ROCHESTER
PUBLIC
UTILITIES

Public Utility Board Agenda
Rochester Boards & Commissions - Public Utility Board
February 20, 2024
4:00 p.m.

Attending and Viewing the Meeting
Attend in-person at 4000 E River Rd NE, RPU Community Room, Rochester, MN or via MS Teams.
Call in audio only number: 347-352-4853 Conference ID: 251 382 526 258#.
A recording is made available after the meeting at the City's website.

Call to Order/Roll Call

1. ***Approval of Agenda***
2. ***Safety Moment***
3. ***Consent Agenda***

3.A. Minutes of the Rochester Public Utility Board Meeting of January 30, 2024.
Approve the minutes and video of the January 30, 2024 meeting of the Rochester Public Utility (RPU) Board.

3.B. Review of Accounts Payable
Review the list of consolidated and summarized transactions for 01/12/2024 to 02/08/2024 in the total amount of $10,104,009.47.

3.C. Microsoft Enterprise Agreement License Renewal
Approve a resolution to renew the Microsoft Enterprise license through the re-seller, SHI International Corp, up to $630,000, plus applicable tax, subject to review and approval of the Agreement by the General Manager and City Attorney.

3.D. 2024 RPU Board Meeting Dates
Approve a resolution revising the 2024 RPU Board Meeting dates.

3.E. Alternate Member Representative Appointment to the Southern Minnesota Municipal Power Agency
Approve a resolution appointing Tony Dzubay as the Alternate Member Representative to the Southern Minnesota Municipal Power Agency.

3.F. 2024-2026 Rochester Public Utilities Strategic Plan
Approve a resolution adopting the 2024-2026 Rochester Public Utilities Strategic Plan.

3.G. 2024 IFB Vertical Rise Truck Lift
Approve a resolution to accept the bid from High Forest Bobcat Service, Inc. in an amount of $189,812.70, and authorize the Project Manager to execute the services up to the approved budget amount.

Open Public Comment Period
This agenda section is for the purpose of allowing citizens to address the Utility Board. Comments are limited to 4 minutes, total comment period limited to 15 minutes. Any speakers not having the opportunity to be heard will be the first to present at the next Board meeting.

4. Regular Agenda

4.A. 2024 Electric Service Rules and Regulations Update
Approve a resolution to adopt the proposed 2024 Electric Service Rules and Regulations, effective June 1, 2024.

4.B. Itron Agreement
Approve a resolution authorizing an agreement with Itron, for professional services for the Advanced Metering Infrastructure (AMI) project.

5. Informational

5.A. Technology Assessment Presentation from 1898 & Co.
No action required. Informational only.

6. Board Policy Review

6.A. RPU Index of Board Policies
Review the Index of Board Policies to summarize progress on policy updates and determine future policy review items.

7. General Managers Report

7.A. General Manager's Report for February 2024

8. Division Reports & Metrics

8.A. Division Reports and Metrics - February 2024
Review the reports from each of RPU's five divisions: Core Services, Compliance and Public Affairs, Power Resources, Customer Relations and Corporate Services.

9. Other Business

10. Adjournment

ROCHESTER BOARDS & COMMISSIONS

REQUEST FOR ACTION

Minutes of the Rochester Public Utility Board Meeting of January 30, 2024.

MEETING DATE:
February 20, 2024

ORIGINATING DEPT:
Rochester Public Utilities

AGENDA SECTION:
Consent Agenda

PRESENTER:
Tim McCollough

Action Requested:
Approve the minutes and video of the January 30, 2024 meeting of the Rochester Public Utility (RPU) Board.

Report Narrative:
Official minutes of the RPU Board are published in accordance with Open Meeting Law, capturing the official record of the RPU Board.

Policy Considerations & DEI Impact:
Minutes and video of the appointed boards of the City provide access and transparency to RPU systems, processes and decision making.

Prior Legislative Actions & Community Engagement:
Minutes of the previous RPU Board meeting are generated monthly.

Fiscal & Resource Impact:
No fiscal impact of publishing minutes.

Prepared By:
Christina Bailey

Attachments:
20240130 Minutes

CITY OF ROCHESTER, MINNESOTA
Public Utility Board MINUTES

Attending and Viewing the Meeting

Call to Order/Roll Call

Attendee Name	Status
Melissa Graner Johnson	Present
Brian Morgan	Present
Brett Gorden	Present
Patrick Keane	Present
Malchi McNeilus	Present

1) Approval of Agenda

Motion to approve the agenda.

MOVER: Patrick Keane
SECONDER: Brett Gorden
AYES: Melissa Graner Johnson, Brian Morgan, Brett Gorden, Patrick Keane, Malchi McNeilus
RESULT: **APPROVED [UNANIMOUS]**

2) Safety Moment

Safety Manager Bob Cooke gave a presentation to the Board.

3) Consent Agenda

3.A) Authorization of Banking Representatives

Official Act: Approve a resolution with the updated schedule of authorized banking representatives for Rochester Public Utilities.

Cover Page

20240130 Resolution - Authorized Banking Representatives.docx

3.B) Fleet Allocation Purchases for 2024 and 2025

Official Act: Approve a resolution to spend up to $902,094 in 2024 and $1,215,970 in 2025 for budgeted fleet purchases purchased through the State of Minnesota cooperative contracts.

Cover Page

20240130 Resolution - Fleet Allocation Purchases for 2024 and 2025.docx

3.C) Minutes of the Rochester Public Utility Board Meeting of December 19, 2023

Official Act: Approve the minutes and video of the December 19, 2023 meeting of the Rochester Public Utility (RPU) Board.

Cover Page

20231219 Minutes.pdf

3.D) Review of Accounts Payable

Official Act: Review the list of consolidated and summarized transactions for 12/08/2023 to 01/11/2024 in the total amount of $17,190,108.61

Cover Page

AP Board List Current Month.pdf

Motion to approve the consent items in block 3.A - 3.D.

MOVER:	Brian Morgan
SECONDER:	Patrick Keane
AYES:	Melissa Graner Johnson, Brian Morgan, Brett Gorden, Patrick Keane, Malchi McNeilus
RESULT:	**APPROVED [UNANIMOUS]**

Open Public Comment Period

4) Informational

4.A) Draft 2024-2026 Strategic Plan Review

Official Act: Receive and provide feedback on the draft 2024-2026 Strategic Plan.

Cover Page

2024-2026 Strategic Plan DRAFT.pdf

General Manager Tim McCollough gave a presentation to the Board.

4.B) Critical Water Deficiency Ordinance

Official Act: No action requested, informational only.

Cover Page

2023-06-26-RochesterWaterSupplyPlanApprovalLetter-Permit-1979-5076.docx

RPU Water Supply Plan Appendix 7.pdf

Critical Water Deficiency Declaration Ordinance v06 Clean.docx

Director of Compliance and Public Affairs Steve Nyhus gave a presentation to the Board.

5) Board Policy Review

5.A) RPU Index of Board Policies

Official Act: Review the Index of Board Policies to summarize progress on policy updates and determine future policy review items.

Cover Page

Index of Board Policies-revised.xlsx

The next Board policy to be reviewed will be Board policy #5, Board Procedures.

6) General Managers Report

6.A) General Manager's Report for January 2024

Cover Page

20240130 GM Report.pdf

General Manager Tim McCollough gave a presentation to the Board.

Each RPU director gave a presentation to the Board.

7) Division Reports & Metrics

7.A) Division Reports & Metrics - January 2024

Official Act: Review the reports from each of RPU's five divisions: Core Services, Compliance and Public Affairs, Power Resources, Customer Relations and Corporate Services.

Cover Page

Division Reports January 2024.pdf

8) Other Business

9) Adjournment

Motion to adjourn.

MOVER:	Patrick Keane
SECONDER:	Brett Gorden
AYES:	Melissa Graner Johnson, Brian Morgan, Brett Gorden, Patrick Keane, Malchi McNeilus
RESULT:	**APPROVED [UNANIMOUS]**

ROCHESTER BOARDS & COMMISSIONS

REQUEST FOR ACTION

Review of Accounts Payable

MEETING DATE:
February 20, 2024

ORIGINATING DEPT:
Rochester Public Utilities

AGENDA SECTION:
Consent Agenda

PRESENTER:
Tim McCollough

Action Requested:
Review the list of consolidated and summarized transactions for 01/12/2024 to 02/08/2024 in the total amount of $10,104,009.47.

Report Narrative:
Reference the detailed Rochester Public Utilities A/P Board Listing by Dollar Range Report (attached).

Policy Considerations & DEI Impact:
This item is in compliance with Minnesota statute 412.271 requiring all claims to be reviewed by boards and councils.

Fiscal & Resource Impact:
This is for payment of previously approved amounts, through budget or other Board action.

Prepared By:
Lana Anderson

Attachments:
AP Board List Current Month

ROCHESTER PUBLIC UTILITIES

A/P Board Listing By Dollar Range

For 01/12/2024 To 02/08/2024

Consolidated & Summarized Below 1,000

Greater than 50,000 :

1	SOUTHERN MN MUNICIPAL POWER AG	January SMMPA Bill	7,778,343.57
2	IRBY UTILITIES dba	91578FT-Wire, AL, 15kV, 1/0 Solid, 1/C,	337,922.32
3	CONSTELLATION NEWENERGY-GAS D	December Gas-SLP	191,449.07
4	IRBY UTILITIES dba	54162FT-Cable in Conduit AL 15kV 1/0 Sol	182,760.19
5	ENVIRONMENTAL SYSTEMS RESEARC	2023-26 Esri Enterprise Lic. Agrmt Renew	113,980.20
6	MMUA	2024 MMUA Membership Dues	75,932.00
7	RESCO	72EA-SL Pole, 25', Residential, 21' Mtg	75,087.04
8	BORDER STATES ELECTRIC SUPPLY	Down Payment Gas Circuit Breaker	72,711.11
9	CARL BOLANDER & SONS LLC	Release Retainage Carl Bolander PO 11556	62,745.19
10	ASPLUNDH TREE EXPERT LLC (P)	2024 Hourly Tree Trimming	60,159.71
11	MAYO CLINIC	CIP-Lighting (C&I)-Incentives/Rebates	56,209.46
12			
13		**Price Range Total:**	9,007,299.86
14			

5,000 to 50,000 :

15			
16			
17	NORTH COUNTRY CHEVROLET BUICK	1EA-2024 GMC Sierra 3500 (V712)	52,408.55
18	NORTH COUNTRY CHEVROLET BUICK	1EA-2024 GMC Sierra 3500 (V758)	46,345.42
19	KEY BUILDERS INC	Construction of Well House #42	36,343.54
20	RVNA TECHNOLOGIES LLC	January Vena Implementation Services	35,281.25
21	ITRON INC	400EA-Itron,500W, Gen5 Pit Ert	34,800.00
22	VISION METERING LLC	600EA-Meter,12S AMR (Refurbished)	33,248.81
23	PEOPLES ENERGY COOPERATIVE (P	January Compensable	29,189.65
24	ITRON INC	300EA-Itron,500W, Gen5 Pit Ert	26,100.00
25	HTP ENERGY	7500GAL-Fuel Oil, Gas Turbine	21,300.00
26	DELL MARKETING LP	12EA-Tower, 3660 Precision	19,063.27
27	US BANK-VOYAGER	January Fuel, Electric	17,846.85
28	MITSUBISHI ELECTRIC POWER PRO	Partial 2023-2025 UPS Maintenance Plan	17,418.00
29	INNER TITE CORP	1000EA-Lock,Meter Flex Tite Locking Ring	17,309.90
30	DAKOTA SUPPLY GROUP-ACH	15000FT-Conduit, HDPE, 4", SDR 13.5, Emp	17,325.00
31	TRAUT COMPANIES	Well Sealing Services RPU Olmsted Co Well	16,775.00
32	EPLUS TECHNOLOGY INC	Cisco Flex Subscription License 3 YR	14,224.40
33	GRAYBAR ELECTRIC COMPANY INC	15EA-Mast Arm, 9' for 2690	13,537.43
34	N HARRIS COMPUTER CORP	Custom Modification-Mass O/A Process	13,359.38
35	WATER RESEARCH FOUNDATION	WRF Membership 2/1/24-1/31/25	12,670.00
36	HAWKINS INC	2024 Chlorine Gas	12,325.50
37	DAVIES PRINTING COMPANY INC	2024 Plugged In Printing Services	12,034.13
38	POWER SYSTEMS ENGINEERING INC	Distribution System Planning Study	10,725.00
39	READY MIX CONCRETE COMPANY LL	Temporary Concrete for Watermain Break (7)	10,510.45
40	A & A ELECT & UNDERGROUND CON	2022-23 Directional Boring	8,876.40
41	FLEET PRIDE	CIP-Lighting (C&I)-Incentives/Rebates	8,860.84
42	KENDELL DOORS & HARDWARE INC	Northern Hills Substation Door Install	8,530.76
43	HYBRID MECHANICAL	Install Soft Water Tank Water Treatment Plant	8,485.88
44	WIESE USA INC	8EA-Upright with Base 14ft	8,424.80
45	MITSUBISHI POWER AERO LLC (P)	1EA-Valve, Finger Assy	8,117.13
46	WEDUM SHOREWOOD CAMPUS LLC	CIP-Lighting (C&I)-Incentives/Rebates	7,945.38
47	GRAYBAR ELECTRIC COMPANY INC	15000FT-Conduit, HDPE, 1.5" Orange w/Blue	7,521.00
48	GRAINGER INC	1EA-Tester, Insulation Resistance, 15kV	7,450.00
49	EXPRESS SERVICES INC	2024 Temp Staff Marketing (1)	7,406.24

ROCHESTER PUBLIC UTILITIES
A/P Board Listing By Dollar Range
For 01/12/2024 To 02/08/2024
Consolidated & Summarized Below 1,000

HAWKINS INC	590GAL-2024 Carus 8500	7,048.55
DELL MARKETING LP	3EA-Computer, Laptop, Dell 7680	6,909.63
WESCO DISTRIBUTION INC	100EA-Cable Support Bracket, 36"	6,776.00
GRAYBAR ELECTRIC COMPANY INC	13500FT-Conduit, HDPE, 1.5" Orange, Empt	6,768.90
VISION COMPANIES LLC (P)	Leadership & Cultural Development	6,667.00
GRAYBAR ELECTRIC COMPANY INC	20EA-Elbow, 4", Rigid Steel, 36 Radius,	6,436.80
VISION METERING LLC	240EA-Meter,2S AMR (Refurbished)	6,412.50
ITRON INC	MVWeb 2024	6,120.00
SOMA CONSTRUCTION INC	Rock for Watermain Break Repairs	6,003.41
IRBY UTILITIES dba	48EA-Pedestal, Dome Cover, Box Style	6,000.00
ROSEMOUNT INC	2EA-Transmitter, Pressure, 0-150psi	5,872.82
TWIN CITY SECURITY INC	2024 Security Services	5,809.72
WESCO DISTRIBUTION INC	130EA-Cable Support Arm, 14"	5,543.20
NARDINI FIRE EQUIPMENT CO INC	Fire System Repair Cascade Creek GT2	5,480.56
CRW ARCHITECTURE + DESIGN GRO	Design Services Willow Booster	5,435.00
GRAYBAR ELECTRIC COMPANY INC	6000FT-Conduit, HDPE, 2.5", Empty, Sch 4	5,356.80
ROCH GOLF & COUNTRY CLUB	Customer Trade Ally Meeting 2024	5,227.46
	Price Range Total:	705,628.31

1,000 to 5,000 :

TEXTILE CARE SERVICES	CIP-Lighting (C&I)-Incentives/Rebates	4,979.55
MINNESOTA ENERGY RESOURCES CO	Natural Gas - SC	4,939.76
FERGUSON ENTERPRISES	Replacement Hydrant	4,906.27
EPLUS TECHNOLOGY INC	Add VRF to Substations	4,825.00
KATS EXCAVATING LLC	SA Water, Water Service Repair	4,800.00
OTT HYDROMET CORP	4EA-OTT Orpheus Mini level logger	4,695.40
ARISE INC	2023-2025 Jurisdictional Inspections	4,660.00
RESCO	25EA-Pedestal, Sec, Plastic w/cover, 10	4,578.75
ROCHESTER CAMPUS LLC	CIP-VSDs-Incntivs/Rebates	4,487.01
IRBY UTILITIES dba	2024 Rubber Goods Testing & Replacement	4,483.25
ALLEGRA OF ROCHESTER LLC	2024 Home Show-Groc Bags/LED Night Lights	4,456.37
VIKING ELECTRIC SUPPLY (P)	Conduit Nipples & Locknuts for Marion Road	4,417.88
WHITE CAP LP (P)	8EA-Lifting Eyes, P50	4,399.92
VIKING ELECTRIC SUPPLY (P)	30EA-Conn, Shear, Lug, 350-750 AL/CU	4,368.05
HAWKINS INC	8373.75LB-2024 Hydrofluosilicic Acid	4,274.80
HTP ENERGY	1402GAL-Fuel Oil, Gas Turbine	4,037.76
KNXR - FM	January Ads-Plugged In Digitally Available	4,000.00
KATS EXCAVATING LLC	SA Water, Replaced Galvanized Service Break	4,000.00
WIESE USA INC	40EA-Straight Arm 36"	3,914.40
DAKOTA SUPPLY GROUP-ACH	4EA-Condux Flex Cable Guide 5IN-9FT Assy	3,848.68
ROCHESTER PUBLIC SCHOOLS	CIP-Lighting (C&I)-Incentives/Rebates	3,791.04
VIKING ELECTRIC SUPPLY (P)	1000FT-Wire, Copper, 4/0 Str, Bare, 19 S	3,759.68
EGAN COMPANY	Olmsted Waste Energy Facility Fiber	3,738.49
DAKOTA SUPPLY GROUP-ACH	10EA-Elbow, 4", Rigid Steel, 36 Radius	3,410.10
FERGUSON ENTERPRISES	Valves for SA Water Repairs	3,260.40
ROSS BERNSTEIN	Professional Speaking Servces	3,250.00
PRAIRIE EQUIPMENT CO LLC	2EA-Power Inverter/Fuse Kit	3,233.71
WABASHA COUNTY ADMIN/TREASURE	Emergency Notification System - Lake Zumbro	3,150.00
ROCHESTER PUBLIC SCHOOLS	CIP-VSDs-Incntivs/Rebates	3,142.56

ROCHESTER PUBLIC UTILITIES
A/P Board Listing By Dollar Range
For 01/12/2024 To 02/08/2024
Consolidated & Summarized Below 1,000

101	ZIEBELLS HIAWATHA FOODS INC	48PL-Ice Melt, 70 lbs/Pail	3,102.11
102	UTIL-ASSIST INC	AMI Contract Negotiation SOW	3,080.00
103	ZIEGLER INC	Backhoe Loader Bucket 24"	3,061.97
104	LICENSE CENTER ROCHESTER INC	2024 Vehicle Tabs	2,985.10
105	AMARIL UNIFORM COMPANY	14EA-Sweatshirt, FR, Light-Weight, 1/4 Z	2,768.06
106	LRS OF MINNESOTA LLC	2024 Waste Removal (SC)	2,754.37
107	ROCHESTER PUBLIC SCHOOLS	CIP-Motors (C&I)-Incentives/Rebates	2,720.00
108	BADGER METER INC (P)	15EA-Meter, Bare 1" Badger Disk (DWG)	2,668.08
109	CENTURYLINK (P)	2024 Monthly Telecommunications	2,665.12
110	FIRST CLASS PLUMBING & HEATIN	Backflow Testing	2,640.00
111	RESCO	32EA-Adapter Plate, 2S to 12S	2,582.40
112	KNIGHTS CHAMBER OF ROCHESTER	CIP-Lighting (C&I)-Incentives/Rebates	2,539.72
113	WESCO DISTRIBUTION INC	9EA-CT,XL Window 2000/5 600V High Accuracy	2,531.70
114	USIC HOLDINGS INC	January Locating Services	2,495.46
115	PAAPE ENERGY SERVICE INC	2023-25 Continuum System Svc Agreement	2,468.81
116	VIKING AUTOMATIC SPRINKLER IN	Install Sprinkler Heads & Remove Old Heads	2,415.38
117	OTTER TAIL POWER OFFICES INC	2024 Dynamics Power System Reg (2)	2,400.00
118	IRBY UTILITIES dba	50EA-Arrester, 10kV, Dist, OH MOV	2,362.50
119	US BANK PURCHASING CARD	MMUA Transf School, Meier,Winter,Koster	2,355.00
120	RESCO	60EA-Deadend Recept, 15kv, 200A, NLB	2,320.80
121	GARCIA GRAPHICS INC	Design 2024 Residential Rebate Applications	2,300.00
122	AMARIL UNIFORM COMPANY	10EA-Sweatshirt, FR, Light-Weight, 1/4 Z	2,273.76
123	IRBY UTILITIES dba	16EA-Pedestal, Base, Secondary, w/o Cove	2,160.00
124	MALLOY ELECTRIC dba	1EA-Pump and Motor Assembly Well #36	2,104.44
125	CORE & MAIN LP (P)	2EA-Valve, Air Release	2,103.52
126	MINNESOTA ENERGY RESOURCES CO	Gas - WES Building Heat	1,962.64
127	ONLINE INFORMATION SERVICES I	January 2024 Utility Exchange Report	1,923.64
128	METROPOLITAN MECHANCIAL CONTR	HVAC Preventative Maintenance Service	1,920.00
129	VERIZON CONNECT NWF INC	January 2024 GPS Fleet Tracking	1,902.05
130	DAVE SYVERSON TRUCK CENTER IN	VGT Actuator/Core Deposit	1,873.73
131	POMPS TIRE SERVICE INC	Tires x 6	1,790.11
132	GRAYBAR ELECTRIC COMPANY INC	2089FT-Wire, 1/0, 6/1, ACSR XLP, Almond	1,734.89
133	BORDER STATES ELECTRIC SUPPLY	5EA-Luminaire, 108W LED, PC 120-277V, Bl	1,732.50
134	MOTION INDUSTRIES INC	2EA-Filter, Desiccant, Lube Oil Breather	1,703.80
135	U S A SAFETY SUPPLY	14EA-Shirt, FR, Hi-Vis	1,683.28
136	BORDER STATES ELECTRIC SUPPLY	48EA-Conn, CRP Lug, 500 Str CU, 90Deg, 2	1,662.24
137	VIKING ELECTRIC SUPPLY (P)	Pipe & Wire for NHS AC Upgrade	1,634.74
138	SCHAD TRACY SIGNS INC	1JOB-Sign controller w/ inline ethernet	1,609.32
139	SECURITYMETRICS INC.	PCI,HIPAA, or GLBA Protection	1,603.10
140	BARR ENGINEERING COMPANY (P)	1EA-Data Logger, 5/10 Channel	1,581.25
141	US BANK PURCHASING CARD	MMUA Tran School,Holtorf,Bunke-McManimon	1,570.00
142	MIRATECH GROUP LLC	2EA-Pulsation dampener 0.13 L, UIS,WES	1,519.21
143	BOWMANS DOOR SOLUTIONS	Replace/Install Door Hardware	1,514.38
144	VIRTUAL PEAKER INC	Distributed Energy Platform Services	1,503.00
145	MIRATECH GROUP LLC	2EA-Measuring Cell, CO, 0-500ppm, WES	1,483.04
146	WESCO DISTRIBUTION INC	30EA-Strain Rod, FG, 78", Clev/Roller	1,419.60
147	DAKOTA SUPPLY GROUP-ACH	Ball Bearings x 24	1,361.61
148	HYBRID MECHANICAL	SLP Gas Line Repair	1,346.63
149	CORPORATE WEB SERVICES INC	2024 Website Services	1,332.04
150	POMPS TIRE SERVICE INC	Endless Track	1,319.90
151	MENARDS ROCHESTER NORTH	SLP Gas Line Install Materials	1,319.39
152	RESCO	9EA-Meter, 3S to 9S Adaptor	1,244.76

ROCHESTER PUBLIC UTILITIES
A/P Board Listing By Dollar Range
For 01/12/2024 To 02/08/2024
Consolidated & Summarized Below 1,000

ON SITE SANITATION INC	2024 Toilet Rental Services	1,207.78
OPEN ACCESS TECHNOLOGY	February Tag Agent,webSmart Tag	1,205.16
BORDER STATES ELECTRIC SUPPLY	6EA-Junction, LB, 200A, 4 Position, w/Br	1,194.60
MALLOY ELECTRIC dba	1EA-VFD 5/3HP 230V R1 Frame Well #36	1,187.81
VIKING AUTOMATIC SPRINKLER IN	GT1-SLP Fire Protection Inspections	1,182.90
IRBY UTILITIES dba	20EA-Bracket, Equip Mtg, 1ph, 1.5" x 18	1,130.00
ALLEGRA OF ROCHESTER LLC	RPU Logo'd Black Tablecloths	1,127.40
DAVIES PRINTING COMPANY INC	Graph Paper Pads	1,125.78
KROC FM/AM	January Ads-Plugged In Digitally Available	1,105.00
ROCHESTER ARMORED CAR CO INC	2024 Pick Up Services	1,087.43
PDS	Sharepoint Workflows Govern&Supprt	1,076.25
CORE & MAIN LP (P)	20EA-Valve Box Extension, 18"	1,067.60
ADVANTAGE DIST LLC (P)	Diesel Fluid Totes x 3	1,055.12
WESCO DISTRIBUTION INC	20EA-Conn, Fire-On Stirrup, 336.4, ACSR	1,039.00
BRADEN FILTRATION LLC	120EA-Filter insert, Pre-filter	1,019.59
TOWNSQUARE MEDIA - ROCHESTER	OTT Streaming for Plugged In Avail Digitally	1,000.00
HAWKINS INC	Demurrage Charge (Multiple Yrs)	1,000.00
	Price Range Total:	245,729.40

0 to 1,000 :

FIRST CLASS PLUMBING & HEATING	Summarized transactions: 18	8,409.41
REBATES	Summarized transactions: 25	6,316.62
IRBY UTILITIES dba	Summarized transactions: 26	5,199.95
ROCHESTER CHEVROLET CADILLAC	Summarized transactions: 16	4,778.86
CITY LAUNDERING COMPANY	Summarized transactions: 24	4,714.36
CUSTOMER REFUNDS (CIS)	Summarized transactions: 48	4,410.59
BORDER STATES ELECTRIC SUPPLY	Summarized transactions: 33	4,358.28
AMARIL UNIFORM COMPANY	Summarized transactions: 33	4,230.34
VIKING ELECTRIC SUPPLY (P)	Summarized transactions: 54	4,148.46
WESCO DISTRIBUTION INC	Summarized transactions: 20	3,598.24
RESCO	Summarized transactions: 11	3,300.45
AIRGAS SAFETY INC	Summarized transactions: 16	2,855.75
POMPS TIRE SERVICE INC	Summarized transactions: 7	2,720.67
US BANK PURCHASING CARD	Summarized transactions: 13	2,663.93
CORE & MAIN LP (P)	Summarized transactions: 16	2,609.47
DELL MARKETING LP	Summarized transactions: 9	2,516.97
GRAINGER INC	Summarized transactions: 9	2,348.33
U S A SAFETY SUPPLY	Summarized transactions: 17	2,268.22
WIESE USA INC	Summarized transactions: 10	2,259.95
WARNING LITES OF MN INC (P)	Summarized transactions: 5	2,060.00
LAWSON PRODUCTS INC (P)	Summarized transactions: 8	1,998.95
ENVIRONMENTAL SYSTEMS RESEARC	Summarized transactions: 4	1,819.96
DAKOTA SUPPLY GROUP-ACH	Summarized transactions: 17	1,766.35
OTT HYDROMET CORP	Summarized transactions: 5	1,741.32
U S A SAFETY SUPPLY	Summarized transactions: 9	1,724.03
CRESCENT ELECTRIC SUPPLY CO	Summarized transactions: 19	1,672.99
NETWORK SERVICES COMPANY	Summarized transactions: 3	1,416.31
MITSUBISHI POWER AERO LLC (P)	Summarized transactions: 6	1,410.86
MINNESOTA ENERGY RESOURCES CO	Summarized transactions: 4	1,368.44

ROCHESTER PUBLIC UTILITIES
A/P Board Listing By Dollar Range
For 01/12/2024 To 02/08/2024
Consolidated & Summarized Below 1,000

204	AIRGAS USA, LLC (P)	Summarized transactions: 10	1,218.87
205	CENTURYLINK (P)	Summarized transactions: 5	1,211.01
206	INNOVATIVE OFFICE SOLUTIONS L	Summarized transactions: 11	1,173.84
207	GARCIA GRAPHICS INC	Summarized transactions: 2	1,122.00
208	MISSISSIPPI WELDERS SUPPLY CO	Summarized transactions: 5	1,093.31
209	G A ERNST & ASSOCIATES INC	Summarized transactions: 2	1,032.86
210	SUTTON JEREMY	Summarized transactions: 7	1,021.81
211	MALLOY ELECTRIC dba	Summarized transactions: 4	1,000.14
212	MIDCONTINENT ISO INC	Summarized transactions: 1	971.19
213	NORTHERN / BLUETARP FINANCIAL	Summarized transactions: 8	952.22
214	NEW LINE MECHANICAL (P)	Summarized transactions: 1	945.41
215	MENARDS ROCHESTER SOUTH	Summarized transactions: 7	932.45
216	BARR ENGINEERING COMPANY (P)	Summarized transactions: 3	908.50
217	K A A L TV LLC	Summarized transactions: 1	900.00
218	T E C INDUSTRIAL INC	Summarized transactions: 8	887.49
219	THE ENERGY AUTHORITY INC	Summarized transactions: 1	887.32
220	POLLARDWATER dba	Summarized transactions: 2	818.52
221	LRS OF MINNESOTA LLC	Summarized transactions: 2	814.73
222	LANGUAGE LINE SERVICES INC	Summarized transactions: 1	805.88
223	FASTENAL COMPANY	Summarized transactions: 12	791.96
224	BOWMANS DOOR SOLUTIONS	Summarized transactions: 2	787.21
225	ASI SIGNAGE INNOVATIONS dba	Summarized transactions: 1	783.50
226	MIRATECH GROUP LLC	Summarized transactions: 6	777.40
227	ADVANCE AUTO PARTS	Summarized transactions: 11	767.08
228	A & A ELECT & UNDERGROUND CON	Summarized transactions: 1	750.86
229	HDR ENGINEERING INC (P)	Summarized transactions: 1	728.62
230	MODEM EXPRESS INC	Summarized transactions: 2	725.00
231	USA BLUE BOOK dba	Summarized transactions: 2	720.93
232	CENTURYLINK	Summarized transactions: 1	718.97
233	BENSON ANTHONY	Summarized transactions: 1	696.20
234	ROCH FORD TOYOTA	Summarized transactions: 1	690.99
235	REINDERS INC	Summarized transactions: 1	680.79
236	HACH COMPANY	Summarized transactions: 2	671.80
237	HIGH VOLTAGE INC (P)	Summarized transactions: 3	641.25
238	CRETEX SPECIALTY PRODUCTS INC	Summarized transactions: 2	623.80
239	SCHAD TRACY SIGNS INC	Summarized transactions: 1	603.58
240	AT&T	Summarized transactions: 1	582.07
241	HALLMARK BUSINESS CONNECTIONS	Summarized transactions: 2	566.71
242	B & H PHOTO	Summarized transactions: 5	559.33
243	KOSTER COLTON	Summarized transactions: 2	552.92
244	HOLTORF CHASE	Summarized transactions: 2	552.92
245	WINTER TANNER	Summarized transactions: 2	552.92
246	BUNKE-MCMANIMON MALACHI	Summarized transactions: 2	552.92
247	GRAYBAR ELECTRIC COMPANY INC	Summarized transactions: 4	544.80
248	HAWKINS INC	Summarized transactions: 3	538.49
249	MCCOLLOUGH TIM	Summarized transactions: 6	529.26
250	STAY VISIBLE LLC	Summarized transactions: 3	500.78
251	ROCH RESTAURANT SUPPLY	Summarized transactions: 2	475.75
252	MENARDS ROCHESTER NORTH	Summarized transactions: 8	470.82
253	ARNOLDS A KLEEN-TECH COMPANY	Summarized transactions: 9	458.34
254	MOX ENTERPRISES	Summarized transactions: 3	454.85
255	RONCO ENGINEERING SALES INC	Summarized transactions: 3	453.14

ROCHESTER PUBLIC UTILITIES
A/P Board Listing By Dollar Range
For 01/12/2024 To 02/08/2024
Consolidated & Summarized Below 1,000

256	TOWNE MELANI	Summarized transactions: 1	451.20
257	GLOBAL INDUSTRIAL (P)	Summarized transactions: 7	449.99
258	WHITE CAP LP (P)	Summarized transactions: 4	449.85
259	NUVERA	Summarized transactions: 2	435.32
260	MOTION INDUSTRIES INC	Summarized transactions: 5	423.93
261	COPPER CREEK SIGN SHOP	Summarized transactions: 10	419.53
262	T E C INDUSTRIAL INC	Summarized transactions: 1	395.89
263	ELECTRICAL TRAINING ALLIANCE	Summarized transactions: 2	387.12
264	ROCH COMMUNITY & TECHNICAL CO	Summarized transactions: 2	369.79
265	HANNA INSTRUMENTS INC	Summarized transactions: 3	365.47
266	EVOQUA WATER TECHNOLOGIES LLC	Summarized transactions: 3	360.91
267	HAWKINS INC	Summarized transactions: 4	348.09
268	GOPHER STATE ONE CALL	Summarized transactions: 2	340.25
269	SCHUMACHER EXCAVATING INC.	Summarized transactions: 1	320.00
270	NORTH CENTRAL INTERNATIONAL L	Summarized transactions: 1	313.59
271	METROPOLITAN MECHANCIAL CONTR	Summarized transactions: 2	309.47
272	CHARTER COMMUNICATIONS	Summarized transactions: 2	307.96
273	ITRON INC	Summarized transactions: 2	300.88
274	EPLUS TECHNOLOGY INC	Summarized transactions: 1	294.49
275	HEROLD FLAGS	Summarized transactions: 2	293.91
276	ALLEGRA OF ROCHESTER LLC	Summarized transactions: 4	281.81
277	ARIN	Summarized transactions: 1	250.00
278	DAVIES PRINTING COMPANY INC	Summarized transactions: 4	246.88
279	VAN METER INC dba	Summarized transactions: 11	244.37
280	EMEDCO INC	Summarized transactions: 3	241.98
281	VANCO SERVICES LLC	Summarized transactions: 1	232.98
282	SOUTHERN PARTS ENGINEERING CO	Summarized transactions: 1	230.45
283	CITY OF ROCHESTER	Summarized transactions: 1	227.00
284	NATIONWIDE	Summarized transactions: 1	225.00
285	ROCH PLUMBING & HEATING CO IN	Summarized transactions: 1	216.60
286	MCMASTER CARR SUPPLY COMPANY	Summarized transactions: 3	214.17
287	ARCHKEY TECHNOLOGIES dba	Summarized transactions: 1	202.50
288	GOPHER SEPTIC SERVICE INC	Summarized transactions: 1	200.00
289	SETON (P)	Summarized transactions: 4	198.60
290	FEDEX SHIPPING	Summarized transactions: 7	193.71
291	AUTO VALUE	Summarized transactions: 2	182.88
292	LARSON GUSTAVE A COMPANY INC	Summarized transactions: 1	181.38
293	INNER TITE CORP	Summarized transactions: 1	174.85
294	NALCO COMPANY LLC	Summarized transactions: 5	166.99
295	BOB THE BUG MAN LLC	Summarized transactions: 2	162.19
296	ROCH AREA BUILDERS INC	Summarized transactions: 1	160.00
297	EARLS SMALL ENGINE REPAIR INC	Summarized transactions: 2	156.72
298	N HARRIS COMPUTER CORP	Summarized transactions: 1	156.25
299	RDO EQUIPMENT COMPANY (P)	Summarized transactions: 1	155.89
300	EMEDCO INC	Summarized transactions: 3	154.06
301	JOHN HENRY FOSTER MN INC (P)	Summarized transactions: 3	150.02
302	MN DEPT OF HEALTH - ENVIRO HE	Summarized transactions: 1	150.00
303	CRESCENT ELECTRIC SUPPLY CO	Summarized transactions: 4	144.00
304	WATER SYSTEMS COMPANY	Summarized transactions: 2	143.70
305	PROPERTY RECORDS OLMSTED COUN	Summarized transactions: 1	138.00
306	NAPA AUTO PARTS dba	Summarized transactions: 8	136.05
307	OLSEN CHAIN & CABLE CO INC	Summarized transactions: 3	135.51

ROCHESTER PUBLIC UTILITIES
A/P Board Listing By Dollar Range
For 01/12/2024 To 02/08/2024
Consolidated & Summarized Below 1,000

308	ULINE	Summarized transactions: 2	127.01
309	ROCHESTERFEST/CELEBRATION OF	Summarized transactions: 1	125.00
310	HAPPY CHRYSLER DODGE JEEP RAM	Summarized transactions: 1	117.14
311	FAY LYNNETTE	Summarized transactions: 1	110.28
312	HTP ENERGY	Summarized transactions: 3	105.16
313	ANCOM COMMUNICATIONS INC	Summarized transactions: 3	103.67
314	BADGER METER INC (P)	Summarized transactions: 2	98.22
315	MSC INDUSTRIAL SUPPLY CO INC	Summarized transactions: 1	97.79
316	SNAP ON INDUSTRIAL	Summarized transactions: 2	97.41
317	KEACH TODD	Summarized transactions: 1	96.00
318	MEINERS TYLER J	Summarized transactions: 1	96.00
319	SANCO ENTERPRISES	Summarized transactions: 2	91.89
320	SLEEPY EYE TELEPHONE CO	Summarized transactions: 1	84.76
321	TRUCKIN' AMERICA	Summarized transactions: 1	80.16
322	KLAMERUS DOUG	Summarized transactions: 1	79.97
323	ELECTROMARK INC	Summarized transactions: 6	68.16
324	FERGUSON ENTERPRISES	Summarized transactions: 1	50.25
325	BARRY SCREEN PRINT CO dba	Summarized transactions: 5	48.60
326	FORUM COMMUNICATIONS COMPANY	Summarized transactions: 1	46.69
327	ZIEBELLS HIAWATHA FOODS INC	Summarized transactions: 3	41.10
328	DIEP ALAN	Summarized transactions: 1	40.00
329	DONAHUE DEBRA	Summarized transactions: 1	31.54
330	CITY OF ROCHESTER	Summarized transactions: 1	30.00
331	GOODIN COMPANY	Summarized transactions: 2	28.47
332	MINNESOTA ENERGY RESOURCES CO	Summarized transactions: 1	28.28
333	PAULS LOCK & KEY SHOP INC	Summarized transactions: 1	26.10
334	PRAIRIE EQUIPMENT CO LLC	Summarized transactions: 2	23.65
335	QUANDT STEVE	Summarized transactions: 1	23.00
336	DAKOTA SUPPLY GROUP-ACH	Summarized transactions: 1	19.36
337	FLAGSOURCE dba	Summarized transactions: 1	18.71
338	PRAIRIE EQUIPMENT CO LLC	Summarized transactions: 1	15.00
339	BURGGRAFS ACE HARDWARE OF ROC	Summarized transactions: 1	7.25
340	FARRELL EQUIPMENT (P)	Summarized transactions: 1	6.40
341	CHS ROCHESTER	Summarized transactions: 1	5.13
		Price Range Total:	145,351.90
		Grand Total:	10,104,009.47

ROCHESTER BOARDS & COMMISSIONS

REQUEST FOR ACTION

Microsoft Enterprise Agreement License Renewal

MEETING DATE:
February 20, 2024

ORIGINATING DEPT:
Rochester Public Utilities

AGENDA SECTION:
Consent Agenda

PRESENTER:
Mona Hoeft

Action Requested:
Approve a resolution to renew the Microsoft Enterprise license through the re-seller, SHI International Corp, up to $630,000, plus applicable tax, subject to review and approval of the Agreement by the General Manager and City Attorney.

Report Narrative:
The Microsoft Enterprise Agreement (EA) license entitles RPU to the use, updates and support of the Microsoft suite of products, including servers, workstations, databases, Office, etc. This renewal is for a three-year term (3-1-24 to 2-28-27), billed annually. The purchase is through the reseller, SHI International Corp, and is governed by the State of MN cooperative purchase contract. RPU will not receive the agreement until after we confirm the purchase, following this approval.

Fiscal & Resource Impact:
These costs are included in the budget.

Prepared By:
Mona Hoeft

Attachments:
20240220 Resolution - MIcrosoft Enterprise Agreement License Renewal

ROCHESTER
PUBLIC UTILITIES
WE PLEDGE, WE DELIVER

RESOLUTION

BE IT RESOLVED by the Public Utility Board of the City of Rochester to approve renewal of the Microsoft Enterprise license through the re-seller, SHI International Corporation, in the amount of $638,623.53, plus applicable tax, subject to review and approval of the agreement by the General Manager and City Attorney.

PASSED AND ADOPTED BY THE PUBLIC UTILITY BOARD OF THE CITY OF

ROCHESTER, MINNESOTA, THIS 20th DAY OF February, 2024**.**

_____
PRESIDENT

_____
SECRETARY

ROCHESTER BOARDS & COMMISSIONS

REQUEST FOR ACTION

2024 RPU Board Meeting Dates

MEETING DATE:
February 20, 2024

ORIGINATING DEPT:
Rochester Public Utilities

AGENDA SECTION:
Consent Agenda

PRESENTER:
Tim McCollough

Action Requested:
Approve a resolution revising the 2024 RPU Board Meeting dates.

Report Narrative:
In order to avoid a conflict with the MMUA Legislative Conference, staff is requesting to move the March board meeting date from March 26 to March 27, 2024. A revised meeting list is attached.

Prior Legislative Actions & Community Engagement:
The Board approved the 2024 RPU Board Meeting Dates on October 24, 2023.

Prepared By:
Christina Bailey

Attachments:
2024 UTILITY BOARD MEETING DATES

20240220 Resolution - 2024 RPU Board Meeting Dates

ROCHESTER PUBLIC UTILITIES
WE PLEDGE, WE DELIVER

Rochester Public Utilities
4000 East River Road NE
Rochester, MN 55906-2813

Phone: 507-280-1500
Fax: 507-280-1542

PUBLIC UTILITY BOARD MEETING DATES FOR 2024

January 30

*February 20
Conflict with APPA Legislative Rally February 26-28

*March 27
Conflict with MMUA Legislative Conference March 26.27

April 30

*May 21
Conflict with Memorial Day holiday

June 25

July 30

August 6
Budget Study Session

August 27

September 24

October 29

November 26

*December 17
Conflict with Christmas Eve and New Year's Eve holidays

Utility Board meetings are regularly scheduled on the last Tuesday of the month (see calendar for exceptions) at 4:00 p.m. at the RPU Service Center (see address above). Special meetings are scheduled as needed. Call 280-1602 to confirm.

*Indicates a meeting date other than the last Tuesday of the month due to conflicts

ROCHESTER
PUBLIC UTILITIES
WE PLEDGE, WE DELIVER

RESOLUTION

BE IT RESOLVED by the Public Utility Board of the City of Rochester to approve the revised 2024 RPU Board Meeting dates.

PASSED AND ADOPTED BY THE PUBLIC UTILITY BOARD OF THE CITY OF

ROCHESTER, MINNESOTA, THIS 20th DAY OF February, 2024**.**

_____
PRESIDENT

_____
SECRETARY

ROCHESTER BOARDS & COMMISSIONS

REQUEST FOR ACTION

Alternate Member Representative Appointment to the Southern Minnesota Municipal Power Agency

MEETING DATE:
February 20, 2024

ORIGINATING DEPT:
Rochester Public Utilities

AGENDA SECTION:
Consent Agenda

PRESENTER:
Tim McCollough

Action Requested:
Approve a resolution appointing Tony Dzubay as the Alternate Member Representative to the Southern Minnesota Municipal Power Agency.

Report Narrative:
Attached is the alternate member representative appointment form which names Tony Dzubay as the alternate member representative to the Southern Minnesota Municipal Power Agency, replacing Jeremy Sutton, effective March 1, 2024. According to the Agency's bylaws, this change needs to be approved by the Utility Board.

Prior Legislative Actions & Community Engagement:
Board policy #6 delegates the member representative responsibility to the General Manager.

Prepared By:
Tim McCollough

Attachments:
SMMPA Change of Member Rep Fillable Form - TDzubay

20240220 Resolution - Alternate Member Representative Appointment to the Southern Minnesota Municipal Power Agency

Southern Minnesota Municipal Power Agency
Your Partner for a Bright Energy Future

CHANGE OF MEMBER REPRESENTATIVE

TO

SOUTHERN MINNESOTA MUNICIPAL POWER AGENCY

I hereby certify that attached hereto is a true and correct copy of a resolution adopted by

____Public Utility Board___ of the City of _____Rochester____, Minnesota, at a meeting
(PUC or Council) (City)

duly called and held on _____February 20, 2024_____ pursuant to which:
(Date)

(a) _____ has been named Representative to Southern
(Name)

Minnesota Municipal Power Agency, replacing _____.
(Name)

And/or

(b) __Tony Dzubay_____ has been named Alternate Representative to
(Name)

Southern Minnesota Municipal Power Agency, replacing _____Jeremy Sutton____,
(Name)

effective on __March 1, 2024__. Such resolution is in full force and effect on the date hereof.

_____
(Signed)

_____
(Title)

ROCHESTER
PUBLIC UTILITIES
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RESOLUTION

BE IT RESOLVED by the Public Utility Board of the City of Rochester to approve the appointment of Tony Dzubay as the Alternate Member Representative to the Southern Minnesota Municipal Power Agency (SMMPA), replacing Jeremy Sutton, effective March 1, 2024.

