AGENDA SHAKOPEE PUBLIC UTILITIES COMMISSION REGULAR MEETING December 3, 2018

- 1. **Call to Order** at 5:00pm in the SPUC Service Center, 255 Sarazin Street.
- 2. Approval of Minutes
- 3. Communications
 - 3a) CAP Agency Thank you Letter
 - 3b) Kid's Voting Shakopee Thank You Letter
- 4. Approve the Agenda
- 5. Approval of Consent Business
- 6. Bills: Approve Warrant List
- 7. Liaison Report
- 8. Reports: Water Items
 - 8a) Water System Operations Report Verbal
 - 8b) Resn. #1217 Adjusting Fees Applied Under the Reconstruction Fund Charge Resolution
 - 8c) Resn. #1218 Adjusting Fees Applied Under the Water Connection Charge Policy Resolution and Relabeling the Fee the Water Capacity Charge
 - 8d) Resn. #1219 Adjusting Fees Applied Under the Trunk Water Charge Policy Resolution
 - 8e) Resn. #1220 Establishing Water Meter and Installation Fees
 - 8f) Resn. #1221 Approving Payment for the Pipe Oversizing Costs on the Watermain Project: Menden's Addition
 - 8g) Resn. #1222 Approving Payment for the Pipe Oversizing Costs on the Watermain Project: Ridge Creek Second Addition
 - 8h) 2017 Water Fluoridation Quality Award
- 9. Reports: Electric Items
 - 9a) Electric System Operations Report Verbal
 - 9b) Resn. #1223 Establishing Electric Rates For Customers Served By Shakopee Public Utilities
 - 9c) Resn. #1224 Adjusting Fees Under the Relocation Underground Charge Resolution
 - 9d) Resn. #1225 Adjusting Fees Applied Under the Installation of Underground Electrical Distribution Systems Policy Resolution
 - 9e) Electric Policy Manual Updated Final
 - 9f) Resn. #1226 Adopting the Electric Service Rules and Regulations of The Shakopee Public Utilities Commission and Providing For the General Administration
 - 9g) MMPA Board Meeting Public Summary November 2018
 - 9h) APPA Public Power Magazine and APPA Webinar

- 10. Reports: Human Resources
 - 10a) Utilities Manager's Annual Review
- 11. Reports: General
 - 11a) Resn. #1227 Adopting Fees and Charges For 2019
 - 11b) Resn. #1228 Designating an Official Means of Publication
 - 11c) Resn. #1229 Designation of Official Depositories of the Shakopee Public Utilities Commission Funds
 - 11d) Resn. #1230 Allowing the Use of Facsimile Signature For Check Signing
- 12. New Business
- 13. Tentative Dates for Upcoming Meetings
 - Mid Month Meeting
- December 17
- Regular Meeting
- January 7
- Mid Month Meeting
- January 22 (Tuesday)
- Regular Meeting
- February 4
- 14. Adjourn to 12/17/18 at the SPUC Service Center, 255 Sarazin Street

MINUTES

OF THE

SHAKOPEE PUBLIC UTILITIES COMMISSION (Regular Meeting)

Vice President Joos called the regular session of the Shakopee Public Utilities Commission to order at the Shakopee Public Utilities meeting room at 5:00 P.M., November 19, 2018.

MEMBERS PRESENT: Commissioners Joos, Amundson and Meyer. Also present, Liaison Mocol, Utilities Manager Crooks, Finance Director Schmid, Planning & Engineering Director Adams, Electric Superintendent Drent, Water Superintendent Schemel and Marketing/Customer Relations Director Walsh. President Weyer was absent as previously advised.

Motion by Amundson, seconded by Meyer to approve the minutes of the November 5, 2018 Commission meeting. Motion carried.

There were no Communication items.

Vice President Joos offered the agenda for approval.

Motion by Meyer, seconded by Amundson to approve the agenda as presented. Vice President Joos asked that easement issues with the Windermere Booster Station property be added under New Business as Item 12a. Motion to approve amended agenda carried.

Motion by Meyer, seconded by Amundson to approve the Consent Business agenda as presented. Motion carried.

Vice President Joos stated that the Consent Items were: Item 11a: October 2018 Financial Results.

The warrant listing for bills paid November 19, 2018 was presented.

Motion by Amundson, seconded by Meyer to approve the warrant listing dated November 19, 2018 as presented. Motion carried.

Liaison Mocol presented her report. The City Council is wrapping up the 2019 Budget. Interviews for the vacated SPU Commission position will take place on Tuesday, November 20.

Water Superintendent Schemel provided a report of current water operations. Mr. Schemel updated the ongoing water construction projects.

Mr. Schemel presented results of the testing and recalibration/repairs of large water meters. The meters were for the top 10 water customers, by volume. Meters for several Homeowners Associations were also tested.

Electric Superintendent Drent provided a report of current electric operations. Three electric outages were reviewed. Updates to the streetlight LED change outs and construction projects were provided.

The Commission was updated on the Rahr Looping/Apgar Street Watermain Project by Planning and Engineering Director Adams. Review of Change Order #1 was provided.

Motion by Amundson, seconded by Meyer to approve Change Order #1 and authorize its execution. Motion carried.

Marketing and Customer Relations Director Walsh presented the status of the 2018 State Conservation Improvement Plan. Funds for the program have been depleted and rebates have been closed until January 1, 2019.

The Shakopee Energy Park Interconnection Agreement was reviewed by Utilities Manager Crooks. Several items within the agreement were discussed by SPU staff and Commissioners.

Motion by Meyer, seconded by Amundson to approve the Interconnection Agreement as presented, allowing for non-substantive and technical changes and authorize the Utilities Manager to execute its completion. Motion carried.

Finance Director Schmid reviewed a 2019 Wage and Compensation Planning Assumptions revision. The revision is to accommodate market conditions for apprentice linemen positions.

Motion by Amundson, seconded by Meyer to approve the 2019 Wage and Compensation Planning Assumptions as presented. Motion carried.

Item 11a: October 2018 Financial Results was received under Consent Business.

Mr. Adams presented the final version of the Administrative Projects and Equipment for 2019.

Motion by Amundson, seconded by Meyer to approve the 2019 Administrative Projects and Equipment and to release the projects and funding to the Utilities Manager to complete, following state formal bidding protocol. Motion carried.

Mr. Adams presented the final version of the Electric Projects and Equipment for 2019.

Motion by Amundson, seconded by Meyer to approve the 2019 Electric Projects and Equipment and to release the projects and funding to the Utilities Manager to complete, following state formal bidding protocol. Motion Carried.

Mr. Adams presented the final version of the Water Projects and Equipment for 2019.

Motion by Meyer, seconded by Amundson to approve the 2019 Water Projects and Equipment and to release the projects and funding to the Utilities Manager to complete, following state formal bidding protocol. Motion carried.

Mr. Adams presented the final version of the 2019-2023 Capital Improvement Plan.

Motion by Meyer, seconded by Amundson to accept the final version of the 2019-2023 Capital Improvements Plan. Motion carried

Ms. Schmid presented the 2019 Proposed Budget, Cash Flows and Key Assumptions. Expenses and revenues for both Water and Electric were presented in detail.

Motion by Meyer, seconded by Amundson to approve the 2019 Operating Budget and 2019-2023 Projected Cash Flow Statement as presented. Motion carried.

Under New Business, three easement issues with the Windermere Booster Station property were discussed. Mr. Adams reviewed the time sensitive issues that needed to be addressed before the Benedictine Health System's closing on the adjoining property.

Motion by Amundson, seconded by Meyer to approve the requested Termination of Declaration of Access Easement and authorize its execution. Motion carried.

Motion by Meyer, seconded by Amundson to approve the requested Access Easement Agreement as presented and authorize its execution. Motion carried.

Motion by Amundson, seconded by Meyer to approve the requested Sanitary Sewer Easement Agreement as presented and authorize its execution. Motion carried.

Also under New Business, Commissioner Meyer requested discussion on the new State of Minnesota competitive bidding formal process. Formal bidding amounts have been increased from \$100,000 to \$170,000. Staff will provide more information to discuss the change at the January 3 meeting.

The tentative commission meeting dates of December 3 and December 17 were noted.

Motion by Meyer, seconded by Amundson to adjourn to the December 3, 2018 meeting. Motion carried.

Commission Secretary: John R. Crooks



November 4, 2018

Shakopee Public Utilities 1030 4th Ave E Shakopee, MN 55379

Dear Friend,

Your generosity makes it possible for the CAP Agency to touch thousands of lives each year. Through continued donations of money, food, clothing, items, space, and volunteer time, we are able to meet basic needs and achieve higher levels of self reliance for over 30,000 of our neighbors in Scott, Carver and Dakota counties.

Thank you for your generous support of our mission. Please visit our website at www.capagency.org to learn more about our services, ways to get involved, and to view our annual report. Please keep this written acknowledgment of your donation for your personal records.

Sincerely,

Joseph P. Vaughan Executive Director/CEO

Gift Details

Date Given: 10/1/2018

Donation Description: \$1,000.00 Designated To: General Agency

Joseph P. Vargham

This acknowledgement of your contribution is also your tax receipt and should be retained by you if your contribution is to be used for tax purposes. Your contributions are deductible to the extent allowed by law.

11/7

November 2018

Shakopee Public Utilities Commission Attn: John Crooks 255 Sarazin St. Shakopee, MN 55379



Dear Shakopee Public Utilities Commission,

Thank you for your recent generous gift of \$500 to the 2018 Kids Voting Shakopee program. We sincerely appreciate the significant financial and volunteer support that the Shakopee Public Utilities plays in the success of the Kids Voting program in Shakopee.

The **Kids Voting program** is a nonpartisan program working to help students learn about the right to vote, democracy, civic responsibility and the importance of participation in the political process. With your financial support, Kids Voting Shakopee provides teachers with Kids Voting USA® instructional materials, activities, and a Student Voter's Guide that they use for discussion in the classroom giving them the opportunity to explore voting, elections and active citizenship. Students are encouraged to take the Voter's Guide home to share with their parents.

Your support also allows us to offer students the chance to put into practice the lessons learned in the classroom by going to their home polling place on Election Day and casting their vote using the same process as the adults in our community. On November 6, 2018, 1,327 students cast their vote during the mid-term election.

On behalf of the Kids Voting Shakopee Steering Committee, together with teachers, students and volunteers involved in the program, thank you again for your commitment in support of the Kids Voting Shakopee mission to "build the next generation of voters."

Sincerely,

The Kids Voting Community Steering Committee

JIL/A

A RESOLUTION ADJUSTING FEES APPLIED UNDER THE RECONSTRUCTION FUND CHARGE RESOLUTION

WHEREAS, the fees established in Resolution #875 which Resolution established the Reconstruction Fund Charge are intended to be adjusted as deemed necessary to provide for adequate funds collected for the purpose intended, and

WHEREAS, an analysis of the current projected Reconstruction Fund Projects, listed on the attachment, indicates a decrease in the fees collected is appropriate at this time.

NOW THEREFORE, BE IT RESOLVED, that the fees charged under Resolution #1177 be decreased to twenty-five cents (\$0.25) per 1,000 gallons applied to the monthly usage of all Shakopee Public Utilities Commission water customers.

BE IT FURTHER RESOLVED that said terms and adjustments are to become effective immediately, and applied to the January 2019 billings (which are due February 15), and all subsequent billings.

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

	Commission President: Aaron Weyer
ATTEST:	
Commission Secretary: John R. Crooks	

A RESOLUTION ADJUSTING FEES APPLIED UNDER THE WATER CONNECTION CHARGE POLICY RESOLUTION AND RELABELING THE FEE THE WATER CAPACITY CHARGE

WHEREAS, the Shakopee Public Utilities Commission operates and maintains the municipal water system of the City of Shakopee, such system consisting of a ("blended") complex of water production, treatment, pressure boosting/reducing, storage, and delivery facilities interconnected across multiple service districts or pressure zones via a network of trunk and lateral watermains, and

WHEREAS, the water connection charge fees are a component of water availability charges, and

WHEREAS, the fees established in Resolution #261, which Resolution established the Water Connection Charge Policy, and Resolution #902, which Resolution adjusted said fees, are intended to be adjusted on the first day of January each year, and

WHEREAS, the water connection charge fees were adjusted in 2015 by Resolution #1106 to \$5,134.00 per equivalent SAC unit for all service, plus 12.1 cents per square foot for industrial use only, and

WHEREAS, per Resolution #902 designated that future increases in the water connection charge fees shall be based on the percentage increase in the Construction Cost Index for the previous period as reported by the <u>Engineering News Record</u>, plus 2.0%, multiplied by the present water connection charge, and

WHEREAS, the "Construction Cost Index" as listed in the <u>Engineering News Record</u> was 10,817.11, as of October, 2017, and

WHEREAS, this index was 11,183.28 as of October, 2018, and

WHEREAS, the Shakopee Public Utilities Commission determines an upward adjustment in the water connection charge equal to 5.4% is warranted at this time to provide adequate funding for the planned water production, treatment and storage facilities necessary to serve developing properties with the Commission's standard of level "A" service (i.e. a robust, redundant, looped water supply and distribution system capable of supplying water safe for human consumption at adequate pressure for domestic and fire protection uses), and

WHEREAS, it is noted by the Shakopee Public Utilities Commission the terminology "Water Connection" has sometimes been erroneously construed to mean these fees apply as a one-time event only applicable at initial construction and connection to the water system.

NOW, THEREFORE BE IT RESOLVED, the Shakopee Public Utilities Commission declares henceforth the Water Connection Charge shall be known as the Water Capacity Charge to better describe its purpose and application as described herein.

BE IT FURTHER RESOLVED that the Water Capacity Charge fees be increased effective January 1, 2019 as follows:

\$6,039.00 per equivalent SAC unit for all service, plus 14.2 cents per square foot for industrial use only, (equivalent SAC units to be computed according to the Metropolitan Council's Sewer Availability Charge Criteria, but applied to all municipal water usage whether discharged to sewer or not).

BE IT FURTHER RESOLVED, that the Water Capacity Charges shall be applied to all water connections made to, or newly drawing water from, the City of Shakopee water system; and that the Water Capacity Charges shall also be applied to all instances where increased water usage is indicated by an increase in SAC units or by other means i.e. metered water usage.

BE IT FURTHER RESOLVED, that the funds collected from the Water Capacity Charges will be set aside by the Utility and used to pay for construction of water production, treatment, pressure boosting/reducing and storage facilities.

BE IT FURTHER RESOLVED, that water availability shall not be granted until the acceptance by the Utility of payment of all standard water fees requisite by this resolution and by compliance with all other Shakopee Public Utilities Commission resolutions applicable to new services.

BE IT FURTHER RESOLVED, that in the case of large water users, specific authorization by Shakopee Public Utilities Commission is also a prerequisite to water availability.

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

	Commission President: Aaron Weyer
ATTEST:	
Commission Secretary: John R. Crooks	

A RESOLUTION ADJUSTING FEES APPLIED UNDER THE TRUNK WATER CHARGE POLICY RESOLUTION

WHEREAS, the fees established in Resolution #222, which Resolution established the Trunk Water Charge Policy, and Resolution #901, which Resolution adjusted said fees, are intended to be adjusted on the first day of January each year, and

WHEREAS, the fees were adjusted in 2015 by Resolution #1107 to \$2,911.00 per acre, and

WHEREAS, per Resolution #901 designated that future increases in the trunk water charge fees shall be based on the percentage increase in the Construction Cost Index for the previous period as reported by the <u>Engineering News Record</u>, plus 2%, multiplied by the present trunk water charge, and

WHEREAS, the "Construction Cost Index" as listed in the <u>Engineering News Record</u> was 10,817.11, as of October, 2017, and

WHEREAS, this index was 11,183.28.11 as of October, 2018, and

WHEREAS, the Shakopee Public Utilities Commission determines an upward adjustment in the trunk water charge equal to 5.4% is warranted at this time to provide adequate funding for the planned trunk water main facilities necessary to serve developing properties with the Commission's standard of level "A" service (i.e. a robust, redundant, looped water supply and distribution system capable of supplying water safe for human consumption at adequate pressure for domestic and fire protection uses), and

WHEREAS, the Shakopee Public Utilities Commission also determines an additional one time upward adjustment in the trunk water charge equal to \$500.00 per acre is warranted at this time due to the continuing deficit in the trunk water fund.

