

AGENDA
SHAKOPEE PUBLIC UTILITIES COMMISSION
REGULAR MEETING
March 1, 2021

Following the March 13, 2020 Declaration of Peacetime Emergency by Governor Walz (as amended), the Commission is holding its regular meeting on March 1, 2021 at 5:00pm by telephone or other electronic means (WebEx) according to MN Statutes, Section 13D.021. The Commission President has concluded that an in person meeting is not practical or prudent because of the health pandemic declared under the Emergency Order and according to current guidance from the MN Department of Health and the CDC. The Commission President will be at the regular meeting location for the Commission. The public may monitor the meeting:

**Call-In Phone Number 1-408-418-9388
Enter Access Code 126 210 3000
When Prompted for Password, enter #**

1. **Call to Order** at 5:00pm in the SPUC Service Center, 255 Sarazin Street.

2. **Communications**

3. **Consent Agenda**
 - C=> 3a) Approval of February 16, 2021 Minutes
 - C=> 3b) Approval of March 1, 2021 Agenda
 - C=> 3c) March 1, 2021 Warrant List (JM)
 - C=> 3d) Water Capacity Charge (WCC) Fee Refunds (JA)
 - C=> 3e) 2021 MMPA Transmission Transformed Rate (JA)

4. **Liaison Report (JB)**

5. **General Manager Report**
 - 5a) General Manager Update – Verbal (GD)

6. **Reports: Water Items**
 - 6a) Water System Operations Report – Verbal (LS)

7. **Reports: Electric Items**
 - 7a) Electric System Operations Report – Verbal (BC)

8. **Reports: Human Resources**

9. **Reports: General**

- 9a) Presentation by Katama Technologies on AMI (GD)
- 9b) Impact of COVID Procedures (SH)
- 9c) 2021 Flower Baskets (GD)
- 9d) EV Vehicle Discussion(GD)

10. **Items for Future Agendas**

11. **Tentative Dates for Upcoming Meetings**

- Mid Month Meeting -- March 15, 2021
- Regular Meeting -- April 5, 2021
- Mid Month Meeting -- April 19, 2021

12. **Adjourn to 03-15-2021 at the SPUC Service Center, 255 Sarazin Street**

MINUTES OF THE
SHAKOPEE PUBLIC UTILITIES COMMISSION
Regular Meeting
February 16, 2021

1. Call to Order. President Amundson called the February 16, 2021 meeting of the Shakopee Public Utilities Commission to order at the SPU meeting room at 5:00 P.M.
2. Roll Call. President Amundson, Vice President Mocol, Commissioner Brennan, Commissioner Fox, and Commissioner Meyer were present.
3. Approval of Consent Agenda. Motion by Vice President Mocol, seconded by Meyer, to approve the consent agenda, namely: February 1, 2021 Minutes, February 16, 2021 Agenda, February 8, 2021 Warrant List, Account Credit Request/Deposit Refunds, February 16, 2021 Warrant List, Water Monthly Dashboard, WaterISAC Involvement, and the West Shakopee Substation Update. Ayes: Amundson, Mocol, Brennan, Fox, and Meyer. Nays: None. Motion carried.
4. Liaison Report. Commissioner Brennan noted that the City Council amended the 2040 Comprehensive Plan concerning the downtown transition plan and entertainment area.
5. Utilities Manager Report. Greg Drent, Interim Utilities Manager, provided an update on a number of pending projects, including AEM's evaluation of process/policies; organizational structure surveys; advanced metering infrastructure; meeting with Xcel Energy regarding West Shakopee Substation; East Shakopee Substation discussions; meeting with MMPA regarding carbon free initiative; construction planning status on the SPU building; Section 125 compliance; videoconferencing options; and the virtual MMUA Legislative Conference, in which he and Commissioner Fox participated, which included electric vehicles and carbon free presentations. Mr. Drent noted that despite the subzero weather, and the temporary increase in market costs, power supply and costs for SPU remained viable, in part because of the behind-the-meter location of the Shakopee Energy Park.
6. Water Report. Lon Schemel, Water Superintendent, reported weather-related water issues, including some frozen meters that broke. Mr. Schemel explained that he contacted the Minnesota Department of Health to clarify the term "elevated" with respect to water contaminants. The Department described "elevated" as jargon and not an official term. Mr. Schemel explained the term maximum contaminants limit goal, the level below which no known or expected health issues arise. A question-and-answer session concerning water topics is being scheduled with the Department of Health for April 19, 2021. Mr. Schemel also noted a good discussion with the City's engineering staff.

7. Electric Report. Brad Carlson, Assistant Electric Superintendent, noted one outage since the last Commission meeting. He also gave an update on pending electric projects.

8. General. Jean McGann, Consulting Finance Director (AEM), discussed the December 2020 preliminary financial statements. Year-end adjustments and close-outs are in process. Ms. McGann noted that the audit is scheduled to be completed in May. In terms of the Investment Manager search, Ms. McGann reported that ten proposals were received and that she recommends interviewing three. Commissioner Fox and Vice-President Mocol volunteered to serve as an informal working group to assist with interviews scheduled for February 19, 2021.

Patti Heminover, Director at Baker Tilly, presented a draft of the recruitment brochure for the Utilities Manager position and discussed the timeline and process. Ms. Heminover recommended that the Commission consider changing the position title to General Manager to add clarity as to the leadership role within SPU. Motion by Commissioner Meyer, seconded by Mocol, to refer to the Utilities Manager position name as General Manager and to change policies and procedures accordingly. Ayes: Amundson, Mocol, Brennan, Fox, and Meyer. Nays: None. Motion carried. Motion by Commissioner Meyer, seconded by Fox, to approve the recruitment brochure, subject to minor revisions communicated to Baker Tilly. Ayes: Amundson, Mocol, Fox, and Meyer. Nays: Brennan. Motion carried 4-1.

Mr. Drent presented the potential purchase of an electric vehicle for SPU. Commissioners asked for additional information concerning specific models, costs, maintenance, longevity, residual value, and how the purchase could provide information and assistance to ratepayers.

9. Adjourn. Motion by Commissioner Meyer, seconded by Mocol, to adjourn to the March 1, 2021 regular meeting. Ayes: Amundson, Mocol, Brennan, Fox, and Meyer. Nays: None. Motion carried.