PASSED AND ADOPTED BY THE PUBLIC UTILITY BOARD OF THE CITY OF

ROCHESTER, MINNESOTA, THIS 20th DAY OF February, 2024**.**

_____
PRESIDENT

_____
SECRETARY

ROCHESTER BOARDS & COMMISSIONS

REQUEST FOR ACTION

2024-2026 Rochester Public Utilities Strategic Plan

MEETING DATE:
February 20, 2024

ORIGINATING DEPT:
Rochester Public Utilities

AGENDA SECTION:
Consent Agenda

PRESENTER:
Tim McCollough

Action Requested:
Approve a resolution adopting the 2024-2026 Rochester Public Utilities Strategic Plan.

Report Narrative:
The draft 2024-2026 Strategic Plan was presented at the January 30, 2024, Public Utility Board Meeting. The consensus from the RPU Board was affirmative support to move forward with adoption of the plan.

Assuming the plan is adopted, the RPU team is prepared to follow through with the implementation plan described in the Strategic Plan.

Prepared By:
Tim McCollough

Attachments:
2024-2026 Strategic Plan Update DRAFT

20240220 Resolution - 2024-2026 Rochester Public Utilities Strategic Plan

2024-2026 STRATEGIC PLAN

Rochester Public Utilities

ROCHESTER
PUBLIC UTILITIES
WE PLEDGE, WE DELIVER™

Contents

Executive Summary

To be drafted by the General Manager and RPU Board President after board adoption.

Introduction

City of Rochester, MN

Rochester is a city that cares. Where all people are treated with dignity and respect. Where residents, city teammates, and visitors enjoy a high quality of life. Where business and industry thrive, and where the land and environment are renewed and sustained for the benefit of all. It is a welcoming and diverse community with a mission to provide a safe, attractive environment through the responsive, efficient, and cost-effective delivery of municipal services. The city strives to enhance community pride by improving the physical, environmental, economic, cultural, and social quality of the community.

The mayor collaborates with the City Council to set and guide the City's vision, mission, and strategic priorities. The City Council has seven elected members, one Council Member-at-Large who serves as the Council President, and six Council members representing each of the six Rochester wards. The City Administrator coordinates the operations of the city and its departments to carry out the policies adopted by the Common Council.

City services are provided through 13 departments: Administration, City Attorney, City Clerk, Community Development, Finance and Information Technology, Fire, Human Resources, Library, Rochester Public Music, Parks and Recreation, Police, Public Works, and **Rochester Public Utilities**. Rochester employs over 950 full-time teammates and has a 2024 adopted budget of $579.1 million.

Rochester Public Utilities (RPU)

Rochester Public Utilities (RPU) is a municipally owned utility which provides electric and water service to the greater Rochester area. For over a century RPU has been at the forefront, guided by the community's values and needs. Throughout our 129-year history, we have witnessed significant changes. Our community is expanding, customer expectations are shifting, technology is advancing swiftly, and practices once deemed strategic have become routine operations. This evolution calls for a reassessment of our approach to future partnerships, challenges, and transformations.

As Minnesota's premier municipal utility, RPU is dedicated to delivering exceptional customer service and dependable utilities, serving over 58,000 electric and 41,000 water customers. Operating as an enterprise fund department of the City of Rochester, RPU is powered by a workforce of more than 200 full-time professionals. We manage and maintain electric and water facilities for generation, production, transmission, and distribution. Committed to innovation, RPU focuses on integrating technologies that are cost-effective, reliable, and environmentally friendly, all while enhancing the quality of life for individuals, fostering business growth, and supporting the prosperity of the Rochester community.

RPU is proactively addressing the evolving landscape of the utility industry by moving forward with long-term strategic planning. This plan, spanning from 2024 to 2027, embodies RPU's dedication to innovation, community engagement, local service excellence, dependability, and adapting to the shifting tides of technology, regulatory frameworks, and environmental considerations. RPU's commitments align with the City of Rochester's Action Plan, ensuring a cohesive approach to future developments. RPU's service area is comprised of approximately 60 square miles within the corporate limits of the city and some rural areas immediately adjacent to the city. With a peak demand of 295 megawatts (MW), RPU's electric production facilities consist of two hydroelectricity generation units, two gas turbines, a natural gas reciprocating engine plant, and two diesel generators with generation capacities of 3 MW, 80 MW, 46 MW, and 4 MW, respectively.

Include picture of service territory on same page

In addition, the electric utility operates and maintains approximately 837 miles of 13.8 kV electric distribution lines, 42 miles of 161 kV transmission lines, 11 substations, and is interconnected with Southern Minnesota Municipal Power Agency (SMMPA), Dairyland Power Cooperative (DPC), and two interconnections with the multi-utility-owned regional transmission system originally constructed under the CapX2020 La Crosse Project agreement. RPU is a generator owner and operator, as well as a transmission owner and operator in the Midcontinent Independent System Operator (MISO) region. The electric utility has annual revenues of approximately $174 million and a 2024 capital budget of approximately $28 million.

The bulk of the City's power and energy is supplied by SMMPA, an 18-member municipal power agency organized pursuant to Minnesota Statutes, Chapter 453 on June 2, 1977, under a partial requirements contract. RPU is the largest member of SMMPA. Energy not supplied by SMMPA is procured by RPU from the MISO market. The existing power supply contract with the agency is set to expire in March 2030 at which time RPU will pursue its power supply needs independently.

Moving away from SMMPA will require strategic and thoughtful leadership that considers exploring sustainable and renewable resources along with developing innovative strategies and providing creative solutions that ensure we meet ongoing customer needs.

RPU's water utility supplies potable water and fire protection for 41,462 customers within city limits. The water supply consists of 31 deep aquifer wells located throughout the city. The distribution system is a 613-mile network of various-sized water mains in three different pressure zones. There are 20 water storage facilities totaling 17 million gallons. Total annual pumpage was approximately 4.95 billion gallons in 2023 with a peak day pumpage of 26.9 million gallons. In addition, the water utility maintains a certified laboratory for water testing. The water utility has annual revenues of approximately $12.5 million and a 2024 capital budget of $9.7 million.

Charter Board Governance

The Rochester Public Utility Board is a five-member Charter Board that governs RPU. Four members are appointed by the Mayor of Rochester and ratified by the Common Council. They serve no more than two consecutive four-year terms. The fifth member is recommended by the Council President and approved by the Common Council for a two-year term. The RPU Board is authorized by the Rochester City Charter. The operation of the utility is delegated to the RPU Board with the City Council retaining final approval of the annual budget, rates, and any debt issuance.

List board members, a brief bio of each, and when their current term concludes.

Management Team

List executive team, a brief bio of each, and what department they lead and the function of each department.

Mission, Vision & Values

Essential to RPU's future planning is ensuring that our strategic priorities and initiatives align with our Mission, Vision, and Values.

Tagline
We pledge, we deliver.

Mission
We provide the highest quality services and products for our customers. With our experience and resources, we enrich people's lives, help businesses prosper, and promote the community's welfare.

Vision
We will set the standard for service.

Values

Value	What It Means To RPU	How We Should Act
Safety	Protect every individual.	Protect Each Other
Integrity	Demonstrate honesty, respect, and good faith.	Respect Everyone
Service	Leave every individual with a positive impression.	Leave a Positive Impression
Stewardship	Protect our environment through the wise use of resources.	Care for the Environment
Accountability	Take ownership and responsibility for actions and outcomes.	Take Ownership
Skill	Improve our own and others' abilities and knowledge.	Continue Improving

Strategic Plan Update Process

This update to the strategic plan was accomplished through several systematic and intentional steps, including:

- Reviewing several decades of RPU's strategic planning documents to understand the consistent and steadfast themes.
- Inventorying all known projects and initiatives and linking each to a primary strategic outcome.
- Creating a vision of how to operationalize the strategic plan into routine interactions between the management team, the board of directors, the RPU and City teammates, and community stakeholders.
- Gathering input from a baseline assessment survey from the board of directors and a group of teammates. This assessment sought to understand:
    - The strategic assets and core competencies of the organization
    - The key drivers of RPU's historic success
    - The current landscape of strategic risks
    - The key differentiators of the organization
    - The current and future drivers of change

Guiding Themes

While the survey feedback encompassed a range of vital elements, the following six key themes were present in each of the above areas, which include teammates, technology, regulatory, governance, resources, and community.

Teammates

First and foremost, through dedication and experience, RPU teammates contribute significantly to the organization's success. This includes a balance of both long-serving teammates with extensive knowledge and fresh perspectives brought by newer teammates. RPU is renowned for its technical expertise and subject-matter knowledge. However, attracting and retaining future skilled teammates poses a risk to our workforce and potentially the quality of our service. Competing with the private sector when it comes to labor-negotiated compensation and healthcare costs could impact the organization's cost competitiveness in the labor market. It was evident that the future requires the empowerment of teammates and creating a culture that values dedication, hard work, and fun. Trust and collaboration among departments and leadership are expected to be pivotal while exploring options for meeting changing workforce dynamics.

Technology

Historically known for vision, innovation, and strong teamwork, RPU will have a continued commitment to focusing on these qualities within the organization. RPU will be the utility that others seek to emulate. The impact of ever-advancing technology, including artificial intelligence and regulations related to energy sources and conservation (e.g., electric vehicles) is expected to drive significant change. Therefore,

the organization should focus on the implementation of technologies such as advanced metering infrastructure (AMI) and cloud-based solutions that will provide more data. Better data will help make informed decisions that align with RPU's strategic goals and initiatives.

Regulatory

Innovation in leading and partnering with industry experts is key to RPU's solid reputation in the Rochester community. The ever-changing impact of new federal and state rules and regulations, political influences, sustainability initiatives, city growth, and the transition away from carbon-based generation will continue to impact utility operations. These drivers of change reflect the multifaceted challenges and opportunities that RPU will need to address over the next decade to remain adaptive and responsive to evolving circumstances.

Governance

Key leaders, both past and present, have played a pivotal role by instilling trust, supporting teammates, and fostering strong communication and engagement within the organization. The organization is proficient in financial planning and budgeting. RPU has a track record of wise investments in infrastructure and strong fiscal management, which position it as an enterprise rather than just a cost center. This can only happen with the support of the RPU Board, City Council, and the public, who trust RPU to effectively serve the community. This has contributed to its success and partnership in the city's economic growth. The future involves strong leadership with a clear vision, the empowerment of teammates, and a culture that values dedication, fun, and hard work.

Resources

RPU's unwavering focus on delivering electricity and water with high reliability, affordability, and good customer service has been a driving force behind RPU's historical success. RPU's early commitment to 100% renewable energy on a net annual basis and ongoing efforts in environmental stewardship, which includes water resources, highlight RPU's dedication to sustainability and care for its customers and the community. This could not be done without RPU's knowledgeable teammates in key positions and positive relationships with stakeholders and policymakers, which sets us apart.

Community

Many RPU teammates live in the community they serve, fostering a strong location connection and pride in their work. Local engagement is believed to set RPU apart. RPU's active involvement and presence in the community are highly valued by customers, fostering positive relationships and a sense of belonging. Customers appreciate the local touch, knowing and recognizing RPU personnel in the community to further build trust and connection. The organization envisions greater community engagement, collaborating with diverse community groups, and educating residents. A more diverse workforce is expected and anticipated to connect with a wider customer base.

The Five R's

The five R's have been the foundation of RPU's strategic plan for many years. The data from the baseline assessment survey shows the five R's are still relevant today, and they will remain unchanged into the future. The identification of strategic measures and an implementation plan are the primary additions to this version of the strategic plan.

Insert graphic here to show alignment between the five R's and the three City Action Plan focus areas.

Reliability: Leaders in Service and System Reliability

Our Pledge: We will maintain optimal levels of reliability by balancing system investments and prudent utility practices for both water and electric services without compromising the safety of our teammates or the public.

Included in this Area: We will consider reliability and resiliency impacts when making new infrastructure investments. We will be committed to proactive preventative maintenance and infrastructure improvements. We will maintain a culture of compliance with the regulatory agencies that oversee our electric and water industries.

Strategic Outcomes:
Maintain optimal levels of water and electric reliability that are above industry standards.
Maintain reliability as a major driver in future power supply decisions and strategic investments.
Mitigate risks to reliability proactively and cost-effectively.

Strategic Measures:
Water main breaks per 100 miles of distribution main - the most common benchmarked index of water distribution system condition. Water main break rates can vary year-to-year and even seasonally and are weather-dependent. However, in aggregate and looking at long-term trends, break rates produce a story that can aid in asset management decision-making as it relates to defining pipe criticality and the costs of repairing and replacing our underground water pipes.
System Average Interruption Duration Index (SAIDI) - is commonly used as a reliability index by electric power utilities. SAIDI is the average outage duration for each customer served during a period, typically annually, and is the primary measurement of electric system distribution system reliability.
Electric Generating Unit Equivalent Demand Forced Outage Rate (EFORd) - a measure of the probability that a generating unit will not be available due to forced outages or forced deratings when there is a demand on the unit to generate.
Energy Market Annual Capacity Requirement - an annual capacity requirement for all load-serving entities (LSEs) based on the load forecast plus reserves. As a forward-looking indicator, this measure projects future capacity resource requirements, which must be maintained by RPU in MISO, and is a key driver for our integrated resource planning decisions.

Rates: Maintain Rates that Provide Value and Long-Term Financial Stability

Our Pledge: We will maintain rates that provide value and long-term financial sustainability.

Included in this Area: Our rates are predictable, competitive, fair, equitable, defensible, and cost-based. Our rates support innovation, conservation, growth, and strategic investments, as well as sustain financial health, provide a return to the community, and support reliability, safety, and responsiveness.

Strategic Outcomes:
Provide sound fiscal management of the budget and finances, and ensure fiscal responsibility is embraced and expected.
Use cost causation principles in rate design to encourage efficient electrification, promote conservation, reduce total costs to our customers, and reduce cross-subsidization within and between customer classes.
Deliver value by being competitive with the electric and water rates of similar utilities in our area.
Maintain cash reserves, debt coverage, and equity to maintain a favorable bond rating.

Strategic Measures:
Retail Electric & Water Rates Comparison – a lagging indicator and regional assessment of rate competitiveness with regional peer utilities based on the bi-annual Owatonna Public Utilities rates survey.
Bond Rating (Water & Electric) – a bond rating is a key measure of an organization's financial health and credit worthiness. Our goal is to maintain a rating within a targeted bandwidth leading into 2030. The target benchmark will shift after the anticipated debt issuance(s) leading into 2030.

Responsibility: Stewards of the Resources We Impact

Our Pledge: We will foster a consistent culture of excellence in achieving and maintaining RPU's responsibilities to our teammates, customers, community, external partners, regulators, and environment.

Included in this Area: We commit to utilizing the best commercially available and cost-effective technologies and tools to effectively manage energy and water usage. We will reflect the standards and vision of the community in the selection of resources and programs. We will continue to be good stewards of resources and to treat customers and teammates fairly and ethically. We will communicate personal accountability to all our teammates and promote a culture of continuous improvement.

Strategic Objectives
Maintain a culture of safety that promotes situational awareness, collaboration to prevent workplace hazards, and regular education with zero recordable injuries as our standard.
Maintain a culture of environmental stewardship that promotes conservation of resources with zero environmental violations as our standard.
Maintain a culture that educates, equips, and empowers our teammates to live our organizational core values.
Utilize partnerships to leverage our assets to enrich our customers and the community.

Measures
Energy (kWh) and gallons of water saved - key measures of the outcome and effectiveness of our conservation programs.
Annual peak demand (kW) avoided - a measure of the avoided peak electric demand realized each year due to our conservation and demand response programs.
Training Completion % - a measure of completion of the assigned teammate training. This metric includes all training in our learning management system and encompasses safety, compliance, and other relevant training for our team.

Relationships: Empowered and Customer-Focused Teammates

Our Pledge: We will foster a culture that enriches the lives of our customers through our teammates.

Included in this Area: We will be proactive, responsive, and dependable in creating partnerships with our customers by leveraging our relationships, experience, listening, and anticipating how we can best meet their expectations. We will employ and develop people who are passionate about delivering.

Strategic Objectives
Continually seek to understand what our customers value, who they are, their challenges and needs, and the ways in which they want to interact with us.
Foster a culture of caring, inclusiveness, compassionate service delivery that aligns with customers' needs and values.
Empower and recognize RPU teammates that provide a best-in-class customer experience with a lens toward equitable customer-centric service.
Encourage teamwork, promote initiative, and provide professional growth opportunities for all teammates.

Strategic Measures
Net Promoter Score (NPS) - an index ranging from -100 to 100 that measures the willingness of customers to recommend a company's products or services to others. It is used as a proxy for gauging the customer's overall satisfaction with a company's product or service and the customer's loyalty to the brand.
Overall engaged teammates % - a quantitative measure that represents the level of teammate engagement within an organization. Organizations with higher teammate engagement scores show a boost in productivity.
Customer call abandonment rate - a measure of our responsiveness to answer the phone when called upon.

Reputation: Engaged with Our Community

Our Pledge: We will deliver world-class service to our customers and be a trusted partner.

Included in This Area: We will employ an empowered workforce that acts in the best interest of our customers and the community. Our actions will demonstrate transparency, honesty, respect, expertise, and good faith. This will result in us being held in high esteem within our industry and by our stakeholders.

Strategic Objectives
Leverage resources and continuous improvement to ensure high customer service satisfaction.
Build and maintain effective relationships with the customers and the public to promote positive community relations and community knowledge of RPU.
Represent the organization on identified boards, task forces, industry groups, and community organizations where RPU's mission is impacted.
Maintain strong and positive relationships with policy makers, neighborhoods, utilities, and other industry coalitions.
Engage with the community and maintain our position as a trusted professional resource.
Maintain a welcoming environment in which all customers can participate in the public process.

Strategic Measures
Involvement with identified community and regional organizations - a measure of our commitment to maintain involvement in and connection to our community.
RPU as a provider overall metric - a measure of our customers' satisfaction with RPU as a provider.
Interactions per year with school district contacts and career outreach events - a measure to understand and grow our community pipeline of talent, build a strong reputation for RPU with our future customers, and deliver key safety messages to our community.

Strategic Priorities and Initiatives

Rates	Reliability	Relationships	Responsibility	Reputation
Maintain innovative, equitable, predictable, and cost based rates with financial flexibility	Successfully navigate the 2030 transition from the SMMPA PPA to self-supply of power	Improve strategic communication and teammate engagement	Routinely update long-range plans by updating assumptions	Pursue clarity in updating the strategic plan and execute a robust implementation plan
Maintain and refresh the 10-year Capital Improvement Plan	Develop and grow the demand side response and demand side management programs in a cost-effective manner	Support equitable workforce development with knowledge transfer and succession planning	Navigate current & new regulations and legislation	Pursue excellence in public utility governance
Complete the due diligence on building and/or operating a Thermal Energy Network (TEN) Utility	Improve IT processes, security, and resilience	Improve our customer engagement and satisfaction	Develop advanced data and business intelligence capabilities	Explore modern management concepts and organizational capabilities
Support community economic development and growth in a sustainable manner	Successfully execute large multi-year strategic projects: • Advanced Metering Infrastructure • Grid North Partners • 2030 Power Supply Plan • Bold. Forward. Unbound.	Improve collaboration and coordination between RPU and external partners	Maintain, develop, refine, and implement asset management plans	Implement business process improvements
	Successfully and reliably fulfill the steam supply contract to Mayo Clinic		Further explore sustainable and renewable energy, and update the Power Supply Resource Plan	Build and maintain effective relationships with regulators, industry organizations,

Rates	Reliability	Relationships	Responsibility	Reputation
			in alignment with the State 2040 Plan	State and Federal representatives, and agencies

Implementation Plan

Here are the intended steps of the implementation plan:

Assemble a team of internal teammates who are normally responsible for graphics, data, communications, facilities, and other roles that have played a part in internal communications. Leverage this team's expertise in developing a communication strategy to effectively roll out the refreshed strategic plan. It is anticipated that the communication plan will contain the following core elements:

- A full year board agenda and planning calendar with scheduled strategic conversations in each outcome area two times per year.
- The development of strategic metrics to demonstrate the effectiveness of the strategic plan over time to maintain or improve the core measures of RPU's strategic success.
- The development of internal communication strategies to help teammates keep informed and aware of strategic-level decisions in a timely manner.
    - Monthly breakfast with the GM conversations with the same content as the GM report at the previous Board meeting.
    - Monthly Managers/Supervisors meetings with pre-planned agendas that align with the strategic focus conversations with the Board of Directors.
    - Printed materials to reflect the updated strategic plan with refreshed graphics and images based on the current logo standards.
    - New wall hangings to display the strategic plan in the conference rooms and offices within the RPU service center.
    - A strategic plan slide deck (*.ppt) that can be maintained to share with internal and external stakeholders by anyone on our management team.
    - Graphics that can be displayed on the digital screens in the hallways within RPU.
    - Alignment of the internal newsletter communications with the strategy in a "From the Desk of the GM"

The draft of the strategic plan will be reviewed by an ad hoc group of the Board of Directors to receive feedback. Any input will be considered and incorporated into the draft.

The draft of the strategic plan will be recommended to the Board of Directors and once approved, the implementation plan will follow.

The following appendices are bodies of knowledge that currently exist in various forms and are in mature stages of development and/or implementation within RPU. The implementation plan will include drafting summaries of these items to show alignment with the strategic plan.

APPENDIX A – Resource Plan Summary

To be drafted and delivered in 2024.

A narrative summary of the updated Resource Plan (or 2030 Power Supply Plan).

APPENDIX B – Long-Term Financial Plan Summary

To be drafted and delivered in 2024.

A summary of the updated long-term financial plan. Including key assumptions, drivers, strategies, and anticipated future debt issuances.

APPENDIX C – Legal & Regulatory Inventory

To be drafted and delivered in 2024.

A summary of the ever-changing landscape of laws and regulations that RPU operates within.

APPENDIX D – Inventory of Long-Term Contracts & Agreements

To be further developed and summarized in 2024.

A summary of the significant long-term contracts and agreements and their associated timeframes.

The below example is intended only as a template to describe the work to be completed.

Contract	Between	Term
Southern Minnesota Municipal Power Agency (SMMPA) Agreement. "Agency Agreement"	City of Rochester *And* Other Agency Members	**Signed**: **Renewed**: **Expiration**: Mar 30, 2030
SMMPA Power Sales Contract	City of Rochester *and* SMMPA	**Signed:** Nov 1, 1982 **Renewed**: **Expiration**: Mar 30, 2030
Steam Supply Agreement	Rochester Public Utilities *and* Mayo Clinic	**Signed**: **Renewed**: **Expiration**: Dec 31, 2030
Cost Split Agreement	Rochester Public Utilities *and* Rochester Public Works	**Signed**: Dec 9, 2020 **Review**: Dec 9, 2021
Metering and Billing Services Agreement	Rochester Public Utilities *and* Rochester Public Works	**Signed**: **Renewed**: **Expiration**:
CAPX 2020 Joint Owners Agreement for 345 kV and 161kV joint owned transmission	Xcel *and* Dairyland Power Cooperative *and* Southern Minnesota Municipal Power Agency	
Collective Bargaining Agreements		

APPENDIX E – Inventory of Short & Long Range Plans & Studies

To be further developed and summarized in 2024.

A summary of the major plans and studies that guide our asset management efforts and capital investments in infrastructure and systems.

The below example is intended only as a template to describe the work to be completed.

Plan Name	Plan Status	Plan Author	Plan Cycle	Last Update	Next Update
Vegetation Management	Adopted		10 years		2024
Customer Journey Mapping	Adopted	IBM			
Transmission Study	Adopted				
Grid Modernization	In Development				
Fleet Management	Adopted	Internal			
Facility Management	Adopted				
Water Supply Plan	Adopted		10 years	2023	2033
Resource Plan	Adopted	1898 & Co. (Burns & McDonnell)			
Generation Asset Management	Internal				
Transmission Asset Management	Internal				
Distribution Asset Management	Internal				
Dam Asset Management	Adopted				
Data Asset Management	In Development				
Electric Cost of Service	Adopted	1898 & Co. (Burns & McDonnell)	3 years	2023	2026
Water Cost of Service	Adopted	1898 & Co. (Burns & McDonnell)	3 years	2022	2025
Five-year financial budget and projection for	Adopted		Annually	2023	2024

both the Water and Electric Utilities.					

APPENDIX F – Glossary of Terms

To be further developed and summarized in 2024.

A glossary of the common terms and TLAs (Three Letter Acronyms) used commonly inside the walls of RPU and inside the Board Room.

The below example is intended only as a template to describe the work to be completed.

2030 Plan – See Integrated Resource Plan

Action Plan – The Strategic Plan of the City of Rochester. RPU's Strategic Plan (this document) is considered a department level Action Plan.

AMI - Advanced Metering Infrastructure. Refers to systems that measure, collect, and analyze utility product usage, and communicate with metering devices such as electricity meters and water meters, either on request or on a schedule. These systems include hardware, software, communications, consumer energy displays and controllers, customer associated systems, meter data management software, and supplier business systems. Sometimes referred to as smart metering.

AMR - Automated Meter Reading. A method of using short range communication technology to read electric and water meters from a vehicle while driving nearby. It allows reading without needing physical access to the meter.

AMWA – Association of Metropolitan Water Agencies

APPA – American Public Power Association

Aquifer – An underground layer of water-bearing, permeable rock, rock fractures, or unconsolidated materials (gravel, sand, or silt).

ATRR – Annual Transmission Revenue Requirement

AWWA – American Water Works Association

Benchmarking – or in Minnesota Statute "Energy Benchmarking". A program established by the state of Minnesota that requires utilities to aggregate customer energy use data of covered properties and make the data available to customers in standard formats and make that data available to upload to various agency established portals.

Beneficial Electrification – The intentional switching of transportation and building heating systems to be powered by electricity. This is primarily accomplished by

switching to electric vehicles and installing heat pump systems for buildings and processes.

BEV – Battery (Only) Electric Vehicle

Capacity –

CapX2020 – The predecessor organization to Grid North Partners.

CCCT – Cascade Creek combustion turbines; referred to in permits as “GT1,” “GT2” and “GT3.”

Charter Board – a general term describing the governance structure and type of board like the Rochester Public Utility Board (Or RPU Board).

CIP – Capital Improvement Plan, Conservation Incentive Program, Critical Infrastructure Protection.

Coincident Peak -

CROD – Contract Rate of Delivery. A provision of the SMMPA Power Sales Agreement that commits RPU to buy all energy and demand from SMMPA when loads are equal to or below 216,000 kW. Energy and demand above 216,000 kW is procured by RPU directly from MISO.

Electric Customer Charge –

Electric Demand Charge –

Electric Energy Charge –

Demand Response (DR) - A program that encourages consumers to reduce their electricity usage during peak demand periods, helping to balance the grid.

Demand Side Management (DSM) - The modification of consumer demand for energy through various methods such as financial incentives and behavioral change through education. The RPU Conserve & Save program is a DSM program.

DER - Distributed Energy Resources: Small-scale power generation or storage systems, like solar panels on rooftops or home batteries.

District Energy –

DOE – Department of Energy

Energy – The amount of electricity used over a period of time. Typically measured in kilowatt-hours (kWh) for a house. Larger amounts of energy are measured in megawatt-hours (1 MWh = 1,000 kWh). An average house in Rochester used 25 kWh of electricity in a day. The City of Rochester uses 1,200,000 MWh of electricity in a year.

EPA – The United States Environmental Protection Agency.

ERP – Electric Resource Plan: Similar to an IRP, it's a plan outlining how a utility will ensure a stable supply of electricity for its customers. Enterprise Resource Plan, is a platform that can integrate finance, marketing, sales, inventory, purchases, and planning.

EV – Electric Vehicle

Fen - A fen is a type of peat-accumulating wetland fed by mineral-rich ground or surface water. It is one of the main types of wetlands along with marshes, swamps, and bogs.

Firm Capacity -

FTE – Full-time Equivalent.

Fuel Assurance -

Grid North Partners - Grid North Partners is a mix of 10 investor-owned and not-for-profit cooperative and municipal utilities working together to ensure continued safe, reliable, and affordable electric service. Grid North Partners serve customers in the Upper Midwest and own and operate transmission infrastructure throughout their respective service territories. Originally formed in 2004 as **CapX2020**, a joint initiative to upgrade and expand the transmission grid in the Upper Midwest, meet the growing demand for electricity, support job and population growth, and increase access to renewable energy sources. Rochester Public Utilities is a member of Grid North Partners.

GRIP – Federal Funding

Heat Pump - A heat pump is a device that uses electrically powered equipment to transfer heat from a cool space to a warm space by transferring thermal energy using a refrigeration cycle, cooling the cool space and warming the warm space. In cold weather a heat pump can move heat from the cool outdoors to warm a house; the pump may also be designed to move heat from the house to the warmer outdoors in warm weather.

IRP - Integrated Resource Plan: A strategic plan that outlines how a utility will meet future energy needs while considering factors like resources, costs, and environmental impact.

ISAC – Information Sharing and Analysis Center. An organization that gathers and analyzes security data, shares appropriate data with stakeholders, coordinates incident management, and communicates mitigation strategies with stakeholders. There is an electricity focused organization (E-ISAC) and a water industry focused organization (WaterISAC)

ISAC – Intermediate Seasonal Accredited Capacity

ISO – Independent System Operator: Similar to an RTO, it manages the operation and reliability of the power grid within a specific area.

KPI – Key Performance Indicator see Strategic Measure

kW – A kilowatt. The amount of power produced or consumed at moment in time. Think of it like the amount of horsepower produced when you push the accelerator in a car.

kWh – A kilowatt-hour. The amount of energy produced or consumed over a period of time. Think of it like the amount of fuel you use holding the accelerator down for an hour.

LRTP – Long Range Transmission Planning

MISO – Midcontinent Independent System Operator

MnDOT – Minnesota Department of Transportation

MDH – Minnesota Department of Health

Minnesota DNR – Minnesota Department of Natural Resources

MPCA – Minnesota Pollution Control Agency

MMUA – Minnesota Municipal Utilities Association

MRO - Midwest Reliability Organization

NAEMA – North American Energy Markets Association

NERC – North American Electric Reliability Corporation: An organization responsible for ensuring the reliability and security of the North American power grid.

NESHAP – National Emissions Standards for Hazardous Air Pollutants Compliance Monitoring

NG - Natural Gas: A fossil fuel often used for electricity generation.

OSHA – The United States Occupational Health and Safety Administration

OWEF – The Olmsted Waste-to-Energy Facility (OWEF) is one component of Olmsted County's integrated approach to solid waste management. The OWEF produces steam and electricity which is provided to 30+ buildings in the Olmsted County District Energy System (OCDES). The output of OWEF is sold to SMMPA or Rochester Public Utilities under a three-party agreement.

PHEV – Plug-In Hybrid Electric Vehicle

PFAS – per- and polyfluoroalkyl substances. A group of man-made chemicals that have been widely used in various industrial and consumer products since the 1940s. They are valued for their water and grease-resistant properties, which make them useful in products like non-stick cookware, waterproof clothing, firefighting foam, and more. However, PFAS have come under scrutiny due to their persistence in the environment and potential health risks. Sometimes referred to as "forever chemicals."

Planning Reserve Margin (PRM) -

Pumpage – a measure of the amount (volume) of water raised out of the aquifer supplied to the distribution system during a period of time. Typically, millions of gallons of water per day or billions of gallons per year.

PV – Present value in financial terms

PV – Photovoltaic: Technology that converts sunlight into electricity, often used in solar panels.

REC – Renewable Energy Certificate: A tradable certificate representing the environmental attributes of one megawatt-hour of electricity generated from a renewable energy source.

Renewable Electricity -

Resource Adequacy – The ability of the electricity system to meet demands under a broad range of conditions to a defined level of reliability.

Roadmap – see Strategy Map

RP3 – The American Public Power Association's Reliable Public Power Provider program recognizes utilities that demonstrate high proficiency in reliability, safety, workforce development, and system improvement. Designations last for three years and RPU was designated at the diamond level in 2022.

RPS – Renewable Portfolio Standard OR Rochester Public Schools

RPL – Rochester Public Library

RFD – Rochester Fire Department

RPD – Rochester Police Department

RTO - Regional Transmission Organization: An entity responsible for managing and overseeing the transmission of electricity within a specific region.

SAC – Seasonal Accredited Capacity

SAIDI – System Average Interruption Duration Index. The sum of all customer interruption durations [minutes] experienced by all customers in a year divided by the total number of customers served in that year.

Seasonal Capacity Construct -

Self-Determination – The fundamental drive of a person or organization to shape their own future. In a practical sense for RPU, self-determination means we have the size and scale as the largest Municipal Utility in Minnesota to fulfill our own power and water supply needs. This desire as an organization is the fundamental idea behind exiting SMMPA in 2030 and fulfilling our own power supply needs.

SEP – Smart Energy Provider Program. A best practices designation for utilities from the American Public Power Association that show commitment to and proficiency in efficiency, distributed energy resources, renewable energy, and environmental initiatives.

Silver Lake Plant (SLP) -

SMMPA – Southern Minnesota Municipal Power Agency

Substation –

TAPS – Transmission Access Policy Study Group

TEA – The Energy Authority

TOU – Time of Use. A rate structure that which charges more than average for electricity consumed during peak hours but charges less than average for electricity consumed during off-peak times.

The Triad – The collaboration between Austin, Rochester, and Owatonna for purposes of joint marketing and efficiency program operations. The Conserve & Save™ program is run in each of the three utilities under the local branding of the individual utilities.

Tranche – a portion of something. In electric utility terms, this is a group of long-range transmission planning projects in the MISO footprint. See Grid North Partners.

Trifold – See Strategic Plan. The common term used inside Rochester Public Utilities for previous versions of the Strategic Plan. It was printed on a Tri-folded piece of paper for quick reference.

UCAP – Unforced Capacity

VOCs – Volatile Organic Compounds

Westside Energy Station (WES) –

ROCHESTER
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RESOLUTION

BE IT RESOLVED by the Public Utility Board of the City of Rochester to adopt the 2024-2026 Rochester Public Utilities Strategic Plan.

PASSED AND ADOPTED BY THE PUBLIC UTILITY BOARD OF THE CITY OF

ROCHESTER, MINNESOTA, THIS 20th DAY OF February, 2024**.**

_____
PRESIDENT

_____
SECRETARY

ROCHESTER BOARDS & COMMISSIONS

REQUEST FOR ACTION

2024 IFB Vertical Rise Truck Lift

MEETING DATE:
February 20, 2024

ORIGINATING DEPT:
Rochester Public Utilities

AGENDA SECTION:
Consent Agenda

PRESENTER:
Andy Bianco

Action Requested:
Approve a resolution to accept the bid from High Forest Bobcat Service, Inc. in an amount of $189,812.70, and authorize the Project Manager to execute the services up to the approved budget amount.

Report Narrative:
Two bids were received on February 9, 2024, for the purchase and installation of a new vertical rise truck lift in the fleet shop. Although Midwest Lift Works provided the apparent low bid, RPU is not willing to accept the deviations provided. High Forest Bobcat Service, Inc. was the second bidder, and their bid was responsive. High Forest has worked with RPU on previous projects and currently provides maintenance on one of our existing lifts in the garage. The RPU team has no concerns about their ability to perform successfully on this project and recommends the Board proceed with an award to High Forest Bobcat Service, Inc.

High Forest Bobcat Service, Inc. - $189,812.70
Midwest Lift Works, LLC. - $175,575.56

Fiscal & Resource Impact:
The 2024 budget included $204,000 for this project.

Prepared By:
Andrew Bianco

Attachments:
20240220 Resolution - 2024 IFB Vertical Rise Truck Lift

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RESOLUTION

BE IT RESOLVED by the Public Utility Board of the City of Rochester to approve the purchase of a 2024 IFB vertical rise truck lift from High Forest Bobcat Service, Inc., in the amount of $189,812.70, and authorize the project manager to execute the services up to the approved budget amount.

PASSED AND ADOPTED BY THE PUBLIC UTILITY BOARD OF THE CITY OF

ROCHESTER, MINNESOTA, THIS 20th DAY OF February, 2024**.**

_____
PRESIDENT

_____
SECRETARY

ROCHESTER BOARDS & COMMISSIONS

REQUEST FOR ACTION

2024 Electric Service Rules and Regulations Update

MEETING DATE:
February 20, 2024

ORIGINATING DEPT:
Rochester Public Utilities

AGENDA SECTION:
Regular Agenda

PRESENTER:
Steven Cook

Action Requested:

Approve a resolution to adopt the proposed 2024 Electric Service Rules and Regulations, effective June 1, 2024.

Report Narrative:

RPU has written and published Electric Service Rules and Regulations since the early 1980's. The intent of this document is to provide consistent guidance to customers and electrical contractors in regards to establishing new electric service to a property, or when making alterations to an existing electrical service installation to a property.

The current version of the Electric Service Rules and Regulations was published and adopted in July 2021. The RPU electric utility updates and revises this document every three (3) years to closely follow the code update cycle for the National Electric Code (NEC), which the City of Rochester adopts and enforces, and the National Electric Safety Code (NESC). The RPU team began the revision process in the fall of 2023, and recently completed the review process for the proposed changes. Changes made in the proposed 2024 Electric Rules and Regulations fall within the following major categories or sections:

1. Clarifying existing rule requirements and language.
2. Insertion of new access and inspection language.
3. Updates and modifications to Section 600 – Meters and Metering Equipment language in preparation for RPU's AMI project roll-out in 2025.
4. Updates and modifications to Section 800 – Overhead Secondary Services language. Staff is proposing the updated language in response to the growing national electrification trend being observed, and to more closely align our Electric Rules and Regulations document with the present Electric Utility Undergrounding Policy adopted by the Board.

Wording or numbering changes are shown in RED text throughout the document to highlight where changes from the 2021 to the 2024 document occurred.

Prepared By:

Brian Kelly

Attachments:

2024 RPU Electric Rules and Regulations

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2024

ELECTRIC SERVICE RULES

ROCHESTER PUBLIC UTILITIES

ELECTRIC SERVICE
RULES AND REGULATIONS

Revised: **February 2024**

INTRODUCTION

Rochester Public Utilities (hereafter referred to RPU) has assembled this booklet to assist its customers and their architects, engineers, or electrical contractors to plan for and obtain electric service. The requirements herein supersede all previous publications of the "Electric Service Rules and Regulations" issued by RPU prior to the above date and is subject to change without notice.

The information presented here is intended to supplement the requirements of the National Electrical Code® (NEC®), National Electric Safety Code® (NESC®), National Fuel and Gas Code (NFPA54), Liquefied Petroleum Gas Code (NFPA58), and all other applicable federal, or state, and municipal codes, regulations, laws and ordinances. It is always necessary to refer to and comply with such other codes, regulations, laws, and ordinances when planning, designing, and installing a new electrical service. Specific requirements of RPU do not intentionally conflict with any other requirements known to be in effect as of the publication date of this booklet. Any apparent conflicts of this nature should be brought to the attention of RPU for interpretation. RPU assumes no responsibility whatsoever for the manufacturer's, supplier's, electrician's, or engineering consultant's compliance with all applicable codes as well as all local and state codes. Any waiver at any time of RPU's rights or privileges under the electric service rules and regulations will not be deemed a waiver as to any breach of other matter subsequently occurring.

All questions or requests should be directed to RPU's Customer Care Department at the contact number or email address listed on page 2.

These electric rules and regulations are available for download from RPU's website https://www.rpu.org/construction-center.php. Contact RPU for more details.

RPU ELECTRIC CONTACT INFORMATION

Main Office Address: 4000 East River Rd NE
Rochester, MN 55906-2813

Web Address: https://www.rpu.org

Contact	Phone Number	Email
Customer Care	507.280.1500	customerservice@rpu.org
Customer Care: Toll Free	800.778.3421	
Emergency Electrical Outages (24 hours)	507.280.9191	
Electric Engineering Department	507.292.1216	EDistribution@rpu.org
Metering Department	507.292.1232	
Modified or New Service	507.292.1232	newservice@rpu.org

OTHER CONTACT INFORMATION

Contact	Phone Number	Website
GOPHER STATE ONECALL	800.252.1166	www.gopherstateonecall.org
Rochester Building and Safety Department	507.328.2600	

REVISION HISTORY

Revision Date	***Brief Description of Revisions***
Aug 2011	Starting Revision for tracking
May 2015	Major Revisions
August 2017	Revisions
July 2021	Revisions
February 2024	Revisions

TABLE OF CONTENTS

SECTION 100 – DEFINITIONS

Altered: Replacing major components or any integral part of a meter socket, current transformer cabinet, riser, service mast, line or load side conductor, or relocating electric service equipment (including storm damage).

Application for Service: The agreement or contract between RPU and the customer under which electric service is supplied and taken.

Accessible: Allowing or admitting, close approach; not guarded by locked doors, elevation, or other effective means including any portion of a temporary or permanent structure.

Approved: Acceptable to the authority having jurisdiction.

Building: A structure with roof and walls. Two (2) or more structures shall not be considered a single building merely by the existence of skyways, tunnels, common heating or cooling facilities, common garages, entry halls or elevators, or other attachments.

Cold Sequence: In a cold meter sequence, a disconnecting device is located on the line side (before) of the metering equipment.

Conduit: Standard tubular material used for mechanical protection of electrical distribution lines which may be exposed, buried beneath the surface of the ground, or encased in a building as required. (See definition for Duct).
NOTE: For the purpose of this document, the terms Conduit and Duct are used interchangeably

Connected Load: The combined manufacturer's rated capacity of all motors and other electric energy consuming devices on the customer's premises which may, at the will of the customer, be operated with the electric energy to be supplied from the service of RPU.

Contractor: Licensed individual or company who performs work on behalf of the customer or RPU.

Current Transformer (CT): An instrument transformer designed for the measurement or control of current.

Customer: Any individual, partnership, corporation, or other legal entity now being served or to be served, using the electric service of RPU at any specified location.

Customer's Service Equipment: The necessary equipment and accessories, located near the point of entrance of supply conductors to a building, which constitute the main control and means of disconnecting the supply to that building. This equipment usually consists of a circuit breaker or a switch and fuses.

Disconnection Means: A device, or group of devices, or other means by which the conductors of a circuit can be disconnected from their source of supply.

Distribution Lines: RPU's lines located along streets, alleys, highways, or easements on private property, when used or intended for use for general distribution of electric service to customers.

Distributed Energy Resource (DER): Often referred to in the past as Distributed Generation (DG) and on occasion also interchanged with the term Qualifying Facility (QF). DER are all types of generation and energy resources that can be interconnected to RPU's electric distribution system. DER technologies can include photovoltaic solar systems, wind turbines, storage batteries, or fossil fuel generators are not limited to renewable types of technologies.

Distributed Generation (DG): Distributed Energy Resources that are derived from a generation source, not from energy storage.

Duct: Standard tubular material used for mechanical protection of electrical distribution lines which may be exposed, buried beneath the surface of the ground, or encased in a building as required. (See definition for Conduit).
NOTE: For the purpose of this document, the terms Conduit and Duct are used interchangeably

Dwelling Unit: A structure or the part of a structure that is used as a home, residence, or sleeping place by one person who maintains a household or by two or more persons who maintain a common household. The term "Dwelling Unit" excludes real property used to accommodate a manufactured home, unless the manufactured home is rented or leased by the landlord

Easement: The right of use over and under the property of another, such as a right-of-way.

Electric Service: The availability of electric power and energy, regardless of whether any electric power and energy is actually used. The supplying of electric service by RPU consists of the maintaining, at the point of delivery, approximately the agreed voltage, phase and frequency by means of facilities adequate for carrying the load which RPU is thereby obligated to supply by reason of the known requirements.

Excess Facilities: Those instances where RPU provides distribution and/or metering facilities at the customer's request, in excess of the facilities RPU deems necessary to supply service to the customer.

Fault Current: The current that will flow through the system to a point where a piece or a conductor has failed, such as bare conductors touching together or a bare conductor touching a ground point.

Frost (Frozen Ground): A condition where the water contained within the ground freezes, resulting in additional difficulty and expense in excavation work.

Hot Sequence: In a hot meter sequence, there is not a disconnecting device located on the line side (before) the meter.

Individual RPU Metering: Direct measurement by RPU, using a RPU meter, of all electrical consumption of a customer supplied by the company.

Instrument Transformer: A transformer that reproduces in its secondary circuit, the voltage or current proportional to its primary circuit.

Instrument Transformer Cabinet: A cabinet installed and owned by the customer, complying with RPU's requirements, and designed for housing instrument transformers used for metering.

Junction Cabinet: A pad-mounted enclosure where underground primary cables are connected together, either by splices or separable connectors, for underground distribution systems.

Manufactured Home: A structure, not affixed to or part of a real estate, transportable in one of more sections, which in the traveling mode, is eight body feet or more in width or 40 body feet or more in length, or when erected on site, is 320 or more square feet, and which is built on a permanent chassis and designed to be used as a dwelling unit.

Master Metering: Metering configuration where a single meter (Master meter) measures the consumption for a building, and then sub-meters on the Customer side of the Master Meter measure the consumption of individual load, loads, or groups of loads.

Meter/Meter Set: The equipment necessary to measure the customer's electric energy usage and demand, including a meter socket, instrument cabinet, instrument transformers, protective device, conduit, associated wiring and meter

Multi-Family Dwelling: A building containing two or more dwelling units

National Electrical Code® (NEC®)[1]: The current edition of the National Electrical Code as issued by the National Fire Protection Association (NFPA No. 70).

National Electric Safety Code® (NESC®)[2]: The current edition of the National Electric Safety Code as issued by the Institute of Electrical and Electronics Engineers (IEEE® C2), American National Standards Institute (ANSI® C2).