NOW THEREFORE, BE IT RESOLVED, that the fees charged under Resolution #222 and #901 be increased to \$4,451.00 per acre effective January 1, 2019.

BE IT FURTHER RESOLVED, that the funds collected from the trunk water charges will be set aside by the Utility and used to pay for construction of trunk water main facilities.

BE IT FURTHER RESOLVED, that water availability shall not be granted until the acceptance by the Utility of payment of all standard water fees requisite by this resolution and by compliance with all other Shakopee Public Utilities Commission resolutions applicable to new services.

BE IT FURTHER RESOLVED, that in the case of large water users, specific authorization by Shakopee Public Utilities Commission is also a prerequisite to water availability.

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

ATTEST:	Commission President: Aaron Weyer
Commission Secretary: John R. Crooks	

RESOLUTION ESTABLISHING WATER METER AND INSTALLATION FEES

BE IT RESOLVED by the Shakopee Public Utilities Commission at meeting duly assembled on the 3rd day of December, 2018, that Resolution #1143 is repealed upon this resolution taking effect, and that the following fees are set to cover water meters and installation costs and that such charges are payable before water service is started to new services:

Standard Meters

Meter Size	Туре	Cost Includes Fittings & Wiring to outside recorder
5/8"	iPERL	\$398.00
3/4"	iPERL	\$398.00
1"	iPERL	\$566.00
1.5"	T2 C2	\$1,259.00 \$1,679.00
2"	T2 C2	\$1,448.00 \$1,931.00
3"	T2 C2	\$1,574.00 \$2,183.00
4"	T2 C2	\$2,918.00 \$3,653.00
6"	T2 C2	\$4,556.00 \$6,068.00
Specialty Meters		
8" Fire 10" Fire Fire Detector Meter	F2 F2	Call for Price Call for Price \$150.00

Requests for a 1" and larger meter and special meters require SPUC approval.

this resolution are hereby authorized and performed.

NOW THEREFORE, BE IT RESOLVED that the water meter and installation fees be increased effective January 1, 2019.

BE IT FURTHER RESOLVED, that all things necessary to carry out the terms and purpose of

Passed in regular session of the Shakopee Public U 2018.	Jtilities Commission this 3 rd day of December,
ATTEST:	Commission President: Aaron Weyer
Commission Secretary: John R. Crooks	

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

MENDEN'S ADDITION

WHEREAS, the Shakopee Public Utilities Commission had previously approved of an estimated amount of \$24,900.00 with Resolution #1127 for oversizing on the above described watermain project, and

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

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

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

NOW THEREFORE, BE IT RESOLVED, that the payment by the Shakopee Public Utilities Commission for the oversizing on this project is approved in the amount of \$20,144.55, and

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

	Commission President: Aaron Weyer
ATTEST:	
Commission Secretary: John R. Crooks	

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

RIDGE CREEK SECOND ADDITION

WHEREAS, the Shakopee Public Utilities Commission had previously approved of an estimated amount of \$96,513.39 with Resolution #1189 for oversizing on the above described watermain project, and

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

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

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

NOW THEREFORE, BE IT RESOLVED, that the payment by the Shakopee Public Utilities Commission for the oversizing on this project is approved in the amount of \$57,363.15, and

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

	Commission President: Aaron Weyer
ATTEST:	
Commission Secretary: John R. Crooks	

SHAKOPEE PUBLIC UTILITIES MEMORANDUM

TO:

John R. Crooks, Utilities Manager

FROM:

Lon R. Schemel, Water Superintendent

SUBJECT:

2017 Water Fluoridation Quality Award

DATE:

November 28, 2018

The Shakopee Public Utilities has earned the Water Fluoridation Award for 2017 from the Centers for Disease Control and Prevention. To qualify for this award water operators had to collect and analyze at least 20 distribution samples per month, submit them to the Minnesota Department of Health, and have the dosage within the prescribed range of 0.5 to 0.9 parts per million. Our operators exceed the minimum number of samples by sampling every day of the year. Our target dosage set by the Minnesota Department of Health is 0.7 parts per million. The operators were able to average 0.71 ppm for the year of 2017. This is an incredible achievement in the industry.

According to Karla Peterson at the Minnesota Department of Health, Shakopee is monitored for approximately 100 regulated and 100 unregulated analytes. This is in addition to the 40 bacterial samples that our operators draw per month. To date. Shakopee has never exceeded a maximum concentration limit or been out of compliance with any regulations dealing with the safety of drinking water.



2017

Water Fluoridation Quality Award SHAKOPEE

Minnesota

The Centers for Disease Control and Prevention commends this water system for its consistent and professional adjustment of the fluoride content to the recommended level for oral health for 12 consecutive months in 2017. High quality water fluoridation, as demonstrated by this water system, is a safe and effective method to prevent tooth decay and improve the oral health of all community residents.

Casey Hannan, MPH

Director Acting, Division of Oral Health

National Center for Chronic Disease Prevention and Health Promotion

Centers for Disease Control and Prevention

Kip Duchon, MS, PE

National Fluoridation Engineer, Division of Oral Health National Center for Chronic Disease Prevention and Health Promotion

Centers for Disease Control and Prevention



U.S. Department of Health and Human Services Centers for Disease Control and Prevention

PRESS RELEASE

The Minnesota Department of Health announced today that Shakopee Public Utilities has been awarded a Water Fluoridation Quality Award from the U.S. Centers for Disease Control and Prevention (CDC). Fluoridation is the adjustment of fluoride in drinking water to a level that is effective for preventing tooth decay. This award recognizes those communities that achieved excellence in community water fluoridation by maintaining a consistent level of fluoride in drinking water throughout 2017.

For 2017, a total of 1,499 public water systems (PWSs) in 30 states received these awards, including 233 of 605 possible fluoridating PWSs in Minnesota.

"Water fluoridation is one of the best investments that a community can make in maintaining the oral health of its citizens. It is equally as effective in preventing cavities in children and adults," stated Casey Hannan, MPH, Acting Director, CDC Division of Oral Health. "Fluoridation is also highly cost effective. Studies continue to show that for every \$1 a community invests in water fluoridation, \$20 are saved in dental treatment costs."

Community water fluoridation has been recognized by CDC as one of 10 great public health achievements of the 20th Century. "Minnesota can be proud of its commitment to community water fluoridation. People of all ages and socioeconomic status have access to one of the most equitable ways to prevent tooth decay and improve overall health", says Prasida Khanal, MPH, BDS, State Oral Health Director with the Minnesota Department of Health Oral Health Program.

For questions about the award or the press release, contact either David Rindal, Senior Compliance Engineer, Minnesota Department of Health, Drinking Water Protection, at (651) 201-4660 and david.rindal@state.mn.us or Clare Larkin, Prevention Coordinator, Minnesota Department of Health, Oral Health Program, at (651) 201-4230 and clare.larkin@state.mn.us.

Communities Benefit from Water Fluoridation

Water fluoridation is safe, effective, and saves communities money.

On average, communities with water fluoridation experience:

25% fewer cavities than communities without water fluoridation leading to:

- Less pain
- Less fillings and teeth pulled
- Less missed days of school and work

A return of \$20 for every \$1 invested

- Less expensive dental treatments needed
- Saves communities and families money



Water fluoridation improves oral health and reaches everyone in the community.

Visit www.cdc.gov/fluoridation for information about community water fluoridation.



U.S. Department of Health and Human Services Centers for Disease Control and Prevention

A RESOLUTION ESTABLISHING ELECTRIC RATES FOR CUSTOMERS SERVED BY SHAKOPEE PUBLIC UTILITIES

BE IT RESOLVED BY THE SHAKOPEE PUBLIC UTILITIES COMMISSION at meeting duly assembled on the 3rd day of December, 2018, that Resolution #1100 is repealed upon this resolution taking effect, and that the following electric rates shall be and hereby are established for applicable customers of the Shakopee Public Utilities Commission, City of Shakopee.

Section I:

RESIDENTIAL SERVICE:

Availability: Residential dwellings

The sum of:

Service Charge:

\$9.00 per month

Energy Charge:

\$0.0988 per KWH

Power Cost Adjustment:

set by separate resolution

Conservation Program Charge:

set by separate resolution

Minimum bill: the Service Charge

Section II:

RESIDENTIAL WATER HEATING: (CLOSED)

Availability: Existing installations only

The sum of:

Service Charge:

\$9.00 per month

Energy Charge:

\$0.0988 per KWH

Power Cost Adjustment

set by separate resolution

Conservation Program Charge:

set by separate resolution

The minimum monthly bill for water heating service is the Service Charge.

The Service Charge will be waived where the customer also takes electric service other than water heating under another standard rate.

Section III:

RESIDENTIAL SERVICE WITH DUAL FUEL HEAT: (CLOSED)

Availability:

Existing installations only.

Residential customers with separately metered electric heat and a backup heat source.

The electric heat is subject to interruption.

Service is through separate meter for electric heat, with approved control device.

The sum of:

All charges and terms applicable to RESIDENTIAL SERVICE, except:

Energy Charge:

\$0.0882 per KWH

Section IV: SEPARATE METERED AIR CONDITIONING: (CLOSED)

Availability:

Existing installations only.

Residential customers with separately metered air conditioning subject to interruption.

Service is through separate meter for air conditioning, with approved control device.

The sum of:

All charges and terms applicable to RESIDENTIAL SERVICE, except:

Energy Charge:

\$0.0882 per KWH

Section V: <u>SERVICE FOR SENIOR CITIZENS:</u>

Availability: Residential dwelling occupied by senior citizen(s)

The sum of:

Service Charge:

\$6.00 per month

Energy Charge:

\$0.0988 per KWH

Power Cost Adjustment:

set by separate resolution

Conservation Program Charge:

set by separate resolution

Minimum bill: the Service Charge

Section VI: <u>COMMERCIAL SERVICE:</u>

Availability: Non-residential customers with less than 15 KW Demand

The sum of:

Service Charge:

\$14.00 per month

Energy Charge:

\$0.0944 per KWH

Power Cost Adjustment:

set by separate resolution

Conservation Program Charge:

set by separate resolution

Minimum bill: the Service Charge

Section VII: LARGE GENERAL SERVICE:

Availability: Non-residential customers with demand of 15 KW but less than

150 KW. Service above 75 KW is 3 phase only, except by written

exception.

The sum of:

SERVICE CHARGE: \$60.00 per month

DEMAND CHARGE:

All KW of billing demand \$9.50 per KW

ENERGY CHARGE:

All KWH per month \$0.0585 per KWH

Section VII: continued

<u>POWER COST ADJUSTMENT</u> set by separate resolution

<u>CONSERVATION PROGRAM CHARGE:</u> set by separate resolution

Minimum monthly bill: the Service Charge plus the Demand Charge

Billing Demand:

The billing demand shall be the customer's greatest 15 minute demand in kilowatts, incurred during the month for which the bill is rendered, but not less than 60% of the highest demand during the preceding 11 months or 15 KW, whichever is greater.

Section VIII: LARGE INDUSTRIAL SERVICE:

Availability: Non-Residential customer with demand of 150 KW and over.

The billing demand shall be as described in this section.

The sum of:

SERVICE CHARGE: \$100.00 per month

DEMAND CHARGE:

All KW of billing demand \$9.50 per KW

ENERGY CHARGE:

First KWH's up to 400 hours times

the billing Demand \$0.0585 per KWH

All KWH's in excess of 400 hours times

the billing Demand \$0.0523 per KWH

POWER COST ADJUSTMENT set by separate resolution

CONSERVATION PROGRAM CHARGE:

set by separate resolution

Minimum monthly bill: the Service Charge plus the Demand Charge

Determination of billing Demand:

The billing demand shall be the customer's greatest 15 minute demand in kilowatts, incurred during the month for which the bill is rendered, but not less than 60% of the highest billing demand during the preceding 11 months or 15 KW, whichever is greater.

The customer agrees to maintain an average power factor at or above 90%. If the average power factor is less than 90% lagging, the billing demand shall be adjusted by multiplying the actual 15 minute demand measured during the month by the ratio of 90% to the average power factor expressed in percent.

Average Power Factor:

The average power factor is defined to be the quotient obtained by dividing the KWH used during the month by the square root of the sum of the squares of the KWH used and the lagging reactive kilovolt-ampere-hours supplied during the same period. Any leading kilovolt-ampere-hours supplied during the period will not be considered in determining the average power factor.

Section IX: <u>LOW LOAD FACTOR CLAUSE</u>:

A customer, whose usage characteristic is routinely below a 5 percent monthly load factor, may apply to the Utilities Commission for assignment to another non-demand rate schedule. Consideration will be given to the contribution in aid of construction made by the customer to offset capital investment by the Shakopee Utilities, and may include other factors.

Section IX: continued

Any assignment granted will continue only for the period of time specified, and billing will revert to the standard rate schedule at the end of that period, except when the assignment is cancelled before the end of that period by the Utilities Commission. The Utilities Commission reserves the right to cancel an assignment granted under this section, and such cancellation may occur without prior notice.

Section X: LIMITED OFF PEAK CLAUSE:

A customer normally billed under a demand rate schedule, who anticipates a single instance usage of energy which is not typical for their service, may apply to the Utilities Commission in advance of the occurrence for an advanced waiver of the demand charges for that single instance of usage. Consideration will be given to the estimated cost of purchased power for the period of time covered by the single instance usage, the ability of the facilities in place to accommodate the unusual load, and may include other factors.

Any advance waiver granted will apply only for the period of time specified, and billing will revert to the standard rate schedule at the end of that period, except when the waiver is cancelled before the end of that period by the Utilities Commission. The Utilities Commission reserves the right to cancel the waiver granted under this section, and such cancellation may occur without prior notice.

THE FOLLOWING CLAUSES APPLY TO ALL RATES: Section XI:

MONTHLY BILLS:

The monthly bill is the sum of the Service Charge, Energy Charge, Power Cost Adjustment, and Conservation Charge.

In addition to the forgoing, monthly bills also include the sum of the Demand Charge, and any adjustments for Power Factor and/or other adjustments referenced in this or other rate resolution of the Shakopee Public Utilities Commission.

Minimum bill provisions, late charges, penalties, and special charges, also apply.

POWER COST ADJUSTMENT:

There may be added to or deducted from the monthly bill a Power Adjustment charge, as set by Shakopee Public Utilities Commission Resolution.

CONSERVATION PROGRAM CHARGE:

A charge will be added to the monthly bill to fund a Conservation Program as mandated by the State of Minnesota and voluntary programs of similar nature by the Shakopee Public Utilities. The amount of the charge will be set by Shakopee Public Utilities Commission Resolution.

PRIMARY METERING:

At the option of the electric department, secondary voltage service hereunder may be metered at the primary voltage, in which case a 2% cash discount will be allowed on the amount of the monthly bill, with the discount applied to all charges except the power adjustment charge.

PRIMARY VOLTAGE SERVICE:

If the customer agrees to take service at the primary voltage available at his location and to pay all costs incurred in the ownership, operation and maintenance of transformers and substation equipment (except meters) with service to be metered at the primary voltage, a cash discount of 5% will be allowed on the amount of the monthly bill, with the discount applied to all charges except the power adjustment charge.

Section XI: continued

AVERAGE POWER FACTOR:

The average power factor is defined to be the quotient obtained by dividing the KWH used during the month by the square root of the sum of the squares of the KWH used and the lagging reactive kilovolt-ampere-hours supplied during the same period. Any leading kilovolt-ampere-hours supplied during the period will not be considered in determining the average power factor.

LOAD FACTOR:

Load factor is defined to be the quotient obtained by dividing the KWH used during the month, by the KW demand during the same period, and dividing the result by the number of hours in that billing period.

MINIMUM POWER FACTOR REQUIREMENT:

The customer must maintain an average power factor not less than 80% lagging, and avoid leading power factor at any time.

DEPOSIT REQUIRED:

Deposit requirements shall be consistent with terms outlined in a separate resolution of the Shakopee Public Utilities Commission.

PROMPT PAYMENT PROVISION:

A penalty of 5% shall be added to the current bill if not paid on or before the due date specified on the monthly Statement of Account following the date of billing.

