12. The Customers have not presented evidence that the equipment fails to comply with the FCC standards. Instead, they raised concerns about the standards themselves, and the impact on their health. SPU is not in a position to second-guess the FCC, the agency with primary jurisdiction in establishing standards for exposure to radiofrequency.
- 13. The Commission recognizes that the Customers are especially concerned with the impact on their health. SPU staff has presented several options within the Commission's current policy to address these concerns. Mindful of the public interest of all SPU customers in efficiently and effectively providing utility service with equipment that satisfies current federal regulations, the Commission declines to depart from its AMI policy to allow individuals such as the Customers to retain analog meters.

BE IT RESOLVED BY THE SHAKOPEE PUBLIC UTILITIES COMMISSION AS FOLLOWS:

That the request of Mr. and Mrs. Gavin that SPU not install advanced electric and water meters at their home is denied.

Passed in regular session of the Shakopee Public Utilities Commission this 3rd day of March, 2025.

Commission President:	Justin Krieg

ATTEST:

Commission Secretary: Greg Drent



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SHAKOPEE PUBLIC UTILITIES MEMORANDUM

TO:

Greg Drent, General Manager

FROM:

Joseph D. Adams, Planning & Engineering Director

SUBJECT:

Anchor Glass Emergency Water Service Request

DATE:

February 26, 2025

ISSUE

Staff received a verbal request to allow a second point of service for emergency only water supply to Anchor Glass.

BACKGROUND

Anchor Glass receives SPU supplied water for domestic supply and fire protection in their main office building.

Anchor Glass utilizes their private well water for their 24/7 cooling requirements associated with their blast furnaces. This has been the case since the plant was constructed by Midland Glass and before the property was annexed into Shakopee. SPU records do not show any previous WCC fees paid to SPU for this facility. There is some circa 1980's historical correspondence in the file between SPU and Anchor Glass/Midland Glass discussing the plant's water supply needs and associated fees but no clear indication that anything was resolved then.

During the past year an unplanned power outage left Anchor Glass without their private well water supply. This caused significant issues for the plant and their staff is seeking permission to make another connection to the municipal water supply with the caveat it would only be used during a similar emergency. Anchor Glass's intent would be to continue to rely on their private well water supply for their normal cooling needs.

During our meeting with Anchor Glass personnel, they were informed that SPU is willing and able to allow Anchor Glass to expand their usage from the municipal water system, but with the same conditions that apply to all customers.



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To move the process forward staff suggested to Anchor Glass they should submit a written request addressed to General Manager Greg Drent with a drawing of the planned water service connection and how it would be plumbed to the cooling piping. Staff pointed out that there cannot be any cross connections between piping connected to the municipal supply and their private water wells. Nothing in writing has yet been submitted.

DISCUSSION

Discussions with Anchor Glass centered around their desire to have the additional connection only provide water service during an emergency and it would not be desired to be used on a continuous basis due to the high volume of water needed they prefer to keep using their private wells. That presents some issues that would need resolution.

One issue is providing municipal water on an emergency only basis is problematic from a cost/revenue perspective. Water usage generates the revenues to operate and maintain the SPU municipal water facilities. The demand from an emergency need cannot be counted on to generate revenue on a consistent basis, yet SPU would be expected to maintain reserve capacity for the Anchor Glass emergency needs.

A second issue is how much of a Water Capacity Charge is appropriate? Normally, this is a straightforward calculation, and a WCC is collected based on the projected water usage using the current rate per equivalent SAC unit. If this is a closed system, and the cooling water is not discharged to the sanitary sewer system, an alternative to an upfront payment or multiple payments under a WCC agreement is to apply the higher unsewered production water rate to their cooling water needs. This rate was developed for just such a use and generates additional revenue over and above the standard industrial water usage rate that is directed into the Water Connection (Capacity) Fund to support the new construction of water supply, treatment, storage and pressure facilities. The remainder (equal to the standard rate) is directed to the Operating Fund to support operations, maintenance, repair and replacement costs the same as the regular usage rate revenues. It is not yet clear to staff if the cooling system is a closed system or if any of the cooling water is being discharged to the sanitary sewer. If so, then the standard industrial water rate might apply and a normal WCC fee could be collected.

A third issue is SPU in compliance with MN Department of Health standards cannot allow a cross connection between the municipal water supply and private wells. In is unclear how the plumbing might meet this requirement.

REQUESTED ACTION

Staff requests the Utilities Commission direct staff to review the written request when it is presented by Anchor Glass and evaluate how it impacts the water utility and report back to the Utilities Commission as soon as practicable.