[1] National Electrical Code® and NEC® are registered trademarks of the National Fire Protection Association, Inc., Quincy, MA 02269

[2] National Electric Safety Code® and NESC® are registered trademarks and service marks of the Institute of Electrical and Electronics Engineers, Inc. New York, NY 10017

Nominal Voltage: The value, expressed in volts, which is assigned to a circuit or system for the purpose of conveniently designating its voltage class (such as 120/240V, 277/480Y, etc.). The actual voltage at which a circuit operates can vary from the nominal within a range established by ANSI C84.1. The customer is responsible for ensuring that their systems are capable of operating within range B of ANSI C84.1

Occupancy Unit: A room, office, apartment, or other space separated by walls or partitions that enclose the area, or a contiguous grouping thereof when occupied by a single customer.

Paved: A surface covered with a material such as stone, asphalt, or concrete designed for vehicular traffic.

Point of Delivery: The point where the electric energy first leaves the line or apparatus owned by RPU and enters the line or apparatus owned by the customer. This is not necessarily the point of location of RPU's meter.

Point of Interconnection: The location designated by RPU that the Customer must extend conduits to in order for RPU to install our facilities on customer property.

Primary Service: Any type of service with a nominal voltage greater than 600 volts.

RPU: Rochester Public Utilities

Rate Schedules: The classification of the use of electricity into categories considering the amount of power supplied and the purpose of its use.

Redistribution: The provision of unmetered electrical supply by a customer to customer's tenants or other occupant, or to any person who qualifies for unmetered service.

Redundant Facilities: Duplicate (partial or full) facilities installed at the request of the customer for the purpose of increasing reliability of the system for a particular customer.

Single Family Dwelling: A building consisting solely of one dwelling unit.

Secondary Connection Cabinet: Cabinet required when the number and/or size of the conductors exceeds RPU's limit for terminating in a specific pad-mounted transformer. If a secondary connection cabinet is used, it will also be the location of the metering equipment.

Secondary Service: Any type of service with a nominal voltage less than or equal to 600 volts.

Secondary Terminal: The secondary side of a pad-mounted transformer, service pedestal, or vault, whichever is designated by RPU.

Series Subtractive Metering: An arrangement to measure consumption in a multiple occupancy unit building using individual RPU meters on each occupancy unit in series with one RPU master meter to measure total building consumption on the set of service entrance conductors or feeder supplying the individual occupancy units with billing for common area usage determined by company formula.

Service: The conductors and equipment for delivering energy from RPU's system to the wiring system of the customer.

Service Drop: The overhead service conductors from the last pole or other aerial support up to, and including the splices (if any), connecting to the service-entrance conductors at the building or other structure.

Service Entrance Conductors, Overhead System: The service conductors between the terminals of the service equipment and a point usually outside the building, clear of building walls, where joined by tap or splice to the service drop.

Service Entrance Conductors, Underground System: The service conductors between the terminals of the service equipment and the point of delivery.

Service Equipment: The necessary equipment, usually consisting of a circuit breaker or switch and fuses, and their accessories, located near the point of entrance of supply conductors to a building or other structure, or an otherwise defined area, and intended to constitute the main control and means of cutoff of the supply.

Service Upgrade: An electric service is considered upgraded if any of the following conditions are met:

1. If the rating of the customer disconnect is increased
2. If the main service disconnect type is changed (i.e. from fuses to a circuit breaker)
3. If either the conductors between the meter socket and the customer disconnect or the conductors on the supply side of the meter are changed or altered
4. A DER system is installed by the customer
5. A home emergency generator with an automatic transfer switch (ATS) is installed by the customer

Sub-metering: The provision of metered electrical supply through a customer owned meter to a customer's tenants, cooperative or condominium owners, other occupants, or to a portion of the customer's own electrical consumption.

Underground Residential Distribution (URD) Areas: Those residential subdivisions, or other specified areas, within which all customers are served by underground distribution lines.

Underground Service Lateral: The secondary service conductors from RPU's distribution system.

Unsuitable Backfill Material: Includes, but is not limited to, the following materials:

- Granular material (individual stones, soil in clumps or clods, etc.) larger than ¼" in diameter
- Frozen materials
- Materials removed as rock excavation or over-excavation
- Trash, metal, or construction waste
- Environmentally contaminated soils

Utility: For the purpose of this document any public, city, or city-franchised organization that furnishes electric service.

Voltage to Ground: For grounded circuits, the voltage between the given conductor and that point or conductor of the circuit that is grounded; for underground circuits, the greatest voltage between the given conductor and any other conductor of the circuit.

Voltage Transformer (VT): An instrument transformer intended for use in the measurement or control of a circuit and designed to have its primary winding connected in parallel with the circuit.

SECTION 200 – GENERAL INFORMATION

201 SERVICE JURISDICTION

RPU has been established by the City of Rochester for the purpose of providing electricity to the residents of the City. RPU also provides electricity to residents outside of the City limits but within the service area boundaries established by the State of Minnesota. Service will be provided to all eligible applicants only when all applications, agreements, easements, deposits, payments, and other required information have been provided to RPU.

202 APPLICATION FOR SERVICE

Application for initial, additional, or temporary electric service must be made by the customer, or a designated representative, to RPU. Applications can be made at RPU's Service Center or by contacting a Modified or New Service Representative (refer to page 2 for contact information). At the time of application, the customer will be required to provide, in writing on the form(s) provided, information relating to the service request, including the following:

(1) Exact location of premises to be served, including building street address, apartment or unit number if applicable, lot and block numbers, and name of subdivision

(2) The type of service desired (e.g. temporary, permanent, residential subdivision, dwelling unit, commercial, industrial, rewire, etc.)

(3) The approximate date that electric service is required

(4) The name, address, and telephone number of the customer's designated representative who will be responsible for working with RPU representatives in providing the electric service (e.g. customer, employee, engineer, contractor, etc.)

(5) Commercial Services:

a) Load Data Sheet: The customer, or their representative, shall submit to RPU's Engineering Department a completed Electrical Load Data sheet specifying the type of service required by the customer and expected magnitudes of connected and peak load. Additional data in the form of construction drawings and the proposed service entrance may also be necessary for RPU to adequately determine the capacity and arrangement of service to the customer. The completed Load Data sheet must be received before RPU can perform the necessary planning and design of the project. Failure to provide this information at the start of a project may result in significant delay in RPU being able to provide service

b) The Commercial Service Application must be submitted as soon as feasible in order for RPU to establish an account, and allow adequate time to invoice and receive payment for the Line Extension Fee, if applicable

c) Notification to RPU Engineering that the customer is ready for installation of the transformer must be received a minimum of ten (10) working days prior to energizing the service

(6) Residential Subdivisions:

a) Complete Residential Line Extension billing information form and submit with CAD file of plat at least six (6) months in advance

RPU should be advised of planning installations as early as possible so that details for furnishing service may be arranged and construction completed by the desired date. Application forms and additional information may be obtained at https://www.rpu.org/construction-center.php. Contact a RPU Modified or New Service Representative (refer to page 2 for contact information) with questions concerning the application process.

203 OWNERSHIP OF EQUIPMENT

203.1 RPU-Owned Equipment - The meter and associated metering equipment furnished or installed by RPU are the property of RPU.

(1) Overhead Service – In addition to the metering equipment, the overhead service drop installed by RPU is the property of RPU

(2) Underground Service – In addition to the metering equipment, all equipment up to and including the designated point of delivery is the property of RPU

203.2 Customer-Owned Equipment - The meter socket, instrument transformer compartment (if required, see Section 611), the service entrance conductors and conduit from the meter socket to the service entrance disconnect, the service entrance switch or circuit breaker, the service entrance ground equipment, and the concrete transformer pad and grounding grid are the property of the customer.

(1) Overhead Service – In addition to the equipment on the customer side of the meter socket, the service drop wire holder or bracket, the weather head, and either the service mast and conduit with entrance wires, or the service entrance cable with watertight connection to the meter socket are the property of the customer

(2) Underground Service – In addition to the equipment on the customer side of the meter, all conduit and cable required to extend the secondary service

lateral from RPU's point of delivery to the meter socket are the property of the customer

203.3 Responsibilities - The customer and RPU are responsible for the installation, maintenance, repair, and replacement of the electric service equipment which each owns.

204 EASEMENTS

Whenever any RPU-owned underground and/or overhead material and equipment is located above or below the customer's property, the customer shall grant an easement to RPU to the extent which RPU deems necessary. All utility easements required by RPU are to be granted by the customer at no cost to RPU.

204.1 Easement Legal Description and Exhibit Processes

(1) Rochester Community Development – When the easement is sought during the Rochester Community Development process, the customer or property developer shall provide the legal description and exhibit by a Registered Land Surveyor

(2) Other Easement Request – When the easement is sought after the property has been developed, RPU will provide an electronic copy of the assembled easement (legal description and exhibit by RPU staff) for the property owner's signature. Once sign-off by the property owner is received by RPU, RPU will record the signed easement paperwork

204.2 Change of Grade - The finished grade in any platted or recorded utility easement shall not be altered without first contacting RPU Engineering to determine if electric facilities are installed within the easement. Permission may be granted to change the finished grade by RPU Engineering if the proposed grade change will not affect minimum burial depth requirements for ducts or require removal and reinstallation of above grade facilities such as transformers, poles, secondary pedestals, etc. Replacement and/or relocation of RPU facilities, at customer's expense, may be required if necessitated by the proposed grade change. RPU Engineering will provide a cost estimate for all work associated with the proposed grade change for approval prior to the commencement of any proposed grade change work. Payment must be received and cleared prior to the start of any work by RPU.

205 INSPECTION OF CUSTOMER'S FACILITIES

205.1 Requirements – As a minimum, wiring and electrical equipment of the customer shall be installed in accordance with the latest edition of the National Electrical Code®.

205.2 Inside City Limits – Customer services and associated wiring installations located within the Rochester city limits, including temporary installations, must be inspected and approved by an authorized inspector of the City Building Safety Department as required by Minnesota Statutes Section 326.B.36. RPU will make connection only after approval by the authorized inspecting authority. The inspector is required by Minnesota Statutes Section 326.B.36 to disconnect or have disconnected by the utility any installation that is declared by the inspector to be unsafe and a hazard.

205.3 Outside City Limits – Customer services and associated wiring installations located outside the Rochester city limits and requesting service from RPU must have their wiring inspected by a state inspector. RPU will make connection before authorization from the state inspector only if the master electrician who installed or supervised the installation agrees in writing to be responsible for said wiring until such time that it can be inspected and approved by the state inspector ("Request for Electrical Inspection" – white form).

205.4 Disconnected Service Inspection – For any electric service that has been disconnected for more than ninety (90) days prior to a reconnection request, the customer will be required to hire a licensed electrical contractor to perform an inspection of the building or dwelling's electrical wiring to verify that no unsafe or hazardous conditions are present. The procedure listed below is required in order for RPU to re-energize the service:

(1) Customer's licensed electrical contractor shall contact Rochester Building Safety Electrical Inspections to inform them of the passing inspection

(2) Customer or customer's licensed electrical contractor shall be present on-site to open the main service disconnect prior to RPU personnel re-energizing the service

Exception:
Multi-family dwellings that have 6 meters or more installed, with at least one (1) meter in the ganged service entrance energized, are exempt from the above requirement

205.5 Other Required Inspections (Forms can be found at https://www.rpu.org/construction-center.php)

(1) Transformer Pad – Prior to pouring concrete, the customer, or customer's contractor, shall complete and submit to RPU's Engineering Department the completed "Request for Transformer Pad Inspection" form, with multiple photos. RPU personnel will review the photos and visually inspect the formed pad within the timeframe noted on the form. Observed deficiencies will be communicated to the contact listed on the submitted inspection form. **Corrections and re-inspection by RPU personnel must be made before approval to pour concrete will be given**. RPU reserves the right to refuse service if the transformer pad is poured prior to inspection and correction of noted deficiencies

(2) Subdivision Installation – The customer, or customer's contractor, shall complete and submit to RPU's Engineering Department the completed "Developer Notification of Subdivision Readiness for Utility Installation" form. The site will then be inspected for compliance with requirements. If no deficiencies are found, the site will be scheduled for joint utility installation. If any deficiencies are found, corrections must be made and a new form re-submitted for inspection prior to the site being scheduled for joint utility installation

206 SERVICE CONNECTION, DISCONNECTION & RECONNECTION

206.1 Site Readiness – After the customer's installation has been inspected and approved by the proper authority, a meter will be installed by RPU and the electric service made available provided that all applications, fees, agreements, and deposits have been submitted by the customer and approved by RPU. Inspection notices must be received by RPU two (2) business days prior to the date that the connection is desired (weekends and holidays excluded). Under special circumstances, verbal inspections will be accepted as long as written inspection documentation is submitted immediately thereafter.

206.2 Notification – Customer requests for disconnection or reconnection of existing services must be received by RPU two (2) business days prior to the desired time of disconnection or reconnection (weekends and holidays excluded). For the mutual protection of the customer and RPU, only authorized employees of RPU are permitted to set and remove meters, or to make and energize or break and de-energize the connection between RPU's service drop or secondary terminals and the customer's service entrance conductors or underground service laterals.

206.3 Building Demolition – If a building is scheduled for demolition, the contractor shall notify RPU's New Services Department for a service disconnect a minimum of two (2) business days prior to the start of demolition. RPU will then issue a work order to disconnect the service. There is no RPU charge for the retirement of electric service.

If at some future time the owner at the location requires service, the owner shall be required to submit a new "APPLICATION FOR SERVICE" request, pay any and all liens or amounts encumbered by RPU and/or any outstanding RPU charges before an account will be reactivated.

206.4 Commercial Customer Requested Outage – Customer shall contact their Commercial Account Representative. Contact information can be found at https://www.rpu.org/contact-us.php or by calling the RPU Customer Care number listed on page 2 of this document.

207 LIABILITY

207.1 Damage as Result of Service – RPU does not engage in the practice of doing interior wiring on the customer's premises except for the installation and maintenance of its own property, and therefore, is not responsible for service beyond the point of delivery. RPU shall not be liable for damage to any customer or to any third party resulting from the use of the service or from the presence of RPU appliances or equipment on the customer's premises.

207.2 Responsibility – The customer is solely responsible for any accidents, fires, or failures resulting from the condition and use of their wiring installation or equipment.

208 SERVICE INTERRUPTIONS

208.1 Notice – RPU reserves the right to interrupt service at any time. Interruptions for maintenance and system improvements will be prearranged and advance notice will be given to the customer whenever practical.

208.2 Responsibility – RPU will not be responsible for consequential damages resulting from service interruptions or fluctuations outside its control or from operations in response to abnormal system conditions. Customers requiring service reliability and/or stability exceeding RPU's normal service should consider uninterruptible power supplies, isolation transformers, power conditioners, redundant services, or other options to provide the level of service needed. RPU's Engineering Department is available to discuss such needs.

209 ACCESS

Employees of RPU shall have the right of access to the customer's premises at all reasonable times for the purpose of installing, reading, inspecting, maintaining, or removing any of its meters, devices, or other equipment which is used in connection with the furnishing of the customer's electric service. If a key is required to access locked locations containing RPU's electric metering equipment, the customer will provide RPU personnel with a key to keep in our possession, or RPU will provide a key lock box for the customer key to be kept on-site at the metered location. All meter locations must have matching keys for RPU access to the metering equipment. RPU reserves the right to charge a meter service call fee if we cannot access our electric metering equipment.

210 CUSTOMER RESPONSIBILITY

Failure of the Customer to notify RPU in a timely manner of any planned alteration to electric service facilities or increased electrical load, and failure to comply with RPU's published rules, regulations, and rate schedules may result in delayed connections, interruption of service, or damage to equipment, for which RPU disclaims all responsibility.

211 REVISIONS OF REQUIREMENTS

All requirements stated or implied herein are subject to change at any time without prior notice.

SECTION 300 – STANDARD SERVICES

301 GENERAL CHARACTERISTICS

This section describes the types of services offered to customers under RPU's standard rate schedules. Electric service supplied by RPU is alternating current having a nominal frequency of 60 Hertz (cycles per second).

302 AVAILABILITY OF SERVICE

Although the types of service listed in subsequent sections are generally available through the area served by RPU, service of the type requested by a customer may not be available at the location where such service is desired, and in certain cases may be available only through special contractual arrangements and at the expense of the customer. Each customer will generally be allowed only one type of service and one point of delivery for each location.

302.1 Redundant Services – Refer to Section 404 for requirements.

302.2 Multiple Services – Only one (1) service installation to a customer's service equipment is allowed. During customer renovation or service upgrade work, should RPU determine that a customer's service equipment has multiple services connected to it, RPU Engineering will work with the customer to eliminate the multiple service installation as soon as possible.

303 SECONDARY SERVICE VOLTAGE

The following types of secondary service are generally available to customers served under RPU's standard rate schedules:

303.1 Single Phase Service – 120/240 Volt, 3-Wire, Grounded Neutral: Generally available where the total load is 100 kVA or less for pad-mount service, or 50 kVA or less for pole-mounted service, with an underground secondary in each case.

303.2 Three Phase Service – Generally available where facilities of adequate capacity are adjacent to the premises to be served

(1) 208Y/120 Volt, 4-Wire, Grounded Neutral: Generally available to customers with loads determined by RPU to be 75 kVA or greater for pad-mount service, or 45 kVA maximum for pole-mounted service, with an underground secondary in each case. The maximum size pad-mounted transformer that RPU will install for this service voltage is 1000 kVA

(2) 240/120 Volt, Delta, 4-Wire, Grounded Neutral: No longer available as a new standard service

(3) 240 Volt (and 480 Volt), Delta, 3-Wire: No longer available as a new standard service

(4) 480Y/277 Volt, 4-Wire, Grounded Neutral: Generally available to customers with loads determined by RPU to be 75 kVA or greater for pad-mount service, or 45 kVA maximum for pole-mounted service, with an underground secondary in each case. The maximum size pad-mounted transformer that RPU will install is 2500 kVA

303.3 New Development Cost Calculation – Refer to RPU Line Extension Policy. Any costs assessed to the project by RPU will need to be paid by the customer prior to RPU performing facility installation.

303.4 Redevelopment Cost Calculation – Contact RPU's Engineering Department for determination of cost (if any) that will be assessed to the project by RPU.

304 PRIMARY SERVICE VOLTAGES

Three-Phase, 13800Y/7970 Volt, 4-Wire, Grounded Neutral Service: Available only by special request where the total annual peak load at one site is projected by RPU to exceed 500 kW. RPU reserves the right to deny a request for a primary voltage service. Where provided, the point of delivery will normally be the terminals of RPU's cable in either the customer's switchgear or in limited cases, the RPU supplied primary metering cabinet. Please contact RPU's Engineering Department for switchgear bay requirements and approval when utilizing this service option.

SECTION 400 – SPECIAL SERVICES

401 TEMPORARY SERVICE REQUIREMENTS

401.1 General – Temporary service is intended to be supplied at secondary voltages only to customers for use during the construction of permanent facilities and before the permanent service can be installed.

401.2 Address – The address of the location to be supplied with temporary service must be permanently displayed at the location and on the temporary pedestal/meter location and be easily readable from the street before RPU will install the temporary service. All overhead and underground temporary services will be metered and billed under one of RPU's standard rate schedules.

401.3 Installation – The customer shall provide an approved meter socket with the necessary raceway and a suitable rigid support for attachment of the metering equipment and service drop. On all three phase temporary services, where required, the customer shall also provide a suitable enclosure for installation of RPU's instrument transformers.

401.4 Installation Length – Service to any electrical installation for a period of less than two (2) years shall be considered as "temporary service". Any installation that remains in service longer than this timeframe must be changed to a permanent service installation when directed by RPU.

401.5 Fees - Temporary electrical services costs shall be in accordance with the following requirements listed below:

(1) Secondary Available at Property:

a) A temporary meter installation fee will be assessed for a single phase temporary service installed for construction. The location of the temporary service will be designated by RPU

(2) RPU has primary voltage facilities available on or adjacent to the lot and setting of a transformer is required:

a) A temporary meter installation fee and a temporary facilities installation fee will be assessed for the temporary service installed for construction. The location of the temporary service will be designated by RPU

(3) RPU does not have adequate facilities in the area:

a) The customer will be required to pay RPU for the actual cost to install and remove the temporary service(s)

(4) Information regarding the charges for temporary service can be obtained from RPU Engineering. RPU may require temporary service fees to be paid in advance.

402 SERVICES FOR UNUSUAL LOAD CHARACTERISTICS

402.1 Customer Transients – The operation of customer equipment having a relatively high load of short or intermittent duration, such as welders, compressor motors, elevators, and X-ray equipment, may cause serious fluctuations of voltage and interfere with the service being provided by RPU to other customers. If such a load is anticipated, the customer must consult with RPU and agree to install such protective devices as may be required so as not to cause damage to any of RPU's equipment or in any way inhibit service to other customers.

402.2 Special Compensation - Special compensation may be required by RPU, from the customer, in those cases where it is necessary for RPU to install non-standard, or larger, facilities than would normally be required to provide satisfactory service. (Refer to Section 700 for additional details).

403 EXCESS FACILITIES

RPU Engineering will size utility electric facilities (primary cable and transformer) to serve the load projected by RPU. If a customer desires RPU to install excess facilities, RPU Engineering must be advised as soon as possible so the feasibility of such a service can be determined. If RPU determines that excess facilities can and will be provided, the customer will be required to reimburse RPU for the difference in cost between the standard service and the excess facilities, including all labor, materials, and overheads. A written agreement between the customer and RPU shall also be executed at RPU's discretion.

404 REDUNDANT FACILITIES

RPU will provide one set of facilities (such as a set of primary cables and a transformer) to one point of service for each customer. If a customer requires redundant facilities (more than one set of facilities to the same point of service), RPU must be advised as soon as possible so the feasibility of such service can be determined. If RPU determines that redundant facilities can and will be provided, the customer will be required to reimburse RPU for the entire cost of additional facilities, including all labor, materials, vehicle charges, and overheads. An agreement between the customer and RPU may also be executed at RPU's discretion.

405 RELOCATION OR PROTECTION OF RPU FACILITIES

405.1 Responsibilities – It is the responsibility of the customer to arrange for the relocation and/or protection of RPU's facilities whenever such action is appropriate. Any intended relocation or protection of RPU's facilities must be reviewed with and approved by RPU in advance.

405.2 Customer Costs – The cost of any change or relocation of RPU's facilities for the benefit only of the customer, and which has been initiated by the customer, shall be borne solely by the customer. A deposit by the customer may also be required before the changes are made.

405.3 RPU Costs – RPU will bear costs to the extent that a change or relocation benefits RPU. The customer shall not be required to pay for changes necessitated through public improvements by the City, County or State.

405.4 Painting – The customer shall not paint or otherwise modify the appearance of any RPU owned equipment or facilities.

406 REWIRING OR UPGRADING EXISTING FACILITIES

406.1 General – The customer or electrical contractor shall contact RPU when it is necessary to rewire or upgrade an existing electric service. Rewire or upgrade work shall be in accordance with the following requirements listed below:

(1) All RPU Electric Service Rules and Regulations must be followed

(2) Where pole mounted CT's are present, a new CT cabinet complying with Section 610 requirements must be installed by the customer or electrical contractor

(3) The customer or electrical contractor is responsible for maintaining the same phase rotation for 3-phase rewire work

406.2 Not Permitted – Customers shall not be allowed to convert an existing underground electric service to an overhead service.

406.3 Underground Service – When a customer with an existing RPU owned underground service lateral performs a Service Upgrade, the ownership of the underground service lateral will transfer from RPU to the customer.

SECTION 500 – DISTRIBUTED ENERGY RESOURCES

501 GENERAL INTERCONNECTION REQUIREMENTS

The State of Minnesota has interconnection process standards in effect to address interconnection of distributed energy resources (DER) to the distribution grid. Rochester Public Utilities has process and technical requirements that meet the State standards. The customer shall follow RPU's process for projects to install, modify existing, and operate generating equipment interconnected with RPU's distribution system. No generation equipment shall be allowed to operate interconnected to RPU's distribution system without prior approval from RPU and meeting all requirements of RPU, the State of Minnesota, and all other applicable regulations and standards.

502 TECHNICAL REQUIREMENTS

A copy of RPU's rules, technical requirements, process documentation, and applications for operation of Distributed Energy Resources are available through RPU's website https://www.rpu.org. If the DER is under 10 MW in size, it will follow the appropriate State of MN mandated process. If the DER size is over 10 MW, contact RPU's Engineering Department for guidance prior to starting design.

SECTION 600 – METERS AND METERING EQUIPMENT

600 GENERAL

This section covers the installation of meters and associated equipment such as current and potential transformers for both overhead and underground services. Further description of RPU requirements for both overhead and underground services is covered in other sections of this booklet. The requirements contained in this section are for services rated 600 volts or less. When services are required at primary voltage (such as 13800Y/7970 volts), the metering requirements and equipment will be determined on an individual basis.

601 METERING EQUIPMENT RESPONSIBILITIES

All metering equipment, with the exception of the meter, current and potential transformers, must be purchased and installed by the customer or electrical contractor. All metering equipment installed must be certified and labeled and have prior approval of RPU's Electric Metering Department. Metering equipment installed without RPU approval will not be energized unless special permission from RPU's Electric Metering Department is obtained. RPU will energize only one (1) set of metering equipment under each contract or application for one class of service.

602 LOCATION OF METERS

602.1 General – Meter locations will be agreed upon by representatives of the customer and RPU, subject to final approval by RPU.

602.2 Clearances – Meters shall be installed in a location with not less than three (3) feet of unobstructed space in front and 30 inches total in width. Meters shall not be located where they are subject to corrosive fumes, dust, vibration or physical damage. Outdoor meters shall not be located in carports, under porches whether open or enclosed, or along walkways or driveways where they might create a hazard to people or be subject to damage by passing objects. Required meter working and safety clearances are shown in Section 1200, Exhibit 11.1. RPU reserves the right to trim vegetation to meet these clearances for the safety of RPU personnel.

602.3 Accessibility – Meter locations shall not be hazardous or cause inconvenience to employees of RPU when installing, maintaining, or reading the meters. RPU personnel shall have direct and unobstructed access to RPU's metering equipment at all times. Indoor meter location(s) shall not be used for any type of storage and shall be free from clutter. RPU will not be responsible for damage, removal, or loss of any items that hinder clearances or the operation of our equipment.

602.4 Change of Grade - All existing meters located outdoors on residential, industrial, or commercial services, where the meter is mounted on a permanent structure, shall not change the final grade within the unobstructed space requirements identified in Section 602.2 without receiving approval from RPUs Engineering Department.

602.5 Residential – Residential meter installations shall comply with the following requirements:

(1) All new services must have the electric meter located outside. A typical residential underground service meter installation is shown in Section 1200, Exhibit 1

(2) Existing residential customers where the meter is located inside shall relocate the meter to the outside when the service is either altered or upgraded as defined under Section 100 Definitions

(3) Any service upgrade or DER installation requires the existing meter socket to be changed to an approved self-contained lever bypass type (if non-compliant)

(4) Any service upgrade or DER installation will require the installation of a CT cabinet if pole-mounted CT's are present

(5) All new self-contained meter sockets installed under (1), (2), or (3) above must be on the list of approved meter sockets (refer to Section 613)

(6) Recessed meter socket installations shall not be permitted

602.6 Multi-Family Dwelling – Where more than one meter is installed (typical for apartment complexes), meters shall be grouped outdoors at a point accessible at all times to each customer and to RPU personnel.

Exceptions:

a) *Multi-family dwellings that have 24 meters or more may request to locate the meters inside as long as they are grouped at one (1) location and accessible at all times to each customer and to RPU personnel*

b) *Multi-family dwellings where the building has over three (3) occupied stories fully above grade, the customer may request in writing for permission to be allowed to install grouped metering panels in multiple locations. The metering locations should be minimized and typically would only be allowed on every 3rd story of the building*

In all cases where multi-metering panels with stacked meter sockets are used, the installation shall comply with the spacing and clearance requirements shown on the Section 1200, Exhibit 3 drawing (Typical Multiple Metering Arrangement). Individual apartment disconnects must be connected on the load side of the meter. If the service voltage is 120/208 volts, a fifth terminal located at the 9 o'clock position is required in the socket and must be connected to the service

neutral in accordance with the National Electric Code® (Refer to Section 1200, Exhibit 11.0). Only one (1) meter may be installed under one socket cover in multi-metering panels

RPU will set a minimum of one floor of meters at a time. Meter service charges will start at the time of the meter set.

602.7 Manufactured Homes - RPU will individually meter each manufactured home located in all new manufactured home communities or additions to a mobile home community. Resale of metered electrical energy by the property owner will not be permitted in these facilities. An individual meter pedestal, with bypass meter socket, or a free standing meter structure shall be provided by the customer or his representative. Maintenance and repair of the meter pedestal or free standing meter structure is the responsibility of the owner of the manufactured home community. A typical free standing meter structure arrangement is shown in Section 1200, Exhibit 2.

602.8 Industrial and Commercial – Industrial and Commercial self-contained meter installations shall comply with the following requirements:

(1) All new services must comply with the requirements of Sections 602.1 through 602.4

(2) Any service upgrade or DER installation requires the existing meter socket to be changed to an approved self-contained lever bypass type (if non-compliant)

(3) All new self-contained meter sockets installed must be on the list of approved meter sockets (refer to Section 614)

602.9 Commercial Multi-Metering Panels – Installations shall comply with the following requirements:

(1) All commercial multi-metering panels used in shopping centers, spec. buildings, and multi-tenant commercial buildings shall comply with the spacing and clearance requirements shown on the Section 1200, Exhibit 3 drawing (Typical Multiple Metering Arrangement). An approved lever bypass is required on all meter sockets and each individual unit disconnect shall only be connected to the load side of the meter. Each individual meter socket shall have a barrier to isolate the customer's disconnect switch and wiring from the metering area. Only one (1) meter may be installed under one socket cover in multi-metering panels. A system neutral is required to each 5 and 7 terminal meter socket in accordance with the National Electric Code®

(2) Each meter shall have a separate accessible lockable service disconnect wired in cold sequence to be used by RPU

Exception:
In situations where the building has over three (3) occupied stories fully above grade, the customer may request in writing for permission to be allowed to install grouped metering panels in multiple locations. The metering locations should be minimized and typically would only be allowed on every 3rd story of the building

603 GROUPED METERS

In installations requiring more than one meter, the meters shall be grouped and suitably connected such that a meter serves no more than one customer. The spacing and clearance requirements shown on the Section 1200, Exhibit 3 drawing (Typical Multiple Metering Arrangement) also pertain to grouped meter installations where practicable. If deemed necessary by the space available, the meters may be stacked in an orderly fashion. Any dwelling with more than one customer living therein must have an individual meter for each dwelling unit. These meters must be easily accessible to all tenants and to RPU personnel. There shall be an approved type of disconnecting means for each meter, which is lockable in some way to prevent reconnection by other than RPU personnel.

604 METER IDENTIFICATION

604.1 Requirements – If more than one meter is required for a building, each meter socket shall be identified and permanently designated in a suitable manner indicating the particular customer served. An engraved hard plastic or label rated for outdoor use with a minimum height of ½ inch and a minimum font of 28 BOLD will be required at each meter. The tag shall be securely attached to the exterior, non-removable portion of the meter socket and at the individual meter main disconnect. Any other means of identification is not acceptable. **Meters will not be installed until the above requirements are met.**

604.2 Circuit Checking – Each circuit shall be carefully traced and rechecked by the customer or contractor to ensure against errors in wiring that would result in one customer obtaining service through the meter serving another customer. This is especially important when the wiring is concealed. Electric service shall not be energized if meter sockets are not identified. It will be the contractor's/owner's responsibility to correct any errors due to misidentification of meter sockets. RPU reserves the right to charge the building owner and/or electrical contractor for actual costs incurred by RPU to make corrections. See Section 1101.6

604.3 Location Map – In installations requiring more than one meter room/location, a durable and laminated permanent map of all metering rooms/locations within the building shall be installed in the ground level entryway. The location of the map shall be approved by RPU metering personnel prior to installation.

605 OUTDOOR METER MOUNTING

605.1 Outdoor Meters and Meter Mounting Devices – Outdoor meters and meter mounting devices shall be mounted securely on permanent structures such as houses, garages, and other buildings. Where outdoor meters are installed on surfaces that prevent installation of the meter-mounting device in an exact vertical plane, a meter board must be installed or the surface modified in such a manner that the meter-mounting device can be installed vertically.

605.2 Preferred Meter Location(s) – The preferred meter location is within ten (10) feet of the front end of the building (house or attached garage) on a single-family dwelling for new customer hook ups. All meter locations for rewired or upgraded services shall be located outdoors with locations agreed upon between customer, contractor, and RPU personnel with final approval by RPU personnel. RPU has the right to refuse to energize service if these requirements have not been met.

606 INDOOR METER MOUNTING

606.1 Indoor Meter Location(s) – Indoor meters, where permitted, shall be mounted in accordance with the preceding requirements of this section and shall be located as close as possible to the point where service enters the building. Indoor metering equipment shall be mounted securely in a vertical plane on permanent structures in a location free from moisture, high temperature, vibration, dust, or dirt.

606.2 Indoor Meter Room Requirements – Indoor meter room installations shall comply with the following requirements:

(1) Lighting – multiple lighting fixtures shall be installed to eliminate visibility problems caused by shadows. A minimum of 30 lumens per square foot shall be required for each meter location

(2) Labeling – meter room doors shall be labeled with “Electric Meter Room” and “No Storage” signs

607 METER CONNECTIONS

607.1 General – The customer shall provide the necessary wiring for the meter set with the wiring so arranged that the line (supply) side can be connected to the top terminals of the socket and the load side to the bottom terminals. All conductors shall extend into the meter socket and shall be of equal length and at a minimum distance equal to the length of the socket trough. All neutral conductors must be insulated.

607.2 Underground Services – Underground service installations shall comply with the following requirements:

(1) Line side neutral wire shall be identified in accordance with the National Electrical Code®

(2) An expansion joint shall be furnished and installed by the customer on all new underground residential meter installations. The expansion joint shall be a minimum eighteen (18) inch length Schedule 80 PVC installed at the bottom of the meter housing

(3) Sufficient slack shall be left in the underground cables to make up for any ground shifting due to settling, ground shifting, or extreme cold

608 WIRING RESTRICTIONS ON METER/METER SETS

608.1 General – Meters and metering sets shall comply with the following requirements:

(1) No customer wiring shall be permitted to be connected to the metering, secondary wiring, or under the terminals of the meter

(2) No part of the metering set shall be used as a junction box for the customer's wiring

(3) All line side (non-metered) conductors shall be installed within a continuous length of conduit that emerges from the ground up to the meter socket. Junction boxes, conduit bodies (e.g. LB's) or other devices are not permitted

(4) No non-RPU owned equipment (such as surge suppression, generator transfer switch, etc.) that utilizes a plug-in device designed to fit between the meter and the meter socket shall be permitted

609 METER TESTING

609.1 Testing Request – Any customer, who believes that a meter is failing to register properly the use of electricity, may request a meter check by contacting an RPU Customer Care Advisor. RPU will test the meter using standard calibration equipment and generally accepted test procedures within a reasonable period of time. Customers who request additional meter tests within a twelve (12) month period may be charged for the additional tests. See RPU rate schedule – Miscellaneous Fees – Electric Utility.

609.2 Meter Error Standard – Whenever a watt-hour meter is found upon test to have an average error of more than two percent (2%) from one hundred percent (100%), a recalculation of bills for service will be made on the basis that the meter should be one hundred percent (100%) accurate with respect to a working test standard.

609.3 Meter Inaccuracy (Working) – If the period of inaccuracy cannot be determined, it will be assumed that the metering equipment has become inaccurate at a uniform rate since it was installed or last tested unless there is a

valid reason to use another method. Recalculation of bills is based upon RPU Board Policy for Adjustment of Utility Services Billed.

609.4 Meter Inaccuracy (Failure) – When the average error cannot be determined by test due to complete failure of all or part of the metering equipment, then an estimate of the quantity of energy consumed based upon available data will be used to determine the adjusted bills.

610 METER SEALS & LOCKS

All connections to RPU service equipment shall be made by RPU Electric Metering Department personnel only. Unauthorized connections to or tampering with any RPU meter, associated equipment or meter seals, or indications or evidence thereof subjects the customer to immediate discontinuance of service, prosecution under the laws of Minnesota, adjustment of prior bills for services rendered, and reimbursement to RPU for all extra expense incurred on the account, including a meter tampering fee. In addition, when the unauthorized connections or tampering involve an inside meter, the customer shall, at his own expense, relocate all service equipment and metering facilities outside the building.

611 INSTRUMENT TRANSFORMER METER INSTALLATIONS

RPU does not furnish instrument rated meter sockets. Please contact a local electrical distributor of your choice to purchase an RPU approved instrument rated meter socket.

611.1 Where Required – It will be necessary for RPU to use instrument transformers in the metering installation under the conditions listed below:

(1) Single Phase Service: When any single phase service exceeds 320 continuous amps in size or exceeds 240 volts

(2) Three Phase Service: When any three phase service exceeds 320 continuous amps in size or exceeds 240 volts

611.2 Instrument Transformer Provision & Location – All instrument transformers will be furnished by RPU and delivered to the customer/contractor to install into an approved instrument transformer cabinet. The instrument transformer cabinet will be located before the customer service entrance disconnect switch.

611.3 Secondary Metering Instrument Transformer Cabinet Requirements – Cabinet shall be furnished and installed by the customer. This includes all services, either overhead or underground. All cabinets must be certified and labeled, approved by RPU personnel and meet all National Electric Code® requirements prior to installation. All cabinets must conform to the following:

(1) The meter socket shall not be mounted to the door of the instrument cabinet and must be mounted within 20 feet of the instrument cabinet

(2) Cabinets must be UL approved and be the correct NEMA class for the area environment in which it is installed

(3) Minimum instrument transformer cabinet sizes are as follows:

a) 250 volts and below: 48 inches high, 25 inches wide, and 15 inches deep

b) 251 – 600 volts: 48 inches high, 36 inches wide, and 15 inches deep

(5) The door must have a single closure with provisions for locking with a standard padlock through the handle

(6) Cabinet must be hinged on the right or left side only

(7) Cabinet shall not be used as a junction box or service connection cabinet

(8) Only RPU metering transformers may be contained therein

(9) A 1-inch conduit installed between the cabinet and meter socket location is required

(10) Cabinet must accept bar-type current transformers on all services 1200 amps or less

(11) Customer is required to label the line side and load side of the conductors within the instrument transformer cabinet

611.4 New Service Secondary Metering Requirements – For any new electrical services requiring the use of instrument transformers, the instrument transformers must be mounted in an approved instrument transformer cabinet complying with the requirements of 611.3 above and be located as follows:

(1) Underground Service from Pad-Mounted Transformers: When service is supplied underground from a pad-mounted transformer, the location of the instrument transformer cabinet must be approved by RPU during installation

(2) Overhead Services: When service is provided by overhead service drops, approved outdoor instrument transformer cabinets will be required. Location of transformer cabinets will have final approval by RPU's Electric Metering Department before installation. No open air CT's or PT's will be allowed

(3) Indoor Mounted Instrument Transformers: Instrument transformers installed indoors must have prior approval from RPU's Electric Metering Department, and meet the requirements of Section 611.3

611.5 New Indoor Primary Metering Equipment Requirements

(1) When primary metering service is to be installed, the customer shall furnish a compartment or switchgear cubicle to house the primary current and potential instrument transformers. All current and potential instrument transformers shall be rated for metering accuracy as approved by the RPU's Electric Metering Department. The metering point shall be located electrically between the customer's main disconnect and customer's circuits ("cold sequence" metering arrangement

(2) When practical, RPU may request that the customer install the primary current and potential transformers per RPU specifications. (Contact a Customer Care Advisor to obtain Engineering assistance.)

611.6 New Outdoor Primary Metering Equipment Requirements – When outdoor primary service is to be installed, RPU may elect to utilize either a pole-mounted or pad-mounted primary metering equipment set. Outdoor primary metering units are furnished and installed by RPU. Sharing of the material and installation costs for primary metering will be determined on a case-by-case basis.

611.7 Existing Service Emergency Repairs – In situations requiring emergency repairs to an existing electrical service where instrument transformers are installed in any location other than an instrument transformer cabinet, the customer/contractor must receive prior approval for the new mounting location of the current transformers from RPU's Electric Metering Department. These types of installations include, but are not limited to:

(1) Instrument transformers mounted on a pole

(2) Instrument transformers installed inside a distribution transformer

(3) Instrument transformers installed inside customer switchgear

612 SELF-CONTAINED METER INSTALLATIONS

612.1 New Installation Requirements – In general, RPU will install self-contained meters (meters without instrument transformers) on single or three phase services (240V or less) where the service rating is 400 amps or less (Class 320 meter socket). Where such metering is to be used, the customer shall provide a ringless lever-operated bypassing socket (Refer to Section 614). Such meter sockets permit a continuation of service upon removal of the meter for testing or maintenance. If a lever-operated bypass meter socket is not installed, the service will not be energized.

612.2 Existing Service Repair – In situations requiring repair work to alter the existing electrical service, the customer/electrical contractor shall bring the electrical service into compliance with the requirements of Section 602.5 for Residential or Section 602.8 Industrial and Commercial.

Exception:
Minor repair work (such as a direct replacement of a main circuit breaker or fuse holder within a panel, etc.) shall be exempt from the above requirement. Contact RPU's Electric Metering Department for approval when claiming this exception

613 MASTER METERING INSTALLATIONS

613.1 All new residential units will be individually metered.

Exception Provided in Minnesota Rule 326B.106 Subd. 12:
Buildings intended for occupancy primarily by persons who are 62 years of age or older or disabled, supportive housing, or buildings that contain a majority of units not equipped with complete kitchen facilities, shall be exempt from the provisions of this subdivision. For purposes of this section, "supportive housing" means housing made available to individuals and families with multiple barriers to obtaining and maintaining housing, including those who are formerly homeless or at risk of homelessness and those who have a mental illness, substance abuse disorder, debilitating disease, or a combination of these conditions."

(1) A customer claiming the above exception above takes all legal responsibility for proving the exemption for the life of their building

(2) Any customer claiming the exception above must provide RPU, in writing, a statement that they are claiming an exception under Minnesota Rule 326B.106 Subd. 12 and why they feel their building meets the requirements for an exception. RPU does not determine the validity of the claimed exception and this required filing is for RPU's documentation only

613.2 All new commercial or industrial units will be individually metered. Exceptions must be approved by RPU's Electric Metering Department.

613.3 Sub-metering by others for the purpose of charging individual occupants based on measured use must be in accordance with statutory requirements. Sub-metering by others for information purposes or to control the use of electric power for energy is permitted.

614 APPROVED METER SOCKETS

Meter installations made with unapproved meter sockets will not be energized, or subject to disconnection if non-approved equipment is installed. Refer to the following table for a list of meter sockets approved for installation by RPU:

RPU APPROVED METER SOCKETS		
SELF CONTAINED	***SERVICE VOLTAGES***	***APPROVED MFG./PART NUMBER***
4 Terminal 320A Max (Residential, 1-Phase)	120-240V, 3 wire Single Phase	Heavy duty, ringless type, with lever bypass
5 Terminal 320A Max (Residential, 1-Phase)	120-208V, 3 wire Single Phase	Heavy duty, ringless type with lever bypass
7 Terminal 320A Max (Commercial, 3-Phase)	120-208V 4-Wire Three Phase	Heavy duty, ringless type with lever bypass
INSTRUMENT RATED	***SERVICE VOLTAGES***	***APPROVED MFG./PART NUMBER***
6 Terminal (Residential or Commercial, 1-Phase)	120-240V, 3 wire Single Phase	Milbank: UC7478-XL-WC-271 Brooks: 602U3010C6-1666 Durham: BOMSOCD6T-RPU Tesco: 9070113-CL
13 Terminal (Residential or Commercial, 3-Phase)	120-208V 4-Wire WYE 277-480V 4-Wire WYE	Milbank: UC7478-XL-WC-271 Brooks: 602U3010C6-1666 Durham: BOMSOCD6T-RPU Tesco: 9070112-CL

615 SERVICE AT 480 VOLTS

All 277/480V metering services will require the installation of CT's and VT's. RPU will supply all metering CT's and VT's at no cost to the customer/contractor.

Exception:
Self-contained services (200A or smaller) supplying MnDOT lighting operating at 240/480V and fed from a single phase transformer only supplying the lighting service shall be exempt from the above requirement

616 LOCATION OF HIGH-LEG IN METER SOCKET ON 240/120 VOLT, 3-PHASE SERVICES

The conductor with the higher voltage to ground must be connected to the terminal on the right side. The high-leg conductor must be identified as required by the National Electric Code®. Meter sockets with the high-leg in the wrong position will not be energized. Incorrectly wired sockets will be subject to disconnection until wiring is corrected.

617 REMOVING RPU SEALS, LOCKS AND METERS

Disconnection of RPU metering equipment and cutting of seals or locks is not allowed, and will result in meter tampering fees.

618 CUSTOMER GENERATION

Refer to Section 500 – Distributed Energy Resources for metering requirements pertaining to DER facilities interconnected to RPU's distribution system.

619 PROPER GROUNDING/BONDING OF METER SOCKETS & SERVICES

619.1 Proper Grounding/Bonding – Service equipment and enclosures may need to carry heavy fault currents in the event of a ground-fault. For this reason, it is imperative that meter sockets and conduits be adequately bonded to the neutral and to the ground. Bonding is to be done by threaded couplings and threaded bosses in a rigid metal conduit system where the joints will be made up wrench tight. Locknuts and bushings do not fulfill the requirement of bonding at service equipment. Grounding bushing (with bonding jumpers), bonding locknuts, threaded conduit hubs, or other means are approved (Refer to National Electric Code® Article 250). All metering conduits and sockets must be properly grounded. If PVC conduits are used, grounding conductors must be provided and installed by the customer or electrical contractor in accordance with the National Electric Code®. Electric services will not be connected if improperly grounded/bonded upon inspection.

619.2 Neutral for 5 and 7 Terminal Sockets - A system neutral is required to each 5 and 7 terminal socket. Conductor shall be sized in accordance with the National Electric Code®.