Greg Drent, Commission Secretary

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SHAKOPEE PUBLIC UTILITIES COMMISSION

WARRANT LISTING

March 1, 2021

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

57797	AEM Workforce Solutions LLC	\$1,682.80
57798	Allstream	\$2,461.76
57799	Amaril Uniform Co.	\$570.17
57800	Anderson Companies	\$56.73
57801	AAR Building Service Co.	\$3,610.00
57802	APPA	\$1,210.00
57803	Apple Ford of Shakopee	\$66.73
57804	Border States Electric Supply	\$17,971.00
57805	Centerpoint Energy	\$2,602.63
57806	City of Shakopee	\$187,000.00
57807	Comcast	\$2.25
57808	Core & Main LP	\$29,007.20
57809	CPS Technology Solutions Inc.	\$5,363.38
57810	CSK Auto	\$49.85
57811	D R Horton Inc.	\$1,509.10
57812	DGR Engineering	\$2,820.02
57813	Distinctive Land Development LLC	\$1,080.00
57814	Emergency Automotive Technologies I	\$374.74
57815	First Industrial Realty Trust	\$773.17
57816	Further	\$5,304.23
57817	Gaughan Companies	\$588.91
57818	Grainger Inc.	\$213.59
57819	Hansen Holding	\$3,898.92
57820	HRExpertiseBP LLC	\$5,812.50
57821	Interstate All Battery Center	\$418.44
57822	Impact Mailing of Minnesota, Inc.	\$1,281.65
57823	Innovative Office Solutions LLC	\$430.81
57824	Stuart C Irby Co.	\$1,637.47
57825	KEB America Inc.	\$1,349.78
57826	Marvin Development IV, LLC	\$1,995.87
57827	McGrann Shea Carnival Straughn & Lamb, Chartered	\$18,357.50
57828	Midwest Safety Counselors, Inc.	\$288.85
57829	Minn Valley Testing Labs Inc.	\$58.00
57830	Minn Dept. of Health (MDH)	\$29,765.00
57831	MN Dept of Revenue	\$197,881.00
57832	Napa Auto Parts	\$12.86
57833	VOID	\$0.00
57834	Gerry Neville	\$140.00
57835	Cindy Nickolay	\$176.40
57836	Bluetarp Financial, Inc.	\$265.92
57837	OBSV, LLC	\$191.74
57838	Orchard Park Townhomes	\$432.31

SHAKOPEE PUBLIC UTILITIES COMMISSION

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March 1, 2021

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

57839	Paymentus Corporation	\$17,075.85
57840	Scott County Gov't Center	\$3,809.41
57841	Shakopee Secure Storage LLC	\$1,768.00
57842	Short Elliott Hendrickson Inc.	\$28,664.72
57843	Stagecoach LLC	\$2,195.38
57844	Gregory Triplett	\$206.64
57845	Verizon Connect NWF Inc.	\$466.32
57846	WESCO Receivables Corp.	\$14,151.06
	TOTAL	<u><u>\$597,050.66</u></u>



Interim Commission Secretary

Commission President



Interim Director of Finance & Administration

SHAKOPEE PUBLIC UTILITIES COMMISSION

WARRANT LISTING

March 1, 2021

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

57797	AEM Workforce Solutions LLC	\$1,682.80	January HR Consulting
57798	Allstream	\$2,461.76	Shakopee Sub, Pike Lake, S. Sub and SPU lines
57799	Amaril Uniform Co.	\$570.17	FR Clothing for R.W.
57800	Anderson Companies	\$56.73	Refund WO#2427 Temp power VA Clinic
57801	AAR Building Service Co.	\$3,610.00	March Cleaning service for SPU building
57802	APPA	\$1,210.00	2020 RP3 Application Fee - Medium Utility
57803	Apple Ford of Shakopee	\$66.73	Water dept. Trk #630 - Oil change
57804	Border States Electric Supply	\$17,971.00	\$2398.44 - Fault Indicator & Optic Fiber cable, \$467.32 - Cable Cutter Kit, \$5536.29 - Insulating cap, clamp hot line, module 4 point feed thru, pipe 2" PVC Sweep elbow, shrink heater pri, sleeve alum loop splice, conduit straps, \$1145.37 - Step ladder, bow rakes, digging shovels, \$980.16 - Quazite cover, \$7443.42 - WO#2344 - Centron meter & Polyphase meter
57805	Centerpoint Energy	\$2,602.63	10th Ave. Gas and SPU building gas usage
57806	City of Shakopee	\$187,000.00	March Transfer Fee
57807	Comcast	\$2.25	Cable bill
57808	Core & Main LP	\$29,007.20	Omni Meters - WO#2451
57809	CPS Technology Solutions Inc.	\$5,363.38	Technical Services finally completed
57810	CSK Auto	\$49.85	Brake roter, QtHydFluid, Wiper blade, Air filter
57811	D R Horton Inc.	\$1,509.10	Refund WO#2440-CR78 & Zumbro Intersection Street Lighting
57812	DGR Engineering	\$2,820.02	Professional Services thru Jan. on Levee Drive Duct Bank - WO#2239
57813	Distinctive Land Development LLC	\$1,080.00	Refund WO#2424 Distinctive Shores UG Electric
57814	Emergency Automotive Technologies I	\$374.74	Light bar for new unit #621 - WO#2465
57815	First Industrial Realty Trust	\$773.17	Refund WO#2336 Jonaco Machine UG Electric- Valley Park Dr.
57816	Further	\$5,304.23	Dependent care and Dental Care reimbursements
57817	Gaughan Companies	\$588.91	Refund WO#2441 River Bluff Apt. Temp. Service
57818	Grainger Inc.	\$213.59	Caution tape, flagging tape, cleaner/degreaser, key blank

SHAKOPEE PUBLIC UTILITIES COMMISSION

WARRANT LISTING

March 1, 2021

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

57819	Hansen Holding	\$3,898.92	Refund WO#2425 1515 Maras St. Truck Heaters
57820	HRExpertiseBP LLC	\$5,812.50	HR Consulting - Reissued check, initial check made personal self not the business name
57821	Interstate All Battery Center	\$418.44	Batteries for FC300 Readers
57822	Impact Mailing of Minnesota, Inc.	\$1,281.65	Collection letters 1/19-
57823	Innovative Office Solutions LLC	\$430.81	Office Supplies
57824	Stuart C Irby Co.	\$1,637.47	Mount assembly, hook for greenlee stick
57825	KEB America Inc.	\$1,349.78	Refund WO#2327 - KEB America - Expansion
57826	Marvin Development IV, LLC	\$1,995.87	Refund WO#2296 Vierling Plaza 2nd Addition - UG Electric
57827	McGrann Shea Carnival Straughn & Lamb, Chartered	\$18,357.50	Municipal & Regulatory Matters - \$13512.50 and West Sub Purchase Agreement WO#2377 - \$4845.00
57828	Midwest Safety Counselors, Inc.	\$288.85	Clear Visor safety shields for Water dept.
57829	Minn Valley Testing Labs Inc.	\$58.00	Nitrate & Nitrite
57830	Minn Dept. of Health (MDH)	\$29,765.00	Community Water Supply Connection fee
57831	MN Dept of Revenue	\$197,881.00	January Sales & Use Tax
57832	Napa Auto Parts	\$12.86	Trk #613 fuses
57833	Diane Nelson	\$0.00	Void - Made to wrong name
57834	Gerry Neville	\$140.00	Mileage reimbursement
57835	Cindy Nickolay	\$176.40	Mileage reimbursement
57836	Bluetarp Financial, Inc.	\$265.92	Combination Wrench Set
57837	OBSV, LLC	\$191.74	Refund WO#2279 Canterbury Park 9th Addition, WM Plan Review & Inspection
57838	Orchard Park Townhomes	\$432.31	Refund WO#2418 McIntosh Cir. New Security Light
57839	Paymentus Corporation	\$17,075.85	January Transaction Fees
57840	Scott County Gov't Center	\$3,809.41	Refund Scott Co. Govt. Ctr. II WO#2282
57841	Shakopee Secure Storage LLC	\$1,768.00	Refund WO#2317 4th Ave. Storage UG Electric
57842	Short Elliott Hendrickson Inc.	\$28,664.72	\$14705.00 - WO#2437- Goundwater Aquifer Monitoring Well, \$1096.00 - WO#2355 Water Tower 3, \$6733.72-WO#2408 - Windermere South, \$2930.00- WO#2340 -Powers 1st Addition, \$3200.00 - WO#2437 - Groundwater Acuifer Monitoring Well
57843	Stagecoach LLC	\$2,195.38	Refund WO#2319 Hwy 1010 Truck Heater Service
57844	Gregory Triplett	\$206.64	Mileage reimbursement