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February 26, 2025

TO:

Greg Drent, General Manager 300

FROM:

Sharon Walsh, Director of Marketing, Key Accounts and Special Project

SUBJECT:

Water Tower #3 - Design Updates

<u>Overview</u>

Following the February 3rd commission meeting, the feedback from the Commissioners was incorporated into the design.

"Shakopee" was changed to block lettering vs script, and the SPU logo was incorporated into the "o" in Shakopee. This was done in lieu of having the SPU logo on the tower column. Further edits to the artwork included the removal of the roulette wheel and the incorporation of more lifestyle graphics, such as greenery, parks and trails. The river, bridge and city scape were also added. The overall design utilizes a broader range of colors that are bright and eye-catching for distance viewing.

This graphic was shared with the City of Shakopee's Graphic Artist and Communications Manager. They approved of the design, with a request for a more legible font for SHAKOPEE. (This was addressed.)

The artwork was then shared in a pre-con meeting where we learned the use of gradation in water tower painting is very costly and only a few artists can do this. The estimated cost to utilize the artwork as designed was more than \$100,000 above what was budgeted.

To remain within the budget and timeline, the artwork is being modified to be fully spot-color painting vs. gradation. The new design will be presented at the March 3rd commission meeting.

Action Requested

No action is required, unless the Commission has further edits.

RESOLUTION #2025-07

RESOLUTION OF APPRECIATION TO LON SCHEMEL

WHEREAS, Mr. Lon Schemel joined Shakopee Public Utilities on November 1, 2010, and during his tenure of more than fourteen years and three months has worked as the Water Superintendent for the Water Department; and

WHEREAS, Mr. Schemel always strived for excellence in contributing to the efficient operation of Shakopee Public Utilities and has been extremely dependable and responsible in performing his duties; and

WHEREAS, Mr. Schemel retired from his position as the Water Superintendent with Shakopee Public Utilities on February 28, 2025; and

NOW THEREFORE, BE IT RESOLVED BY THE SHAKOPEE PUBLIC UTILITIES COMMISSION, that it does hereby express its sincere and deep appreciation to Mr. Schemel for his fourteen years and three months of dedicated service to Shakopee Public Utilities.

BE IT FURTHER RESOLVED that the Shakopee Public Utilities Commission extends its best wishes and congratulations to Mr. Schemel.

Passed in regular session of the Shakopee Public Utilities Commission this 3rd day of March 2025.

	Commission President: Justin Krieg
ATTEST:	
Commission Secretary: Greg Drent	-



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SHAKOPEE PUBLIC UTILITIES MEMORANDUM

TO:

Greg Drent, General Manager

FROM:

Joseph D. Adams, Planning & Engineering Director

SUBJECT:

Solar Grid Access Charge

DATE:

February 27, 2025

ISSUE

The Utilities Commission adopted a new Solar Grid Access Charge (SGAC) in 2025 per the recent rate study by Dave Berg Consulting and staff recommendations.

BACKGROUND

The SPU SGAC applies to DER capacities over 5 kw at the rate of \$4/kw with no cap currently. As a concession for existing solar customers the Commission decided to reduce the SGAC for the first year to \$2/kW. New solar interconnections are to be informed of the fee during the application process and it is charged at the full \$4/kw over 5 kW.

Attached is a summary of existing SPU solar customers listed by capacity without any further identifying data. The summary includes the amounts of solar capacity interconnected on the SPU distribution grid along with projected revenues for the SGAC with a 50% discount for 2025 and at 100% for 2026. 60-66% of the solar customers' generation utilizes the SPU distribution grid facilities on an annual basis.

Also attached is a staff survey of other customer owned electric utilities (municipals and cooperatives) and their current SGAC structure.

As can be seen from the survey data several other utilities have chosen to cap their SGAC. Some have even grandfathered in existing systems to be exempt from the SGAC. While there is not an engineering economic basis for capping the SGAC or exempting systems from the SGAC, staff is bringing options to the Utilities Commission for consideration.



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SPU currently has 250 existing customers over 5 kW capacity with Distributed Energy Resources (DER) interconnected to the local distribution grid. These customers may have chosen to add photovoltaic (PV) generation based on assumptions of the economics of self-generating a portion of their energy usage with the balance to be supplied by the utility.

DISCUSSION

Adopting and applying a Solar Grid Access Charge affects the economics existing customers rightly or wrongly assumed would be static for the life of their DER PV system. MN state statutes permit the fee and do not require any waiver or accommodation for existing interconnected customers. Nonetheless, the adoption of the SPU SGAC has generated several responses from customers on social media and directly to staff and commissioners.