620 CUSTOMER DISCONNECT SWITCH

620.1 Location – Disconnect switches shall be installed in a location that meets the same requirements for location as those for electric meters (Refer to Section 602)

620.2 Residential Customers – Individual Customer disconnect switches shall be connected on the load side of the meter. No customer devices, e.g. surge suppressors, load management equipment, etc., may be installed on the line side of the meter.

620.3 Non-residential Customers – Each installation must have a separate securable disconnect, installed on the load side of the meter, and accessible to RPU at all times. If the building is a multi-tenant building, each non-residential customer must have a separate securable disconnect installed on the load side of the meter. The securable disconnect shall be labeled and mounted adjacent to the meter location.

621 SPECIAL SOCKETS

All special sockets, such as ganged meter sockets and free-standing metering pedestals, must have RPU Engineering approval prior to installation.

622 RPU OWNED EQUIPMENT

Any metering equipment furnished by RPU, such as meters, instrument transformers, relays, totalizers, test switches, etc., remain the property of RPU. If the equipment has to be removed or disconnected for any reasons, please call RPU so that the equipment can be picked up.

623 TEMPORARY REMOVAL OF CUSTOMER OWNED METER SOCKETS

Any meter socket removal request will be at the discretion of RPU's personnel. Should RPU's personnel not be able to perform the work, it will be up to the customer to hire an electrician/contractor to perform the task. If at any time safety is a concern, RPU will have the service de-energized to perform the work. The customer/contractor shall contact RPU two (2) business days in advance to schedule the temporary removal of the meter socket for siding purposes.

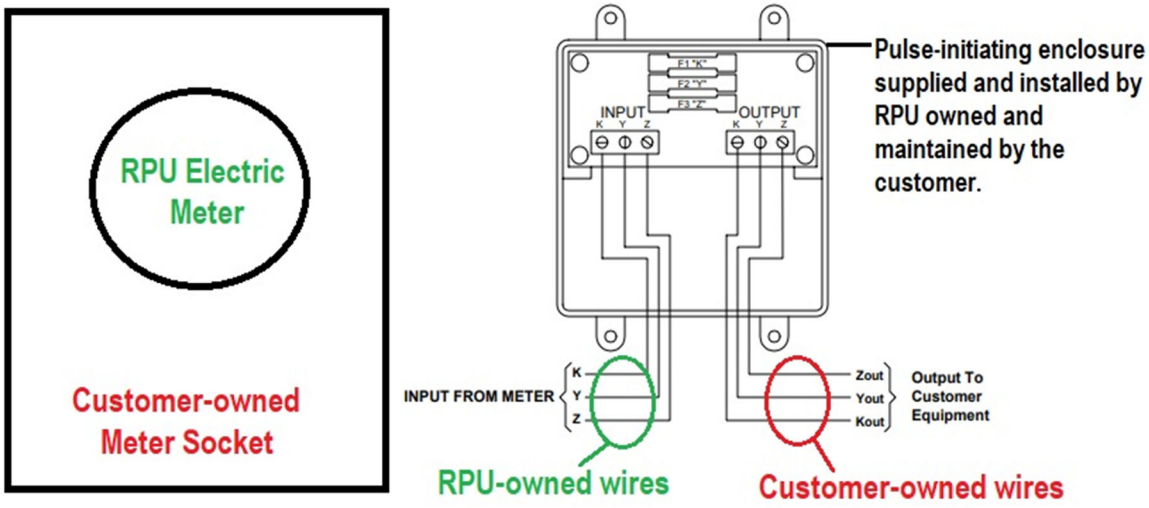
624 PULSE INITIATING DEVICE

624.1 Customer Request – To initiate a request for installation of a pulse-initiating device, the customer shall contact RPU. The customer should submit, in writing, all technical information concerning the customer's load monitoring equipment to RPU for review. RPU will determine what type of pulse and the amount of pulses available in a given time interval.

624.2 Installation – Upon customer and RPU acceptance, RPU will provide and install a pulse-initiating enclosure on a customer's existing meter socket and supply the wiring from the electric meter to the utility side of the pulse-initiating enclosure. The customer owns and is responsible for maintaining the pulse-initiating enclosure, all associated wiring, and hardware on the customer's side of the pulse-initiating enclosure. All installed wiring must be in accordance with the requirements of the electrical code governing such installation.

624.3 Typical Pulse-Initiating Device Installation Detail – Refer to the detail on the following page for a typical wiring arrangement for a pulse initiating device installation:

Typical Pulse-Initiating Device Installation



624.4 Responsibilities and Liability – RPU's responsibility and liability end on the utility side of the pulse-initiating enclosure. RPU reserves the right to deny or cancel a customer's request or existing installation for pulses if the customer's service doesn't meet the requirements listed above or the technology is unavailable.

624.5 Interruption and Removal – RPU may interrupt or permanently remove pulses at any time and notify the customer of any change to the pulse values or when it becomes necessary for equipment maintenance or availability.

SECTION 700 – CUSTOMER UTILIZATION EQUIPMENT

The customer's service entrance and utilization equipment shall be installed in accordance with all local, state, and National Electrical Code® requirements. It is the intent of this section to provide the customer with recommendations concerning factors that can affect both RPU and the customer in the selection, installation, maintenance, and operation of the customer's utilization equipment. If concerns arise that are not covered in this section, please contact a RPU Customer Care Advisor for assistance.

701 PROTECTION OF CUSTOMER EQUIPMENT

701.1 General – The customer is advised to provide adequate protection against the effects of outages or voltage spikes in accordance with the National Electric Code® or other pertinent sources of information for all types of motors and other equipment. Equipment that should be protected includes, but is not limited to:

(1) Motors

(2) Computers

(3) Electronic Equipment

(4) Equipment in which computers or electronics form an integral operating part

701.2 Protection Conditions – Equipment should be protected under all conditions, including:

(1) Overload

(2) Voltage Loss

(3) High or low voltage

(4) Phase loss (e.g. single phasing on polyphase motors)

(5) Re-establishment of service after any of the foregoing

(6) Phase reversal

(7) Motors that cannot be subjected to full voltage on starting

(8) Harmonics or wave form irregularities

701.3 Failure to Protect – Failure to provide such protection may result in needless damage to equipment and the expense of delay and repair.

701.4 Sensitive Electronics – Sensitive electronics, such as microprocessor-based home electronics and business computers, are susceptible to damage due to voltage spikes or surges. Before any microprocessor-based electronics are installed:

(1) Wiring practices that meet manufacturer specifications need to be assured (e.g. proper grounding and dedicated circuits are important)

(2) Consideration should be given to installation of transient voltage surge suppression

a) At the main service entrance

b) At the point of use

(3) An uninterrupted power supply (battery backup) should be considered if a momentary voltage dip or outage would cause loss of data

702 MOTOR STARTING CURRENTS

702.1 General – Typically, all motors require a starting current substantially greater than their normal running current. Where starting currents are excessive, an abnormal drop in supply voltage will result. In order to minimize the unfavorable effects of such voltage drops, it is essential that the customer's motors do not exceed the allowable starting characteristics as shown in Table 430-251(A and B) of the National Electric Code®.

NOTE: Customers planning to install any motor larger than 5 HP single phase or 25 HP three phase, must contact RPU Engineering. Motor installations that cause power quality problems for other customers shall be corrected at the owner's expense.

702.2 Voltage Flicker – RPU uses IEEE Standard 141 (IEEE Red Book) as a guideline for the level of allowable flicker. Customers are not allowed to start any load on RPU's system that produces unacceptable levels of flicker which affect other customers. Customers are responsible for correcting unacceptable flicker problems in a timely manner when notified by RPU.

703 POWER FACTOR

703.1 Requirements – In order to improve the efficiency of RPU's distribution system, the customer's utilization equipment shall maintain an average power factor as close to unity as possible.

703.2 Penalties – Some of RPU's rate schedules include a demand charge and a penalty for an average power factor that is less than 95%. Details of the method of billing for such customers can be obtained from an RPU Customer Care Advisor. For new services, it is suggested that the customer's utilization equipment be designed for operation at high power factor or with capacitors that are switched on and off with the equipment. Refer to Section 1108, Table 11.1 for correcting customer's power factor.

703.3 Calculation – RPU will calculate the power factor of customers in designed rate classes by installing a varhour meter. Refer to Section 601 for customer's responsibilities in providing metering equipment.

704 FAULT CURRENTS

The customer's service equipment and other devices shall be adequate to withstand and interrupt the maximum available fault current. For single-family residences with service equipment rated 200 amperes maximum and 120/240 volts, single phase, equipment shall have a minimum interrupting rate of 10,000 amperes symmetrical and other equipment shall be braced to withstand that minimum value. Refer to Section 1003 for more information.

705 WIRING ADEQUACY

The National Electrical Code® (NFPA No. 70) specifies the adequacy of wiring with respect to safety; however, such installations may not be efficient or adequate for future expansion of electrical use.

706 CUSTOMER-OWNED GENERATING EQUIPMENT

Unless authorized by written agreement, electric generating equipment installed by the Customer shall not be interconnected or operated in parallel with RPU's distribution system. The customer shall own, install, operate, and maintain electrical interlocking equipment which will prevent parallel operation and such equipment shall be approved by RPU prior to installation.

706.1 Distributed Energy Resources (DER) – For generation and storage systems designed to operate in parallel with RPU's distribution system, refer to Section 500 for requirements governing this type of installation.

707 CUSTOMER'S OBLIGATIONS

707.1 Increased Load – In the event the customer desires to increase load materially, such as adding electric heat, increased motor loads, etc., they shall give RPU sufficient advance notice, so that RPU may provide added facilities if necessary. If the customer fails to notify RPU and RPU's equipment is damaged as a result of such increased load, the customer shall reimburse and make payment to RPU for all such damages.

707.2 Balancing of Load – Except in the case of three-phase, four-wire delta services, the current unbalance in three-phase services shall not exceed 10 percent of the current that would be required at maximum load under balanced conditions.

707.3 Total Harmonic Distortion (THD) Requirements

(1) Nonlinear Load – The application of any nonlinear load by the customer (e.g. static power converters, arc furnaces, adjustable speed drive systems, etc.) shall not cause voltage and/or current Total Harmonic Distortion (THD) levels greater than industry accepted levels on RPU's electric system at the point of power delivery to the customer's facility (Refer to IEEE Standard 519)

(2) Nonlinear Load Disclosure – the customer shall disclose to RPU all nonlinear loads prior to connection. RPU may test the customer's load to determine the THD levels

(3) Nonlinear Load Responsibilities – It shall be the responsibility of the customer to assure that the THD requirements are met, including the purchase of necessary filtering equipment. Any load found not in compliance with this policy shall be corrected immediately by the customer at the customer's expense. If not corrected, RPU may disconnect service to the customer's facility

(4) Nonlinear Load Damages – The customer shall be liable for all damages, losses, claims, costs, expenses and liabilities of any kind or nature arising out of, caused by, or in any way connected with the application by the customer of any nonlinear load operating with maximum THD levels in excess of the values stated in Section 707.3(1) above. The customer shall hold harmless and indemnify RPU from and against any claims, losses, costs of investigation, expenses, reasonable attorney's fees, damages and liabilities of any kind or nature arising out of, caused by, or in any way connected with the application by the customer of any nonlinear load operating with maximum THD levels in excess of the values stated in Section 707.3(1) above

SECTION 800 – OVERHEAD SECONDARY SERVICES

801 SCOPE

801.1 Availability – The requirements of this section apply to all residential, commercial, and industrial customers within RPU's service territory where overhead facilities are present.

801.2 Installations Permitted – RPU will supply and maintain all existing overhead secondary services (600 volts or less), at the voltages and under the conditions specified in other sections of this standard. Any upgrade or modification request to an existing overhead secondary service must be reviewed and approved by RPU Engineering prior to construction.

801.3 Installations Not Permitted – An overhead secondary service (600 volts or less) in a residential, commercial, or industrial location that meets any of the conditions listed below:

(1) Any new service drop request to establish permanent service to the customer's property without a written waiver on company letterhead provided by the RPU Engineering Department
(2) Any new service drop request that would establish a second permanent service to the customer's property or buildings such as a detached garage
(3) An existing service drop upgrade request that exceeds 400 amperes in size

801.4 Violations – All upgraded, modified or repaired services shall comply with all applicable NESC clearance requirements. The customer is responsible for rectifying clearance violations caused by them or the previous property owner/tenant.

802 TRANSFORMER LIMITATIONS

802.1 Maximum Size – The maximum standard overhead transformer size installed by RPU will be either one 50 kVA transformer for a single-phase application or three 15 kVA transformers for multiphase applications. If a larger transformer size is required for a particular application, it shall be a pad-mounted type.

802.2 Number of Secondary Services – One (1) or more secondary services may be supplied from a transformer; the number of services from a transformer shall be determined by RPU Engineering depending upon the application.

803 SERVICE DROP CONDUCTORS

803.1 Configuration – The service drop will be a twisted wire triplex (3 wires) or quadruplex (4 wires) configuration from the distribution system to the point of attachment on the customer's premises.

803.2 Existing Services – The service drop may either be a twisted wire or open wire configuration. If necessary for various reasons, RPU may change a service from an open wire to a twisted wire configuration.

804 REQUIRED CLEARANCES

804.1 Roofs, Balconies & Windows/Doors – The service drop must be so located that the minimum clearance as specified in the latest editions of the National Electrical Code® and the National Electric Safety Code® is maintained. Illustration drawings of the clearances required are shown in Section 1200, Exhibits 4, 4.1, and 4.2. Please contact RPU's Engineering Department if there are any questions about the clearances depicted. RPU will not energize an electric service with an observed clearance violation.

804.2 Patios, Pools & Hot Tubs – The service drop must be located so that the minimum clearance as specified in the latest editions of the National Electrical Code® and the National Electric Safety Code® is maintained. Illustration drawings of the clearances required are shown in Section 1200, Exhibits 4.3, 4.4 and 4.5. Please contact RPU's Engineering Department if there are any questions about the clearances depicted. RPU will not energize an electric service with an observed clearance violation.

805 SERVICE ATTACHMENT PROVISIONS

805.1 General Requirements – The customer shall be responsible to comply with all the service attachment requirements listed below:

(1) Eye bolts, where required, shall be galvanized, 3/8-inch minimum diameter, and installed by the customer. Screw point or lag type attachments (4 inches of thread minimum) are only permitted on rewires with RPU approval
(2) Service drop conductors shall not be attached to fire walls, parapet walls, or chimneys
(3) Where not accessible by a service truck, the overhead service attachment must not exceed eighteen feet (18') above ground level

805.2 Building Attachment – A solid point of attachment for supporting the service drop on the building shall be provided by the customer at a point which will comply with previously stated clearances in Section 804. Where the required heights and clearances cannot be maintained by a point of attachment on the building, the customer shall provide a service mast which is of a permanent nature and of sufficient strength to support the service drop at the required

minimum clearance. Illustration drawings of the attachment clearances and service mast installations are shown in Section 1200, Exhibits 6 and 6.1.

NOTE 1: In no case shall the point of attachment be more than 5 foot above the roof surface unless prior approval is obtained by RPU Engineering Department.

NOTE 2: In no case shall the point of attachment be more than 18 feet in the air unless the location has unobstructed access to an RPU bucket truck and the property owner takes the full responsibility of site restoration for any damage caused by RPU bucket truck access. RPU will, at its sole judgement, determine if there is adequate unobstructed access

NOTE 3: RPU reserves the right to decline to connect its service drop to an extension support, which, in its judgment, constitutes a hazard to life or property.

806 OVERHEAD SERVICE MAST REQUIREMENTS

806.1 Unguyed Mast Service Drop Length Limitations – Table 8.1 below shows the maximum service drop lengths allowable for triplex and quadruplex service drops attached to unguyed riser masts:

TABLE 8.1 - MAXIMUM SERVICE DROP LENGTHS

SERVICE ENTRANCE SIZE	RISER MAST CONDUIT SIZE FOR ABOVE THE ROOFLINE (RIGID OR INTERMEDIATE)	SERVICE ATTACHMENT HEIGHT ABOVE SUPPORT (FT)				
		1.5	2	3	4	5
		MAXIMUM SERVICE DROP LENGTH (FT)				
100A	2"	125	100	75	75	50
	2-1/2" OR 3"	150	150	100	100	75
	3-1/2" OR 4"	150	150	150	125	100
200A	2"	100	75	50	50	50
	2-1/2" OR 3"	150▲	100	75	75	75▲
	3-1/2" OR 4"	150▲	150▲	125▲	100	75
400A	2-1/2" OR 3"	100	100	75	50	50
	3-1/2" OR 4"	125	100	100	75	75

APPLICATION AND CONDITIONS FOR ABOVE TABLE:

1. ▲ Marked Span lengths indicate that 25 feet must be subtracted from the value shown if service drop is quadruplex
2. EMT (thinwall conduit) is not acceptable for any portion of the service mast

806.2 Guyed Mast Service Drop Length Limitations – Riser masts that support spans longer than those shown in Table 8.1 must be guyed or braced to withstand the following maximum actual service drop tension values:

Service Entrance Size	Maximum Actual Tension
100A	1500 Lbs.
200A	2000 Lbs.
400A	3500 Lbs.

806.3 Customer Responsibility – Customer's portion of the overhead service mast shall consist of the conduit from the meter socket, a weather head, and the wire from the line side of the meter socket up the mast to the weather head. Tails shall be left on the customer's service wires extending a minimum of three (3) feet beyond the weather head. The neutral wire shall be identified and shall be continuous (no cut) from the weather head to the entrance switch (unless otherwise approved by RPU)

SECTION 900 – UNDERGROUND SERVICES

901 NEW RESIDENTIAL DEVELOPMENTS

901.1 Point of Delivery – RPU will designate a point of delivery for the connection of the customer's secondary underground service. The point of delivery may be the secondary terminals of a pad-mounted transformer, service pedestal, or secondary vault. In general, RPU will install, own, operate, and maintain all facilities on the source side of the point of delivery, including the junction cabinet and connections; the customer will install, own, operate, and maintain all secondary cables, conduit, and related service equipment specified in other sections of this publication on the load side of the point of delivery.

901.2 Point of Delivery Location – Points of delivery will be located within the general utility or RPU specific easement area along or near a front or rear property line unless it is necessary or desirable to designate locations which are closer to the metering point(s). In such cases, the customer will be charged for the installed cost of any additional lengths of underground distribution cable and conduit from the property line to the point of delivery. Such charges shall be in addition to any other charges specified herein.

901.3 Responsibilities – Additional information regarding RPU and customer responsibilities for URD installations is provided in Section 1200, Exhibit 9.

902 RESIDENTIAL UNDERGROUNDING IN OVERHEAD AREAS

902.1 Customer Initiated – Customers residing in residential zones presently served by overhead lines may request underground electric service. Customers intending to relocate, upgrade, or replace an existing overhead service may request underground service. In either situation, the customer shall own, operate, and maintain the facilities specified in Section 901 above.

902.2 Additional Customer Responsibilities – Customers replacing an existing overhead service with an underground service will install the service conductors to an RPU installed secondary pedestal or padmount transformer. The location of the RPU equipment will be determined by RPU. The customer should contact RPU's Engineering Department for more details prior to proceeding.

903 UNDERGROUND SERVICE TO COMMERCIAL & INDUSTRIAL CUSTOMERS

903.1 Where Required – RPU requires the underground installation of primary and secondary distribution service to new commercial and industrial structures.

903.2 Point of Delivery – RPU will designate a point of delivery for the connection of the customer's secondary underground service lateral. The point of delivery will normally be the secondary terminals of a pad-mounted

transformer placed at a mutually agreeable location on the customer's property, as close as practicable to the metering point.

903.3 RPU Owned Material – RPU will install, own, operate, and maintain the primary underground cable, the distribution transformer, and the secondary connections at the distribution transformer.

903.4 Conduit Required (RPU Underground Facilities) – If underground primary distribution facilities are located on the customer's property, the customer or their electrical contractor shall provide the conduit from a designated point of interconnection to the distribution transformer.

903.5 Conduit Required (RPU Overhead Facilities) – If overhead main distribution facilities are located on or adjacent to the customer's property, the customer shall provide conduit from the riser pole, including the long sweep elbows, to the pad-mounted distribution transformer. Refer to Section 1200, Exhibit 8 for details.

903.6 Concrete Transformer Pad – The customer shall install, own and maintain a concrete transformer pad constructed to RPU specifications.

(1) If the transformer is located in an area subject to physical damage (e.g. from vehicular traffic), RPU will require the customer to furnish and install an approved means of protection (such as bollards).

(2) The customer will be required to construct or position the concrete transformer pad in such a way to avoid other types of transformer damage, such as corrosion resulting from snow-melt chemicals.

903.7 Customer Owned Material – The customer shall install, own, and maintain all secondary cables, conduits, and cabinets from the transformer or secondary pedestal to the building service entrance.

(1) Secondary Bus Duct – RPU must approve the design of all secondary bus duct and cable bus designs. The installation may be inspected by RPU and the secondary connections to the transformer and the transformer side of the connection cabinet will be made by RPU.

(2) Customer Coordination – It is the customer's responsibility to coordinate with and provide the necessary information to RPU to assure that adequate connections are made at the secondary terminals of the transformer.

903.8 Metering – RPU will furnish and install the meter set in accordance with the requirements of Section 600.

903.9 Maximum Secondary Connections – The maximum number of secondary connections available shall be:

(1) Single Phase: Six (6) 350 MCM conductors per phase

(2) Three Phase:

TRANSFORMER SIZE	# OF CONDUCTORS PER PHASE
45 KVA	3
75 KVA to 500kVA	6
750kVA to 2500kVA	10

(3) The maximum size secondary conductor to be installed in a 3-phase transformer is 500 MCM. Conductors may be aluminum or copper and parallel conductors shall be of identical wire size

Exception: Where the customer's NEC ® service ampacity requirement (as determined by others) exceeds the maximum allowable cable quantity shown above for 500 MCM copper conductors at 90°C temperature rating, contact RPU's Engineering Department for assistance.

(4) Any service requiring more conductors per phase than listed above must utilize a customer provided secondary connection cabinet complying with the requirements of Section 904

903.10 Manhole Secondary Connections – Secondary cables installed in an RPU manhole must be copper conductor.

904 SECONDARY CONNECTION CABINETS

904.1 General – Where secondary connection cabinets are necessary, the following requirements apply:

(1) Cabinet assemblies will be suitable for the installation and comply with all RPU and National Electric Code® requirements
(2) Cabinets shall be constructed with provisions for bar-type or donut-type current transformers
(3) Conduits from service equipment to the connection cabinet and from the transformer to connection cabinet will be furnished and installed by electrical contractor as concrete pads are being formed and poured. Conduit systems shall meet RPU requirements. Above-grade raceway from the transformer to the connection cabinet is not allowed.

904.2 Clearance Requirements – Secondary connection cabinets must be installed such that the minimum clearance requirements for pad-mounted transformers specified in Section 1200, Exhibit 7 are maintained.

904.3 Inspections – During the required transformer pad inspection, if the secondary connection cabinet is found to be in violation of the minimum required pad-mount transformer clearances, the inspection will be marked as 'FAILED'. The contractor will need to correct the observed deficiencies and submit a new form for inspection.

905 TRANSFORMER CLEARANCES

Where pad-mounted transformers are installed, the minimum clearances specified and shown in Section 1200, Exhibit 7 must be maintained. Fences, shrubbery, manholes, junction boxes, and trees may be installed by the customer if the specified clearances are maintained, grade is not altered, and the underground cable is not endangered.

906 OTHER PAD-MOUNTED EQUIPMENT CLEARANCES

Where pad-mounted equipment such as capacitor banks, switchgear, or primary metering cabinets are installed, the following minimum clearances shall be provided:

(1) Ten (10) feet in front of the access doors
(2) Three (3) feet from the sides and/or back of the equipment

The above minimum clearances must be at the same grade as the equipment.

907 WINTER INSTALLATION

The customer shall be required to pay a per foot additional fee for underground cable installation, at the customer's request, after frost has been established in the ground to an average depth of 6 inches or more. The amount of the frost fee depends on the depth of the frost. RPU may require that the estimated frost charges be paid in advance of performing work.

908 INSTALLATION IN UNSUITABLE SOILS

The customer shall be required to pay an additional fee if unsuitable backfill material is encountered during the installation of RPU's facilities. The fee will be based on the cubic feet of unsuitable backfill material encountered by RPU or our contractor during installation. RPU may require that the customer pay an estimated fee prior to performing the work.

909 TOTAL UNDERGROUNDING

RPU does not install new underground vaults, manholes, or submersible transformers on customer property. If the presence of permanent structures up to the property lines, or other conditions, precludes the installation of pad-mounted equipment on the customer's property, primary service will be provided by RPU in accordance with Section 304.

SECTION 1000 – TRANSFORMERS AND TRANSFORMER DATA

1001 TRANSFORMERS

1001.1 Ownership – Necessary transformers will be installed and maintained by RPU in accordance with its established Rate Schedules and Electric Service Rules and Regulations.

1001.2 Requirements – RPU will not furnish transformers unless they are of standard size and voltage as established by RPU. The customer shall notify RPU in advance of any change in the customer's load requirements that may affect the installed transformer capacity.

1002 GROUNDING

1002.1 Grounded System – All service systems that operate below 600 volts contain a grounded neutral or a grounded phase conductor used as a circuit conductor in the system. The grounded neutral or grounded phase conductor is grounded at the supply transformer and will be run from the transformer bank to the meter socket and to each service disconnection means in accordance with National Electric Code® Article 250.24(B), or as may be amended.

1002.2 Ungrounded System – Customers requiring an ungrounded service for operation of a ground detection system, or for other operations permitted by the National Electric Safety Code®, shall submit an exception request detailing the special circumstances necessitating the request. In addition, the customer shall state in the exception request that he is aware of and accepts the increased risk to personal safety associated with an ungrounded service. When supplying an ungrounded service results in an additional cost to RPU, the additional cost may be passed on to the customer.

1003 SPECIAL RULES

1003.1 Customer Furnished Equipment – When a customer is furnished primary service by RPU and installs transformers or other equipment, in accordance with the applicable RPU rate schedule and Electric Service Rules & Regulations, RPU accepts no responsibility for maintaining or replacing the customer's transformers or other equipment if damaged or destroyed.

1003.2 Required Clearances – The customer shall provide a minimum of ten (10) feet of level clearance on the door side(s) of pad-mounted transformers for hot-stick operation and ten (10) feet level clearance on the door side(s) of pad-mounted primary metering cabinets for instrument transformer maintenance. Additional clearance requirements are located in Section 1200, Exhibit 7.

1004 FAULT CURRENT

1004.1 Intention – It is RPU's intent to address the customer's need for information concerning fault current and transformer protective device requirements pertaining to new construction, rewiring, or additional load. Refer to the current edition of the National Electric Code®, Article 110.9 Interrupting Rating and Article 110.16 Arc Flash Hazard Warning, or as may be amended.

1004.2 Tables – Tables 10.1 through 10.3 in this Section show the maximum available RMS symmetrical fault current that may be expected at the secondary terminals of distribution transformers. Each fault current value listed in the tables is based on the percent impedance value of the transformer that might be set initially or as a replacement. No primary source or secondary line impedance has been included since it is generally relatively small, may change, and cannot be accurately forecasted.

NOTE: Because an overloaded transformer is typically replaced with the next larger standard size transformer, and an under-loaded transformer may be replaced with the next smaller standard size transformer, the customer shall use this range of transformers to perform their analysis and select equipment such as fuse or circuit breakers and service entrance bus bar bracing. When selecting the fault current interrupting rating of the customer protection devices, the customer should also take into account the minimum size transformer that would be required to serve the load rating of the customer main protection device.

1004.3 Variability – Due to the variability of the transformer and electric distribution system characteristics, these tables should be used as a general guideline and shall not be used as a design tool to replace engineering that may be required by the Code Authorities having jurisdiction. Customers or contractors requiring specific fault current calculations should consult a registered professional engineer of their choice.

NOTE 1: All installations served from a single-phase pad-mount transformer should as a minimum use the calculations based on the installation of a 37.5 kVA transformer.

NOTE 2: All temporary construction meter installations may use the actual transformer size.

1005 ARC FLASH

1005.1 Intention – It is RPU's intent to address the customer's need for information concerning arc flash data requests as follows:

(1) For secondary voltage services, RPU will provide upon request from the customer:

a) Transformer size, primary voltage, secondary voltage and typical transformer percent impedance

b) Transformer primary fuse information and size type

c) Calculated symmetrical bolted three-phase fault current, bolted single-line ground fault current, and calculated system impedance (R and X) at the high side of the transformer

d) The upstream protective device information nearest the service point. This information will include the device model, rating and applicable settings

(2) For primary voltage services, RPU will provide upon request from the customer:

(3) Calculated symmetrical bolted three-phase fault current, bolted single-line ground fault current and calculated system impedance (R and X) at the service point

(4) The upstream protective device information nearest the service point. This information will include the device model, rating and applicable settings

1005.2 Calculations – Fault current calculations are based upon the distribution system configuration at the time of the calculations. RPU does not provide minimum fault current information or associated protective device clearing times.

1005.3 Use of Data – It is understood that this data is to be used for arc flash calculations. Parties using this data must understand that it may change due to various reasons. RPU will not notify the customer when such changes occur.

1005.4 Table Data – Tables 10.1 through 10.3 in this Section are only intended to provide the basic information necessary for secondary service customers to make their own internal system fault current and basic arc flash calculations. Primary service customers will still need to consult with RPU's Engineering Department to obtain fault current and protective device information for their service locations.

NOTE: As a safety measure, RPU recommends that when customers are performing maintenance work on or near exposed electrical equipment that their electrical system be de-energized whenever possible.

Table 10.1 Single Phase Underground

SINGLE-PHASE PADMOUNT TRANSFORMERS EXPECTED SINGLE-PHASE FAULT CURRENTS (IN RMS AMPS) AT THE SECONDARY TERMINALS						
					PROTECTIVE DEVICE, OVERHEAD FUSE	
TRAN	TRAN	TRAN	TRAN	Fault Current	**7960V PRIMARY**	
KVA	%Z	%R	%X	240V Secondary	BAY-O-NET	Amps
5	1.00	0.39	0.92	2,085	4000358C05	8
15	1.00	0.39	0.92	6,250	4000358C05	8
25	1.00	0.32	0.95	10,420	4000358C08	15
37.5	1.00	0.25	0.97	15,630	4000358C08	15
50	1.10	0.57	0.94	18,940	4000358C08	15
75	1.10	0.38	1.03	28,410	4000358C10	25
100	1.10	0.34	1.05	37,880	4000358C10	25
167	1.20	0.34	1.05	57,990	4000358C12	50
					PROTECTIVE DEVICE, OVERHEAD FUSE	
TRAN	TRAN	TRAN	TRAN	Fault Current	**7960V PRIMARY**	
KVA	%Z	%R	%X	480V Secondary	BAY-O-NET	Amps
15	1.1	0.39	1.03	2,840	4000358C05	8
Note: BAY-O-NET fuse is a COOPER/EATON or equivalent						

Table 10.2 Single Phase Overhead

SINGLE-PHASE OVERHEAD TRANSFORMERS EXPECTED SINGLE-PHASE FAULT CURRENTS (IN RMS AMPS) AT THE SECONDARY TERMINALS										
									PROTECTIVE DEVICE, OVERHEAD FUSE	
TRAN	TRAN	TRAN	TRAN	Fault Current	TRAN	TRAN	TRAN	Fault Current	**7960V PRIMARY**	
KVA	%Z	%R	%X	240V Secondary	%Z	%R	%X	120V Secondary	Typical	Limited Use
10	1.20	0.35	1.15	3,470	1.48	0.53	1.38	5,630	1.5X	6 ELF
15	1.20	0.66	1.00	5,210	1.56	0.99	1.20	8,010	2X	6 ELF
25	1.20	0.50	1.09	8,680	1.51	0.75	1.31	13,800	3.5X	6 ELF
37.5	1.20	0.39	1.13	13,020	1.48	0.59	1.36	21,110	5.5X	8 ELF
50	1.20	0.43	1.12	17,360	1.49	0.65	1.34	27,960	7X	12 ELF
75	1.20	0.17	1.19	26,040	1.45	0.26	1.43	43,100	10X	18 ELF
167	1.20	0.17	1.19	57,990	1.45	0.26	1.43	95,980	25KS	18 ELF

Table 10.3: Three Phase Pad-mount Transformers

THREE-PHASE PADMOUNT TRANSFORMERS EXPECTED THREE-PHASE FAULT CURRENTS (IN RMS AMPS) AT THE SECONDARY TERMINALS									
						TRANSFORMER PROTECTIVE DATA			
TRAN	TRAN	TRAN	TRAN	Fault Current	Fault Current	Current Limiting	Size	BAY-O-NET	Size
KVA	%Z	%R	%X	120/208V Secondary	277/480V Secondary	Cooper/Eaton or Equivalent	Amps	Cooper/Eaton or Equivalent	Amps
45	1.3	1.04	0.78	9,600	N/A	CBUC08030C100	30	4000358C05	8
75	1.3	0.7	1.10	16,000	6,900	CBUC08080C100	80	4000358C08	15
112.5	1.4	0.49	1.31	22,300	9,700	CBUC08080C100	80	4000358C08	15
150	1.4	0.35	1.36	29,700	12,900	CBUC08080C100	80	4000358C08	15
225	1.4	0.43	1.33	44,600	19,300	CBUC08100C100	100	4000358C10	25
300	1.4	0.48	1.32	59,500	25,800	CBUC08125C100	125	4000358C10	25
500	1.6	0.40	1.55	86,700	37,600	CBUC08150D100	150	4000358C12	50
750	4.5	0.39	4.48	46,300	20,000	CBUC08250D100	250	4000358C14	65
1,000	5.1	0.32	5.09	54,400	23,600	CBUC08150D100	150	4038361C03CB	135
1,500	5.1	0.36	5.09	N/A	35,400	CBUC08150D100	150	4038361C03CB	135
2,000	5.1	0.43	5.08	N/A	47,200	CBUC08165D100	165	4038361C04CB	165
2,500	5.1	0.33	5.09	N/A	59,000	CBUC08250D100	250	4038361C05CB	185

SECTION 1100 – SUPPLEMENTAL INFORMATION

1101 USE OF SERVICE

1101.1 Purpose – Electric service may be used only for the purposes set forth in the respective rate schedules. RPU is in the business of providing retail electricity to the ultimate consumer. Electricity is supplied for use by customer's household or business, and outside sale of such service is not permitted. RPU permits redistribution and sub-metering where allowed by law, but a landlord may not charge the tenants more than the landlord is charged by RPU.

1101.2 Arrangement – The electric service equipment and associated building wiring of buildings must be arranged by the owner to facilitate individual metering of the electrical consumption of each building and occupancy unit. (Minnesota Statute Section 326B.106 Subd.12 requires separate metering on most residential units). If desired by the owner, RPU will install and maintain necessary individual RPU meters to measure consumption and tender bills on the applicable rate schedules to each customer and separately occupied buildings and occupancy units. Installation and maintenance of individual RPU meters by RPU shall not relieve the owner or landlord of responsibility for electrical service equipment and associated building wiring, nor shall it relieve the owner or landlord of responsibility to notify RPU of a single-metered residential building.

1101.3 Metering – Electric service in a single-metered residential building, as defined pursuant to Minn. Stat. 504B.215, shall be billed to the landlord/building owner except when a de minimis exception exists. A de minimis exception to the determination that a building is a single-metered residential building exists if electrical service used in a common area but measured by an individual tenant's meter does not exceed an aggregate 1,752 kilowatt hours per year. The landlord shall bear the burden and cost associated with proving an exception. (Minnesota Statute 504B.215 Subd. 2 requires the landlord of a single-metered residential building shall be the bill payer responsible, and shall be the customer of record contracting with the utility, and requires the landlord to advise the utility of the existence of a single-metered residential building). Except where a de minimis exception applies, a single metered residential building includes the following situations: "shared meter" in which a utility meter measures service provided to a tenant's dwelling and also measures such service to areas outside that dwelling; or "mixed wiring" in which electric outlets, fixtures or devices outside the individual unit are included on an individual meter; or "mixed plumbing" when related to electric utility service such as when an electric water heater serves more than one individual unit. RPU shall respond to a tenant customer's request for a shared meter investigation within ten (10) business

days. RPU's investigation shall consider whether a de minimis exception applies.

1101.4 De Minimis – The following may be representative de minimis exception examples:

(1) Common area lighting fixtures up to two (2) 100-watt light bulbs operating 24 hours/day, seven days per week
(2) Common area outlets without constant motor loads, such as an outlet in a hallway used for housekeeping
(3) Common area garage door opener for non-commercial use.
(4) Mixed wiring with another tenant unit
(5) Laundry appliances accessible by multiple tenants
(6) Common area lighting fixtures exceeding two (2) 100-watt light bulbs operating 24 hours/day, seven days per week usage

A landlord seeking to prove a de minimis exception shall do so by providing evidence establishing by actual measurement that the usage does not exceed 1,752 kilowatt hours per year. Where such actual measurement is not possible the landlord shall present written documentation from a licensed tradesperson or housing inspector that this usage is not likely to exceed 1,752 kilowatt hours per year. Such evidence must be presented prior to, during, or within 30 days of the conclusion of a shared meter investigation.

1101.5 Adjustments – Upon discovery of a single-metered residential building, as defined pursuant to Minnesota. Statute Section 504B.215, whether shared metering, mixed wiring or mixed plumbing in which individual metered service had been established and billed, RPU shall, within thirty (30) business days, recognize and make adjustments to its records to reflect that the landlord/building owner is the bill payer responsible and customer of record. RPU shall make adjustments to the tenants and landlord/building owners account based on Minnesota State Statute and RPUs standard practices. Additionally, the tenant or landlord/building owner may seek additional adjustment of charges or challenge RPU's finding of a shared meter situation by filing a complaint with the Minnesota Public Utilities Commission, or by court action. Upon request, RPU will provide to the tenant available billing history in relation to such additional actions. The Minnesota Public Utilities Commission has determined that regardless of how or by whom an investigation is initiated leading to utility account adjustments, credits and/or refunds as herein described, the investigation and any resulting adjustments, credits and/or refunds shall implicate the protections of Minnesota Statute Sections 504B.285 Subds. 2 and 3, and 504B.441.

In the event the landlord/building owner denies access to the building or fails to cooperate with an investigation to determine whether a single-metered residential building exists, as defined pursuant to Minnesota Statute Section

504B.215, the building shall be presumed to be a single-metered residential building as defined pursuant to Minnesota Statute Section 504B.215, and the landlord/building owner shall be the bill payer responsible and customer of record. RPU shall make adjustments to the tenants and landlord/building owners account based on Minnesota State Statute and RPU's standard practices. Additionally, the tenant or landlord/building owner may seek additional adjustment of charges or challenge RPU's finding of a shared meter situation by filing a complaint with the Minnesota Public Utilities Commission, or by court action. The Minnesota Public Utilities Commission has determined that regardless of how or by whom an investigation is initiated leading to utility account adjustments, credits and/or refunds as herein described, the investigation and any resulting adjustments, credits and/or refunds shall implicate the protections of Minnesota Statute Sections 504B.285 subds.2 and 3, and 504B.441.

1101.6 Service Re-establishment – In order to reestablish individual metered service for the individual tenant units, the landlord/building owner shall be required to provide certification of a licensed electrician that the building has been inspected sufficiently to determine that all instances of mixed wiring, shared metering and mixed plumbing have been eliminated or that the building qualifies for a de minimis exception, as shown by actual measurement or by certification by a licensed tradesperson or housing inspector. Additionally, the building owner may be required by RPU to post a deposit equal to the expected charges for up to two months of usage for electric service to the building.

RPU shall have the right to verify the certification at the landlord/building owner's expense prior to establishing metered service for individual units. Such verification shall not relieve the landlord/building owner of its responsibility to be the bill payer and customer of record of a single-metered residential building as defined pursuant to Minnesota Statute Section 504B.215.

1101.7 MN PUC Petition – In the event of discovery of a single-metered residential service, as defined pursuant to Minnesota Statute Section 504B.215, after previous certification to reestablish individual metered service for tenants, in addition to the above adjustments, the building shall be ineligible for individual metered service for tenants without petition to the Minnesota Public Utilities Commission by the landlord/building owner and a showing by the building owner by clear and convincing evidence justifying the reestablishment of individual metered service for tenants. Additionally, the MPUC may require consent of the building's tenants in determining that reestablishment of the individual metered service for tenants is appropriate.

1101.8 Series Metering – RPU will not install, operate, maintain, or acquire any series metering system. RPU may, however, require series subtractive

metering for its own purposes to measure consumption and render bills for electric energy not otherwise measured.

1101.9 Service Arrangement – Electricity is normally supplied to each separate customer through a single service and meter. RPU does not engage in the practice of doing interior wiring on customer's premises except for the installation and maintenance of its own property. The customer may combine the supply of electricity through one meter and one service to two or more buildings or occupancy units if they are located on the same or contiguous parcels of property and occupied by the same customer, solely for customer's own use. If separate buildings are occupied in whole or part by tenants of the customer, then each tenant occupied building, or area, or occupancy unit must be segregated from other loads of the customer and metered by RPU.

1101.10 Legacy Arrangement – If more than one building with tenants, or portions of more than one building with tenants, are served through one meter, this practice may continue until such time as material structural changes are made that will result in major modifications to the customer's service entrance equipment. If such modifications do occur, provisions must be made to allow for individual RPU metering of each tenant occupied building, or area, or occupancy unit. While the single meter service continues, the bill for the buildings will be computed as though each building used an equal portion of the total metered service and was separately billed.

1101.11 Customer Responsibility – All wiring and equipment on customer's side of the point of delivery, except metering equipment, will be furnished, installed, and maintained at the customer's expense in a manner approved by the public authorities having jurisdiction over the same. Customer will protect all electrical equipment and systems with devices that conform to the industry accepted standard for the various classes of electrical equipment and systems to prevent fire or damage to equipment from electrical disturbances or fault occurring in the customer's system or in the supplying system. The "industry accepted standard" will be as required in the National Electrical Code and such additional devices as are prescribed by any public authority with jurisdiction over the installation of electrical facilities.

1101.12 Inspections – Any inspection of a customer's wiring and equipment by RPU is for the purpose of avoiding unnecessary interruptions of service to its customers or damage to its property, and for no other purpose, and will not be construed to impose any liability upon RPU to a customer or any other person by reason thereof. In addition, RPU will not be liable or responsible for any loss, injury, or damage that may result from the use of or defects in a customer's wiring or equipment.

RPU may, however, at any time require a customer to make such changes in customer's electrical or non-electrical property or use thereof as may be necessary to eliminate any hazardous condition or any adverse effect which the operation of the customer's property or equipment may have on said customer, other customers of RPU, the public, or RPU's employees, equipment or service. In lieu of changes by the customer, RPU may require reimbursement from the customer for the cost incurred by RPU in alleviating an adverse effect on RPU's facilities caused by the customer's property.

1101.13 Capacity – The transformers, service conductors, meters, and appurtenances used in furnishing electric service to a customer have a definite capacity. Therefore, no material increase in load or equipment will be made without first making arrangements with RPU for the additional electric supply.

1102 RATE SCHEDULE CLASSIFICATION

Electric service is supplied to customers under various rate schedule classifications as determined by the type of service, the amount of electric power supplied, and the purpose for which the electric service is to be used. Copies of RPU's rate schedules are available at RPU's Service Center and https://www.rpu.org/my-account/rates-fees.php.

1103 PAYMENT

1103.1 Meter Reading – RPU will, insofar as possible, read all meters every month and bill the customer for service used during the period. Payment of the bill is due by the date noted on the bill.

1103.2 Estimated Billing – If the meter cannot be read during a billing period, or the reading seems erroneous, an estimate will be made for that billing period. Adjustments to bills resulting from inaccuracies in the meters will be handled in the manner described in Section 608, Meter Testing.

1104 CUSTOMER CHARGE

There is a customer charge for each meter/service provided. The amount of this customer charge will vary based on the type and number of services provided (refer to RPU's rate schedule(s) for more information).

1105 NEW UNDERGROUND RESIDENTIAL SERVICE CONNECTION CHARGE

1105.1 Charges – RPU will charge an underground service connection charge (New Underground Service fee) for the extension and/or connection of new underground electrical service to any single-family home, townhome, condominium, duplex or triplex located in a R-1, R-1x, R-Sa, R-2, R-4 or Special District, zoning districts. The amount of the charge can be obtained from a Customer Care Advisor.

1105.2 Service Connections – There will be no charge for connections or reconnections of existing services, in good payment standing, during RPU's normal working hours. If connection must be made outside of normal working hours at the request of the customer, a special connection charge will be assessed. The charge for such work can be obtained from a Customer Care Advisor.

1106 SERVICE DISCONNECTION/RECONNECTION

1106.1 With Notice – RPU may disconnect a customer's service, with notice, for any of the following reasons:

(1) Nonpayment of billings or issuance of non-negotiable check
(2) Nonpayment of a deposit or other charges/fees
(3) Failure to meet credit requirements
(4) Failure to provide access to RPU owned metering equipment

1106.2 Without Notice – RPU may disconnect a customer's service, without notice, for any of the following reasons:

(1) A condition determined to be hazardous – to the customer, to other customers, or to RPU personnel
(2) Unauthorized use of electricity, water, or equipment belonging to RPU

1106.3 Reconnection Fee – In the event service has been disconnected for nonpayment, deposit, theft, or other credit cause, the customer will be required to pay a reconnection fee before the service is restored. In the event that the service is disconnected because of hazardous conditions on the customer owned equipment or unauthorized use, the customer will be required to have all required inspections performed prior to service being restored.