SHAKOPEE PUBLIC UTILITIES COMMISSION

WARRANT LISTING

March 1, 2021

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

57845	Verizon Connect NWF Inc.	\$466.32	Electric and Water dept. Vehicle service agreement
57846	WESCO Receivables Corp.	\$14,151.06	Mastic compound, duct tape, elbows, fuses, ground rods, lamp, heat shrink, splicing kit, copper, wire guy all to restock inventory
	TOTAL	<u>\$597,050.66</u>	

Interim Commission Secretary


Commission President

Interim Director of Finance & Administration



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

TO: Greg Drent, Interim Utilities Manager 

FROM: Joseph D. Adams, Planning & Engineering Director 

SUBJECT: Water Capacity Charge (WCC) Fee Refunds

DATE: February 24, 2021

ISSUE

Staff is submitting for approval a special Warrant list for WCC fee refunds.

BACKGROUND

On December 7, 2020 the Utilities Commission adopted Resolution 2021-02 A Resolution Addressing Refunding of Past Water Capacity Charges FKA Water Connection Charges Due to the Recent Reduction in the WCC Rates Policy Resolution.

The Commission provided direction to staff that all projects that had not yet received an occupancy permit as of the above action would be entitled to a refund of the WCC fees they had previously paid.

DISCUSSION

Staff has calculated the refunds due to the projects and parties as noted on the special Warrant list attached. The total amount of these refunds are \$276,992.52 and are some \$29,615 less than previously estimated (\$306,607) because staff was able to re-issue some of the invoices that had not yet been paid using the reduced rate. So, in those cases there is no refund necessary since there was no overpayment.

REQUESTED ACTION

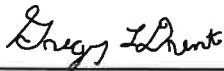
Staff requests the Commission approve the special Warrant list for the WCC refunds.

SHAKOPEE PUBLIC UTILITIES COMMISSION

Warrant List
Water Capacity Refund for 2019 & 2020
March 1, 2021

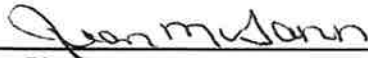
By direction of the Shakopee Public Utilities Commission, the Secretary does hereby authorize the following warrants drawn upon the Treasury of Shakopee Public Utilities

57847	Lon Caarnahan	\$513.00
57848	Canterbury DBSV LLC	\$4,617.00
57849	Cargo Van-go Inc.	\$1,026.00
57850	D. R. Horton	\$51,300.00
57851	Distinctive Design Build LLC	\$5,643.00
57852	Donnay Homes	\$3,078.00
57853	Enclave Development	\$135,612.00
57854	Fieldstone Family Homes	\$6,156.00
57855	Friendship Baptist Church	\$9,234.00
57856	Kubes Realty	\$2,052.00
57857	Lennar Corporation	\$18,468.00
57858	Link Construction	\$3,078.00
57859	OPUS Development Company LLC	\$20,312.52
57860	PF Baseline Fitness LLC	\$3,591.00
57861	River Valley Crossing	\$6,156.00
57862	Scott County	\$2,565.00
57863	SDA Inc.	\$3,078.00
57864	Timeless Homes LLC	\$513.00
	TOTAL	<u>\$276,992.52</u>



Interim Utilities Manager

Commission President



Interim Director of Finance & Administration



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TO: Greg Drent, Interim Utilities Manager *GD*
FROM: Joseph D. Adams, Planning & Engineering Director *J.D. Adams*
SUBJECT: 2021 MMPA Transmission Transformed Rate
DATE: February 26, 2021

ISSUE

Minnesota Municipal Power Agency, SPU's wholesale power supplier, has recently released a new Transmission Transformed Rate for its members, including SPU.

BACKGROUND

The Utilities Commission adopted this new rate last fall. It is for very large demand customers only, with a minimum of 5000 kVA peak annual demand.

DISCUSSION

At this time SPU does not have any customers that would qualify for this rate, but it can be used as an incentive to attract a certain user like a very large data center.

REQUESTED ACTION

Staff requests the Commission adopt the new rate as presented.

SHAKOPEE PUBLIC UTILITIES

ELECTRIC RATE SCHEDULE – TRANSMISSION TRANSFORMED SERVICE

Conditions of Service

- Customer must take retail three-phase electric service at a transmission transformed voltage via a direct connection to one of City's distribution substations.
- Customer must have a minimum annual peak demand of 5,000 kilowatts (kW).
- Customer's annual load factor must be no less than 75%.
- Customers that fail to meet the above criteria shall be moved to another electric rate schedule.
- New customers not yet taking service must demonstrate that they are likely to meet the above criteria prior to taking service under this rate schedule.
- Any Customer taking service under this electric rate schedule must acknowledge that this rate schedule contains market-based pricing that subjects the Customer to certain risks, including fluctuation in rates and prices set by the Midcontinent Independent System Operator (MISO).
- Any Customer desiring to take service under this rate schedule must execute a contract with the Utility that commits to a minimum term of service, outlines the expected peak demand and load factor, agrees to the requirements for registering generation with MISO, and acknowledges the risks of market-based pricing.

Billing Determinants

Energy: Actual metered hourly usage

Transmission Demand: Monthly maximum metered 15-minute Customer demand, adjusted for:

- Applicable MISO zone transmission losses

Capacity: Customer shall select one of the options below:

- If Customer has its own generation, then the capacity billing determinant shall be the maximum metered 15-minute demand in excess of Customer's registered generation in a given month. To qualify for the billing determinant in the preceding sentence, Customer's generation must be registered with MISO and comply with all MISO requirements for capacity resources.
- If Customer does not have its own generation, or if Customer fails to register its generation with MISO or fails to comply with all MISO requirements for capacity resources, then the capacity billing determinant shall be monthly maximum metered 15-minute Customer demand.

Rates

The following charges shall apply to all energy quantities:

- MISO Real-Time Locational Marginal Price at the applicable MISO Node
- All applicable MISO Ancillary Services Charges
- MISO Multi-Value Project Charges
- A charge of 0.1 cents per kWh for the cost of compliance with the State of Minnesota's Renewable Energy Standard

- A charge of one cent per kWh to cover all dispatch, billing, and administrative costs. This charge shall be inclusive of all franchise fees and regulatory charges imposed by Utility on all customers.