Staff wishes to present to the Utilities Commission factors in considering whether to modify the application of the SGAC for existing and new customers:

- 1. Retain the 5 kW and less capacity exemption for all systems.
- 2. Implement a cap, either permanent or temporary, either for all or just pre-2025 systems.
- 3. Set the cap by KW not by \$, so when the rate changes over time the revenue derived rises with the change.

RECOMMENDATIONS

Staff recommends:

- 1. Retain the 5 kW capacity exemption.
- 2. Set a cap of 20 kW for all existing and new solar customers.

REQUESTED ACTION

Staff requests the Utilities Commission by motion approve any modifications to the SGAC and its application.

Yr Installed	System KW	Solar Grid Access Charge	2025	Cap of 20KW
2023	40.000	\$140.00	\$70.00	\$60.00
2023	40.000	\$140.00	\$70.00	\$60.00
2023	40.000	\$140.00	\$70.00	\$60.00
2024	38.000	\$132.00	\$66.00	\$60.00
2019	37.800	\$131.20	\$65.60	\$60.00
2013	34.220	\$116.88	\$58.44	\$60.00
2021	28.800	\$95.20	\$47.60	\$60.00
2016	26.600	\$86.40	\$43.20	\$60.00
2023	26.300	\$85.20	\$42.60	\$60.00
2023	21.000	\$64.00	\$32.00	\$60.00
2023	20.480	\$61.92	\$30.96	\$60.00
2020	20.000	\$60.00	\$30.00	\$30.00
2020	18.990	\$55.96	\$27.98	\$27.98
2022	17.400	\$49.60	\$24.80	\$24.80
2023	16.900	\$47.60	\$23.80	\$23.80
2022	16.752	\$47.01	\$23.50	\$23.50
2022	16.650	\$46.60	\$23.30	\$23.30
2020	16.560	\$46.24	\$23.12	\$23.12
2022	16.530	\$46.12	\$23.06	\$23.06
2022	16.000	\$44.00	\$22.00	\$22.00
2024	15.200	\$40.80	\$20.40	\$20.40
2024	15.200	\$40.80	\$20.40	\$20.40
2019	15.040	\$40.16	\$20.08	\$20.08
2023	14.976	\$39.90	\$19.95	\$19.95
2022	14.800	\$39.20	\$19.60	\$19.60
2024	14.720	\$38.88	\$19.44	\$19.44
2021	13.700	\$34.80	\$17.40	\$17.40
2021	13.630	\$34.52	\$17.26	\$17.26
2023	13.630	\$34.52	\$17.26	\$17.26
2021	13.611	\$34.44	\$17.22	\$17.22
2024	13.440	\$33.76	\$16.88	\$16.88
2021	13.340	\$33.36	\$16.68	\$16.68
2016	12.870	\$31.48	\$15.74	\$15.74
2025	12.800	\$31.20	\$15.60	\$15.60
2022	12.650	\$30.60	\$15.30	\$15.30
2020	12.180	\$28.72	\$14.36	\$14.36
2024	12.160	\$28.64	\$14.32	\$14.32
2023	11.890	\$27.56	\$13.78	\$13.78
2019	11.700	\$26.80	\$13.40	\$13.40
2021	11.510	\$26.04	\$13.02	\$13.02
2019	11.400	\$25.60	\$12.80	\$12.80
2019	11.400	\$25.60	\$12.80	\$12.80