1106.4 Fee Schedule – A schedule of fees is available from an RPU Customer Care Advisor.

1107 SERVICE DEPOSIT

RPU has established a credit policy whereby existing customers with an acceptable credit history and customers never having had service with RPU may not be required to provide a deposit as a condition of service. A new or additional deposit may be required in cases where a deposit has been refunded or where the current deposit amount is inadequate. The deposit amount is based on two times the average monthly bill and bears interest at the rate established by Minnesota Statute Section 325E.02. Further information is available in the RPU Deposit Policy.

1108 POWER FACTOR CORRECTION CALCULATION

Refer to Table 11.1 on the following page for instructions for multipliers to determine required capacitor kVARs for correcting power factor.

TABLE 11.1 – POWER FACTOR CORRECTION CALCULATION TABLE

ORIGINAL POWER FACTOR	CORRECTED POWER FACTOR						
	90%	92%	94%	95%	96%	98%	100%
60%	0.849	0.907	0.970	1.005	1.042	1.130	1.333
62%	0.781	0.839	0.903	0.937	0.974	1.062	1.265
64%	0.716	0.775	0.838	0.872	0.909	0.998	1.201
66%	0.654	0.712	0.775	0.81	0.847	0.935	1.138
68%	0.594	0.652	0.715	0.750	0.787	0.875	1.078
70%	0.536	0.594	0.657	0.692	0.729	0.817	1.020
72%	0.480	0.538	0.601	0.635	0.672	0.761	0.964
74%	0.425	0.483	0.546	0.580	0.617	0.706	0.909
76%	0.371	0.429	0.492	0.526	0.563	0.652	0.855
78%	0.318	0.376	0.439	0.474	0.511	0.599	0.802
80%	0.266	0.324	0.387	0.421	0.458	0.547	0.750
82%	0.214	0.272	0.335	0.369	0.406	0.495	0.698
84%	0.162	0.220	0.283	0.317	0.354	0.443	0.646
86%	0.109	0.167	0.230	0.265	0.302	0.390	0.593
88%	0.055	0.114	0.177	0.211	0.248	0.337	0.540
90%	0	0.058	0.121	0.156	0.193	0.281	0.484
92%		0	0.063	0.097	0.134	0.223	0.426
94%			0	0.034	0.071	0.160	0.363
96%					0	0.089	0.292
98%						0	0.203
100%							0

INSTRUCTIONS:

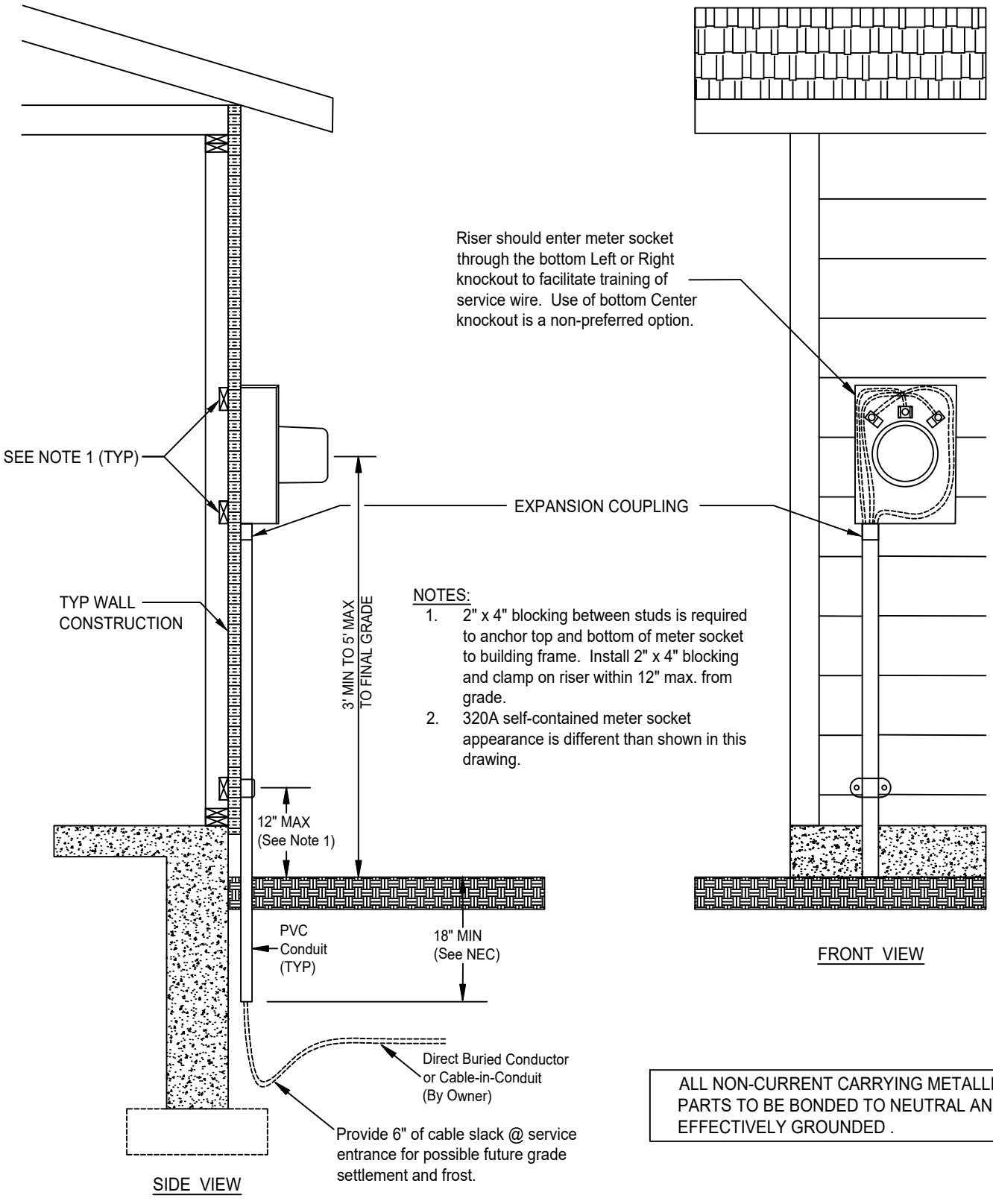
1. Determine the average power factor that your system operates at during peak demand months. Call this your ORIGINAL POWER FACTOR.
2. In the row titled CORRECTED POWER FACTOR at the top of the page, find the power factor that you wish to correct your system to.
3. Read from left to right along the row corresponding to your ORIGINAL POWER FACTOR until you reach the column that shows your desired CORRECTED POWER FACTOR.
4. Read the number that you find at the intersection of the row and column. Multiply your KW Demand by this number to calculate the total amount of capacitor KVAR you need to install to your electric service.
5. If your plant operates with a 3 phase electric service, divide the total KVAR by 3 to determine the amount of KVAR to connect per phase.

Example: If your plant has a 3 phase demand of 410 KW and operates at 76% power factor, but you want to correct to 95%:

a) Find 95% in the CORRECTED POWER FACTOR row at the top of the page
b) Find 76% in the ORIGINAL POWER FACTOR column along the left edge of the page. Read from left to right along this row until you reach the 95% column
c) Read the number at the intersection of the row and column (0.526)
   410 KW x 0.526 = 216 KVAR needed to correct your system to 95% power factor
d) 216 ÷ 3 = 72 KVAR per phase

SECTION 1200 – EXHIBIT DRAWINGS & INFORMATION

EXHIBIT	
1	Typical Underground Residential Metering Arrangement
2	Typical Free Standing Meter Structure
3	Typical Multiple Metering Arrangement
4	Service Conductor Clearances (480V and below)
4.1	Service Conductor Clearances from Balconies & Windows
4.2	Secondary Conductor Clearances over Roofs
4.3	Service Conductor Clearances to Patios and Pools
4.4	Service Conductor Clearances to Aboveground Swimming Pool With Deck
4.5	Service Conductor Clearances to Aboveground Swimming Pool Without Deck
5	Overhead Supply Secondary Temporary Service Installation
6	Typical Residential Service Mast Installation with Guying
6.1	Typical Residential Under Eaves Service Installation
7	Clearance Requirements of Pad-Mounted Transformers
7.1	Transformer Bollard Detail
8	RPU and Customer Responsibilities Associated with Non-Single Family Underground Installations
9	RPU and Customer Responsibilities Associated with Underground Single Family Residential Distribution (URD) Installations
10	Installation Guidelines
11	Meter Socket Types
11.1	Required Meter Working and Safety Clearances



NOTES:

1. 2" x 4" blocking between studs is required to anchor top and bottom of meter socket to building frame. Install 2" x 4" blocking and clamp on riser within 12" max. from grade.
2. 320A self-contained meter socket appearance is different than shown in this drawing.

ALL NON-CURRENT CARRYING METALLIC PARTS TO BE BONDED TO NEUTRAL AND EFFECTIVELY GROUNDED .

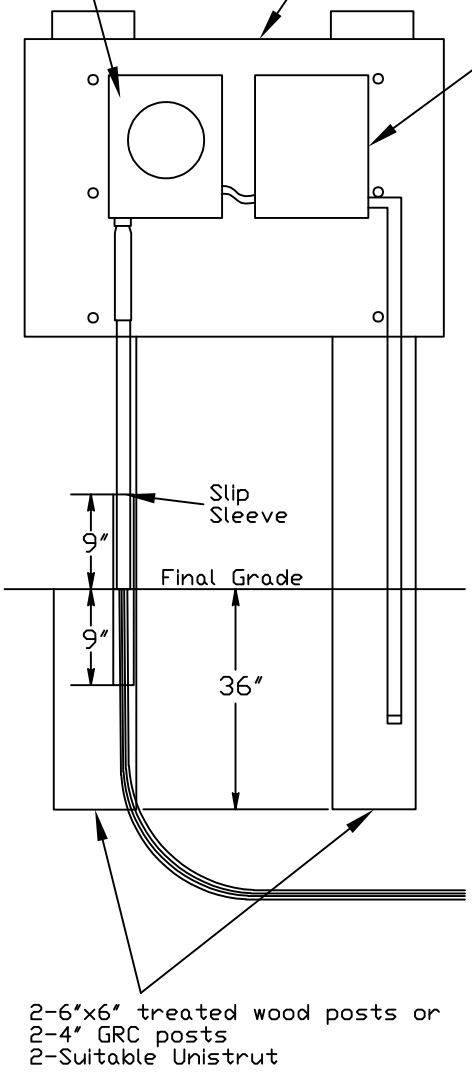
ROCHESTER PUBLIC UTILITIES

NO	REVISION	BY	DATE
0	ORIGINAL DRAWING	BJK	05/01/2017
1	ADJUSTED EXPANSION COUPLING	BJK	02/09/2021

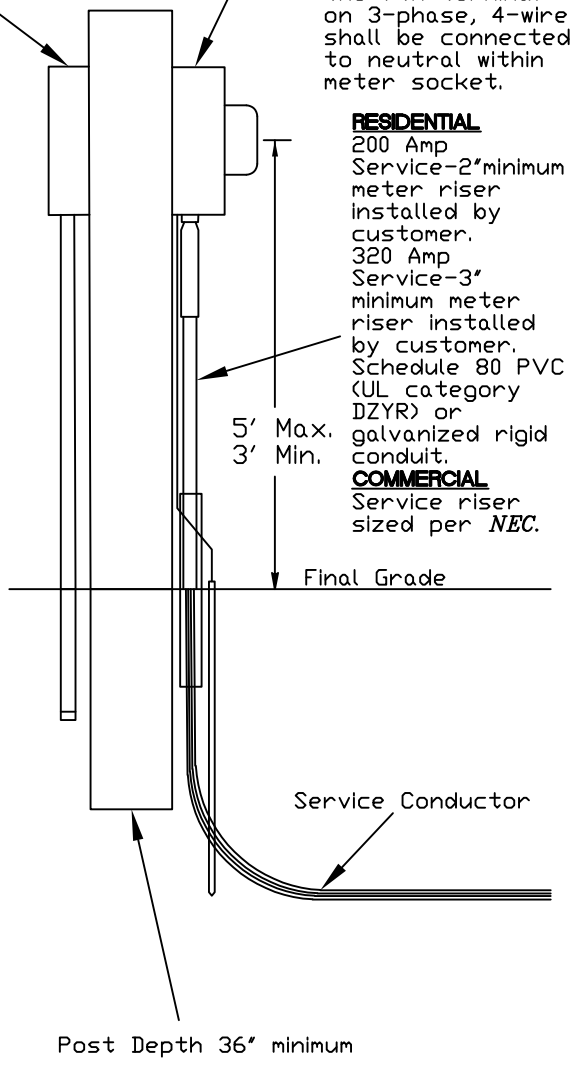
TYPICAL RESIDENTIAL UNDERGROUND SERVICE METER INSTALLATION

EXHIBIT 1

PREFERRED INSTALLATION



ALTERNATIVE SINGLE POST INSTALLATION



RESIDENTIAL
200 Amp Service-2"minimum meter riser installed by customer.
320 Amp Service-3" minimum meter riser installed by customer.
Schedule 80 PVC (UL category DZYR) or galvanized rigid conduit.

COMMERCIAL
Service riser sized per *NEC*.

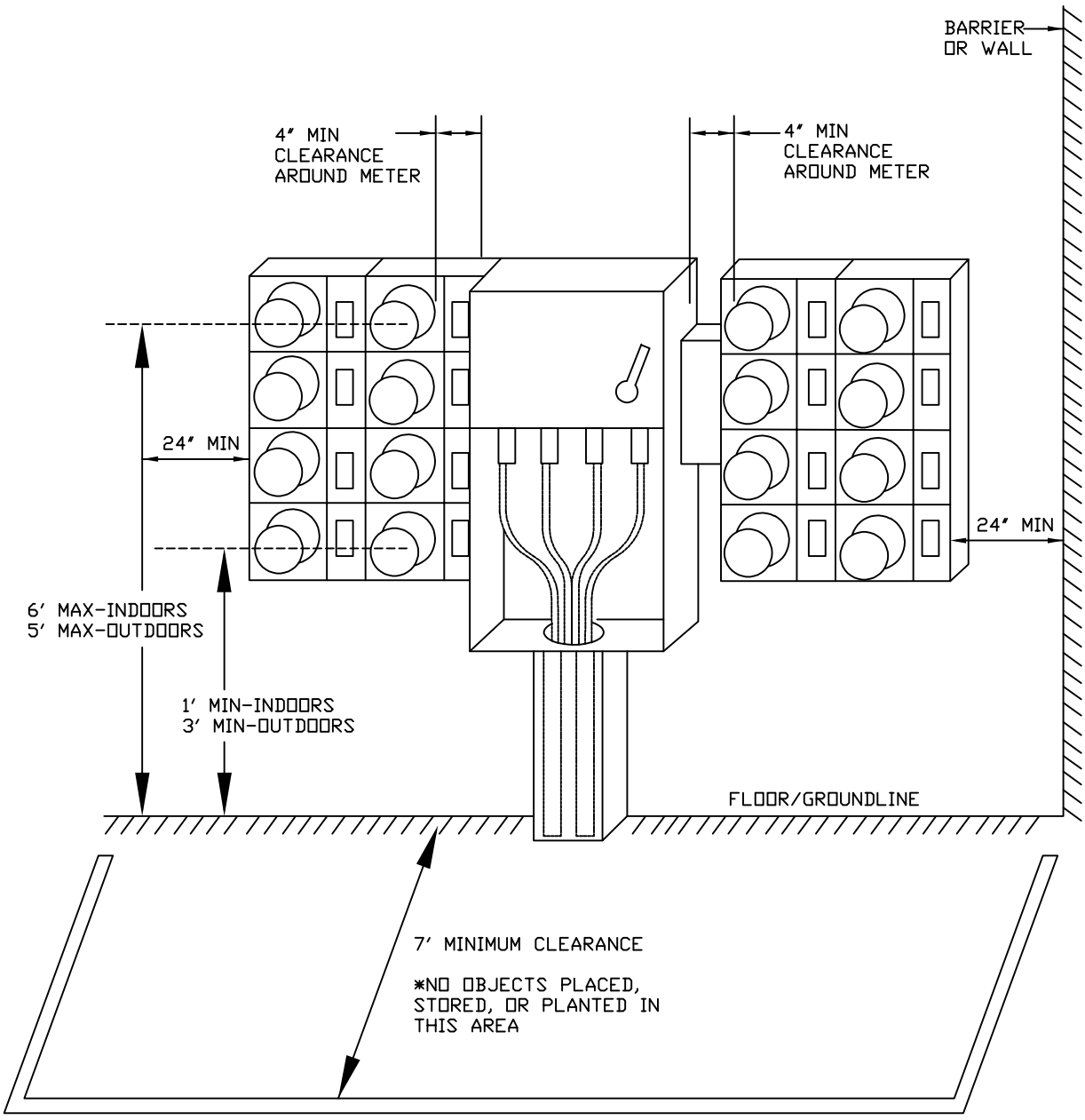
ROCHESTER PUBLIC UTILITIES

REVISION	BY	DATE
ORIGINAL DRAWING	BJK	12/2023

TYPICAL FREE STANDING METER STRUCTURE

EXHIBIT 2

ISSUED ON: 12/23



NOTES:

1. Indoor meter locations shall not be hazardous or cause inconvenience to employees of RPU when installing, maintaining, or reading the meters. RPU personnel shall have direct and unobstructed access to RPU's metering equipment at all times.

NOT TO SCALE

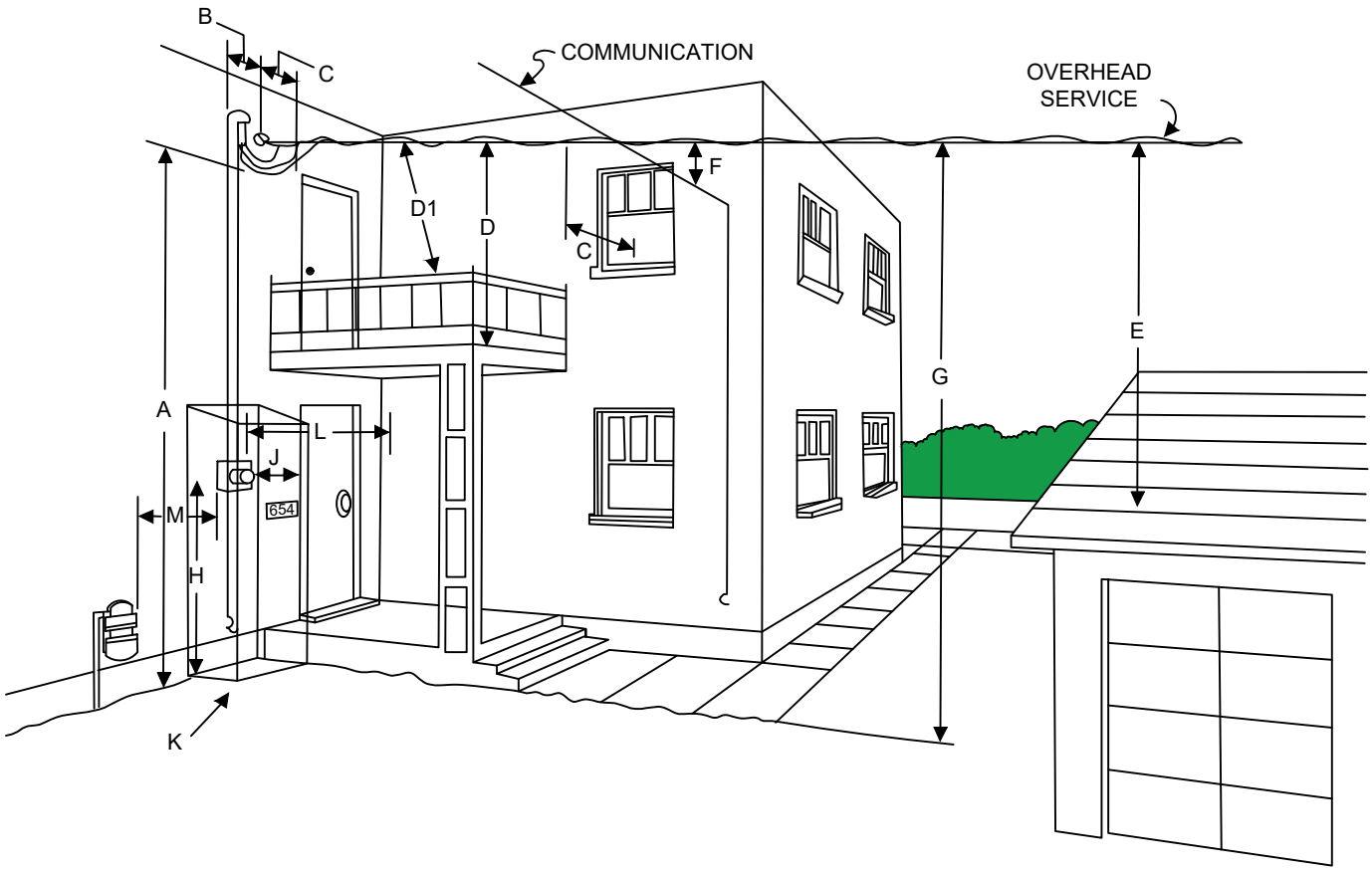
ROCHESTER PUBLIC UTILITIES

NO	REVISION	APPROVED BY	DATE
0	ORIGINAL DRAWING CREATED	JSA	9/23
1	TEXT UPDATES	JSA	12/23

TYPICAL MULTIPLE METERING ARRANGEMENT

EXHIBIT 3

ISSUE DATE – SEPT. 21



The general clearances listed on the next page, under any and all conditions, include Rochester Public Utilities' requirements and interpretations derived from the NESC Rule 234 and the NEC Section 230.24. Refer to those Sections for specific conditions not depicted. Clearances for utility-owned service drops and cables, beyond the perimeter of the customer's buildings, will be controlled by the NESC requirements. The alphabetical designations and respective dimensions on the next page apply to the illustration above. Clearances shown are for multiplex (duplex, triplex, and quadruplex) service drop conductors only - open wire service conductors require greater clearance.

ROCHESTER PUBLIC UTILITIES

NO	REVISION	BY	DATE
0	ORIGINAL DRAWING	BJK	05/01/2017
1	ADDED CLEARANCE CONDITION D1	BJK	02/08/2021

SERVICE CONDUCTOR CLEARANCES (480V AND BELOW)

EXHIBIT 4

CLEARANCE CONDITION:

A- The drip loop or service attachment fixture, whichever is the lowest point, shall have 12 feet minimum vertical clearance above final grade. Higher clearances may be required, reference "G" below.

B- The clearance between the service attachment and weatherhead shall be 12 inches minimum and 24 inches maximum.

C- Service conductors that are not protected by conduit or raceway shall have a minimum clearance of 3 feet from windows designed to be opened, doors, porches, fire escapes, signs, and similar construction. Conductors run above the top level of a window shall be permitted to be less than the 3 feet requirement.

D- The diagonal distance from the nearest edge of a balcony or deck handrail that is readily accessible to the service conductor shall be 10 feet minimum.

D1- 3.5 feet

E- The minimum vertical clearance shall be:
3.5 feet for roof slope not readily accessible to pedestrians
11.0 feet for roof slope readily accessible to pedestrians

F- Minimum vertical clearances between service drop and communication conductors shall be 2 feet at the conductor crossing and 12 inches at adjacent vertically spaced attachments to the building.

G- The minimum vertical clearance shall be:
12 feet above sidewalk and ground
16 feet above residential driveways
18 feet above commercial areas, public driveways, alleys and streets, and other land traversed by vehicles
20 feet above Department of Transportation right of way and others as required by local jurisdiction

H- For individual settings, the clearance between the center of the meter and the finished grade is to be 5 feet maximum and 3 feet minimum.

J- The dimension between the hinged side of a door and the nearest surface of the meter is to be door width plus 6 inches.

K- A clear working space, as shown by the box in the diagram, of not less than 36 inches in front of the meter and 30 inches wide shall be maintained at all times. (*NEC* Section 110.26)

L- The horizontal clearance from the nearest side of the meter socket enclosure to any structural protrusion shall be 3 inches minimum.

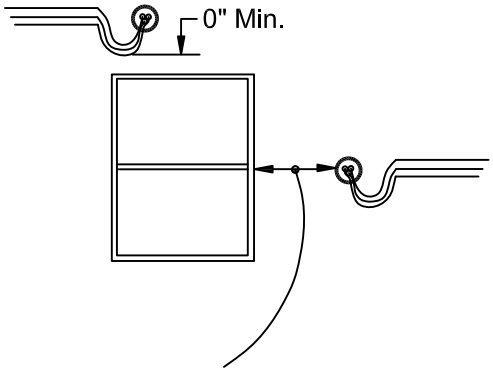
M- Horizontal distance of electric meter to gas regulator vent is 3 feet minimum.

ROCHESTER PUBLIC UTILITIES

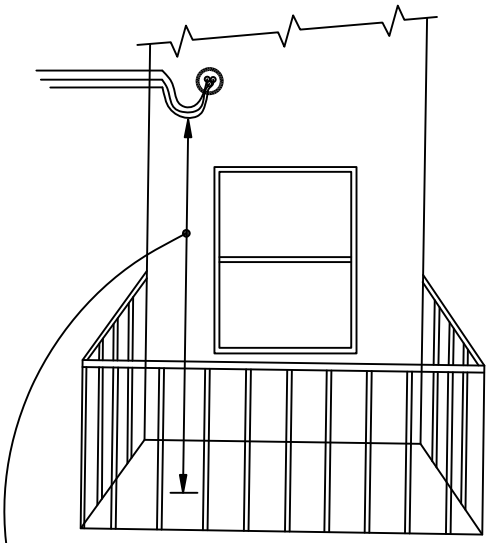
NO	REVISION	BY	DATE
0	ORIGINAL DRAWING	BJK	05/01/2017
1	ADDED CLEARANCE CONDITION D1	BJK	02/08/2021

SERVICE CONDUCTOR CLEARANCES (480V AND BELOW)

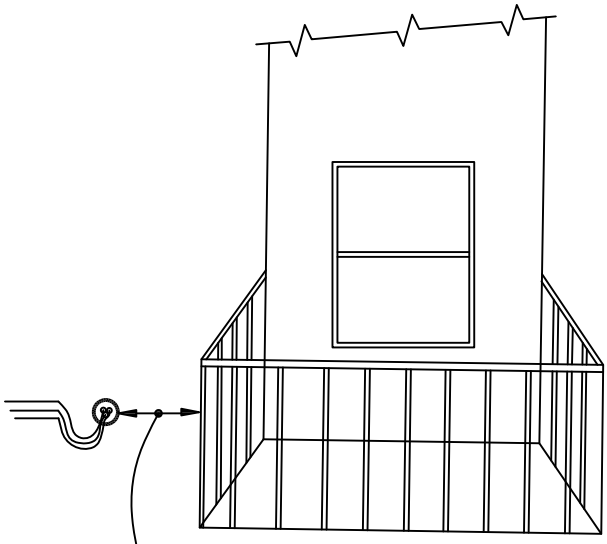
EXHIBIT 4 (Continued)



NESC 234-1: A horizontal clearance of not less than 3' for triplex and 5'-6" for open wire must be maintained from window. Above window a 0" vertical clearance is allowed.



NESC 234-1: Open wire up to 750 volts to ground = 11'-6"
Open wire over 750 volts to ground = 13'-6"
Triplex/quadruplex = 11'-0".



NESC 234-1: Conductors shall have a horizontal clearance of 3' for triplex and 5'-6" for open wire.

ROCHESTER PUBLIC UTILITIES

NO	REVISION	BY	DATE
0	ORIGINAL DRAWING	BJK	05/01/2017

SERVICE CONDUCTOR CLEARANCES FROM WINDOWS AND BALCONIES

EXHIBIT 4.1

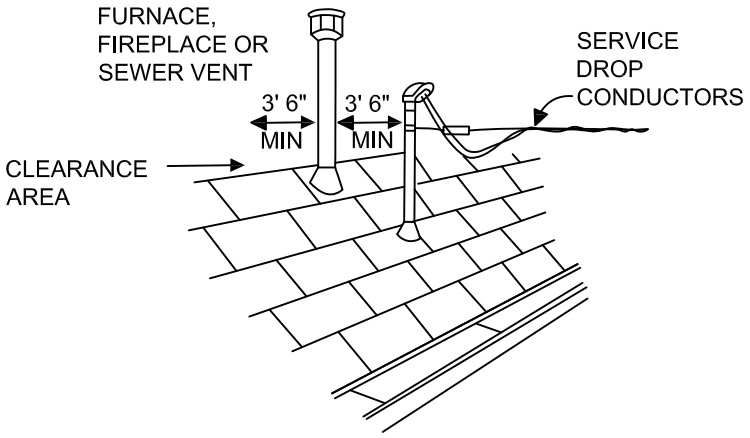


FIG. 1

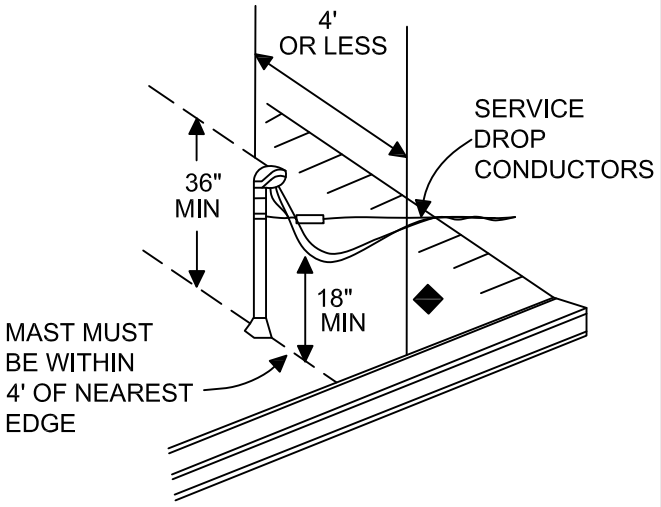


FIG. 2

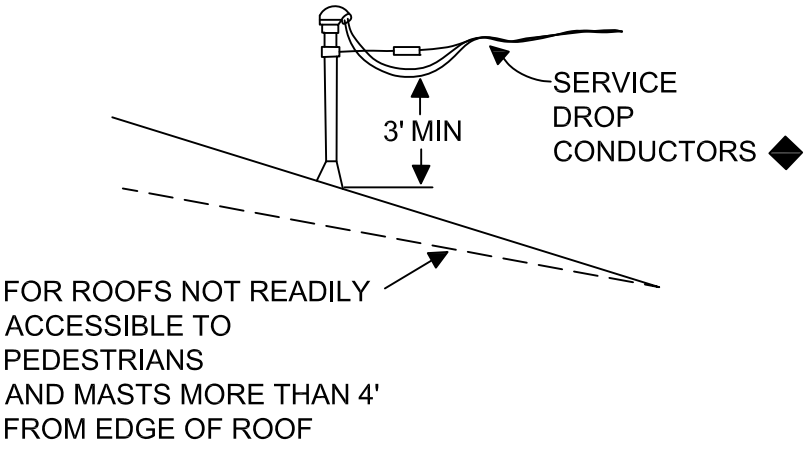


FIG. 3

◆ THIS VERTICAL DIMENSION APPLIES TO ANY POINT ON THE ROOF SURFACE DIRECTLY UNDER THE CONDUCTORS.

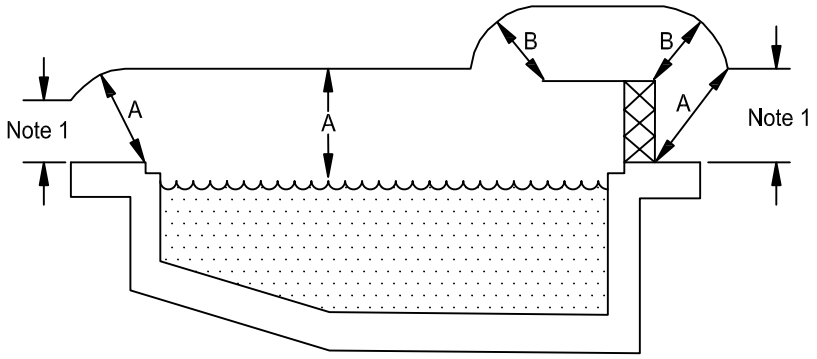
ROCHESTER PUBLIC UTILITIES

NO	REVISION	BY	DATE
0	ORIGINAL DRAWING	BJK	05/01/2017

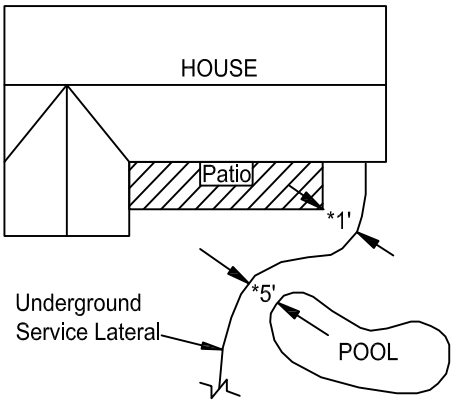
SERVICE CONDUCTOR CLEARANCES OVER ROOFS

EXHIBIT 4.2

Type of Structure Under or Next to Wire	Neutrals, Guys, Messengers; Surge protection; Wires and Communications	Duplex, Triplex, Quadraplex, Lashed 0 - 750 V	Open Supply Conductors 0 - 750 V	Primary Conductors 750 V - 22 kV
Clearance In Any Direction To: Edge of pool, water surface, Base of diving platform or anchored raft. (Dimension A)	22' - 0" (Note 1)	22' - 6" (Note 1)	23' - 0"	25' - 0"
Clearance In Any Direction To: Diving platform or Tower (Dimension B)	14' - 0" (Note 6)	14' - 6" (Note 6)	15' - 0" (Note 6)	17' - 0" (Note 6)
Hot Tubs and Whirlpool Spas: (Notes 4 and 5)	10' - 6"	11' - 0"	11' - 6"	13' - 6"



Clearances of Underground Secondary Service Lateral to Patios and Pools



*These dimensions are minimum unless cable is in conduit

NOTES:

1. 0 - 750 volts except open wire HORIZONTALLY greater than 10 feet from the edge of the pool or diving platform NEEDS ONLY a vertical clearance of 12.5 feet in pedestrian only traffic areas.
2. Table data is for below grade pool (as depicted).
3. Values are from NESC Table 234-3.
4. For hot tubs and whirlpool spas, clearance is the same as clearance from balconies, decks and areas accessible to pedestrians. Clearance would be from the highest point a person could stand to the conductor.
5. For hot tubs and whirlpool spas, clearance is less than swimming pools since long handled cleaning equipment and rescue poles are not used.
6. For horizontal clearance, add 2 feet for conductor swing.

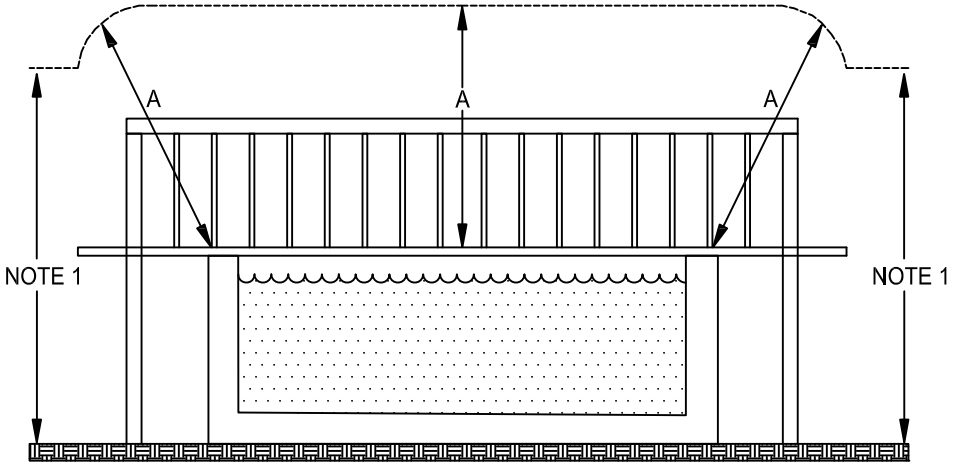
ROCHESTER PUBLIC UTILITIES

NO	REVISION	BY	DATE
0	ORIGINAL DRAWING	BJK	05/01/2017

SERVICE CONDUCTOR CLEARANCES TO PATIOS AND POOLS

EXHIBIT 4.3

Type of Structure Under or Next to Wire	Neutrals, Guys, Messengers; Surge protection; Wires and Communications	Duplex, Triplex, Quadraplex, Lashed 0 - 750 V	Open Supply Conductors 0 - 750 V	Primary Conductors 750 V - 22 kV
Clearance In Any Direction To: Edge of pool, water surface, Base of diving platform or anchored raft. (Dimension A)	22' - 0"	22' - 6"	23' - 0"	25' - 0"
Hot Tubs and Whirlpool Spas: (Notes 2 and 3)	10' - 6"	11' - 0"	11' - 6"	13' - 6"



ABOVEGROUND SWIMMING POOL WITH DECK. CLEARANCE IS MAINTAINED FROM THE HIGHEST POINT OF THE INSTALLATION UPON WHICH PEOPLE CAN STAND.

NOTES:

1. 0 - 750 volts except open wire HORIZONTALLY greater than 10 feet from the edge of the pool NEEDS ONLY a vertical clearance of 12.5 feet in pedestrian only traffic areas.
2. For hot tubs and whirlpool spas, clearance is the same as clearance from balconies, decks and areas accessible to pedestrians. Clearance would be from the highest point a person could stand to the conductor.
3. For hot tubs and whirlpool spas, clearance is less than swimming pools since long handled cleaning equipment and rescue poles are not used.

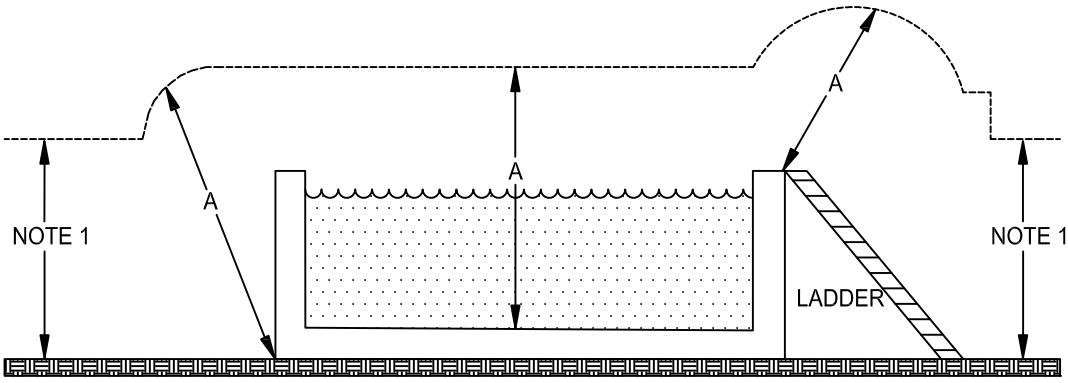
ROCHESTER PUBLIC UTILITIES

NO	REVISION	BY	DATE
0	ORIGINAL DRAWING	BJK	05/01/2017

SERVICE CONDUCTOR CLEARANCES TO ABOVEGROUND SWIMMING POOL WITH DECK

EXHIBIT 4.4

Type of Structure Under or Next to Wire	Neutrals, Guys, Messengers; Surge protection; Wires and Communications	Duplex, Triplex, Quadraplex, Lashed 0 - 750 V	Open Supply Conductors 0 - 750 V	Primary Conductors 750 V - 22 kV
Clearance In Any Direction To: Edge of pool, water surface, Base of diving platform or anchored raft. (Dimension A)	22' - 0"	22' - 6"	23' - 0"	25' - 0"
Hot Tubs and Whirlpool Spas: (Notes 2 and 3)	10' - 6"	11' - 0"	11' - 6"	13' - 6"



ABOVEGROUND SWIMMING POOL WITHOUT DECK. REQUIRED CLEARANCE IS MAINTAINED ABOVE GROUND.

NOTES:

1. 0 - 750 volts except open wire HORIZONTALLY greater than 10 feet from the edge of the pool NEEDS ONLY a vertical clearance of 12.5 feet in pedestrian only traffic areas.
2. For hot tubs and whirlpool spas, clearance is the same as clearance from balconies, decks and areas accessible to pedestrians. Clearance would be from the highest point a person could stand to the conductor.
3. For hot tubs and whirlpool spas, clearance is less than swimming pools since long handled cleaning equipment and rescue poles are not used.

ROCHESTER PUBLIC UTILITIES

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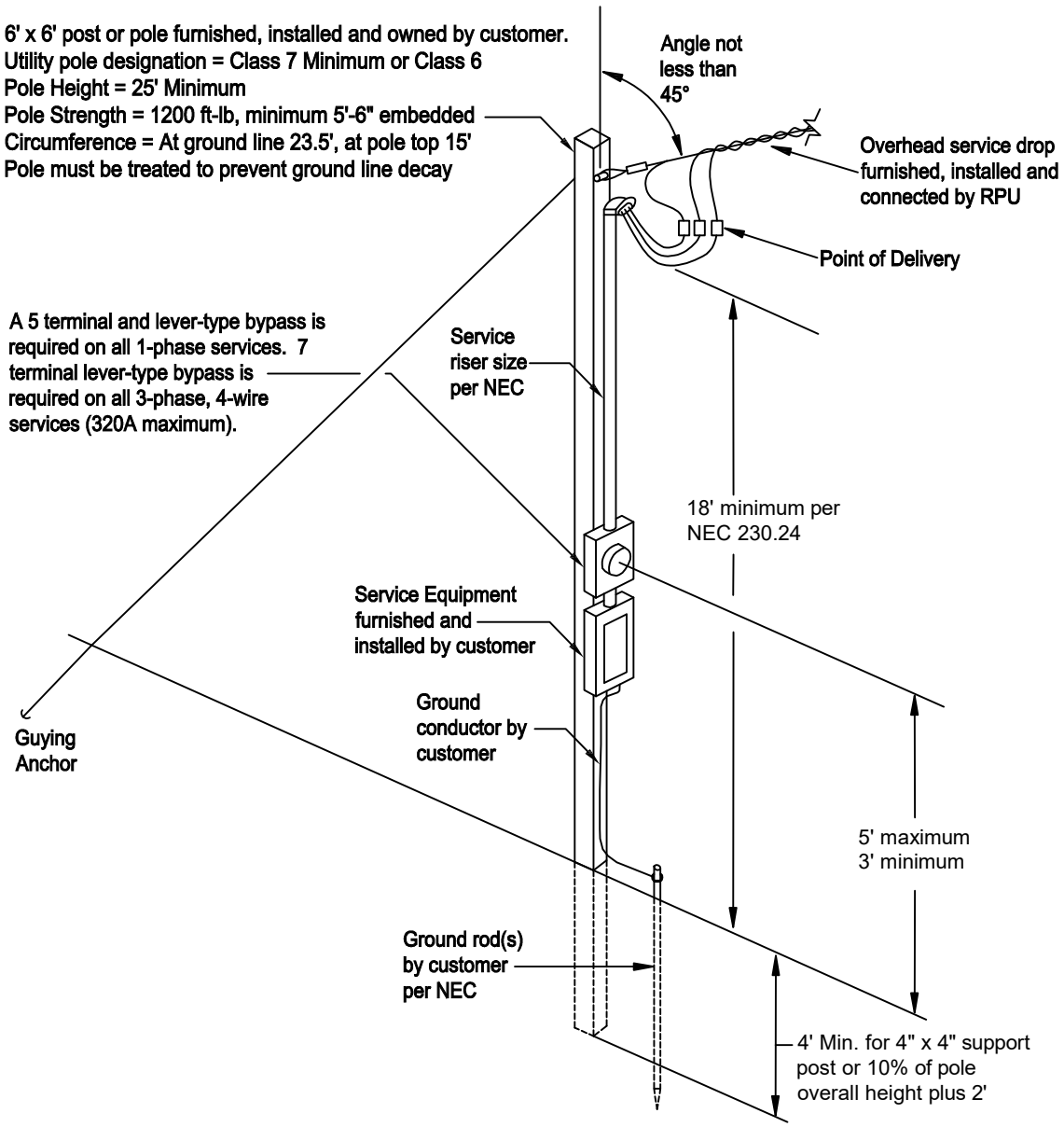
0	ORIGINAL DRAWING	BJK	05/01/2017

SERVICE CONDUCTOR CLEARANCES TO ABOVEGROUND SWIMMING POOL WITHOUT DECK

EXHIBIT 4.5

Installation shall be outside the utility easement and located no closer than 10' minimum or 70' maximum with a conductor no larger than 4/0 from RPU's secondary supply point.



NOTES:

1. Temporary installation shall not be attached to a RPU-owned pole.
2. Support may require additional braces to be protected from vehicular and other construction hazards.
3. Make sure area is clear of underground obstructions before installing support or ground rod.
4. Service drop shall not be at an angle of less than 45° from vertical.