Section XII: LARGE INDUSTRIAL SERVICE - with Time Of Use Option:

Availability: Non-Residential customer with demand of 1,000 KW and over, who would otherwise be subject to the requirements of Section VIII of Resolution #1223.

Limitations to Availability: Due to the exploratory basis on which Time Of Use Service is being offered, the availability of such service terms under Resolution #1223 is limited to one customer, and further subject to such practical limitations as may exist involving the availability of technology and the administrative practices to provide billing under such TOU rates.

The billing demand shall be as described in this section.

The sum of:

SERVICE CHARGE:

\$120.00 per month

DEMAND CHARGE:

On-peak KW of billing demand

\$9.50 per KW

Off-peak KW of billing demand in excess of On-peak KW

of billing demand

\$3.00 per KW

ENERGY CHARGE:

On-peak KWH's

\$0.0636 per KWH

Off-peak KWH's

\$0.0512 per KWH

with a credit applied to KWH's in excess of 400 hours times the billing demand

\$0.0062 per KWH

TIME PERIODS:

On-peak period

9 a.m. - 10 p.m., M - F CST or CDT as applicable

Off-peak period

all other hours

OTHER TERMS APPLICABLE

Service provided and billed under Resolution #1223, Section XII are subject to all terms, factors, and adjustments applicable under Resolution #1223, including the Power Cost Adjustment and other charges not itemized here; and other terms, conditions of service and policies of the Shakopee Public Utilities Commission as generally applicable.

Shakopee Utilities will make reasonable efforts to provide reliable and prompt billings within the provisions of this resolution, however, in the event of a failure to provide reliable billing as a result of deficiency in technology or in the administrative processing of billings under TOU rates, the customer will be responsible for payment of charges determined under the standard, non-TOU rates and terms provided under Resolution #1223.

Section XIII: SHAKOPEE ENERGY PARK:

Limitations to Availability: Due to the unique basis on which Wholesale Service is being offered, the availability of such service terms is limited to one customer (MMPA), and further subject to such practical limitations as may exist involving the availability of technology and the administrative practices to provide billing under such Wholesale Rates.

The billing electric service shall be as described in this section.

The sum of:

SERVICE CHARGE:

\$100.00 per month

DEMAND CHARGE:

\$13.32

Non-Summer Demand (\$ per Kw month)

\$8.90

ENERGY CHARGE:

\$0.05101

Sat/Sun/Holiday (2x16) Energy (\$ per kWh) 7am-10pm

\$0.04351

Off-Peak (7x8) Energy (\$ per kWh) 10pm-7am

\$0.03101

Energy Adjustment Charge

varies monthly

OTHER TERMS APPLICABLE:

Service provided and billed under Section XIII are subject to all terms, factors, and adjustments applicable under Resolution #1223, excluding the Power Cost Adjustment; other terms, conditions of service and policies of the Shakopee Public Utilities Commission as generally applicable.

Shakopee Utilities will make reasonable efforts to provide reliable and prompt billings within the provisions of this resolution, however, in the event of a failure to provide reliable billing as a result of deficiency in technology or in the administrative processing of billings under Wholesale rates, the customer will be responsible for payment of charges determined under the standard rates and terms provided under Resolution #1223.

BE IT FURTHER RESOLVED that said terms and adjustments are to become effective beginning January 1, 2019 or the nearest regular meter reading date following, and apply to usage after that date and to subsequent billings;

BE IT FURTHER RESOLVED that at all times Commission staff shall comply with good utility business practices and all applicable Federal laws and Minnesota Statutes when processing account activity, i.e. applications, establishing accounts, deposits, billings, payment receipts, reminders of non-payment, disconnect notices, etc.

BE IT FURTHER RESOLVED that said terms and adjustments are to become effective immediately, and applied to the January 2019 billings (which are due February 15), and all subsequent billings.

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

Commission	President:	Aaron	Wever	_
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ATTEST:

Commission Secretary: John R. Crooks

A RESOLUTION ADJUSTING FEES APPLIED UNDER THE RELOCATION UNDERGROUND CHARGE RESOLUTION

WHEREAS, the fees established in Resolution #742, which Resolution established the Relocation Underground Charge, are intended to be adjusted as deemed necessary to provide for adequate funds collected for the purpose intended, and

WHEREAS, an analysis of the current projected Relocation Underground Projects, listed on the attachment, indicates an increase in the fees collected is appropriate at this time.

NOW THEREFORE, BE IT RESOLVED, that the fees charged under Resolution #742 be increased to .34 mils (\$0.00034) per kWh.

BE IT FURTHER RESOLVED that said terms and adjustments are to become effective immediately, and applied to the January 2019 billings (which are due February 15), and all subsequent billings.

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

ATTEST:	Commission President: Aaron Weyer
Commission Secretary: John R. Crooks	

A RESOLUTION ADJUSTING FEES APPLIED UNDER THE INSTALLATION OF UNDERGROUND ELECTRICAL DISTRIBUTION SYSTEMS POLICY RESOLUTION

WHEREAS, the fees established in Resolution #1180 are intended to be adjusted effective on the first day of January each year, and

WHEREAS, the "Construction Cost Index" as listed in the <u>Engineering News Record</u> was 10,817.11, as of October, 2017, and

WHEREAS, this index was 11,183.28 as of October, 2018.

NOW THEREFORE, BE IT RESOLVED, that the underground electrical distribution charge fees be increased to \$649.00 per lot for single-family and twin home developments and \$359.00 per living unit for other than twin home multi-family unit developments except apartment buildings (this represents a 3.4% increase over the 2018 fees) and that the fees shall remain to be 75% of the cost of material for all other developments including apartment buildings, effective January 1, 2019.

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

	Commission President: Aaron Weyer
ATTEST:	
Commission Secretary: John R. Crooks	

ADOPTING THE ELECTRIC SERVICE RULES AND REGULATIONS OF THE SHAKOPEE PUBLIC UTILITIES COMMISSION AND PROVIDING FOR GENERAL ADMINISTRATION

WHEREAS, it is deemed to be of benefit to have assembled into a comprehensive document the policies of the Shakopee Public Utilities Commission applicable to accessing electric service from the Shakopee Public Utilities electric system; and

WHEREAS, it is necessary to provide a balance between firm regulations and some degree of flexibility to respond to unforeseen circumstances or new technologies; and

WHEREAS, it is necessary to provide for administration of such policies by providing a framework for interpretation and routine modifications of details; and

WHEREAS, it is necessary to provide for timely adjustments of rates, fees, and charges.

NOW THEREFORE, BE IT RESOLVED that the Shakopee Public Utilities Commission Electric Service Rules and Regulations adopted by this resolution is applicable to all electric service requested or supplied by connection to the Shakopee Public Utilities electric system.

BE IT FURTHER RESOLVED that the Electric Service Rules and Regulations is represented as a faithful attempt at compiling policies, however the Shakopee Public Utilities Commission reserves the right to adopt policies without being limited by this resolution or by the Electric Service Rules and Regulations.

BE IT FURTHER RESOLVED that adjustment of rates, fees, and charges covered by the Electric Service Rules and Regulations may be implemented by Commission action from time to time.

BE IT FURTHER RESOLVED that the Utilities Manager or his delegate is charged with the administration of all policies including interpretations, routine modifications, or details.

BE IT FURTHER RESOLVED that the assessment rights of the City of Shakopee under state law are not compromised by this Resolution.

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

SHAKOPEE PUBLIC UTILITIES MEMORANDUM

TO:

SHAKOPEE PUBLIC UTILITIES COMMISSSION

FROM:

JOHN R. CROOKS, UTILITIES MANAGÉR

SUBJECT:

MMPA BOARD MEETING PUBLIC SUMMARY

NOVEMBER 2018

DATE:

NOVEMBER 29, 2018

The Board of Directors of the Minnesota Municipal Power Agency (MMPA) met on November 27, 2018 at the offices of Shakopee Public Utilities.

The Board was updated on the status of repairs to Faribault Energy Park from a tornado that hit the plant on September 20, as well as the successful completion of a major maintenance outage.

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

The Board discussed changes to NERC reliability standards affecting several of the larger member communities.

SHAKOPEE PUBLIC UTILITIES MEMORANDUM

TO:

SHAKOPEE PUBLIC UTILITIES COMMISSION

FROM:

JOHN R. CROOKS, UTILITIES MANAGER

SUBJECT:

APPA WEBINAR AND PUBLIC POWER MÁGAZINE

DATE:

NOVEMBER 30, 2018

This month there have been a couple of unique opportunities for SPU to promote two projects that we have helped develop and are still involved in.

APPA PUBLIC POWER MAGAZINE-

In the November/December issue of Public Power magazine the focus was on "Redefining Smart". One article in the magazine was titled "Not Your Father's Energy Efficiency". SPU was interviewed in regards to our Smart Home project from five years ago.

APPA WEBINAR SERIES-

This fall, APPA developed a webinar series for members called "Raising Awareness of Public Power". It is a seven part series covering many programs/ opportunities that utilities have developed with their customer base. SPU was asked to participate based on our presentation at the APPA National Conference in New Orleans in June of this year. The webinar "Reaching Tomorrow's Customers: Energy Education for the Next Generation" was held November 13 and focused on our MMPA/SPU joint 4th grade energy education program, the SPU High School education program and the Environmental Learning Center constructed at Shakopee High School.

The webinar attracted Utilities from around the country and was a great opportunity for SPU to tell our story.

SHAKOPEE PUBLIC UTILITIES MEMORANDUM

TO:

SHAKOPEE PUBLIC UTILITIES COMMISSION

FROM:

JOHN R. CROOKS, UTILITIES MANAGER

SUBJECT:

UTILITIES MANAGER'S ANNUAL REVIEW - 2018

DATE:

NOVEMBER 29, 2018

Per the contract between the Shakopee Public Utilities Commission and the Utilities Manager, there is to be an annual evaluation and a process for establishing goals and objectives for the ensuing year.

The Commission shall evaluate and assess in writing, the performance of the Utilities Manager, at least once a year during the term of the contract. This evaluation and assessment shall be related to the position description of the Utilities Manager and the goals and objectives of the Commission for the year in question. The performance evaluation is to be scheduled by the Utilities Manager within the first 90 days of each fiscal year.

Also within 90 days of the execution of the contract, the Commission and the Utilities Manager shall meet to establish Commission goals and objectives for the ensuing year. The goals and objectives shall be established in writing and be among the criteria by which the Utilities Manager is evaluated.

Request -

Have the Commission establish the date or dates to conduct the annual performance review and schedule the workshop for setting the 2019 Commission Goals and Objectives.

A RESOLUTION ADOPTING FEES AND CHARGES FOR 2019

WHEREAS, it is desirable to have a general listing of various fees and charges applied by the Shakopee Utilities, and

WHEREAS, the Utilities Commission has adopted various electric and water rates and charges by resolutions separate from this one and wish to keep those rates and charges intact,

NOW THEREFORE, BE IT RESOLVED THAT THE SHAKOPEE PUBLIC UTILITIES COMMISSION, hereby adopts the attached listing of fees, charges, and rates, for the purpose of having a common reference, effective January 1, 2019.

BE IT FURTHER RESOLVED, that this resolution does not invalidate any fees or charges adopted by other resolutions, nor does it preclude the subsequent adoption or application of any fees or charges that may arise for circumstances not covered by the attached list.

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

Adopted in regular session of the Shakopee Public Utilities Commission, this 3rd day of December, 2018.

	Commission President: Aaron Weyer	
ATTEST:		
Commission Secretary: John R. Crooks	_	

Effective January 1, 2019

		1	1	Effective January 1, 2019
	WATER	ELECTRIC	ENGINEERING	CUSTOMER ACCOUNTS & COLLECTIONS
Water Rates	by Resn.			
Water Connection Charge	by Resn.			
Trunk Water Charge	by Resn.			
Hydrant Use			,	
Annual Permit Fee Equipment Deposit Meter Rental Water Charge	\$25 \$250 \$9/week \$2/1000gal			
Connection Permit Fee	\$50			
Connection Inspection Fee	\$75			
Shutoff Fee / Cold Weather	\$75 or \$125 after hrs			
Reinstatement Fee Water Meter Fee	\$75 or \$125 after hrs by Resn.			
Special Service Charge Flushing WM Inspection Operate Valves After Hours	\$60/man hr + truck rate \$60/man hr + truck rate \$60/man hr + truck rate overtime rates will apply			
Irrigation Valve Fee	\$45			
Private Hydrant Inspection	\$50 each			
Standby Fire Protection Charge	\$20/yr			
Electric Rates		by Resn.		
Reconnect - Electric				\$100
Renters Deposit electric heat gas heat				\$200 \$100
Commercial Account Deposit				2 months typical bill
Plan Review and Inspection Fee			100% actual costs. Deposit amt=8.5% of constr. Costs	
Underground Charge			by Resn.	
Seasonal Demand Customer Charge			by Resn.	
Special Service Charge Line Switching Misc. Work After Hours		\$60/manhr + equipment charge \$60/manhr + equipment charge overtime rates will apply		
Streetlight Charge Security Light Charge		refer to attachment refer to attachment		
Account Setup		role to attachment		\$15
NSF Charge				\$30
Late Payment Charge Net Meter Fee - Residential Net Meter Fee - Commercial 1 Phase			\$85 · \$85	5% of new charges
Net Meter Fee - Commercial 3 Phase Meter Tampering/Theft			\$85	\$100 (plus actual costs)

SHAKOPEE PUBLIC UTILITIES STREET LIGHTING DEVELOPER INSTALLATION COSTS*

Effective January 1, 2019

			Lifective January 1, 2019
LIGHT TYPE	POLE TYPE	EXISTING CHARGE	2019 CHARGE
RESIDENTAIL LED STANDARD	24' ALUMINUM POLE	\$1,470.00	\$1,455.00
160W LED RECTILINEAR			
COLLECTOR SINGLE INSTALLATION	34' ALUMINUM POLE	\$3,035.00	\$3,050.00
160W LED RECTILINEAR			
COLLECTOR LED STANDARD GROUP			
CONTROL	34' ALUMINUM POLE	\$3,560.00	\$3,665.00
		*	
			44.455.00
RESIDENTAIL LED - PRIOR LAKE**	18' ALUMINUM POLE		\$1,455.00
COLLECTOR LED BREAKAWAY	30' ALUMINUM POLE		¢4.745.00
COLLECTOR LED - BREAKAWAY	WITH BREAKAWAY BASE		\$4,745.00

^{*} FOR TYPICAL MULTIPLE UNITS INSTALLED AS A PART OF A NEW UNDERGROUND ELECTRIC DISTRIBUTION SYSTEM EXTENSION INCLUDES 3 YEARS OF OPERATION AND MAINTENANCE COST

SHAKOPEE PUBLIC UTILITIES SECURITY LIGHTING RATE SCHEDULE

Effective January 1, 2019

0175	TVDE	2018	2019
SIZE	TYPE	Charge	Charge
100W	HPS	\$9.75	2.000
100W	HPS CM	\$5.00	\$5.50
250W	HPS	\$18.00	\$18.00
250W	HPS CM	\$7.25	\$7.75
400W	HPS	\$26.50	\$27.00
400W	HPS CM	\$10.00	\$10.50
1000W	METAL HALIDE	\$60.85	\$60.85
SMALL (100W HPS EQUIV)	LED	\$6.50	\$5.00
SMALL (100W HPS EQUIV)	LED CM	\$4.00	\$3.50
MEDIUM (250W HPS EQUIV)	LED	\$12.15	\$10.25
MEDIUM (250W HPS EQUIV)	LED CM	\$6.00	\$5.50
LARGE (1000W MH EQUIV)	LED	\$23.90	\$23.75
LARGE (1000W MH EQUIV)	LED CM	\$9.75	\$9.50
PL/SMSC RESIDENTIAL	LED	\$4.70	\$3.50
PL/SMSC COLLECTOR	LED	\$8.95	\$7.75
PL/SMSC RESIDENTIAL	HPS	\$7.50	\$9.25
PL/SMSC COLLECTOR	HPS	\$15.75	\$17.50

CM IS LIGHT INSTALLED ON THE CUSTOMER SIDE OF THE METER. SPU HAS NO MERCURY VAPOR SECURITY LIGHTS

^{**} DOES NOT INCLUDE 3YR ENERGY OR MAINTENANCE SINCE PRIOR LAKE IS BILLED MONTHLY

SUMMARY OF FEES, CHARGES AND RATES

EQUIPMENT RATES

Effective January 1, 2019

	, , _ , _ , _ , _ , _ , _ , _ , _ , _ ,
EQUIPMENT & NUMBER	\$/HR
Digger Derrick #612	\$100.00
Bucket Truck #611, 614, 616	\$65.00
1 Ton Truck #613, 631, 632, 633	\$30.00
Pick Up #617, 618, 621, 627, 645 Water Trucks	\$30.00
Tractor / Back Hoe #637	\$60.00
Trencher	\$35.00
Skid Steer	\$20.00
Hydra Vacuum	\$30.00
Air Compressor	\$15.00
Brush Chipper	\$20.00

Rate does not include \$60/ man hour to operate equipment

A RESOLUTION DESIGNATING AN OFFICIAL MEANS OF PUBLICATION

BE IT RESOLVED BY THE SHAKOPEE PUBLIC UTILITIES COMMISSION, in
meeting duly assembled that the Shakopee Valley News, Inc. of Savage, Minnesota 55378 be
and the same hereby is designated as the official means of publications for the Shakopee Public
Utilities Commission, 255 Sarazin Street, Shakopee, MN 55379-0470 for 2019.

