

MEETING AGENDA - JUNE 25, 2019

BOARD ROOM 4000 EAST RIVER ROAD NE ROCHESTER, MN 55906

#### 4:00 PM

#### **Call to Order**

- 1. Approval of Agenda
- 2. Safety Moment
- 3. Approval of Minutes
  - 1. Public Utility Board Regular Meeting May 21, 2019 4:00 PM

#### 4. Approval of Accounts Payable

1. AP Board Listing

#### NEW BUSINESS

#### **Open 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.)

#### 5. Consideration Of Bids

 Proposal for Engineering and Design Services - Marion Rd Substation Resolution: Proposal for Engineering and Design Services

#### 6. Regular Agenda

1. Cayenta Project Extension

Resolution: Cayenta Project Extension

- 2. RPU Support of Energy Integration Committee Resolution: RPU Support of Energy Integration Committee
- Charitable Contributions Policy
   Resolution: Charitable Contributions Policy

#### 7. Board Liaison Reports

- 1. RPU Index of Board Policies
- 2. 2019 APPA National Conference
- 8. General Managers Report
- 9. Division Reports & Metrics
- 10. Other Business
- 11. Adjourn

The agenda and board packet for Utility Board meetings are available on-line at <u>www.rpu.org</u> and <u>http://rochestercitymn.iqm2.com/Citizens/Default.aspx</u>



#### BOARD ROOM 4000 EAST RIVER ROAD NE ROCHESTER, MN 55906

#### 4:00 PM

#### **Call to Order**

Attendee Name	Title	Status	Arrived
Brett Gorden	Board Member	Present	
Tim Haskin	Board Member	Present	
Melissa Graner Johnson	Board Vice President	Present	
Brian Morgan	Board President	Present	
Michael Wojcik	Board Member	Present	

#### 1. Recognition: Glenn Reiter

RPU Meter Reader Glenn Reiter was recognized by the Board for his thirty-six years of service to the utility.

#### 2. Election of Officers

1. Election of Officers

At the April 30, 2019 RPU Board meeting, Board members approved a motion to maintain the existing Board officers and to submit a resolution stating same for the May Board agenda. Board Member Michael Wojcik moved to approve the resolution. This was seconded by Board Member Tim Haskin. Motion passed.

**Resolution: Election of Officers** 

BE IT RESOLVED by the Public Utility Board of the City of Rochester, Minnesota, to elect the following officers:

Brian Morgan - President

Melissa Graner Johnson - Vice President

In addition the board also appoints:

Christina Bailey - Board Secretary

Passed by the Public Utility Board of the City of Rochester, Minnesota, this 21st day of May, 2019.

RESULT:	COUNCIL APPROVAL [UNANIMOUS]
MOVER:	Michael Wojcik, Board Member
SECONDER:	Tim Haskin, Board Member
AYES:	Gorden, Haskin, Johnson, Morgan, Wojcik

#### 3. Approval of Agenda

3.1

#### **Regular Meeting**

#### Tuesday, May 21, 2019

4:00 PM

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1. **Motion to:** approve the agenda as presented

RESULT:	APPROVED [UNANIMOUS]	
MOVER:	Michael Wojcik, Board Member	
SECONDER:	Melissa Graner Johnson, Board Vice President	
AYES:	Gorden, Haskin, Johnson, Morgan, Wojcik	

#### 4. Safety Moment

President Morgan presented a new feature on the RPU website that was created by RPU staff containing training materials for contractors working around electric power lines.

#### 5. Approval of Minutes

- 1. Public Utility Board Regular Meeting Apr 30, 2019 4:00 PM
- 2. **Motion to:** approve the Minutes of April 30, 2019 as presented

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Michael Wojcik, Board Member
SECONDER:	Melissa Graner Johnson, Board Vice President
AYES:	Gorden, Haskin, Johnson, Morgan, Wojcik

#### 6. Approval of Accounts Payable

- 1. AP Board Listing
- 2. **Motion to:** approve the a/p board listing as presented

Board Member Tim Haskin cited various payments related to Cayenta, RPU's new customer care and billing system, and asked about the status of the implementation project. General Manager Mark Kotschevar stated that an update will be included in the GM Report.

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Michael Wojcik, Board Member
SECONDER:	Tim Haskin, Board Member
AYES:	Gorden, Haskin, Johnson, Morgan, Wojcik

#### **NEW BUSINESS**

#### **Open 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.)

President Morgan opened up the meeting for public comment. Three people came forward to speak.

Bella Dunbar and Mohamed Ali of the Olmsted County Youth Commission said they began circulating a petition in February and have collected 1,000 signatures in support of RPU and the City of Rochester adopting a 100 percent renewable energy plan following the end of RPU's sales contract with Southern Minnesota Municipal Power Agency (SMMPA) in 2030. They asked the RPU Board and staff to work towards developing such a plan. Board Member Michael Wojcik stated that the Board will be bringing plans forward for 100 percent clean energy, and thanked the commission for their work.

#### Tuesday, May 21, 2019

Ray Schmitz, of Rochester, spoke in favor of smart meters and time-of-use rates. Referencing the announcement of the closing of the Sherco 3 plant, he said he hopes to get more information from SMMPA to help guide the public and the Board into the future.

#### 7. Consideration Of Bids

1. Digger Derrick, Utility Body and Installation (V647)

Part of RPU's 2019 vehicle replacement budget includes funds to purchase a digger derrick and utility body for an RPU-supplied chassis. Buyer Mona Hoeft told the Board that bids were received from two vendors, Terex Utilities Inc. and Altec Industries Inc. The bid from Terex Utilities included terms and conditions, which is not prohibited by the competitive bidding law, and Altec Industries withdrew their bid due to a misunderstanding of the technical specifications. Therefore, the Board was requested to reject the bid from Terex Utilities Inc. as non-responsive.

Resolution: Digger Derrick, Utility Body and Installation (V647)

BE IT RESOLVED by the Public Utility Board of the City of Rochester, Minnesota, to reject the bid received by Terex Utilities, Inc.

Passed by the Public Utility Board of the City of Rochester, Minnesota, this 21st day of May, 2019.

RESULT:	ADOPTED [UNANIMOUS]
MOVER:	Michael Wojcik, Board Member
SECONDER:	Melissa Graner Johnson, Board Vice President
AYES:	Gorden, Haskin, Johnson, Morgan, Wojcik

#### 8. Regular Agenda

1. Legislative-Citizen Commission on Minnesota Resources (LCCMR) Grant

Environmental and Regulatory Affairs Coordinator Todd Osweiler presented a request to the Board for approval to submit an application for a Legislative-Citizen Commission on Minnesota Resources (LCCMR) grant to fund the conversion of two inactive municipal wells into monitoring wells on the deeper aquifers below the Jordan aquifer. Data from the wells will be collected to assess the potential impact to natural resources from groundwater pumping from shallow aquifers. Additionally, this will provide data to the Minnesota DNR's long term well monitoring program. Submission of the grant application requires approval from the utility governing body. If selected, RPU will receive \$537,700 from LCCMR to convert municipal wells 220785 and 220827. Mr. Osweiler informed the Board that RPU will learn if the grant was approved by the end of June.

Resolution: Legislative-Citizen Commission on Minnesota Resources (LCCMR) Grant

BE IT RESOLVED by the Public Utility Board of the City of Rochester, Minnesota, to approve the grant proposal to secure \$537,700 from Legislative-Citizen Commission on Minnesota Resources (LCCMR), if selected, to convert two unused municipal wells into monitoring wells on the deeper aquifers below the Jordan aquifer.

Passed by the Public Utility Board of the City of Rochester, Minnesota, this 21st day of May, 2019.

4:00 PM

#### 4:00 PM

RESULT:	ADOPTED [UNANIMOUS]
MOVER:	Melissa Graner Johnson, Board Vice President
SECONDER:	Michael Wojcik, Board Member
AYES:	Gorden, Haskin, Johnson, Morgan, Wojcik

2. Distributed Generation Interconnect Rules 2019

All electric utilities in the state of Minnesota are required to adopt new distributed energy resources interconnect rules presented by the Minnesota Public Utilities Commission by June 17, 2019. The new rules include the collection of application fees and testing and metering fees. Updated process documents and training were provided by Minnesota Municipal Utility Association (MMUA) this spring. Steven Cook asked the Board to adopt the RPU-personalized version of the documents, along with the associated fee structure.

President Morgan asked how the new interconnect rules and fees will affect residential customers considering solar. Mr. Cook stated the process will actually be simplified using the new rules. President Morgan also asked about the nature of a \$300,000 insurance requirement to interconnect, to which Mr. Cook replied this is a requirement mandated by the state.

Resolution: Distributed Generation Interconnect Rules 2019

BE IT RESOLVED by the Public Utility Board of the City of Rochester, Minnesota, to approve the Distribution Energy Resources Interconnection Process and associated fee schedules.

**WHEREAS,** by order on September 28, 2004, the Minnesota Public Utilities Commission adopted Generic Standards for Utility Tariffs for Interconnection and Operation of Distributed Generation Facilities; and

**WHEREAS,** Minnesota Statutes Section 216B.1611, subdivision 3 required municipal utilities to adopt a generation tariff that addressed the issues included in the commission's order; and

**WHEREAS,** under Minnesota Statutes Section 216B.25, any order of the commission rescinding, altering, amending, or reopening a prior order shall have the same effect as an original order; and

**WHEREAS,** by order on August 13, 2018, the Minnesota Public Utilities Commission adopted an updated interconnection process for distributed energy resources replacing the standards adopted in 2004; and

**WHEREAS,** the Rochester Public Utility Distributed Energy Resource Interconnection Process addresses the issues included in the commission's 2018 order; and

**WHEREAS,** this Distributed Energy Resource Interconnection Process functions in concert with the Rochester Public Utility Procedures Regarding Distributed Energy Resources and Net Metering as well as its Rules Governing the Interconnection of Cogeneration and Small Power Production;

**THEREFORE, BE IT RESOLVED** that the Public Utility Board of the City of Rochester, Minnesota adopts the Rochester Public Utility Distributed Energy Resources Interconnection Process.

Additionally the Public Utility Board of the City of Rochester approves the addition of the following fees to the Miscellaneous Fee Schedule.

#### **Regular Meeting**

#### Tuesday, May 21, 2019

Process	Track	Fees
Simplifi	ed	\$100
Fa st Tr ac k	Certified System	\$100 + \$1/kW
	Non-Certified System	\$100 + \$2/kW
Study		\$1,000 + \$2/kW down payment. Additional study fees may apply.
Pre-App	lication Report	\$300

TESTING	TESTING AND OTHER FEES				
Testing Certifie d System	40 kW or Less	No Fee			
	40 kW to 1 MW	\$300			
	Greater than 1 MW	Actual Cost			
Meterin g Fee	Net Metered under 40 KW	No Fee			
	Not net Metered	Actual Cost			

Additionally the authority to make minor corrections and changes to the documents are granted to staff with the approval of the Rochester City Attorney and the General Manager of Rochester Public Utilities.

Passed by the Public Utility Board of the City of Rochester, Minnesota, this 21st day of May, 2019.

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#### Tuesday, May 21, 2019

4:00	PM

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RESULT:	ADOPTED [UNANIMOUS]
MOVER:	Michael Wojcik, Board Member
SECONDER:	Tim Haskin, Board Member
AYES:	Gorden, Haskin, Johnson, Morgan, Wojcik

#### 9. Informational

1. Water Main Replacement Prioritization Plan - Phase 2 Update

Derek Gardels, utility management services project manager, and Kathryn Jones, project manager, of HDR Consulting, presented the findings from phase two of the RPU water main replacement prioritization plan to the Board. The purpose of the study is to manage aging water distribution assets, prioritize asset replacement, balance cost with service and align RPU's priorities with those of Public Works. RPU's water main system has grown from under 300 miles in 1988 to 600 miles in length in 2018. The diameters of pipes in the RPU system range from 0.75 inches to 24 inches, and the City of Rochester has a relatively low break rate, averaging 8 breaks per year, compared to the industry break rate goal of 15 or fewer per year. Prioritization is based on the likelihood of failure and the consequence of failure, and water mains are scored according to pipe characteristics, soil characteristics, break history, hydraulic criticality, impact to community/environment and damage potential. The next steps for RPU will be to proactively work with Public Works on project priorities, integrate proposed investment level for replacement into budget and setting cost of service, to update its prioritization model annually and perform a detailed analysis every five to ten years.

Board Member Tim Haskin asked Senior Civil Engineer Doug Klamerus how much RPU's goals overlap with those of Public Works. Mr. Klamerus replied that RPU and Public Works are currently 75 percent aligned on projects and the two will continue to work together. Board Member Michael Wojcik asked what the overall cost is to repair breaks versus doing preventive maintenance. Water Maintenance and Construction Manager Cary Johnson stated that on average, the cost to repair a water main break is \$5,000-6,000.

2. 2018 Water Engineering and Operations Report Presentation

The 2018 Water Engineering and Operations Report was presented to the Board. The annual report is prepared by staff to provide a summary of the work performed by the water department for the year. According to the report, the RPU water system contains 31 wells from five aquifers, with a total annual pumpage of 4.5 billion gallons. There are a total of 20 water storage facilities holding a total of 16.95 million gallons of water, serving a population of 116,145 people and 40,400 water customers.

Board Member Michael Wojcik asked what the capacity is in higher level water surface areas. Senior Civil Engineer Doug Klamerus replied that staff is currently doing a storage study in the Baihly area and Willow area of Rochester, and that wells are matched to areas that are growing.

3. 2018 Electric Engineering and Operations Report Presentation

The 2018 Electric Engineering and Operations Report was presented to the Board, highlighting the accomplishments of the utility's electric system's projects for the year. The RPU electric system served 55,335 customers in 2018, with 1,102 of those newly added. The total number of electric customers has grown steadily year by year.

#### **Regular Meeting**

Rochester's electric system has grown to 823.4 total circuit miles of distribution, with 63.3 percent running underground, up from 818.4 total circuit miles in 2017, with 62.9 percent running underground.

The 2018 peak system demand recorded by RPU was 277 MW. The highest ever system peak demand occurred in 2011 at 292 MW.

Board Member Tim Haskin commented that the density of energy usage on a block by block basis has grown exponentially.

4. RPU Renewable Energy Objective

RPU voluntarily follows the requirements of Minnesota Statute 216B.1691 Renewable Energy Credit. In 2018, RPU retired enough credits to cover 100 percent of load served over contracted rate of delivery (CROD), said Manager of Portfolio Optimization Dirk Bierbaum, well above the obligation within the statute of 17 percent of load served. Renewable energy certificates that were retired are 456-MN-05-2014-38267-1 to 970, 456-MN-04-2014-38266-1 to 727, 457-MN-05-2014-38271-744 to 847, 457-MN-03-2014-38269-1 to 658, and 457-MN-04-2014-38270-1 to 887, for a total of 3,346 certificates. Mr. Bierbaum stated this is the fourth year in a row that RPU retired enough credits to cover 100 percent of load served over CROD.

5. Rate Structure Discussion

The Board viewed the results of the RPU rate structure survey conducted by Great Blue Research at the April 30, 2019 meeting. General Manager Mark Kotschevar stated that based on the results of the survey, with time-of-use rate structure garnering the second highest approval rating amongst customers, staff would like to explore the potential creation of a three-tiered time-of-use rate, consisting of offpeak, on-peak, and super-peak rates. RPU will work with its financial consultant to develop a rate structure that would be made available to electric vehicle owners and would be available on a voluntary basis to other customers for everyday electric usage. President Morgan asked if a resolution is needed to record the Board's approval. Mr. Kotschevar said he was only asking for guidance.

Board Member Michael Wojcik asked if the customer charge will be looked at for revision. The current discussion only deals with the energy charge, but the Board's Rates Committee could be brought together to discuss the customer charge, said Mr. Kotschevar. Mr. Wojcik and Board Member Brett Gorden, of the Rates Committee, agreed to meet the morning of June 18, 2019.

President Morgan stated he approves of making time-of-use opt-in for customers and would like to see an incentive tied to electric vehicles, as well as the use of smart meters. Vice President Johnson said moving in this direction makes a lot of sense. Mr. Wojcik suggested creating a master list of first steps. As a whole, the Board concurred to develop a time-of-use rate structure.

*Mr.* Wojcik also requested that the white papers discussed at the April 23, 2019 Board study session with Burns and McDonnell be posted to the RPU website.

#### 10. Board Liaison Reports

Director of Compliance and Public Affairs Steve Nyhus is currently revising the Board's Charitable Contributions policy, which will be brought to the Board for approval at an upcoming meeting. General Manager Mark Kotschevar said he recently met with Rochester Assistant City

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Administrator Aaron Parrish and City of Rochester Community Development Director Cynthia Steinhauser to discuss the pending Undergrounding policy.

#### 11. General Managers Report

General Manager Mark Kotschevar reported that Director of Power Resources Jeremy Sutton and Portfolio Optimization Manager Dirk Bierbaum are working on RPU's resource plan. Mr. Kotschevar reached out to Allen Gleckner of Fresh Energy to set up a meeting for May 22 to discuss where RPU's future lies in renewable energy sources.

Mr. Kotschevar stated that with the announcement by Xcel Energy to close the Sherco 3 plant in Becker, Minnesota by 2030, and with RPU and Austin Utilities leaving Southern Minnesota Municipal Power Agency (SMMPA) in 2030, SMMPA will be able to explore new power supply options.

#### 12. Division Reports & Metrics

#### 13. Other Business

Board members discussed their availability for upcoming 2019 Board meeting dates. Vice President Johnson and Michael Wojcik are unable to attend the June Board meeting, and Mr. Wojcik is unable to attend the July Board meeting. The Board discussed holding a study session for the resource plan being developed with Burns and McDonnell in July, and tentatively agreed to move the July Board meeting to July 23, 2019, with the resource plan as the main agenda item.

President Morgan said he would like additional discussion regarding the City of Rochester's Council Initiated Action (CIA) to RPU asking for a plan to shift to 100 percent renewable energy by 2035. General Manager Mark Kotschevar stated that RPU's current plan will have a 100 percent renewable option by 2030, so the utility is in good shape, and the request fits in with RPU's project plan. Mr. Wojcik said since residents are seeking more education on renewable energy, this is building towards a public forum. Rochester City Council Member Patrick Keane stated that public forums are better if based on a proposal, rather than as a general topic.

Board Member Tim Haskin asked about the current status of the Lake Zumbro dredging project, which began in May. Mr. Kotschevar said the project has been very well received, and RPU's name appears on the lake's granite marker as a donor.

#### 14. Adjourn

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Submitted by:

Secretary

Approved by the Board

**Board President** 

Date

## **ACCOUNTS PAYABLE**

Meeting Date: 6/25/2019

**SUBJECT:** AP Board Listing

PREPARED BY: Colleen Keuten

Please Approve

#### **ROCHESTER PUBLIC UTILITIES** A/P Board Listing By Dollar Range For 05/09/2019 To 06/10/2019 Consolidated & Summarized Below 1,000

Greater than 50,000 :

1	Greater than 50,000 :		
2			
3	SOUTHERN MN MUNICIPAL POWER A	May SMMPA Bill	7,066,567.96
4	MN DEPT OF REVENUE	April Sales and Use Tax	590,782.01
5	CONSTELLATION NEWENERGY-GAS D	April Gas for WES	110,836.72
6	STUART C IRBY CO INC	29,970 FT-Cable in Conduit AL 15kV 1/0 Solid, 1/C	86,823.09
7	CONSTELLATION NEWENERGY-GAS D	April Gas for Cascade Creek	83,594.39
8	STEELCASE INC (P)	10-Workstation furniture for BEP	69,043.55
9	BURNS & MCDONNELL INC (P)	Power Supply Infrastructure Plan-Feb, March & April	65,321.13
10	MEP ASSOCIATES LLC	Service Center HVAC Upgrade	64,160.61
11	MN DEPT OF HEALTH	Community Water Supply Fee Apr-June 2019	62,693.00
12	CONSTELLATION NEWENERGY-GAS D	April Gas for SLP	57,745.58
13	WRIGHT TREE SERVICE INC	Hourly Tree Removal 2019-2020~	56,452.62
14	CLARK EQUIPMENT CO	2019 Bobcat Compact Track Loader	54,345.83
15	STEEL TANK AND FABRICATING CO	Cascade Creek Fuel Oil Tank	53,493.51
16			
17		Price Range Total:	8,421,860.00
18			
19	<u>5,000 to 50,000 :</u>		
20			
21	BILLTRUST dba	2019 CC/Billing/Mailing/IVR Services-May	49,319.48
22	KNUTSON CONSTRUCTION SERVICES	Service Center Expansion Labor-3/30-5/10/19	48,174.65
24	SCHWICKERTS COMPANY INC	Vehicle Canopy Roof Replacement	30,000.00
25	NEW AGE TREE SERVICE INC	601A Tree Clearance Services~	29,844.84
26	THE ENERGY AUTHORITY INC	May Resource Fee	22,628.17
27	BLUESPIRE STRATEGIC MARKETING	2016 - 2019 RPU Plugged In Contract	20,890.00
28	U S ALLIANCE GROUP	May Credit Card Processing Fees	18,979.84
29	THF-G ROCHESTER JOINT VENTURE	CIP Conserve & Save Rebates-Lighting	18,777.00
30	SUBSURFACE INSTRUMENTS INC	Leak Noise Correlator w/warranty	18,750.00
31	DAKOTA SUPPLY GROUP	60-Luminaire, 108W LED, PC 120-277V, Gray	18,339.75
32	MIMG CXXXVII-GATES OF ROCHESTER	CIP Conserve & Save Rebates-760 HE Toilets	17,650.00
33	WELLS FARGO BANK ACCT ANALYSI	2019 Banking Services-April & May	16,934.93
34	KATS EXCAVATING LLC	Fuel tank foundation build in Containment Area	16,672.50
35	WALMART STORES INC #1971	CIP Conserve & Save Rebates-Lighting	16,187.95
36	A & A ELECT & UNDERGROUND CON	2017-2022 Directional Boring	16,071.50
37	USIC LOCATING SERVICES INC	2019 Locating Services-April	15,326.67
38		11-Trans, PM, 1ph, 37.5kVA,13.8/8,240/120	14,718.00
39		April Gas for WES	14,461.66
40		6,000 FT-WIRE, AL, 600V, 350-4/0 NEU YS TRI URA	14,112.00
41		CIP Conserve & Save Rebates-Lighting	13,727.12
42		2,296 FT-VVIIE, AL, TSKV, 750 Str, T/C, 220 Jacket	13,141.04
43		Bidg Cleaning-April	12,841.70
44		2010 IT Helpdock Support	12,023.10
45		2019 11 Helpdesk Support May Fuel Electric	12,011.30
40		Consulting Services Property to be purchased by PDU	11,575.02
47 10	PARSONS ELECTRICILIO	Low Voltage SC Expansion Contract April	10 704 00
40 10		Time-of-use rate eval hulk water station rate	10,794.00
47 50	SCHNEIDER ELECTRIC USA INC. (	Switchgear Field Assessment-Cascade Creek	10,701.23
51	BADGER METER INC. (P)	5-Meter, Bare 3" Badger Compound Round Flo	9 752 60
52	STUART C IRBY CO INC	10-Metal Sec. Encl. 3ph. 30"x67"x22" 200Amp	9 350 00
53	DOYLE CONNER CO INC (P)	Concrete street repairs dut to water main break	8.854.00
54	GDS ASSOCIATES INC	2019 NERC Compliance Assistance-CIP Audit Prep	8,600.00

Attachment: AP Board CrMo (10728 : AP Board Listing)