ROCHESTER PUBLIC UTILITIES

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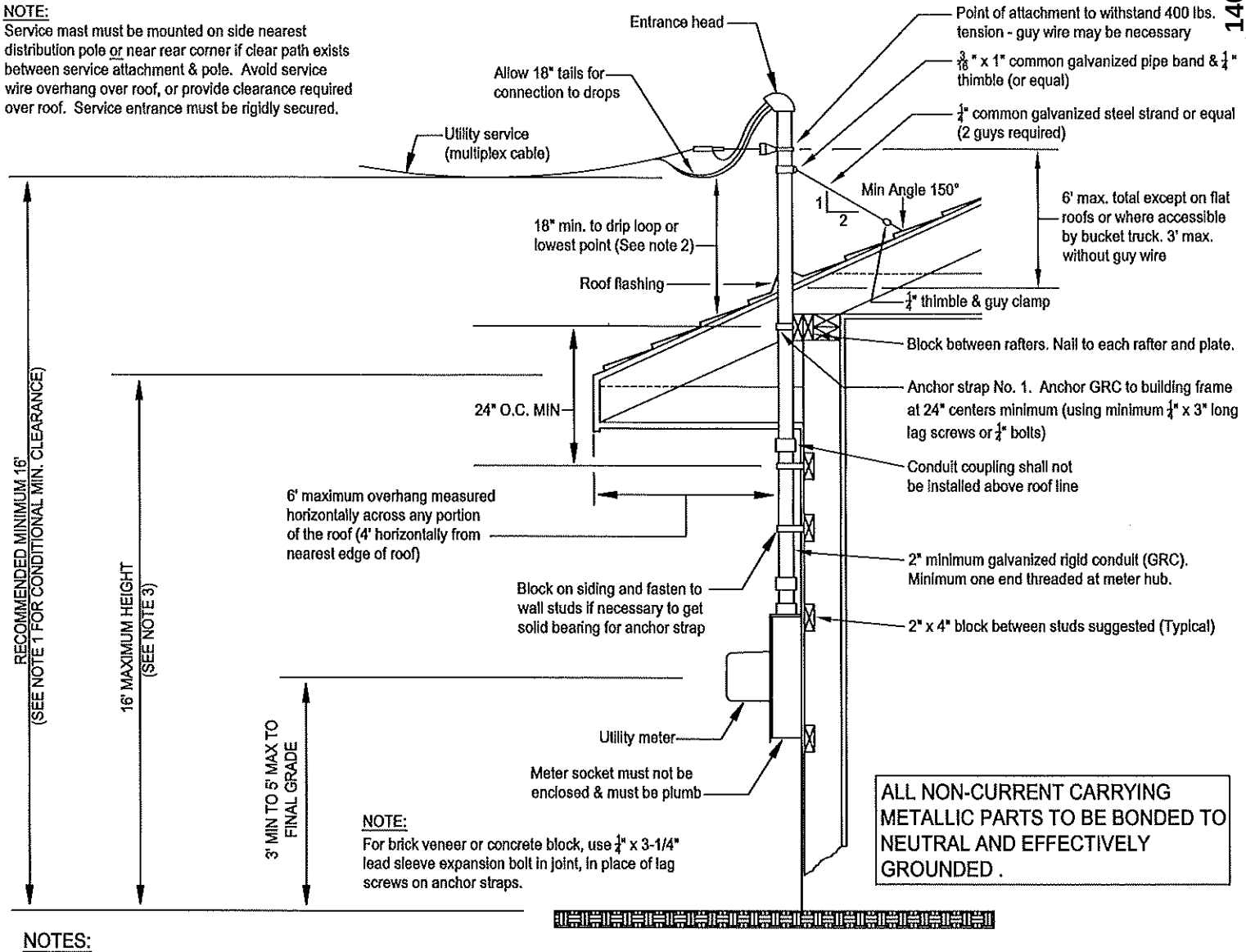
OVERHEAD SUPPLY SECONDARY TEMPORARY SERVICE INSTALLATION

EXHIBIT 5

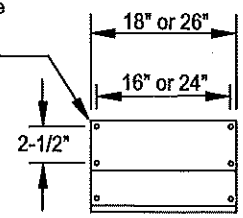
NOTE:
Service mast must be mounted on side nearest distribution pole or near rear corner if clear path exists between service attachment & pole. Avoid service wire overhang over roof, or provide clearance required over roof. Service entrance must be rigidly secured.



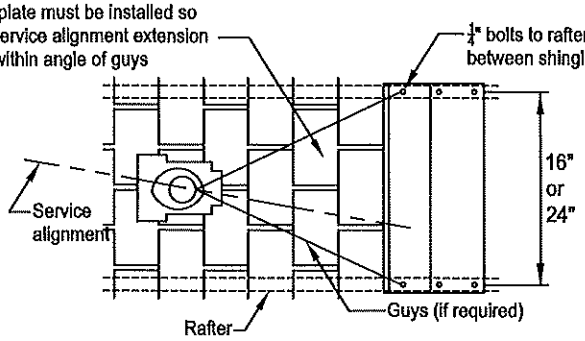
NOTES:

1. If the land under the cable is accessible to truck traffic or to vehicles over 8 feet in height, the minimum attachment height is 16 feet. If the area is subject to pedestrian or restricted traffic only (no vehicles over 8 feet in height), the minimum attachment height is 12 feet; refer to NESC Table 232-1.
2. If the service is crossing the roof for more than 6 feet horizontally in any direction, or more than 4 feet horizontally from the nearest edge of the roof, refer to NESC 234C3 for the appropriate clearance.
3. The service access point (roof edge, etc.) shall not exceed 16 foot height above grade, unless accessible by bucket truck.

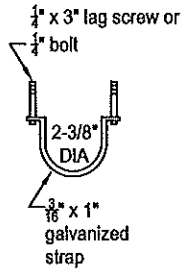
3/8" eye bolts & washers with header block are acceptable, but eye lags are not. As an alternate, one guy aligned with the service wire and adequately attached to a 3/8" eye bolt (not lag) through a header block between rafters is acceptable.



ROOF PLATE (OR EQUAL)



GUY DETAIL



ANCHOR STRAP No. 1(OR EQUAL)

*NOT TO SCALE

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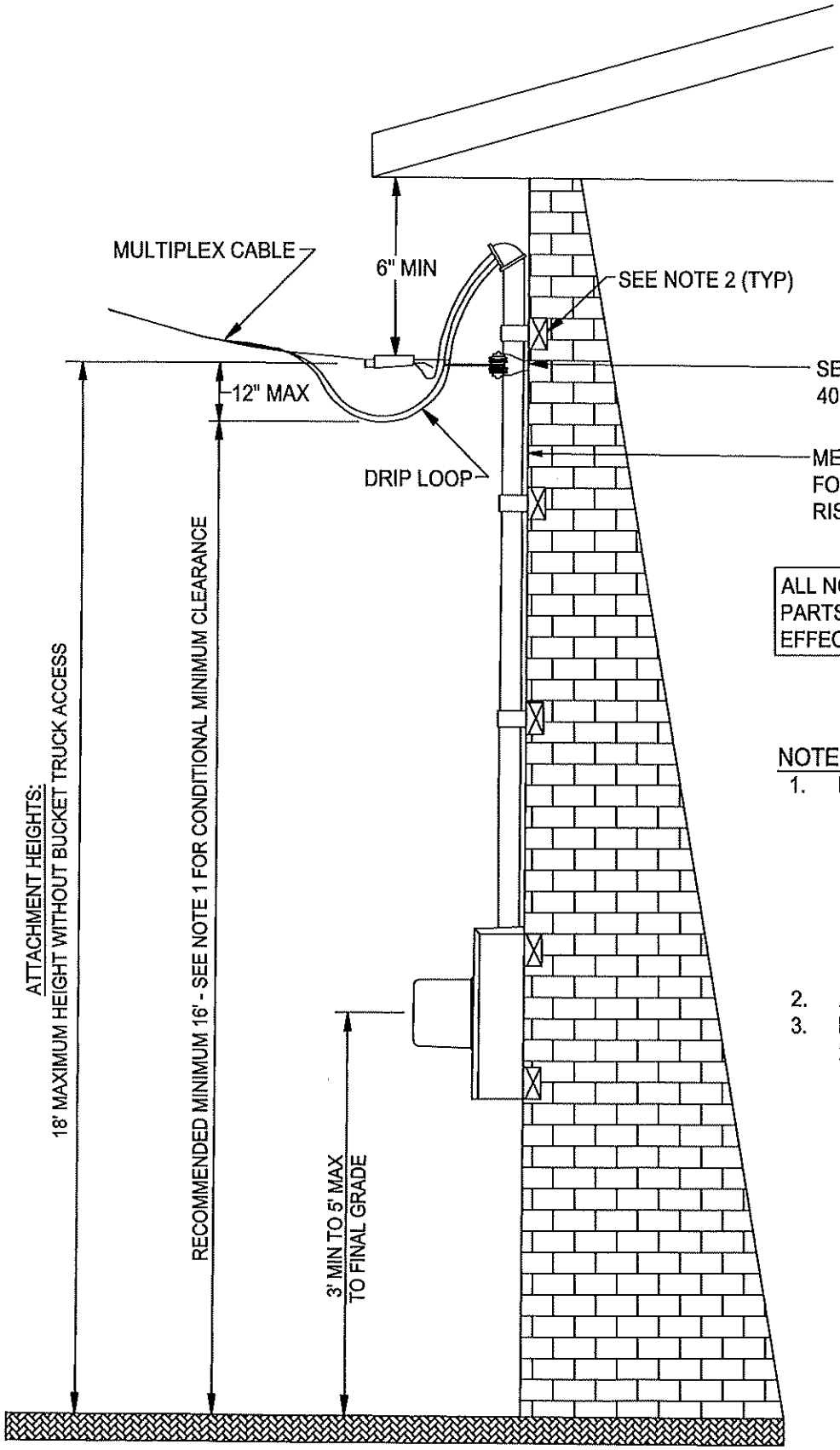
0	ORIGINAL DRAWING	BJK	05/01/2017
1	MISC. TEXT CHANGES	JA	02/09/2024

TYPICAL RESIDENTIAL SERVICE MAST INSTALLATION WITH GUYING

EXHIBIT 6



NOTES:

1. If accessible to truck or traffic or to other vehicles over 8 feet in height, or to riders on horseback, minimum clearance (and attachment height) is 16 feet; refers to NESC Table 232-1. Clearances shown as 12 feet minimum are suitable for areas subject to pedestrians and restricted traffic only. 2" x 4" blocks betweeen studs is suggested.
2. Anchor to building frame at 24" centers.
3. For clearance of service drops, refer to Section 23 of the National Electric Safety Code.

*NOT TO SCALE

ROCHESTER PUBLIC UTILITIES

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0	ORIGINAL DRAWING	BJK	05/01/2017
1	MISC. TEXT CHANGES	JA	02/09/2024

TYPICAL RESIDENTIAL UNDER EAVES SERVICE INSTALLATION

EXHIBIT 6.1

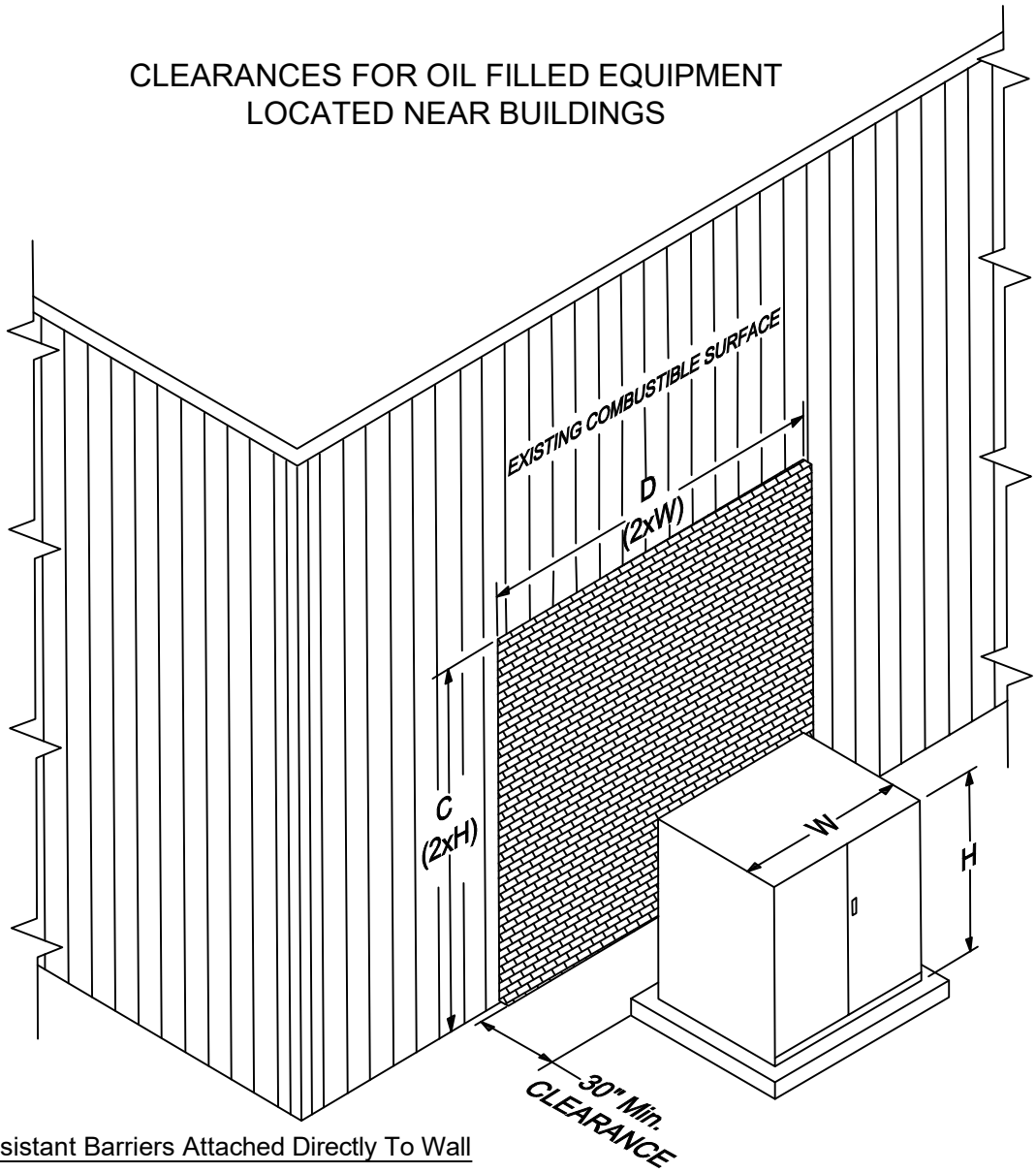
EXHIBIT 7

Clearance Requirements of Pad-Mounted Transformers

A minimum zone free of vegetation and obstructions shall be maintained around pad-mounted transformers. The minimum clearances around the transformer are 10 feet in front of the transformer doors and 2 feet from the sides and back of the transformer pad. These minimum clearances must be at the same grade as the transformer. Transformers shall not be located under any overhang (roof, balcony, stairs, etc.) without customer provided and installed provisions for setting/removal of the transformer and prior approval by RPU's Engineering Department.

Additional clearance requirements depicted on the following pages shall be met if the transformer is located near a structure.

CLEARANCES FOR OIL FILLED EQUIPMENT LOCATED NEAR BUILDINGS



Fire Resistant Barriers Attached Directly To Wall

In locations where basic clearances cannot be met, a fire resistant barrier shall be installed either by the customer or at the customer's expense to reduce the required clearance to combustible walls, door air intakes or windows. The barrier shall be constructed of non-combustible material certified to have a 2 hour fire rating. It shall be of sufficient strength and have stability to resist tipping and satisfy Rochester building ordinances. If a specific ruling regarding fire ratings is necessary, contact the Rochester Fire Department. Engineering will coordinate the construction and location of the barrier, however the customer is responsible for all maintenance. The barrier will satisfy the following dimensional requirements:

H = Height in inches of oil filled equipment.
W = Width in inches of oil filled equipment.
C = Height of barrier required to obtain a projected height of two times the height of the oil filled equipment on the building wall (2 x H).
D = Width of barrier required to obtain a projected width of two times the width of the oil filled equipment on the building wall (2 x W).

ROCHESTER PUBLIC UTILITIES

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0	ORIGINAL DRAWING	BJK	05/01/2017

CLEARANCES FOR OIL FILLED EQUIPMENT NEAR BUILDINGS

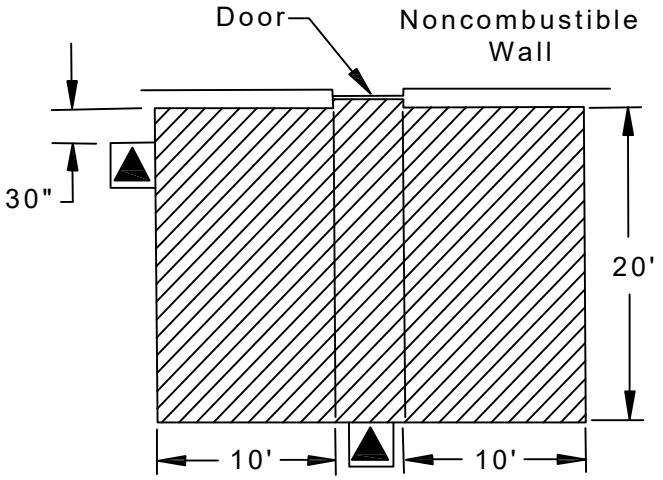
EXHIBIT 7

I. NONCOMBUSTIBLE WALLS: (Included in this class would be wood framed brick veneered buildings, metal clad steel framed buildings, cement-board walled metal framed buildings, masonary buildings, and masonary buildings with a one (1) hour fire rating.)

Oil insulated, pad-mounted transformers may be located a minimum distance of 30" from noncombustible walls if all the clearances shown on this and the following drawings are maintained from doors, windows, and other building openings. A sump shall be installed for the transformer if the immediate terrain is not pitched away from the building. If a combustible first floor overhang exists, a 10' distance from the edge of the transformer to the edge of the overhang (combination of vertical and horizontal distance) shall be required in addition to the other clearances shown.

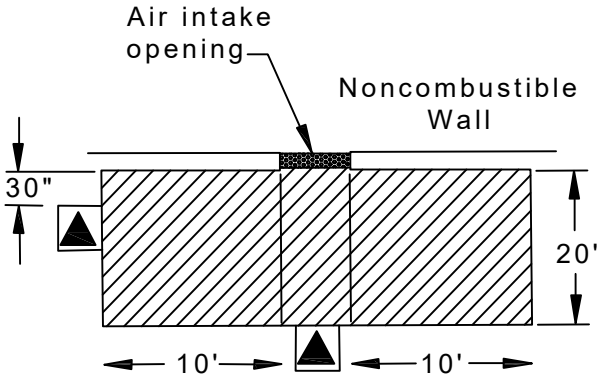
A. Doors

Oil insulated, pad-mounted transformers shall not be located within a zone extending 20' outward and 10' to either side of a building door.



B. Air Intake Openings

Oil insulated, pad-mounted transformers shall not be located within a zone extending 10' outward and 10' to either side of an air intake opening located within 10' of the ground. If the air intake opening is located more than 10' above the ground, the distance from the transformer to the opening shall be a minimum of 25'.



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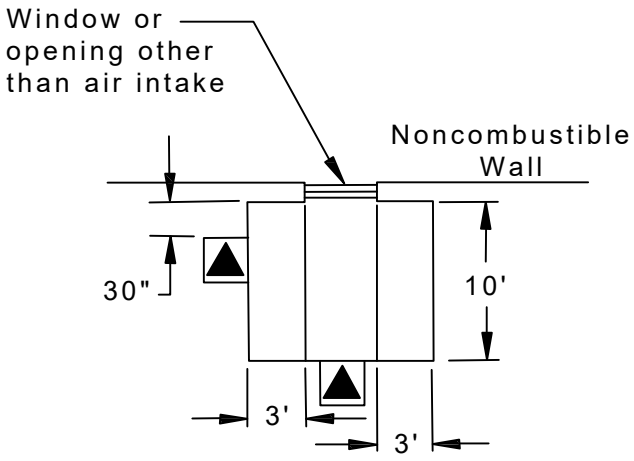
PAD-MOUNTED TRANSFORMER LOCATIONS

EXHIBIT 7 (Continued)

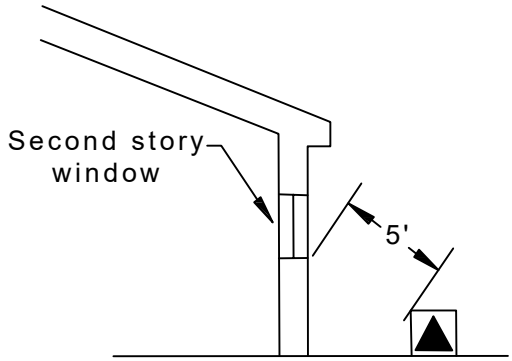
C. Windows or Openings other than Air Intake



1. First Story
Oil insulated, pad-mounted transformers shall not be located within a zone extending 10' outward and 3' to either side of a building window or opening.

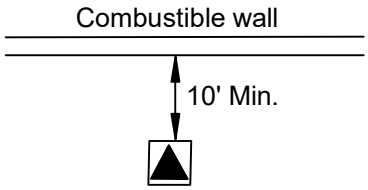
2. Second Story
Oil insulated, pad-mounted transformers shall not be located less than 5' from any part of a second story window or opening.

Oil filled equipment shall not be placed below an operating window on any floor. No exceptions will be made!



II. COMBUSTIBLE WALL

(Included in this class would be wood buildings and metal clad buildings with wood frame construction.) Oil insulated, pad-mounted transformers shall be located a minimum 10' from the building wall in addition to the clearance from building doors, windows, and other openings set forth for noncombustible walls. A sump shall be installed for the transformer if the immediate terrain is not pitched away from the building. If a combustible first floor overhang exists, a 10' distance from the edge of the transformer to the edge of the overhang (combination of vertical and horizontal distance) shall be required in addition to the other clearances as shown.



ROCHESTER PUBLIC UTILITIES

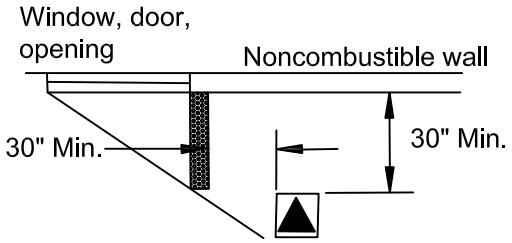
NO	REVISION	BY	DATE
0	ORIGINAL DRAWING	BJK	05/01/2017

PAD-MOUNTED TRANSFORMER LOCATIONS (CONTINUED)

EXHIBIT 7 (Continued)

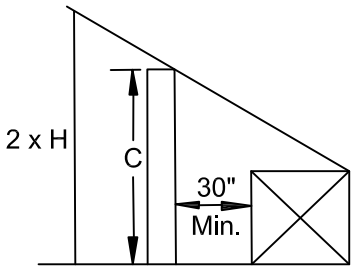
III. BARRIERS

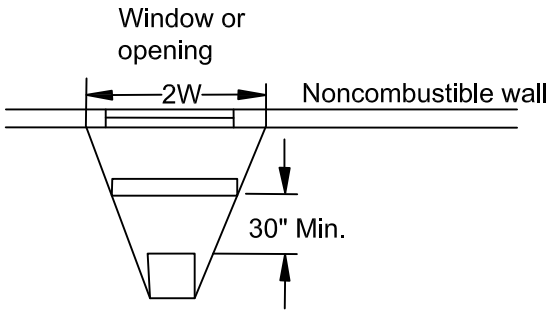
(Included in this class are reinforced concrete, brick, or concrete block barrier walls with a 3 hour fire rating.) If the clearance specified above cannot be obtained, a fire resistant barrier shall be constructed in lieu of the separation. The barrier (when required) is provided by the customer. The following methods of construction are acceptable.



A. NONCOMBUSTIBLE WALL

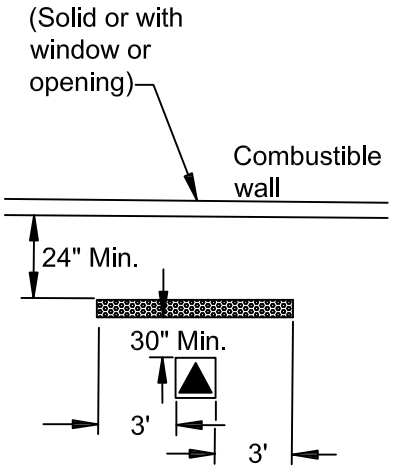
The barrier shall extend to a projection line from the corner of the pad-mounted to the furthest corner of the window, door, or opening in question.





B. COMBUSTIBLE WALLS

The barrier shall extend 3' beyond each side of the oil insulated, pad-mounted transformer. The height of the barrier shall be 3' above the top of the pad-mounted transformer. If a combustible first floor overhang exists, the 24" specified shall be measured from the edge of the overhang rather than from the building wall.



ROCHESTER PUBLIC UTILITIES

NO	REVISION	BY	DATE
0	ORIGINAL DRAWING	BJK	05/01/2017

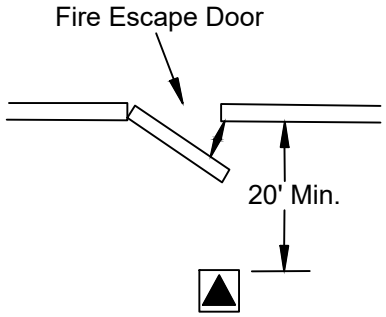
PAD-MOUNTED TRANSFORMER LOCATIONS (CONTINUED)

EXHIBIT 7 (Continued)

IV. FIRE ESCAPES

Oil insulated, pad-mounted transformers shall be located such that a minimum clearance of 20' is maintained from fire escapes at all times.

Exception: Oil insulated, pad-mounted transformers may be located closer to a fire escape than the 20' minimum when a fire resistant barrier is constructed around the transformer (side walls and roof). The barrier shall extend a minimum of 1' beyond the transformer. The transformer and barrier shall not in any way obstruct the fire escape exit. 10' clearance is required in front of pad-mount transformer doors. Adequate transformer accessibility and ventilation must be provided. If transformer is installed underneath a fire escape, maintain 10' vertical clearance.



V. DECORATIVE COMBUSTIBLE ENCLOSURE

Decorative combustible enclosures (fence) installed by the customer around oil insulated, pad-mounted transformers adjacent to a combustible building wall shall not extend more that 24" beyond the transformer towards the combustible wall. 10' clearance is required in front of pad-mounted transformer doors. Adequate transformer accessibility and ventilation must be provided.

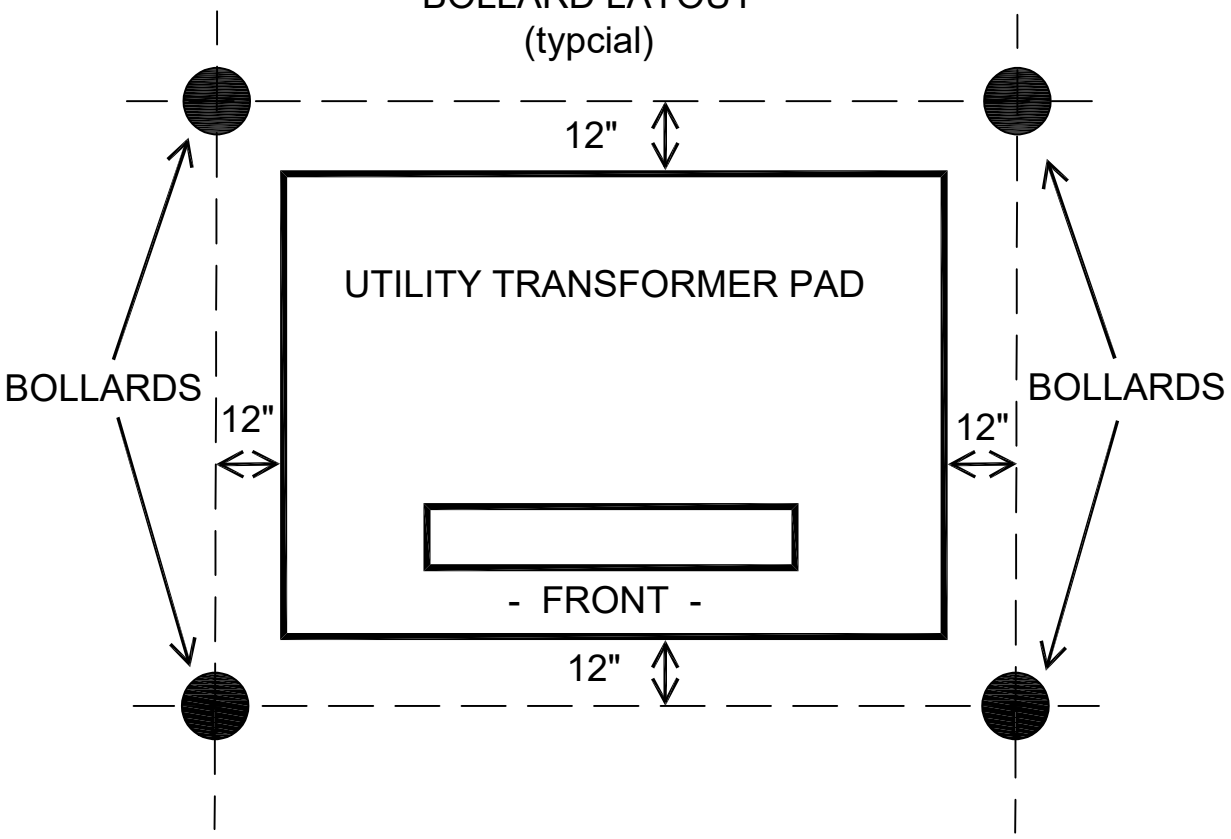
ROCHESTER PUBLIC UTILITIES

NO	REVISION	BY	DATE
0	ORIGINAL DRAWING	BJK	05/01/2017

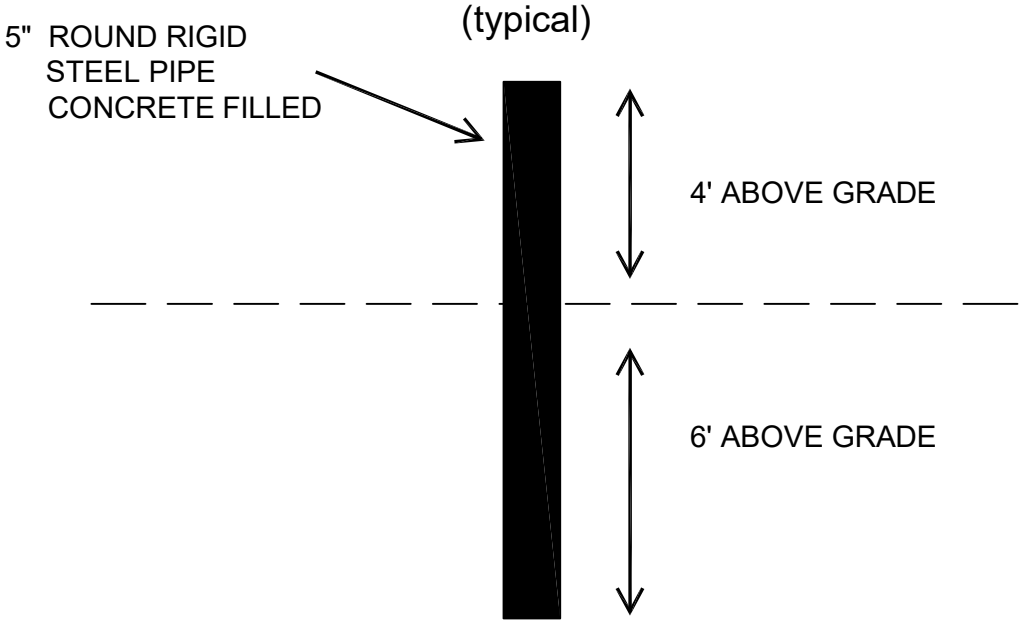
PAD-MOUNTED TRANSFORMER LOCATIONS (CONTINUED)

EXHIBIT 7 (Continued)

BOLLARD LAYOUT
(typcial)



BOLLARD DETAIL
(typical)



NOT TO SCALE

ROCHESTER PUBLIC UTILITIES

NO	REVISION	APPROVED BY	APPROVED DATE
BK	DRAWING CREATED	JSA	5/21

TRANSFORMER PROTECTION

EXHIBIT 7.1

EXHIBIT 8

RPU AND CUSTOMER RESPONSIBILITIES ASSOCIATED WITH NON-SINGLE FAMILY RESIDENTIAL UNDERGROUND INSTALLATIONS

RPU RESPONSIBILITIES

1. Designate service location and/or transformer location.
2. Supply and install pad-mounted transformer.
3. Make all primary terminations and connections.
4. Connect the customer's secondary cable to the secondary terminals of the transformer only after customer's wiring has been approved by the inspecting authority.
5. Energize the service only when authorized to do so by the inspecting authority.
6. Supply and install all primary cable at no cost to the customer after said customer furnishes and installs conduit for the entire distance from the property line to the transformer.
7. Supply and install one meter set for each customer, including all meters required for billing purposes and any accessories such as totalizers, current and potential transformers, phase-shifting transformers, test switches, and color code meter wiring.
8. Inspect customer-furnished equipment required by RPU. Installations not in compliance with RPU regulations will be rejected.

CUSTOMER RESPONSIBILITIES

1. Contact RPU to obtain the location and routing of RPU's facilities and to fill out an Application for Service, Load Data Sheet and any other forms or statements required by RPU.
2. Provide necessary easements and clear area of all construction obstructions.
3. Bring area to final grade before installation of cable and transformers. Grade changes requiring cable adjustments will result in charges to the party requiring the changes.
4. Compaction along conduit route after installation of conduit is the customer's responsibility.
5. Furnish and install a transformer pad and ground rod to RPU specifications. Contact RPU to obtain the pad specifications and transformer location (transformer location shall be truck accessible and within 15 feet of a paved surface) for the specific service being installed. Notify RPU to inspect formed pad prior to pouring concrete.
6. Provide a location for the transformer(s) that meets the clearance requirements of Exhibit 7.
7. Provide easy accessibility to area 24 hours a day.
8. Furnish and install all secondary cables, cabinets, and conduits from the transformer to the building service entrance.

EXHIBIT 8 - Continued

9. Furnish and install electrical conduit per RPU's specifications (typically schedule 40 PVC 4" or larger) with marking tape to the point of interconnection with RPU. All conduit shall be installed a minimum of 36" below final grade. All radiuses less than 60" shall be factory fabricated and shall be made of schedule 40 galvanized rigid metallic conduit. Minimum elbow (bend) radius shall be 36 inches. Furnish and install pull rope in conduit.
10. Install protective bollards if RPU facilities (i.e. transformer, junction cabinet, pad-mount switchgear, etc.) will be installed in parking area or area subject to vehicular traffic.
11. Protect RPU facilities from damage during construction period.
12. Have all required inspections of facility performed and approved.
13 Notify RPU prior to any proposed building or grade changes within 10 feet of the electrical service or the cable route.
14. Supply and install RPU approved meter socket on outside wall or approved location and install conduit for service cable.
15. Notify RPU as far in advance as possible when any unusual loads are anticipated, such as special medical equipment, arc welders, elevators, or any other equipment that could affect RPU's system or any other customer.
16. Pay all applicable RPU fees.

EXHIBIT 9

RPU AND CUSTOMER RESPONSIBILITIES ASSOCIATED WITH UNDERGROUND SINGLE FAMILY RESIDENTIAL DISTRIBUTION (URD) INSTALLATIONS

RPU RESPONSIBILITIES

1. Designate point of delivery or transformer location.
2. Supply and install all primary cable, transformer pads, and pad-mounted transformers.
3. Make all primary terminations and connections and install the grounding system.
4. Connect customer's secondary cables to RPU's point of delivery after customer's wiring has been approved by the inspecting authority.
5. Install the meter and any other meter accessories needed for billing purposes, excluding the meter socket.
6. Energize the service only when authorized to do so by the inspecting authority.
7. Supply and install secondary connection pedestals and secondary cable to the pedestals.

CUSTOMER RESPONSIBILITIES

1. Contact RPU to obtain the location of RPU's facilities and customer service point and to fill out an "Application for Service," and any other forms or statements required by RPU.
2. Provide necessary easements and clear area of all construction obstructions.
3. Bring area to final grade before installation of cable and transformers. Install grade stakes at all front lot line property corners. Grade changes requiring cable adjustments will result in charges to the party requiring the changes.
4. In new developments, install road crossing conduits per Exhibit 12 as designated by RPU in the general development specifications.
5. Allow RPU to install cable/conduit prior to installation of sidewalks, soil or lighting along cable route.
6. Compaction of customer installed (buried) cable is customer's responsibility. (RPU will compact all primary and secondary cable it buries.)
7. Provide firm soil conditions under the pad area to prevent settling of the pad.
8. Provide a location for the transformer or secondary pedestal that meets the clearance requirements outlined in Exhibit 7.
9. Protect RPU facilities from damage during construction period.
10. Provide easy accessibility to the area 24 hours a day.
11. Have wiring approved by inspecting authority and then request service connection by RPU.
12. Install protective bollards if RPU facilities (i.e. transformer, junction cabinet, pad-mount switchgear, etc.) will be installed in parking area or area of vehicular traffic.

EXHIBIT 9 – Continued

13. Notify RPU prior to any proposed building or grade changes within 10 feet of the electrical service or the cable route.
14. Notify RPU as far in advance as possible when any unusual loads are anticipated, such as special medical equipment, arc welders, elevators, or any other equipment that could affect RPU's system or any other customer.
15. Supply and install an RPU approved meter socket on outside wall.
16. Supply all secondary cable extending from the meter to the RPU designated point of interconnection (transformer or secondary pedestal).
17. Contact RPU two (2) business days in advance when a service is to be installed so that RPU can schedule the meeting to provide access to the power source and the contractor can install the service into the power source.
18. Pay all applicable RPU fees.

EXHIBIT 10

INSTALLATION GUIDELINES

Scheduling:

1. RPU will install underground electric facilities on a first come - first served basis. If for some reason the site is not ready for the installation on the scheduled date it will be rescheduled to the end of the queue.

2. New Commercial/Residential Subdivisions are typically installed as joint installations with other utilities. These installations are jointly scheduled by the utilities and our contractor once certain site conditions are met. If for some reason the site is not ready for installation of all facilities on the scheduled date the installation will be rescheduled to the end of the queue.

3. Installation in Unsuitable Backfill Material:

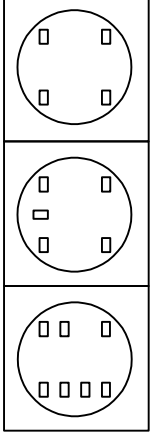
   The customer shall be required to pay an additional fee if unsuitable backfill material is encountered during the installation of RPU's facilities. The fee will be based on the cubic feet of unsuitable backfill material encountered by RPU or our contractor during installation. RPU may require that the Customer pay an estimated fee prior to performing the work.

4. Winter Installations:

   The customer shall be required to pay a per-foot additional fee for underground cable installation, at the customer's request, after frost has been established in the ground to an average depth of 6 inches or more. The amount of the frost fee depends on the depth of the frost. RPU may require that the estimated frost charges be paid in advance of performing work.

   Installations scheduled on or after the onset of frost will be attempted at the discretion of RPU, based on ground conditions.

Self-Contained



4 TERMINAL
120-240 VOLT, 277 VOLT
SINGLE PHASE

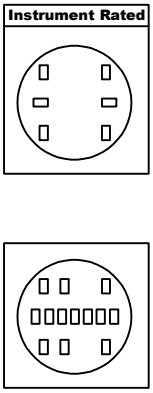
5 TERMINAL
120-208 VOLT
SINGLE PHASE
(Fifth Terminal needs to be located in the 9 O'Clock Position)

7 TERMINAL
120-208 VOLT
THREE PHASE, 4 WIRE
(Also 240 Volt, 4 Wire Delta)

SELF CONTAINED METERING NOTES:

1. **All self contained meter sockets must contain a lever bypass and will need to be purchased by the Customer or Electrician.**
2. **The maximum service size for a self contained metering application is 400A (Class 320 meter socket).**

Instrument Rated



6 TERMINAL
120-240 VOLT
SINGLE PHASE

13 TERMINAL
120-208, 240, 277-480 VOLT
THREE PHASE, 4 WIRE

INSTRUMENT RATED METERING NOTES:

1. **All instrument rated meter sockets will need to be purchased by the Customer or Electrician. RPU no longer sells meter sockets.**

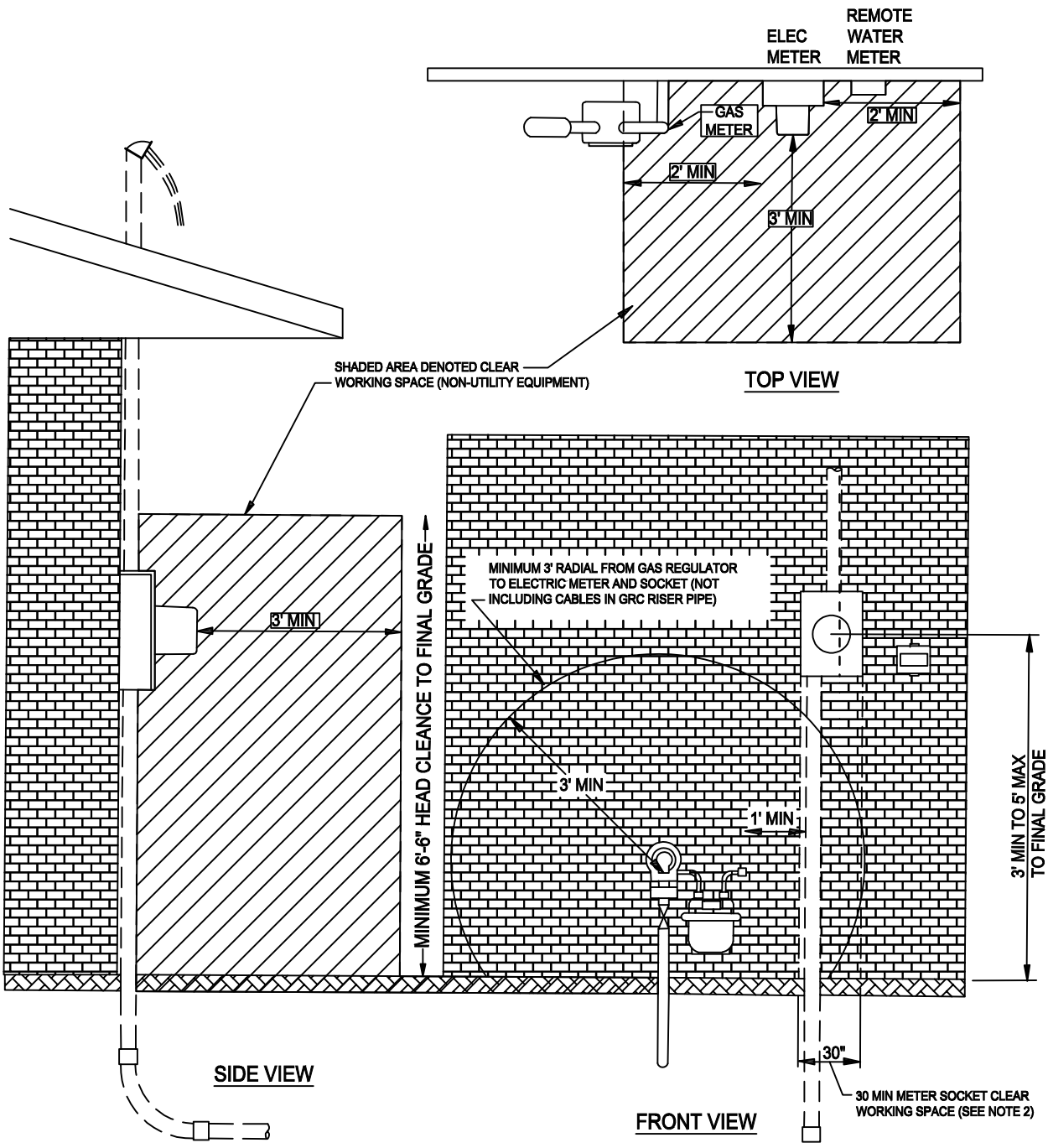
ROCHESTER PUBLIC UTILITIES

REVISION	BY	DATE
0 ORIGINAL DRAWING	BLK	05/01/2017
1 REMOVED 8 TERMINAL SOCKET	JSA	12/23

METER SOCKET TYPES

EXHIBIT 11.0

ISSUED ON: 12/23



NOTES:

1. A 30" wide clear working space (includes the meter socket) along with 3' of clear area in front of the meter is required for all non--utility owned equipment. This clear working space shall extend from the final grade up to the required 6'-6" headroom clearance. Obstructions that can hinder maintenance or reading of meters such as shrubs, stairways, window wells, or other debris are prohibited within this clear space.
2. Rochester Building Department requires all above ground gas piping materials to be installed outside of 30" meter socket working space (see drawing).
3. These clearances apply to both overhead and underground services.

ROCHESTER PUBLIC UTILITIES

NO	REVISION	BY	DATE
0	ORIGINAL DRAWING	BJK	05/01/2017

REQUIRED METER WORKING AND SAFETY CLEARANCES

EXHIBIT 11.1

ROCHESTER
PUBLIC UTILITIES
WE PLEDGE, WE DELIVER

RESOLUTION

BE IT RESOLVED by the Public Utility Board of the City of Rochester to adopt the revised 2024 Electric Service Rules and Regulations document, effective June 1, 2024.

PASSED AND ADOPTED BY THE PUBLIC UTILITY BOARD OF THE CITY OF

ROCHESTER, MINNESOTA, THIS 20th DAY OF February, 2024**.**

_____
PRESIDENT

_____
SECRETARY

ROCHESTER BOARDS & COMMISSIONS

REQUEST FOR ACTION

Itron Agreement

MEETING DATE:
February 20, 2024

ORIGINATING DEPT:
Rochester Public Utilities

AGENDA SECTION:
Regular Agenda

PRESENTER:
Mona Hoeft and Scott Nickels

Action Requested:

Approve a resolution authorizing an agreement with Itron, for professional services for the Advanced Metering Infrastructure (AMI) project.

Report Narrative:

At the June 27, 2023 meeting, the Board approved the project budget of $31,804,198 for Phase 1 of the AMI Project, which includes: advanced metering, meter data management, and meter installation services. This Itron contract is the first in a series of contracts that will be forthcoming for approval. This contract includes a suite of head-end software to manage the network, read schedules, events, endpoint configurations, administration and reporting, water and electric meters, network equipment, field tools, and professional services to train, configure, deploy, and test the solution for RPU.

This agreement is still being negotiated and approval at this stage is critical for the project to remain on schedule. Lead times for meters and network equipment are still long and this is the best mitigation strategy. The team is expecting to wrap up the final MSA and SOW within a couple weeks.