The following charges shall apply to all transmission demand quantities:

- All applicable MISO transmission charges, including but not limited to:
 - Schedule 1
 - Schedule 2
 - Schedule 9
 - Schedule 26

The following charges shall apply to all capacity quantities:

- The above-defined billing determinant multiplied by:
 - \$10.60 per kW-month for all capacity quantities during the months of June through September
 - \$3.50 per kW-month for all capacity quantities during the months of October through May

If Customer has registered generation that does not perform as registered when requested by utility, utility's wholesale supplier, or MISO, Customer shall be responsible for:

- Any financial or other penalties imposed by MISO related to the generation's failure to perform
- All costs of utility or utility's wholesale supplier to acquire replacement capacity to replace registered generation that did not perform.

Customer shall pay a monthly transformation charge based on the cost of providing transmission transformed service to Customer, including recovery of costs for any new substation or related facilities.

Customer is responsible for any new charges or fees imposed by MISO or any new regulatory or legislative action that results in increased costs to provide power supply to Customer.

All rates in this electric rate schedule are subject to change on an annual basis.

Shakopee Public Utilities
Advanced Metering Infrastructure (AMI) Assessment
February 2021

Facilitators – Consultants:

Greg Johnson, Katama Technologies, Inc

gjohnson@katamatech.com, 704.225.7864

Pat Corrigan, Katama Technologies, Inc

pcorrigan@katamatech.com, 919.523.9597



Katama Technologies, Inc.

Estimated AMI Costs

- What's included
 - Consideration of broad range of AMI providers
 - Total Cost of Ownership
 - Implementation costs
 - Estimated annual expenses
 - 12-year operational period
 - Accounts for growth in customer accounts
 - Estimate created prior to the receipt of vendor proposals
 - Collaborative development of assumptions
 - New meters
 - All electric meters will be replaced with new AMI devices
 - All residential water meters will be replaced with new AMI devices
 - All other water meters will be upgraded

Estimated AMI Costs

- What's not included
 - Customer portal – this will be added once the AMI implementation is complete
 - Meter Data Management software application – future addition depends upon CIS system
 - Costs for integration to future Outage Management System
 - Software for prepay metering

AMI Technology Overview

Low RF Mesh

- More Routers
- Fewer Repeaters
- Lower Mounting Heights Required



Canopy RF Mesh

- Fewer Routers
- More Repeaters
- Higher Mounting Heights Required



Point to Multipoint (Tower)

- No Routers
- No Repeaters
- Very high mounting



Estimated AMI Costs

Shakopee Public Utilities

Estimated System Costs

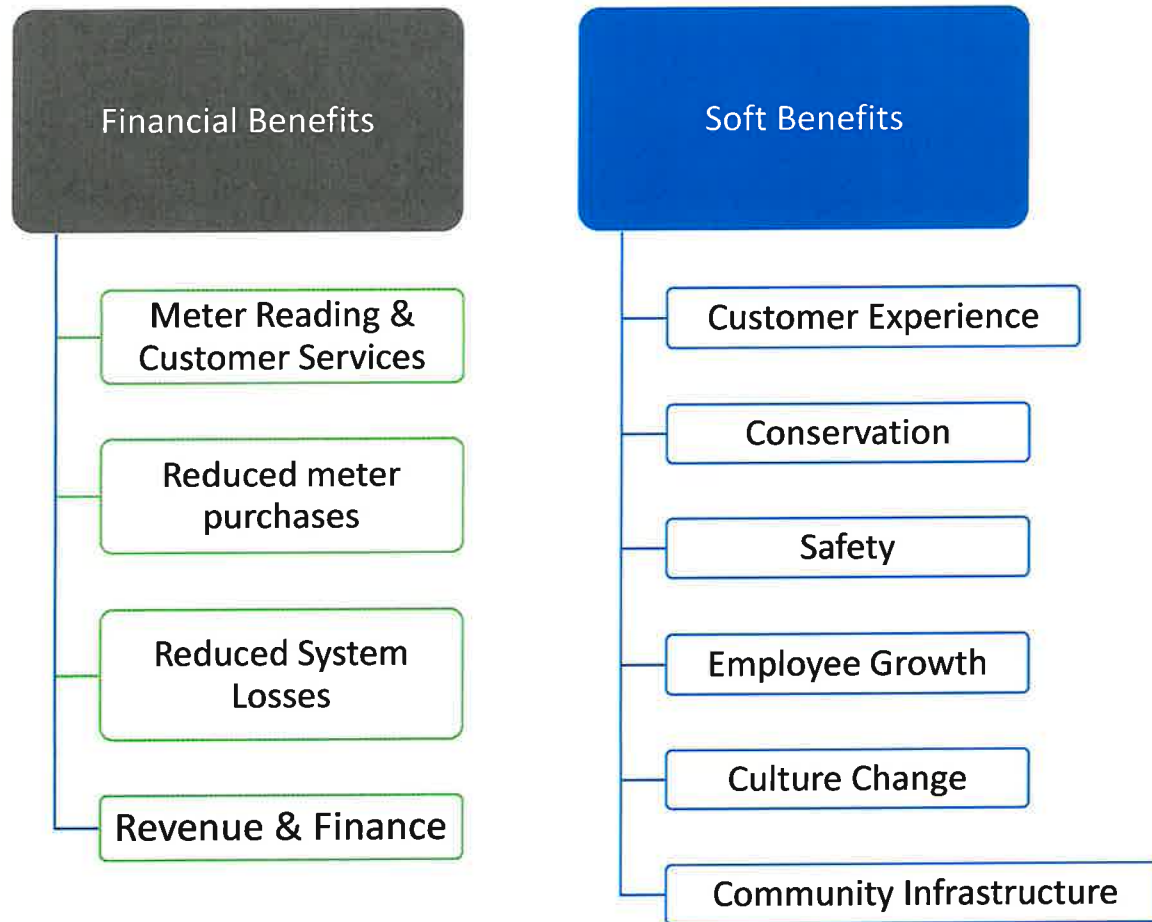
	Low Mesh 1	Canopy Mesh 1	Canopy Mesh 2	Point to MultiPoint 1	Low Mesh 2
Capital Costs					
Software application	\$50,000	\$125,000	\$0	\$30,000	\$175,000
Installed Communications Infrastructure	\$243,000	\$151,000	\$178,000	\$196,000	\$138,000
Electric Meters	\$4,020,000	\$4,056,000	\$4,048,000	\$3,936,000	\$3,825,000
Water Meters	\$3,306,000	\$3,370,000	\$3,757,000	\$3,886,000	\$3,692,000
Installation Labor - Electric	\$695,000	\$653,000	\$778,000	\$793,000	\$674,000
Installation Labor - Water	\$983,000	\$983,000	\$983,000	\$983,000	\$983,000
Project Management & Delivery	\$954,000	\$867,000	\$942,000	\$830,000	\$866,000
Total Capital Costs	\$10,251,000	\$10,205,000	\$10,686,000	\$10,654,000	\$10,353,000
Annual Fees*	\$50,000	\$150,000	\$75,000	\$100,000	\$75,000

*

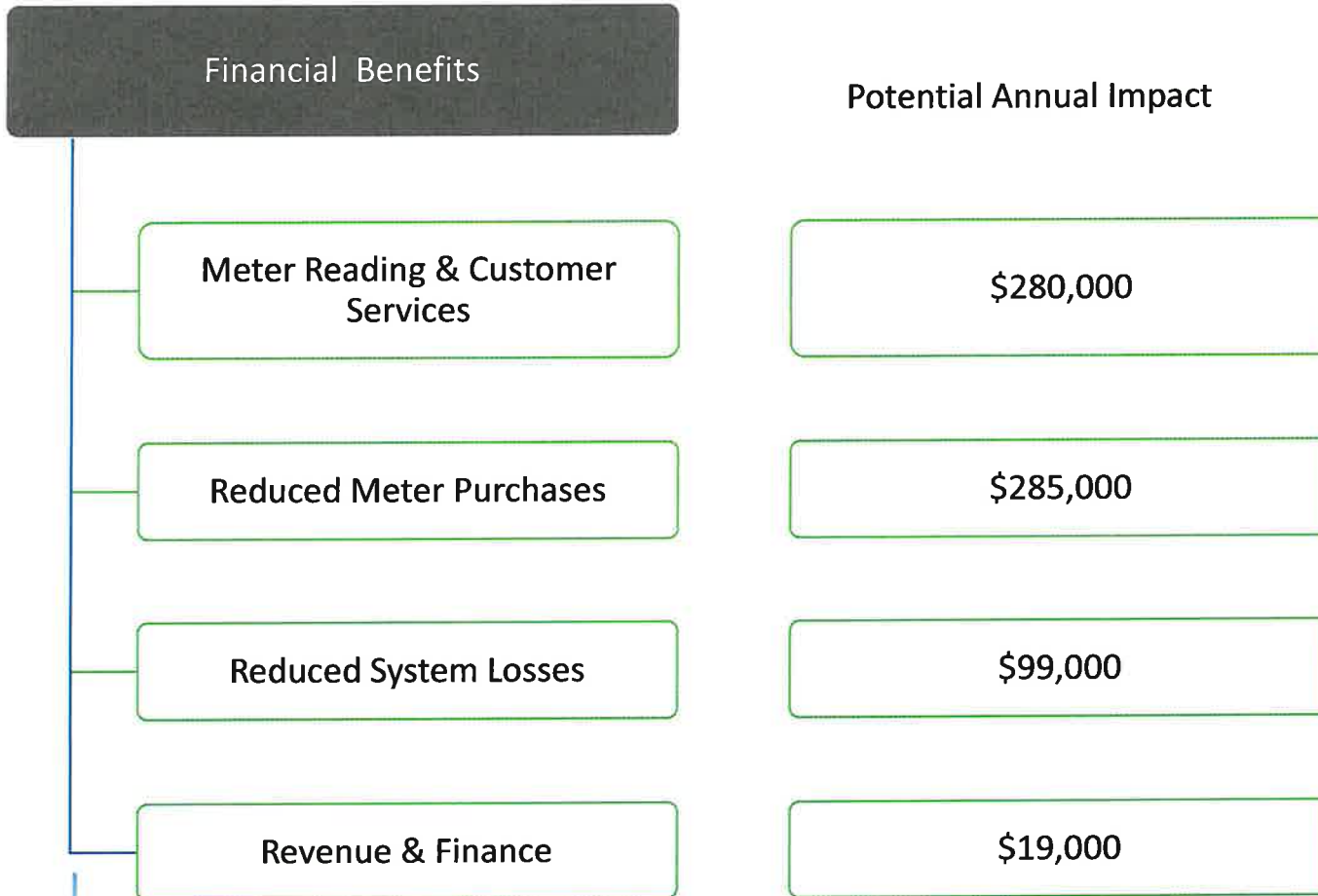
The request for proposals will require that the vendors commit to offering support services for the software application for a minimum of 12 years