Passed in regular session of the Shakopee Public Utilities Commission, this 3rd day of December, 2018.

	Commission President: Aaron Weyer
ATTEST:	
Commission Secretary: John R. Crooks	

A RESOLUTION DESIGNATING OFFICIAL DEPOSITORIES OF THE SHAKOPEE PUBLIC UTILITIES COMMISSION FUNDS

WHEREAS, the State of Minnesota Statues 118.A02 and 118A.06 provide that the governing body of each government entity shall designate, as a depository of its funds, one or more financial institutions.
NOW THEREFORE BE IT RESOLVED, by the Shakopee Public Utilities Commission of the City of Shakopee, Minnesota that the following institutions are designated as depositories.

Western Bank, A Division of American National Bank

Old National Bank

US Bank as Custodian for Minnesota Municipal Money Market Fund

Wells Fargo Institutional Trust & Custody

U.S. Bank National Association

Adopted in regular session of the Shakopee Public Utilities Commission of the City of Shakopee, Minnesota held this 3rd day of December, 2018.

	Comr	mission President: Aaron Weyer
ATTEST:		

Commission Secretary: John R. Crooks

A RESOLUTION ALLOWING THE USE OF FACSIMILE SIGNATURE FOR CHECK SIGNING

WHEREAS, the Shakopee Utilities Commission will utilize a check signing software and facsimile signatures for the Shakopee Utilities Commission President, Utilities Manager, and Director of Finance and Administration Director for the purposes of check signing.

NOW THEREFORE BE IT RESOLVED, by the Shakopee Public Utilities Commission of the City of Shakopee, Minnesota that use of a check signing software and facsimile signatures for the Shakopee Public Utilities Commission President, Utilities Manager, and Director of Finance and Administration for the purposes of check signing is hereby approved.

Adopted in regular session of the Shakopee Public Utilities Commission of the City of Shakopee, Minnesota held this 3rd day of December, 2018.

	Commission President: Aaron Weyer
ATTEST:	
Commission Secretary: John R. Crooks	



SHAKOPEE PUBLIC UTILITIES COMMISSION

ELECTRIC SERVICE RULES AND REGULATIONS

Adopted by: S.P.U.C. Resolution # Dated

SHAKOPEE PUBLIC UTILITIES

ELECTRIC SERVICE RULES AND REGULATIONS

December 3, 2018

INTRODUCTION

Shakopee Public Utilities (hereafter referred to as SPU) has assembled this booklet to assist its customers and their architects, engineers, or contractors to plan for and obtain electric service. This document will be reviewed and updated at least annually.

The information presented here is intended to supplement the requirements of the National Electrical Code (NEC), current edition, and all other applicable federal, state, and municipal codes, regulations, laws and ordinances. It is the customer's responsibility to refer to and comply with such other codes, regulations, laws, and ordinances when planning, designing, and installing an electrical service. Specific requirements of SPU do not intentionally conflict with any other requirements known to be in effect as of the publication date of the document. Any apparent conflicts of this nature should be brought to the attention of SPU for interpretation.

SPU wishes to serve its customers promptly and satisfactorily. We will endeavor to cooperate with customers and their representatives to the fullest extent possible in providing electrical service with as little delay and inconvenience as possible.

SPU will be happy to confer with those customers desiring information concerning rates, services, etc., by telephone or otherwise. Such inquiries can be made by phoning SPU's Customer Service Department at 952-445-1988 or by visiting the SPU Service Center located at 255 Sarazin Street, Shakopee, MN.

These rules and regulations are available on the SPU website at spucweb.com.

SHAKOPEE PUBLIC UTILITIES COMMISSION

ELECTRIC SERVICE RULES AND REGULATIONS

Adopted by: S.P.U.C. Resolution # Dated

SHAKOPEE PUBLIC UTILITIES COMMISSION ELECTRIC SERVICE RULES AND REGULATIONS

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SHAKOPEE PUBLIC UTILITIES COMMISSION ELECTRIC SERVICE RULES AND REGULATIONS

SECTION 100 - DEFINITIONS

Adopted by: S.P.U.C. Resolution # Dated

SHAKOPEE PUBLIC UTILITIES COMMISSION ELECTRIC SERVICE RULES AND REGULATIONS

SECTION 100

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SECTION 100

DEFINITIONS

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

Accessible: An area that can be readily and safely accessed through a doorway, ramp, window, or stairway by a person on foot who exerts neither extraordinary effort nor employs special tools or devices to gain entry.

Approved: Acceptable to the authority having jurisdiction.

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

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

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

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

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

Dwelling:

Dwelling Unit: One or more rooms for the use of one or more persons as a housekeeping unit with space for eating, living, and sleeping, and permanent provisions for cooking and sanitation.

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

Two-Family Dwelling: A building consisting solely of two dwelling units.

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

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

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

Meter Set: An instrument or instruments, together with auxiliary equipment, for measuring the electric power and energy supplied to a Customer.

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

National Electrical Safety Code: The current edition of the National Electrical Safety Code (NESC) as issued by the Institute of Electrical and Electronic Engineers (IEEE) and adopted by the American National Standards Institute (ANSI C2).

Overhead Distribution Area: The area or areas served by SPU's overhead distribution system as differentiated from those areas served by underground systems.

Point of Delivery: The point where the electric energy first leaves the line or apparatus owned by SPU and enters the line or apparatus owned by the Customer unless specified in the Customer's Agreement for Service. This is not necessarily the point of location of SPU's meter.

Property Owner: An individual, partnership, corporation, or other legal entity who is the owner of record for the specified service location.

SPU: Shakopee Public Utilities is the electric and water utility owned by the City of Shakopee that serves in Shakopee and certain adjacent communities.

SPUC: The Shakopee Public Utilities Commission is a five-person public body whose members are appointed by the city council. The commission sets policy for the electric and water utilities owned by the City of Shakopee.

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

Secondary Terminal: The secondary side of a pad mounted transformer or a secondary junction box, whichever is designated by SPU.

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

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

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

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

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

Service Lateral: The underground service conductors from SPUC's distribution system, including any risers at a pole or other structure or from a transformer, to the first point of connection with the service entrance conductors in a terminal box or meter or other enclosure inside or outside the building wall. Where there is no terminal box, meter, or other enclosure, the point of connection shall be considered to be the point of entrance of the service conductors into the building.

Type of Service: The characteristics of electric service described in terms of frequency, phase, nominal system voltage, and number of wires.

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

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

Temporary Service: Service provided for a finite period of time, usually during the construction of permanent facilities when the permanent service is not yet completed. See Section 500 Special Services.

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

Voltage (of a Circuit): The greatest root-mean-square (effective) difference of potential between any two conductors of the circuit concerned.

Voltage, Nominal: The value, expressed in volts, which is assigned to a circuit or system for the purpose of designating its voltage class (as 240/120, 208Y/120, 480Y/277, etc.). The actual voltage at which the circuit operates can vary from the nominal within a range that permits satisfactory operation of equipment.

Voltage to Ground: The voltage between the given conductor and that point or conductor of the circuit that is grounded.

SHAKOPEE PUBLIC UTILITIES COMMISSION ELECTRIC SERVICE RULES AND REGULATIONS

SECTION 200 – GENERAL INFORMATION

Adopted by: S.P.U.C. Resolution # Dated

SHAKOPEE PUBLIC UTILITIES COMMISSION ELECTRIC SERVICE RULES AND REGULATIONS

SECTION 200

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SECTION 200

GENERAL INFORMATION

201 Service Jurisdiction

SPU has been established for the purpose of providing electric and water service to properties within the City of Shakopee. SPU also provides electric service to properties outside the city limits of Shakopee but within the service area boundaries established by the State of Minnesota. Service will be provided to all eligible applicants when all applications, agreements, easements, deposits, payments, and other required information have been provided to SPU.

202 Application for Service

Application for new, additional, or temporary electric service must be made by the Customer, or a designated representative, to SPU at the service center located at 255 Sarazin Street, Shakopee, MN, or by fax at 952-445-7767. The Application for Utilities may be downloaded from the SPU website at spucweb.com. At the time of application, the Customer will be required to provide information relating to the service request, including the following:

- Exact location of premises to be served including building street address or legal description, lot and block numbers, and name of the subdivision.
- 2) The type of service desired (temporary or permanent, residential, commercial, industrial, rewire, etc.)
- 3) For any commercial or industrial service, the service voltage, phases, connected load, and anticipated peak demand must be provided. Additional information in the form of construction drawings and the proposed service entrance may also be necessary for SPU to adequately determine the capacity and arrangement of service. This information must be received by SPU before the necessary planning and design of the project can be completed.
- 4) The approximate date that service is requested.
- 5) The name, address, and telephone number of the Customer's designated representative(s) who will be responsible for working with SPU representatives in providing the electric service. Only the designated representative(s) will have access to account information. All designated representatives hold the same financial responsibility for the account. Once identified as a designated representative, only

the remaining, responsible representative can remove another representative from the account.

6) Deposits may be required. See Section 306 for details.

203 Ownership of Equipment

- **203.1** SPU-Owned Equipment The meter and associated metering equipment furnished and installed by SPU remains the property of SPU.
- **203.2** Customer/Property Owner-Owned Equipment The meter socket, metering transformer compartment, if required, service entrance conductors and conduit from the meter socket to the service entrance disconnect, the service entrance switch or circuit breaker, and the service entrance ground equipment are all the property of the Customer.
- Overhead Service In addition to the equipment on the Customer side
 of the meter socket, the service drop with wire holder or bracket, the
 weather head and either the service mast and conduit with entrance
 wires or the service entrance cable with watertight connection to the
 meter socket are the property of the Customer.
- 2) Underground Service In addition to the equipment on the Customer side of the meter, all conduit and cable required to extend the secondary service lateral from SPU's secondary terminals to the meter socket are the property of the Customer.

The Customer and SPU are responsible for the installation, maintenance, repair, and replacement of the electric service equipment which each owns.

204 Easements

Whenever any SPU-owned overhead and underground lines and equipment is located on the Customer's property, the Customer shall grant an easement to SPUC to the extent SPUC deems necessary. All utility easements required by SPUC are to be granted by the Customer at no cost to SPU. The Customer must provide a legal description by a Registered Land Surveyor. The easement will be accepted and recorded by SPU.

205 Inspection of Customer's Facilities

205.1 As a minimum, wiring and electrical equipment installed and owned by the Customer shall be installed in accordance with the latest edition of the National Electrical Code (NFPA No. 70). State law permits a homeowner to complete the wiring in his own home, however, SPU will

not make a service connection prior to inspection if the wiring was completed in this manner. All homeowner-completed wiring must be inspected by the designated electrical inspector prior to connection.

205.2 Wiring installations within the Shakopee city limits, including temporary installations, must be inspected and approved by an authorized electrical inspector employed by the City of Shakopee as required by Shakopee City Ordinance No. 4.19. SPU will make connection only after approval by the inspecting authority. The electrical inspector is required by City Ordinance to disconnect or have disconnected by SPU any installation that is declared by the electrical inspector to be unsafe and a hazard.

205.3 Customers outside the Shakopee city limits requesting service from SPU must have their wiring inspected by the state inspector prior to the service being energized. SPU will make connection before authorization from the state inspector only if the wiring was completed by a licensed electrician or contractor whose name is listed on the certificate.

206 Service Connection, Disconnection, and Reconnection

206.1 New Service - A meter will be installed by SPU and electric service made available within 2 business days after all applications, agreements, payments, deposits, and the certificate of connection (electrical permit) have been received provided the service has been inspected and SPU's distribution system extension is completed. The SPU Service Center is located at 255 Sarazin Street, Shakopee, MN. The phone number is 952-445-1988, fax number 952-445-7767.

206.2 New Customer at an Existing Location - A request to provide electrical service into the name of a new tenant or owner for purpose of establishing a new account will normally require that a meter reading be obtained. Requests will include the completion of an Application for Service that must be received by SPU at least 2 business days before the intended time of assignment.

206.3 Disconnection and Reconnection of Existing Services - Customer requests for disconnection or reconnection of existing services for maintenance, construction, re-siding, or demolition reasons must be received by SPU at least 2 business days in advance of the desired time of disconnection or reconnection (weekends and holidays excluded). For mutual protection of the Customer and SPU, only authorized employees of SPU are permitted to set and remove meters, or to make or break the connection between SPU's service drop or secondary terminals and the Customer's service entrance conductors.

207 Liability

SPU does not engage in the practice of doing interior wiring on Customer's premises, except for the installation and maintenance of its own property. SPUC shall not be liable for damage to any Customer or to any third party resulting from use of the electric service or from the presence of SPU's equipment on the Customer's premises. The Customer is solely responsible for any accidents, fires, or failures resulting from the condition and use of his or her wiring installation or equipment.

208 Service Interruptions

SPU reserves the right to interrupt service at any time. Except for cases of extreme hazard to employees or the public, interruptions for maintenance and system improvement will be prearranged and advance notice will be given to the affected Customers.

SPU will not be responsible for consequential damages resulting from service interruptions, abnormal system conditions due to causes outside its control, or from operations in response to abnormal system conditions. Customers requiring service reliability and/or stability exceeding SPU's normal service should consider uninterruptible power supplies, isolation transformers, power conditioners, redundant services, or other options to provide the level of service needed. SPU's engineering staff (952-233-1501) is available to discuss such needs.

209 Access

The utility shall have the right of access to the Customer's/Property Owner's premises at all reasonable times for the purpose of installing, reading, inspecting, maintaining, or removing any of its meters, devices, or other equipment which is used in the provision of the Customer's electric service.

210 Customer Responsibility

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

211 Use of SPU Distribution Plant

SPU's poles and pad-mounted equipment are for its use only, unless a formal agreement has been executed with SPU for the attachment of other utility equipment. Signs may not be placed on SPU poles or pad-mounted equipment. Nails and staples used for placing signs on poles create a safety hazard for linemen when climbing the poles.

212 Revision of Requirements

All requirements stated or implied herein are subject to change without prior notice. Check website at spucweb.com for changes.

SHAKOPEE PUBLIC UTILITIES COMMISSION ELECTRIC SERVICE RULES AND REGULATIONS

SECTION 300 - RATES, CONNECTION CHARGES, AND CREDIT POLICY

Adopted by: S.P.U.C. Resolution # Dated

SHAKOPEE PUBLIC UTILITIES COMMISSION ELECTRIC SERVICE RULES AND REGULATIONS

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SECTION 300

RATES, CONNECTION CHARGES, AND CREDIT POLICY

301 Rate Schedule Classification

Electric service is supplied to Customers under various rate schedule classifications as determined by the type of service, the amount of electric power supplied, and the purpose for which the electric service is to be used. Copies of SPU's rate schedules are available at SPU's Service Center or on our website (spucweb.com).