#### **ROCHESTER PUBLIC UTILITIES A/P Board Listing By Dollar Range** For 05/09/2019 To 06/10/2019

55	HDR ENGINEERING INC	Swithgear Evaluation-April Phase 1	7,863.46
56	STEEL TANK AND FABRICATING CO	Cascade Creek Liquid Fuel Tank	7,500.00
57	KATS EXCAVATING LLC	868 9th Ave SE-Repair Service Assured	7.450.00
58	HY VEE	1.720 Lunches-Arbor Day Food/Box Lunches	7.376.57
59	WESCO DISTRIBUTION INC	6.000FT-Conduit, HDPE, 2.50, Empty, Sch 40	6,960.00
60	STUART C IRBY CO INC	6-Trans PM 1ph 25kVA 13.8/8 240/120	6,906,00
61		80-Lube Oil Filter Candlestick	6 521 60
62	PARSONS ELECTRIC LLC	Release Retainage All Systems 15-51707 for BEP	6 /08 73
42		Conoral Groundwater Consulting Services-3/23-1/10/10	6,460,00
03		5 000 Callena Liroa 22 WES	6,465.00
04		5,000 Gallolls-Olea 52, WES	6,405.94
65		So Trees-Tree Planting-Right Tree III Right Place	6,449.50
00		Arber Dev Event Cable Ade	0,310.23
6/	ELEVATE MARKETING SOLUTIONS L	Arbor Day Event-Cable Ads	6,315.00
68	BADGER METER INC (P)	15-Meter, Bare 1-1/2" Badger Disc	5,956.09
69		May Fuel Water	5,900.74
70	BADGER METER INC (P)	10-Meter, Bare 2" Badger Disc	5,757.46
71	ASI SIGNAGE INNOVATIONS dba	Exterior Building Sign and install	5,713.54
72	CITY OF ROCHESTER	Medical Services	5,447.00
23	DOBLE ENGINEERING COMPANY	2019 M4100 Insulation Analyzer	5,265.43
73	MIDWEST FUELS (P)	1,983.90 Gallons-Fuel Oil, IBM Gen-Set	5,138.30
74	TWIN CITY SECURITY INC	2019 Security Services-May	5,109.09
75	STUART C IRBY CO INC	4-Trans, PM, 1ph, 15kVA, 13.8/8, 240/120	5,092.00
76	VERIZON WIRELESS	2019 Cell & IPad Monthly Service-April	5,038.84
77	RUDZIVA TATENDA	CIP Conserve & Save Rebates-Renewables	5,000.00
78	PITNEY BOWES 10041747 RESERVE	Prepay Postage PB Reserve-Refill Postage	5,000.00
79			
80		Price Range Total:	728.069.48
00			,
81			
81 82	1.000 to 5.000 :		
81 82 83	<u>1,000 to 5,000 :</u>		
81 82 83 84	<u>1,000 to 5,000 :</u> BADGER METER INC (P)	120-Meter, Bare 5/8x3/4" Badger Disc	4.982.40
81 82 83 84 85	<u>1,000 to 5,000 :</u> BADGER METER INC (P) JF BRENNAN CO INC	120-Meter, Bare 5/8x3/4" Badger Disc Hydro dam cleanup - crew & equipment	4,982.40 4.740.00
81 82 83 84 85 86	<u>1,000 to 5,000 :</u> BADGER METER INC (P) JF BRENNAN CO INC WARTSILA NORTH AMERICA	120-Meter, Bare 5/8x3/4" Badger Disc Hydro dam cleanup - crew & equipment 2-Cylinder Main Gas Valve	4,982.40 4,740.00 4,734.80
81 82 83 84 85 86 87	<u>1,000 to 5,000 :</u> BADGER METER INC (P) JF BRENNAN CO INC WARTSILA NORTH AMERICA CREDIT MANAGEMENT LP	120-Meter, Bare 5/8x3/4" Badger Disc Hydro dam cleanup - crew & equipment 2-Cylinder Main Gas Valve 2019 Collections/Delinguent Services-May Delinguent	4,982.40 4,740.00 4,734.80 4 727 50
81 82 83 84 85 86 87 88	<u>1,000 to 5,000 :</u> BADGER METER INC (P) JF BRENNAN CO INC WARTSILA NORTH AMERICA CREDIT MANAGEMENT LP ELEVATE MARKETING SOLUTIONS L	120-Meter, Bare 5/8x3/4" Badger Disc Hydro dam cleanup - crew & equipment 2-Cylinder Main Gas Valve 2019 Collections/Delinquent Services-May Delinquent Community Powered Rotators-Cable Ads	4,982.40 4,740.00 4,734.80 4,727.50 4 700.00
81 82 83 84 85 86 87 88 88	<u>1,000 to 5,000 :</u> BADGER METER INC (P) JF BRENNAN CO INC WARTSILA NORTH AMERICA CREDIT MANAGEMENT LP ELEVATE MARKETING SOLUTIONS L STUART C JRBY CO INC	120-Meter, Bare 5/8x3/4" Badger Disc Hydro dam cleanup - crew & equipment 2-Cylinder Main Gas Valve 2019 Collections/Delinquent Services-May Delinquent Community Powered Rotators-Cable Ads 50-Cutout 15KV 1004 NI B Poly	4,982.40 4,740.00 4,734.80 4,727.50 4,700.00 4 580.00
81 82 83 84 85 86 87 88 88 89 90	<u>1,000 to 5,000 :</u> BADGER METER INC (P) JF BRENNAN CO INC WARTSILA NORTH AMERICA CREDIT MANAGEMENT LP ELEVATE MARKETING SOLUTIONS L STUART C IRBY CO INC KATS EXCAVATING LL C	120-Meter, Bare 5/8x3/4" Badger Disc Hydro dam cleanup - crew & equipment 2-Cylinder Main Gas Valve 2019 Collections/Delinquent Services-May Delinquent Community Powered Rotators-Cable Ads 50-Cutout, 15KV, 100A, NLB, Poly Water SA service repair-225 9th Ave NE	4,982.40 4,740.00 4,734.80 4,727.50 4,700.00 4,580.00
81 82 83 84 85 86 87 88 89 90 01	<u>1,000 to 5,000 :</u> BADGER METER INC (P) JF BRENNAN CO INC WARTSILA NORTH AMERICA CREDIT MANAGEMENT LP ELEVATE MARKETING SOLUTIONS L STUART C IRBY CO INC KATS EXCAVATING LLC EANC EPANCIS	120-Meter, Bare 5/8x3/4" Badger Disc Hydro dam cleanup - crew & equipment 2-Cylinder Main Gas Valve 2019 Collections/Delinquent Services-May Delinquent Community Powered Rotators-Cable Ads 50-Cutout, 15KV, 100A, NLB, Poly Water SA service repair-225 9th Ave NE CIP Conserve & Save Rebates-Renewables	4,982.40 4,740.00 4,734.80 4,727.50 4,700.00 4,580.00 4,550.00
81 82 83 84 85 86 87 88 89 90 91	<u>1,000 to 5,000 :</u> BADGER METER INC (P) JF BRENNAN CO INC WARTSILA NORTH AMERICA CREDIT MANAGEMENT LP ELEVATE MARKETING SOLUTIONS L STUART C IRBY CO INC KATS EXCAVATING LLC FANG FRANCIS CORE & MAIN L P (P)	120-Meter, Bare 5/8x3/4" Badger Disc Hydro dam cleanup - crew & equipment 2-Cylinder Main Gas Valve 2019 Collections/Delinquent Services-May Delinquent Community Powered Rotators-Cable Ads 50-Cutout, 15KV, 100A, NLB, Poly Water SA service repair-225 9th Ave NE CIP Conserve & Save Rebates-Renewables 20-W/867 Breakoff Elange Kit K528	4,982.40 4,740.00 4,734.80 4,727.50 4,700.00 4,580.00 4,550.00 4,500.00
<ul> <li>81</li> <li>82</li> <li>83</li> <li>84</li> <li>85</li> <li>86</li> <li>87</li> <li>88</li> <li>89</li> <li>90</li> <li>91</li> <li>92</li> <li>92</li> <li>92</li> <li>92</li> </ul>	<u>1,000 to 5,000 :</u> BADGER METER INC (P) JF BRENNAN CO INC WARTSILA NORTH AMERICA CREDIT MANAGEMENT LP ELEVATE MARKETING SOLUTIONS L STUART C IRBY CO INC KATS EXCAVATING LLC FANG FRANCIS CORE & MAIN LP (P) WARTSILA NORTH AMERICA	120-Meter, Bare 5/8x3/4" Badger Disc Hydro dam cleanup - crew & equipment 2-Cylinder Main Gas Valve 2019 Collections/Delinquent Services-May Delinquent Community Powered Rotators-Cable Ads 50-Cutout, 15KV, 100A, NLB, Poly Water SA service repair-225 9th Ave NE CIP Conserve & Save Rebates-Renewables 20-WB67 Breakoff Flange Kit, K528	4,982.40 4,740.00 4,734.80 4,727.50 4,700.00 4,580.00 4,550.00 4,550.00 4,370.00 4,370.00
<ul> <li>81</li> <li>82</li> <li>83</li> <li>84</li> <li>85</li> <li>86</li> <li>87</li> <li>88</li> <li>89</li> <li>90</li> <li>91</li> <li>92</li> <li>93</li> <li>94</li> </ul>	<u>1,000 to 5,000 :</u> BADGER METER INC (P) JF BRENNAN CO INC WARTSILA NORTH AMERICA CREDIT MANAGEMENT LP ELEVATE MARKETING SOLUTIONS L STUART C IRBY CO INC KATS EXCAVATING LLC FANG FRANCIS CORE & MAIN LP (P) WARTSILA NORTH AMERICA EXDRESS SERVICES INC	120-Meter, Bare 5/8x3/4" Badger Disc Hydro dam cleanup - crew & equipment 2-Cylinder Main Gas Valve 2019 Collections/Delinquent Services-May Delinquent Community Powered Rotators-Cable Ads 50-Cutout, 15KV, 100A, NLB, Poly Water SA service repair-225 9th Ave NE CIP Conserve & Save Rebates-Renewables 20-WB67 Breakoff Flange Kit, K528 2-Valve Tappet	4,982.40 4,740.00 4,734.80 4,727.50 4,700.00 4,580.00 4,550.00 4,550.00 4,370.00 4,370.00 4,355.14
<ul> <li>81</li> <li>82</li> <li>83</li> <li>84</li> <li>85</li> <li>86</li> <li>87</li> <li>88</li> <li>89</li> <li>90</li> <li>91</li> <li>92</li> <li>93</li> <li>94</li> </ul>	<u>1,000 to 5,000 :</u> BADGER METER INC (P) JF BRENNAN CO INC WARTSILA NORTH AMERICA CREDIT MANAGEMENT LP ELEVATE MARKETING SOLUTIONS L STUART C IRBY CO INC KATS EXCAVATING LLC FANG FRANCIS CORE & MAIN LP (P) WARTSILA NORTH AMERICA EXPRESS SERVICES INC MADE DISON LAMES	120-Meter, Bare 5/8x3/4" Badger Disc Hydro dam cleanup - crew & equipment 2-Cylinder Main Gas Valve 2019 Collections/Delinquent Services-May Delinquent Community Powered Rotators-Cable Ads 50-Cutout, 15KV, 100A, NLB, Poly Water SA service repair-225 9th Ave NE CIP Conserve & Save Rebates-Renewables 20-WB67 Breakoff Flange Kit, K528 2-Valve Tappet 2019 Seasonal staff facilities	4,982.40 4,740.00 4,734.80 4,727.50 4,700.00 4,580.00 4,550.00 4,550.00 4,370.00 4,370.00 4,375.14 4,143.20
81 82 83 84 85 86 87 88 89 90 91 92 93 94 95	<u>1,000 to 5,000 :</u> BADGER METER INC (P) JF BRENNAN CO INC WARTSILA NORTH AMERICA CREDIT MANAGEMENT LP ELEVATE MARKETING SOLUTIONS L STUART C IRBY CO INC KATS EXCAVATING LLC FANG FRANCIS CORE & MAIN LP (P) WARTSILA NORTH AMERICA EXPRESS SERVICES INC MARTENSON JAMES	120-Meter, Bare 5/8x3/4" Badger Disc Hydro dam cleanup - crew & equipment 2-Cylinder Main Gas Valve 2019 Collections/Delinquent Services-May Delinquent Community Powered Rotators-Cable Ads 50-Cutout, 15KV, 100A, NLB, Poly Water SA service repair-225 9th Ave NE CIP Conserve & Save Rebates-Renewables 20-WB67 Breakoff Flange Kit, K528 2-Valve Tappet 2019 Seasonal staff facilities CIP Conserve & Save Rebates-Renewables Training TLO Foundation 2016 Ctudu for C Timbers	4,982.40 4,740.00 4,734.80 4,727.50 4,700.00 4,580.00 4,550.00 4,550.00 4,370.00 4,355.14 4,143.20 4,095.00
<ul> <li>81</li> <li>82</li> <li>83</li> <li>84</li> <li>85</li> <li>86</li> <li>87</li> <li>88</li> <li>89</li> <li>90</li> <li>91</li> <li>92</li> <li>93</li> <li>94</li> <li>95</li> <li>96</li> </ul>	1,000 to 5,000 : BADGER METER INC (P) JF BRENNAN CO INC WARTSILA NORTH AMERICA CREDIT MANAGEMENT LP ELEVATE MARKETING SOLUTIONS L STUART C IRBY CO INC KATS EXCAVATING LLC FANG FRANCIS CORE & MAIN LP (P) WARTSILA NORTH AMERICA EXPRESS SERVICES INC MARTENSON JAMES TRIPWIRE INC	120-Meter, Bare 5/8x3/4" Badger Disc Hydro dam cleanup - crew & equipment 2-Cylinder Main Gas Valve 2019 Collections/Delinquent Services-May Delinquent Community Powered Rotators-Cable Ads 50-Cutout, 15KV, 100A, NLB, Poly Water SA service repair-225 9th Ave NE CIP Conserve & Save Rebates-Renewables 20-WB67 Breakoff Flange Kit, K528 2-Valve Tappet 2019 Seasonal staff facilities CIP Conserve & Save Rebates-Renewables Training TLC Foundation Self Study for S Timbers	4,982.40 4,740.00 4,734.80 4,727.50 4,700.00 4,580.00 4,550.00 4,550.00 4,370.00 4,370.00 4,355.14 4,143.20 4,095.00 4,007.81
<ul> <li>81</li> <li>82</li> <li>83</li> <li>84</li> <li>85</li> <li>86</li> <li>87</li> <li>88</li> <li>89</li> <li>90</li> <li>91</li> <li>92</li> <li>93</li> <li>94</li> <li>95</li> <li>96</li> <li>97</li> </ul>	1,000 to 5,000 : BADGER METER INC (P) JF BRENNAN CO INC WARTSILA NORTH AMERICA CREDIT MANAGEMENT LP ELEVATE MARKETING SOLUTIONS L STUART C IRBY CO INC KATS EXCAVATING LLC FANG FRANCIS CORE & MAIN LP (P) WARTSILA NORTH AMERICA EXPRESS SERVICES INC MARTENSON JAMES TRIPWIRE INC WRIGHT TREE SERVICE INC	120-Meter, Bare 5/8x3/4" Badger Disc Hydro dam cleanup - crew & equipment 2-Cylinder Main Gas Valve 2019 Collections/Delinquent Services-May Delinquent Community Powered Rotators-Cable Ads 50-Cutout, 15KV, 100A, NLB, Poly Water SA service repair-225 9th Ave NE CIP Conserve & Save Rebates-Renewables 20-WB67 Breakoff Flange Kit, K528 2-Valve Tappet 2019 Seasonal staff facilities CIP Conserve & Save Rebates-Renewables Training TLC Foundation Self Study for S Timbers 2019 Hourly Tree Trimming Extension~	4,982.40 4,740.00 4,734.80 4,727.50 4,700.00 4,580.00 4,550.00 4,550.00 4,370.00 4,370.00 4,355.14 4,143.20 4,095.00 4,007.81 4,007.71
<ul> <li>81</li> <li>82</li> <li>83</li> <li>84</li> <li>85</li> <li>86</li> <li>87</li> <li>88</li> <li>89</li> <li>90</li> <li>91</li> <li>92</li> <li>93</li> <li>94</li> <li>95</li> <li>96</li> <li>97</li> <li>98</li> </ul>	<u>1,000 to 5,000 :</u> BADGER METER INC (P) JF BRENNAN CO INC WARTSILA NORTH AMERICA CREDIT MANAGEMENT LP ELEVATE MARKETING SOLUTIONS L STUART C IRBY CO INC KATS EXCAVATING LLC FANG FRANCIS CORE & MAIN LP (P) WARTSILA NORTH AMERICA EXPRESS SERVICES INC MARTENSON JAMES TRIPWIRE INC WRIGHT TREE SERVICE INC BADGER METER INC (P)	120-Meter, Bare 5/8x3/4" Badger Disc Hydro dam cleanup - crew & equipment 2-Cylinder Main Gas Valve 2019 Collections/Delinquent Services-May Delinquent Community Powered Rotators-Cable Ads 50-Cutout, 15KV, 100A, NLB, Poly Water SA service repair-225 9th Ave NE CIP Conserve & Save Rebates-Renewables 20-WB67 Breakoff Flange Kit, K528 2-Valve Tappet 2019 Seasonal staff facilities CIP Conserve & Save Rebates-Renewables Training TLC Foundation Self Study for S Timbers 2019 Hourly Tree Trimming Extension~ 96-Meter, Bare 5/8x1/2" Badger Disk	4,982.40 4,740.00 4,734.80 4,727.50 4,700.00 4,580.00 4,550.00 4,550.00 4,370.00 4,370.00 4,355.14 4,143.20 4,095.00 4,007.81 4,007.71 3,985.92
<ul> <li>81</li> <li>82</li> <li>83</li> <li>84</li> <li>85</li> <li>86</li> <li>87</li> <li>88</li> <li>89</li> <li>90</li> <li>91</li> <li>92</li> <li>93</li> <li>94</li> <li>95</li> <li>96</li> <li>97</li> <li>98</li> <li>99</li> <li>90</li> </ul>	1,000 to 5,000 : BADGER METER INC (P) JF BRENNAN CO INC WARTSILA NORTH AMERICA CREDIT MANAGEMENT LP ELEVATE MARKETING SOLUTIONS L STUART C IRBY CO INC KATS EXCAVATING LLC FANG FRANCIS CORE & MAIN LP (P) WARTSILA NORTH AMERICA EXPRESS SERVICES INC MARTENSON JAMES TRIPWIRE INC WRIGHT TREE SERVICE INC BADGER METER INC (P) ONGERI BENSON	120-Meter, Bare 5/8x3/4" Badger Disc Hydro dam cleanup - crew & equipment 2-Cylinder Main Gas Valve 2019 Collections/Delinquent Services-May Delinquent Community Powered Rotators-Cable Ads 50-Cutout, 15KV, 100A, NLB, Poly Water SA service repair-225 9th Ave NE CIP Conserve & Save Rebates-Renewables 20-WB67 Breakoff Flange Kit, K528 2-Valve Tappet 2019 Seasonal staff facilities CIP Conserve & Save Rebates-Renewables Training TLC Foundation Self Study for S Timbers 2019 Hourly Tree Trimming Extension~ 96-Meter, Bare 5/8x1/2" Badger Disk CIP Conserve & Save Rebates-Renewables	4,982.40 4,740.00 4,734.80 4,727.50 4,700.00 4,580.00 4,550.00 4,550.00 4,350.00 4,370.00 4,355.14 4,143.20 4,095.00 4,007.81 4,007.71 3,985.92 3,960.00
81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	1,000 to 5,000 : BADGER METER INC (P) JF BRENNAN CO INC WARTSILA NORTH AMERICA CREDIT MANAGEMENT LP ELEVATE MARKETING SOLUTIONS L STUART C IRBY CO INC KATS EXCAVATING LLC FANG FRANCIS CORE & MAIN LP (P) WARTSILA NORTH AMERICA EXPRESS SERVICES INC MARTENSON JAMES TRIPWIRE INC WRIGHT TREE SERVICE INC BADGER METER INC (P) ONGERI BENSON EXPRESS SERVICES INC	120-Meter, Bare 5/8x3/4" Badger Disc Hydro dam cleanup - crew & equipment 2-Cylinder Main Gas Valve 2019 Collections/Delinquent Services-May Delinquent Community Powered Rotators-Cable Ads 50-Cutout, 15KV, 100A, NLB, Poly Water SA service repair-225 9th Ave NE CIP Conserve & Save Rebates-Renewables 20-WB67 Breakoff Flange Kit, K528 2-Valve Tappet 2019 Seasonal staff facilities CIP Conserve & Save Rebates-Renewables Training TLC Foundation Self Study for S Timbers 2019 Hourly Tree Trimming Extension~ 96-Meter, Bare 5/8x1/2" Badger Disk CIP Conserve & Save Rebates-Renewables 2019 Temp Staff Business Services	4,982.40 4,740.00 4,734.80 4,727.50 4,700.00 4,580.00 4,550.00 4,550.00 4,350.00 4,370.00 4,370.00 4,355.14 4,143.20 4,095.00 4,007.81 4,007.71 3,985.92 3,960.00 3,945.29
81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101	<u>1,000 to 5,000 :</u> BADGER METER INC (P) JF BRENNAN CO INC WARTSILA NORTH AMERICA CREDIT MANAGEMENT LP ELEVATE MARKETING SOLUTIONS L STUART C IRBY CO INC KATS EXCAVATING LLC FANG FRANCIS CORE & MAIN LP (P) WARTSILA NORTH AMERICA EXPRESS SERVICES INC MARTENSON JAMES TRIPWIRE INC WRIGHT TREE SERVICE INC BADGER METER INC (P) ONGERI BENSON EXPRESS SERVICES INC LAGERWAARD ARIE	120-Meter, Bare 5/8x3/4" Badger Disc Hydro dam cleanup - crew & equipment 2-Cylinder Main Gas Valve 2019 Collections/Delinquent Services-May Delinquent Community Powered Rotators-Cable Ads 50-Cutout, 15KV, 100A, NLB, Poly Water SA service repair-225 9th Ave NE CIP Conserve & Save Rebates-Renewables 20-WB67 Breakoff Flange Kit, K528 2-Valve Tappet 2019 Seasonal staff facilities CIP Conserve & Save Rebates-Renewables Training TLC Foundation Self Study for S Timbers 2019 Hourly Tree Trimming Extension~ 96-Meter, Bare 5/8x1/2" Badger Disk CIP Conserve & Save Rebates-Renewables 2019 Temp Staff Business Services CIP Conserve & Save Rebates-Renewables	4,982.40 4,740.00 4,734.80 4,727.50 4,700.00 4,580.00 4,550.00 4,550.00 4,550.00 4,370.00 4,370.00 4,355.14 4,143.20 4,095.00 4,007.81 4,007.71 3,985.92 3,960.00 3,945.29 3,885.00
81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102	<u>1,000 to 5,000 :</u> BADGER METER INC (P) JF BRENNAN CO INC WARTSILA NORTH AMERICA CREDIT MANAGEMENT LP ELEVATE MARKETING SOLUTIONS L STUART C IRBY CO INC KATS EXCAVATING LLC FANG FRANCIS CORE & MAIN LP (P) WARTSILA NORTH AMERICA EXPRESS SERVICES INC MARTENSON JAMES TRIPWIRE INC WRIGHT TREE SERVICE INC BADGER METER INC (P) ONGERI BENSON EXPRESS SERVICES INC LAGERWAARD ARIE SMARTSHEET INC	120-Meter, Bare 5/8x3/4" Badger Disc Hydro dam cleanup - crew & equipment 2-Cylinder Main Gas Valve 2019 Collections/Delinquent Services-May Delinquent Community Powered Rotators-Cable Ads 50-Cutout, 15KV, 100A, NLB, Poly Water SA service repair-225 9th Ave NE CIP Conserve & Save Rebates-Renewables 20-WB67 Breakoff Flange Kit, K528 2-Valve Tappet 2019 Seasonal staff facilities CIP Conserve & Save Rebates-Renewables Training TLC Foundation Self Study for S Timbers 2019 Hourly Tree Trimming Extension~ 96-Meter, Bare 5/8x1/2" Badger Disk CIP Conserve & Save Rebates-Renewables 2019 Temp Staff Business Services CIP Conserve & Save Rebates-Renewables 2019 Temp Staff Business Services	4,982.40 4,740.00 4,734.80 4,727.50 4,700.00 4,580.00 4,550.00 4,550.00 4,370.00 4,355.14 4,143.20 4,095.00 4,007.81 4,007.71 3,985.92 3,960.00 3,945.29 3,885.00 3,809.03
81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103	<u>1,000 to 5,000 :</u> BADGER METER INC (P) JF BRENNAN CO INC WARTSILA NORTH AMERICA CREDIT MANAGEMENT LP ELEVATE MARKETING SOLUTIONS L STUART C IRBY CO INC KATS EXCAVATING LLC FANG FRANCIS CORE & MAIN LP (P) WARTSILA NORTH AMERICA EXPRESS SERVICES INC MARTENSON JAMES TRIPWIRE INC WRIGHT TREE SERVICE INC BADGER METER INC (P) ONGERI BENSON EXPRESS SERVICES INC LAGERWAARD ARIE SMARTSHEET INC YUNG THOMAS	<ul> <li>120-Meter, Bare 5/8x3/4" Badger Disc</li> <li>Hydro dam cleanup - crew &amp; equipment</li> <li>2-Cylinder Main Gas Valve</li> <li>2019 Collections/Delinquent Services-May Delinquent</li> <li>Community Powered Rotators-Cable Ads</li> <li>50-Cutout, 15KV, 100A, NLB, Poly</li> <li>Water SA service repair-225 9th Ave NE</li> <li>CIP Conserve &amp; Save Rebates-Renewables</li> <li>20-WB67 Breakoff Flange Kit, K528</li> <li>2-Valve Tappet</li> <li>2019 Seasonal staff facilities</li> <li>CIP Conserve &amp; Save Rebates-Renewables</li> <li>Training TLC Foundation Self Study for S Timbers</li> <li>2019 Hourly Tree Trimming Extension~</li> <li>96-Meter, Bare 5/8x1/2" Badger Disk</li> <li>CIP Conserve &amp; Save Rebates-Renewables</li> <li>2019 Temp Staff Business Services</li> <li>CIP Conserve &amp; Save Rebates-Renewables</li> <li>9-IS Project Mgmt Software Licenses</li> <li>CIP Conserve &amp; Save Rebates-Renewables</li> </ul>	4,982.40 4,740.00 4,734.80 4,727.50 4,700.00 4,580.00 4,550.00 4,550.00 4,550.00 4,370.00 4,355.14 4,143.20 4,095.00 4,007.81 4,007.71 3,985.92 3,960.00 3,945.29 3,885.00 3,809.03 3,700.00
81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104	L,000 to 5,000 : BADGER METER INC (P) JF BRENNAN CO INC WARTSILA NORTH AMERICA CREDIT MANAGEMENT LP ELEVATE MARKETING SOLUTIONS L STUART C IRBY CO INC KATS EXCAVATING LLC FANG FRANCIS CORE & MAIN LP (P) WARTSILA NORTH AMERICA EXPRESS SERVICES INC MARTENSON JAMES TRIPWIRE INC WRIGHT TREE SERVICE INC BADGER METER INC (P) ONGERI BENSON EXPRESS SERVICES INC LAGERWAARD ARIE SMARTSHEET INC YUNG THOMAS MUDDERMAN NANCY	<ul> <li>120-Meter, Bare 5/8x3/4" Badger Disc Hydro dam cleanup - crew &amp; equipment</li> <li>2-Cylinder Main Gas Valve</li> <li>2019 Collections/Delinquent Services-May Delinquent Community Powered Rotators-Cable Ads</li> <li>50-Cutout, 15KV, 100A, NLB, Poly</li> <li>Water SA service repair-225 9th Ave NE</li> <li>CIP Conserve &amp; Save Rebates-Renewables</li> <li>20-WB67 Breakoff Flange Kit, K528</li> <li>2-Valve Tappet</li> <li>2019 Seasonal staff facilities</li> <li>CIP Conserve &amp; Save Rebates-Renewables</li> <li>Training TLC Foundation Self Study for S Timbers</li> <li>2019 Hourly Tree Trimming Extension~</li> <li>96-Meter, Bare 5/8x1/2" Badger Disk</li> <li>CIP Conserve &amp; Save Rebates-Renewables</li> <li>2019 Temp Staff Business Services</li> <li>CIP Conserve &amp; Save Rebates-Renewables</li> <li>9-IS Project Mgmt Software Licenses</li> <li>CIP Conserve &amp; Save Rebates-Renewables</li> <li>CIP Conserve &amp; Save Rebates-Renewables</li> </ul>	4,982.40 4,740.00 4,734.80 4,727.50 4,700.00 4,550.00 4,550.00 4,550.00 4,550.00 4,370.00 4,355.14 4,143.20 4,095.00 4,007.81 4,007.71 3,985.92 3,960.00 3,945.29 3,885.00 3,809.03 3,700.00 3,622.50
81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105	L,000 to 5,000 : BADGER METER INC (P) JF BRENNAN CO INC WARTSILA NORTH AMERICA CREDIT MANAGEMENT LP ELEVATE MARKETING SOLUTIONS L STUART C IRBY CO INC KATS EXCAVATING LLC FANG FRANCIS CORE & MAIN LP (P) WARTSILA NORTH AMERICA EXPRESS SERVICES INC MARTENSON JAMES TRIPWIRE INC WRIGHT TREE SERVICE INC BADGER METER INC (P) ONGERI BENSON EXPRESS SERVICES INC LAGERWAARD ARIE SMARTSHEET INC YUNG THOMAS MUDDERMAN NANCY IDEXX DISTRIBUTION CORP	<ul> <li>120-Meter, Bare 5/8x3/4" Badger Disc</li> <li>Hydro dam cleanup - crew &amp; equipment</li> <li>2-Cylinder Main Gas Valve</li> <li>2019 Collections/Delinquent Services-May Delinquent</li> <li>Community Powered Rotators-Cable Ads</li> <li>50-Cutout, 15KV, 100A, NLB, Poly</li> <li>Water SA service repair-225 9th Ave NE</li> <li>CIP Conserve &amp; Save Rebates-Renewables</li> <li>20-WB67 Breakoff Flange Kit, K528</li> <li>2-Valve Tappet</li> <li>2019 Seasonal staff facilities</li> <li>CIP Conserve &amp; Save Rebates-Renewables</li> <li>Training TLC Foundation Self Study for S Timbers</li> <li>2019 Hourly Tree Trimming Extension~</li> <li>96-Meter, Bare 5/8x1/2" Badger Disk</li> <li>CIP Conserve &amp; Save Rebates-Renewables</li> <li>2019 Temp Staff Business Services</li> <li>CIP Conserve &amp; Save Rebates-Renewables</li> <li>9-IS Project Mgmt Software Licenses</li> <li>CIP Conserve &amp; Save Rebates-Renewables</li> <li>CIP Conserve &amp; Save Rebates-Renewables</li> <li>4-Colilert, 100ml</li> </ul>	4,982.40 4,740.00 4,734.80 4,727.50 4,700.00 4,550.00 4,550.00 4,550.00 4,550.00 4,370.00 4,355.14 4,143.20 4,095.00 4,007.81 4,007.71 3,985.92 3,960.00 3,945.29 3,885.00 3,809.03 3,700.00 3,622.50 3,609.20