As for the project, Itron will begin by conducting discovery sessions, followed by building the software system integration upon execution of the contract. RPU plans for the pilot to run from July 2025 to October 2025 for 500 electric meters and 50 water meters, with full deployment following a successful testing period. This project requires a significant amount of coordination amongst all AMI partners.

As it stands, between professional services and equipment, the value of this contract is about $19,000,000, and is subject to annual price increases. This is in line with the proposal submitted in October 2022 as a result of the Request for Proposal. The overall cost has the potential to change, as the requirements for each integration are being built. For this reason, staff will manage the project costs against the overall budget rather than each individual contract.

The RPU team has taken into consideration a number of risk mitigation strategies to ensure project success. These include:

- Hiring consultants who have direct, extensive and successful experience implementing and supporting AMI systems.
- Establishing clear definition and documentation of project goals, timelines and technical architecture. These documents will be incorporated into each agreement.
- Ensuring clear definition and documentation of roles and responsibilities of all parties involved.

- Hiring the same legal firm used by Dakota Electric, which specializes in technology agreements.
- Introducing contract language that limits price increases and a liquidated damage clause for failure to perform.

Prior Legislative Actions & Community Engagement:

Water and Electric AMI Project Approval: 6/27/23
AMI, MDM and Meter Install Procurements: RFP Analysis and Project Status Report 5/30/23
RPU AMI Implementation Project Plan: 5/24/23
AMI, MDM and Meter Install Procurements: Project Status Report 11/29/22

Fiscal & Resource Impact:

This request is part of the AMI project that was approved by the Board on June 27, 2023. Funding has been allocated through the budget process.

Prepared By:

Mona Hoeft

Attachments:

20240220 Resolution - Itron Agreement

ROCHESTER
PUBLIC UTILITIES
WE PLEDGE, WE DELIVER

RESOLUTION

BE IT RESOLVED by the Public Utility Board of the City of Rochester to approve an agreement with Itron for professional services and equipment for initial implementation of the Advanced Metering Infrastructure (AMI) project, subject to final review and approval by the General Manager and City Attorney, and authorize the RPU project manager to perform the acts to execute the project within the approved budget.

PASSED AND ADOPTED BY THE PUBLIC UTILITY BOARD OF THE CITY OF

ROCHESTER, MINNESOTA, THIS 20th DAY OF February, 2024**.**

_____
PRESIDENT

_____
SECRETARY

REQUEST FOR ACTION

Technology Assessment Presentation from 1898 & Co.

MEETING DATE:
February 20, 2024

ORIGINATING DEPT:

AGENDA SECTION:
Informational

PRESENTER:

Action Requested:
No action required. Informational only.

Prepared By:
Jeremy Sutton

Attachments:

ROCHESTER BOARDS & COMMISSIONS

REQUEST FOR ACTION

RPU Index of Board Policies

MEETING DATE:
February 20, 2024

ORIGINATING DEPT:
Rochester Public Utilities

AGENDA SECTION:
Board Policy Review

PRESENTER:
Tim McCollough

Action Requested:
Review the Index of Board Policies to summarize progress on policy updates and determine future policy review items.

Report Narrative:
RPU Board policies are updated throughout the year as needed.

Prepared By:
Christina Bailey

Attachments:
Index of Board Policies-revised.xlsx

ROCHESTER PUBLIC UTILITIES				
INDEX OF BOARD POLICIES				
	REVISION DATE	FOCUS AREA / STAFF LIAISON	ANTICIPATED REVISION TIME PERIOD	TARGET COMPLETION DATE
BOARD				
1. Mission Statement	4/25/2023	Policy / Tim McCollough		
2. Responsibilities and Functions	9/26/2023	Policy / Tim McCollough		
3. Relationship with the Common Council	2/28/2012	Policy / Tim McCollough		
4. Board Organization	3/27/2018	Policy / Tim McCollough		
5. Board Procedures	9/27/2022	Policy / Tim McCollough	Q2 2024	4/30/2024
6. Delegation of Authority/Relationship with Management	11/28/2023	Policy / Tim McCollough		
7. Member Attendance at Conferences and Meetings	12/18/2018	Policy / Tim McCollough		
8. Board Member Expenses	12/18/2018	Policy / Tim McCollough		
9. Conflict of Interest	DELETED	N/A		
10. Alcohol and Illegal Drugs	DELETED	N/A		
11. Worker Safety	3/27/2012	Policy / Tim McCollough		
CUSTOMER				
12. Customer Relations	4/30/2019	Ops & Admin / Krista Boston		
13. Public Information and Outreach	4/30/2019	Communications / Steven Nyhus		
14. Application for Service	7/1/2016	Ops & Admin / Scott Nickels		
15. Electric Utility Line Extension Policy	3/28/2017	Finance / Peter Hogan		
16. Billing, Credit and Collections Policy	4/26/2022	Finance / Peter Hogan		
17. Electric Service Availability	10/29/2019	Ops & Admin / Scott Nickels		
18. Water and Electric Metering	6/26/2018	Ops & Admin / Scott Nickels		
19. Adjustment of Utility Services Billed	6/29/2021	Finance / Peter Hogan		
20. Rates	7/25/2017	Finance / Peter Hogan		
21. Involuntary Disconnection	9/28/2021	Communications / Steven Nyhus		
ADMINISTRATIVE				
22. Acquisition and Disposal of Interest in Real Property	12/19/2017	Ops & Admin / Scott Nickels		
23. Electric Utility Cash Reserve Policy	1/28/2020	Finance / Peter Hogan		
24. Water Utility Cash Reserve Policy	1/28/2020	Finance / Peter Hogan		
25. Charitable Contributions	6/25/2019	Communications / Steven Nyhus		
26. Utility Compliance	10/24/2017	Communications / Steven Nyhus		
27. Contribution in Lieu of Taxes	6/29/1999	Finance / Peter Hogan		
28. Joint-Use of Infrastructure and Land Rights	3/30/2021	Ops & Admin / Scott Nickels		
29. Customer Data Management Policy	3/22/2022	Communications / Steven Nyhus	Q3 2024	9/30/2024
30. Life Support	9/24/2019	Communications / Steven Nyhus		
31. Electric Utility Undergrounding Policy	9/29/2020	Ops & Admin / Scott Nickels	Q3 2024	7/31/2024
Red - Currently being worked on				
Yellow - Will be scheduled for revision				
Marked for deletion				

REQUEST FOR ACTION

General Manager's Report for February 2024

MEETING DATE:
February 20, 2024

ORIGINATING DEPT:
Rochester Public Utilities

AGENDA SECTION:
General Managers Report

PRESENTER:

Prepared By:
Tim McCollough

Attachments:
20240220 GM Report Board Packet.pdf

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General Manager's Report
February 2024

Meeting Reports & Current Activity

- SMMPA Board Meeting Report
- College Career Fair Recruitment
- Interim Power Resources Director
- ESGR Patriot Award
- Leadership Greater Rochester Presentation
- Project Status Updates

Southern Minnesota Municipal Power Agency

Board Meeting Report


ROCHESTER
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ELECTRICAL ENGINEER
Will start out in our electric distribution group performing distribution planning studies and designing improvements to our electric distribution system.
PROJECT ENGINEER
SUBSTATION AND CONTROLS
Engineer with 3+ years of experience in design of physical layout and control systems for electrical substations or similar facilities.
SENIOR ENGINEER
SUBSTATION AND CONTROLS
Professional Engineer with 5+ years of experience in design of physical layout and control systems for electrical substations or similar facilities.
SUPERVISOR
SUBSTATION ENGINEERING
Professional Engineer with 5+ years of experience with electrical substations or similar facilities and 3+ years of supervisory/management/leadership experience.
ENGINEERING SUMMER INTERN
Preferred Candidate will be enrolled in a 4+ year engineering degree program and an interest in Utility Electric or WaterSystems.
CITY OF ROCHESTER, MN
CAREER OPPORTUNITIES
ROCHESTER PUBLIC UTILITIES
www.rpu.org
4000 E RIVER RD NE
ROCHESTER, MN 55906
ROCHESTER PUBLIC UTILITIES
WE PLEDGE, WE DELIVER™
CAREER OPPORTUNITIES
ENGINEERING DEPARTMENT
SERVICE TERRITORY 61 SQUARE MILES
59,000 ELECTRIC CUSTOMERS
SUBSTATIONS 12
SYSTEM ELECTRICAL PEAK DEMAND
300 MW
ROCHESTER PUBLIC UTILITIES
ENGINEERING DEPARTMENT
12 TEAM MEMBERS
DEGREED ENGINEERS 9
5 HOLD A PROFESSIONAL ENGINEER LICENSE AS A
ROCHESTER, MINNESOTA
TRANSMISSION
42 MILES OF 161,000 VOLT
20 ACTIVE WATER TOWERS
31 ACTIVE WELLS
SYSTEM PEAK WATER DEMAND
30.2 MGD


Rochester Public Utilities
CAREER OPPORTUNITIES
ROCHESTER PUBLIC UTILITIES
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MMC CONTRACTORS
ROCHESTER PUBLIC UTILITIES
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Interim Director of Power Resources

Tony Dzubay

Lani Towne
Employer's Support of Guard & Reserves (ESGR) Patriot Award

The Patriot Award reflects the efforts made to support citizen warriors through a wide-range of measures including flexible schedules, time off prior to and after deployment, caring for families, and granting leaves of absence if needed.

Leadership Greater Rochester Presentation

MAJOR PROJECT UPDATES		% BUDGET	% COMPLETE
	Marion Road Substation and Duct	89	70
	Advanced Metering Infrastructure (AMI)	0.5	0

Marion Road Substation & Associated Projects

Description: Drone footage of the new electric distribution substation in SE Rochester

ROCHESTER PUBLIC UTILITIES
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Project Overview

PROJECT SUMMARY:

This project has three major segments (Substation, Transmission, and Conduit Systems). All three segments have experienced challenges partially due to supply and labor shortages following COVID19. The Substation and Transmission are nearing completion with all major equipment on site and installed. The conduit system is approximately 2 miles long and the last segment has encountered a work stoppage due to a Cultural Heritage Site.

ACCOMPLISHMENTS:

- ✓ All Transmission Poles Installed
- ✓ Substation Transformers Tested
- ✓ All Major Substation Equipment On Site
- ✓ Fiber Optic Cable installed to Willow Creek Substation (*not tested*)
- ✓ Received RR Crossing Permit for 9th Street SE Work

PROJECT DASHBOARD

PROJECT STATUS

PROJECT MANAGER

Steven Cook & Neil Stiller

EXECUTIVE SPONSOR

Scott Nickels

DATE

1/30/2024

ROCHESTER PUBLIC UTILITIES
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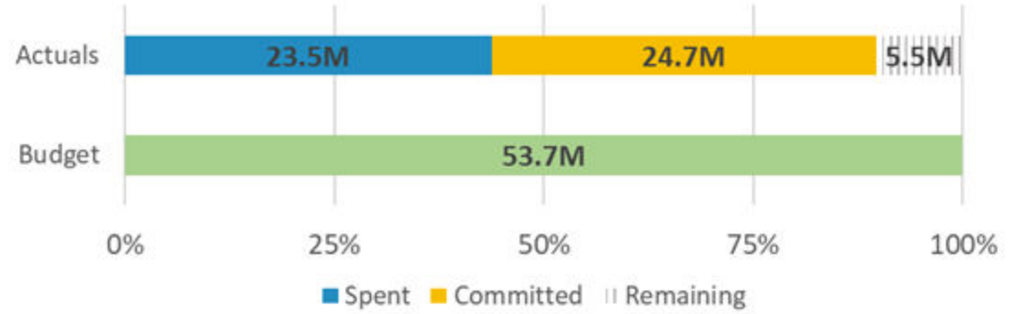
SCHEDULE

Project Start Date	2018
Baseline Finish Date	January 2025
Estimated Finish Date	June 2026

FINANCIALS



% BUDGET

89%

% COMPLETE

70%

EXECUTION TIMELINE

KEY RISKS & ISSUES

No.	Description	Severity	Impact	Status
S1	MISO model update approved	Med	Schedule	Open
D1	Cultural Heritage Site	High	Budget/Schedule	Open

UPCOMING MAJOR MILESTONES

July 2024 Energization of Substation

July 2024 Energizing two feeders out of Substation to serve SE Rochester Load

PROJECT STATUS DESCRIPTION

Based on the potential need to reroute a section of the duct bank, this project is marked as caution until the full schedule and scope impacts of a potential reroute are known. There is $5.5M of remaining budget to cover a potential reroute.

Advanced Metering Infrastructure Project

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Project Overview

PROJECT SUMMARY:

The project involves three main parts - Advanced Metering Infrastructure (AMI), Meter Data Management (MDM), and the joint effort of RPU personnel and the Meter Installation Vendor (MIV) to replace 60,000 electric and 40,000 water endpoints. The replacement will take place over a period of three years, starting in the fall of 2025.

ACCOMPLISHMENTS:

- ✓ RFPs have been completed for AMI, MDM, and MIV.
- ✓ Product demonstrations have been held.
- ✓ A preferred best in breed solution has been selected.
- ✓ Multiple contract negotiations are nearing completion.
- ✓ A project timeline has been established.

PROJECT DASHBOARD

PROJECT STATUS

PROJECT MANAGER

Util-Assist

EXECUTIVE SPONSOR

Scott Nickels

DATE

2/20/2024

ROCHESTER PUBLIC UTILITIES
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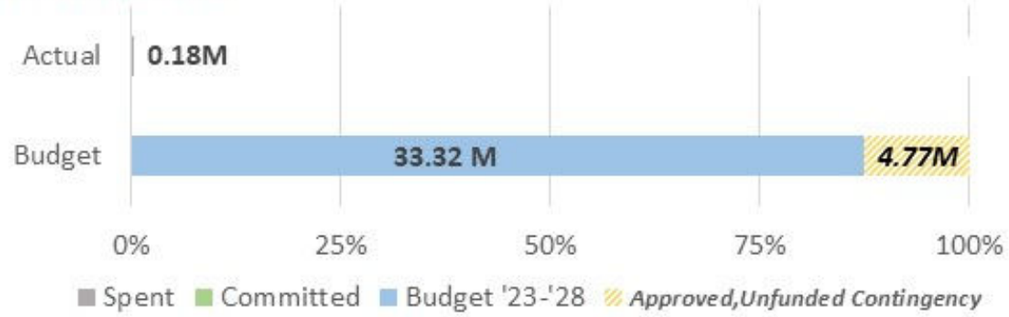
SCHEDULE

Project Start Date	October 2023
Baseline Finish Date	December 2028
Estimated Finish Date	December 2028

FINANCIALS



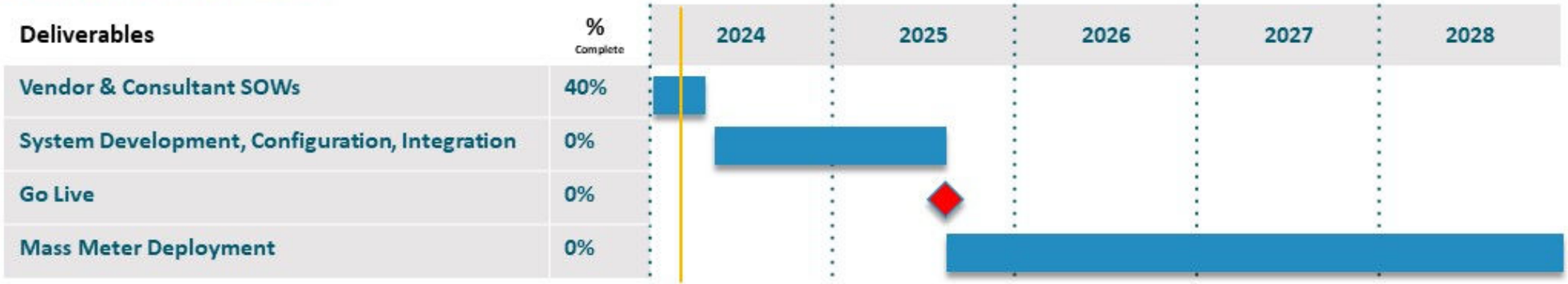
% BUDGET

0.5%

% COMPLETE

0%

EXECUTION TIMELINE



KEY RISKS & ISSUES

No.	Description	Severity	Impact	Status
1	Meter Delivery	High	Schedule/Budget	Open
2	System Integration	High	Schedule/Budget	Open
3	Water Meter Deployment-Residence Entrance	Medium	Schedule/Budget	Open

UPCOMING MAJOR MILESTONES

April 2024 SOWs Complete

May 2024 Kickoff Project Workshops

PROJECT STATUS DESCRIPTION

Currently reviewing SOWs from multiple vendors and building an internal SME project team.

What's Ahead

Mon, Feb 26 – Wed, Feb 28	APPA Legislative Rally	Washington, DC
Wed, Mar 6 – Fri, Mar 8	The Energy Authority (TEA) Energy Symposium	Atlantic Beach, FL
Wed, Mar 13	SMMPA Board Meeting	RPU
Thu, Mar 14	RPU Employee Recognition Breakfast	RPU
Sun, Mar 17 – Tue, Mar 19	APPA CEO Roundtable	Pasadena, CA
Tue, Mar 26 – Wed, Mar 27	MMUA Legislative Conference	St Paul, MN
Wed, Mar 27	***RPU Board Meeting***	**RPU**
Wed, Apr 10	SMMPA Board Meeting	St Peter, MN
Fri, Apr 26	Arbor Day Celebration	
Tue, Apr 30	**RPU Board Meeting**	**RPU**
Thu, May 9	SMMPA Board Meeting	Grand Marais, MN
Tue, May 21	***RPU Board Meeting***	**RPU**
Sun, Jun 9 – Wed, Jun 12	APPA National Conference	San Diego, CA
Thu, Jun 13	SMMPA Board Meeting	Spring Valley, MN
Tue, Jun 25	**RPU Board Meeting**	**RPU**

QUESTIONS

ROCHESTER BOARDS & COMMISSIONS

REQUEST FOR ACTION

Division Reports and Metrics - February 2024

MEETING DATE:
February 20, 2024

ORIGINATING DEPT:
Rochester Public Utilities

AGENDA SECTION:
Division Reports & Metrics

PRESENTER:
Tim McCollough

Action Requested:
Review the reports from each of RPU's five divisions: Core Services, Compliance and Public Affairs, Power Resources, Customer Relations and Corporate Services.

Report Narrative:
Each division of RPU reports monthly on its metrics and activities to the Board.

Prepared By:
Christina Bailey

Attachments:
Division Report February 2024.pdf

Division Reports & Metrics
February 2024

CORE SERVICES
SAFETY, COMPLIANCE & PUBLIC AFFAIRS
POWER RESOURCES
CUSTOMER RELATIONS
CORPORATE SERVICES
FINANCIAL REPORTS

Division Reports & Metrics
February 2024

CORE SERVICES

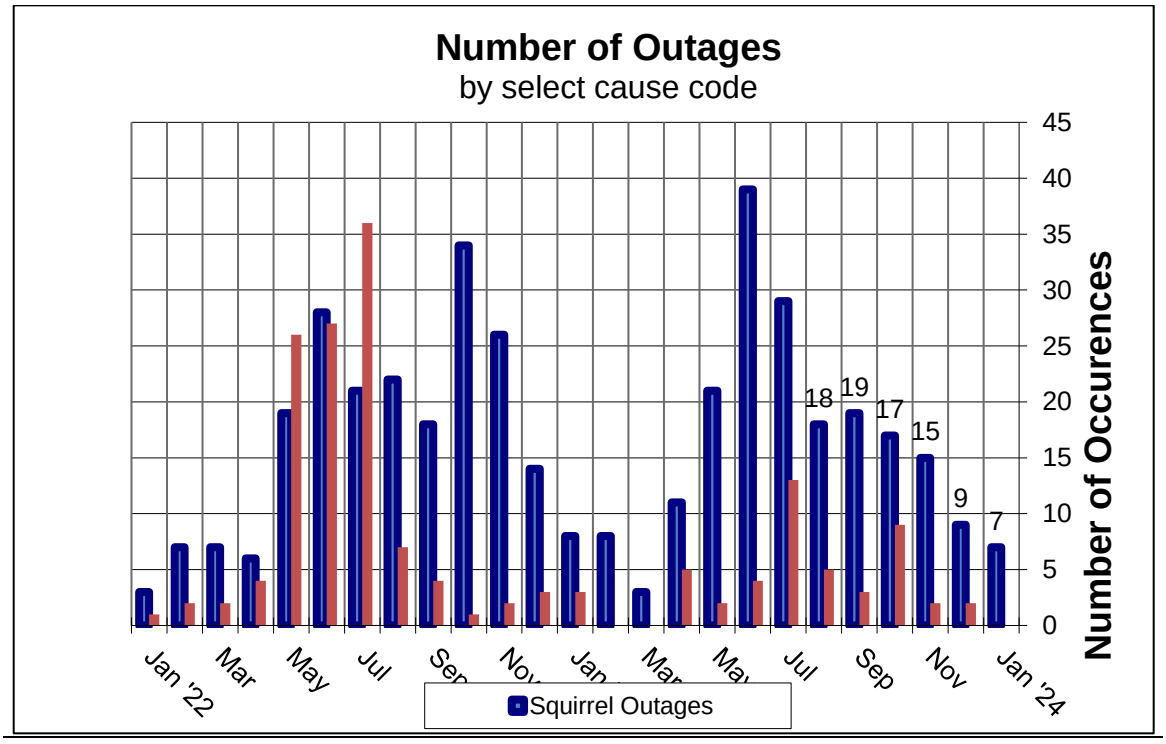
Electric Utility:

1. **Electric Outage Calculations for the month and year to date (January 2024 Data)**

a.	Reliability = 99.99948%	Year-to-date Reliability = 99.99948%
b.	245 Customers affected by outages	Year-to-date Customers affected by outages = 245
c.	SAIDI = 0.23 min	Year-to-date SAIDI = 0.23 min
d.	CAIDI = 54.17 min	Year-to-date CAIDI = 54.17 min

2. **Electric Utility Operations – T&D, Engineering, System Ops, GIS, Tech Services**:

- The Line Crew, System Operations, and GIS staff participated in a winter readiness tabletop drill based on past RPU winter outage events. For training purposes, the newer staff in these areas were tasked with responding to the drill scenarios, identifying the required safety protocols, remediation steps, and materials required to perform each system restoration step. Leading the scenarios were senior staff from each work area acting as advisors, mentors, and trainers.
- The field data collection portion of the pole attachment inventory survey and NESC audit on overhead facilities was completed in January. Of the 12,446 poles surveyed, 7035 require attachment verification, and 3,515 require NESC mitigation action. Existing joint attachment companies will contribute 64% of the cost of the field data collection. Annual rental revenue adjustments, along with back invoicing of newly found unbilled attachments, will be determined after validation activities are compete in 2024.
- Reliability statistics were positively impacted by the lack of severe weather in January.



Summary of individual electrical outages (greater than 200 customers - Jan 2024 data)

# Customers	Date	Duration	Cause
None			

Summary of aggregated incident types (greater than 200 customers – Jan 2024 data)

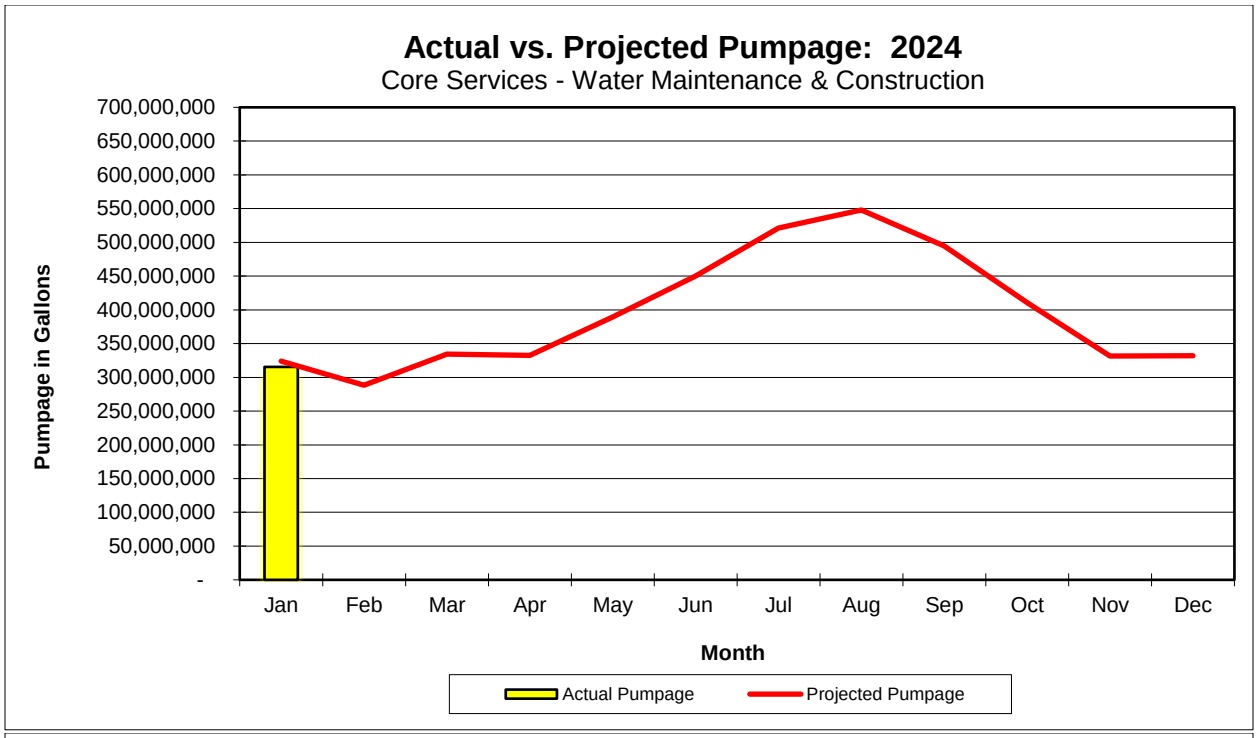
# Customers	Total # of Incidents	Cause
None		

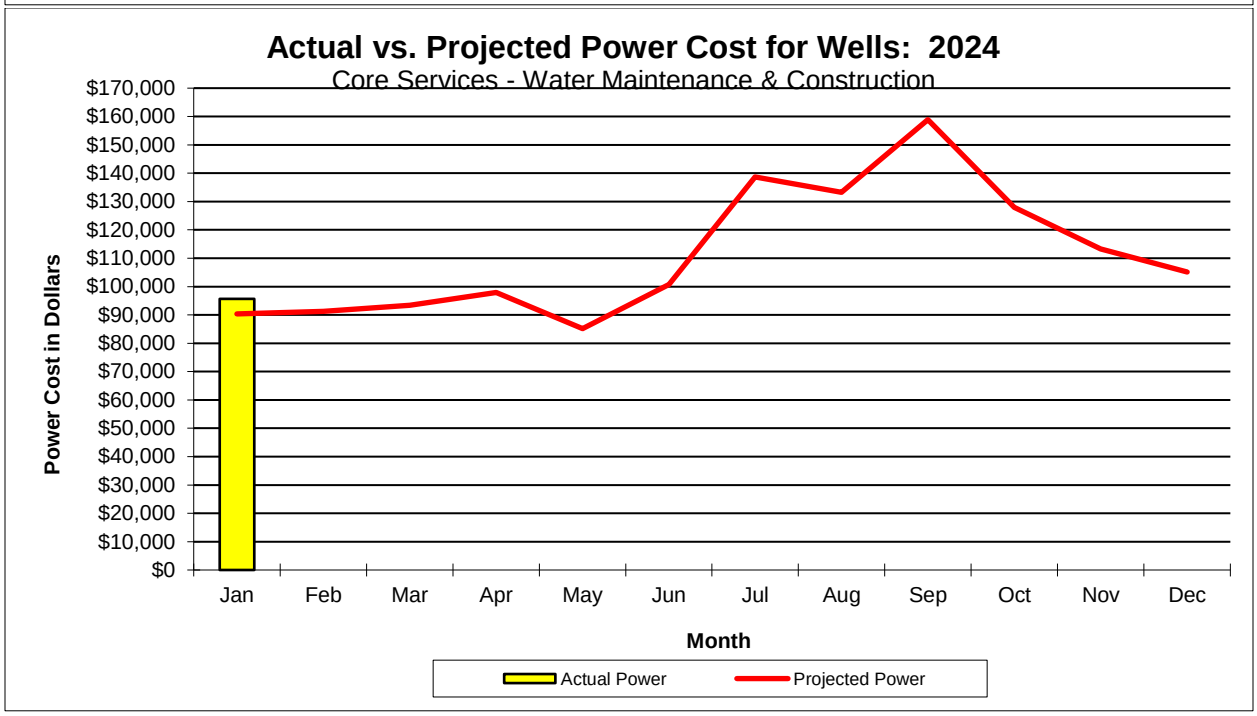
Water Utility:

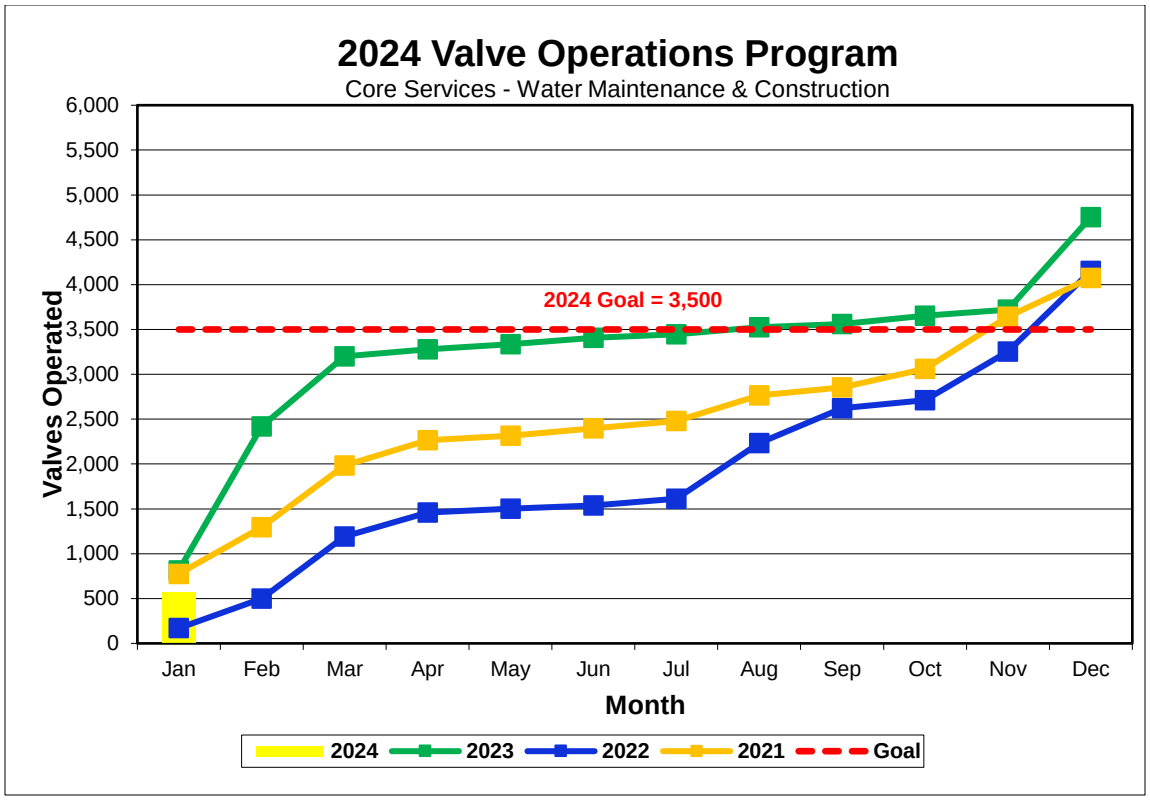
1. **Water Outage Calculations for the month and year to date (January 2024 data):**

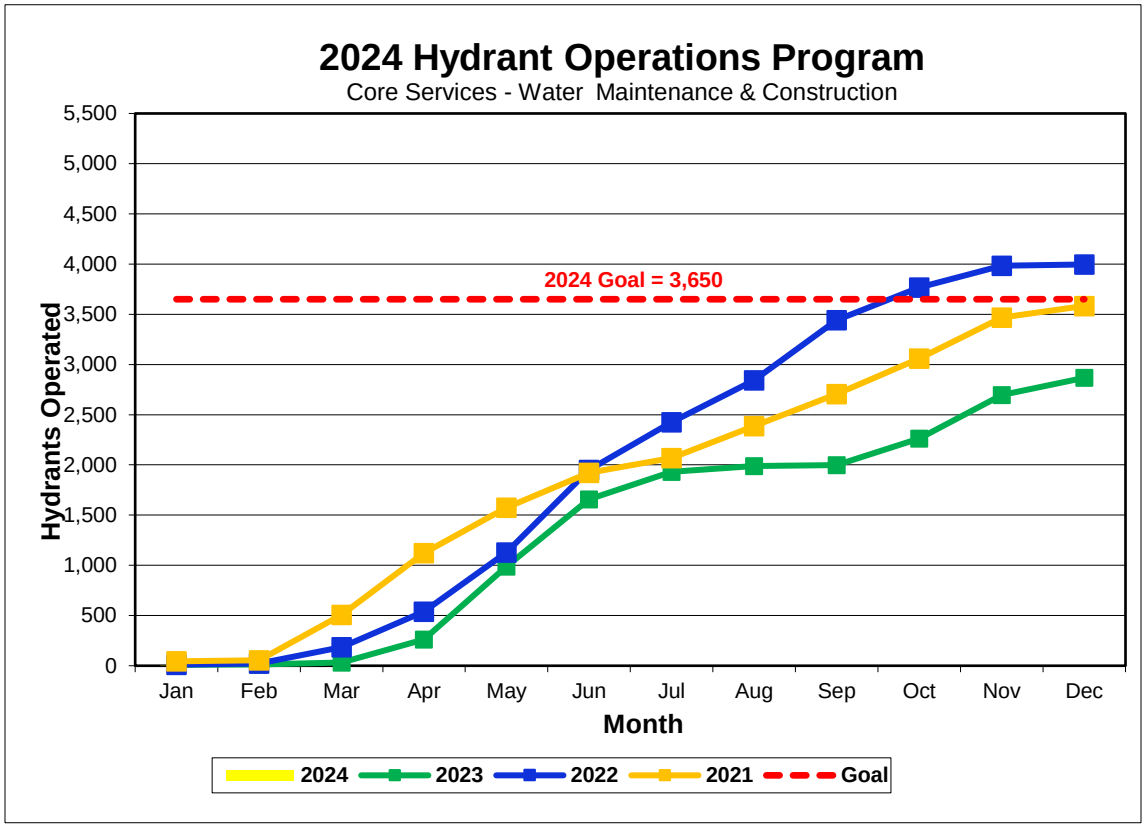
a.	Reliability = 99.99769876%	Year-to-date Reliability = 99.99769892%
b.	231 Customers Affected by Outages	Year-to-date Customers Affected by Outages = 231
c.	716.3 Customer Outage Hours	Year-to-date Customer Outage Hours = 716.3
d.	SAIDI = 1.0	Year-to-date SAIDI = 1.0
e.	CAIDI = 186.1	Year-to-date CAIDI = 186

- Performed 178 Gopher State water utility locates during the month for a total of 178 for the year.
- Repaired water distribution system failures or maintenance at the following locations during the month:
  - 2528 18th Ave NW – (Water Main Break) – 1/2
  - 18th St & 3rd Ave SW – (Water Main Break) – 1/4
  - 820 33rd St NW – (Water Main Break) – 1/4
  - 1541 5th Ave NE – (Water Main Break) – 1/9
  - 518 16th St SW – (Water Main Break) – 1/12
  - 1601 11th Ave NE – (Water Main Break) – 1/16
  - 9 18th Ave NW – (Water Main Break) – 1/22
  - 2622 Salem Rd SW – (Leak) – 1/24
  - 1039 Sierra Ln NE – (Water Main Break) – 1/26
  - Sierra Ln & 11th Ave NE – (Leak) – 1/29
  - 2207 7th St NW – (Water Main Break) – 1/31


Actual vs. Projected Pumpage: 2024
Core Services - Water Maintenance & Construction
Pumpage in Gallons
700,000,000
650,000,000
600,000,000
550,000,000
500,000,000
450,000,000
400,000,000
350,000,000
300,000,000
250,000,000
200,000,000
150,000,000
100,000,000
50,000,000
-
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month
Actual Pumpage
Projected Pumpage


Actual vs. Projected Power Cost for Wells: 2024
Core Services - Water Maintenance & Construction
Power Cost in Dollars
$170,000
$160,000
$150,000
$140,000
$130,000
$120,000
$110,000
$100,000
$90,000
$80,000
$70,000
$60,000
$50,000
$40,000
$30,000
$20,000
$10,000
$0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month
Actual Power
Projected Power


2024 Valve Operations Program
Core Services - Water Maintenance & Construction
Valves Operated
6,000
5,500
5,000
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
2024 Goal = 3,500
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month
2024
2023
2022
2021
Goal


2024 Hydrant Operations Program
Core Services - Water Maintenance & Construction
Hydrants Operated
5,500
5,000
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
2024 Goal = 3,650
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month
2024
2023
2022
2021
Goal

SAFETY / COMPLIANCE & PUBLIC AFFAIRS
January 2024

1. Safety

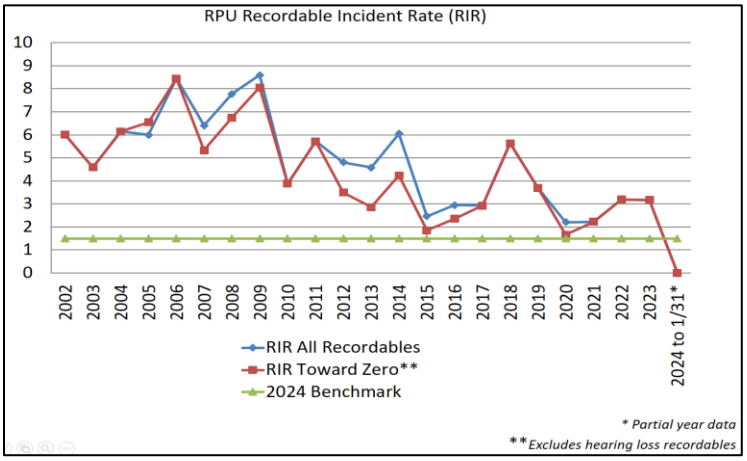
TRAINING	Total Required Enrollments	Completions as of 1/31/2024	Percent Complete
January 2024	411	411	100%
Calendar Year to 1/31/2024	411	411	100%

SAFETY TEAMS	Total Members	Members Attending	Percent Attending
January 2024	33	26	78.8%
Calendar Year to 1/31/2024	33	26	78.8%

INCIDENTS	Reports Submitted	OSHA Cases[1]	RPU RIR[2]	BLS RIR[3]
January 2024	3	0	--	--
Calendar Year to 1/31/2024	3	0	--	1.5

1	Deemed to meet OSHA criteria as a recordable case by RPU Safety Manager, subject to change
2	Recordable Incident Rate – Number of OSHA Recordable Cases per 100 employees.
3	Bureau of Labor Statistics nonfatal illnesses and injuries in the utility sector

24 of RPU's 24 departments are recordable injury free in 2024
207 of RPU's 207 teammates are recordable injury free in 2024



2024 OSHA Recordable Case Detail				
Work Area	Incident Date	Description	Primary Reason it's a Recordable	Corrective Action
--	--	--	--	--

SAFETY INITIATIVES

1. Completed annual AWAIR program training for all staff.
2. Switched to using Teams for all safety team notifications and recordkeeping including agendas and minutes.
3. Implemented incident follow-up meetings involving applicable leadership staff with the goal of better identifying corrective actions to be implemented.

2. Environmental & Regulatory Affairs

- On January 16th RPU submitted the water use fee to the DNR. RPU pumped 4.9 billion gallons of water in 2023, an increase of 500 million gallons from 2022.
- On February 2nd RPU & Barr Engineering completed an evaluation on potential impacts to Cascade Creek from RPU's groundwater pumping. DNR required this evaluation to approve groundwater withdrawals for RPU well 43.

3. Communications

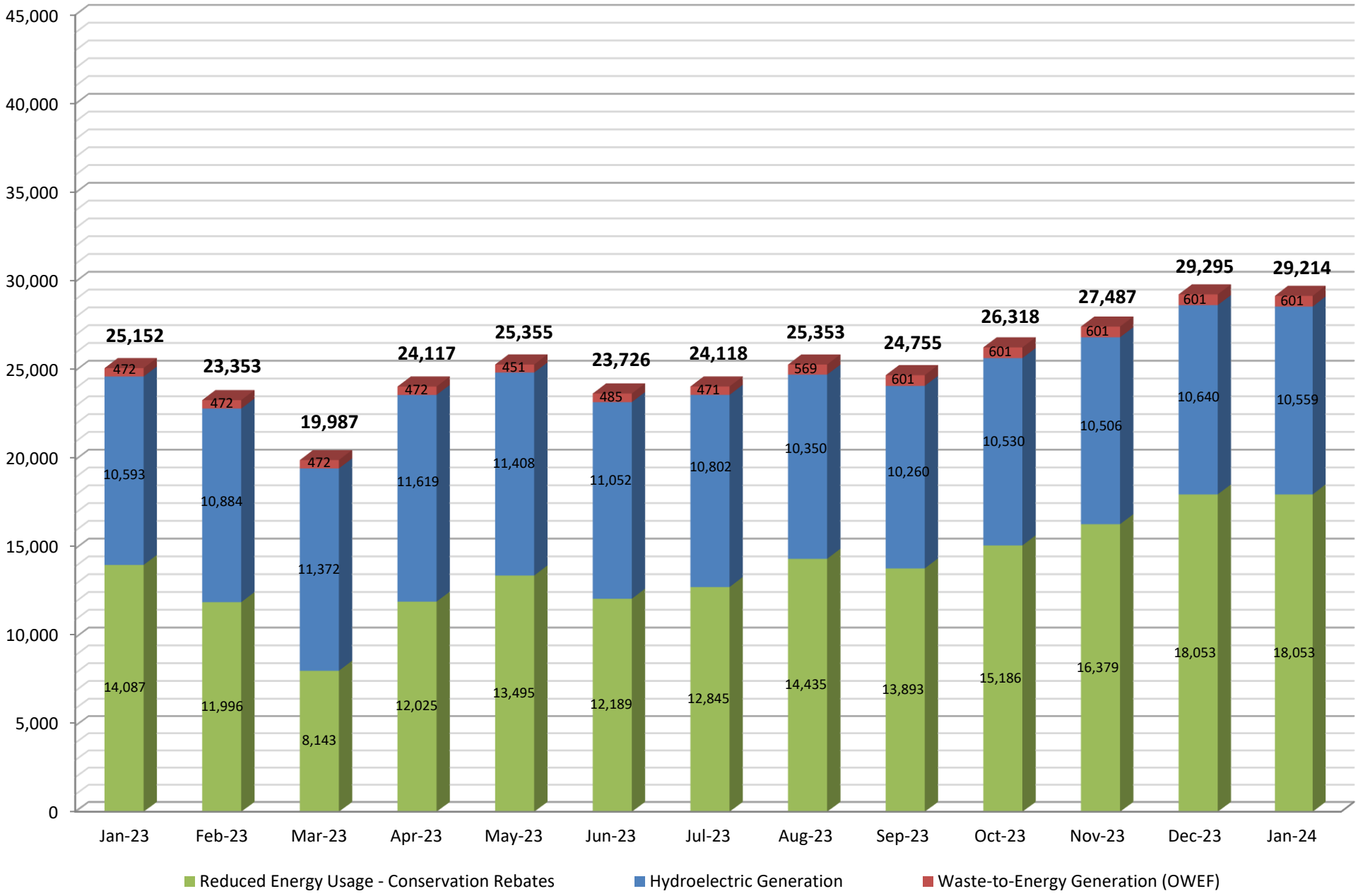
- RPU was asked by SPARK Children's Museum to participate in "I Love to Read" month. Jerrod Klug signed up to be the guest reader for RPU.
- RPU spoke with local news agencies about the importance of shoveling around hydrants and transformers for access this winter. This will also be featured in the upcoming edition of Plugged In.
- We submitted RPU's application to participate in the Rochesterfest Parade in June.


Performance
Daily
Cumulative
Reach
5.8K ↓ 3.4%
Content interactions
287 ↑ 13.9%
Followers
Lifetime
4K
Link clicks
32 ↑ 966.7%
6,000
4,000
2,000
0
Jan 16
Jan 26
Feb 5
Reach
From organic
From ads
Reach breakdown
Total
5,770 ↓ 3.4%
From organic
5,661 ↓ 2.9%
From ads
0 0%

RPU Environmental Stewardship Metric

Tons CO_2 Saved

(12 Month Rolling Sum)



POWER RESOURCES MANAGEMENT

Portfolio Optimization

1. In January, RPU continued to bid GT1, GT2 and WES into the MISO day-ahead and real-time markets. GT2 and WES are also capable of participating in the ancillary services market.

    a. Ancillary Service Market – Supplemental Reserves
        i. Cleared DA
            1. GT2 – 19 days
            2. WES – 20 days
        ii. Deployment YTD
            1. GT2 – 0
            2. WES – 0

    b. Dispatched by MISO

i. GT1 –	0 times	YTD	0 times
ii. GT2 –	6 times	YTD	6 times
iii. WES –	12 times	YTD	12 times

    c. Hours of Operation

i. GT1 –	0 hours	YTD	0 hours
ii. GT2 –	31 hours	YTD	31 hours
iii. WES –	81 hours	YTD	81 hours

    d. Electricity Generated

i. GT1 –	0 MWh	YTD	0 MWh
ii. GT2 –	861 MWh	YTD	861 MWh
iii. WES –	2,199 MWh	YTD	2,199 MWh

    e. Forced Outage

i. GT1 –	0 hours	YTD	0 hours
ii. GT2 –	0 hours	YTD	0 hours
iii. WES –	48 hours	YTD	48 hours

2. MISO market Real Time Price averaged $42.62/MWh and Day Ahead Price averaged $45.09/MWh.

CUSTOMER RELATIONS

(Contact Center, Utility Programs and Services, Commercial and Residential)

Stakeholder Engagement, Forums, and Meetings

1. Utility Programs and Services hosted a booth in the 2024 Rochester Area Builder's Home Show the weekend of February 2-4. The booth focused on our energy and water conservation programs. There were rebate applications and other handouts available. Sixteen staff members from across the utility volunteered their time over the weekend to work in the booth.