302 Payment

SPU will, insofar as possible, read all meters every month and bill the Customers for service used during the period. Payment of the bill is due on the 15th of the month, except when falling on a weekend or holiday, then the following business day. Payments received after the due date will be assessed a late payment fee and the account will be considered past due.

If the meter cannot be read during a billing period, or the reading seems erroneous, an estimate will be made for that billing period. If the meter cannot be read due to access issues, no more than two estimated billing cycles will be allowed. Adjustments to bills resulting from inaccuracies in the meters will be handled in the manner described in paragraph 608.

303 Customer Charge

There is a customer charge for each meter/service provided. The amount of this customer charge will vary based on the type of service provided.

304 Underground Electric Charge

SPU will charge an underground electric charge for the extension and connection of new or expanded underground electric service to any customer. The amount of the charge can be obtained from the Planning and Engineering Department.

There will be no charge for connections to existing services during SPU's normal working hours. If connection must be made outside of normal working hours at the request of the Customer, a special connection charge will be assessed. The charge for such work can be obtained from the Customer Service Representative.

305 Service Disconnection/Reconnection

SPU may disconnect a Customer's service, with notice, for any of the following reasons:

- Non-payment of billings
 - All customer payments are due in full on the 15th of every month (or next business day if the 15th falls on a weekend or holiday).
 - o If SPU has not received a payment within 10-14 calendar days following the state due date, affected customers are notified in writing via USPS of a late payment.
 - Customers are given a minimum of 20 calendar days from the date of the notice to pay the past due balance in full or setup a payment plan.
 - Failure to do so by the date communicated will result in disconnection of electrical service.
 - The past due balance plus a reconnection fee must be paid before service will be restored if customer is disconnected.
- Issuance of a non-negotiable payment
 - Customers are notified in writing via USPS of nonnegotiable payments.
 - Customers have seven (7) calendar days to provide a new payment, including a service fee, in the form of cash, certified check, money order or credit card.
 - Failure to do so by the date communicated will result in disconnection of electrical service.
 - The past due balance plus a reconnection fee must be paid before service will be restored if customer is disconnected.
- Non-payment of other charges/fees
- Failure to meet credit requirements
- Failure to provide access to SPU owned metering equipment

Without notice, the Customer's service may be disconnected for:

- A condition determined to be hazardous--to the Customer; to other Customers; or to SPU personnel or equipment
- Unauthorized use of electricity, water, or equipment belonging to SPU

In the event service has been disconnected for a valid cause, the Customer will be required to pay a reconnection fee before service is restored.

A schedule of fees is available from a SPU Customer Service Representative.

306 Service Deposit

306.1 A deposit shall be required to be paid by all residential customers who do not hold title to the real property at the customer's service address.

Residential rental customers will pay a standard deposit, higher if electric heat, prior to connection of services. Utility service will remain in the property owner's /landlord's name until the renter's/leaser's deposit requirement is satisfied in full. This refundable deposit and interest earned will be applied to any final bill charges as of the date of service disconnection. Any remaining credit balance will be refunded to the customer in the form of a refund check. If a balance due exists after the deposit has been applied, a final bill will be issued to the customer for payment.

For residential homeowners no deposit is required. However, if an account is shut off as a result of a delinquent balance, the Utility reserves the right to require a deposit prior to reconnection of service.

306.2 Commercial and industrial customers are required to pay a deposit, equal to two months average billings, prior to installation of permanent service. If no prior usage history is available you will be required to provide a load sheet, then the deposit will be based on this information. The deposit and/or guaranty will be retained by SPU until the service is disconnected.

You may select one of the three methods indicated for meeting the deposit requirement:

- Cash (interest accrued annually)
- Irrevocable letter of credit from a bank
- Surety bond

Deposit and interest will be applied to any final bill charges as of the date of service disconnection. Any remaining credit balance will be refunded to the customer in the form of a refund check. If a balance due exists after the deposit has been applied, a final bill will be issued to the customer for payment.

If the deposit has been held for 12 months or more, the customer has the right to request a recalculation of the deposit based on actual electricity usage. SPU will refund any over collection once current history is established.

SHAKOPEE PUBLIC UTILITIES COMMISSION ELECTRIC SERVICE RULES AND REGULATIONS

SECTION 400 - STANDARD SERVICES

Adopted by: S.P.U.C. Resolution # Dated

SHAKOPEE PUBLIC UTILITIES COMMISSION ELECTRIC SERVICE RULES AND REGULATIONS

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SECTION 400

STANDARD SERVICES

401 General Characteristics

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

402 Availability of Service

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

403 Secondary Service Voltages

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

403.1 Single Phase Service

- a) 240/120 Volt, 3-Wire, Grounded Neutral. Generally available where the total load is less than 75 kVA for pad-mount service, or less than 50 kVA for pole-mounted service.
- b) 480/240 Volt, 3-Wire, Grounded Neutral. Available for street lighting service only.

403.2 Three Phase Service

a) 208Y/120 Volt, 4-Wire, Grounded Neutral. Generally available where facilities of adequate capacity are adjacent to the premises to be served. This service is limited to less than 500 kVA for pad-mounted service, or less than 150 kVA for pole-mounted service. When the necessary infrastructure is not in place to provide this service, special contract arrangements may be necessary before the service is provided.

- b) 240/120 Volt, Delta, 4-Wire, Grounded Neutral. Available only where installed capacity exists. If expansion of existing service is necessary, customer shall convert service to 208Y/120 volt, 4-wire, grounded neutral.
- c) 480Y/277 Volt, 4-Wire, Grounded Neutral. Generally available where facilities of adequate capacity are adjacent to the premises to be served. This service is limited to less than 2500 kVA capacity. When the necessary infrastructure is not in place to provide this service, special contract arrangements may be necessary before the service is provided. This type of service is not available for pole-mounted overhead services.

404 Primary Service Voltages

Service at primary voltage is available at either 13,800Y/7970 Volts or 12,470Y/7200 Volts, 4-Wire, Grounded Neutral. The available voltage depends on the SPU distribution circuit voltage in the area. This service is available by special request when the projected demand is greater than 500 kVA. SPU reserves the right to deny a request for primary voltage service. When the necessary infrastructure is not in place to provide this service, special contract arrangements may be necessary before the service is provided.

The Customer will provide and maintain a primary voltage metering cabinet in which to accept service. The cabinet will be the point of delivery.

405 Operating Voltages

The voltages indicated above are nominal service voltages. SPU will endeavor to maintain the actual service voltage within an operating range up to 5% above and 5% below these nominal service voltages. When the service voltage is found to be outside of the +/- 5% range, SPU will take the necessary steps to return the voltage to the operating range as soon as practical.

406 Street Lighting Service

Street lighting is provided in the City of Shakopee in accordance with the Street Lighting Policy established between the City of Shakopee and SPU. This policy provides for lights to be installed at street intersections and at regular intervals on both sides of city streets. The lighting level is generally higher on main and collector streets than on residential streets. Roadway lighting is provided as security lighting service in other governmental jurisdictions with separate agreements.

407 Security Lighting Service

Security lighting can be provided at the request of individual Customers in SPU's service territory. The cost of security lighting is borne by the requesting party. Contact SPU's Planning and Engineering Department to discuss the options available.

SHAKOPEE PUBLIC UTILITIES COMMISSION ELECTRIC SERVICE RULES AND REGULATIONS

SECTION 500 - SPECIAL SERVICES

Adopted by: S.P.U.C. Resolution # Dated

SHAKOPEE PUBLIC UTILITIES COMMISSION ELECTRIC SERVICE RULES AND REGULATIONS

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SECTION 500

SPECIAL SERVICES

501 Temporary Service

- **501.1** Temporary service is intended to be supplied at secondary voltages only to customers for use during the construction of permanent facilities and before the permanent service can be installed. Temporary service may also be provided for short-term events such as community celebrations and seasonal sales.
- **501.2** The address of the location to be supplied with temporary service must be permanently displayed at the location and on the temporary pedestal before SPU will install the temporary service. All overhead and underground temporary services will be metered and billed under one of SPU's Standard Rate Schedules. SPU will furnish only the overhead service drop or lateral and the metering equipment.
- **501.3** The Customer shall provide an approved meter socket with the necessary raceway and suitable rigid support for attachment of metering equipment and service drop or lateral. On all services requiring instrument transformers, the Customer shall furnish a suitable enclosure for the installation of SPU's transformers.
- **501.4** A nominal fee will be charged for the provision of temporary service. This charge is designed to cover SPU's cost for the installation and removal of the necessary temporary facilities. It will be determined in advance and must be paid before the service is connected.

Information regarding the charges for temporary service can be obtained from SPU's Electric Superintendent at 952-233-1502.

502 Services for Unusual Load Characteristics

The operation of Customer equipment having a relatively high load of short or intermittent duration, such as welders, compressor motors, elevators, and X-ray equipment, may cause serious fluctuations of voltage and interfere with the service being provided by SPU to other customers. If such a load is anticipated, the Customer must consult with SPU and agree to install such protective devices as may be required so as not to cause damage to any of SPU's equipment or in any way inhibit service to other customers. In addition, special compensation may be required by SPU from the Customer in those cases where it is necessary for SPU to install special or larger facilities than would normally be required to provide satisfactory service.

503 Redundant Facilities

SPU will normally provide one set of facilities to one point of service for each Customer. If a Customer requires redundant facilities, SPU must be advised as soon as possible so the feasibility of such service can be determined. If SPU determines that redundant facilities can be provided, the Customer will be required to reimburse SPU for the entire cost of the additional facilities including labor, materials, vehicle charges, and overhead. An agreement between the Customer and SPU shall also be executed.

504 Relocation or Protection of SPU Facilities

It is the responsibility of the Customer to arrange for the relocation and/or protection of SPU's facilities whenever such action is appropriate. Any intended relocation or protection of SPU facilities must be reviewed with and approved by SPU in advance. The cost of any change or relocation of SPU's facilities for the benefit only of the Customer, and which has been initiated by the Customer, shall be borne solely by the Customer. A deposit by the Customer may also be required before the changes are made. SPU will bear costs to the extent (as determined by SPU) that the change or relocation benefits SPU.

505 Rewiring Existing Facilities

The Customer or electrical contractor shall contact SPU when it is necessary to rewire or upgrade an existing electric service. All SPU Electric Rules and Regulations will be followed to the degree that conditions allow, with final approval by SPU personnel. The Customer shall be responsible for maintaining the same phase rotation for 3-phase rewires.

When customer has 240/120 volt, delta service per section 403.2.b and customer is making upgrades to service, customer shall upgrade service to a 208Y/120 volt service per section 403.2.a.

506 Underground Locations

506.1 Minnesota Statute, Chapter 216D, requires an excavator to contact the utility notification center (Gopher State One Call) at least 48 business hours before beginning an excavation. SPU encourages that underground facilities locations be requested prior to all construction or activity that disturbs the soil. The excavation notice may be made by calling the center at 811 or www.gopherstateonecall.org and providing the following information:

- Name of individual calling.
- Precise location of the proposed excavation.
- Name, address, and telephone number of the excavator.
- Excavator's field phone number.
- Type and extent of proposed excavation.
- Any anticipated use of explosives.
- Date and time when excavation is to commence.

506.2 "Excavation" means an activity that moves, removes, or otherwise disturbs the soil by use of a motor, engine, hydraulic or pneumatically powered tool, or machine-powered equipment of any kind, or by explosives.

Excavation does not include:

- The extraction of minerals.
- The opening of a grave in a cemetery.
- Normal maintenance of roads and streets if the maintenance does not change the original grade and does not involve the road ditch.
- Plowing, cultivating, planting, harvesting, and similar operations in connection with growing crops, trees, and shrubs, unless any of these activities disturbs the soil to a depth of 18 inches or more.
- Gardening, unless it disturbs the soil to a depth of 12 inches or more.
- Planting of windbreaks, shelterbelts, and tree plantations, unless any of these activities disturbs the soil to a depth of 18 inches or more.

506.3 Any contact with an electric cable during excavation must be reported immediately, day or night, by calling SPU at 952-445-1988.

SHAKOPEE PUBLIC UTILITIES COMMISSION ELECTRIC SERVICE RULES AND REGULATIONS

SECTION 600 - METERING

Adopted by: S.P.U.C. Resolution # Dated

SHAKOPEE PUBLIC UTILITIES COMMISSION ELECTRIC SERVICE RULES AND REGULATIONS

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SECTION 600

METERING

This section covers the installation of meters and the associated equipment necessary to measure Customer's usage for both overhead and underground service.

601 Responsibilities for Providing Metering Equipment

All metering equipment except current and potential transformers must be provided and installed by the customer or their contractor. For secondary service, SPU will provide and the Customer will install the current transformers, when required. For primary service, SPU will provide and install the current and potential transformers. All metering equipment installed must be UL listed and labeled and have prior approval of the SPU electric department. Metering equipment installed without SPU approval will not be energized unless by special permission of the SPU electric department. SPU will energize only one set of metering equipment under each contract or application for one class of service.

602 Location of Meters

Meter locations will be agreed upon by the Customer and SPU, subject to final approval by SPU.

- **602.1** Residential All new or rewired services must have the meter located outside. Prior written approval from SPU is needed to be excluded from this requirement.
- 602.2 Multiple Tenant Dwellings When more than one meter is installed, as in the case of a twin home or an apartment complex, meters are to be located outside and grouped where possible. Exception: Complexes that have 24 or more meters may locate them inside as long as they are grouped at one location and accessible at all times to each customer and SPU personnel. Drawing No. 1 in the Appendix shows a typical multiple-meter installation.
- **602.3** Industrial and Commercial Meters for commercial and industrial services shall be located outdoors in an area that is easily accessible at all times to SPU personnel.

603 Meter Elevation, Clearances, and Accessibility Requirements

- **603.1** Height Limits All meters shall be mounted 3-6 feet from final grade to the center of the meter. Where indoor meter installations are permitted, the bottom meter may be 2 feet above the floor.
- 603.2 Meter Clearances Meters shall be situated such that there is not less than three feet of unobstructed space in front and one foot on all sides of the meter face; this applies to landscaping material. It is the customer's responsibility to establish and maintain the required clearances. Meters shall not be located where they are subject to corrosive fumes, excessive dust, vibration, excessive noise or physical damage. Outdoor meters shall not be located in carports, under porches or decks whether open or closed, or along walkways or driveways where they might be create a hazard to pedestrians or vehicles.
- 603.3 Access to Meters Meters shall be located where they are readily and safely accessible to SPU personnel at all times, even with loss of power. The building owner shall provide, by means of a lock box on the premises, a key to gain access to the meters. Meters shall not be located where ladder climbing is required, under a porch or deck, in any location where the clearance is less than 7', including plants and shrubs, or in any location where damage is likely to occur.

604 Additional Requirements

- 604.1 Apartment Buildings Individual apartment disconnects must be connected on the load side of the meter. If the service voltage is 208/120 volts, a fifth terminal located at the 9 o'clock position is required in the socket and must be connected to the service neutral in accordance with the National Electrical Code. Only one meter may be installed under one socket cover in multi-metering panels. The maximum height to the center of the top meter shall be no more than 6 feet and the minimum height to the center of the bottom meter shall be 3 feet, 2 feet when permitted indoors.
- 604.2 Commercial Multi-Metering Panels All commercial multimetering panels shall have a maximum of 4 meter sockets per vertical stack. The maximum height to the center of the top meter shall be no more than 6 feet and the minimum height to the center of the bottom meter shall be 3 feet, 2 feet when permitted indoors. Each individual unit disconnect shall only be connected to the load side of the meter. Only one meter may be installed under one socket cover. A system neutral is required to each 5 and 7 terminal meter socket in accordance with the National Electrical Code.

605 Meter Identification

In multiple-dwelling or multiple-tenant installations, the building owner shall ensure that each individual meter socket shall has an identification tag with the appropriate address, unit number, or suite number for the unit being metered. This tag shall be a durable engraved metal or plastic tag that is riveted, screwed, or bolted in place. A similar tag shall also be placed on the cover. Each circuit shall be carefully traced and rechecked by the Customer to ensure against errors in wiring that would result in one customer obtaining service through the meter serving another customer. This is especially important when the wiring is concealed. The service shall not be energized if meter sockets are not identified. It will be the building owner's responsibility to correct any errors due to misidentification of meter sockets.

606 Meter Mounting

606.1 Outdoor meters and meter mounting devices shall be mounted securely on permanent structures such as houses, garages, or other buildings. Where outdoor meters are installed on surfaces that prevent installation of the meter mounting device in an exact vertical plane, a meter board must be installed or the surface modified in such a manner that the meter mounting device can be installed vertically. The preferred meter location is within ten feet of the front of the building. All meter locations for rewired or upgraded services shall be located outdoors with locations agreed upon by the Customer and SPU with final approval by SPU. SPU has the right to refuse to energize a service if these requirements have not been met.

606.2 Indoor meters, where permitted, shall be mounted in accordance with the preceding requirements of this section and shall be located as close as possible to the point where service enters the building. Indoor metering equipment shall be mounted securely in a vertical plane on a permanent structure in a location free from moisture, high temperature, vibration, excessive noise, excessive dust or dirt.

607 Meter Connections

The Customer shall provide the necessary wiring for the meter set with the wiring so arranged that the line (supply) side is connected to the top terminals of the socket and the load side to the bottom terminals. All neutral conductors must be insulated. For underground services, the line side neutral wire is to be identified in accordance with the National

Electrical Code. There should be sufficient slack left in the underground cables to make up for any ground shifting that may occur.

608 Meter Testing

Any Customer who believes that their meter is failing to properly register the use of electricity may request a meter check by contacting the Customer Service Department. SPU will test the meter using standard calibration equipment and generally accepted test procedures within a reasonable period of time. A standard fee will be charged for this test. The fee will be waived if the meter is found to be inaccurate.

Whenever a watt-hour meter is found upon test to have an average error of more than two percent (2%) from one hundred percent (100%) or a demand meter more than one and one half percent (1.5%) from one hundred percent (100%), a recalculation of bills for service will be made on the basis that the meter should be one hundred percent (100%) accurate with respect to the working test standard.

If the period of inaccuracy cannot be determined, it will be assumed that the metering equipment has become inaccurate at a uniform rate since it was installed or last tested unless there is valid reason to use another method. Recalculation of bills is based on SPU Policy for adjustments of customer accounts.

When the average error cannot be determined by test due to complete failure of all or part of the metering equipment, then an estimate of the quantity of energy consumed based on available data will be used to determine the adjusted bills.

609 Meter Tampering

All connections to SPU's service equipment shall be made by SPU personnel only. Unauthorized connections to or tampering with any SPU meter, associated equipment or meter seals, or indications or evidence thereof subjects the Customer to immediate discontinuance of service, prosecution under the laws of the State of Minnesota, adjustment of prior bills for services rendered, payment of the tampering fee as adopted by SPUC and reimbursement to SPU for all extra expenses incurred on the account. In addition, when the unauthorized connections or tampering involve an inside meter, the Customer shall, at his/her own expense, relocate all service equipment and metering facilities on the outside of the building.

610 Services Requiring Instrument Transformer Installation

610.1 Secondary Voltage Customers - Any single phase service having a total connected load greater than 320 amperes, and any three phase service having a total connected load greater than 200 amperes will require instrument transformers for the metering installation. These instrument transformers will be furnished by SPU and installed by the Customer on the <u>line side</u> of the service entrance disconnect switch. An exception may be made to this rule in the case of a multi-tenant building.

Instrument transformers shall be installed in an approved current transformer cabinet; in the connection cabinet, if used, located adjacent to SPU's transformer; or in the Customer's switchgear in a compartment designated for instrument transformers. All cabinets used must be UL approved and must meet all applicable NEC and NEMA class rules for the environment in which they are located. Cabinets must accept bar type current transformers. Instrument transformers may not be installed in padmount transformer cabinets. No open air instrument transformers will be permitted for an overhead service. The location of the instrument transformers must be approved by SPU. The customer must furnish and install a 1-inch rigid metal conduit from the instrument transformer location to a meter location approved by SPU. Conduit runs shall not exceed 25 feet, except by special permission.

610.2 Primary Voltage Customers - All primary voltage Customers require instrument transformers for both voltage and current. If indoors, the instrument transformers should be located in a switchgear compartment or cubicle designed for that purpose. If the instrument transformers are located outdoors, they may be mounted in a pad-mounted cabinet designed for that purpose.

611 Use of Bypass Socket

An approved lever-operated bypass socket shall be provided and installed by the Customer for all self-contained (without instrument transformers) metering installations. Such sockets permit a continuation of service upon removal of the meter for testing or maintenance. If a lever-operated bypass socket is not installed, the service will not be energized.

All self-contained meter sockets must have a minimum rating of 200 amperes continuous. Contact SPU's Customer Service Department for a current list of approved meter sockets.

612 Master Metering

All new residential units will be individually metered with the exception of facilities that provide care for elderly or disabled persons as provided for in State Law (16B.61 Subd.8). In mobile home parks, a master meter may be used but all billing will be administered via master meter. All new commercial and industrial customers will be individually metered.

613 Location of High-Leg in Meter Socket on 240/120 Volt 3 phase Service

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

614 Removing SPU Seals and Meters

Disconnection of SPU metering equipment and cutting of seals is not allowed without obtaining prior approval from the Electric Service Department.

615 Customer Generation

Where a customer intends to operate any type of electric generator, photovoltaic array, wind generator, or similar equipment interconnected to the SPU system, special service and metering requirements must be satisfied. Contact SPU's Planning and Engineering Department for details prior to interconnecting any generation equipment. Before a customer generator may be connected to operate in parallel with the SPU distribution system, the customer must request approval from SPU for this type of operation. The design of this interconnection must include relay protection to prevent damage to the utility system as required by the current version of the State of Minnesota Requirements for Interconnection of Distributed Generation.

616 Proper Grounding

All metering conduits and sockets must be properly grounded. Electric service will not be connected to improperly grounded equipment.

A system neutral is required to each 5 and 7 terminal socket. Conductor should be sized in accordance with the National Electrical Code.

617 Customer Disconnect Switch

Individual customer disconnect switches should be connected on the load side of the meter. No customer devices such as surge suppressors or load management equipment may be installed on the line side of the meter.

618 SPU-Owned Equipment

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

SHAKOPEE PUBLIC UTILITIES COMMISSION ELECTRIC SERVICE RULES AND REGULATIONS

SECTION 700 – CUSTOMER UTILIZATION EQUIPMENT

Adopted by: S.P.U.C. Resolution # Dated

SHAKOPEE PUBLIC UTILITIES COMMISSION ELECTRIC SERVICE RULES AND REGULATIONS

SECTION 700

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SECTION 700

CUSTOMER UTILIZATION EQUIPMENT

The Customer's service entrance and utilization equipment shall be installed in accordance with all local, state, and National Electrical Code requirements. It is the intent of this section to provide the Customer with recommendations concerning factors that can affect both SPU and the Customer in the selection, installation, maintenance, and operation of the Customer's utilization equipment. If concerns arise that are not covered in this section, SPU's Customer Service Department should be contacted.

701 Protection of Customer Equipment

The customer is advised to provide adequate protection against the effects of outages or voltage spikes in accordance with the NEC or other pertinent sources of information for all types of motors and other equipment.

Equipment that should be protected includes, but is not limited to:

- motors
- computers
- electronics equipment
- equipment in which computers or electronics form an integral operating part

Equipment should be protected under all conditions, including:

- overload
- loss of voltage
- high or low voltage
- loss of phase(s) (e.g. single phasing on polyphase motors)
- re-establishment of service after any of the foregoing
- phase reversal
- motors that cannot be subjected to full voltage on starting
- harmonics or wave form irregularities

Failure to provide such protection may result in needless damage to equipment and the expense of delay and repair. Sensitive electronics, such as microprocessor-based home electronics and business computers, are susceptible to damage due to voltage spikes or surges.

Wiring practices that meet manufacturer specifications need to be assured in the installation of any microprocessor-based electronics. (For example, proper grounding and dedicated circuits are important.) Consideration should be given to installing transient voltage surge suppression equipment at the main service entrance and at the point of use. An

uninterruptible power supply should be considered if a momentary voltage dip or outage would cause loss of data.

702 Motor Starting Currents

All motors require a starting current substantially greater that their normal running current. Where starting currents are excessive, an abnormal drop in supply voltage will result. In order to minimize the unfavorable effects of such voltage drops, it is essential that the Customer's motors not exceed the allowable starting characteristics as shown in current version of the National Electrical Code.

Customers planning to install any motor larger than 5 horsepower single phase or 25 horsepower three phase must contact SPU's Planning and Engineering Department. Motor installations that cause power quality problems for other Customers shall be corrected at the owner's expense.

703 Power Factor

In order to improve the efficiency of SPU's distribution system, the Customer's utilization equipment shall maintain an average power factor as close to unity as possible, and never leading. Some of SPU's rate schedules include a demand charge and a penalty for an average power factor that is less than 90% lagging. Details of the method of billing for such Customers can be obtained from the Customer Service Department. For new services, it is suggested that the Customer's utilization equipment be designed to include provisions for adding capacitors in order to improve the average power factor. SPU will install metering equipment to measure the average power factor.

704 Fault Currents

The Customer's service equipment and other devices shall be adequate to withstand and interrupt the maximum available fault current. For single family residences with service equipment rated 200 amperes maximum and 240/120 volts single phase, equipment shall have a minimum interrupting rating of 10,000 amperes symmetrical and other equipment shall be braced to withstand that minimum value. Contact the SPU Planning and Engineering Department to determine fault current availability for other services.

705 Customer-Owned Generating Equipment

Unless authorized by written agreement, electric generating equipment installed by the Customer shall not be interconnected or operated in parallel with the SPU system. The Customer shall own, install, operate,

and maintain electrical interlocking equipment which will prevent parallel operation and such equipment shall be approved by SPU prior to installation.

706 Energy Conservation

SPU encourages the prudent and efficient use of the electric energy which it provides. Customers desiring special information or assistance regarding the efficient use of electricity should contact the Marketing Department.

SPU offers a residential program to control the peak demand during times of heavy usage. This is accomplished by cycling off air conditioning load in those homes equipped with a Smart Switch. Customers who participate in this voluntary program are given a credit on their bills during the months of June through September. Drawing No. 2 in the Appendix shows a typical Smart Saver switch installation.

707 Customer's Obligations

707.1 Increased Load. In the event the Customer desires to significantly increase load, (more than 10%) they shall provide SPU notice as soon as possible so that SPU can provide added facilities, if necessary. If additional facilities are necessary, there may be a contribution in aid of construction required from the Customer. If the Customer fails to notify SPU of added load and SPU's equipment is damaged as a result of such added load, the Customer shall reimburse and make payment to SPU for all such damages.

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

707.3 Total Harmonic Distortion. The application of any nonlinear loads by the Customer such as static power converters, arc furnaces, or adjustable speed drive systems shall not cause voltage and/or current Total Harmonic Distortion levels greater that industry accepted levels on SPU's electric system at the point of delivery to the Customer's facility. The Customer shall disclose to SPU all nonlinear loads prior to connection. SPU may test the Customer's load to determine the THD levels. The guidelines for Total Harmonic Distortion included in the latest IEEE Std 519 "IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems" shall be followed. It shall be the Customer's responsibility to assure that the THD requirements are met, including the purchase of any filtering equipment. Any load found not in

compliance with this policy shall be corrected immediately at the Customer's expense. If not corrected, SPU may disconnect service to the Customer's facility.

The Customer shall be liable for all damages, losses, claims, costs, expenses, and liabilities of any kind arising out of, caused by, or in any way connected with the application by the Customer of any nonlinear load operating with maximum THD levels in excess of the industry accepted levels. The Customer shall hold harmless and indemnify SPU from and against any claims, losses, costs of investigation, expenses, attorney's fees, damages, and liabilities of any kind arising out of the application of any nonlinear load operating with maximum THD levels in excess of industry accepted levels.

SHAKOPEE PUBLIC UTILITIES COMMISSION ELECTRIC SERVICE RULES AND REGULATIONS

SECTION 800 - OVERHEAD SECONDARY SERVICE

Adopted by: S.P.U.C. Resolution # Dated

SHAKOPEE PUBLIC UTILITIES COMMISSION ELECTRIC SERVICE RULES AND REGULATIONS

SECTION 800

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SECTION 800

OVERHEAD SECONDARY SERVICE

SPU will supply overhead secondary service (600 volts or less) at the voltages and under the conditions specified in other sections of this publication. The service entrance location will be specified by SPU. This section includes information on distribution transformer size, overhead service drop and connections to the Customer's premise or equipment. Metering and Customer equipment requirements are covered in other sections of this publication. The requirements of this section apply to all residential, commercial and industrial customers.

801 Maximum Transformer Size

- **801.1** The maximum overhead transformer size installed by SPU will be one 75 kVA transformer for a single phase application, two-75 kVA transformers or three-75 kVA transformers for three-phase applications. If a larger transformer size is required, it shall be a pad-mounted type.
- **801.2** One or more secondary services may be supplied from a transformer; the number of services from a transformer shall be determined by SPU depending upon the application.

802 Service Drop Conductors

- **802.1** The service drop for new services will be a twisted wire triplex (three wires) or quadplex (four wires) configuration from the distribution system to the point of attachment on the Customer's premises.
- **802.2** Existing services may be either a triplex or open wire configuration. At SPU's option, a service may be changed from an open wire to a triplex or quadplex.

803 Clearances

- **803.1** The service drop must be so located that the minimum clearances as specified in the latest edition of the National Electric Safety Code are maintained. See drawing No. 3 for a typical overhead service installation.
- **803.2** Service drop conductors installed above or near a swimming pool shall meet the distance requirements as specified in the latest edition of the National Electric Safety Code, Part 2, Safety Rules for Overhead Lines.

804 Point of Attachment

A solid point of attachment for supporting the service drop on the building shall be provided by the Customer at a point that will comply with previously stated clearances. Where the required heights and clearances cannot be maintained by a point of attachment on the building, the Customer shall provide a service mast which is of a permanent nature and of sufficient strength to support the service drop at the required minimum clearance. Two inch or larger galvanized iron conduit or 3 inch or larger rigid aluminum conduit shall be used. SPU reserves the right to decline to connect its service drop to an extension support which, in its judgment, constitutes a hazard to life or property. In cases where it is not possible to properly anchor an overhead service, the Customer may be required to install an underground service.

805 Service Entrance

The Customer's service entrance wiring shall terminate at a point so located that the service drop from supply lines will not interfere with windows, doors, awnings, drainpipes, or other parts of the building or other obstructions so that only one bracket is required.

806 Line Clearance

Trees located near overhead distribution lines and services will be periodically trimmed by SPU in order to maintain a reliable distribution system. Trees and shrubs will be trimmed back 6-8 feet from overhead conductors and service lines. Trimming may also be necessary in order to restore service after a storm. The trimmed brush will normally be chipped and removed, however, in storm situations when there is much tree damage, it may be left in order to expedite restoration of the entire system. SPU personnel do not remove stumps if an entire tree is needed to be removed.

SPU will annually inspect the electrical distribution system and street light system for line clearance from trees and vegetation. Line clearance is preventative line maintenance to minimize power outages caused by tree damage or direct contact. It is our goal to provide safe, reliable electric service while maintaining the good will of the property owners. The pruning process is intended to anticipate the growth rate of the tree and to provide a conflict free operation (clearance) for at least 3 years. The distance required to maintain clearance varies with the type of tree as well as the voltage of the power line. SPU tree trimming crews would prune more from fast growing trees than from slow growing trees. SPU is also concerned about tree branches that overhang electrical wires and removes them.

<u>Qualified Personnel</u>: Conforming to OSHA Standard (29 CFR 1910.266) and (29 CFR 1910.269), SPU tree trimming crews are trained and qualified to prune trees near electrical wires.

<u>Trees that SPU will trim</u>: SPU Crews will trim trees along electrical wires that run from pole to pole and electrical wires running from the pole to a structure (house service).

Only Qualified personnel can prune trees near electrical wires.

Before trimming or removing trees near power lines by unqualified persons, call Shakopee Public Utilities at (952) 445-1988 or (952) 345-2473 to request SPU to trim the tree (to make it safe from electric wire contact) or to temporally disconnect the service while the tree trimming is being completed.

*OSAH Standard CFR 1910.332 (i) (A) states: When an unqualified person is working in an elevated position near overhead lines, the location shall be such that the person and the longest conductive object he or she may contact cannot come closer to any unguarded, energized overhead line than 10 Ft (305 cm).

<u>Tree Trimming Schedule</u>: Shakopee Public Utilities scheduled tree trimming activities are usually performed during the winter months from December to March.

Before trimming a tree, SPU will attempt to make contact with the customer. If we cannot contact the customer and the needed trimming is minimal/low impact; the SPU crew may elect to proceed and perform the necessary trimming. If we cannot contact the customer and the required trimming is extensive/high impact, the SPU crew will leave a door hanger explaining the trimming action desired and a name and phone number for you to contact in regards to the trimming. If circumstances require the removal of the tree a SPU representative will contact you.

SHAKOPEE PUBLIC UTILITIES COMMISSION ELECTRIC SERVICE RULES AND REGULATIONS

SECTION 900 - UNDERGROUND SECONDARY SERVICE

Adopted by: S.P.U.C. Resolution # Dated

SHAKOPEE PUBLIC UTILITIES COMMISSION ELECTRIC SERVICE RULES AND REGULATIONS

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SECTION 900

UNDERGROUND SECONDARY SERVICE

901 Undergrounding in New Residential Developments

SPU requires the complete underground installation of the distribution system in all residential zones, except in those cases where it is determined that underground installations are technically unfeasible.

SPU will designate a junction point for the connection of the Customer's secondary underground service lateral. The junction point will be a service pedestal or the terminals of a pad-mounted transformer. In general, SPU will install, own, operate, and maintain all facilities on the source side of the junction point, including the junction enclosure and connections; and the Customer will install, own, operate, and maintain all secondary cables, conduit, and related service equipment specified in other sections of this publication on the load side of the junction point. See drawing No. 4 for a typical underground service. The developer of a new subdivision is responsible for installing SPU-supplied road crossing conduits, according to SPU specifications. Drawing No. 5 shows a typical conduit crossing installation.

Junction points will be located within SPU's easement area along or near a front or rear property line unless it is necessary or desirable to designate locations which are closer to the metering points. In such cases, the Customer will be charged for the installed cost of any additional lengths of underground distribution cable and conduit from the property line to the junction point. Such charges shall be in addition to any other charges specified herein.

SPU's distribution system will normally be installed in the Right-of-Way or within utility easements provided by the Customer as a part of the recorded property plat. SPU reserves the right to require additional easements as it deems necessary. All utility easements requested by SPU are to be granted by the Customer at no cost to SPU.

902 Residential Undergrounding in Overhead Areas

Customers residing in residential zones served by overhead lines may request underground service. Customers intending to relocate, upgrade, or replace an existing overhead service may request underground service. In either case, the Customer shall install, own, operate, and maintain the facilities up to the junction point, usually on a pole. In addition, the Customer will be charged an amount which reflects any additional cost incurred by SPU in providing service to the junction point. All such

charges must be paid by the Customer before SPU will commence installation of the necessary facilities.

903 Underground Service to Commercial and Industrial Customers

SPU requires the underground installation of primary and secondary distribution service laterals to new commercial and industrial structures. A junction point will be designated for the connection of the Customer's secondary underground service lateral. The junction point will normally be the secondary terminals of a pad-mounted transformer placed at mutually agreeable location.

SPU will install, own, operate, and maintain the primary underground cable, distribution transformer, and secondary connections. Transformers shall be located within 10 feet of a street, driveway, or parking area of 5 ton load rating. The transformer shall be located in an area that allows unrestricted access by SPU personnel at all times. It may not be located behind a fence or gate that is controlled by others. The Customer will be required to install SPU-supplied PVC conduit for the primary cables in areas under driveways, parking lots, and other hard surfaced areas. See drawing No. 7 for details on the placement of conduit. Any adjustment to the grade of SPU's distribution plant, after it has been installed to the specified grade, will be at the Customer's expense.

The Customer shall install, own, and maintain a concrete transformer pad built to SPU specifications. If the transformer is located in an area where it may be subject to physical damage by vehicles or other equipment, steel bollards, supplied and installed by the Customer, will be required to protect it.

The Customer shall install, own, and maintain all secondary cables, conduits, and cabinets from the transformer secondary terminals to the building service entrance. The secondary connections will be made by SPU. Metering installation and ownership shall be in accordance with Section 600.

The maximum number of secondary cables allowed to be installed in the secondary compartment of a transformer is six (6) per phase and neutral. The maximum conductor size allowed is 500 MCM copper or 750 MCM aluminum. If more cables are needed, a connection cabinet shall be used as described below. Shakopee Public Utilities' Electric Superintendent may allow more conductors per phase on a case by case basis.

904 Secondary Connection Cabinets

Where secondary cabinets are used, the following apply:

904.1 Cabinets will be suited to the installation and meet SPU and National Electrical Code requirements.

904.2 Cabinets shall be constructed with provisions for bar-type current transformers.

904.3 Conduits and conductors shall be provided and installed underground by the Customer between the transformer terminals and the connection cabinet.

905 Transformer Clearances

Minimum clearances from buildings and other structures must be maintained in the placement of transformers. See drawing No. 8. Transformers should be installed in such a way that allows the movement of air around them for cooling. Any screening for aesthetic reasons must not restrict the movement of air for cooling and it must not limit access by SPU personnel and equipment.

A clear space of 10 feet in front of the doors and 2 feet on the other sides of transformers and switches must be maintained. This space may not have a slope greater than 8/1. Shrubbery and trees for screening the equipment may be planted outside of the clear space area. See drawing No. 9 in the Appendix for details of clear zones.

906 Winter Construction

Underground cables will not normally be installed in frozen ground. If, however, they are installed in these conditions at the Customer's request, the installation will be subject to a winter installation charge.

SHAKOPEE PUBLIC UTILITIES COMMISSION ELECTRIC SERVICE RULES AND REGULATIONS

SECTION 1000 - PRIMARY SERVICE

Adopted by: S.P.U.C. Resolution # Dated

SHAKOPEE PUBLIC UTILITIES COMMISSION ELECTRIC SERVICE RULES AND REGULATIONS

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SECTION 1000

PRIMARY SERVICE

Primary service is available for Customers whose load and/or load arrangement do not allow efficient service at secondary voltage. The Customer must provide a suitable cabinet in which to terminate SPU's cables and mount metering equipment. Service is available at the available primary circuit voltage in the area, either 12,470Y/7200 volts or 13,800Y/7970 volts. The point of delivery will normally be the terminals of SPU's cable in the Customer cabinet.

Customer owned cabinet must have provisions for looping of SPU's cable. If not looped, customer must provide SPU with a concrete encased duct bank to property line.

Primary Customers receive a cash discount of 5% on the amount of the monthly bill, with the discount applied to all charges except the power adjustment charge.

SHAKOPEE PUBLIC UTILITIES COMMISSION ELECTRIC SERVICE RULES AND REGULATIONS

APPENDIX

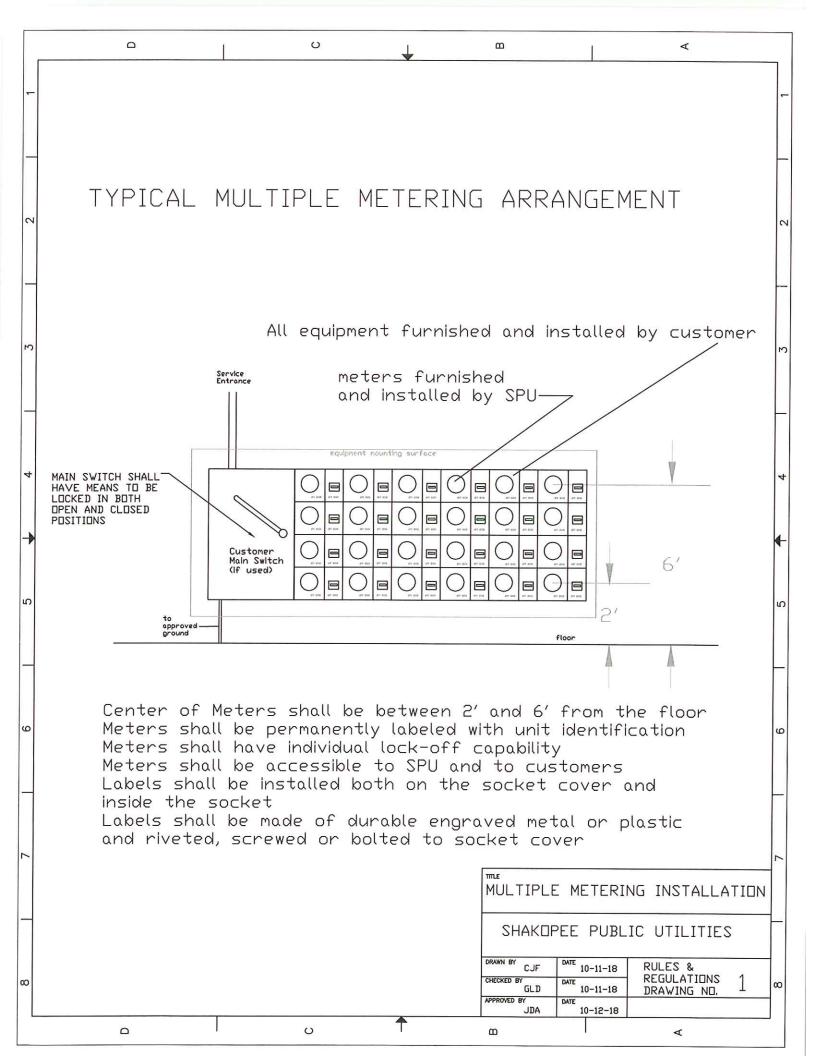
Adopted by: S.P.U.C. Resolution # Dated

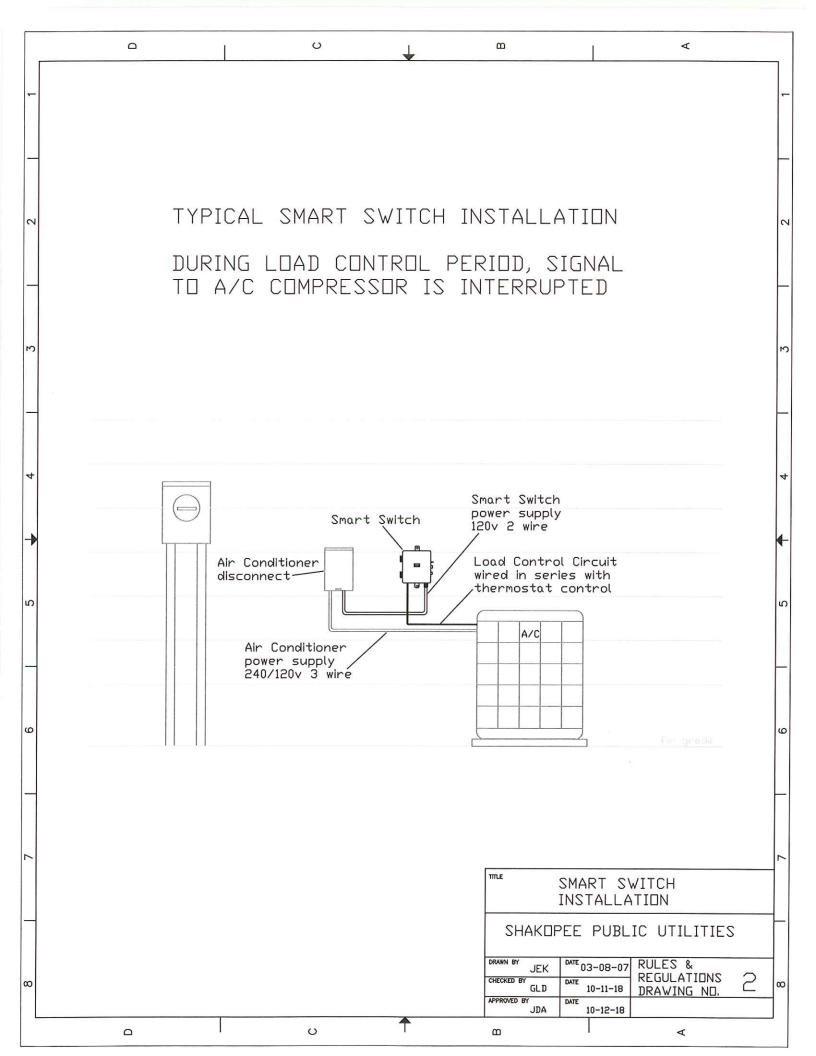
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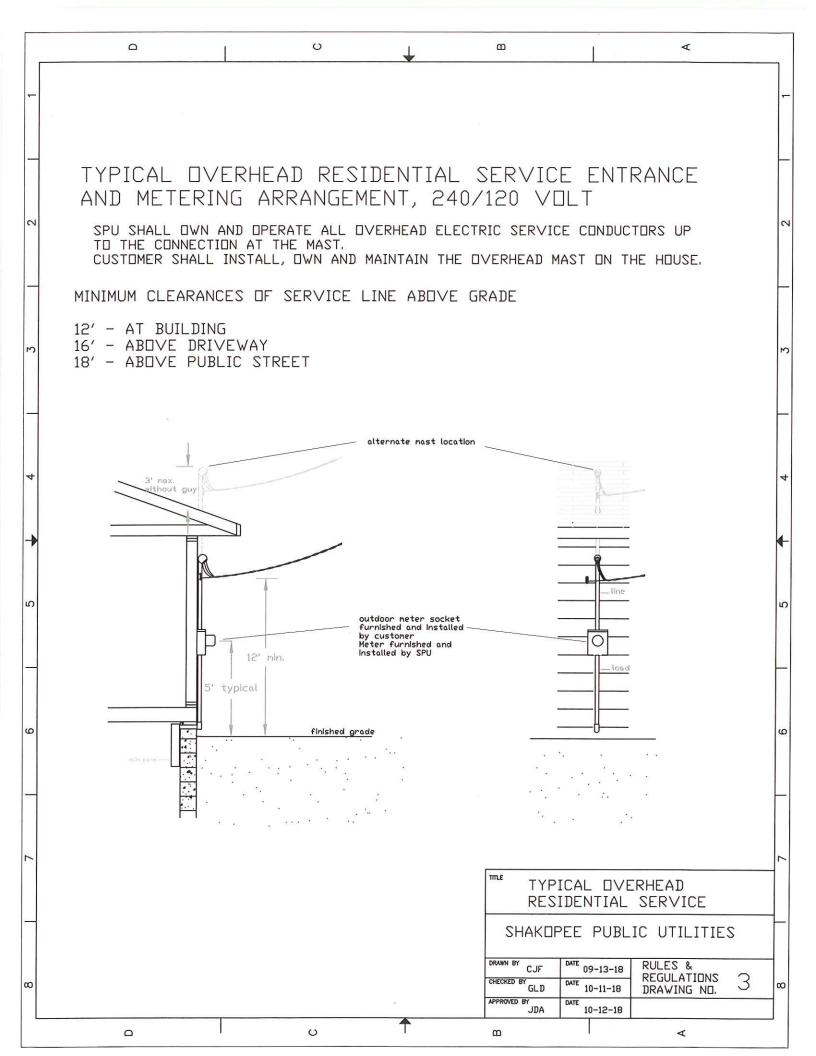
Drawings