Yr Installed	System KW	Solar Grid Access Charge	2025	Cap of 20KW
2021	11.400	\$25.60	\$12.80	\$12.80
2022	11.210	\$24.84	\$12.42	\$12.42
2024	11.168	\$24.67	\$12.34	\$12.34
2021	10.960	\$23.84	\$11.92	\$11.92
2021	10.960	\$23.84	\$11.92	\$11.92
2023	10.752	\$23.01	\$11.50	\$11.50
2023	10.752	\$23.01	\$11.50	\$11.50
2021	10.470	\$21.88	\$10.94	\$10.94
2020	10.412	\$21.65	\$10.82	\$10.82
2022	10.410	\$21.64	\$10.82	\$10.82
2022	10.240	\$20.96	\$10.48	\$10.48
2023	10.240	\$20.96	\$10.48	\$10.48
2023	10.240	\$20.96	\$10.48	\$10.48
2015	10.000	\$20.00	\$10.00	\$10.00
2016	10.000	\$20.00	\$10.00	\$10.00
2019	10.000	\$20.00	\$10.00	\$10.00
2020	10.000	\$20.00	\$10.00	\$10.00
2022	10.000	\$20.00	\$10.00	\$10.00
2023	9.984	\$19.94	\$9.97	\$9.97
2023	9.984	\$19.94	\$9.97	\$9.97
2023	9.984	\$19.94	\$9.97	\$9.97
2021	9.860	\$19.44	\$9.72	\$9.72
2023	9.750	\$19.00	\$9.50	\$9.50
2020	9.600	\$18.40	\$9.20	\$9.20
2022	9.600	\$18.40	\$9.20	\$9.20
2023	9.600	\$18.40	\$9.20	\$9.20
2022	9.423	\$17.69	\$8.85	\$8.85
2021	9.320	\$17.28	\$8.64	\$8.64
2021	9.320	\$17.28	\$8.64	\$8.64
2022	9.320	\$17.28	\$8.64	\$8.64
2020	9.316	\$17.26	\$8.63	\$8.63
2023	9.216	\$16.86	\$8.43	\$8.43
2022	9.074	\$16.30	\$8.15	\$8.15
2020	8.990	\$15.96	\$7.98	\$7.98
2022	8.960	\$15.84	\$7.92	\$7.92
2021	8.880	\$15.52	\$7.76	\$7.76
2023	8.832	\$15.33	\$7.66	\$7.66
2023	8.832	\$15.33	\$7.66	\$7.66
2021	8.770	\$15.08	\$7.54	\$7.54
2021	8.770	\$15.08	\$7.54	\$7.54
2021	8.770	\$15.08	\$7.54	\$7.54
2022	8.770	\$15.08	\$7.54	\$7.54

Yr Installed	System KW	Solar Grid Access Charge	2025	Cap of 20KW
2022	8.770	\$15.08	\$7.54	\$7.54
2021	8.768	\$15.07	\$7.54	\$7.54
2022	8.768	\$15.07	\$7.54	\$7.54
2020	8.700	\$14.80	\$7.40	\$7.40
2024	8.700	\$14.80	\$7.40	\$7.40
2023	8.410	\$13.64	\$6.82	\$6.82
2023	8.410	\$13.64	\$6.82	\$6.82
2022	8.376	\$13.50	\$6.75	\$6.75
2022	8.320	\$13.28	\$6.64	\$6.64
2024	8.320	\$13.28	\$6.64	\$6.64
2020	8.220	\$12.88	\$6.44	\$6.44
2020	8.220	\$12.88	\$6.44	\$6.44
2020	8.220	\$12.88	\$6.44	\$6.44
2021	8.220	\$12.88	\$6.44	\$6.44
2021	8.220	\$12.88	\$6.44	\$6.44
2022	8.220	\$12.88	\$6.44	\$6.44
2024	8.190	\$12.76	\$6.38	\$6.38
2019	8.100	\$12.40	\$6.20	\$6.20
2019	8.060	\$12.24	\$6.12	\$6.12
2022	8.027	\$12.11	\$6.05	\$6.05
2024	7.875	\$11.50	\$5.75	\$5.75
2021	7.830	\$11.32	\$5.66	\$5.66
2021	7.830	\$11.32	\$5.66	\$5.66
2015	7.680	\$10.72	\$5.36	\$5.36
2022	7.680	\$10.72	\$5.36	\$5.36
2022	7.680	\$10.72	\$5.36	\$5.36
2023	7.680	\$10.72	\$5.36	\$5.36
2024	7.680	\$10.72	\$5.36	\$5.36
2024	7.680	\$10.72	\$5.36	\$5.36
2024	7.680	\$10.72	\$5.36	\$5.36
2025	7.680	\$10.72	\$5.36	\$5.36
2025	7.680	\$10.72	\$5.36	\$5.36
2025	7.680	\$10.72	\$5.36	\$5.36
2021	7.672	\$10.69	\$5.34	\$5.34
2021	7.672	\$10.69	\$5.34	\$5.34
2019	7.670	\$10.68	\$5.34	\$5.34
2021	7.670	\$10.68	\$5.34	\$5.34
2021	7.670	\$10.68	\$5.34	\$5.34
2021	7.670	\$10.68	\$5.34	\$5.34
2021	7.670	\$10.68	\$5.34	\$5.34
2021	7.670	\$10.68	\$5.34	\$5.34
2021	7.670	\$10.68	\$5.34	\$5.34