## **ROCHESTER PUBLIC UTILITIES**

#### A/P Board Listing By Dollar Range

For 05/09/2019 To 06/10/2019

107	BADGER METER INC (P)	18-HRE Badger M-120 100W Itron ERT Integral	3,437.28
108	ELEVATE MARKETING SOLUTIONS L	Arbor Day Digital billbords-Cable Ads	3,400.00
109	CORE & MAIN LP (P)	1-Hydrant, 8 ft	3,339.00
110	BOLTON AND MENK (P)	Antenna Review TMOB North Park #97	3,325.00
111	KELLEY SEAN	CIP Conserve & Save Rebates-Renewables	3,300.00
112	WARTSILA NORTH AMERICA	5-Spark Plug Coil Pack	3,294.25
113	IHEART MEDIA dba	Arbor Day Ads	3,294.00
114	MIDCONTINENT ISO INC	May MISO Billing	3,264.93
115	ELEVATE MARKETING SOLUTIONS L	Cable advertising-Irrigation Ads for May	3,180.00
116	WARTSILA NORTH AMERICA	1-Prechamber Complete Assembly	3,150.50
117	JENNINGS, STROUSS & SALMON PL	Legal Fees-MISO Attachment O	3,147.50
118	ULINE	4-Storage cabinet, Heavy Duty	3,100.00
119	RESCO	100-Arrester, 10kV, Dist, Riser MOV	3,085.00
120	HOM FURNITURE	CIP Conserve & Save Rebates-Lighting	3,071.76
121	ELEVATE MARKETING SOLUTIONS L	Community Powered - Prime Rotators-Cable Ads	3,029.00
122	BORDER STATES ELECTRIC SUPPLY	120-Elbow, 15kV, 200A, LB,1/0 Sol,175-220Mil	2,994.00
123	BAKER TILLY VIRCHOW KRAUSE LL	2018-2020 Audit Fees	2,912.00
124	BORDER STATES ELECTRIC SUPPLY	Installation/Training-IMA	2,885.63
125	VERCNOCKE ANDREW	CIP Conserve & Save Rebates-Renewables	2,880.00
126	IDEAL SERVICE COMPANY INC	Preventative Mantenance service on VFD's	2,880.00
127	PW POWER SYSTEMS INC	3-Filter, Element, CT115594-SP1	2,605.78
128	HI LINE UTILITY SUPPLY CO (P)	10 Rolls-Pull Tape, Printed, .750" x 3000'	2,588.30
129	HALLBERG ENGINEERING INC	CSC Commissioning Service-Expansion thru 4/30/19	2,568.60
130	CPMI INC	Design services on BEP	2,550.00
131	ONLINE INFORMATION SERVICES I	2019 Utility Exchange Report-May	2,540.80
132	FIRST STUDENT INC	Busing for Arbor Day	2,531.02
133	LYLES SALES & SERVICE	Battery & 5-Echos	2,511.43
134	RONCO ENGINEERING SALES INC	Hydraulic hose, Fittings, Hoses, Pipes	2,508.61
135	SMARTSHEET INC	IS-Prof Services-Launch of Software Program	2,500.00
136	CONSOLIDATED COMMUNICATIONS d	2018-20 Network and Co-location Services-May	2,461.26
137	D P C INDUSTRIES INC	3,822 Lbs-2019 Carus 8500 Aqua Mag F35	2,460.10
138	A & A ELECT & UNDERGROUND CON	Transformer bank change-out	2,437.00
139	NETWORKFLEET INC	2019 Monthly Charge - GPS Fleet Tracking-April	2,428.06
140	VIKING ELECTRIC SUPPLY INC	3,600 FT-Wire, AL, 600V, #2-#4 ACSR NEU Tri	2,404.69
141	SOMA CONSTRUCTION INC	Backfill material for main break repair	2,381.14
142	EXPRESS SERVICES INC	2019 Temp Services IT Support	2,340.80
143	ELEVATE MARKETING SOLUTIONS L	Community Powered - Sports-Cable Ads	2,340.00
144	STEVE BENNING ELECTRIC	Service Center - Power for T & D Work Area	2,306.02
145	ULTEIG ENGINEERS INC	Engineering Srvs for IBM Phasing Mod	2,305.50
146	MN DEPT OF NATURAL RESOURCES	Crossing Permit	2,250.00
147	ELEVATE MARKETING SOLUTIONS L	Rotator TV spots-Cable Ads	2,240.00
148	WARTSILA NORTH AMERICA	5-Lube Oil Filter Gasket Set	2,239.00
149	ELITE CARD PAYMENT CENTER	K Boston, Travel, APPA, TX, APPA Registration	2,225.00
150	ELITE CARD PAYMENT CENTER	M Wojcik, Travel, APPA, TX, Registration	2,225.00
151	ELITE CARD PAYMENT CENTER	M Kotschevar, Travel, APPA, TX, Registration	2,225.00
152	D P C INDUSTRIES INC	6,482 Lbs-2019 Hydrofluorosilicic Acid - Delivered	2,216.41
153	MINNESOTA ENERGY RESOURCES CO	April Gas for SLP	2,210.65
154	RESCO	50-Crossarm, Wood, 8' HD	2,199.00
155	BADGER PAINTING	Interior painting work at SC	2,167.00
156	WARTSILA NORTH AMERICA	2-Charge Air Cooler Gasket Kit	2,165.24
157	D P C INDUSTRIES INC	28 Cyl-2019 Chlorine, 150 lb Cyl	2,121.00
158	MASTEC NORTH AMERICA INC	2019 Joint Trench Directional Boring	2,100.00
159	OPEN ACCESS TECHNOLOGY	June OATI Services WebCompliance	1,950.00

### **ROCHESTER PUBLIC UTILITIES A/P Board Listing By Dollar Range** For 05/09/2019 To 06/10/2019

160	WARTSILA NORTH AMERICA	2-Cylinder Main Gas Bellows	1,943.06
161	DAKOTA SUPPLY GROUP	12-Filter, Air, 20 x 20 x 4, SC	1,927.98
162	ASSOCIATED MILK PRODUCERS	CIP Conserve & Save Rebates-Lighting	1,921.50
163	ASPLUNDH TREE EXPERT LLC (P)	801B Green line clearance~	1,886.77
164	BRELAND ROSEMARY	CIP Conserve & Save Rebates-Geothermal	1,883.75
165	DELL MARKETING LP	10-Computer, Dell 22 Inch Monitor	1,868.07
166	MN SAFETY COUNCIL INC	NFPA training on 70E on 5/30/19 for T & D	1,839.32
167	UNITED RENTALS INC	Rental of Telescopic Boom at 3605 Hwy 52 N	1,833.93
168	ELEVATE MARKETING SOLUTIONS L	Cable Adverting-Irrigation Ads	1,785.00
169	GOPHER STATE ONE CALL	May Tickets-Electric	1,750.95
170	GOPHER STATE ONE CALL	May Tickets-Water	1,750.95
171	JOHN HENRY FOSTER MN INC (P)	6-Oil, QuinSyn, 5 Gal. Container	1,731.76
172	WESCO DISTRIBUTION INC	2-Flexible cable guide w/adapters	1,701.44
173	MAYO FOUNDATION	CIP Conserve & Save Rebates-Lighting	1,657.00
174	BARR ENGINEERING COMPANY (P)	Wellhead Protec-Containment Source Inv-Prof Services	1,626.50
175	TRIPWIRE INC	Training TE Foundation Admin Track for S Timbers	1,603.13
176	ELITE CARD PAYMENT CENTER	Travel,TMason,Doble,CA, Lodging	1,598.95
177	WARTSILA NORTH AMERICA	2-Cooling Water Pump Gasket Kit	1,584.86
178	WARTSILA NORTH AMERICA	2-Prechamber Upper Body	1,575.26
179	STUART C IRBY CO INC	24-Pedestal Dome Cover, Box Style	1,560.00
180	STUART C IRBY CO INC	50-Arrester, 10kV, Dist, OH MOV	1,560.00
181	JF BRENNAN CO INC	Mobilization rate-Dive Support for Dam Cleanup	1,560.00
182	VIKING ELECTRIC SUPPLY INC	10-Elbow, Steel, 36.0 R, 4.00	1,558.90
183	ELITE CARD PAYMENT CENTER	BMorgan, Travel, APPA, TX, Registration	1,525.00
184	MAASS GRADY	CIP Conserve & Save Rebates-Renewables	1,507.50
185	MEYER BORGMAN & JOHNSON INC	Professional Services-RPU Fuel Tank Foundation	1,500.00
186	G A ERNST & ASSOCIATES INC	Energy Audit-25 Audits & 96 Bulbs	1,481.29
187	BADGER METER INC (P)	3-Strainer, Bronze Plate. 3" Round Flange	1,475.19
188	DAKOTA SUPPLY GROUP	467-Brass pipe fittings	1,461.81
189	CHS ROCHESTER	Diesel for SLP	1,446.13
190	STUART C IRBY CO INC	24-Pedestal Base, Secondary, w/o Cover	1,440.00
191	SANCO EQUIPMENT LLC	Bobcat repair	1,403.72
192	CITY OF ROCHESTER	US Interior-RPU share S Fork Fee	1,402.50
193	BOLTON AND MENK (P)	Antenna Review TMOB John Adams #83	1,400.00
194	BOLTON AND MENK (P)	Antenna Review TMOB Baihly #92	1,400.00
195	ABILITY BUILDING CENTER	CIP Conserve & Save Rebates-Lighting	1,362.48
196	ELITE CARD PAYMENT CENTER	Tool calibration-Fluke Corporate	1,345.00
197	MINNESOTA ENERGY RESOURCES CO	April Gas for Cascade Creek	1,327.09
198	CUSTOM COMMUNICATIONS INC	2019 Custom Connect Monitor & Protective	1,314.82
199	HARRIS ROCHESTER INC	Maintenance Agreement-Preventative Maintenance	1,292.12
200	CITY OF ROCHESTER	Workers Comp 4/19 Fee	1,282.00
201	MURCAL INC dba	12-Spark plug	1,279.29
202	BADGER METER INC (P)	2-Strainer, Bronze Plate. 4" Round Flange	1,278.50
203	WESCO DISTRIBUTION INC	18-Term, No Skirts 15kv, 500-750 MCM, C.S.	1,277.28
204	STUART C IRBY CO INC	100-Steel Deadend, .375" Guy, HS	1,275.00
205	OLDCASTLE PRECAST INC (P)	20-Manhole Spacer Ring, 37" x 2" Cement	1,274.16
206	EPLUS TECHNOLOGY INC	2019 Network maintenance services	1,272.00
207	WERNER ELECTRIC SUPPLY	3-Mast Arm, Single Bishop, Green	1,262.47
208	WIESER PRECAST STEPS INC (P)	1-Grd Sleeve, Switch Basement, PME	1,250.00
209	FORBROOK LANDSCAPING SERVICES	Water Main Break Restoration	1,249.46
210	BOLTON AND MENK (P)	Verizon St. Bridget #103 Site Review~	1,225.00
211	STUART C IRBY CO INC	40-U-Guard, 2.0" x 10', Steel	1,212.00
212	ALTEC INDUSTRIES INC	2-Spool valve	1,204.10

## ROCHESTER PUBLIC UTILITIES

A/P Board Listing By Dollar Range

For 05/09/2019 To 06/10/2019

213	JEFF FEECE DESIGNS	AE Services on SC NW Landscaping Project	1,200.00
214	PREMIER BANK	CIP Conserve & Save Rebates-Lighting	1,193.13
215	ROCHESTER ARMORED CAR CO INC	2019 Pick Up Services-May	1,187.24
216	McGRANN SHEA CARNIVAL STRAUGH	Legal Services-Service Territory - MPUC joint request	1,170.00
217	THOMAS TOOL & SUPPLY INC	Impact drill, Ratchet, Lithium Batteries	1,131.74
218	ELITE CARD PAYMENT CENTER	6-Insulators for SLP	1,128.44
219	BADGER METER INC (P)	6-Measuring Champber, M-170	1,117.80
220	HAWK & SON'S INC	Hauling Apache Mall Transformer back to SC	1,110.00
221	WARTSILA NORTH AMERICA	2-Lube Oil Module Gasket Set	1,067.00
222	SVEEN HOLDINGS LLC	Customer Refunds 300000720227-Deposit Refund	1,034.91
223	ADVANTAGE DIST LLC (P)	55 Drums-Oil, DTE Heavy Med. (55 Gal Drum)	1,013.39
224			
225		Price Range Total:	329,269.40
226			
227	<u>0 to 1,000 :</u>		
228			
229	REBATES	Summarized transactions: 166	23,366.01
230	EXPRESS SERVICES INC	Summarized transactions: 20	15,300.86
231	Customer Refunds (CIS)	Summarized transactions: 136	12,500.62
232	ELITE CARD PAYMENT CENTER	Summarized transactions: 61	11,094.16
233	STUART CIRBY COINC	Summarized transactions: 36	8,212.13
234	CINTAS CORP	Summarized transactions: 54	8,142.28
235		Summarized transactions: 26	7,022.47
236		Summarized transactions: 13	6,150.64
237		Summarized transactions: 22	5,736.59
238		Summarized transactions: 28	5,513.44
239		Summarized transactions: 43	5,248.98
240		Summarized transactions: 7	4,090.02
241		Summarized transactions: 5	3,001.01
242		Summarized transactions: 3	3,000.00
245		Summarized transactions: 22	3,563.14
244		Summarized transactions: 23	3 268 71
245	AMAZON COM	Summarized transactions: 25	3 181 84
247	NETWORK SERVICES COMPANY	Summarized transactions: 19	2,992,54
248	CITY OF ROCHESTER	Summarized transactions: 11	2,954,15
249	VIKING ELECTRIC SUPPLY INC	Summarized transactions: 19	2,866.33
250	FIRST CLASS PLUMBING & HEATIN	Summarized transactions: 10	2,715.28
251	MINNESOTA ENERGY RESOURCES CO	Summarized transactions: 7	2,526.88
252	BOLTON AND MENK (P)	Summarized transactions: 5	2,450.00
253	SUTTON JEREMY	Summarized transactions: 8	2,412.98
254	ELITE CARD PAYMENT CENTER	Summarized transactions: 10	2,067.58
255	MCMASTER CARR SUPPLY COMPANY	Summarized transactions: 33	2,045.53
256	GARCIA GRAPHICS INC	Summarized transactions: 8	1,980.50
257	WESCO DISTRIBUTION INC	Summarized transactions: 12	1,969.00
258	WARNING LITES OF MN INC (P)	Summarized transactions: 4	1,844.13
259	WINKELS ELECTRIC INC	Summarized transactions: 10	1,816.61
260	OLSON JEFF	Summarized transactions: 5	1,754.90
261	EPLUS TECHNOLOGY INC	Summarized transactions: 7	1,650.64
262	KIMT	Summarized transactions: 2	1,620.00
263	GRAINGER INC	Summarized transactions: 16	1,442.46
264	PARSONS ELECTRIC LLC	Summarized transactions: 5	1,373.06
265	PW POWER SYSTEMS INC	Summarized transactions: 14	1,369.76