2. The Utility Programs and Services Manager (Patty Hanson) participated in a panel discussion highlighting commercial sustainability through our programs at a Leadership Greater Rochester event held on Thursday, February 15.

Events/Opportunities for Customers

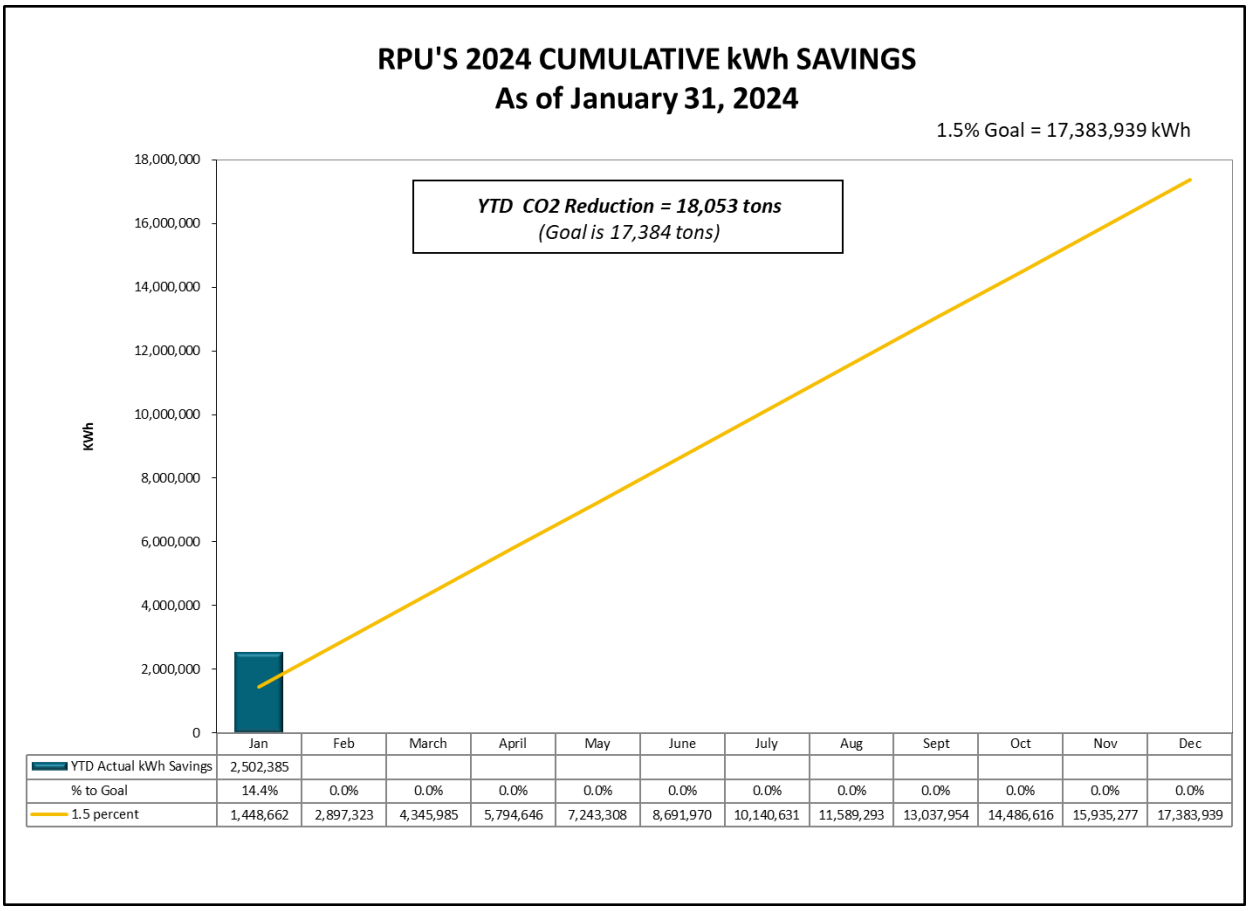
1. Utility Programs and Services held a Neighborhood Energy Challenge workshop with Community Education on Saturday, January 27. There were 16 households in attendance.

2. RPU collected holiday lights from customers again this year for recycling. This event ran from November 1 through January 31. This year RPU, with the help of the hard work of Bob Rickard and Nick Winkels in Facilities, recycled 4,354 pounds of holiday lighting, the most since we started the program in 2011! Here is a look at what RPU has collected over the years:

Year	Pounds Recycled
2011	4,500
2012	2,037
2013	873
2014	1,493
2015	1,578
2016	2,042
2017	1,820
2018	3,199
2019	2,922
2020	3,027
2021	2,425
2022	2,814
2023	4,354
TOTAL	**33,084**

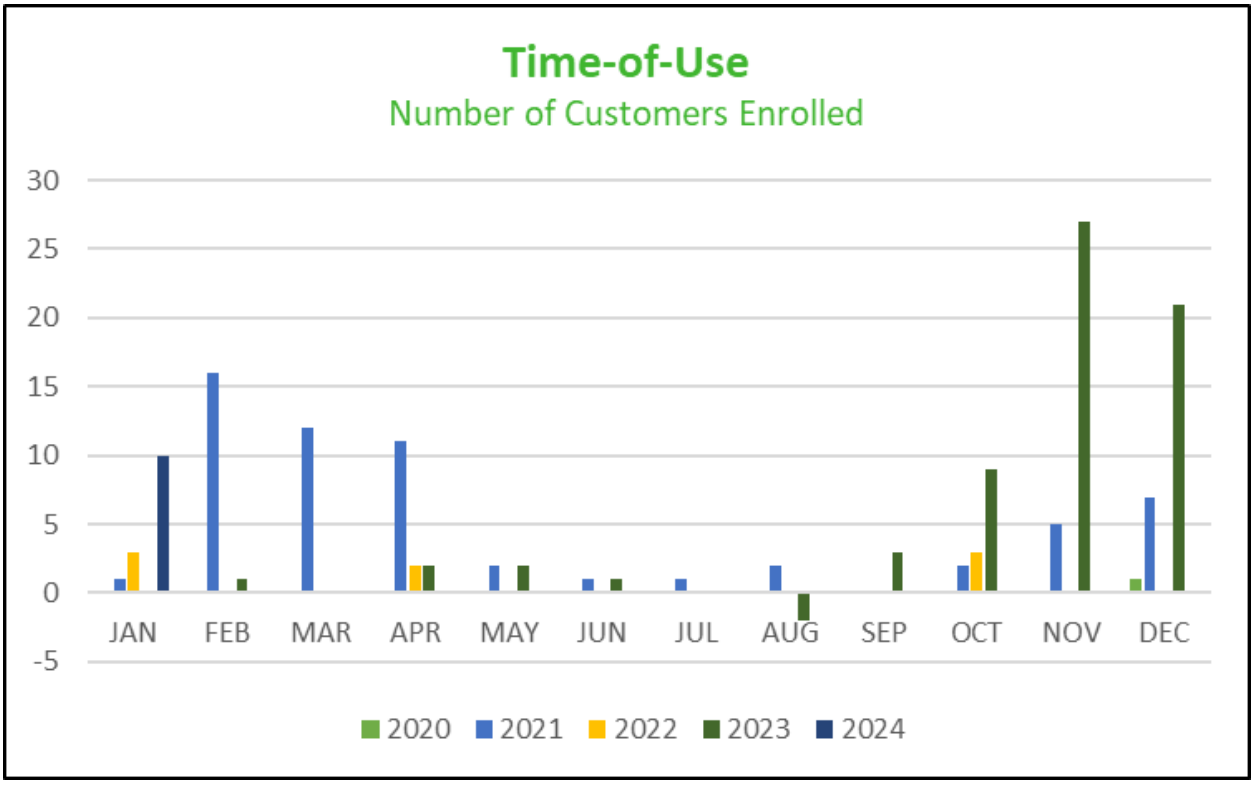
3. Customer Care and Collections continue to make outreach calls to customers with past due balances on their accounts. The intent is to be proactive and connect these customers with outside resources for financial assistance. During the month of January, 1,221 customers were called.

4. Utility Program and Services staff, along with Tech Services, facilitated a solar and battery storage interconnection meeting with the T&D staff. The purpose was to discuss safety concerns around DG systems back feeding on to the system during outages, etc. and how to protect themselves. The team shared the interconnection process and provided examples of one-line diagrams, pictures of typical set-ups with inverter shut-offs by the meters, what to look for when inverters were not located by the meters, and answer any other questions around the possibility of back feeding systems.



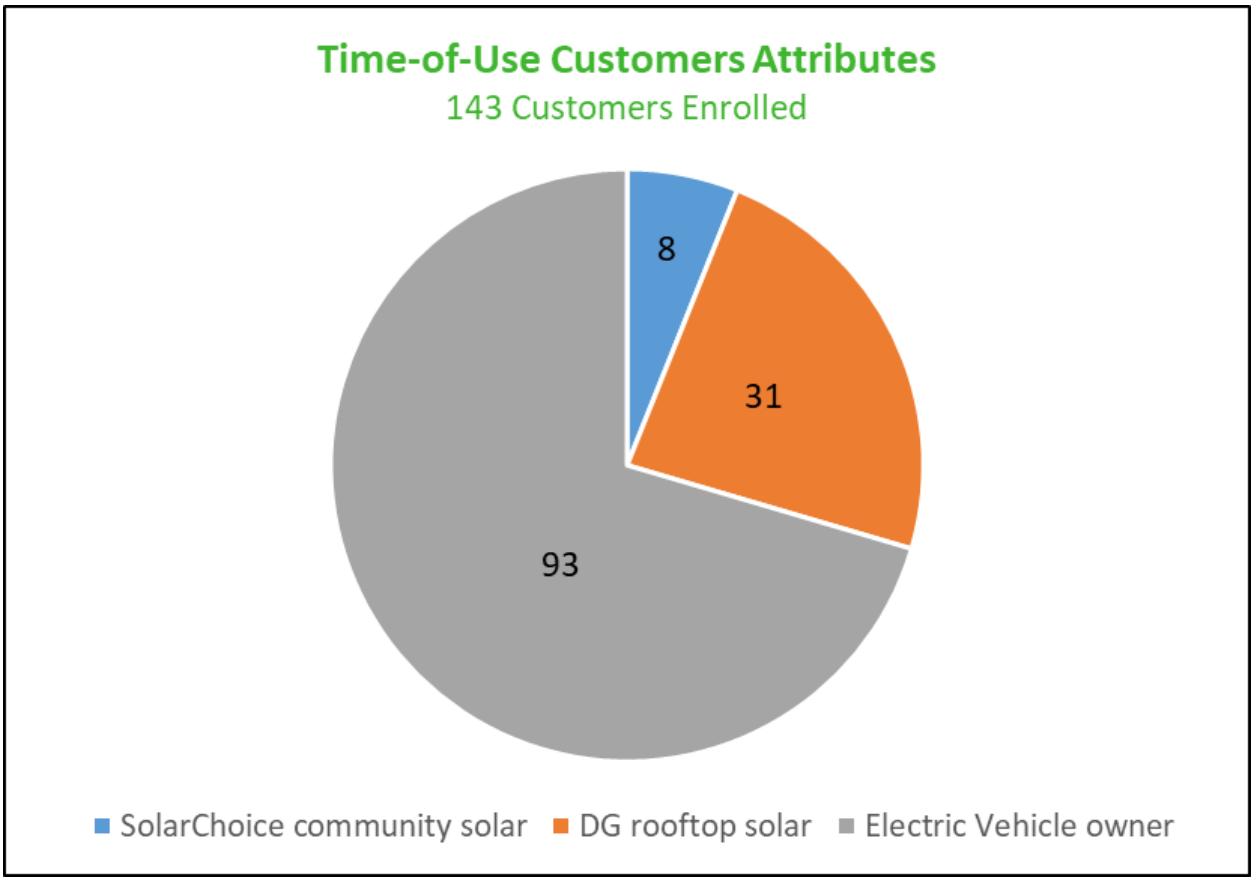
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
YTD Actual kWh Savings	2,502,385											
% to Goal	14.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1.5 percent	1,448,662	2,897,323	4,345,985	5,794,646	7,243,308	8,691,970	10,140,631	11,589,293	13,037,954	14,486,616	15,935,277	17,383,939

- YTD Savings: 2,502,385 kWh
- Percent to kWh Goal: 14.4%

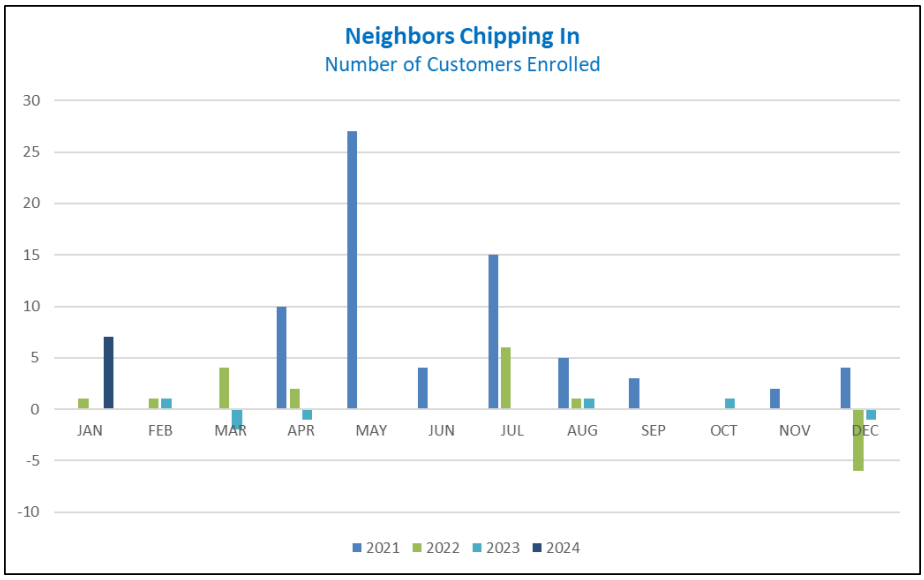


- Total Customers Enrolled: 143
  - 2021 = 1
  - 2021 = 60
  - 2022 = 8
  - 2023 = 64
  - 2024 = 10

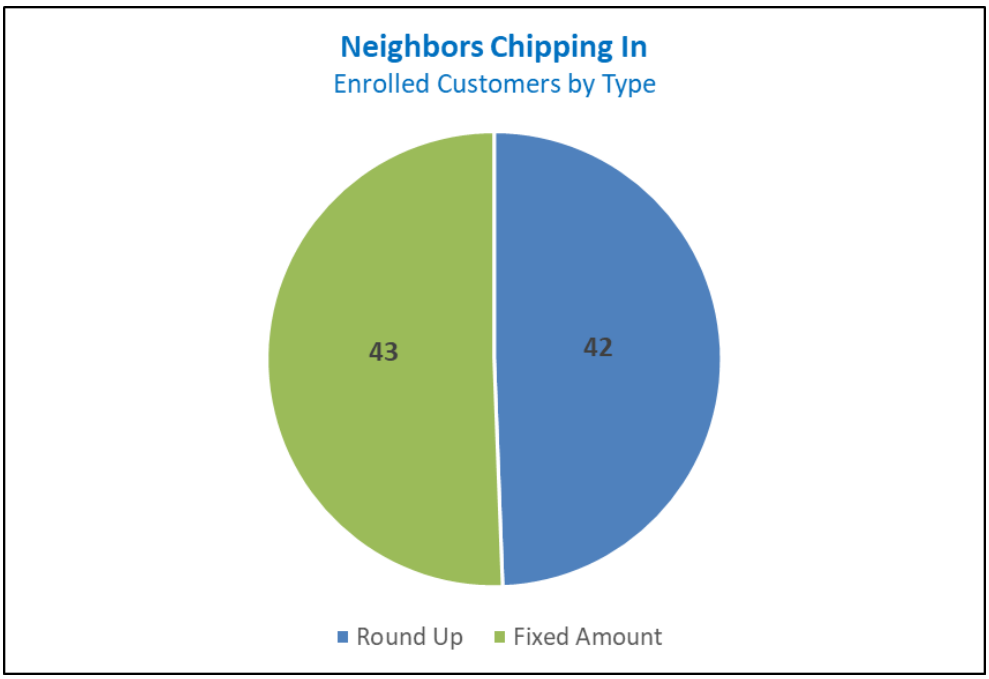
- Electric Vehicle Rebates (since September 2023)
  - Paid = 28
  - Pending = 53



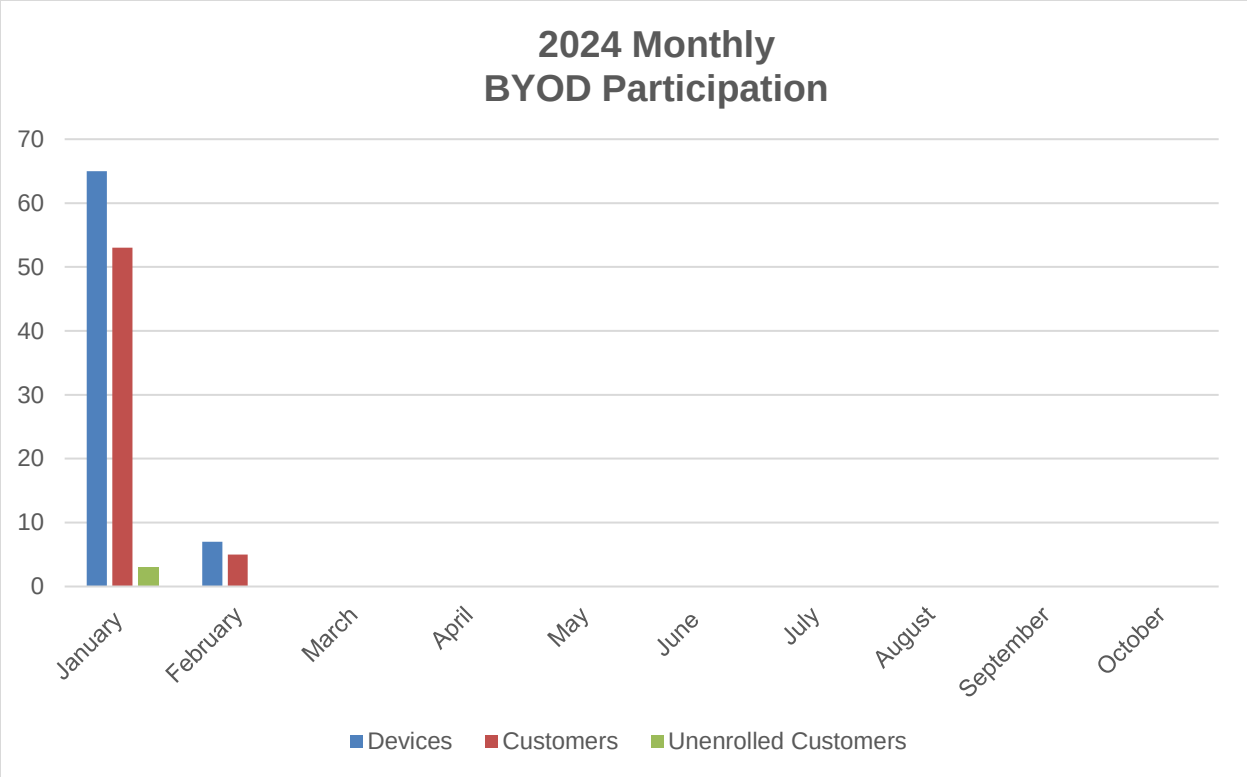
- Attributes:
  - SolarChoice = 8
  - Solar = 31
  - Electric Vehicle = 93



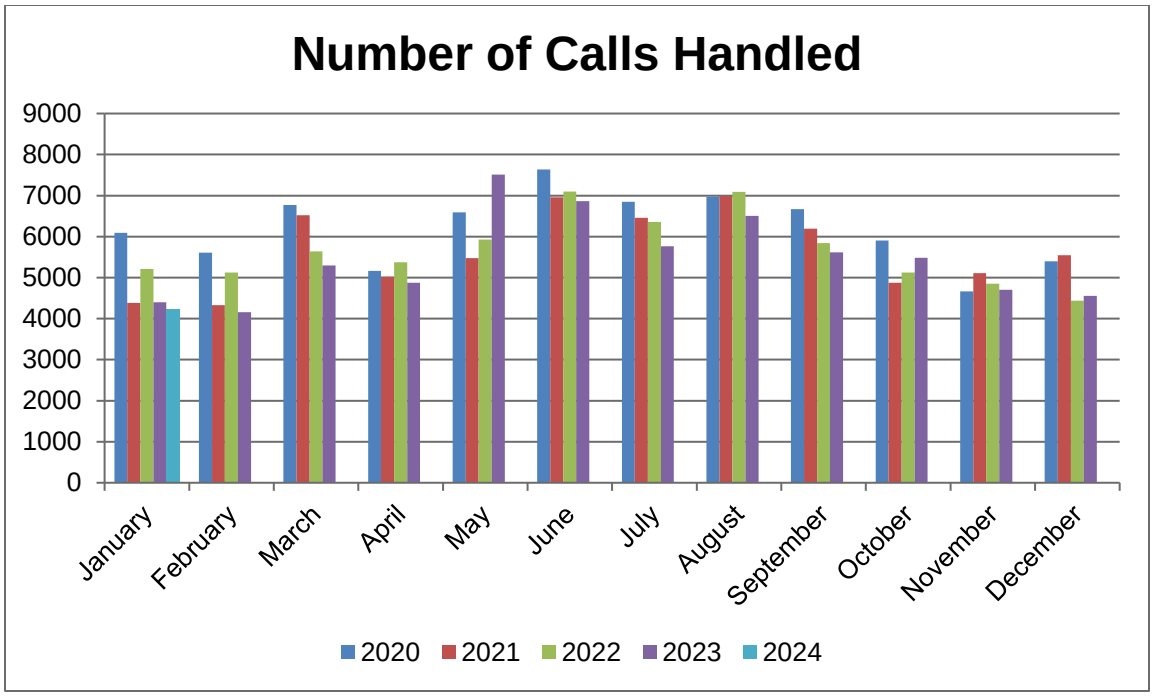
- Total Customers Enrolled: 85
  - 2021 = 70
  - 2022 = 9
  - 2023 = -1
  - 2024 = 7



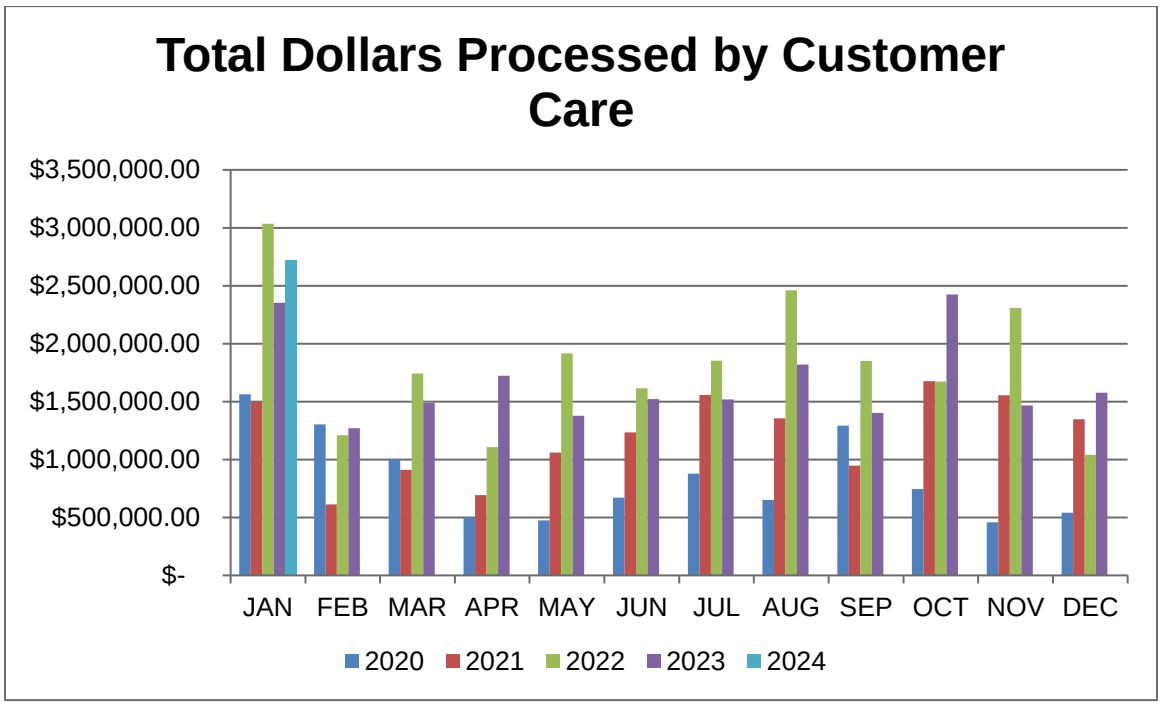
- Total Customers Enrolled: 85
  - Round Up = 42
  - Fixed Amount = 43



- Totals Year to Date:
  - Devices = 1,152
  - Customers = 1016
  - Unenrolled Customers = 37

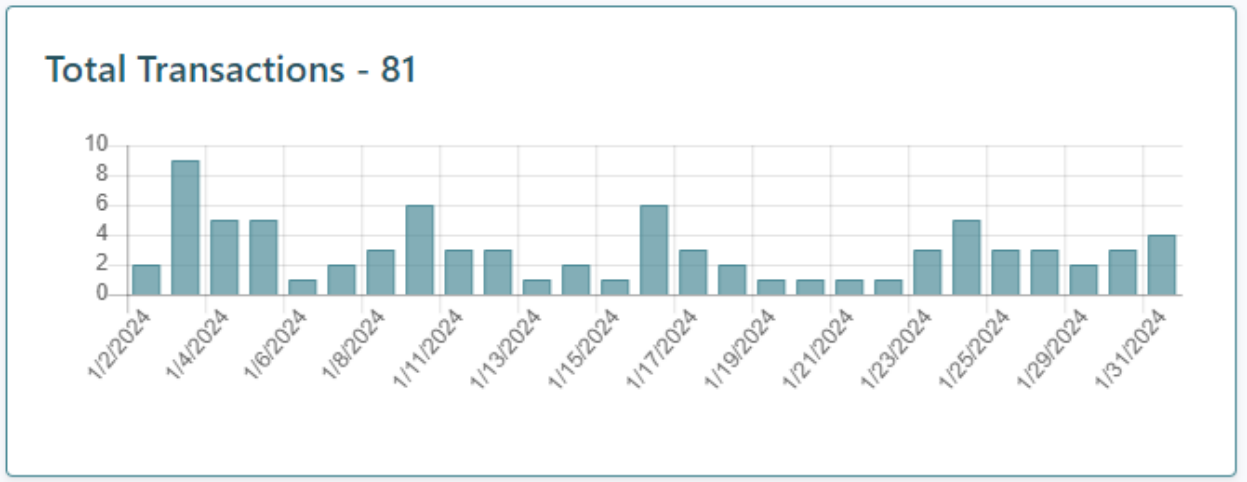


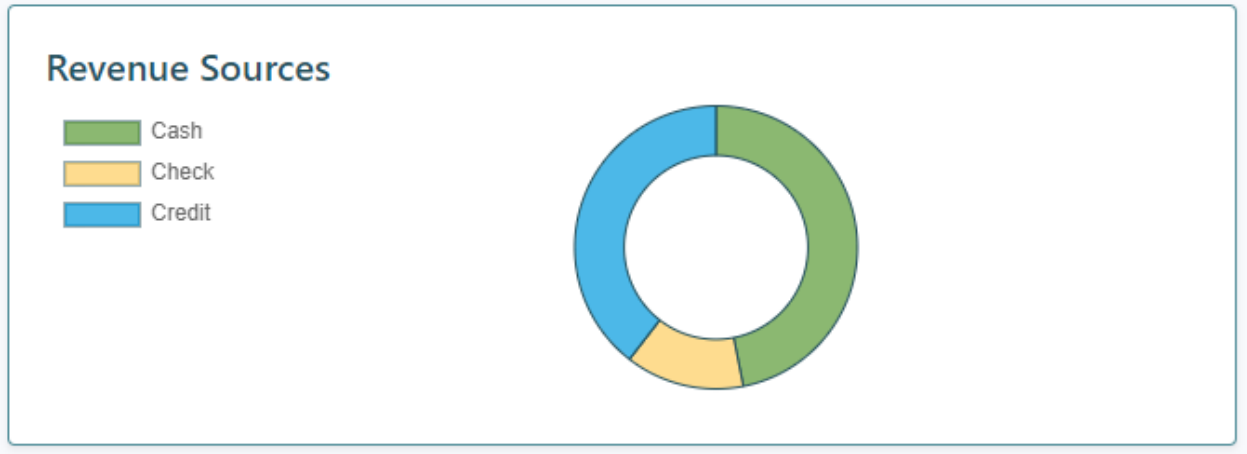
- Total Number of Calls: 4,225 (graphed above)



- Total Number of Transactions Processed by Representatives: 4,124 (graphed above)
- Total Number in Dollars Processed by Representatives: $2,718,749

Kiosk Payments

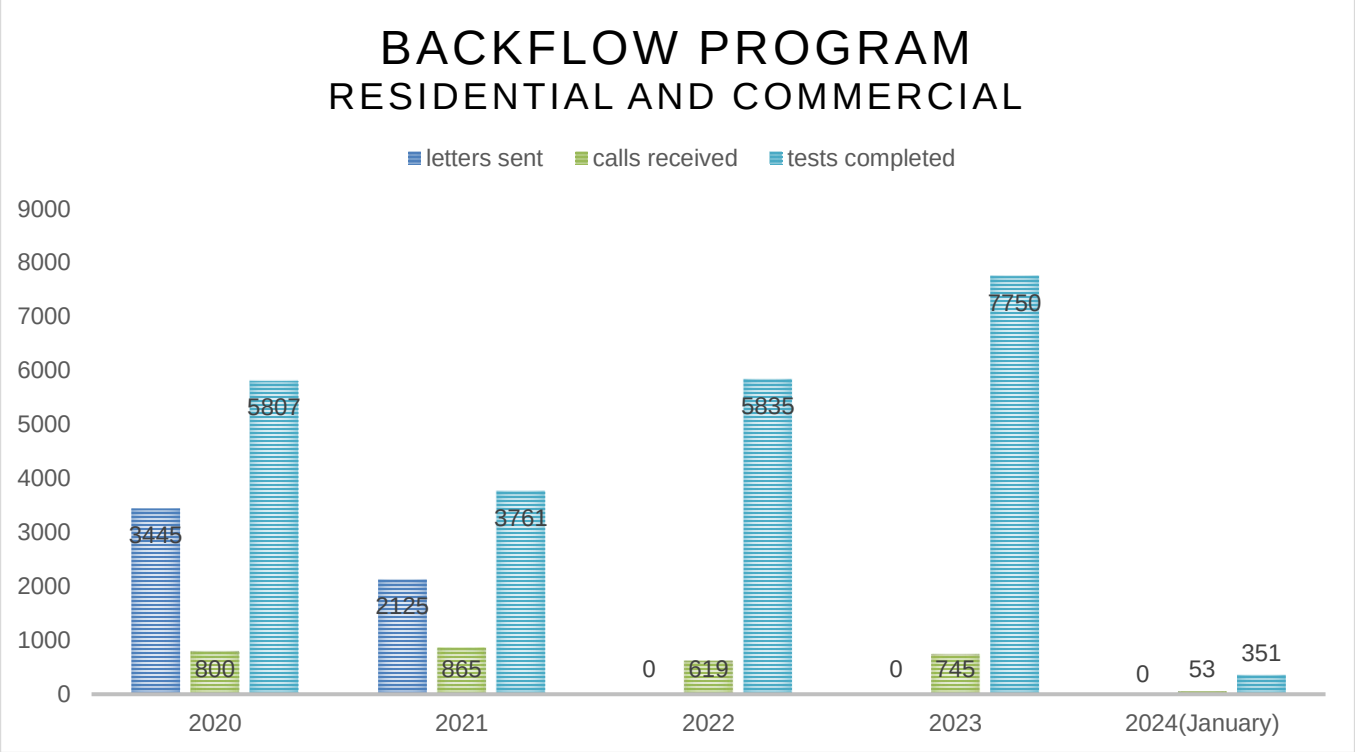




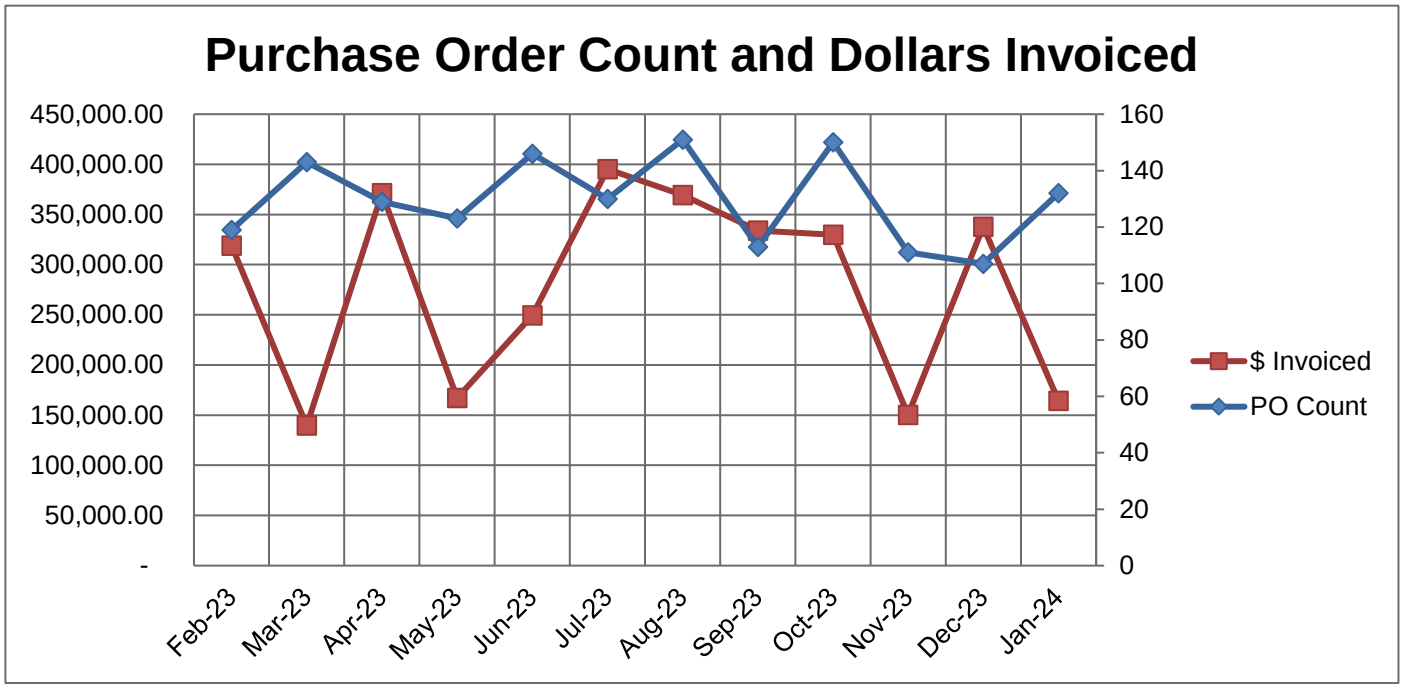
- Total Number of Transactions: 81 (graphed above)
- Total Number of Transactions by Payment Method: 38 cash, 11 check, and 32 credit card payments

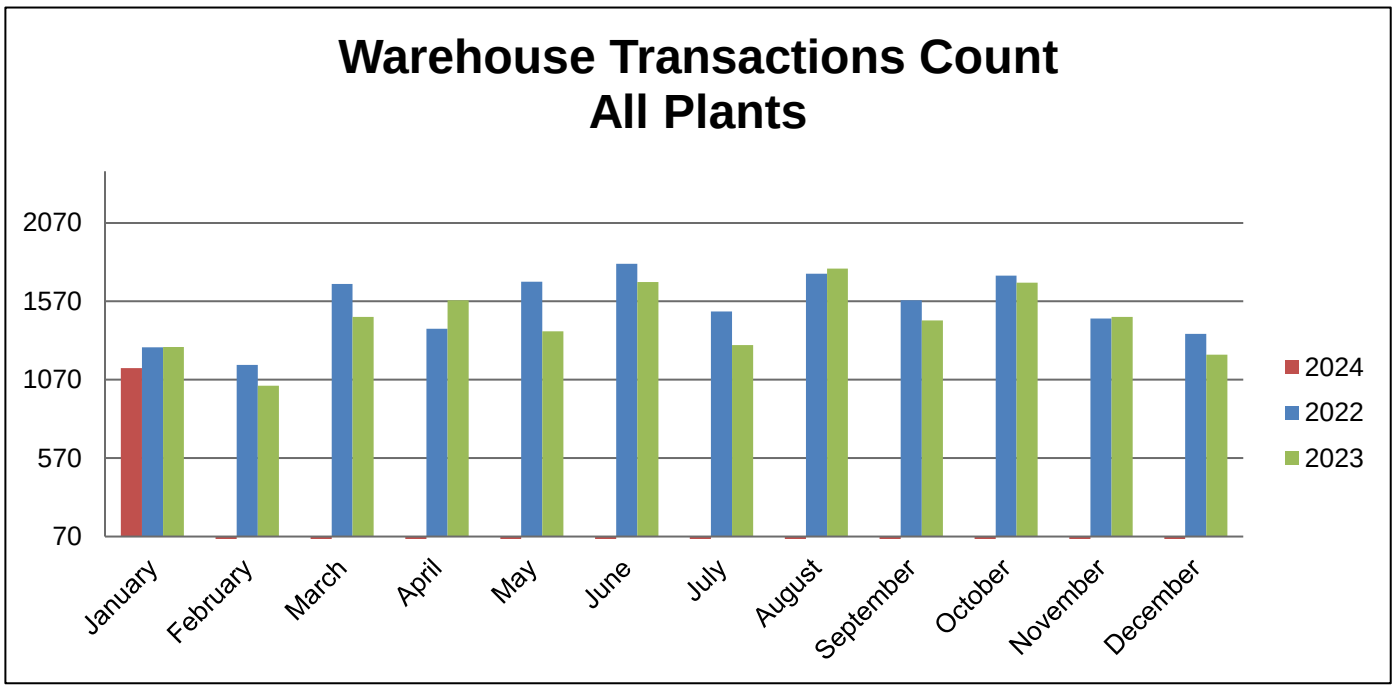
CORPORATE SERVICES

1. **Business Services:**
   - Payroll/HR – Coordinated onboarding activities for one full time employee.
   - Payroll/HR – Prepared and posted six seasonal summer positions.
   - Payroll/HR – Currently working on 2 additional positions approved in the 2024 budget, and 4 additional positions that were approved to support the Advanced Metering project, along with additional backfill and limited term positions.
   - Designed trade show banners and supporting materials for the Home Show.
   - Created a recruiting handout for the Engineering team when attending job fairs.



- **Purchasing and Materials Management:**
  - Issued Request for Bid for Vertical Rise Lift Truck
  - Extended offers to fill the two Warehouse Operations Attendant positions.
  - Active with Advanced Metering Infrastructure project master service agreement and statements of work.





2. Finance and Accounting:

General

- The approved 2024 rate tariffs have been implemented.
- The Finance and Accounting team are working on 2023 year-end financial adjustment in preparation for the annual financial audit. The field work for the financial audit will be conducted the week of February 20, 2024. The completed audit report is expected to be presented to the Board during the April 2024 Board meeting.

- Budgeting Software Implementation – this project is on track to be implemented by the end of March. The new system will be used during the 2024 budget update process. The Board and Council have approved a two-year budget for 2024 and 2025. The projected 2025 budget, which was completed during the budget process in 2023, will be updated during 2024 to ensure that the Utility continues to operate within the current budget approval while incorporating new information.
- The Finance team has one open limited term position in the billing area to support the AMI project.

- **Information Services:**
  - In January, the person in charge of administering our North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection (CIP) program took a position with another Utility company. RPU has entered into a short-term contract to help administer our NERC/CIP program while the NERC Compliance Manager position is being filled.
  - The IT department currently has four positions that are open. NERC Compliance Manager, IT System Administrator, IT System Analyst and IT Security Coordinator position. The Administrator and Analyst positions are backfill positions for the people that have moved into the AMI project.

3. Financial Results:

Note: Due to the February RPU Board meeting being scheduled earlier in the month, the January and February 2024 financial information will be provided at the March 2024 RPU Board meeting.

ROCHESTER PUBLIC UTILITIES
WE PLEDGE, WE DELIVER

TO: **Jeremy Sutton, Director of Power Resources**

FROM: **Tina Livingston, Senior Financial Analyst**

SUBJECT: **LOAD FORECAST SUMMARY FOR 2024**

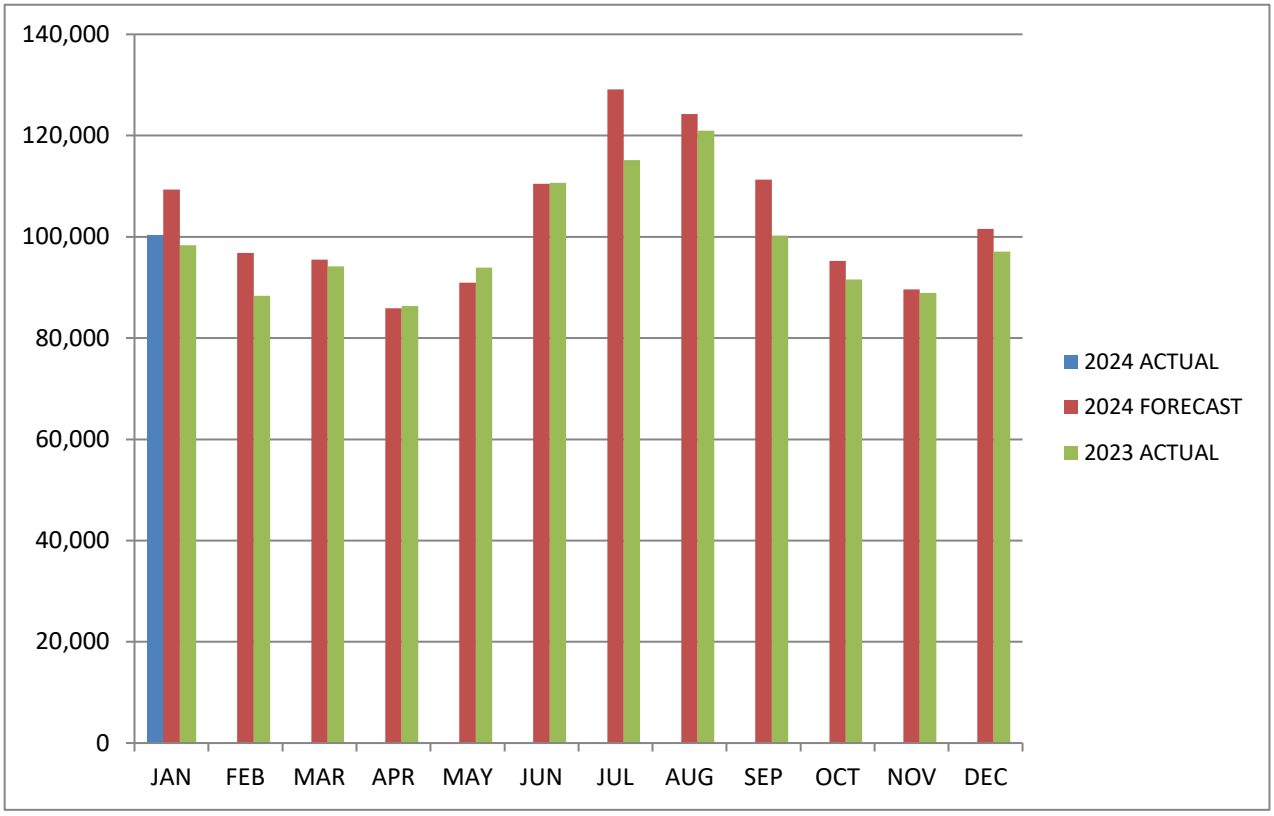
	SYSTEM ENERGY			PEAK SYSTEM DATA		
MONTH	**ACTUAL MWH**	**FORECAST MWH**	**% DIFF**	**ACTUAL MW**	**FORECAST MW**	**% DIFF**
JAN	100,306	109,357	-8.3%	173.9	187.9	-7.5%
FEB					180.0	
MAR					161.0	
APR					153.0	
MAY					214.7	
JUN					266.8	
JUL					293.1	
AUG					258.7	
SEP					263.6	
OCT					174.5	
NOV					154.3	
DEC					175.3	
YTD	**100,306**	**109,357**	**-8.3**			

PREVIOUS HISTORICAL SYSTEM PEAK 294.8 MW 08/23/2023

% DIFF = (ACTUAL / FORECAST X 100) - 100
MWH = MEGAWATT HOUR = 1000 KILOWATT HOURS
MW = MEGAWATT = 1000 KILOWATTS

2024 YTD SYSTEM REQUIREMENTS

Energy Required for the Month (MWH)



Peak Demand for the Month (MW)