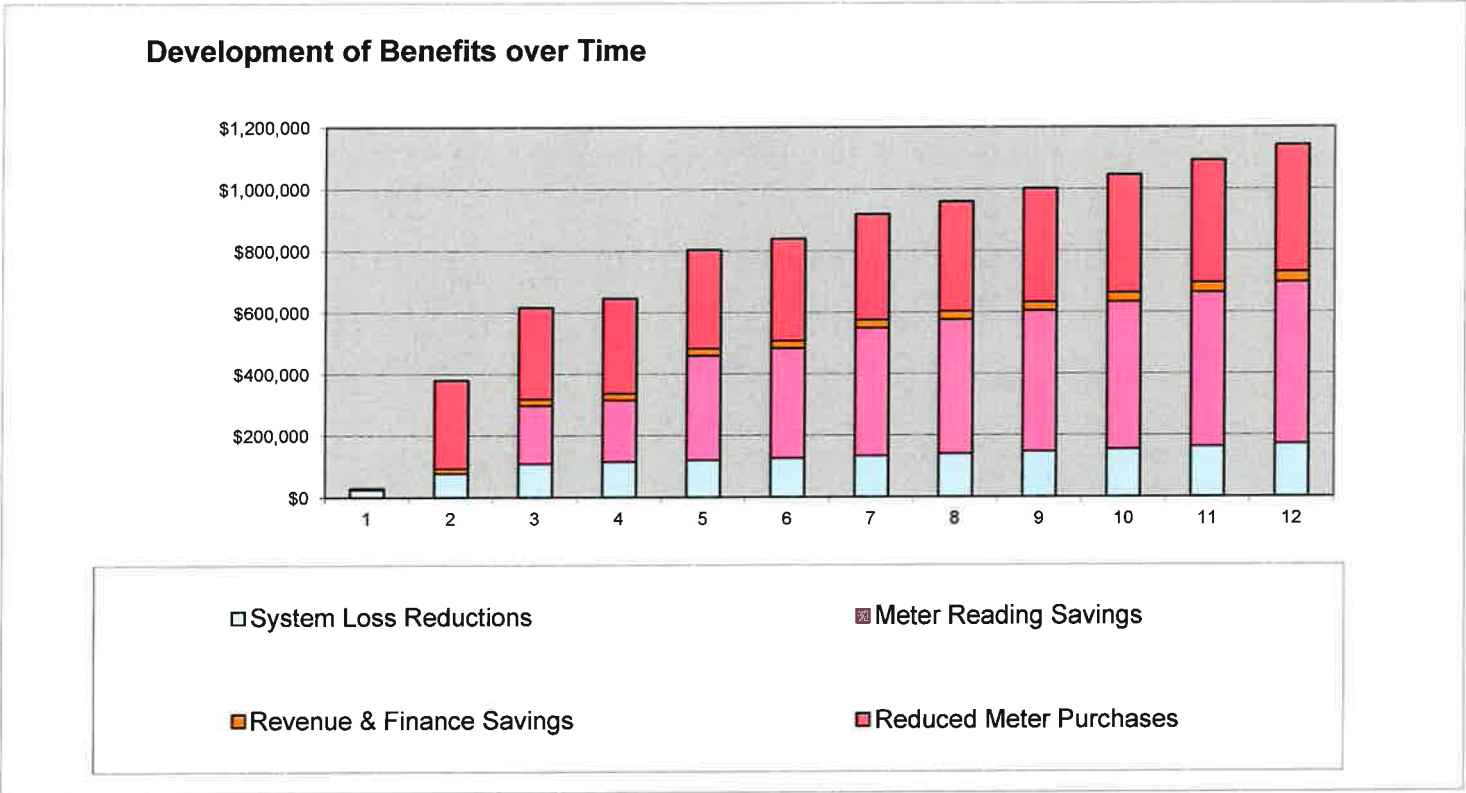
AMI Benefits



AMI Benefits



AMI Benefits



Soft Benefits

- **Customer Experience**
 - Customer self service (increase consumer involvement)
 - Ability to provide consumers choice (rates, bill dates, renewables)
 - Reduced frequency of entering people's property
 - Proactive Communications (Alerts, Updates)
- **Employee/Consumer Safety**
 - Fewer people in harm's way (dogs, accidents, physical collections)
 - Fewer vehicle accidents
 - Less incentive to tamper (easier to catch them)
- **Culture Change**
 - Redeploy resources to higher value-added activities
 - Field Meter Tech's, Manual Billing Tech's
 - Incorrect Bills or High Bill Complaints
 - Less Meter Programming & Configuration
 - **Data Analytics**
 - Predictive Maintenance
 - Preventive Action (vs. Corrective Action)

Soft Benefits

- **Employee Growth**
 - New Skills
 - Geospatial Reasoning
 - Voltage, Load Profiling
 - Asset Monitoring
 - Power Quality Monitoring
 - Using Big Data
- **Conservation**
 - New Capabilities
 - CVR
 - DVR
 - Renewables Support
 - EV Support
 - Energy Management
- **Improved Outcomes**
 - More informed CSR's
 - Reduced front office traffic
 - Improved Asset Utilization
 - Disaster Recovery and Security
 - Improved Performance of Distribution System
 - Efficiency
 - Reliability
- **Community**
 - Modern Infrastructure
 - Attract Businesses
 - Attract/Keep Talent

Process Improvement

Current State	Future State
Manual Meter Reading	Automatic Meter Reading from Office
Rigid Billing Schedules	Flexible Billing Schedules
Manual Disconnect/Reconnect	Automatic Disconnect/Reconnect from Office
Collections Challenges	Fewer Challenges (Easier Disconnect & Pre-Pay)
Tradition Centric (Standard Process)	Data Centric (Process Improvement)
No Customer Self Service	Many Online Services Available
Manual Monitoring of Distribution System	Automated Monitoring of Distribution System (Outage, Voltage, Wiring, etc.)
Older, Low Function Meters	New, High Function Meters*

* Enables Distributed Energy Resources (DER), Tamper detection, Instrumentation, Alerts

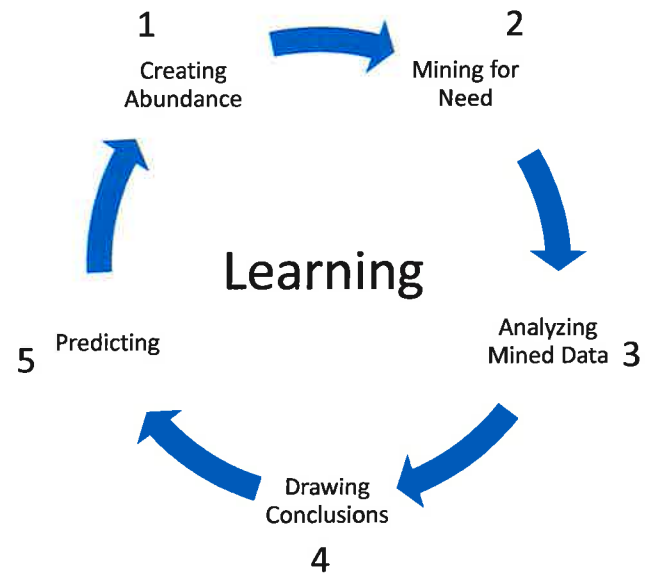
Culture Change

- Corrective Action Culture
 - Finding
 - Troubleshooting
 - Correcting
- Preventive Action Culture
 - Analyzing
 - Predicting
 - Preventing



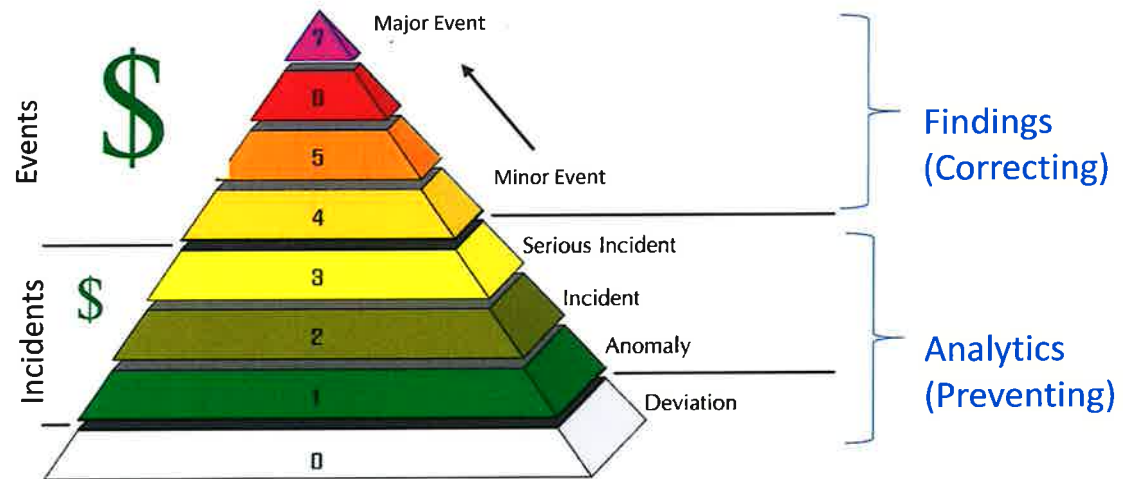
New Knowledge

New Approach to Data



Data Wheel

Preventive Action vs. Corrective Action



Recommendation

Katama Technologies (KTI) recommends that SPU proceed with AMI for the following reasons:

- Business case is conservative yet strategically attractive
- Soft benefits yield substantial advantages to SPU and are not quantified in the business case
- AMI positions SPU for a future economy that is increasingly going digital
- Based on KTI's experience with many public power companies in the USA, it is our judgement that SPU is properly staffed to successfully implement the project on time and in budget
- The market timing is attractive due to lower vendor costs, healthy competition, and technology maturity

AMI vendor selection and implementation should be coordinated with the upgrade of the Customer Information System (CIS) to ensure that the CIS is complete and stabilized in advance of the AMI deployment.

**Shakopee Public Utilities
Capital Improvement Plan
Final
Dated: December 7, 2020
Electric Detail**

Item Description	Justification	2020 Carryover	2021	2022	2023	2024	2025	Total
ADVANCED METERING INFRASTRUCTURE (AMI)								
Planning/Design/Project Management	Project Planning/Design	-	120,000	120,000	-	-	-	240,000
Construction/Implementation/Hardware/Software/Training	Customer Service	-	-	1,700,000	1,700,000	1,700,000	-	5,100,000
Total ADVANCED METERING INFRASTRUCTURE (AMI)		-	120,000	1,820,000	1,700,000	1,700,000	-	5,340,000

**Shakopee Public Utilities
Capital Improvement Plan
Final
Dated: December 7, 2020
Water Detail**

Item Description	Justification	2020 Carryover	2021	2022	2023	2024	2025	Total
Advanced Metering Infrastructure (AMI)								
Planning/Design/Project Management	Project Planning/Design		130,858	76,701	-	-	-	207,559
Construction/Implementation/Hardware/Software/Training	Customer Service		-	-	2,000,000	2,000,000	2,000,000	6,000,000
Total Advanced Metering Infrastructure (AMI)		-	130,858	76,701	2,000,000	2,000,000	2,000,000	6,207,559



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February 26, 2021

TO: Greg Drent, Interim General Manager *GD*
 FROM: Sharon Walsh *SNW*
 SUBJECT: Impact of COVID Procedures

Overview

Since March 2020, SPU has modified their standard customer utility account payment and collection processes. The following depicts the financial impact to SPU since the processes were modified, as well as the changes in customer payment patterns/behaviors.

Penalties – approximately 33,750 customers have had penalties waived, which represents more than \$395,000.00 in lost revenues/fees.

Credit Card Convenience Fees - more than 47,000 customers have made electronic payments online. This represents increased expenses of more than \$187,000.00 in convenience fees paid by SPU to Paymentus.

- *Comparing March 2020 to January 2021 – we see an increase of 42% in online payments*
- *Month over month we are seeing an average growth of 3.56%*
- *The biggest increase (as a percentage) has been in scheduled payments on the eBill portal. In March 2020, 407 customers used this feature. In January 2021, 903 customers were using this feature – a 121% increase.*
- *Overall we have seen a decrease in personal auto pay payment (scheduled through personal bank), which could explain the increase in eBill scheduled payments.*

Collection Activity –

“Collection” Notices were converted to “Courtesy” Notices in March 2020 with no message of disconnection or interruption in service. The number of notices mailed between March and August remained flat with an average of 1,471 mailed per month. However, in September we saw a jump to more than 1,800 notices and the monthly average has remained at that level since.

- *February hit a record high of 2,043 notices*
- *This delinquency may or may not include a prior balance. It could be the current balance is the only delinquency.*



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The number of customers that would have moved to a disconnection status has steadily grown from March 2020 through February 2021.

- *March 2020 – 265 customers for a total past due of approximately \$36,000.00*
- *February 2021 – 1,012 customers for a total past due of approximately \$516,000.00*
- *Based on averages alone, this would say the average past due balance has grown from \$136 to \$510; however, as discussed previously, there are some very large balances from a few customers that are skewing this calculation.*

SPU Support – we have received 27 applications with a total payout of \$3,629.00. Breakdown is as follows:

- 7 Applied, but not approved – did not supply documentation or correct documentation, did not have a past due balance or have closed their account.
- 2 Applied and approved – payment in process
- 17 Applied, approved and paid (some less than \$200)
- 1 new submission – being reviewed

Action Required

Staff is requesting input/direction on process changes or modifications related to COVID concessions.



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DATE: February 26, 2021
 TO: SPU Commissioners
 FROM: Greg Drent, Interim General Manager GD
 Subject: Flower Baskets

Background:

SPU would like to sponsor the beautiful flower baskets that line our downtown Shakopee streets during the Spring/Summer months. For a number of years SPU has worked with the Chamber of Commerce, specifically the Main Street Program, to make these baskets available. They are enjoyed by many and have become a recognizable trademark of our downtown streets.

I have talked with Mr. Reynolds and he and I agree this should be a joint effort with the City and SPU. SPU could assist in the purchase and hanging of the baskets while the City of Shakopee waters the baskets throughout the season. I feel this is very important to the community and an economic development incentive for business to want to be downtown.

Kaela will be at the meeting to discuss public expenditures and public purpose.

Action Requested



Recommendation:

Direct staff to work with the City to purchase and install flower baskets.



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DATE: February 26, 2021
 TO: SPU Commissioners
 FROM: Greg Drent, Interim General Manager *GD*
 Subject: Electric Vehicle discussion

SPU has a bucket truck scheduled to be purchased out of the 2021 CIP budget. The CIP budget for the bucket truck is \$300,000.00. We have ordered the cab and chassis for the truck under the state bid contract for \$90,000.00. We have ordered the boom from Altec Industries for \$179,000.00 also under the state bid contract. The delivery on the cab and chassis will be in 2021 but the boom will not be installed until early 2022 as this is the earliest build date from the factory. With that being said, not all the CIP dollars for 2021 will be spent. The boom for the truck will be in the 2022 CIP.

Since there is monies available in the 2021 CIP budget in the equipment line item, I would like to make a change and purchase an Electric Vehicle (EV) for the utility. The General Manager will primarily use the EV vehicle. We will also install an EV charger at the utility when we are working on the facility expansion.

The EV vehicle will be a demonstration vehicle as SPU needs to understand total cost of ownership to promote EV vehicles on our system. It takes approximately 77kw hrs. to charge the batteries which will get 200 to 250 mile depending on temperature. The warranty on most EV automobile batteries are rated for eight to ten years and 100,000 miles. The current car allowance for the General Manager is \$300.00 per month. To charge the vehicle at SPU wholesale rate will cost less than \$200 per month. I do understand there are additional expenditures in owning an electric vehicle but won't have that information until we drive the vehicle for a while. When SPU gets a drive up window in the front of the facility we will install an EV charger there so our customers will see we are promoting EV and use renewable energy to power the EV charging station. SPU facility will be changing to 100 percent renewable under the clean energy choice program from our wholesale power provider MMPA within the next few months.

Attached is an article from U.S. Department of Energy on EV charging and a Volkswagen ID.4 vehicle specification.

Recommendation:

Modify the CIP budget to include the purchase of an EV vehicle for SPU not to exceed \$50,000.00. This purchase does not negatively affect the cash flows for the utility, as this is a reduction in the CIP for 2021. We will shift the \$179,000.00 boom purchase to 2022 CIP.



Charging Plug-In Electric Vehicles at Home

Most drivers of plug-in electric vehicles (PEVs)—which include all-electric vehicles (EVs) and plug-in hybrid electric vehicles (PHEVs)—charge their vehicles overnight at home using [AC Level 1 \(electricity_infrastructure.html#level1\)](#) or [AC Level 2 \(electricity_infrastructure.html#level2\)](#) charging equipment. Residential equipment is frequently installed in garages, but outdoor installation and use are also safe, even if the vehicle is being charged in the rain. Outdoor installations require outdoor-rated charging equipment. Charging at a [multi-family residential complex \(/fuels/electricity_charging_multi.html\)](#) requires additional considerations and may be more like public charging than charging at a single-family home.

Installing Charging Equipment in Your Home

Many PEV owners will be able to meet their daily driving range requirements by charging overnight with Level 1 equipment, requiring no additional cost or installation, provided that a power outlet on a dedicated branch circuit is available near their parking location. For drivers with less regular schedules, or longer commutes, Level 2 charging equipment can be installed. [State and utility incentives \(/laws/state\)](#) may be available to help offset the cost of charging equipment.

The most basic Level 2 products have standard safety features and status lights. More advanced, "smart" Level 2 products have features such as data collection, user interface systems, enhanced displays, charging timers, communications capabilities, and keypads.

Electricians can inform homeowners whether their home has adequate electrical capacity for vehicle charging. Some homes might have insufficient electric capacity for [Level 2 \(electricity_infrastructure.html#level2\)](#) equipment. However, homeowners may have a qualified electrician add circuits to accommodate the capacity needed for Level 2 charging.

The City of San Jose, California, was one of the first to issue [requirements for installing vehicle charging systems \(https://www.sanjosecleanenergy.org/ev\)](#) in single-family homes and duplexes, and explains the permitting process and location planning for a home charging unit.



PHEV and EV owners may install [Level 2 \(electricity_infrastructure.html#level2\)](#) (240 V) charging equipment in their homes for a faster charge, or opt for the Level 1 cordset provided with the vehicle as shown here.

Complying with Regulations

Charging equipment installations must comply with local, state, and national codes and regulations. Appropriate permits may be required from the local building and permitting authorities.

You can learn about related codes and standards on the [Codes and Standards Resources page \(/codes_standards.html\)](#). PEV charging infrastructure is considered a continuous load by the National Electrical Code (NEC). Your electrical contractor should understand and use the appropriate NEC for a safe and code-compliant installation. NEC Article 625 contains most of the information applicable to charging equipment. If possible, consult vehicle manufacturer guidance for information about the required charging equipment and learn the specifications before purchasing equipment or electrical services.

In many areas, a site installation plan must be submitted to the permitting authority for approval before installation.

Jurisdictions that have not yet developed a specific permitting process for residential charging equipment installations can refer to the [permitting template \(/files/pdfs/EV_charging_template.pdf\)](#).

Electricity Costs for Charging

The fuel efficiency of an EV may be measured in kilowatt-hours (kWh) per 100 miles. To calculate the cost per mile of an EV, the cost of electricity (in dollars per kWh) and the efficiency of the vehicle (how much electricity is used to travel 100 miles) must be known. If electricity costs \$0.13 per kWh and the vehicle consumes 33 kWh to travel 100 miles, the cost per mile is about \$0.04.

If electricity costs \$0.13 per kilowatt-hour, charging an EV with a 200-mile range (assuming a fully depleted 66 kWh battery) will cost about \$9 to reach a full charge. To compare the fueling costs of individual models of conventional and plug-in vehicles, see the [Vehicle Cost Calculator \(/calc/\)](#).

For PEV charging, the stability and planning benefits of household electricity rates offer an attractive alternative compared to traditional types of transportation. Learn more from the report: [Comparing Energy Costs per Mile for Electric and Gasoline-Fueled Vehicles \(https://avt.inl.gov/sites/default/files/pdf/fsev/costs.pdf\)](#).

Volkswagen ID.4



<u>Cash</u>	<u>Loan</u>	<u>Lease</u>
AFTER INCENTIVES \$32,495		
MSRP \$39,995 See All Costs >	ESTIMATED INCENTIVES \$7,500 See All Incentives >	

[View All Cars](#)

[View Charging Programs](#)

TYPE
Crossover

MINIMUM SEATS
5

FUEL TYPE
BEV

ELECTRIC RANGE
250 miles

MILES PER 30 MIN OF FAST CHARGING [?]
~ 71 miles

TIME TO CHARGE - LEVEL 2 [?]
~ 10 hr

BATTERY SIZE [?]
77 kWh

CO2 EMISSIONS REDUCTION
5,502 lbs/yr

TREES PLANTED
115

GASOLINE SAVED
480 gal/yr



[Hide Detailed Calculations](#)

Charging	Fuel	Emissions
Description	Volkswagen ID.4	Source
DC Fast Charging (DCFC) Rate	50 kW	
kWh per 100 mi	35 kWh	EPA Efficiency Rating
Miles Per 30 min of Fast Charging	~ 71 miles	Charging Rate / (kWh per 100 mi / 100) / 2
Vehicle Battery Capacity	77 kWh	
Vehicle Max AC Intake	11 kW	
Level 2 Charging Rate	7.7 kW	
Time to Full Charge for Level 2	~ 10 hr	Vehicle Battery Capacity / Charging Rate

Description	Volkswagen ID.4	Source
Charging Rate	7.7 kW	Minimum of Level 2 Charging Rate and Vehicle Max AC Intake
Time to Full Charge for Level 2	~ 10 hr	Vehicle Battery Capacity / Charging Rate

Compare the Volkswagen ID.4 to a similar gas vehicle, the Volkswagen Tiguan

PURCHASE METHOD [?]

Cash

Cost to Fill Up Monthly

The Volkswagen ID.4 is \$85 less expensive to fill up monthly

MILES DRIVEN PER YEAR

12,000 miles

YEARS OF OWNERSHIP/LEASE

10 Years

GASOLINE PRICE (\$/GAL)

\$2.50

Vehicles	Electricity	Gasoline	Total
Volkswagen ID.4	\$15	\$0	\$15
Volkswagen Tiguan	\$0	\$100	\$100

Cost of Ownership

The Volkswagen ID.4 is \$6,899 less expensive to own over 10 Years

ASSUMPTIONS

Sales Tax

6.875%

Electricity Rate

\$0.0417/kWh

Electricity Rate shown is an example of an EV driver in Minnesota charging off-peak on the Time of Day - Separate Meter rate plan.

Description	Volkswagen ID.4	Volkswagen Tiguan
Vehicle	\$25,209	\$20,445
Maintenance	\$3,878	\$6,733
Insurance	\$18,078	\$16,636
Electricity	\$1,751	\$0
Gasoline	\$0	\$12,000
Total	\$48,916	\$55,814

Cost to Breakeven

Compare the cumulative lifetime cost of the Volkswagen ID.4 to a Volkswagen Tiguan

Year	Volkswagen ID.4	Volkswagen Tiguan
Year 0	\$32,495	\$25,000
Year 1	\$34,866	\$28,537
Year 2	\$37,236	\$32,074
Year 3	\$39,607	\$35,611
Year 4	\$41,978	\$39,148
Year 5	\$44,349	\$42,685
Year 6	\$46,719	\$46,221
Year 7	\$49,090	\$49,758
Year 8	\$51,461	\$53,295
Year 9	\$53,831	\$56,832
Year 10	\$48,916	\$55,814