Yr Installed	System KW	Solar Grid Access	2025	Cap of 20KW
Ti ilistatteu	System Kvy	Charge	2025	Cap of ZUKW
2022	7.670	\$10.68	\$5.34	\$5.34
2018	7.600	\$10.40	\$5.20	\$5.20
2019	7.600	\$10.40	\$5.20	\$5.20
2019	7.600	\$10.40	\$5.20	\$5.20
2020	7.600	\$10.40	\$5.20	\$5.20
2020	7.600	\$10.40	\$5.20	\$5.20
2021	7.600	\$10.40	\$5.20	\$5.20
2021	7.600	\$10.40	\$5.20	\$5.20
2022	7.600	\$10.40	\$5.20	\$5.20
2022	7.600	\$10.40	\$5.20	\$5.20
2023	7.600	\$10.40	\$5.20	\$5.20
2024	7.600	\$10.40	\$5.20	\$5.20
2025	7.600	\$10.40	\$5.20	\$5.20
2023	7.560	\$10.24	\$5.12	\$5.12
2024	7.560	\$10.24	\$5.12	\$5.12
2020	7.540	\$10.16	\$5.08	\$5.08
2022	7.540	\$10.16	\$5.08	\$5.08
2019	7.440	\$9.76	\$4.88	\$4.88
2023	7.340	\$9.36	\$4.68	\$4.68
2022	7.329	\$9.32	\$4.66	\$4.66
2022	7.250	\$9.00	\$4.50	\$4.50
2024	7.245	\$8.98	\$4.49	\$4.49
2020	7.124	\$8.50	\$4.25	\$4.25
2021	7.124	\$8.50	\$4.25	\$4.25
2021	7.120	\$8.48	\$4.24	\$4.24
2021	7.120	\$8.48	\$4.24	\$4.24
2021	7.120	\$8.48	\$4.24	\$4.24
2021	7.120	\$8.48	\$4.24	\$4.24
2021	7.120	\$8.48	\$4.24	\$4.24
2021	7.120	\$8.48	\$4.24	\$4.24
2023	7.040	\$8.16	\$4.08	\$4.08
2023	7.040	\$8.16	\$4.08	\$4.08
2024	7.040	\$8.16	\$4.08	\$4.08
2024	7.040	\$8.16	\$4.08	\$4.08
2018	7.000	\$8.00	\$4.00	\$4.00
2020	6.980	\$7.92	\$3.96	\$3.96
2021	6.980	\$7.92	\$3.96	\$3.96
2018	6.960	\$7.84	\$3.92	\$3.92
2020	6.960	\$7.84	\$3.92	\$3.92
2021	6.960	\$7.84	\$3.92	\$3.92
2021	6.960	\$7.84	\$3.92	\$3.92
2023	6.582	\$6.33	\$3.16	\$3.16

Yr Installed	System KW	Solar Grid Access Charge	2025	Cap of 20KW
2021	6.580	\$6.32	\$3.16	\$3.16
2021	6.580	\$6.32	\$3.16	\$3.16
2021	6.580	\$6.32	\$3.16	\$3.16
2021	6.580	\$6.32	\$3.16	\$3.16
2021	6.580	\$6.32	\$3.16	\$3.16
2020	6.576	\$6.30	\$3.15	\$3.15
2020	6.576	\$6.30	\$3.15	\$3.15
2020	6.576	\$6.30	\$3.15	\$3.15
2021	6.576	\$6.30	\$3.15	\$3.15
2022	6.480	\$5.92	\$2.96	\$2.96
2022	6.400	\$5.60	\$2.80	\$2.80
2022	6.400	\$5.60	\$2.80	\$2.80
2022	6.400	\$5.60	\$2.80	\$2.80
2022	6.400	\$5.60	\$2.80	\$2.80
2023	6.400	\$5.60	\$2.80	\$2.80
2023	6.400	\$5.60	\$2.80	\$2.80
2023	6.400	\$5.60	\$2.80	\$2.80
2024	6.400	\$5.60	\$2.80	\$2.80
2025	6.400	\$5.60	\$2.80	\$2.80
2012	6.390	\$5.56	\$2.78	\$2.78
2021	6.380	\$5.52	\$2.76	\$2.76
2021	6.380	\$5.52	\$2.76	\$2.76
2023	6.300	\$5.20	\$2.60	\$2.60
2020	6.282	\$5.13	\$2.56	\$2.56
2023	6.280	\$5.12	\$2.56	\$2.56
2016	6.110	\$4.44	\$2.22	\$2.22
2021	6.030	\$4.12	\$2.06	\$2.06
2021	6.030	\$4.12	\$2.06	\$2.06
2021	6.030	\$4.12	\$2.06	\$2.06
2021	6.030	\$4.12	\$2.06	\$2.06
2021	6.030	\$4.12	\$2.06	\$2.06
2021	6.030	\$4.12	\$2.06	\$2.06
2021	6.030	\$4.12	\$2.06	\$2.06
2021	6.030	\$4.12	\$2.06	\$2.06
2021	6.030	\$4.12	\$2.06	\$2.06
2021	6.030	\$4.12	\$2.06	\$2.06
2022	6.030	\$4.12	\$2.06	\$2.06
2020	6.028	\$4.11	\$2.06	\$2.06
2020	6.028	\$4.11	\$2.06	\$2.06
2020	6.028	\$4.11	\$2.06	\$2.06
2016	6.000	\$4.00	\$2.00	\$2.00
2017	6.000	\$4.00	\$2.00	\$2.00

Yr installed	System KW	Solar Grid Access Charge	2025	Cap of 20KW
2017	6.000	\$4.00	\$2.00	\$2.00
2019	6.000	\$4.00	\$2.00	\$2.00
2020	6.000	\$4.00	\$2.00	\$2.00
2023	5.840	\$3.36	\$1.68	\$1.68
2022	5.760	\$3.04	\$1.52	\$1.52
2022	5.760	\$3.04	\$1.52	\$1.52
2022	5.760	\$3.04	\$1.52	\$1.52
2022	5.760	\$3.04	\$1.52	\$1.52
2023	5.760	\$3.04	\$1.52	\$1.52
2023	5.760	\$3.04	\$1.52	\$1.52
2023	5.760	\$3.04	\$1.52	\$1.52
2025	5.760	\$3.04	\$1.52	\$1.52
2021	5.584	\$2.34	\$1.17	\$1.17
2023	5.584	\$2.34	\$1.17	\$1.17
2024	5.510	\$2.04	\$1.02	\$1.02
2015	5.500	\$2.00	\$1.00	\$1.00
2020	5.480	\$1.92	\$0.96	\$0.96
2020	5.480	\$1.92	\$0.96	\$0.96
2021	5.480	\$1.92	\$0.96	\$0.96
2021	5.480	\$1.92	\$0.96	\$0.96
2021	5.480	\$1.92	\$0.96	\$0.96
2021	5.480	\$1.92	\$0.96	\$0.96
2021	5.480	\$1.92	\$0.96	\$0.96
2021	5.480	\$1.92	\$0.96	\$0.96
2021	5.480	\$1.92	\$0.96	\$0.96
2021	5.480	\$1.92	\$0.96	\$0.96
2022	5.480	\$1.92	\$0.96	\$0.96
2022	5.480	\$1.92	\$0.96	\$0.96
2018	5.460	\$1.84	\$0.92	\$0.92
2017	5.460	\$1.84	\$0.92	\$0.92
2024	5.355	\$1.42	\$0.71	\$0.71
2020	5.280	\$1.12	\$0.56	\$0.56
2020	5.280	\$1.12	\$0.56	
2021	5.220	\$0.88	\$0.44	\$0.44
2022	5.220	\$0.88	\$0.44	\$0.44
2023	5.220	\$0.88	\$0.44	\$0.44
2023	5.200	\$0.80	\$0.40	
2022	5.120	\$0.48	\$0.24	\$0.24
2024	5.120	\$0.48	\$0.24	\$0.24
2021	5.040	\$0.16	\$0.08	\$0.08
2015	5.000	\$0.00	\$0.00	\$0.00
2015	5.000	\$0.00	\$0.00	

Yr Installed	System KW	Solar Grid Access Charge	2025	Cap of 20KW
2023	5.000	\$0.00	\$0.00	\$0.00
2020	4.932	\$0.00	\$0.00	\$0.00
2021	4.932	\$0.00	\$0.00	\$0.00
2021	4.930	\$0.00	\$0.00	\$0.00
2021	4.930	\$0.00	\$0.00	\$0.00
2021	4.930	\$0.00	\$0.00	\$0.00
2021	4.930	\$0.00	\$0.00	\$0.00
2021	4.930	\$0.00	\$0.00	\$0.00
2021	4.930	\$0.00	\$0.00	\$0.00
2021	4.930	\$0.00	\$0.00	\$0.00
2022	4.930	\$0.00	\$0.00	\$0.00
2022	4.930	\$0.00	\$0.00	\$0.00
2022	4.930	\$0.00	\$0.00	\$0.00
2024	4.930	\$0.00	\$0.00	\$0.00
2024	4.930	\$0.00	\$0.00	\$0.00
2020	4.800	\$0.00	\$0.00	\$0.00
2024	4.725	\$0.00	\$0.00	\$0.00
2024	4.725	\$0.00	\$0.00	\$0.00
2024	4.725	\$0.00	\$0.00	\$0.00
2010	4.720	\$0.00	\$0.00	\$0.00
2022	4.640	\$0.00	\$0.00	\$0.00
2024	4.640	\$0.00	\$0.00	\$0.00
2019	4.600	\$0.00	\$0.00	\$0.00
2023	4.500	\$0.00	\$0.00	\$0.00
2022	4.480	\$0.00	\$0.00	\$0.00
2023	4.480	\$0.00	\$0.00	\$0.00
2023	4.480	\$0.00	\$0.00	\$0.00
2023	4.410	\$0.00	\$0.00	\$0.00
2020	4.384	\$0.00	\$0.00	\$0.00
2020	4.380	\$0.00	\$0.00	\$0.00
2021	4.380	\$0.00	\$0.00	\$0.00
2021	4.380	\$0.00	\$0.00	\$0.00
2021	4.380	\$0.00	\$0.00	\$0.00
2022	4.380	\$0.00	\$0.00	\$0.00
2023	4.350	\$0.00	\$0.00	\$0.00
2023	4.350	\$0.00	\$0.00	\$0.00
2021	4.190	\$0.00	\$0.00	\$0.00
2025	4.180	\$0.00	\$0.00	\$0.00
2014	4.080	\$0.00	\$0.00	\$0.00
2011	4.060	\$0.00	\$0.00	\$0.00
2011	4.060	\$0.00	\$0.00	\$0.00
2024	4.060	\$0.00	\$0.00	\$0.00

Yr Installed	System KW	Solar Grid Access Charge	2025	Cap of 20KW
2024	4.060	\$0.00	\$0.00	\$0.00
2010	4.000	\$0.00	\$0.00	\$0.00
2010	4.000	\$0.00	\$0.00	\$0.00
2010	4.000	\$0.00	\$0.00	\$0.00
2018	4.000	\$0.00	\$0.00	\$0.00
2021	3.840	\$0.00	\$0.00	\$0.00
2021	3.840	\$0.00	\$0.00	\$0.00
2021	3.840	\$0.00	\$0.00	\$0.00
2021	3.840	\$0.00	\$0.00	\$0.00
2021	3.840	\$0.00	\$0.00	\$0.00
2023	3.840	\$0.00	\$0.00	\$0.00
2024	3.840	\$0.00	\$0.00	\$0.00
2020	3.836	\$0.00	\$0.00	\$0.00
2017	3.800	\$0.00	\$0.00	\$0.00
2018	3.800	\$0.00	\$0.00	\$0.00
2023	3.800	\$0.00	\$0.00	\$0.00
2024	3.800	\$0.00	\$0.00	\$0.00
2025	3.800	\$0.00	\$0.00	\$0.00
2025	3.800	\$0.00	\$0.00	\$0.00
2024	3.780	\$0.00	\$0.00	\$0.00
2024	3.770	\$0.00	\$0.00	\$0.00
2019	3.700	\$0.00	\$0.00	\$0.00
2010	3.500	\$0.00	\$0.00	\$0.00
2021	3.480	\$0.00	\$0.00	\$0.00
2023	3.480	\$0.00	\$0.00	\$0.00
2024	3.480	\$0.00	\$0.00	\$0.00
2024	3.480	\$0.00	\$0.00	\$0.00
2024	3.480	\$0.00	\$0.00	\$0.00
2024	3.465	\$0.00	\$0.00	\$0.00
2012	3.440	\$0.00	\$0.00	\$0.00
2013	3.440	\$0.00	\$0.00	\$0.00
2013	3.440	\$0.00	\$0.00	\$0.00
2024	3.420	\$0.00	\$0.00	\$0.00
2021	3.290	\$0.00	\$0.00	\$0.00
2021	3.290	\$0.00	\$0.00	\$0.00
2022	3.290	\$0.00	\$0.00	\$0.00
2024	3.190	\$0.00	\$0.00	\$0.00
2024	3.190	\$0.00	\$0.00	\$0.00
2017	3.000	\$0.00	\$0.00	\$0.00
2020	2.740	\$0.00	\$0.00	\$0.00
2016	2.700	\$0.00	\$0.00	\$0.00
2023	2.600	\$0.00	\$0.00	\$0.00

Current SPU Solar Customer Info

Yr Installed	System KW	Solar Grid Access Charge	2025	Cap of 20KW
2023	2.320	\$0.00	\$0.00	\$0.00
2024	2.320	\$0.00	\$0.00	\$0.00
Annual	32,386.044	\$52,339.82	\$26,169.91	\$26,933.11

System Size kW	2024 Avg SPU Delv'd (kWh)	2024 Avg SPU Recvd (kWh)	2024 Avg Production Meter (kWh)	% kWh pushed onto SPU
2.70	570	80	240	33.33%
2.74	440	110	260	42.31%
3.29	320	290	430	67.44%
3.29	380	240	420	57.14%
3.29	340	170	330	51.52%
AVG	410	178	336	52.98%

System Size kW	2024 Avg SPU Delv'd (kWh)	2024 Avg SPU Recvd (kWh)	2024 Avg Production Meter (kWh)	% kWh pushed onto SPU
5.04	430	500	650	76.92%
5.12	290	495	670	73.88%
5.12	685	290	570	50.88%
5.20	450	340	575	59.13%
5.22	350	520	750	69.33%
AVG	441	429	643	66.72%

System Size kW	2024 Avg SPU Delv'd (kWh)	2024 Avg SPU Recvd (kWh)	2024 Avg Production Meter (kWh)	% kWh pushed onto SPU
9.98	550	770	1150	66.96%
10.00	810	620	1100	56.36%
10.00	1030	480	930	51.61%
10.00	685	590	910	64.84%
10.24	850	650	1090	59.63%
AVG	785	622	1036	60.04%

System Size kW	2024 Avg SPU Delv'd (kWh)	2024 Avg SPU Recvd (kWh)	2024 Avg Production Meter (kWh)	% kWh pushed onto SPU
16.90	1160	1330	1920	69.27%
17.40	960	1690	2240	75.45%
20.00	3470	660	2100	31.43%
20.48	1350	1290	2080	62.02%
21.00	1060	1660	2080	79.81%
AVG	1600	1326	2084	63.63%

System Size kW	2024 Avg SPU Delv'd (kWh)	2024 Avg SPU Recvd (kWh)	2024 Avg Production Meter (kWh)	% kWh pushed onto SPU
34.22	9930	630	n/a (no production mtr here)	n/a
37.80	2800	1700	3800	44.74%
38.00	2500	4300	5800	74.14%
40.00	3175	1660	2900	57.24%
40.00	1620	3700	n/a (no production mtr here)	n/a
AVG	6740	2000	4167	48.00%

^{*}Avg of the 3 production mtrs

Customer Owned Utilties SGAC

Utility	Exempt kW	\$/kW	kW Max	\$ Cap	Fixed One-time Fee	Notes
Shakopee Public Utilities	5.00	\$4.00	40.000			
Connexus (residential non- demand)	3.50	\$2.98	10.300	\$20.26		Systems prior to June 2016, exempt for 20 years
Red River Valley Coop (1-phase)	3.50	\$3.64	39.999	\$39.00		
Anoka Municipal Utility					\$1,000.00	
Wright-Hennepin Electric	3.50	\$2.78		\$20.00		B
People's Energy Cooperative	3.50	\$2.00		\$37.00		Systems prior to May 2016 are exempt unless capacity is added
MVEC					\$750.00	
McLeod Coop	3.50	\$2.99	-	\$27.00		Separate rates per schedule
Meeker Cooperative	3.50	\$3.97		\$33.00		Separate rates per schedule
Todd-Wadena	3.50	\$2.91		\$25.00		
Nobles Cooperative	3.50	\$1.11		\$13.00		
Mille Lacs Energy Coop	3.50	\$3.75		\$18.00		
Redwood Electric Coop	3.50	\$4,60		\$55.81		
South Central Electric Association	3.50	\$5.50		\$68.02		
Cooperative Light and Power	3.50	\$3.88		\$21.81		
Agralite Electric Coop	3.50	\$4.15		\$42.00		
Renville-Sibley	3.50	\$5.76		\$55.00		
Kandiyohi Power Coop	3.50	\$2.24		\$21.45		
Madelia Municipal L&P	3.50	\$5.25		\$24.50		
Benco Electric Coop	3.50	\$4.96		\$41.00		
Blue Earth Light and Water	3.50	\$4.43		\$28.00		
Lyon-Lincoln Electric Coop		\$0.03			1 1	No minimum or maximum
Red Lake Electric Coop	3.50	\$2.26	40.000	\$32.00		Rate decreases with greater capacity
Rochester - In process						
Moorhead – no fee						
Chaska – no fee						
Elk River – no fee						
Owatonna – no fee						
Austin – no fee						
North St. Paul – no fee						
New Prague – no fee						1