## **ROCHESTER PUBLIC UTILITIES** A/P Board Listing By Dollar Range

For 05/09/2019 To 06/10/2019

266	CAPELLE KEITH	Summarized transactions: 2	1,281.45
267	IDEXX DISTRIBUTION CORP	Summarized transactions: 4	1,173.98
268	DAKOTA SUPPLY GROUP	Summarized transactions: 13	1,145.94
269	THOMAS TOOL & SUPPLY INC	Summarized transactions: 4	1,037.05
270	JOHN HENRY FOSTER MN INC (P)	Summarized transactions: 4	1,034.47
271	WARTH SARAH	Summarized transactions: 3	1,022.48
272	ADVANCE AUTO PARTS	Summarized transactions: 31	983.36
273	ZIEGLER INC	Summarized transactions: 2	950.85
274	SEEME PRODUCTIONS LLC	Summarized transactions: 1	950.00
275	USA BLUE BOOK DBA	Summarized transactions: 3	936.50
276	AUTHORIZE.NET	Summarized transactions: 1	916.75
277	CINTAS CORP	Summarized transactions: 5	912.52
278	ELECTRIC SCIENTIFIC CO INC	Summarized transactions: 1	908.44
279	SUNBELT RENTALS	Summarized transactions: 1	885.57
280	VERIZON WIRELESS	Summarized transactions: 2	859.91
281	DAKOTA SUPPLY GROUP	Summarized transactions: 10	859.34
282	QUALITY OVERHEAD DOOR INC	Summarized transactions: 8	852.58
283	HALO BRANDED SOLUTIONS	Summarized transactions: 3	849.12
284	CENTURYLINK (P)	Summarized transactions: 6	826.64
285	HARRIS ROCHESTER INC	Summarized transactions: 1	796.75
286	STANTEC CONSULTING SERVICES I	Summarized transactions: 1	748.00
287	CLEMENTS CHEVROLET CADILLAC S	Summarized transactions: 7	746.38
288	POWER SYSTEMS ENGINEERING INC	Summarized transactions: 1	720.00
289	THE ENERGY AUTHORITY INC	Summarized transactions: 1	717.48
290	CHS ROCHESTER	Summarized transactions: 1	711.75
291	BENSON ANTHONY	Summarized transactions: 3	699.74
292	REINDERS INC	Summarized transactions: 1	670.80
293	FIRST SUPPLY (P)	Summarized transactions: 1	666.64
294	KAAL TV LLC	Summarized transactions: 2	650.00
295	FASTENAL COMPANY	Summarized transactions: 4	642.11
296	DAVIES PRINTING COMPANY INC	Summarized transactions: 3	636.98
297	CLARK EQUIPMENT CO	Summarized transactions: 1	635.64
298	SCHUMACHER ELEVATOR COMPANY	Summarized transactions: 1	618.00
299	BARRY SCREEN PRINT CO dba	Summarized transactions: 43	605.47
300	BEST BUY BUSINESS ADVANTAGE d	Summarized transactions: 4	603.14
301	GRAYBAR ELECTRIC COMPANY INC	Summarized transactions: 3	599.79
302	PEOPLES ENERGY COOPERATIVE	Summarized transactions: 3	598.10
303	STURM DANNY K	Summarized transactions: 6	596.16
304	EDINALARM INC	Summarized transactions: 3	592.04
305	BRAUN INTERTEC CORPORATION	Summarized transactions: 1	586.50
306	ASI SIGNAGE INNOVATIONS dba	Summarized transactions: 2	576.65
307	STEVE BENNING ELECTRIC	Summarized transactions: 1	567.50
308	FASTENAL COMPANY	Summarized transactions: 18	543.10
309	INSTY PRINTS ROCHESTER (P)	Summarized transactions: 2	540.79
310	BARR ENGINEERING COMPANY (P)	Summarized transactions: 1	526.00
311	BLACKBURN MANUFACTURING CO	Summarized transactions: 2	524.22
312	MN SUPPLY COMPANY INC (P)	Summarized transactions: 2	520.42
313	VERTEX US HOLDINGS INC	Summarized transactions: 1	517.20
314	NUVERA	Summarized transactions: 1	500.31
315	JENNINGS, STROUSS & SALMON PL	Summarized transactions: 1	250.00
316	REBATES	Summarized transactions: 12	500.00
317	А Т & Т	Summarized transactions: 1	497.42
318	KLAMERUS DOUG	Summarized transactions: 1	475.00

#### **ROCHESTER PUBLIC UTILITIES** A/P Board Listing By Dollar Range

For 05/09/2019 To 06/10/2019

319	EO JOHNSON CO INC	Summarized transactions: 4	474.14
320	LUHMANN ABE	Summarized transactions: 1	467.01
321	WERNER ELECTRIC SUPPLY	Summarized transactions: 10	465.59
322	POWERMATION DIVISON	Summarized transactions: 2	457.61
323	TREATMENT RESOURCES INC	Summarized transactions: 3	444.83
324	LANGUAGE LINE SERVICES INC	Summarized transactions: 1	434.54
325	SKYWATCH SERVICES dba	Summarized transactions: 1	427.50
326	JETTER CLEAN INC	Summarized transactions: 2	413.75
327	MENARDS ROCHESTER NORTH	Summarized transactions: 6	408.35
328	OLDCASTLE PRECAST INC (P)	Summarized transactions: 1	400.93
329	NATIONAL GROUNDWATER ASSN INC	Summarized transactions: 1	375.00
330	PAULS LOCK & KEY SHOP INC	Summarized transactions: 2	352.31
331	CENTURYLINK	Summarized transactions: 1	342.74
332	ALTERNATIVE TECHNOLOGIES INC	Summarized transactions: 1	340.00
333	LYLES SALES & SERVICE	Summarized transactions: 1	331.26
334	CORPORATE WEB SERVICES INC	Summarized transactions: 2	329.85
335	NORTHERN / BLUETARP FINANCIAL	Summarized transactions: 4	329.73
336	HOGAN PETER	Summarized transactions: 1	325.00
337	BLACKBURN MANUFACTURING CO	Summarized transactions: 2	321.67
338	WINKELS ELECTRIC INC	Summarized transactions: 2	320.00
339	JOHNSON PRINTING CO INC	Summarized transactions: 2	307.80
340	FERGUSON WATERWORKS	Summarized transactions: 2	307.54
341	LAUGEN STEVE	Summarized transactions: 2	300.90
342	MINNESOTA CHILDRENS MUSEUM	Summarized transactions: 1	300.00
343	ROCH PLUMBING & HEATING CO IN	Summarized transactions: 1	299.17
344		Summarized transactions: 1	286.62
345		Summarized transactions: 2	276.75
346		Summarized transactions: 1	267.19
347		Summarized transactions: 5	264.62
348		Summarized transactions: 6	262.12
349		Summanzed transactions: 2	250.00
350	CHARTER COMMUNICATIONS HOLDIN	Summarized transactions: 1	231.73
351		Summarized transactions: 1	222.40
352		Summarized transactions: 7	220.00
254		Summarized transactions: 2	210.00
255		Summarized transactions: 1	209.10
355	SCHUMACHER EXCAVATING INC	Summarized transactions: 1	205.00
350	COMPLITER TASK GROUP INC	Summarized transactions: 1	203.30
358		Summarized transactions: 1	199.50
359	MENARDS ROCHESTER NORTH	Summarized transactions: 9	198 73
360	WABASHA IMPLEMENT	Summarized transactions: 1	197.18
361	HY VEE NORTH	Summarized transactions: 2	196.45
362	NALCO COMPANY	Summarized transactions: 5	181.24
363	IHEART MEDIA dba	Summarized transactions: 1	180.00
364	P F C EQUIPMENT INC (P)	Summarized transactions: 3	176.63
365	FEDEX SHIPPING	Summarized transactions: 8	176.39
366	CUSTOM COMMUNICATIONS INC	Summarized transactions: 2	171.38
367	EAGLE EYE POWER SOLUTIONS LLC	Summarized transactions: 1	160.00
368	HI LINE UTILITY SUPPLY CO (P)	Summarized transactions: 1	157.07
369	GOPHER SEPTIC SERVICE INC	Summarized transactions: 1	150.00
370	SAUNDERS TRACY	Summarized transactions: 1	150.00
371	NYHUS STEVE	Summarized transactions: 1	150.00

## **ROCHESTER PUBLIC UTILITIES**

A/P Board Listing By Dollar Range

For 05/09/2019 To 06/10/2019

372	BOWMANS SAFE & LOCK SHOP LTD	Summarized transactions: 1	149.00
373	SOUND AND MEDIA SOLUTIONS	Summarized transactions: 1	144.28
374	OSWEILER TODD	Summarized transactions: 3	140.76
375	C & N UPHOLSTERY	Summarized transactions: 2	140.00
376	KRENZ & CO INC	Summarized transactions: 2	137.58
377	BECKLEYS OFFICE PRODUCTS INC	Summarized transactions: 1	134.75
378	CURVATURE INC	Summarized transactions: 1	127.18
379	SANCO EQUIPMENT LLC	Summarized transactions: 1	121.54
380	VERIFIED CREDENTIALS INC	Summarized transactions: 1	120.00
381	HACH COMPANY	Summarized transactions: 2	118.93
382	AIRGAS SAFETY INC	Summarized transactions: 6	117.70
383	RONCO ENGINEERING SALES INC	Summarized transactions: 2	112.59
384	OLSEN CHAIN & CABLE CO INC	Summarized transactions: 3	103.61
385	MISSISSIPPI WELDERS SUPPLY CO	Summarized transactions: 5	102.83
386	POWER DYNAMICS INC	Summarized transactions: 3	95.69
387	A T & T MOBILITY	Summarized transactions: 2	93.54
388	FLAGSOURCE dba	Summarized transactions: 2	90.79
389	WSB & ASSOCIATES	Summarized transactions: 1	90.00
390	LOGANS TREE SERVICE & RECYCLI	Summarized transactions: 1	90.00
391	MCMASTER CARR SUPPLY COMPANY	Summarized transactions: 2	86.89
392	KEACH TODD	Summarized transactions: 1	85.50
393	KAMAN INDUSTRIAL TECHNOLOGIES	Summarized transactions: 3	85.22
394	SLEEPY EYE TELEPHONE CO	Summarized transactions: 1	84.76
395	MCNEILUS STEEL INC	Summarized transactions: 1	84.00
396	TOKAY SOFTWARE	Summarized transactions: 1	79.00
397	AMARIL UNIFORM COMPANY	Summarized transactions: 2	77.50
398	HERCULES INDUSTRIES INC	Summarized transactions: 2	72.95
399	ROCHESTERFEST/CELEBRATION OF	Summarized transactions: 1	70.00
400	CLAREY'S SAFETY EQUIPMENT dba	Summarized transactions: 2	69.50
401	PODEINS POWER EQUIPMENT (P)	Summarized transactions: 2	64.38
402	SNAP ON INDUSTRIAL	Summarized transactions: 1	61.59
403	DONAHUE DEBRA	Summarized transactions: 1	60.21
404	ALTEC INDUSTRIES INC	Summarized transactions: 1	60.20
405	IDEAL SERVICE COMPANY INC	Summarized transactions: 1	60.00
406	ON SITE SANITATION INC	Summarized transactions: 1	56.33
407	MENARDS ROCHESTER SOUTH	Summarized transactions: 2	54.31
408	ARNOLDS SUPPLY & KLEENIT CO (	Summarized transactions: 2	52.90
409	G A ERNST & ASSOCIATES INC	Summarized transactions: 1	50.23
410	JACOB FIX	Summarized transactions: 1	49.00
411	ZEP SALES & SERVICE	Summarized transactions: 2	47.46
412	KOTSCHEVAR MARK	Summarized transactions: 1	46.21
413	PROPERTY RECORDS OLMSTED COUN	Summarized transactions: 1	46.00
414	THOMAS TOOL & SUPPLY INC	Summarized transactions: 2	44.87
415	NORTHERN / BLUETARP FINANCIAL	Summarized transactions: 1	39.75
416	TLD AMERICA	Summarized transactions: 6	39.21
417	CORE & MAIN LP (P)	Summarized transactions: 2	38.70
418	CLAREY'S SAFETY EQUIPMENT dba	Summarized transactions: 1	38.48
419	ZEE MEDICAL SERVICE INC (P)	Summarized transactions: 2	37.46
420	PROLINE DISTRIBUTORS	Summarized transactions: 1	37.28
421	CENTRAL FINANCE OLMSTED COUNT	Summarized transactions: 1	36.75
422	DZUBAY TONY	Summarized transactions: 1	32.96
423	GOODIN COMPANY	Summarized transactions: 1	32.40
424	NAPA AUTO PARTS (P)	Summarized transactions: 2	32.07

### **ROCHESTER PUBLIC UTILITIES**

#### A/P Board Listing By Dollar Range

For 05/09/2019 To 06/10/2019

425	SOLID WASTE OLMSTED COUNTY	Summarized transactions: 1	31.80
426	HEPPNER COLE	Summarized transactions: 1	30.00
427	NORTH AMERICAN ELECTRIC RELIA	Summarized transactions: 1	27.87
428	MINNESOTA ENERGY RESOURCES CO	Summarized transactions: 1	26.23
429	KURTZ DALE	Summarized transactions: 1	23.00
430	FIRE SAFETY USA, INC	Summarized transactions: 1	21.38
431	ADVANTAGE DIST LLC (P)	Summarized transactions: 1	21.37
432	MURCAL INC dba	Summarized transactions: 2	17.31
433	MISTER CARWASH	Summarized transactions: 1	13.32
434	BATTERIES PLUS	Summarized transactions: 1	9.99
435	CREDIT MANAGEMENT LP	Summarized transactions: 1	9.32
436	UPS FREIGHT	Summarized transactions: 1	3.84
437			
438		Price Range Total:	231,879.38
439			
440		Grand Total:	9.711.078.26

Agenda Item # (ID # 10718)

Meeting Date: 6/25/2019

#### SUBJECT: Proposal for Engineering and Design Services - Marion Rd Substation

#### **PREPARED BY:** Neil Stiller

#### **ITEM DESCRIPTION:**

A new electric substation is being planned to serve the Rochester downtown district and Mayo facilities. The proposed substation will also provide electric distribution service to residences and businesses in the surrounding neighborhoods and dedicated electric capacity for Mayo loads.

RPU requested proposals for the engineering services of an experienced substation design firm. Proposals were received from Ulteig Engineers (UEI) and Burns & McDonnell (BMcD) that accurately reflected the requested scope of work.

	UEI	BMcD
Transmission Line Design	\$56,600	\$52,000
Substation Site Development, platting, survey, and staking	\$96,230	\$120,300
Substation Physical & Electrical Design and Relay Settings	\$563,000	\$656,000
Energy Storage Project Scoping	\$16,900	\$35,000
Total of requested services	\$732,730	\$863,300
Contingency (approx. 15%)	\$110,000	

Both firms are experienced, capable and willing to perform the work. RPU has a long work history with both.

The RPU portion of the proposed project is budgeted. RPU management is in the process of negotiating with Mayo a memo of understanding (MOU) regarding the intended responsibilities of the parties. Execution of the Engineering Services Agreement of this Board item are subject to the terms and condition of the MOU.

Staff recommends the acceptance of the proposal for engineering and design services submitted by Ulteig Engineers, following final contract review by the General Manager and City Attorney. Staff also request approval of engineering contingency funds, including granting authorization for the RPU project manager to perform the acts to execute the project.

#### UTILITY BOARD ACTION REQUESTED:

Accept the proposal for engineering and design services submitted by Ulteig Engineers, following final contract review by the General Manager and City Attorney, and approve the engineering contingency funds, including granting authorization for the RPU project manger to perform the acts to execute the project.



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June 19, 2019

Neil Stiller Rochester Public Utilities 4000 East River Road, NE Rochester, MN 55906

#### Subject: Marion Road Substation – Proposal for Engineering and Design

Dear Mr. Stiller,

Thank you for the opportunity to submit a proposal for the Marion Road Substation project. This proposal is in response to the RFP issued by Rochester Public Utilities on April 19, 2019. This RFP consisted of the following documents: "Engineering services RFP 4-19-2019," "Marion Road Substation Design Guide 4-18-2019," and "Q2 Transmission Design Guide 4-19-2019." This project will be governed by the Master Professional Services Agreement in place between Rochester Public Utilities and Ulteig Engineers, Inc.

This proposal outlines our understanding of the project scope. We've subdivided this proposal out into three main sections: Project understanding, milestone schedule, and professional fee. The project understanding is our interpretation of the overall project scope. We use this information to develop our detailed project approach; this section details the deliverables, assumptions, and exclusions we consider appropriate based on the RFP documents and our industry experience and expertise gained from performing work on similar types of projects. Our milestone schedule section highlights the planned due dates of major deliverable packages. Finally, our professional fee section lists our estimated costs for the various packages. We also include optional additional services that we believe could be of value to your organization. Combining these services can save valuable time and budget by allowing Ulteig to act as a single-source solution.

Our main goal is to ensure project success by working collaboratively with key stakeholders during the lifecycle of this project to ensure that the project meets requirements of schedule and budget. If you have any questions regarding our interpretation of the scope and/or our proposal please let us know as we would be happy to walk you through our process.

We look forward to discussing this project further,

Sincerely,

Jeff Heinemann Technical Director - Substation 701.280.8641 jeff.heinemann@ulteig.com

Mute kA

Matt Kavanagh Assoc. Director – Partnerships & Proposals 701.280.8693 matt.kavanagh@ulteig.com

## **PROJECT UNDERSTANDING**

Engineering for this project is broken down into the following major areas of work scope:

- 1) Transmission Line
  - a) The proposed 161 kV single circuit transmission line scope is to provide two new structures to cut into the existing transmission line to allow connection of the new Marion Road Substation. It is assumed that the transmission line will be constructed of self-supporting steel structures supported on concrete foundations.
- 2) Substation Site Development
  - a) The project site currently supports existing facilities. Site development will require both demolition plans and site grading plans in order to accommodate the project substation.
- 3) Substation Physical & Electrical Design
  - a) The substation ultimate design will provide dedicated redundant capacity of two transformers for Mayo loads. The substation will also provide two transformers to support customary RPU loads. The substation will be configured as a 6-position ring bus with two line terminals, four distribution transformer terminals, four medium voltage metalclad switchgear line-ups of five feeders each and no more than nine 161 kV protective relay panels. Two separate standalone concrete buildings will house the switchgear, auxiliary systems, and relay panels.

## **Transmission Line Design**

The scope of this work is to design a cost-effective solution for the required 161kV transmission line, confirm adequacy or determine modifications to the existing structures, if any, perform total station ground survey for the affected portion, construction staking and construction verification.

- Incorporate the proposed transmission line arrangement and supplemental site survey data into an existing PLS-CADD model that includes LiDAR survey data
- Design structures using RPU's Design Criteria Guidelines for 161 kV Transmission Lines, RPU existing framing drawings and other RPU standards
- 3) Prepare bill of materials for the new structures
- 4) Prepare a bid package for new structures. Bid package will include load and design drawings for steel or laminated wood poles.
- 5) Evaluate bids for poles and review vendor calculation and drawing packages for compliance to project specifications.
- 6) Design concrete pier foundations.
- 7) Revise RPU concrete foundation specifications for project-specific conditions
- 8) Design and document direct embedment installation instructions for tangent and light angle structures.
- 9) Revise RPU construction specifications for project-specific conditions
- 10) Prepare construction drawings, including revised or new plan and profile drawings, structure framing drawings, and sag charts
- 11) Submit Issued for Construction drawing package
- 12) Prepare staking coordinates and elevations. Staking will be performed by others.
- 13) Provide up to 10 man-hours of engineering support during construction. This support will be via telephone for miscellaneous questions from the construction contractor.
- 14) Update PLS-CADD model for the transmission line including all as-built modifications for Record submittal
- 15) Submit backup PLS-CADD files. Provide Record plan and profile drawings in PDF and AutoCAD formats

#### Assumptions

- 1) The new structures and clearances will meet current RPU and NESC requirements
- 2) Plan and profile drawing for construction will be created in PLS-CADD
- Existing PLS-CADD backup files will be provided to Ulteig. The PLS-CADD model will be accurate and reflect the current conditions
- 4) The existing AutoCAD plan and profile drawing for the affected region and current structure framing drawings will be provided to Ulteig
- 5) New structures will be either steel or laminated wood, though it is assumed self-supporting steel structures will be required due to limited space available for guying.
- 6) Two (2) load and design drawing will depict both structures types required
- 7) Two (2) concrete foundation designs will be required
- 8) The preliminary design will be based on the 90% substation project drawings
- 9) Geotechnical work, including soil borings, will be provided by others and the data forwarded to Ulteig
- 10) Additional ground survey data required will be provided to Ulteig

## **Substation Site Development**

#### **Specifications**

#### Deliverables

- 1) Review and revise as needed the RPU Excavation and Grading specifications for site improvements and grading, including bidding units and quantities.
- 2) Review vendor and contractor bid documents
- 3) Review vendor submittals for selected materials and construction processes.

### Site Grading

- 1) Review Phase 1 and 2 Environmental Site Assessment and Hazardous Waste Assessment performed by others. Align Demolition plans with any findings.
- 2) Perform a wetland delineation of the substation property and affected portions of the transmission corridor.
- 3) Soil boring plan
- 4) Topographic Site Plan
- 5) Site Demolition Plan
- 6) Substation Grading Plan
- 7) Erosion and Sedimentation Control Plan and Details
- 8) Grading section views, elevations, and details incorporating RPU standards.
- 9) Landscape Plan
- 10) Engineer's estimate for demolition, excavation, grading, and landscaping.
  - a) Estimate will include bid units and quantities.
- 11) Interface between RPU and geo-tech firm to obtain design level soil boring information
- 12) Attend Preliminary Site Development Planning meeting
  - a) Present preliminary land use plan
  - b) Respond to City and County agency questions and requirements
- 13) Attend Site Development meetings
  - a) Present initial grading plans
  - b) Respond to City and County agency questions and requirements
  - c) Revise and resubmit grading plans for final approval and permit issuance
- 14) Interface with City and County agencies to address concerns or details.

15) Support public meetings with neighborhood associations, citizen groups, and others regarding substation siting. Attendance at such meetings will be on an as requested basis.

#### Assumptions

- 1) This proposal is based on the Marion Road site. Alternative sites (whether previously investigated, or new sites) will require re-evaluation of this scope and fee.
- 2) Landscape plan will be compliance with zoning requirements and limited to low maintenance buffer tree selection and turf seeding direction. Certified drawings by a Professional Landscape Architect are not required.
- 3) Procurement of any soil boring, geotechnical services and reports will be done by others.
- Preliminary Site Development Planning meeting is assumed to be one meeting in Rochester. This meeting is assumed to be two hours.
- 5) Site Development meetings is assumed to be two meetings in Rochester. Each meeting is assumed to be two hours.
- 6) Ulteig assumes two meetings in Rochester will be required to support public meetings with citizen groups. Each meeting is assumed to be two hours.

## **Substation Physical & Electrical Design**

#### **Conceptual Design**

#### Deliverables

- 1) General Arrangement (GA) & Site Plan
- 2) Metering and Relaying (M&R) One-Line Diagram

#### Assumptions

- 1) Two (2) iterations each of the general arrangement and M&R one-line diagram are provided
- 2) The M&R One-Line Diagram and General Arrangement will be based on a four-transformer and two-line configuration in a six-position ring. It is understood that the initial build may only have three (3) transformers.
- Two (2) options of the general arrangement will be provided with different site access options and control enclosure locations
- 4) The substation will be an open-air design for the 161kV and switchgear for the 13.8kV system
- 5) It is assumed no design activities will proceed until this submittal is completed. An Owner approved General Arrangement and M&R One-Line Diagram will complete this submittal
- 6) Drawings will be developed in AutoCAD and per RPU standards
- 7) Truck turning radius will be analyzed by Ulteig to allow for proper maintenance space

#### **Specifications**

- Equipment Specifications for 161 CVT's, 161kV breakers, 161kV group operated disconnect switches, main power transformers, control enclosure, switchgear, relay panels, structural steel, concrete foundations, precast wall (fence), and auxiliary equipment such as DC batteries, box trench, etc. See also Assumption #1 below.
- 2) Construction Specification, bid units.
- Review vendor and contractor bid documents for compliance with specification, fit and function, and make award recommendation to RPU for procurement.
- 4) Review vendor submittals for major equipment as follows
  - a) CVT's
  - b) Main power transformers
  - c) Breakers
  - d) Manually Operated Disconnect Switches
  - e) Control Enclosure

- f) Switchgear
- g) Control Panels
- h) Precast Wall (fence)
- A construction cost estimate of material and labor will be provided by Ulteig at the issued for bid drawing stage. This estimate will include total engineering, construction and contingency. It will be maintained quarterly after initial creation.

#### Assumptions

- "Go-by" specifications will be provided by RPU. Specifications will be reviewed and project specific information will be added or modified as necessary. One iteration of revision to the specifications is included in the proposal
- 2) One (1) proposal review and recommendation for up to four separate bids (Ulteig to analyze the bottom two price points that are in compliance with the specification and provided recommendations) have been included in this proposal. If additional reviews are required, they can be provided for an additional fee.
- 3) One (1) review of vendor approval drawings is included in this proposal. It is assumed only one review is necessary for all vendor equipment. If additional reviews are required, they can be provided for an additional fee. Additional reviews required due to quality of vendor submittals may affect schedule
- 4) Two (2) reviews of switchgear and transformer vendor approval drawings is included in this proposal. It is assumed only two reviews are necessary for the switchgear and transformer vendor equipment. If additional reviews are required, they can be provided for an additional fee. Additional reviews required due to quality of vendor submittals may affect schedule

#### Exclusions

- 1) Safety or lockout-tag out procedures for testing and checkout of the equipment
- 2) Copies of equipment manuals, drawings and instructions are provided by the supplier
- 3) Energization plan (created by others)

#### Control & Switchgear Building, Relay Panels and Switchgear Arrangement

#### Deliverables

- 1) Precast concrete control enclosure with cast in place vault foundation
  - a) Review and recommend edits to the RPU specification for control building
  - b) Create architectural views, plan views, roof design drawings
  - c) Create equipment layouts, details, and interior section cuts
  - d) Review and approve vendor submittals for precast concrete building. It is assumed the precast manufacture will perform the detailed structural design and submit drawings and calculations for review and approval.
  - e) HVAC load calculations and equipment layout plan
  - f) Cable tray and lighting layouts and bills of material
  - g) Sump drainage, water and sanitary sewer service for bathroom and safety shower/eyewash.
- 2) Relay and Control Panel Front Elevations and steel details for 161 kV panels
- 3) Metal Clad Switchgear Front Elevations
- 4) Associated Nameplate list & Bills of Material
- 5) AC Auxiliary Service Study (i.e. AC station service demand calculation)
- 6) DC Auxiliary Service Study, evaluate need for 48VDC or 125VDC system.