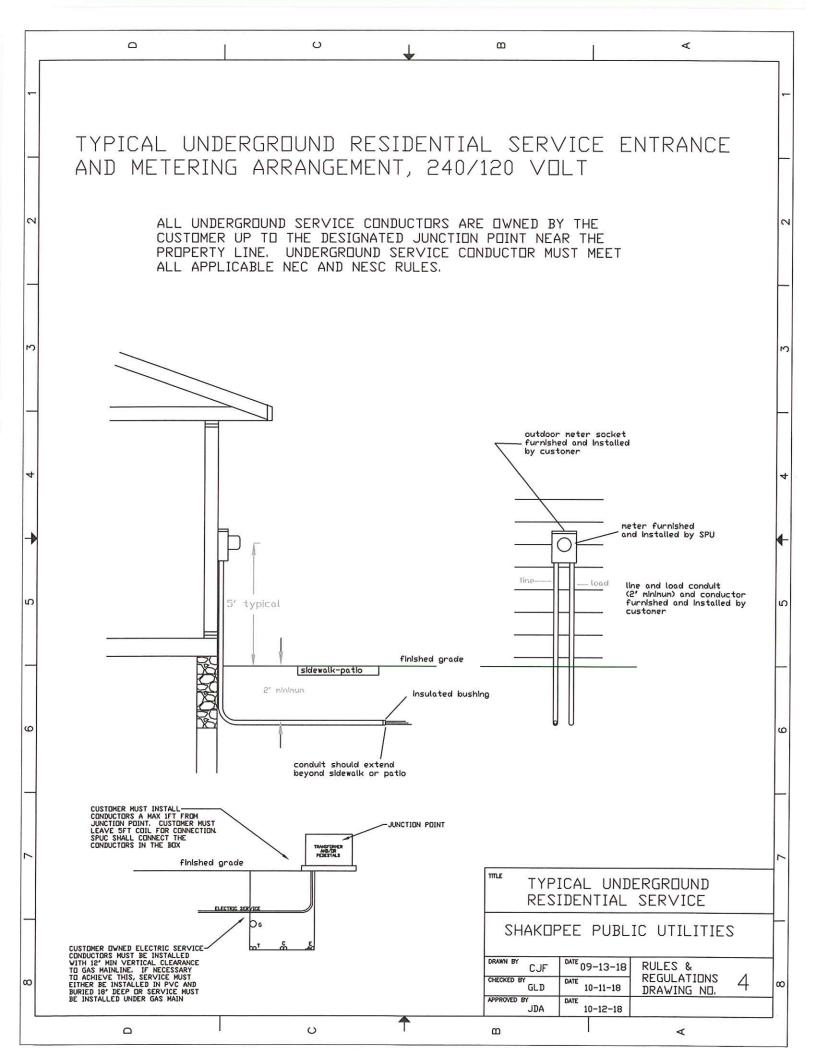
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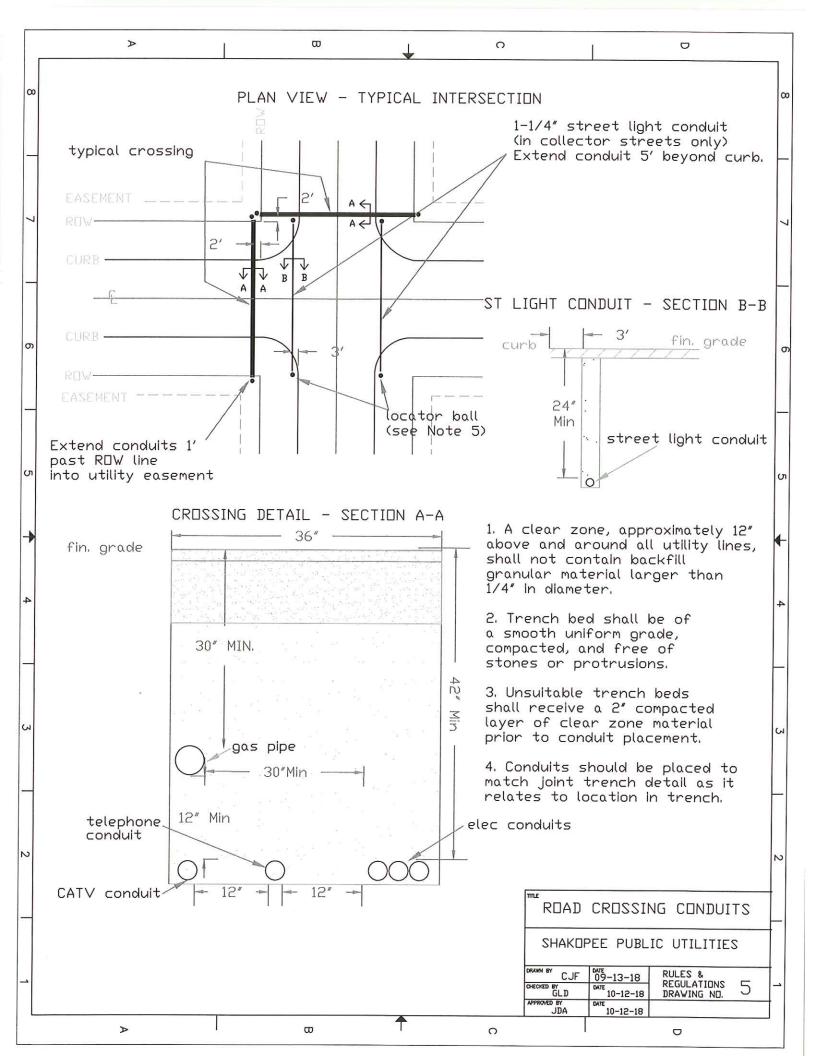
- 1. Multiple Metering Installation
- 2. Smart Switch
- 3. Typical Overhead Service
- 4. Typical Underground Service
- 5. Conduit Crossings
- 6. Typical Joint Trench Layouts
- 7. Conduit Placement
- 8. Transformer Minimum Distances
- 9. Clear Zones Around Pad-Mounted Equipment
- A. Summary of Developer Requirements for Electric Service
- B. Summary of Property Owner Requirements for Electric Service
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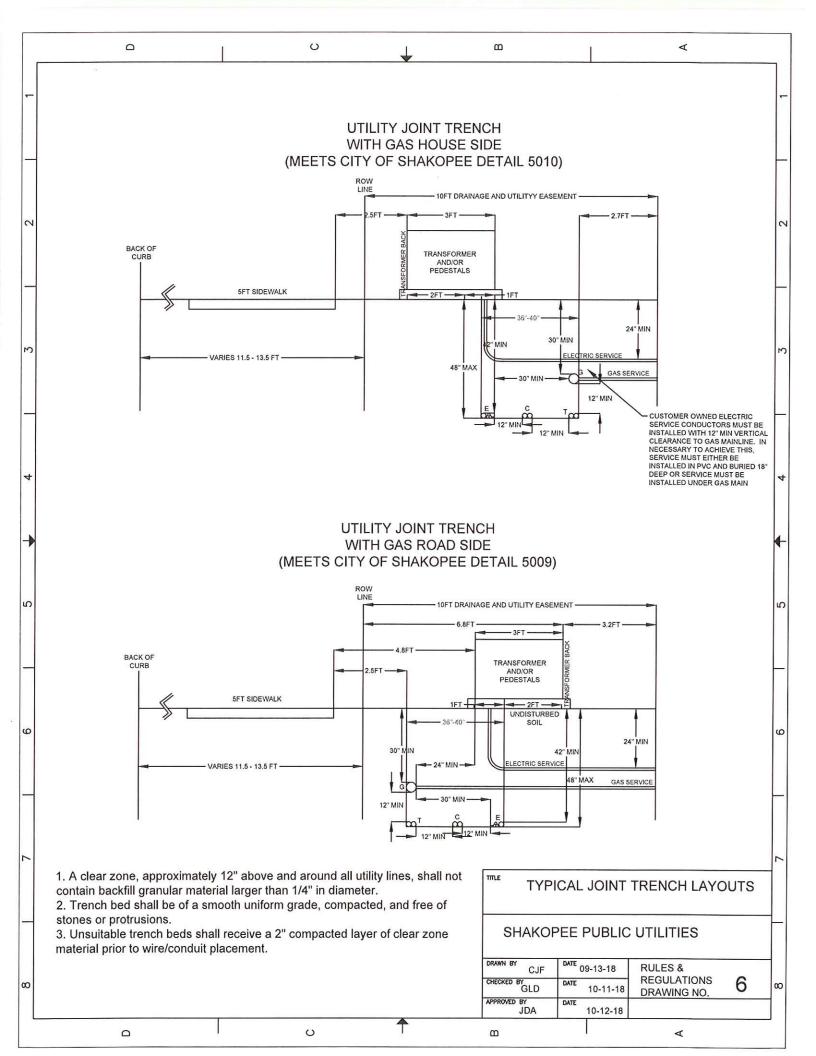


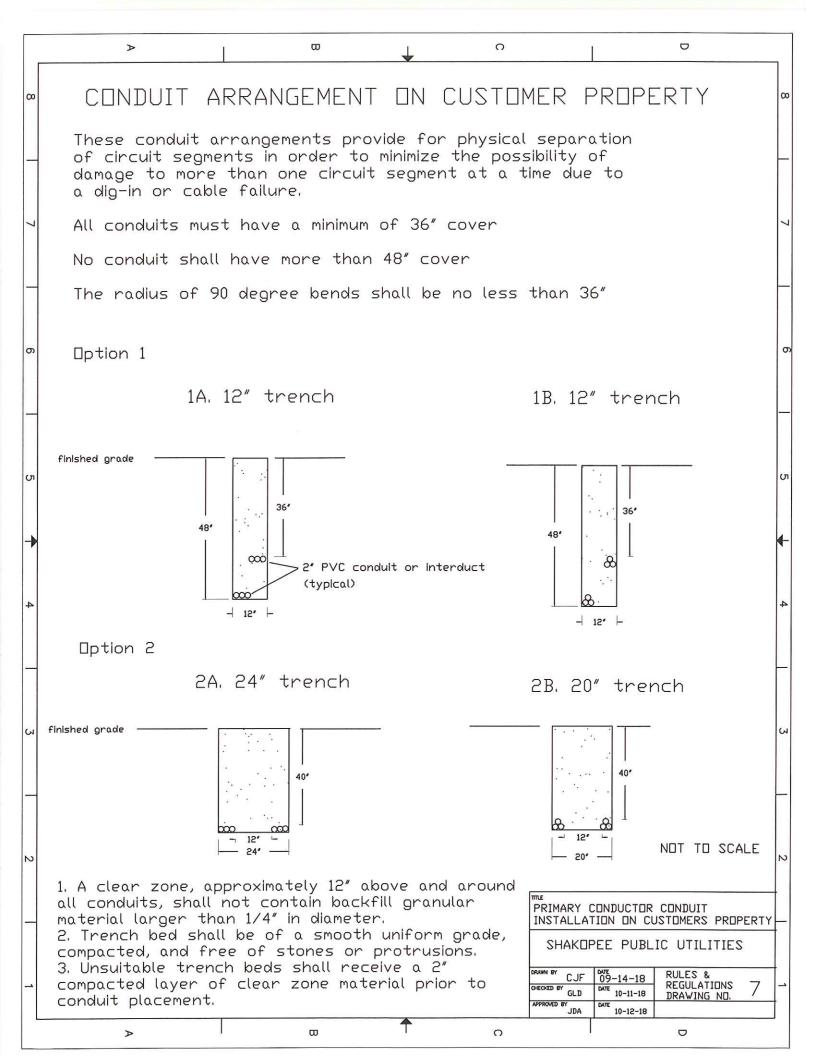


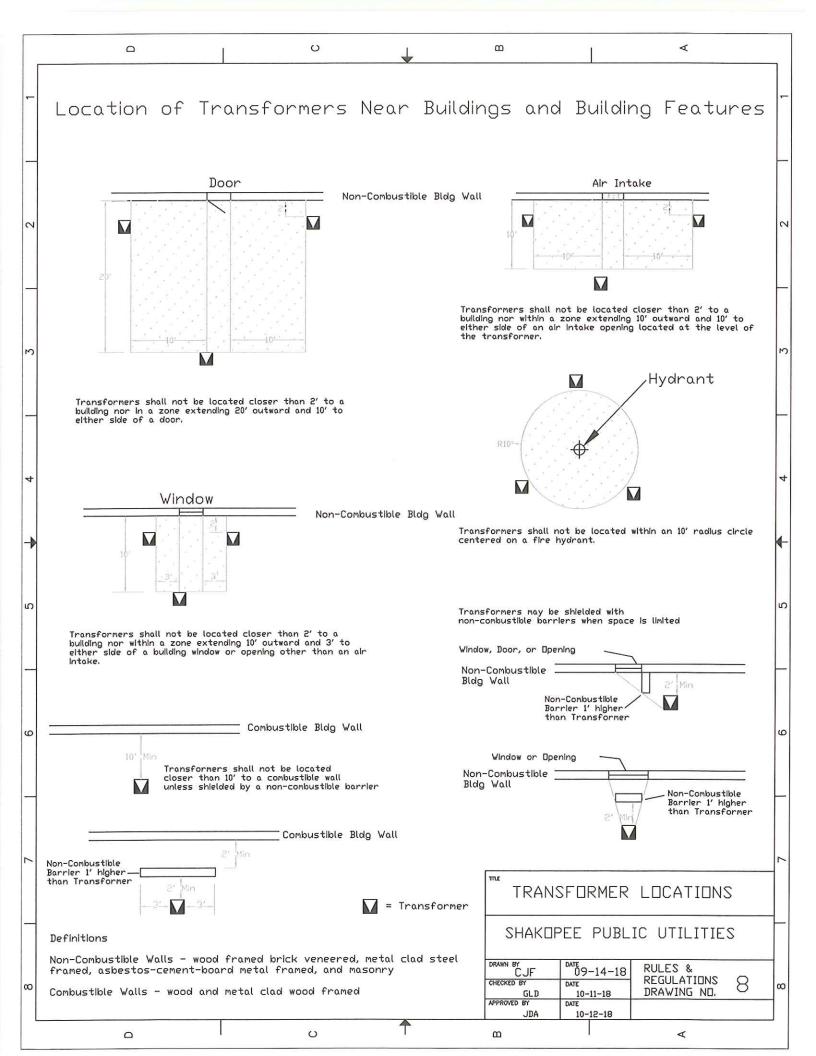












CLEAR ZONE REQUIREMENTS

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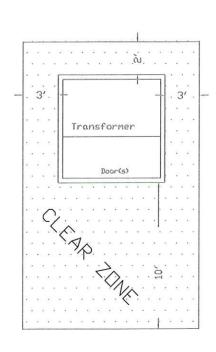
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A clear zone that is free of plantings and obstructions must be maintained around transformers and switches for operations, inspection, and cooling.

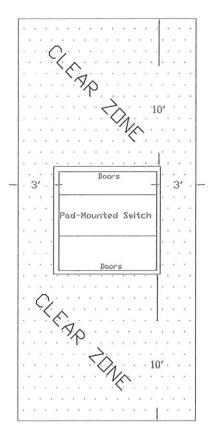
The clear zone shall extend out 3^\prime from the sides and 10^\prime from the doors of the equipment. The maximum slope in the clear zone shall be 8/1.

Locate utility cables before placing plantings near transformers and switches, outside of the clear zone.

Do not place plantings directly above utility cables.



O



DPERATING CLEARANCE REQUIREMENTS AROUND EQUIPMENT

SHAKOPEE PUBLIC UTILITIES

DRAWN BY CJF	09-14-18	RULES & REGULATIONS		
CHECKED BY GLD	DATE 10-11-18	DRAWING NO.	9	
APPROVED BY JDA	DATE 10-12-18			

V

APPENDIX A

Summary of Developer Requirements for Electric Service

- 1. The developer shall submit a written request for electric service.
- 2. The developer shall enter into an Electric Distribution Agreement.
- 3. The developer shall pay a cash deposit equal to 100% of SPU's estimate of the contribution in aid of construction cost, prior to installation. The developer shall be responsible for all associated costs as described in the agreement. If the deposit is in excess of these costs, the amount will be returned at the end of the project.
- 4. The developer shall grant any necessary easements at no cost to SPU for SPU's electric system prior to installation.

APPENDIX B

Summary of Property Owner Requirements for Electric Service

- 1. The property owner shall submit an application for service.
- 2. The property owner shall adhere to all of the Electric Service Rules and Regulations as adopted by the Utilities Commission.
- 3. The property owner shall grant any necessary easements at no cost to SPU for SPU's electric system prior to installation.

APPENDIX C

Summary of Customer Requirements for Electric Service

- 1. The customer shall sign an application for utilities.
- 2. The customer shall pay a deposit equal to two months estimated usage charges, before service is provided.
- 3. The customer shall adhere to all of the Electric Service Rules and Regulations as adopted by the Utilities Commission.