#### Assumptions

- 1) Approval of the general arrangement and M&R one-line must occur before the metalclad switchgear building layout, relay panel, switchgear front elevations nameplate list and bills of material can be completed
- 2) The purpose of the AC and DC auxiliary service study is to size the substation battery, charger, DC panels, AC panels, and auxiliary transformers. Recommendations will be provided as to the outcome of the studies. Ulteig understand the RPU standard for DC station service is 48V, but due to the size of the site, 125VDC may be required.

- 3) It has been assumed that there will be four (4) switchgear line-ups. A total of up to four (4) main bus positions, twenty (20) feeder positions, up to four (4) bus tie positions, and any aux PT/CPT positions are included in this proposal
- 4) We have assumed the development and design of up to eight (8) 161 kV relay panels and one (1) SCADA panel
- 5) We have assumed the entire site (both Mayo and RPU buildings) will be served by a single AC and DC system.

## **Electrical Physical Design**

#### Deliverables

- 1) General Arrangement
- 2) Sections, Elevations and Details
- 3) Material List and Equipment List
- 4) Substation General Lighting
- 5) Lightning Protection Plan
- 6) Control and power cable conduits, box trench, and manhole plans, sections, and bills of material

#### Assumptions

- 1) General arrangement must be approved before Sections, Elevations and Details can be started.
- 2) The lightning protection plan will be created using the fixed angle method as described in IEEE Std. 998
- 3) Final vendor drawings must be received before the design can be finalized
- 4) Fence will be precast concrete along with additional level of aesthetics to shade the substation from public view.
- 5) Design will be provided with conduits to equipment from the control enclosure(s) and a manhole located at the control enclosure(s)
- 6) Conduit layout includes additional conduit required for fiber optics entrance into control enclosure, potentially from outside the substation fence.
- 7) Cut sheets of preferred cable will be provided

#### Exclusions

1) Illumination study

### **Structural Steel**

#### Deliverables

- 1) Perform structural steel design and detailing of all equipment supports (line dead ends, switches, bus supports, shield pole)
- 2) Create plan, elevation, and detail drawings of all equipment supports suitable for bidding and fabrication
- 3) Respond to manufacturer submittals

#### Assumptions

- 1) Steel structures will be rolled shapes (e.g. wide flange, channel, HSS, etc.) in the substation.
- 2) Lightning masts and deadend structure will be fabricated using tapered tubular steel
- Electrical Physical Sections, Elevations, and Details must be approved before the structural steel design can be completed
- 4) Final vendor drawings for equipment mounted to steel must be received before the design can be finalized

#### Exclusions

1) Review of vendor fabrication drawings for structures fully designed and detailed by Ulteig.

## Foundations

- 1) Foundation Plan
- 2) All equipment pad and pier foundation plans, sections, and details
- 3) Transformer combination pad and oil containment structure plans, sections, and details
- 4) Precast perimeter wall footings plan and details

5.1.a

- Make recommendations regarding type and quantity of geotechnical services necessary to support the project. Review and coordinate follow up investigations as needed. Procurement of geotechnical services and reports will be done by RPU.
- 6) Make recommendations regarding type and quantity of material and construction quality testing services necessary to support the project. Review and approve testing results. Procurement of material or construction quality testing services and reports will be done by RPU.

#### Assumptions

- 1) Ulteig must receive the geotechnical report, topographic survey, and have vendor drawings before the foundation plan can be finalized
- 2) Steel structures will be supported by concrete drilled piers
- 3) Equipment such as circuit breakers and transformer will be supported by slabs-on-grade
- 4) The precast wall system will be supported by drilled piers. Loading criteria and connection details will be provided by the wall supplier

#### Exclusions

1) Spill prevention control countermeasures (SPCC) plan

## Grounding

#### Deliverables

- Develop a specification and make recommendations regarding type and quantity of material quality testing services necessary to support the project. Review and approve testing results. Procurement of soil resistivity testing services and reports will be done by RPU.
- 2) Perform a substation grounding study, report, and design
- 3) Create grounding layout plan, sections, and details per RPU standards
- 4) Material lists

#### Assumptions

- 1) The substation ground grid will be designed in accordance with IEEE Std. 80-2000 and applicable Owner supplied standards
- 2) Ulteig must receive the soil resistivity values and future ground fault current value and have the General Arrangement drawing approved before the grounding study and design can be completed
- 3) The minimum ground grid spacing will be 20 feet and standard 10-foot CCS ground rods will be sufficient for the grounding design and no chemical grounding means are required.
- 4) The grounding study will be performed with CDEGS software and resulting information will be included in a grounding drawing

## **Perimeter Wall/Fence**

#### Deliverables

- 1) Perimeter wall/fence plan and section.
- 2) Rolling vehicle gate and pedestrian gate/door plan.
- 3) Integration of manufacturer drawings, site plan drawings, and gate systems.

#### Assumptions

- 1) Precast concrete wall sections and column details will be designed by the manufacturer
- 2) Entry gate details, and access control will be designed by others.

## **AC/DC Schematics & Wiring Diagrams**

- 1) AC/DC Schematics for all 161 kV and 13.8 kV metering and relaying per the approved M&R diagram
- 2) External Connection Design will be completed by Ulteig

- 3) Switchgear and relay panel internal wiring diagrams will be prepared by vendors based on Ulteig's schematics. All schematics and wiring diagrams will utilize RPU approved AC & DC schematics and templates.
- 4) Point to point wiring diagrams for the switchgear and relay panels will be reviewed and integrated with the balance of the protection and control designs by Ulteig

#### Assumptions

- 1) The panel elevations must be approved before the preliminary AC and DC schematics can be completed
- 2) The vendor schematics must be supplied for major equipment (Transformer, Breaker, CT, CVT, etc.) before the final AC and DC schematics can be completed
- 3) Ulteig will integrate external panel wiring diagrams into the vendor as-built wiring diagrams

## **Communications, Power, and Control Cables**

#### Deliverables

- 1) Power, control and alarm indication cable tabulation by type, length, and destination. Cable types will meet RPU standard inventory to the extent possible
- 2) Conduit and cable tray tabulation by type, material, and destination
- 3) Cable routing designations
- 4) Material lists summarized by cable type
- 5) Communication diagram
- 6) Fiber optic systems interconnection at Marion Road substation

#### Assumptions

1) The M&R one-line diagram must be approved prior to starting the cable tabulation

### **Relay settings**

#### Deliverables

- Programming for up to three SEL 3530 devices (RTAC)

   a) Includes points list
- 2) Site support for up to 50 man-hours including travel
- 3) Relay setting files and spreadsheets per RPU philosophies and standard methods of all protective relaying. Assumes the following:
  - a) All relay are SEL brand
  - b) Primary (311L) and secondary relays (311C) per each transmission line
  - c) Primary (387E) and secondary relays (387E or 351) per each power transformer installed during the project
  - d) One breaker failure relay (501) per each 161 kV circuit breaker
  - e) One main breaker relay per switchgear bus
  - f) One bus differential relay (587Z) per switchgear bus
  - g) One arc flash detection relay (751) per switchgear bus
  - h) Dependent on design collaboration with Mayo staff, there may be a 13.8 kV underground cable bus tie linking RPU and Mayo control buildings, thus requiring additional switchgear relaying consisting of one bus tie differential relay (587Z) per Mayo/RPU cable bus tie. Quantity assumed to be two.
  - i) RPU will provide VPN access to CAPE system modelling software, standard data files, spreadsheets templates and process/workflow guidance to support settings file management per RPU practices

#### Assumptions

- 1) One (1) site trip for onsite support has been included in this proposal
- 2) Additional site visits, if required, will be charged on a T&M basis
- 3) Creation of any documentation to support testing is by RPU.
- 4) RPU will retain responsibility of commissioning of all relay systems

## **Remote End Upgrades**

It is assumed the primary and secondary relay systems at Chester and Willow Creek substations will <u>not</u> require replacement for the Marion Road terminal. Time is included to update drawings to reflect new relay names and any other miscellaneous updates.

#### Deliverables

- 1) One Line updates
- 2) Three Lines updates
- 3) AC/DC schematics updates
- 4) Panel Elevations, Nameplates, and BOM
- 5) Wiring Diagram updates
- 6) Relay Settings updates
- 7) SCADA updates (points list & programming)

#### Assumptions

- 1) Chester and Willow Creek drawings will be provided to Ulteig
- 2) The other terminal at Willow Creek has a 221F relay. No updated are anticipated to be needed to this relay.

## **Security System**

#### Deliverables

1) Ulteig will coordinate with the security system vendor and provide necessary control enclosure space, power, conduits, etc. to allow installation of the security system.

#### Assumptions

1) Security system design is by others.

## **Scheduled Trips**

#### Deliverables

1) One (1) half day site visit to review substation physical design for this project is included in the base estimate

Assumptions

- 1) Additional construction site visits and other meetings requiring travel will be charged as described in the project management section below.
- 2) Design conferences will be bi-weekly via teleconference.
- 3) Travel and construction coordination will be on an as requested basis

## **Record Drawings**

#### Deliverables

1) Record Drawings

#### Assumptions

1) Ulteig will be provided field marked copies of the construction prints and the most current CAD drawings from RPU.

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## **PV & Energy Storage Scoping**

#### Deliverables

- Ulteig will present on our experience, projects, solutions and industry partnerships for battery storage along with exploring 3-4 options for storage placement within the City of Rochester. Ulteig will examine options around each location for utility value/benefit and cost to aid in shaping RPU's scope (e.g. 10 MW/VAR) for various storage support schemes. At a high-level, these locations may be within the substation fence, distribution centers, critical load locations, etc., that are deemed suitable for RPU.
- 2) Included within our proposal are two full-day, face-to-face meetings at RPU's office that will be independently scheduled to hold focused discussions on battery storage solutions. One of these meetings, travel, time and expense will be promotional to support the objective of RPU moving into the utility storage space.

#### Assumptions

1) 100 hours are allocated to scope definition.

## **Optional Services**

#### Topographic, Legal, & Boundary Surveys

Ulteig shall prepare a preliminary and final plat, a topographical survey, and construction staking of the proposed substation being a part of the Northeast Quarter of Section 12, T106N, R14W, Olmsted County, Minnesota with a street address of Marion Road SE, Rochester, Minnesota. The subdivision plat will be based upon the description of the property along with easements affecting the property as contained within the title commitment or opinion of title provided by the client. Ulteig will be able to begin work on initial portions of the project prior to the delivery of the title information, but will not be able to finalize the plats until the title work has been supplied to Ulteig for review.

#### Deliverables

#### Subdivision Plat:

- 1) Perform a boundary survey of the property to verify the outside boundary of the proposed plat based on the property description within the supplied title information.
- 2) The preliminary plat drawing will confirm lot sizes, shapes and development configuration of the project and other site improvements. The preliminary plat will also display the proposed easements that will be incorporated into the final plat document. The preliminary plat drawing will be suitable for submission to the city for their review.
- 3) As the project progresses we will need to submit a final plat and produced in the format as required by Minnesota State Law as well as City of Rochester and Olmsted County recorder requirements. Prior to the preparation of the final plat we will need all ownership, title and mortgage information to include in the signature portion of the final plat document.
- 4) As a part of the platting process, there are items that are required by various agencies that require additional costs that are not included in the above estimate. The following is a summary, and where costs are known we have included them. However some fees and costs are site specific, therefore this summary should not be considered complete.
  - a) Additional Expenses:
    - i) The Plat Application fee, Recording fees, Cost of Title Opinion/Commitment, Taxes (all taxes for the current year must be paid prior to the filing of the plat).
- 5) Upon approval of the final plat configuration, or as directed by the client at the completion of grading operations, Ulteig will set regulatory monuments at the outside corners of the boundary of the plat and the newly created lots.

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5.1.a

#### Topographical Survey:

- 1) Establish two on-site benchmarks.
- 2) Contours at a one-foot interval.
- 3) Spots elevation at approximately 50-foot spacing along curbs, sidewalks, and edges of pavement.
- 4) Visible improvements to the property such as structures and pavement.
- 5) Contact the State utility location service and request that utility locations be marked. Survey locations of utilities marked after this request has been fulfilled.
- 6) Location and size of water mains, gate valves, and fire hydrants.
- 7) Location, size, and invert elevations of the sanitary sewer system, storm sewer system, including the inlets, catch basins, and culverts.

#### Assumptions

- 1) Survey will be performed by Ulteig.
- 2) The client shall provide Ulteig with an accurate and complete property description in order to begin the work on the site. The Title Commitment, Policy or Opinion and copies of all supporting record easement documents and exceptions listed within the title information will be provided prior the completion of the project.
- 3) The client will complete the submission of the preliminary and final plat documents to the city departments for their review and approval.
- 4) The preparation of additional easements, not within the plat boundary or supplemental to the plat, will be billed as additional services.

#### **Construction Staking**

#### Deliverables

- 1) Stake Soil Borings
  - a) One set of stakes for preliminary design soil boring locations.
- 2) Stake Site Grading
  - a) One set of stakes with offsets for site grading. Main corners of site along with driveway and drainage features.
- 3) Stake Fence Corners
  - a) One set of stakes with offsets for fence corners.
- 4) Stake Concrete Pads\*
  - a) One set of stakes with offsets for Concrete Pads will be staked as offsets to the four main corners or as offsets on the applicable grid lines.
- 5) Stake Drilled Piers\*
  - a) One set of stakes for Drilled Pier locations at pier center along with grid line offsets for the grid lines of the new pier locations.

#### Assumptions

- 1) Survey will be performed by Ulteig.
- 2) Requests for additional staking or restaking, will be billed per Ulteig's rate sheet.

#### **Construction Management**

#### Deliverables

- 1) Observe & verify the quality of construction work
- 2) Verify construction progress

#### Assumptions

- 1) Optional T&M pricing will be provided for single-day and multi-day visits.
- 2) Optional flat-rate pricing will be provided for weekly, and/or monthly on-site assignments.

### **Contractor Safety Oversight**

#### Deliverables

1) Periodic/daily site visits by a duly credentialed safety professional to verify compliance with job site and task safety regulations.

#### Assumptions

- 1) Optional pricing will be provided for periodic, daily, and on-call site visits
- 2) Optional flat-rate pricing will be provided for weekly, and/or monthly on-site assignments.

## **Project Management / Overall Project Assumptions**

#### **Deliverables**

#### **Design Standards**

1) The attached scope and fee have been developed based upon Ulteig's understanding of RPU design standards and design best practice methods where detailed information was not provided in the project RFP documents. Any and all owner and independent review engineer requirements not listed in the RFP documents must be provided to Ulteig upon award. These requirements will be reviewed against the estimate provided within this proposal. This proposal assumes that the owner does not have specific design requirements other than those listed in the RFP documents and is requesting a design for a functional project as Ulteig has defined above. Any and all owner preferences or requirements on equipment, layout, and operation will be reviewed by Ulteig to determine appropriate cost and schedule impacts.

#### **Project Status Documents**

- 1) Prepare a project cost estimate (spreadsheet) and maintain quarterly. This estimate will include total engineering, construction and contingency.
- 2) Prepare an estimate of project cash flows (spreadsheet) and maintain quarterly
- 3) Prepare and maintain a project schedule, including key engineering, procurement, permitting, construction, and outage milestones. Project schedule assumes a two-week client review period on all deliverables. The schedule shall be prepared using Microsoft Office Project and maintained monthly.
- 4) Upon commencement of the project, Ulteig will provide bi-weekly status reports detailing both progress to date and plans for the next two weeks.
- 5) Prepare a Permits Matrix to identify and track all necessary building permits and regulatory applications for the substation project. Anticipated permits include:
  - a) City Permits for control buildings and perimeter wall
  - b) County driveway permit
  - c) DNR permitting for grading in flood plain of Bear Creek
  - d) Grading Permit, including two meetings with relevant agency and phone calls.
- 6) Prepare all supporting exhibits and informational submittals on behalf of permits and regulatory applications.
  - a) Filing or procurement of any construction permit applications will be done by RPU.

#### **Design Documents**

- 1) Provide one (1) electronic copy (PDF and AutoCAD) for the issued for review design documents.
- Provide one (1) electronic copy (PDF and AutoCAD) for the final 100% complete design documents. The final design documents will be marked "For Construction" and certified by an engineer licensed in the appropriate jurisdiction.
- 3) Provide one (1) electronic copy (PDF and AutoCAD) of the "Record Drawings." The record drawings will be completed per the contractor's red-lines and marked "Record Drawing."

- a) Record drawings will not be sealed by a licensed professional engineer.
- b) It is assumed that the contractor's red-lines will be complete and accurate. Ulteig will provide limited engineering review of the record prints. If the contractor's red-lines are found to be suspect or incomplete, Ulteig can assist in getting accurate redlines for an additional fee. Otherwise, the record drawings will be processed based on the contractor's red-lines.
- 4) Submittal package review period for client and/or owner is assumed to be two (2) weeks in duration. Once a drawing has been reviewed by the owner it will be considered final. Comments added after initial review will be considered out of scope and an additional negotiated fee may be issued.

#### **Design Meetings**

- 1) One (1), one-day project kick-off meeting at the RPU office is included in this proposal. The project manager, project technical lead (PTL) and discipline leads will attend.
- 2) One (1) hour, bi-weekly conference call to update design status. The project manager, project technical lead, and discipline leads will be available for up to 18 bi-weekly phone conferences to discuss project status. A design schedule and/or list of action items will be provided by the engineer as necessary for tracking status updates.
- 3) Additional meetings and/or site visits can be provided for optional pricing as noted below.

#### **Project Delays**

 Delays caused by others out of our control including, but not limited to, receipt of prerequisite information, vendor drawings, and excessive client/owner review periods will have an effect on the deliverables schedule and engineering costs and will result in a scope change if deemed appropriate.

#### Assumptions

- 1) It is our understanding that this project will be constructed in one phase.
- 2) Filing or procurement of any permit applications will be done by others.
- 3) Procurement of all materials will be done by others.
- On-site management and/or supervision of the construction contractors', their employees, and their overall means and methods, shall be provided by others.
- 5) Actual field tests (such as soils compaction, slump tests, break tests, etc.), any normally required construction inspections, and testing & commissioning activities, shall be performed by others.
- 6) Overall site safety plans and individual contractors' safety plans are to be provided by others
- 7) Drawings will be developed in AutoCAD format.
- 8) It is assumed that preliminary engineering designs will be approved prior to starting detailed design.

#### **Exclusions**

1) Any scope item not specifically covered in this proposal is excluded from the proposal.

## **PROFESSIONAL FEE**

### **Professional Fee – Base Scope of Work**

Ulteig will provide engineering services for the following time and material, not to exceed sum fees:

Scope of Work	Fee
Transmission Line Design	\$56,600
Substation Site Development	\$68,000
Substation Physical & Electrical Design	\$563,000
PV & Energy Storage Scoping	\$16,900
TOTAL – Base Scope of Work	\$704,500

The work described in this proposal will start upon agreement on contract documents and a project schedule. This proposal is valid for 60 days.

#### **Professional Fee – Optional Scope of Work**

Ulteig can provide engineering services for the optional scope items for following lump sum fees:

Scope of Work		Fee	
	Additional Site Development Community Meeting Substation or Transmission Engineer Site Visit	\$1,800/each \$1,600/each	
	Substation or Transmission Engineer Site Visit (Supported from Fargo, one hotel night)	\$3,500/each	
	Subdivision Plat	\$10,500	
	Topographic Survey	\$8,930	
	Construction Staking	\$8,800	
	Construction Management – Single Day Visit	\$4,500	
	Construction Management – Full Week	\$9,400	
	Construction Management – Full Month	\$39,900	
	Contractor Safety Oversight – Single Day Visit	\$4,500	
	Contractor Safety Oversight – Full Week	\$9,400	
	Contractor Safety Oversight – Full Month	\$39,900	
	Safety Oversight – Full Week	\$9,400	
	Contractor Safety Oversight – Full Month	\$39,900	

# **STAFF & SUBCONTRACTOR LIST**

Project Technical Lead: Substation P&C Lead: Substation Physical Lead: Substation Structural Lead: Site Development Lead: Transmission Line Lead: Patrick Deibel Jacob Lien Patrick Deibel Dan Weber Marisol Velilla Zachary Tatlock

Qualified Safety Oversight to be provided personnel from OSHA Environmental Compliance Systems, located in St. Louis Park, MN. Individual staff will be determined at time award and forwarded to RPU for review.

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## RESOLUTION

BE IT RESOLVED by the Public Utility Board of the City of Rochester, Minnesota, to approve a professional services agreement for with Ulteig Engineers and authorize the Mayor and the City Clerk to execute the agreement for:

Engineering and Design Services for the Marion Road substation project

The amount of the agreement to be SEVEN HUNDRED THIRTY-TWO THOUSAND SEVEN HUNDRED THIRTY AND 00/100 DOLLARS (\$732,730.00). following final review by the General Manager and City Attorney, and approve the engineering contingency funds, for an amount not to exceed ONE HUNDRED TEN THOUSAND AND 00/100 DOLLARS (\$110,000.00) including granting authorization for the RPU project manger to perform the acts to execute the project.

Passed by the Public Utility Board of the City of Rochester, Minnesota, this 25th day of June, 2019.

President

Secretary
# FOR BOARD ACTION

Agenda Item # (ID # 10721)

Meeting Date: 6/25/2019

#### **SUBJECT:** Cayenta Project Extension

#### **PREPARED BY:** Peter Hogan

#### **ITEM DESCRIPTION:**

At the regularly scheduled May 31, 2016 Utility Board meeting, a Cayenta Software Implementation Services Agreement was approved for the implementation of Cayenta's customer care and billing system for the authorized, not to exceed, amount of \$1,392,895. The original project schedule was for 18 months starting in July 2016, with a go-live in mid-November 2017. Total budgeted project costs were \$3,577,427, which included other costs such as RPU resources, interface agreements, and project management.

Due to delayed Cayenta deliveries of interfaces and configuration, the project timeline has been modified by changing the go-live date several times and the board has previously approved additional expenses for those other costs in the amount of \$1,475,669.

Extension to March 2018 Expenses	Extension to May 2019 Expenses
Board approved October 2017	Board approved January 2019
\$563,584	\$912,085

The project has been delayed and the projected go-live is now scheduled for some time between mid-October to November. The total cost impact to meet this go-live time frame is \$730,144.

Estimated additional dollars	
RPU Extension Expenses	Cost
Backfill Resources (5 people 7/1-12/31/2019)	\$ 197,072
WCG, Consulting (2 people 5 Months, 1 person 1 Month)	339,381
Smart Energy Water Interface (960 Hours @ \$75/Hr)	72,000
Contingency	121,691
Total	\$ 730,144

Given this extension will exceed the current budget for the project, we will need Board and Council approval to proceed.

#### UTILITY BOARD ACTION REQUESTED:

Staff is seeking Utility Board approval and recommends to the Common Council to approve, not to exceed, amount of \$730,144 for the additional costs associated with this extension for project management services, backfill resources, and third party resources, and authorizes the RPU Cayenta Project Manager to execute these expenditures towards completing the Cayenta implementation project.



# RESOLUTION

BE IT RESOLVED by the Public Utility Board of the City of Rochester, Minnesota, to approve and request Common Council approval of not to exceed \$730,144 for the additional costs associated with change in the implementation date of the customer information and billing system to November, 2019.

BE IT FURTHER RESOLVED by the Public Utility Board of the City of Rochester, Minnesota to authorize management to administer the execution of these expenditures toward the completion of the customer information and billing system implementation.

Passed by the Public Utility Board of the City of Rochester, Minnesota, this 25th day of June, 2019.

President

Secretary

# FOR BOARD ACTION

Agenda Item # (ID # 10713)

Meeting Date: 6/25/2019

#### SUBJECT: RPU Support of Energy Integration Committee

#### **PREPARED BY: Dirk Bierbaum**

#### **ITEM DESCRIPTION:**

The Energy Integration Committee (EIC) was formed by the Destination Medical Center Corporation in 2016 to coordinate actions to implement the climate and energy vision within the DMC zone. The committee is composed of six members.

- City of Rochester
- **Destination Medical Center**

Mayo Clinic

Minnesota Energy Resources Company

Olmsted County

**Rochester Public Utilities** 

The Committee has developed a set of goals and projects that move towards meeting the energy plans within the DMC zone and with the City as documented in the attached plan document. The goals and projects are consistent and in-step with existing RPU plans and goals which already have work in progress or consideration of future plans. Although many of the EIC goals are dependent upon future RPU actions and programs, the RPU Board retains all budgetary, policy and oversight functions. The EIC is a collaborative working group functioning within the bounds of RPU's normal activities and approved budgeted items.

It is desired to have the Board review the documents and give their continued support of RPU staff and resources to work in collaboration with the other EIC members on these projects.

#### UTILITY BOARD ACTION REQUESTED:

Affirm continued support and participation of RPU staff in the Energy Integration Committee.

# Energy Integration Committee Charter & Working Commitment Agreement

#### **Energy Integration Committee Statement of Purpose**

Formed by the Destination Medical Center Corporation in 2016, the Energy Integration Committee [Committee] exists for the purpose of making recommendations and taking practical, coordinated actions to ensure successful implementation of the climate and energy vision within the DMC zone. This technical advisory Committee is a cohort for sharing expertise and ideas, communicating decisions and commitments, and coordinating activities in a way that is strategically beneficial for Committee Members and the community. Based on the shared environmental vision, goals and resources of the DMC and City of Rochester it is now the desire of the members to expand the role of the committee to include the energy and climate goals of the City of Rochester in addition to the DMC climate and energy vision. Please note that each committee organization has independent governance with ultimate decision-making authority on strategic priorities and funding decisions and it is not the role of the Committee to supersede these decision-making processes.

#### Members

The Committee is comprised of six original member organizations [Members], with at least one regular representative [Representative] participating on behalf of each Member:

- City of Rochester
- Destination Medical Center
- Mayo Clinic
- Minnesota Energy Resources Company (MERC)
- Olmsted County
- Rochester Public Utilities (RPU)

Membership is voluntary and may be expanded over time to include additional local entities and organizations that can commit to action on their own energy and carbon footprints as well as those in support of forming more comprehensive collaboration and effectively carrying out the Objectives and goals outlined in this Charter and Working Commitment Agreement [Agreement].

#### **Committee Objectives**

The objective [Objective] of the Committee is to help identify, develop, support, and/or participate in practical, cost effective efforts that achieve the Committee's goals. The Committee's goals include the energy and climate goals of both the City of Rochester and the Destination Medical Center:

City of Rochester's Energy & Climate Goals (Energy Action Plan, 2016):

- A. 1.5% annual retail energy savings (aligns with current state goal)
- B. 25% renewable energy by 2025 (meet MN Renewable Energy Standard)
- C. State-wide GHG emissions reductions of (15% by 2015, 30% by 2025, 80% by 2050)

DMC Energy & Climate Impact Goals (DMC Development Plan, 2015):

- A. Attain carbon neutrality across the DMC District
- B. 25% energy reduction below 2010 levels by 2030
- C. Reduce DMC-wide emissions per square foot by 80% below 2005 levels by 2050

#### **Scope of Activities & Deliverables**

The Committee is dedicated to assisting in achieving these energy and climate goals and has representation from the major users and suppliers of energy in the community. The Committee is mindful of the Rochester Energy Action Plan and other efforts of the Rochester Energy Commission, and the Committee will work in coordination with the Energy Commission on shared goals and activities.

The Committee will align its efforts with the 2019 Energy Integration Committee Strategic Project Plan [Project Plan] and concentrate its efforts on five focus areas. These focus areas are subject to change as the Committee sees fit over time:

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- 1. Organizational & Financing
- 2. Energy Efficient Design & Operations
- 3. Renewable Energy (grid-mix & on-site resources)
- 4. District Energy
- 5. Innovation & Electrification

As outlined in the 2019 Project Plan, Committee activities will include 21 strategies and efforts. Members can opt-in to participate in these strategies and efforts on a voluntary basis and will likely be the result of available resources. Examples of these activities and the resources and support that Members commit to are:

- Joint conversations and negotiations with Minnesota Energy Resources and Rochester Public Utilities (RPU) in pursuit of local or on-site renewable energy procurement
- Joint funding of a joint study or consulting services in pursuit of questions identified and agreed upon by Committee Representatives and Member leadership.
- Time, effort, and expertise to guide the development and delivery of a program, service, or tool
- Leverage professional networks and information sharing skills to engage businesses and educate the public
- Commitment to participate in a program or effort to build buy-in and experience, increase impact, and share lessons learned within the community

Deliverables of the Committee will take the form of memos, short reports, third-party technical studies, regular Member organization updates, and professional presentations. Deliverables may also come in the form of education and engagement through the oversite and coordination of events, case studies, and networking. It is the roll of the Representatives to seek input from organizational peers and Member leadership about the substance and form of Committee deliverables.

#### **Reporting Plan**

Within the Committee, Representatives are responsible for sharing organizational updates for the purposes of information sharing and growing opportunities for collaboration. This will be provided on a monthly or bi-monthly (every other month) basis, and will include progress updates on the agreed upon strategies included in the EIC Strategic Energy Project Plan. Annually, the Committee will recap activities, accomplishments, and lessons learned from the previous year and provide an overview of key activities and efforts for the forthcoming year. To the extent that the EIC oversees ongoing programming or a budget, the EIC will be responsible for providing an expense and impact report to the appropriate Member personnel.

#### **Overarching Statement of Commitment**

Through the approval of this Charter and Working Commitment Agreement, each Member agrees to jointly pursue and support in good faith, efforts and activities intended to achieve the Objectives of this Committee.

Approval of this Charter and Working Commitment Agreement commits Members to work on the strategies and actions outlined in the 2019 Committee Strategic Energy Project Plan. Assistance may include one or more of the following: providing expert input, participation, public information sharing and championing, or financial support.

Approval of this Charter and Working Commitment Agreement commits Members to forming the necessary internal communication channels and coordination with decision-makers to allow Member Representatives to bring vetted support and decisions to the Committee when requested.

Further, this Charter and Working Commitment Agreement commits each Member to supply one or more Representatives to serve on the Committee at all times.

Approval of this 2019 Charter and Working Commitment Agreement establishes an ad hoc commitment that will expire at the end of 2025, with the intention of Members to renew and extend.

# Rochester EIC Strategic Energy Project Plan

# An Output of the Energy Integration Committee Strategic Energy Project Planning Process 2018-2019

Final Report: February 2019

Attachment: EIC Strategic Energy Project Plan\_Final Draft\_5.6.19(10713:RPU Support of Energy Integration Committee)

#### **Created by Center for Energy and Environment**

#### For the Rochester Energy Integration Committee

#### With Support from the Destination Medical Center and McKnight Foundation





#### MCKNIGHT FOUNDATION

#### Lead Author:

Megan Hoye, CEE Kevin Bright, Destination Medical Center and City of Rochester (Committee Chair)

#### **Supporting Authors:**

Jenny Edwards, CEE Brady Steigauf, CEE

#### **Review by the Energy Integration Committee:**

Dirk Bierbaum, Manager of Portfolio Optimization, Rochester Public Utilities Kevin Bright, Director of Energy and Sustainability, Destination Medical Center & City of Rochester Brett Gorden, Section Head – Utility Operations, Energy Management, and Infrastructure Systems Engineering, Mayo Clinic Amanda Holloway, Director of the Office of Sustainability, Mayo Clinic Dru Larson, Energy and Environmental Advisor, Rochester Public Utilities Mat Miller, Director of Facilities and Building Operations, Olmsted County Paul O'Sullivan, Senior Account Manager, Minnesota Energy Resources Brent Svenby, Senior Administrative Analyst, City of Rochester

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# **Energy Project Planning Process & Background**

The Destination Medical Center's (DMC) Energy Integration Committee (EIC) was formed and exists to help advance the energy and carbon goals of the DMC and the City of Rochester. As an established working group of representatives from Mayo Clinic, the City of Rochester, Destination Medical Center, Rochester Public Utilities, Minnesota Energy Resources, and Olmsted County, the EIC is tasked with the collaboration and coordination of energy infrastructure projects within the DMC as well as citywide. Though the EIC already regularly convenes to achieve its task, the intent of this Plan is to formalize the commitments and roles of the Committee, to align and build consensus on disparate goals, and to provide prioritized strategies and actions over time to achieve these goals.

The goals of this project planning process were to go beyond supporting incremental building efficiency and renewable energy generation; the intent of this process include a significantly more coordinated, actionable path toward achieving the energy and carbon goals of the EIC that is aligned with the broader goals of Committee members and the community. Over the course of four facilitated workshops, this project planning process began by elevating the vision and intent of the Committee, so that each member organization had a clearer sense of its role and ability to overcome barriers to commitment. Next, the process focused on a collective understanding of major development milestones and organizational deadlines relevant to the goals and actions of the EIC and their respective organizations. Lastly, the process refined and prioritized the most impactful, time-sensitive strategies and actions by focus area for the EIC to pursue as well as proposed solutions to potential barriers to achieving the EIC's carbon and energy goals.

As the actions and strategies of this Plan are accomplished, it will be important to celebrate successes and progress along the way. Some of these victories include increased renewable energy procurement, the roll-out of enhanced utility conservation programs and services, deeper energy savings for customers, and access to financing options available for building energy improvements.

# I. EIC Energy & Carbon Goals

During the Energy Action Planning process, the Committee reaffirmed their commitment to city-level and DMC-level goals. The objective of the Committee is to help identify, develop, support and participate in efforts that achieve the City and DMC energy and climate goals outlined below.

#### City of Rochester's Energy & Climate Goals (Energy Action Plan, 2016):

- 1. 1.5% annual retail energy efficiency savings (aligns with current state goal)
- 2. 25% renewable energy by 2025 (Minnesota Renewable Energy Standard)
- 3. Statewide greenhouse gas (GHG) emissions reductions of 15% by 2015, 30% by 2025, 80% by 2050

#### DMC Energy & Climate Impact Goals (DMC Development Plan, 2015):

- 1. Attain carbon neutrality across the DMC District
- 2. 25% energy reduction below 2010 levels by 2030
- 3. Reduce DMC-wide emissions per square foot by 80% below 2005 levels by 2050

# **II. Timeline & Critical Path**

This section reflects the inventory and evaluation of deadlines and constraints that the EIC should consider as they create an organized, prioritized Project Plan. The activities inventoried during project planning include DMC and City development timelines, capital improvement planning cycles, release of reports and studies, funding

2020 DMC Phase 1: Hotel & Multifamily SF Resource Heat pump pilot results (est. complete ready for sharing

opportunities, planning and regulatory processes, contract terminations, and terms and cycles for elected and appointed officials.

The project planning process required the EIC to prioritize where they want to focus their efforts and attention. Like all organizations and businesses, the EIC is bound by the constraints of time, effort, and resources. Many opportunities lie ahead, and the prioritization effort of the EIC captured here reflects careful thought around how staging can maximize impact, as well as upcoming windows of opportunity for key decisions. Exercises such as evaluating strategies based on potential impact and considering the extent to which the EIC has influence or control over a strategy were instrumental in honing their focus.

To determine *critical path* actions (those that must be completed within a certain timeframe to leverage an opportunity), the EIC inventoried relevant events and deadlines that lie ahead in the next 12 to 18 months. Between January 2019 and April 2020, there are a number of deadlines that are relevant to the activities and goals of the EIC. These events are laid out below.

Plan

date)



RPU

White

Paper

Innov.)

County to know major renovation projects

Study (DR, DSM,

Mayo

Distr.

Resource

2019

#### Rochester Public Utilities Milestones

Today

In 2019, RPU is publishing two major documents that the EIC can influence. The Resource Plan is the first of these and will consider the resource needs of Rochester over a 20-year period from 2020 to 2040. A proposed plan will be submitted by RPU staff to the Rochester Public Utilities Board (RPU Board) in June 2019 (anticipated) for review and approval. The Committee and its member organizations will have the formal opportunity to comment on the proposed resource plan once it is submitted to the RPU Board as the plan will have an impact on the pursuit on the organization's internal environmental goals and planning efforts as well as broader community energy and climate goals. The Committee should consider opportunities to engage RPU staff well before this time. Earlier engagement would allow the EICto offer substantive input and have an active conversation around interests and concerns. Further, earlier input would allow staff to consider additional technical assumptions and propose scenarios that may broaden the plan's support once submitted to the RPU Board. This is an important opportunity for the EIC to have lasting input about the electricity resource supply mix and local renewable development, as this planning process occurs every five years.

The context that RPU will consider within this resource plan includes the planned end of life of the existing Silver Lake gas steam plant, which currently only services Mayo buildings, and the end of the Power Sales Contract between Southern Minnesota Municipal Power Agency (SMMPA) and the City of Rochester. The Power Sales Contract with SMMPA, which is in effect until April 1, 2030, is a large opportunity for RPU to rethink its resource mix.

RPU is also working on a white paper exploring projections and opportunities for demand response, which it also plans to submit to the RPU Board in summer 2019 as part of its overarching Infrastructure Plan. This paper will assist RPU determine the economic value of demand response programs and understand the future implications of new technology like battery storage and electric vehicle adoption. The EIC is interested in having RPU consider these technology advancements as they map out least-cost options for addressing distribution system needs. Once released, RPU has agreed to present the findings of the white paper to the EIC as an opportunity for them to engage RPU and share information about how these alternative distribution investments may serve the energy and carbon reduction goals of the City and DMC.

#### Other Deadlines

A number of deadlines highlighted in Figure 1 and Figure 2 occur annually, such as capital improvement planning for the City, County, and Mayo (which tend to end in late summer each year). Others are unique to 2019, such as Mayo's Electrical Supply Check-up Study. In preparation for significant growth in the next five to 10 years, in November 2016 Mayo contracted a third party to complete Mayo's Downtown Campus Utility Master Plan, which looked at resource needs and expansion scenarios for their district energy system. In February/March of 2019, Mayo Clinic will complete its Electrical Supply Check-up Study to assess how it can reduce carbon emissions associated with energy consumption as well as increase resilience. A new mixed-use residential project being developed within the DMC district will also complete a pilot looking at the effectiveness of using air source heat pumps to serve the entire building. The initial results of this pilot should be ready for sharing in early 2020. Separately, the County is hoping to finalize an outline in 2019 of the major building renovation projects that will take place over the next few years. This, along with ongoing development across Mayo and DMC (see Figure 3), will create a ripe environment for conservation programs focused on design assistance, procurement of high-performance design, and recommissioning to have high impact.



Figure 2. Deadlines & Opportunities for Determining Critical Path Activities (present to 2040)

Other deadlines for consideration are the Mobility Hub planning process that is currently convened through the Destination Medical Center, City of Rochester, Olmsted County, and Mayo Clinic. The west hub is planned to be sited at the Mayo west lot and the south hub is planned to be sited at Graham Park. The EIC should offer input on these developments as the planning and construction process presents many opportunities to work towards the goals identified.

Other transportation-related deadlines include purchasing decisions that the Rochester Public Transit (RPT) (Rochester's public transit authority) will make regarding vehicle replacements and purchasing electric buses. While it has already been decided that RPT will purchase nine electric buses to put in service by approximately 2023, the fleet plans to grow and will require additional turnover and purchasing by 2028. Knowing this timeline creates an opportunity for the EIC to coordinate with RPT and other potential partners, such as other mobility service providers and the broader business community.



Figure 3. DMC and Mayo Development by Phase. The square footage captured in this figure includes growth at DMC as well as all Mayo growth across all Rochester campuses, not just downtown.

Level of effort and the duration of time<sup>1</sup> needed to develop a strategy are important factors that the EIC considered when prioritizing actions. As seen in Figure 4, seven of the 13 strategies ranked by the EIC for impact require a relatively high degree of effort, duration or time, or both. These high-impact activities or strategies were identified as those that should be positioned in the "immediate-action EIC and facilitators from the Center for Energy and Environment made during the project planning process." or "early-action" phases of the Project Plan. It is important to note that participation in these strategies will be done on a voluntary basis by the organizations, and in some cases, involvement will require board or council approval.

(2025 - 2030)

(2030 - 2035)



Figure 4. Comparison of Strategies by Development Effort and Duration of Time Needed

(2020 - 2025)

(2015 - 2020)

<sup>&</sup>lt;sup>1</sup> Duration may extend due to approval processes, annual budgets, or the human capacity available to complete a project.

While not shown in Figure 4, there are other strategies that may benefit from being implemented in later phases of the Project Plan, such as developing incentives and financing options for projects that meet City and DMC environmental goals. While tackling this strategy earlier may increase incremental impact over time, waiting allows the EIC to target resources based on areas where opportunities are greatest and incentives or awareness are needed the most.

# **III. Project Plan Focus Areas**

This section outlines the five focus areas into which the strategies of this Project Plan are categorized. EIC members developed these focus areas during the planning process, as part of strategy refinement and prioritization activities. While numbered below, the focus areas numerical value assigns no weight indicating its potential value or impact toward the EIC's goals, as each focus area will serve an important role going forward. Using these focus areas, the EIC considered which strategies fell into each category and considered opportunities under each for the Plan's phasing.

To meet goals, EIC's strategies fall in to five primary categories:

- 1. Organizational and Financing
- 2. Energy Efficient Design and Operations
- 3. Renewable Energy (grid-mix and on-site)
- 4. District Energy
- 5. Innovation and Electrification



#### Figure 5. Project Plan Focus Areas

# **IV. Phased Energy Project Plan**

To focus on urgent actions and foundational activities and processes that will help instill Committee collaboration and accountability, this project plan focuses on strategies and efforts that will take place primarily over the next five years.

This plan is organized in three phases. The first of these phases is the "immediate action" phase with strategies that should be implemented in the next 12-15 months. The second phase is the "near-term action" phase and

6.2.b

outlines strategies that should be initiated or completed between 2020 and 2022. The third phase is the "midterm action" phase, focused on activities and strategies that are less urgent compared to other activities.

#### Figure 6. Project Plan Phasing



## PHASE I – Immediate Action, 2019 & Early 2020

Phase I includes 10 priority actions, which fall across four of the five focus areas identified by the EIC. (See Figure 5.) The intent is that the EIC will initiate each of these activities before the end of 2020. In some cases, these activities are to be completed within 12 to 18 months.

#### Complete by January through March 2019

- 1. Create an EIC commitment/charter document by end of March 2019
- 2. Support Building Benchmarking roll-out through recruitment and recognition ongoing
- 3. Input from future District Energy subcommittee representatives on consulting services by April 2019

#### Complete by April through July 2019

- 4. (a) EIC informed about RPU's pending Resource (Infrastructure) Plan via presentation by April 2019
  - (b) Evaluate alignment between City and DMC environmental goals and Resource Plan; Members will provide input to RPU Board by May/June 2019
- 5. Respond to pending RPU white paper findings on long-term clean energy and carbon benefits and further consideration of innovative technology integration by end of April/May 2019
- 6. Begin member procurement of local or on-site renewable energy by end of May 2019

#### Initiate or Complete by August through March (Q1 2020)

7. Participating organizations to fund an EIC member electric vehicle (EV) fleet conversion study – **begin by** end of May 2019

- 8. Provide input on DMC Mobility Hub decision-making criteria and design by end of 2019
- 9. Integrate life cycle costing analysis into member capital improvement plans to evaluate decisions against DMC/City environmental goals begin by end of 2019

10. Evaluate the possibility of a formal joint commercial design assistance program (RPU + MERC) – **begin by** end of 2019

Strategies	2019			2020				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
EIC Charter	Codify I	Before April						
LCCA to inform Capital Planning			Initiate Before March 2019; Complete by Q2 2020					
New Construction Incentive Program						6 1	Projects Co Before 20	mplete 21
Benchmarking Support	Recrui	t thru May		Support Ree	cruitment t	thru May		
Resource Planning	Prese Comi	ntation to EIC ment on Plan i	April/May; n Summer					
Procure Renewables	Begin member procurement by May		Expanc growii	led procure ng building	ement to me and EV load	et ds		
<i>Discovery Walk</i> District	Scope & Ir	nitiate Study						
"White Paper" Input		Supply In	put April					
Mobility Hub Criteria			Provide l	before 2020				
EV Fleet Study	Procure Provider Before Aug			gust				

#### Figure 7. Phase I Action Timeline

	Objective	Ask	Approach
O&F EIC Commitment & Charter Document	Strengthen the EIC's action capacity and accountability through collective commitment and buy-in at the leadership- level	Member organizations commit to advancing goals through the advising, studying or implementation of priority actions	Formal commitment documen with 1 or 2 tiers of commitment; initial commitment through 2025, with recurring renewal
Integrate LCCA into Capital Improvement Plan decision-making	Create reoccurring opportunities to align investments with goals, at the department budget level	Identify and adopt one or more investment decision-making criteria that help align decision- making with goals	Make "lifecycle costs" a decision metric instead of "firs costs"; expand consideration for options with longer ROI
EE Streamline Joint New Construction Incentive Program	Increase access to and use of energy design assistance program offerings	Utility collaboration (RPU, MERC, and SMMPA) to build one of the most impactful conservation programs in Rochester	Review pilot outcomes to streamline program process, increase user friendliness, and expand marketing breadth
Support Benchmarking Recruitment and Recognition	Increase building operator awareness and accountability of facility performance through benchmarking participation	Help increase benchmarking participation through joint and individual program championing and sharing of participation benefits	Help increase public and building operator awareness about building performance through speaking, hosting events, and recognizing leader
RE RPU Infrastructure/ Resource Plan Input	Reduce City carbon emissions as cost-effectively as possible	Ensure that achievable, high- penetration renewable scenarios are considered in RPU's resource plan	Review and comment on proposed resource plan recommendations that align with City/DMC environmental goals
Local Member Renewable Energy Procurement	Increase installed capacity of local renewable energy and help reduce carbon emissions	Work collaboratively to lay out renewable options; members determine solar capacity needs to meet City/DMC environmental goals	Harness the scale and buying power of EIC members to evaluate models such as a buy thru, green tariffs, or large- scale on-site solar
DE Input on Scope of District Energy Study	Avoid missed opportunities for near-term district energy integration at <i>Discovery Walk</i>	Ahead of forming a District Energy Subcommittee, get key EIC reps to provide insight on what info is vital for studying <i>Discovery Walk</i> options	Prepare technical and financia analysis to evaluate district energy opportunities at <i>Discovery Walk</i> in prep for the Dist. Energy Subcommittee
Respond to RPU Innovative Tech White Paper	Communicate with RPU about supply-side, demand-side, and grid technologies that align with City/DMC goals to avoid missed integration opportunities	Collaborate with RPU to understand findings, ensure appropriate assumptions were evaluated, and how to take a long-term benefit approach to technology options and pilots	Request early presentation of white paper findings to discuss which options could further advance goals, particularly under deep electrification and high-performance scenarios.
Provide Input in Transit Hub planning	Ensure that DMC/City environmental goals are represented in Mobility Hub development criteria to maximize carbon reduction	Promptly supply EIC input regarding Mobility Hub criteria	Offer expert insights to align Mobility Hub criteria with electric distribution capacity and renewable opportunities

6.2.b

#### **Barriers, Solutions & Next Steps Discussion**

The following section offers a discussion of the barriers that will need to be overcome to make these strategies successful. It also offers solutions to some of these challenges and guidance on first steps.

#### **Create EIC Commitment Document and Charter**

After being established in 2016, the Energy Integration Committee has met monthly and has worked on priorities including a voluntary benchmarking program, a sustainability resolution, and a sustainable building policy. However, the impetus for each member organization varies and no formal or informal commitment to collaboration has been established. While member organizations identified how their involvement and support for one strategy will vary, such as co-funding an electric vehicle fleet study versus investing in local renewable energy, they agreed that a joint commitment to collaborate and assist in strategy implementation would be helpful.

This commitment document and charter will serve two purposes: first to codify that the EIC is a voluntary collaborative committee and forum for all members to bring forward ideas and strategy opportunities that are in pursuit of the City and DMC environmental goals; second, to provide accountability between members and stability of commitment in the face of changing leadership and EIC representatives.

To find balance between accountability, commitment, and value for each member organization, the commitment from members would be renewed on a regular basis. This allows for flexibility in the role of the EIC over time. The first period of commitment would last through 2025 ensuring that the Committee can rely on the EIC as a central hub for Phase I and Phase II strategy collaboration. Additionally, the document might be designed with two commitment tiers so that members are coordinated, but perhaps involved in implementation at different levels. This approach may not be necessary as the document is developed and adopted, but is a potential approach to overcoming barriers to commitment and approval at the organization level.

This strategy is foundational to this plan as it will be an area of first action for all EIC member representatives and involve engagement with local government and business leaders. Without consensual commitment, there is the risk that other strategies will not be achieved on time or at all due to insufficient collaboration.

# Integrate City and DMC Environmental Goals into Member Organization Capital Improvement Plans through Life-Cycle Costing Analysis

The objective of this strategy is to create a reoccurring opportunity for EIC organizations to align investments and capital improvement decisions with environmental goals. While budget allocations that require Council, Commission, or Board approval are necessary steps for advancing some energy and carbon reduction opportunities, many decisions are made at the department level. Here, there is opportunity to make small and large impact decisions and, in many cases, to have less uncertainty in the investment decision-making process. Thus, this is a strategy that may only require moderate effort to implement but have significant impact.

Barriers to carrying out this strategy are that organizations have different requirements and cultural norms around decision-making at all levels. Thus, the EIC will work to establish a select number of decision-making criteria or processes that could be adopted and embedded at the organizational level. EIC members will share back to the Committee on how these processes are working and report on emerging best practices that can inspire and ensure that other EIC member organizations are maximizing their learning and investment benefits. Broadly speaking, the goal of this strategy will be to encourage capital improvement decisions to look at value over a moderate- to long-term horizon, considering "lifecycle cost" instead of "first cost."

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As of 2018, Rochester Public Utilities (RPU) and Minnesota Energy Resources (MERC) initiated an energy design assistance pilot for commercial customers in Rochester. The pilot provides new construction and major renovation projects with building energy modeling services as well as cost-assistance to pay for recommended design elements that achieve performance beyond energy code. While this pilot is now available, it is in the nascent stages of implementation. As the community undergoes significant development between now and 2040 – from DMC, Mayo, school district, City, and County new construction projects – there will be numerous opportunities for this service to have an impact.

The EIC is interested in not only seeing this pilot program evolve in to an ongoing program offering, but one that is user-friendly and widely utilized. To make this a robust energy conservation tool to achieve City and DMC goals, the EIC is interested in helping RPU and MERC evaluate the pilot services, so they can be expanded and improved. A few of the committee organizations like the County, City, DMC and Mayo Clinic are heavily involved in construction projects in town, and as a result have case study information that could be helpful for program development. As a two-utility collaborative program, the EIC will aim to offer input regarding how the program can be streamlined in terms of promoting the program (i.e., effective marketing) and start-up efficiency, as well as receiving incentives in a timely manner. As is helpful, the EIC could help gather input from pilot participants and future participants to assess opportunities for improvements, including how early energy design assistance is offered in the design process. The EIC could also help to expand program recognition through its own outreach and education about the program.

It is important to note the expansion of an incentive program is determined by the RPU Board and will be based on staff and financial resource limitations.

#### Support Building Benchmarking Roll-out Through Recruitment and Recognition

In 2018, the City, County, and DMC Board all approved resolutions to implement and participate in a voluntary commercial building benchmarking program. In 2018, the City and DMC contracted with Center for Energy and Environment to develop an energy benchmarking implementation handbook, providing guidance on how to carry out a successful program and what types of capacity, expertise, and resources are necessary to do so. This report was delivered in October and is already being put in to action as the first year of the benchmarking program gets under way.

In the first year of implementation, all City, County, and DMC buildings over 25,000 square feet, as well as a portion of Mayo facilities, are committed to participating in the program. However, because the program is voluntary, the EIC will be invaluable in recruiting additional participants. As leaders in commercial building operations, the EIC will leverage opportunities to speak at events on the benefits of participation and even host one or more events to build community awareness, buy-in, and curiosity about the program.

Successful benchmarking programs across the country engage local stakeholder groups to build local capacity and help create a culture of participation and sharing of lessons learned. Further, successful programs leverage participant recognition as a way of telling success stories and best practices. The EIC, in conjunction with the Rochester Energy Commission (REC), will use its energy expertise to lead recognition efforts for the program. This may include the selection of awardees, hosting public events to celebrate awardees, and to help build local industry pride in earning these awards.



#### Provide Resource Planning and Infrastructure Planning Input to RPU and the RPU Board (2019)

Due to the deadlines approaching in summer 2019 for both resource planning and infrastructure planning, the EIC identified action around both of these processes as very important. While some conversations have started within the EIC as well as among City, DMC, and RPU staff, the EIC has not provided structured input for either process.

The Committee would like to see assumptions and scenarios for both resource and infrastructure planning that reflect their relative impact on the City and DMC renewable energy, energy efficiency, and carbon reduction goals. This includes moderate to high-penetration of renewables in the grid mix, levels that may not be aligned with the City's 100% renewable by 2031 goal,<sup>2</sup> but is cost-effective and allows the City and DMC to build toward its long-term goals. With these carbon reduction goals that go beyond the use of energy in buildings alone, the EIC would like to see resource and infrastructure planning scenarios that consider varying degrees of transportation electrification, storage, and demand response. Both the resource and infrastructure plans should analyze the lifetime cost-effectiveness of alternative technology investments and non-traditional procurement of renewable energy resources. Again, the RPU Board and City Council are the ultimate decision-making authorities on the infrastructure plan.

Attachment: EIC Strategic Energy Project Plan\_Final Draft\_5.6.19(10713:RPU Support of Energy Integration Committee)

<sup>&</sup>lt;sup>2</sup> https://www.utilitydive.com/news/minnesota-town-targets-100-renewable-energy-by-2031/407381/

Attachment: EIC Strategic Energy Project Plan\_Final Draft\_5.6.19(10713:RPU Support of Energy Integration Committee)

#### Input on Transit Hub Planning & Siting

In early 2019, the DMC is working through siting for two transit hubs that will be centers for local circulators and regional bus transit stations, as well as large parking areas. The location of these hubs and coordination to supply sufficient electric infrastructure at these sites will be vital to support adoption of electric vehicles. The EIC has a very immediate opportunity to provide input on the siting of these hubs and can ensure that there are now distribution system advantages to some sites over others. Additionally, the EIC can be sure to communicate the value EV and EV charging visibility in the community, as these are important factors to reduce range anxiety and increase consumer confidence in purchasing an EV.

The EIC should engage the transit hub planning process as a first action in 2019, either through process participation or in writing.

#### Participating Organizations to Fund an Electric Vehicle (EV) Fleet Study

The City of Rochester is already planning to pursue its own EV fleet study, which will assess which city vehicles are most appropriate for conversion to electric vehicles. This is based on driving patterns (e.g., miles driven per day, length of trips, hours available for charging) and type of vehicle and provides recommendations based on total cost of ownership and carbon impacts. While the City plans to pursue this activity on its own, the EIC identified this as an activity that should be pursued jointly by organizations that voluntarily elect to do so. By collectively funding an EV fleet study, the participating EIC organizations will benefit from sharing lessons learned along the way and likely be motivated to act collectively once study results are in hand.



#### PHASE II - Near-Term Action, 2020-2023

Phase II includes nine priority actions, which fall across four of the five focus areas. These strategies are where the EIC will focus their efforts starting in the second and third quarters of 2020 after completing, or in some cases initiating, the strategies outlined in Phase I of the project plan.

Outlined in Figure 9 are the defining factors of each Phase II strategy. This includes the objective, asks, and approach that the EIC plans to take and is intended to function as a reference for the EIC and other stakeholders during Phase II development and implementation.

Phase II Actions: Actions are listed in the order in which they should be initiated or completed by the EIC.

#### Initiated in 2020

- 1. Leverage PACE financing for conservation and renewable energy projects begin promotion early 2020
- Study opportunities for innovative financing and ownership of district energy to serve the DMC goal: initiate a survey of innovative models by summer 2020

#### Initiated in 2021 or 2022

- 3. Investigate expansion of County district energy services for DMC and UMR goal: initial technical and economic feasibility study complete by 2021
- 4. Develop and pilot an ongoing commissioning program goal: initiate pilot offering by 2021
- 5. Develop and promote vendor education (e.g., an energy fair) goal: start targeted workshops by 2021
- Pass Citywide EV ready ordinance to increase charging access (for new public and private parking) goal: in place by 2021
- 7. Evaluate the use of real-time utility data and rate structures to reduce electric demand and consumption goal: Evaluate options and path forward by spring 2021
- 8. Assess key opportunities for creating and leveraging incentives and financing goal: begin to assess funding gaps and financing needs by summer 2021
- 9. Centralize building operations within the City goal: effort completed by summer 2021

Strategies	2020 (post	: Q1)		20	21	202	22
PACE Promotion	Promote PACE Starting in 2020 (ongoing)						
Incentives / Financing		As	sess & Desig Incentives	ξn			
Ongoing Commissioning	Design & by 2	Roll-Out 2021	Exp	pand I	Roll-Out		
Vendor Education		Develop Ed by Spring	lucation g 2021		Deliver o	n an Ongoing Basi	s
Centralize Operations	Initi	ate by Sum	mer 2020				
Study Dist. Energy	Survey of Mo Recommendat	odels by Fall ions by Spri	2020; ing 2021				
Expand Co. Dist. Energy	Study County District Energy Expansion Options Complete by 2022						
EV Ordinance	Adop Spring	ted by g 2021					
AMI + New Rates		Launch Spring	Pilot by 2021				

#### Figure 9. Phase II Action Timeline

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#### Figure 10. Phase II Action Summary

	Objective	Ask	Approach
Assess Needs and Develop Incentives/ Financing Promote PACE Financing	Identify and leverage key incentives and financing opportunities to assist achievement of City and DMC goals	EIC members to survey local businesses and developers to assess what immediate conservation or clean energy options would be utilized if funding were available so EIC can consider & disburse funds Work with RPU and MERC to promote PACE financing;	EIC members review local input (applications) regularly (quarterly or monthly) for high- impact opportunities Elevate awareness of PACE financing in the community by using it and developing a disseminating a case study or
	conservation and renewable energy projects by leveraging PACE financing	Collaborate with the St. Paul Port Authority to complete one local example project	presentation on benefits
EE Support and Inform Ongoing Commissioning Pilot	Create a collaborative, ongoing recommissioning and commissioning program that engages commercial customers for continuous impact	RPU and MERC to collaborate to design a joint program optimizing customer convenience and energy savings	EIC members provide input on program design features before and during pilot; EIC promotes the pilot and full-scale offering
Develop and Promote Vendor Education	Communicate to contractors and businesses the benefits and value of utility and City energy services and incentives	EIC members to help establish an ongoing source of education by identifying existing engagement channels or creating anew	Help outline the education needed and find expert speakers; individually share energy efficiency case studies and lessons learned
Centralize City Building Operations	Increase building operation best practices by centralizing knowledge and decision- making	Advocate for centralized building operations within the City and educate leaders on the benefits	EIC members who have already centralized operations report to City leaders by quantifying the costs and benefits
DE Study Financing & Ownership Models for DMC District Energy	Identify a financially viable path forward for expanding Mayo or County district system capacity and delivery infrastructure to serve DMC	Finance and district energy experts from the EIC form a district energy subcommittee to investigate and brainstorm alternative funding and ownership models	Explore innovative financing models, infrastructure synergies, and ownership structures that reduce first costs or lifecycle costs to determine a lowest cost expansion price
Investigate Technical Potential to Expand County District Energy	Determine the technical potential and economic feasibility for the County district system to expand and serve DMC west of Broadway	Start conversations with the County, DMC, and utilities about the right value proposition and costs that could create a path forward	EIC district energy subcommittee and County to outline expansion scenarios (capacity and technologies) that should be investigated



Pass Citywide EV Ready Ordinance

Evaluate the use of real-time utility data and rate structures to reduce electric demand and consumption Increase the opportunity to meet EIC carbon reduction goals through supporting citywide EV adoption

ncrease use of smart meters o utilities can grow opportunities for lower-cost A&V, dynamic or time-based oricing signals, and rewarding octual energy/demand savings EIC to advocate for and support drafting of ordinance language in collaboration with City staff and the Energy Commission

Ask RPU to design at least one peak-load rate offering for piloting in coordination with AMI to study the benefits for RPU and key customer segments Work with RPU and SMMPA to match EV load growth with renewable resources; help RPU establish *make-ready* solutions at time of construction

Learn the current constraints and costs of installing smart meters and work with RPU to collect lessons learned across key use cases during this pilot

#### **Barriers, Solutions & Next Steps Discussion**

The following section offers a discussion of the barriers that will need to be overcome to make these strategies successful. It also offers solutions to some of these challenges and guidance on first steps.

#### District Energy: Expansion and Innovative Financing or Ownership Structures

With two district heating and cooling systems adjacent to much of the DMC development, the opportunity to use these resources is unique. In the Mayo's 2016 Downtown Campus Utility Master Plan, Mayo explored the first costs and technical feasibility of expanding generation and distribution infrastructure for two scenarios beyond Mayo: first, DMC west of Broadway; and second, DMC west of Broadway, as well as the expanding University of Minnesota, Rochester (UMR) campus. While there is the technical potential to make this expansion, the first costs of expansion do not make a cost-effective case to do so. To date, the County has not conducted a study to understand the technical constraints or costs to expand to service parts of DMC or UMR.

A primary obstacle for DMC to leverage the adjacent district energy services (steam and chilled water) are first costs. Some important details that have not yet been explored about expanding access to these district systems are alternative ownership structures and innovative models for financing. With many examples of district energy development across the U.S. and Europe, there are a number of models by which these systems have been built and funded. The EIC is interested to further investigate whether there are precedents for working around first-cost challenges. Additionally, are there specific district services that could be cost-effective to expand that would compartmentalize costs or allow for incremental development as the DMC grows.

To determine what the right questions are, the EIC will form a district energy subcommittee to outline the key questions and find partners or consultants to explore creative district energy development models. It will also outline the key questions that need to be further explored to assess the opportunity and cost of expanding the County district energy system. Adding waste heat through future composting services or the sourcing of biogas are options that some EIC members have expressed interest in exploring further.

#### Support and Inform an Ongoing Commissioning (and Recommissioning) Pilot

Currently, there is a lack of utility program offerings that target deep energy efficiency improvements that can have a large impact on energy usage in moderate and large commercial buildings. In 2018 RPU

initiated a pilot recommissioning program, but this program is not designed to provide recurring recommissioning services to continually track and uncover new energy savings that "grow back" overtime. RPU's pilot is also a standalone one that only looks at electric energy savings, which poses a lost opportunity to achieve natural gas energy savings.

To offer Rochester commercial customers a service that will optimize the performance of mechanical and lighting equipment on an ongoing basis (supporting recommissioning studies every five to seven years), the EIC is interested to help RPU and MERC collaborate in developing such a program. By developing a collaborative electric and natural gas savings program, the EIC will be able to offer input about program design to help increase customer usefulness during delivery. Mayo Clinic, in particular, could support the program by sharing its experience and learnings about its own recommissioning program that it has pursued even in the absence of utility incentives. Further, as operators of some of Rochester's largest buildings, the EIC will work with facilities teams within their respective organizations to help the program scale and achieve cost-effective program delivery.

While this offering could be developed as a new program, there may be benefits to making this an extension of RPU's current recommissioning pilot. Joining these programs could offer marketing benefits as well as encourage those receiving commissioning services to partake in ongoing recommissioning services. The program could even incorporate building operator training as a part of ongoing operational services, adding to the scholarships that MERC and RPU currently offer for completing Building Operator Certification.

It is important to note that the creation of a new incentive program is ultimately the decision of the RPU Board and is based on financial and resource availability.

#### **Develop and Promote Vendor Energy Education**

As growth occurs within Rochester, new businesses will enter the local market and energy related contractors and vendors will be in demand. At the same time, both RPU and MERC, the City, and DMC are developing a significant portfolio of new program services and pilot offerings. To help build programs that are supported by the community and that customers and vendors are aware of, program education will be an important resource in the community.

In support of this need, the EIC will help lead the development of a Rochester vendor fair. The fair will offer informational presentations and continuing education sessions for businesses, contractors, and design professionals. The EIC will sponsor this event and support its development and organization directly or through contracting with a third party. The intent will be to host this energy fair on an annual basis and to help highlight the energy performance conservation expertise and resources available to business in Rochester (and southern Minnesota).

#### Support Community wide EV-ready Ordinance

The EIC has identified an EV-ready ordinance as a strategy for decreasing carbon emissions in the city. With over 13 million square feet of new building development planned before 2040, there is a significant opportunity to integrate EV charging infrastructure at the time of new construction. Not only will this help raise the visibility of EV infrastructure, which combats consumer "range anxiety", it will also save building owners from having to invest more in infrastructure updates that would be more expensive post-construction.

Beyond commercial development, an EV-ready ordinance that requires at least appropriate wiring could expand access to EV charging infrastructure for renters of multifamily properties. With 84% of EV charging in the U.S. currently happening at home<sup>3</sup>, educating homeowners about electrical upgrades during home or garage renovations is one opportunity for the EIC to cost-effectively support the EV transformation.

To successfully complete this effort, education and engagement of businesses and City leaders may be necessary to assuage concerns that such an ordinance will be a barrier and unwanted cost for developers and businesses. By using its professional network, the EIC will collaborate with City and RPU staff to build buy-in around this policy and help develop a business case for passing such an ordinance. This may include the creation of one or more case studies, presenting to professional associations, or speaking at city council hearings. As owners and developers of building space, the EIC will also be able to offer important input about the intent and design of a charging access ordinance.

#### Support and Participate in a Time-Based Rate Pilot Program

Installing advanced metering infrastructure (AMI) or smart metering can be a first step to engage building owners on actual energy performance and provide rate offerings that reward them for optimizing building operations to conserve and save peak energy. This can be particularly effective for sophisticated building operators and users. Rochester has a high density of buildings with trained, onsite building operators where performance-based incentives and time-based rates could be valuable to the utility and offer customers cost savings.

The EIC organizations are interested to experience and test the potential benefits of having advanced bidirectional meters, or other types of real-time energy sharing devices coupled with alternative dynamic rate structures. The EIC members would like to collaborate with RPU (and possibly MERC) to test this concept in a sample of buildings and to pilot one or more time-based rates. To overcome the barrier of upfront costs, the EIC would work with RPU to find a way to share the cost; a value that otherwise could be cost-prohibitive to recruitment. They would then work to help create one or more case studies that demonstrate the benefits and challenges of switching to time-based rates. From this experience, both the building operator community as well as RPU would gain hands-on experience with the value and costs of offering different metering technology and rates, which could lead to an ongoing or expanded customer offering package.

It is important to note that the creation of a new rate design program is ultimately the decision of the RPU Board and is based on financial and resource availability.

#### Assess Opportunities to Leverage Incentives and Financing through the EIC

A unique asset identified by the project planning process was the potential for the EIC to use Destination Medical Center Corporation resources, along with possible other partner and third-party resources, to create financing and incentive options. These funding mechanisms could be established to help meet the goals of the EIC or specific project plan targets outlined in this plan.

Because funding mechanisms represent strategies that can be applied to multiple focus areas, such as investment in renewable energy or energy efficiency, and can serve as methods to achieve multiple actions within a focus area, this strategy cuts across many of the previously discussed strategies. For this

<sup>&</sup>lt;sup>3</sup> Idaho National Laboratory (INL). (2015). Plugged-In: How Americans Charge Their Electric Vehicles. INL/EXT-15-35584. Idaho Falls: INL. <u>https://avt.inl.gov/sites/default/files/pdf/arra/PluggedInSummaryReport.pdf</u>

reason, the EIC feels that this opportunity may be best used in response to what is and is not working well without targeted funding support.

After prioritizing other first actions outlined in Phase I and Phase II, it will likely be a good time for the EIC to engage in a "deep dive," collaborative brainstorming process. At this time, existing gaps and opportunity for funding support can be assessed to maximize existing efforts as well as new innovative opportunities still to come.

#### **Centralize City Building Operations**

To maximize the benefits of energy efficiency programs and building operator certifications, there can be a significant benefit to having facility operators with specific energy expertise. However, it is challenging to have those experts in all facilities, as operational budgets and work force supply might not support this. Centralizing building operations across an organization or local government to one individual or team of energy managers can help increase building efficiency. This helps a whole portfolio of buildings to get similar attention and helps one decision to affect more square footage.

Following the County's example, the City is exploring an opportunity to move all energy-related building operations to a central manager or team to make the best use of engagement with utility efficiency programs and the sharing of outcomes and best practices that result. In turn, the City and County will share the benefits of centralization to encourage other large businesses and organizations to do the same.

#### PHASE III – Mid to Long-Term Action, Beyond 2023

Phase III includes three priority actions. These actions fall across two of the five focus areas outlined in this Project Plan, with a primary focus on energy efficiency. However, the EIC will have the ongoing responsibilities from the implementation of strategies that have come before as well as new emerging opportunities. This phase of the Project Plan serves as a list of strategies that need to be implemented but are provided in less detail and focus more on guidance around these actions' intentions to remain relevant for their time of implementation.

As in previous sections,

**Figure 11** outlines the defining factors of each Phase III strategy. This includes the objective, asks, and approach that the EIC plans to take. Unlike in previous sections, the discussion section that follows does not address barriers and solutions, but rather the need for these strategies. This will help the EIC reassess the need and urgency of implementing these strategies as Phase II activities are wrapping up.

Phase III Actions: Strategies are listed in order of which the EIC will first initiate or launch.

- Code compliance support program for city plan reviewers and inspectors goal: initiate a pilot program by spring 2023
- 2. Streamline benchmarking participation through customer data aggregation tool or service goal: make operational by spring 2024
- One-stop conservation offering for mid-size commercial customers goal: pilot this offering before 2024

#### Figure 11. Phase III Action Summary

	Objective	Ask	Approach
Energy Code Compliance City Support Program	Increase commercial energy code compliance, especially during periods of high growth, to increase energy conservation	The EIC will work together to launch this program with a third-party provider and support by championing the program within the City and development community to provide a project pipeline	Champion the program co early and help a third-par provider engage local cod officials, developers, and early about the benefits a flexibility of the service
Utility Energy Data Aggregation Tool for Benchmarking Participants	Streamline the building benchmarking process for current participants and reduce barriers for new participants	Work with potential benchmarking participants to understand the barriers to participation; help educate RPU and MERC about the type of tool(s) that would be helpful for participants	Help conduct an engagem event and/or survey to ga feedback from existing an prospective benchmarking participants for utility sha
Launch One-Stop Conservation Program for Small and Medium-sized Businesses	Support conservation opportunities beyond the largest projects with programs that link audit information to quality contracting	Engage the business community to understand the types of conservation program services and rates that interest customers	Help MERC and RPU colla the development of a one type of program and work business owners and asso to increase awareness

#### **Discussion of Need for Services & Initial Steps**

The following section offers a discussion of the barriers that will need to be overcome to make these strategies successful. It also offers solutions to some of these challenges and guidance on first steps.

#### **Develop Utility Data Aggregation Tools for Benchmarking Program**

Building energy benchmarking provides whole-building energy efficiency metrics by combining two silos of information that have never before been brought together: building characteristic information and utility meter consumption data. For the City of Rochester's benchmarking program, this information is to be entered into ENERGY STAR Portfolio Manager, the standard online benchmarking tool provided by the U.S. Environmental Protection Agency. Of the two silos of information needing entry into the tool, building characteristic information is entered during initial set-up and is fairly static going forward. Meter consumption data, on the other hand, is constantly developing and therefore must be entered on a more regular basis. Developing a utility data aggregation tool is an important step toward streamlining a building energy benchmarking program in the City of Rochester. Without one, buildings must manually enter a full calendar year of water and energy data for all fuel sources. The benefit of a utility data aggregation tool is two-fold: not only does the tool make the process of benchmarking and reporting use easy and convenient for the customer, but also ensures a greater level of data accuracy through

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automation. The EIC discussed the importance of a streamlined benchmarking process for buildings because the more properties that are entered into ENERGY STAR Portfolio Manager and disclosing their energy use to City, the more targeted and effective energy conservation programs can serve customers.

While there are known barriers to launching a utility data aggregation tool, the EIC unanimously agreed on the benefits such a tool could have for Rochester's voluntary benchmarking program. The group acknowledged that developing new utility software can incur increased cost and complexity, even when the development is contracted out to a third party. There are administrative burdens such as the Municipal Privacy Act, which currently would require RPU to manually enroll customers into the tool. However, there are models that exist in Minnesota that provide aggregation services, and these can serve as guidance for next steps.

It should be noted that additional programming needs will likely need additional financial resources that will require the approval of the respective organization's decision-making bodies.

#### **Energy Code Compliance Support Program**

Significant energy savings can be captured by cities rigorously enforcing energy code compliance for new construction and major renovation projects. For larger commercial projects in particular, the enforcement of the energy code's commissioning requirements helps ensure that systems operate correctly at the point of occupancy, thereby preventing discomfort and potential air quality issues in the building while saving energy. Enforcement of the energy code at the time of construction or major renovation leverages a unique opportunity to fold energy efficiency into a building's structure as it is built, preventing the greater expense of retroactively pursuing energy improvements.

Oftentimes, city plan reviewers and city inspectors do not have a complete knowledge of the state energy code and lack available time to enforce code more stringently. Typically, a review of commercial projects is complicated by separate permits for the building itself, such as for electrical and mechanical systems. To encourage better energy code compliance, the EIC should explore opportunities for training or programs aimed to support code enforcement officials on the energy code and its enforcement. Even encouragement from the top levels of city government that energy code enforcement is a priority can spur confidence among code officials that their work is supported. Alternatively, the EIC could explore and provide recommendations for third-party expert review services that would allow the City to gain better compliance without putting considerable time and effort into detailed, technical training of their staff.

#### Mid-size Commercial Customer One-Stop Conservation Program

Mid-sized commercial customers are often one of the hardest audiences for conservation programs to engage. Unlike the largest buildings in the sector, mid-sized commercial buildings may not have a designated energy manager on-site or centralized facility services dedicated to pursuing energy saving opportunities. Further, mid-sized commercial buildings often do not have the resources or time to seek

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out which utility programs they are eligible for much less complete the required paperwork and follow up after receiving an energy audit. This supports the need for a "one-stop" conservation program that provides full door-to-door services and assistance for mid-sized commercial customers. In such a program, customers receive a free energy audit to identify no- and low-cost energy saving opportunities as well as assistance filling out rebate applications and procuring qualified contractors to complete projects. As resources and focus allows, the EIC should consider supporting RPU and MERC in designing a one-stop conservation program for this market sector.

## V. Metrics for Advancement & Benchmarking Progress

The EIC has identified the most helpful and measurable metrics for tracking their achievements. Ultimately, the EIC determined that progress toward the DMC and City's climate goals are the primary milestones that should be tracked and reported on. It is also recognized that many, if not all, of these metrics are collected by agencies within the City of Rochester. Most of these milestones are captured in the graphic on the following page and are organized by the time in which they will be accomplished. While there are many ways to share progress, the EIC discussed the possibilities of publishing of annual report, presenting accomplishments both to the public and internal leadership, and/or sharing successes with the community through the local newspaper. These efforts would be done in collaboration with the City's Energy Commission, Sustainability Office, and other environmental organizations. In particular, presentations made to the DMCC and leadership could reinforce the value and efficacy of the EIC's work to ensure that resources continue to be invested in this work. Though it is unlikely that the EIC will need to pursue all three forms of communication each year, communicating advancement toward energy and climate goals can help build community identity around clean energy solutions and inspire residents and businesses to take action as well.



# VI. Recommendations & Strategic Next Steps

To help the EIC transition from the energy project planning process back to a mode of implementation, this section summarizes additional recommendations that the Committee may want to consider to improve efficiency, process, or engagement with stakeholders. These recommendations were collected during the energy project planning process from EIC conversations and built upon by Center for Energy and Environment to incorporate best practices and additional detail.

#### **Committee Process & Tracking**

- Bottom-Up Strategy Tracking: Establish a method for tracking progress of individual strategies that help the Committee as a whole and individual representatives take stock regularly of whether or not the Committee is on track with the timeline of the Project Plan. The underlying intent is to provide collaborative accountability for EIC member representatives at an individual level while also building a realistic understanding of the Committee's capacity for the future. This will keep up committee morale and help it function as a team.
- **Top-Down Goal Tracking:** Establish which broader metrics are the most helpful and feasible metrics to track the overarching goals of the City and DMC, such as carbon emission reductions, and percent of load or demand (define which) is being served by renewables. By selecting two or three goal-based metrics, the EIC will be positioned well to report to the member organizations and the public about their value and effectiveness. These metrics will also help increase organizational accountability and recognition for their efforts.
- Meeting Frequency & Format: As a Committee, establish a pace of meetings that is commensurate with the work that needs to be accomplished; determine if EIC meetings should occur more often.
- Establish Subcommittees: When a topic requires a deep dive, such as district energy systems or utility program design and delivery, form a subcommittee to focus those with the most expertise and interest on the task at hand. The EIC may determine what the objective of a subcommittee is and should be responsible for setting a deadline that aligns with the phasing in this Project Plan. The subcommittee is then responsible for establishing the questions that they will explore and answer, when a sufficient conclusion has been reached, and the form of a final deliverable.

#### **Internal & External Communication & Reporting**

 Increase Communication & Coordination: Increase coordination across EIC member organizations and to be able to create momentum within the Committee and a pace of work and collaboration that is commensurate with rolling opportunities. This could be accomplished by having the expectation for reporting in during each EIC meeting and out within your organization on a regular basis.

- Share updates, upcoming decisions, and deadlines from within your own organizations.
- Bring back EIC updates and share information with vital colleagues and leaders.
   Establish who these people are and determine if you need their input or they need your information, or both. This will help you determine how often you communicate and the level of information detail that is necessary to share.
- **EIC Visibility:** Increase EIC visibility within each respective member organization and within the community.
  - Establish meetings with organizational leaders or establish regular opportunities to present to councils or boards.
  - Annually or semi-annually, invite leadership from each EIC organization to participate in a roundtable EIC meeting. This will increase visibility of EIC activity as well as provide a forum for discussing resources and collaboration on initiatives moving forward.
  - Consider selecting one or two opportunities each year for the EIC to publish a press release and disseminate to major news sources in Rochester and the Twin Cities that helps communicate the work that the EIC is doing, the role that they play in achieving the City and DMC climate and energy goals, their efforts to collaborate with other environmentally-focused bodies, like the Energy Commission, and to support accountability and recognition for EIC representatives and organizations.

#### **Maintain & Infuse Collaboration**

- Chatham House Rule: During the energy project planning process, the EIC agreed to operate under the Chatham House Rule, suggesting of meeting participants that: *participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed.* During project planning, the Committee decided they would adopt Chatham House Rule as an ongoing practice. In keeping with decision, the EIC hopes to maintain trust and the most open and effective collaboration possible.
- **Deep Dives:** Financing and incentives were called out as a unique and potentially powerful strategy that the EIC could develop. The Committee is drawn to incentives and financing as a strategy that is created and applied when non-incentive strategies are not doing the job. This strategy area is ripe for EIC member to explore through a "deep dive," a brainstorming process that focuses on opportunities and innovative thinking first and constraints and barriers second. It is recommended that such a process be undertaken after 2019 along with or in response to an evaluation of current strategy and implementation effectiveness.

#### **Setting Agendas & Meeting Goals**

• Setting Agendas to Meet First-year Action Goals and Timeframes: With many time-sensitive strategies scheduled to take place in Phase I of this Plan, the EIC will need to further strategize

the responsible lead organization/member, resources needed, and intermediate actions required to meet deadlines in the first year. Further guidance on this process can be found in Appendix A.

• Establishing Metrics for Success and Committee Effectiveness: The EIC still needs to collectively establish metrics for evaluating its efficacy and success, other than obtaining its overarching goals. While Metrics for Advancement & Benchmarking Progress (Section V) offers some annual goals and milestones to be mindful of, establishing a more rigorous evaluation process can improve Committee accountability and likelihood of staying on target toward the goal.

## **VII. Closing**

Through working collectively on the actions and strategies outlined in this Plan, the EIC has the potential to significantly reduce energy use and carbon emissions in pursuit of the EIC's goals. In a rapidly changing climate, the efforts of the EIC will not only save businesses and residents money, but provide a healthier, more competitive and sustainable future for the DMC and the Rochester community at large.

As with all static documents, the strategies outlined in this Plan are organized by their level of urgency and potential impact as assessed in the present. While opportunities and barriers for carbon-savings are fairly well understood for Phase I and Phase II strategies, there is naturally less certainty of around the priority, impact, and feasibility of strategies categorized in Phase III given their more distant timeline for implementation. This allows the EIC to devote more attention to the possibilities of the present while leveraging the growing relationships among Committee members to sustain communication and commitment to collaboratively work on shared goals going forward. With rapidly advancing technology and fluctuating political support, new strategies will emerge and actions that are currently inconceivable may become more important to follow than those included in this plan. That said, many of the strategies provided in Phase I require immediate attention from the EIC as a means of setting the stage for a decarbonized future at a time of intense development in the City of Rochester.

To conclude, the engagement and time commitment provided by the EIC to date holds significant promise that the Committee will make progress toward meeting deadlines and accomplishing the its energy and climate goals. With sustained commitment and communication — both among EIC members and their respective organizations — the strategies presented in this plan will be obtainable and provide cost and environmental benefits to those that participate.

# Appendix A: EIC Meeting Agenda Guidance (2019)

To maximize the impact of the opportunities identified during Phase I of this Project Plan, the organization and sequencing of activities in the first six months will require concerted effort and organized planning. During this time the Committee will acclimate to some new operational practices established during project planning, and work to further build a culture of collaboration. For this reason, an initial schedule of activities is offered in this plan to help guide the Committee to focus on the work at hand and keep momentum into 2020 and the beginning of Phase II.

Below is a guide for what the EIC will tackle each of the first six months in 2019. The agendas will contain one or more of three elements: 1.) information gathering or reporting, 2.) decision-making, or 3.) production and completion of efforts. These elements are best practices that the Committee could choose to adopt as an ongoing structure – a decision they could assess in the second half of 2019.

#### **Definitions:**

**Information Gathering:** Educate and inspire EIC members by bringing in fresh information that is relevant to current or upcoming topics. This would include presentations from external experts as well as regular updates and sharing of lessons learned from other EIC members (e.g. incorporating City and/or DMC environmental goals into capital improvement plans or feedback from a utility pilot program).

- *Tip:* Ask each member to provide organizational updates at each meeting. This will enhance the value of the meetings for members as this information will be helpful beyond the work of the EIC and will increase the opportunity for timely collaborations.
- *Tip:* Inviting outside speakers to present on a bi-monthly basis is a good starting rhythm.

**Decision-Making & Approval:** Call out to the EIC in the agenda ahead of time which topics will require decision-making so that they can coordinate as needed with colleagues before attending.

**Working Sessions & Production:** Some meetings will be best spent co-creating an end product. Through shared discussion, the Committee will build a more durable approach to framing a topic or delivering information. When this is needed, call this out as a "working session" ahead of time so that people come prepared to actively participate. These sessions can result in requesting that one or two EIC members take the lead on translating the discussion or decisions in to a deliverable that can be shared beyond the Committee.

6.2.b

JANUARY	FEBRUARY	MARCH
WORKSHOP 4 Working Session: Review draft EIC Energy Project Plan & Commitment Document	Information: Benchmarking Speaker to learn about program roll-out Decision: 1.) Approve final Energy	Information: RPU to present on innovation/non-wires alternatives white paper
JANUARY MEETING Information & Working Session: Transit Hub speaker to inform EIC of decision and gather input (including input about pairing transit hubs with local renewables)	<ul> <li>Project Plan; 2.) Determine a date for an EIC benchmarking recruitment meeting/event</li> <li>Working Session: Identify and document EIC concerns and asks of RPU's resource planning process; Propose assumptions</li> </ul>	<b>Decision:</b> 1.) Confirm the need for and formally establish a district energy subcommittee and who comprises it; 2.) Approve EIC comments on RPU resource planning and submit or present to RPU
ADDII	or scenarios to be evaluated	Working Session: Outline comments to submit to RPU regarding considerations for demand response opportunities and how to the EIC can act in support
Information: 1.) EV fleet study scope of work and benefits presented to EIC plus guests; 2.) External expert presentation on approaches to achieving local or on- site renewable	Information: External presentation on best practices for embedding "lifecycle cost" as decision-making criteria for capital improvement planning	Information: External expert presentation to further open ideas and opportunities local or on-site renewables (i.e., presentation from RPU)
<b>Decision:</b> 1.) Approve EIC comments on RPU distribution planning and submit or present to RPU (2.) Determine which O1	<b>Decision:</b> Approve EV fleet study and confirm that all organizational approvals are complete or underway	<b>Decision:</b> Determine if and when a EIC leadership round-table should be held for 2019
efforts to include in a press release Working Session: Consider RPU's Resource Plan and discuss EIC member procurement of local renewables	Working Session: Create steps for each EIC organization to embed long-term returns in to capital improvement decision-making or City or DMC environmental goals	Working Session: Second discussion about investment in or procurement of on-site or local renewable energy
#### Beyond the First Six Months

There are too many moving pieces to determine which new information would be helpful to bring to the Committee once we look out more than three to six months. The agenda guide will help ensure that top priorities are getting addressed in the order with which decisions and deliverables need to be produced. Beyond the first six months. However, there are a number of topics that the EIC may consider inviting presentations from external experts or having discussions around for the purposes of information gathering and inspiration.

External information gathering opportunities include:

- 1. Innovation in financing offerings or incentives for development. Consider speakers from the green banking industry.
- 2. Successful and emerging commercial programs that could be applied to large commercial new construction, operator training, or small business segments.
- 3. Hear from the builders and building owners that participated in performance-based procurement at the Mayo, and what benefits were received and lessons learned.
- 4. RPU and MERC to share out what has been learned to date from the commercial design assistance pilot and describe opportunities for improvement and expansion.
- 5. Innovative district energy financing and ownership structures from around the world. This may be achieved through the district energy subcommittee.
- 6. Strategies to build community awareness of the EIC and elevate visibility to the impact being achieved within the City, Minnesota, and across the country.
- 7. External presentation on best practices for tracking progress against goals as a committee and organizational structures for improving and maintaining committee impact and culture. Could include an evaluation of process and a one-year check-in.
- 8. EV Fleet study findings report and discussion around clear next steps, what additional information is needed, and how the EIC can expand the value of implementation by selecting different opportunities across organizations to maximize information sharing along the way.
- 9. Performance based incentives, such as pay-for-performance can help building operators to achieve deeper, real energy savings and ease measurement of energy conservation.

Internal reporting and information gathering opportunities include:

- 10. Self-evaluation of how well the Committee is sharing information in a timely and robust manner to help advance goals and maintain an open and collaborative environment.
- 11. Track and evaluate efforts in motion:
  - Sustainable Building Policy: what is working well, what is not, and how to improve the impact of this approach.
  - Benchmarking program uptake, data quality, and participant feedback.
  - Lessons learned from a first year of utilizing "lifecycle cost" as criteria to determine capital improvements.



## RESOLUTION

BE IT RESOLVED by the Public Utility Board of the City of Rochester, Minnesota, to affirm continued support and participation of RPU staff in the Energy Integration Committee.

Passed by the Public Utility Board of the City of Rochester, Minnesota, this 25th day of June, 2019.

President

Secretary

Agenda Item # (ID # 10712)

Meeting Date: 6/25/2019

#### **SUBJECT:** Charitable Contributions Policy

#### **PREPARED BY:** Steve Nyhus

#### **ITEM DESCRIPTION:**

Attached for your review and comment is a redlined and clean version of the Charitable Contributions policy, which is being revised with minor changes, and the Board Resolution for Conservation Education Support passed on February 24, 2015. A draft copy of the policy was previously sent to the Communications Committee for their review and comment and it is now ready for the full Board's review. Staff is happy to take additional comments from the Board or if the Board is comfortable, we request approval of the policy.

#### UTILITY BOARD ACTION REQUESTED:

Approve the Charitable Contributions policy.

#### ROCHESTER PUBLIC\_UTILITIES

#### BOARD POLICY STATEMENT

#### POLICY SUBJECT: Charitable Contributions

#### POLICY OBJECTIVE:

All monies received by the **Boardutility**, irrespective of source, are public funds held and managed by the Board in trust for the benefit of its rate payers. The Board has no source of funds which can be used for any purpose other than the operation, maintenance and improvement of its utility systems, including contributions in lieu of tax and legally mandated expenditures.

The Board recognizes that many charitable institutions and other local organizations render valuable human services and are deserving of support in their fund-raising endeavors. Such institutions, however, may represent a particular segment of the community and may not enjoy the endorsement of the entire population served by the <u>BoardCity</u>'s utility systems.

#### POLICY STATEMENT:

In consideration of the Board's trusteeship responsibility for the safe-guarding and proper management of public funds, it is the policy of the Board that utility funds shall not be used for contributions to any charitable institution or other organization. Furthermore, the Board itself does not officially endorse any such institution or organization. The Board may, however, permit requests for contributions from employees under closely controlled procedures which do not adversely affect utility operation. The Board does authorize an annual request on behalf of the United Way of Olmsted County and the payroll deduction of employee contributions.

All other requests for-employee contributions, or for the use of utility funds to comply with legally mandated expenditures or in furtherance of public purposes consistent with the utility's charter, must be specifically approved in advance by the Board.

RELEVANT LEGAL AUTHORITY:	City of Rochester Home Rule Charter Sections 15.05 Board Resolution for Conservation Education Support (FebrJanuary 24, 2015)
EFFECTIVE DATE OF POLICY:	November 26, 1985
DATE OF POLICY REVIEW:	June 25, 2019
POLICY APPROVAL:	June 25 <del>August 27</del> , 2019

**Board President** 

Date

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#### ROCHESTER PUBLIC UTILITIES BOARD POLICY STATEMENT

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EFFECTIVE DATE OF POLICY:	November 26, 1985	
DATE OF POLICY REVIEW:	June 25, 2019	
POLICY APPROVAL:	June 25, 2019	

**Board President** 

Date



### RESOLUTION

WHEREAS, the City of Rochester, acting through its Rochester Public Utilities, ("RPU") is authorized by the Rochester Home Rule Charter to engage in the business of providing electric and water services to the residents of the City of Rochester; and

WHEREAS, RPU is subject to the Minnesota Department of Commerce's Conservation Improvement Program requirements to conserve electricity, Minn. Stat. 216B.241; and

WHEREAS, RPU is subject to the Minnesota Department of Natural Resources water supply plans that include water conservation plans, Minn. Stat. 103G.291, Subd. 3; and

WHEREAS, RPU is subject to Federal Safe Drinking Water Act which requires protection of the drinking water supplies, Title XIV of the Public Health Services Act (42 U.S.C. 300f-300j-9); and

WHEREAS, RPU is subject to Federal and State environmental regulations which requires protection of the air, water and land; and

WHEREAS, RPU uses and financially supports educational programs, public awareness events, research & development, environmental improvements, and other similar activities to promote its conservation and environmental improvement mission; and

NOW, THEREFORE, BE IT RESOLVED by the Board of Rochester Public Utilities that the management of RPU may financially support events, programs, and activities that meet the conservation and environmental improvement mission of the utility and that satisfy the various conservation and environmental protection laws and rules imposed upon RPU within the existing approval structure and authorization levels established by the Board.

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

ROCHESTER, MINNESOTA, THIS 24TH DAY OF February, 2015.

President

Secretary



## RESOLUTION

BE IT RESOLVED by the Public Utility Board of the City of Rochester, Minnesota, to approve the amended Charitable Contributions Policy as presented.

Passed by the Public Utility Board of the City of Rochester, Minnesota, this 25th day of June, 2019.

President

Secretary

# FOR BOARD ACTION Agenda Item # (ID # 10720) Meeting Date: 6/25/2019 **SUBJECT: RPU Index of Board Policies PREPARED BY:** Christina Bailey **ITEM DESCRIPTION:** UTILITY BOARD ACTION REQUESTED:

ROCHESTER PUBLIC UTILITIES		
INDEX OF BOARD POLICIES		
		RESPONSIBLE BOARD
	<b>REVISION DATE</b>	COMMITTEE
BOARD		
1. Mission Statement	6/26/2012	Policy
2. Responsibilities and Functions	3/27/2012	Policy
3. Relationship with the Common Council	2/28/2012	Policy
4. Board Organization	3/27/2018	Policy
5. Board Procedures	3/27/2012	Policy
6. Delegation of Authority/Relationship with Management	7/24/2018	Policy
7. Member Attendance at Conferences and Meetings	12/18/2018	Policy
8. Board Member Expenses	12/18/2018	Policy
9. Conflict of Interest	11/26/1985	Delete
10. Alcohol and Illegal Drugs	7/28/1988	Delete
11. Worker Safety	3/27/2012	Policy
CUSTOMER		
12. Customer Relations	4/30/2019	Ops & Admin
13. Public Information and Outreach	4/30/2019	Communications
14. Application for Service	7/1/2016	Ops & Admin
15. Electric Utility Line Extension Policy	3/28/2017	Finance
16. Billing, Credit and Collections Policy	7/25/2017	Finance
17. Electric Service Availability	4/28/1998	Ops & Admin
18. Water and Electric Metering	6/26/2018	Ops & Admin
19. Electric & Water Bill Adjustment	3/10/1994	Finance
20. Rates	7/25/2017	Finance
21. Involuntary Disconnection	4/24/2018	Communications
ADMINISTRATIVE		
22. Acquisition and Disposal of Interest in Real Property	12/19/2017	Ops & Admin
23. Electric Utility Cash Reserve Policy	1/13/2017	Finance
24. Water Utility Cash Reserve Policy	1/13/2017	Finance
25. Charitable Contributions	11/26/1985	Communications
26. Utility Compliance	10/24/2017	Communications
27. Contribution in Lieu of Taxes	6/29/1999	Finance
28. Debt Issuance (PENDING)	PENDING	Finance
29. Joint-Use of Fixed Facilities and Land Rights	10/8/1996	Ops & Admin
30. Customer Data Policy	10/9/2014	Communications
31. Life Support	10/9/2014	Communications
32. Undergrounding Policy (PENDING)	PENDING	Ops & Admin
Red - Currently being worked on		
Yellow - Will be scheduled for revision		

# FOR BOARD ACTION Agenda Item # (ID # 10731) Meeting Date: 6/25/2019 **SUBJECT: 2019 APPA National Conference PREPARED BY: Brian Morgan ITEM DESCRIPTION:** UTILITY BOARD ACTION REQUESTED: